



PROJECT: Demolition & Remediation of a Petroleum Research Facility

Location:

Abingdon, UK

Business Sector:

Petro-Chemical

Principal Contractor:

Masterton Ltd

Project Value:

£3,158,850

Duration:

49 weeks

Services Provided:

- Industrial Dismantling
- Specialised Demolition
- Explosive Demolition
- Asbestos Removal
- Remediation
- Recycling
- Waste Management
- Industrial Cleaning
- Industrial Decontamination
- Asset Recovery

Recycling:

- Metallic Metals
- Non Ferrous Metals
- Crushed Concrete
- Crushed Rubble
- Timber
- Plasterboard

Waste Management:

- 342Te Asbestos waste removed
- 2546Te Chemical Haz
- 84660Te recyclable waste recovered

Project Achievements:

- Completed on Time
- Within Projected Budget
- Accident & Incident Free
- Zero Environmental Issues

Project Overview:

The contract called for the complete demolition and ground remediation of a former research facility. The site comprised of over 30 buildings ranging from large scale laboratories, office buildings, test beds, work shops constructed in the 1950's & 1960's through to a 20m high heavily reinforced marine engine test facility built in the 1980's. The surrounding infrastructure included a tank farm with 55 above and below ground fuel storage tanks ranging from 4,000 – 54,000 litre capacity.

The scope included the removal of all types of notifiable asbestos, soft strip of biodegradable materials, hydrocarbon and pharmaceutical decontamination, decontamination and gas freeing of all tanks and pipe work, discrete dismantling of assets ear marked for re-sale and re-use, mechanical dismantling and demolition, crush, screen and grade 37,500m³ of rubble to a reusable specification (comprising slabs, foundations) concluded with the excavation and decontamination and treatment of hot spot contamination of 13,600m³ of soil from the former tank farm area, bio-remediated and backfilled to the satisfaction of both the EA and client. The remediation phase of works was carried out simultaneously with the demolition

Total Site Clearance -Scope of Works

The scope of works incorporated a number of disciplines which encompassed the majority of the services offered by Masterton from in house, utilising a range of personnel peaking at 56, at the busiest times 26 demolition excavators from Masterton's fleet were utilised. The working area was within an area of outstanding natural beauty requiring detailed protection of flora and fauna, including constraints imposed by an ecological survey (to re-house the bat population).

Industrial Cleaning to specified areas, pipe lines, tanks contaminated with bulk/residual chemical / hydrocarbon product to an exacting gas free standard, carried out by our in house resources using a combination of in line pipe cleaning, vacuum extraction & high pressure steam cleaning methods. The buildings and items of plant were heavily contaminated with all varieties of **Asbestos**, removal of which was carried out by our fully qualified ARCA registered teams. The works included removal of AIB, asbestos limpet, vessel and pipe lagging using a combination of habitat enclosure and wrap and cut techniques. The **Industrial Dismantling** was designed by our engineers to maintain structural integrity during **Asset Recovery** of specialist processing plant and equipment using specialist removal resources. All lifting operations were designed and managed by our resident engineers to BS7121. **Specialised Demolition** followed soft strip and structurally divorce abutting buildings by our resources. Foundations and hard standings were lifted and processed using our concrete breaking and crushing equipment with all materials processed to the specification for structural fill and re-used in the works. **Ground Remediation** was carried out by our resources designed / executed to the standards / specification laid out in the environmental specification to attain the specified SSTL's as agreed with the EA using our own resources, engineers and scientists, with works executed under our own mobile treatment license.

In line with our accredited IMS systems we maximised the project recycling targets exceeding our target of 95%. The project involved our own fleet of demolition excavators on a combination of configurations ranging from high reach (28m), through to plate shear, concrete breakers, mechanical muncher, rotating grab and bucket. The crushing works were carried out by our own plant and equipment. We only utilised site service suppliers as opposed to sub contractors.

