



Client Canary Wharf
Type Demolition and Environmental Services
Location Lambeth, Southbank, London

Sector Residential
Procurement Bespoke Trade Contract
Value £20.5M

Southbank Place



McGee Group was appointed Principal Contractor to carry out the demolition of the prestigious Shell Centre located upon London's Southbank at Waterloo.

The site had an extensive double height basement and sub basement which extended under the Shell Tower and wings and included a four level car park.

Rail Interfaces

The Bakerloo Line runs below the existing Shell Centre basement east to west. The Northern Line runs below the north eastern part of the Shell Site, northwest to southeast as noted in the tender documents.

The railway viaduct directly north of the Site carries railway lines between Waterloo East Station and Charing Cross Station. Sutton Walk passes underneath the viaduct from the Site to Concert Hall Approach. The Royal Festival Hall and Whitehouse apartments are located to the north of the viaduct. The Whitehouse apartment building previously formed part of the Shell Centre

and was known as the Shell 'Downstream' Site, before being converted into residential use.

The demolition and preparation of the site involved working with a number of key stakeholders such as London Underground; Network Rail; London Buses; TFL; Lambeth Council and various Southbank Employers Group.



Summary of Works:

In advance of the main works McGee used a prestart period to advance demolition methodologies, temporary works schemes and to liaise with project stakeholders regarding major elements of temporary works to retain the Network Rail viaduct and works over and around London Underground infrastructure.

During the prestart period McGee Group conducted an extensive value engineering process of the overall programme. A review of the clients programme identified that the potential to resequencing the demolition and piling works and offer the client programme benefits to building 3 and 4a which allowed them to construct and let the buildings some 16 weeks earlier.

Separation Works:

The demolition of the site was carried out under two separate Trade Contracts, known as the Separation Work and a second Trade Contract that included the complete demolition of the site and is procured as part of the Basement & Infrastructure Works. The separation works required the construction of brickwork and blockwork walls to enable fire and noise separation from the demolition works. This work was undertaken whilst Shell occupied the Shell Tower and

around Shell live service infrastructure and communication rooms which handle Shell worldwide traffic. During the works McGee operated under tight noise and vibration limits.



Demolition Works:

Site works commenced with the soft stripping of the wings, basements and investigation works to the structure to confirm assumptions made from the historic construction drawings.

The demolition at the Shell site was broken down into two main sections Basement demolition and Wing demolition. The Wing demolition was completed using traditional top down techniques where the floor below was propped to take the weight of the machines and demolition arising's. Once the floors were propped an opening was formed and an excavator lifted down to the floor. The machine then progressively demolished the floor and folds the perimeter walls in. As the work progressed the demolition arising's were loaded away via boat skip or dropped through well holes that had been formed within old lift shafts or service risers. This method of top down demolition was employed down to the 1st floor where the remaining structure was removing using long reach techniques.

The structure make up of the basement allowed McGee to employ different demolition methodologies. Once an opening was created within the structure a access ramp was formed. This allowed McGee to use its specialist in house long reach plant to safely demolish the structure.