OMEGA
Environmental Services Ltd

Dorking Football Club

Name of Project: Dorking Football Club

Value: £980,000.00

Duration: 3 months

Contract location: Surrey

Sector(s): Leisure

Type(s) of work: Land Remediation
(Asbestos and other hazardous materials)

Description of Work

Omega Environmental were responsible for the safe and efficient excavation, removal and disposal of contaminated soils in preparation for the insertion of a 4G Football Pitch on the proposed development site in Surrey.

The extent of contamination within the proposed area for excavation consisted of heavy metals and hydrocarbon-based contaminants, the concentrations of which exceeded the hazardous threshold for substances within soils, and fragmented asbestos containing materials.

The key element of the project was the identification of “hot spot” areas within the soil (areas in which the contaminants were highly concentrated) which indicated the areas in which soils were to be removed as appropriately classified hazardous waste by a licenced waste carrier. Following the excavation of these areas, further soil testing indicated that the remaining soil within the proposed excavation area was classified as non-hazardous and was therefore appropriately disposed of as such.

Method of Work

In the initial stages of the project, an independent analytical company was employed in order to establish the extent of contamination within the ground, 15 trial pits were excavated in order to identify the presence and concentration of potential contaminants within the soil. Following the discovery of fragmented asbestos containing materials within a number of the 15 trial pits, an asbestos survey incorporating a grid system was carried out with an approximate 80 trial digs completed in order to determine the extent of asbestos contamination across the entire proposed development area for the pitch.

Further soil analysis was recommended prior to the commencement of the project, and subsequent results and waste classification certificates identified several further hazardous substances within the soils in the form of copper sulphate pentahydrate, zinc sulphate, TPHs, benzo[a]anthracene and lead.

The sampling regime identified these contaminants to be heavily concentrated to certain areas, known as “hot spots” of hazardous material, surrounded by soils that can be classified as non-hazardous for removal and disposal.

Omega Environmental Services excavated the heavily contaminated “hot spot” material and stockpiled such in a quarantined, appropriately secured, signed area to prevent cross-contamination and the spread of contaminants. This was achieved by utilising an independent analyst using a GPS Rover to identify and mark out the “hot spot” locations identified as hazardous from previous sampling results. During the excavation process, a watch and brief was carried out to ensure the total removal of hazardous material. Asbestos trained Operatives were also present during the excavation works to locate visually identifiable asbestos cement debris, and hand-pick these upon discovery, placing them in sealed asbestos bags for disposal and therefore reducing the asbestos contamination per soil load.

Following the excavation of the heavily contaminated “hot spot” materials, the remaining areas of site were excavated and, once subjected to further soil testing, were disposed of as appropriately classified non-hazardous waste.

Throughout the excavation works, operatives utilised a water bowser with a spraying arm to dampen the soil and supress the release of any potential contaminants/asbestos fibres into the air, complying with the CAR 2012 regulations on the control and prevention of the spread of asbestos. Air monitoring was carried out by an independent analyst throughout the works to ensure this was sufficient.

In the interest of health and safety, and the reduction of potential cross-contamination, operatives set up respirator zones surrounding the excavation in which the appropriate PPE and RPE was required to be worn. Any operatives/plant/machinery transiting through the respirator zone was required to comply with the appropriate decontamination procedures prior to exiting. Unauthorised access to these areas was prohibited to other contractors.

Approximately 6000m³ of contaminated soil was safely and efficiently removed and disposed of, and certification of such was issued in accordance with the strict waste disposal guidelines.