Shield

Asbestos Removal Case Study

Asbestos Removal
Swansea Bay University Health Board

Experts in Providing
Specialist Services
Nationwide

SAFETY FIRST

Swansea Bay University Health Board, Swansea for Kier Construction Ltd.

Singleton Hospital overlooks Swansea Bay and hosts a range of services including acute assessment, elderly care, neo-natal intensive care, ophthalmology and ENT. The hospital is also the home of the South West Wales Cancer Institute and an iconic Maggie's Centre.

Shield's scope of works comprises the removal and disposal of the whole of the existing front façade of the hospital, facilitating the installation and upgrade of new energy-saving glazing and façades.

Due to the sprayed coating contamination located behind the original façade of circa 3,960m2, the works needed to be carried out under fully controlled conditions by an HSE-approved licensed contractor. All works will be carried out in accordance with the Control of Asbestos Regulations 2012 (CAR2012) and the Licenced Contractors Guide HSG247.

Following further investigations at the pre-planning stage, circa 1,800m2 of Asbestos Insulating Board (AIB) panels were also identified, in the rear frame housing of the façade, forming part of the original fabric of the building. This was also included as a part of Shield's scope of removal.

Light coloured building facade to be removed as a part of Shield's contracted works. External scaffold provided access for asbestos removal operatives.

To facilitate our contracted works a fully boarded and 'shrink-wrapped' scaffold was erected to the front elevation of the hospital, covering all seven working floors, allowing suitable and safe access to all work areas and also providing protection from the elements. Additionally, two Operative/Material hoists operated by trained operatives were erected at each phase of work to assist in access/egress from the work areas.

Shield had significant input into the final scaffolding design, along with the client and other stakeholders. This ensured the first fix was suitable for all stakeholders' needs in order to complete their respective contracted works. This, in turn, mitigated the risk of both additional commercial costs and potential programme delays.

Full asbestos enclosures were formed within the pre-erected scaffolds, with each phase split into manageable enclosure sections, working from the upper floors downwards.

Upon completion of the erection of the full asbestos enclosures and subsequent successful smoke testing, all window frame housings and external façade were removed and disposed of in a controlled, methodical manner throughout the duration of the contract.

Working within a live hospital environment with limitations on the allocation of designated work zones, and access/egress to all areas is always a challenge. However, as with all projects in this type of environment, there are no challenges that cannot be overcome.

"Shield is undertaking the asbestos strip and removal of existing windows for Kier at the Singleton Hospital recladding project. The biggest compliment I can provide is that Shield is self-sufficient and get on with the job with minimal hassle. Works are safely coordinated by their supervisor, delivered to a quality/ clean handover and always to programme. Shield notify me ahead of time of an anticipated delivery date for a particular ward/phase, which allows follow-on trades to be easily coordinated."

Dean Williams, Project Manager

Swansea Bay University Health Board, Swansea for Kier Construction Ltd.

Therefore methodical planning by all stakeholders, from the client's client to our client, and planning in conjunction with all nominated contractors, resolution and best practice will always win through.

The contract was set to run from July 2021 until December 2023, with a value of £1.2m, and would involve one supervisor and four operatives on site. Any required sub-contrcators would be chosen from Shields extensive pool of approved supply-chain partners.

Up until March 2023, a total of 15,688 man hours had been wokred on site with 26 skips of asbestos waste, with a combined weight of 122 tonnes, being removed.

Shield had a designated on-site area, within which were located the site offices, welfare facilities, decontamination units, and waste skips. Shield operatives moved between the work areas along pre designated, signed routes, both for waste removal and transiting to and from the work areas. There was an agreed pre-designated traffic route in place at all times. This was being patrolled and managed by our clients representatives, thus minimizing interaction and disruption to members of the public and NHS workers.

To assist in the removal of the external façade, various hand tools were used. Makita reciprocating saws were used by trained operatives to facilitate the cutting into the facade (Makita JR3070CT model). Therefore Shield operated a hand arm vibration monitoring regime of all operatives, with the use of the HSE 'Hand-Arm Vibration Exposure Calculator'.

"Shield has been very collaborative throughout the project, at both pre-construction stage, providing a robust and clear methodology on how they would carry out the works required, and the construction stage, providing support when dealing with and mitigating any challenges. The Shield project team have been professional, maintained good communication at all times and demonstrated that they can successfully work to programme and within budget."

Luc Rees, Quantity Surveyor