

Eastbourne Terrace, London, W2

Phase 1

John F Hunt



YardNine



£7m



52 weeks

Project Background

50 Eastbourne Terrace is a significant site of 2,500m² immediately adjacent to Paddington Station and the new entrance to the Crossrail Elizabeth Line.

The completed project will deliver an eight storey office building with shops and restaurants at ground level and terraced housing at the rear.

It replaces an outdated 1960s tower and is of a highly sustainable design, adopting energy-efficient measures such as a green roof, photovoltaic panels, roof terraces, tree planting and the use of rainwater harvested from the roof.



The existing structures included two three-storey blocks and an eight-storey tower. One of the low-rise blocks shared a link bridge with a retained office block. All of these were of reinforced concrete construction with a mixture of brick and stone-clad facades.

Within the basement of the tower structure there was live MEP plant which we protected during demolition pending switchover and decommissioning. The site had a live UKPN substation and high voltage service heads which we protected prior to decommissioning. There were also two major gas services and comms equipment belonging to BT.

Scope of Work

The scope of works involved:

- Asbestos surveys and removal works
- Soft strip and asbestos removal throughout the buildings.
- Demolition of two three-storey blocks and an eight-storey tower with a link bridge to a retained office block. This was carried out mainly using floor-by-floor methodology with some manual deconstruction and long-reach was used for the link-bridge demolition.
- Demolition of ground bearing slab and foundations
- Temporary works to enable demolition including falsework, propping, basement retention, temporary screens and party wall supports.
- Creation of piling mats and berms using site-won materials
- Piling



Nestling behind the office building, a row of seven new residential townhouses with concealed roof terraces add to the the line of the historic mews, which themselves posed a site constraint.

Site Details

This site is close to Paddington International and Underground Stations, a nearby Crossrail site and surrounded by homes and businesses.

- Bulk excavation
 - Underpinning of the majority of the site perimeter using pressure-grouting
 - Reinforced concrete crane bases
 - Design development from RIBA stage 4
 - Pouring of basement raft slab
 - Drainage and attenuation
 - CFA piling at ground floor level to provide foundations for residential buildings
 - Construction of basement back to ground floor with the liner walls between lower ground and ground floor being poured against existing retained RC walls
 - Pre-cast stair installation
 - Construction of two jump form cores (phase 2)
- We value engineered the use of CFA (Contiguous Flight Auger) piles as a cost effective, quick solution (compared to the proposed secant piled scope) by recognising its suitability based on the relatively low loadings required by the proposed building.

Programme Efficiency and Added Value

We have worked with our client and their team to develop dynamic solutions to challenges that have come about as works progress:

- We have reduced temporary works by retaining the existing basement walls and will cast the new against the existing, requiring only a small amount of propping.
- Our programme for demolition was reliant on switchover of M&E plant that serviced an adjacent building. Due to statutory delays the programme slipped however we have gained time back by taking advantage of overlaps between demolition and construction; we are pouring the raft slab in stages as demolition completes elsewhere on site.



Public Interface

We achieved a score of 43/50 from the Considerate Constructors Scheme testament to our management of the large public interface at 50 Eastbourne Terrace.

Working in an area heavily populated with homes and businesses, we liaised with local residents and business owners to avoid works affecting their lives through community meetings, newsletters and information points outside of our site.

This communication complimented the incorporation of party wall award requirements into our methodology which was strictly adhered to. We set up a dedicated community liaison contact group to successfully communicate and resolve queries.

One outcome from meetings was to amend our logistics strategy to avoid HGV deliveries on Saturdays. Maintaining the relationship during demolition has benefited the follow-on substructure construction.

We worked with the Local Authority, Transport for London and the Met Police Safety team to agree the best-suited delivery and muck-away routes.

In consideration of this development benefitting the local community, our workforce are almost entirely London based and we make use of local merchant depots and recycling facilities. Our concrete supplier is 2 radial miles away.

Local shops and cafes benefit from our workforce's passing trade.

Working with Asset Owners

We protected an existing substation on site pending decommissioning by UKPN and coordinated the re-routing of HV networks. Additionally, there were two major gas services and comms equipment belonging to BT Major sewer infrastructure.

We submitted proposals to Transport for London and obtained a letter of no objection (LONO) allowing our works to continue near to London Underground Lines, in line with the approved methods, such as de-rating our crane by 25%.

