OUTLINE REMEDIATION STRATEGY

Thomas Telford University Technical College (TT UTC)

An area of land at Thomas Telford University Technical College (TT UTC) is being considered for development by the College, with the construction being undertaken by Morgan Sindall Construction & Infrastructure Ltd. The proposals for the site comprise an extension to the existing TT UTC campus site for the construction of a new classroom block, separate sports hall block, outdoor all-weather sports pitch and a new area of car parking.

A Desk Study, Phase I Geoenvironmental Risk Assessment has previously been produced by Applied Geology (AG) in February 2021 (Report Ref. AG3187-20-AL65). A number of previous reports have also been produced by others for the site and the wider site over various phases of proposed redevelopment, of which a summary of these is included within the AG Desk Study report. The Conceptual Site Model (CSM) deemed the site to represent a low to medium risk to Human Health and Controlled Water receptors. A Phase II Ground Investigation was recommended.

A Phase II Ground Investigation was commissioned by the Client and undertaken by AG, Report Ref. AG3187-20-AL75, dated February 2021. The Phase II identified a number of contaminants of concern within the Made Ground across the site:

- Arsenic recorded above public open space (residential) screening criteria locally in the near surface Made Ground;
- Loose fibres of amosite and chrysotile asbestos were identified locally across the site;
- Historically above and below ground fuel tanks were present onsite. The previous reports outlined that these features were to be removed and the works validated, however, from the review of the previous reports, it has not been possible to prove that these works were undertaken.

Remedial actions were recommended with respect to human health in the areas of limited soft landscaping. A 'Discovery Strategy' was also recommended to ensure that should any previously unidentified contamination be encountered it is appropriately dealt with. An outline remediation strategy is presented below:

- Key elements of remediation comprise:
    - Discovery Strategy during groundworks;
    - Import of clean topsoil for use as cover layer in areas of soft landscaping.
- No gas protection measures considered necessary (to be agreed with the Local Authority);
- Construction phase works to include:
    - Buried concrete to be in accordance with DS-2 and AC-2/AC-1s conditions;
    - Possible barrier pipes subject to Water Authority requirements.

<u>Discovery Strategy</u>

- Recommended based on possibly encountering:
    - Old fuel tanks and associated infrastructure not removed during previous development;
    - Asbestos in soils;
    - Unforeseen/suspected contamination.
- Outline procedure:
    - Site manager to ensure watching briefs are undertaken and documented;

- All site staff, site contractors and relevant visitors, should be briefed on the potential presence of contamination. A record of these briefings should be kept by the site manager;
- Should any unforeseen contamination or old fuel tanks (and/or associated infrastructure) be encountered the advice of an Environmental Consultant must be sought;
- Any areas of contamination encountered should be assessed by suitable environmental Consultant and appropriate remediation and validation works undertaken, if deemed necessary. These should be discussed with the LA;
- Should any suspected bulk asbestos material be encountered, the advice of a specialist asbestos removal contractor should be sought;
- Upon completion of associated works, a written and signed statement should be prepared by the groundwork contractor and site manager, confirming whether (or not) contamination was identified and any action taken (including photographic evidence).

Cover Layers

- Required to break the pathway between identified contaminants within the Made Ground and future end users.
- Cover Layer requirements:
  - Topsoil used within cover layers will need to be imported and will need to comply with appropriate chemical Import Criteria (to be agreed with LA);
  - Source approval would be required prior to import of topsoil;
  - The required cover layer thickness is to be agreed with the LA.
- Cover layer verification:
  - Once placed hand dug pits to be excavated to confirm the thickness (photographic evidence would be obtained) and obtain samples for chemical analysis. Alternatively, before and after surveys could be undertaken, together with site photographs provided by the site manager.
  - The number and/or frequency of validations test pits to be agreed with the LA.
  - On-site testing may be required once topsoil is placed (frequency of on-site testing subject to volume imported and agreement of LA);

Verification report – on completion of construction, a Verification Report should be produced outlining all remedial works undertaken. This should be submitted to the LA for sign off of associated planning conditions.