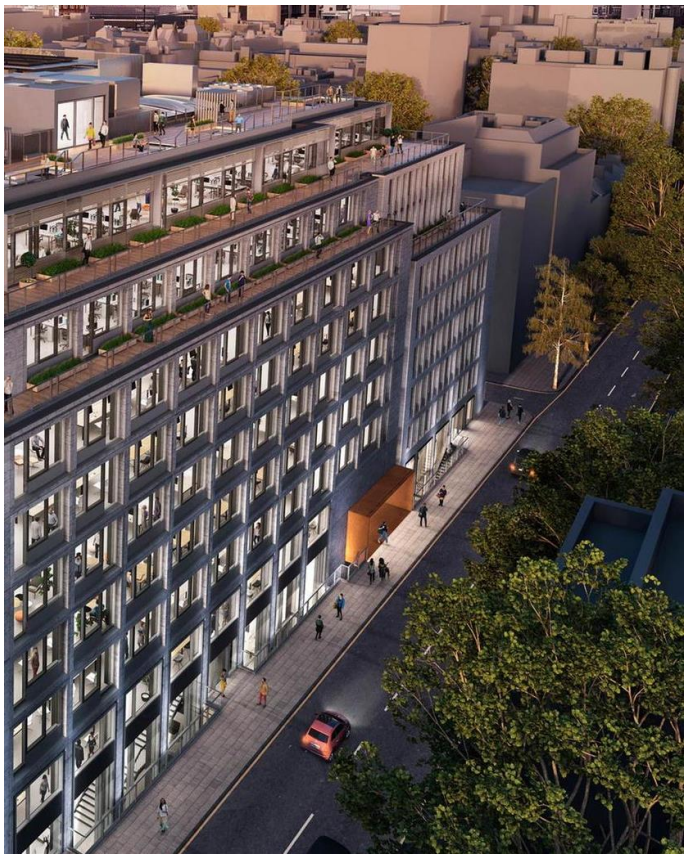


500 London Street case study

Construction Logistics Planning Training
Advanced Practitioner

The development is a nine-storey plus basement (10 floors building) mixed-use scheme in Fitzrovia, near London's West End.

We're transforming this set of 1960s, single-use blocks into a contemporary, fully integrated development of office, residential, retail and vibrant public space.

The finished building will be part refurbished and part new build, with 30% of the original structures retained to reduce waste and carbon emissions. Significant alterations will be made to the retained elements while creating substantial floor space by infilling the existing courtyard, car park and other demolished areas. Office space will be created by extending the roof and basement.

Across several new facades, we're using a range of materials, textures, details and proportions to diversify the original buildings in a way that reflects the area's eclectic character. We're upgrading the interiors, adding new upper-floor extensions and building three atria above roof level, flooding the buildings with natural light and ventilating the space below.

At street level, we're engaging passers-by with animated street frontages, better connectivity, open spaces and a new south-facing park.

The mixed-use scheme will compromise 321,000 sq. ft of offices, 45,000 sq. ft of apartments (including 10,000 sq. ft of affordable housing), 14,000 sq. ft of retail and a new public park.

Build Details

The site covers a whole block bounded by four streets and will be part refurbished and part new build.

Three existing 1960's buildings will be stripped back to the structural frame and there will be significant structural alterations to the retained elements, including the removal of screed, hollow pots and some floor slabs.

Substantial new floor space will be created by infilling the existing courtyard, car park and other demolished areas and the roof.

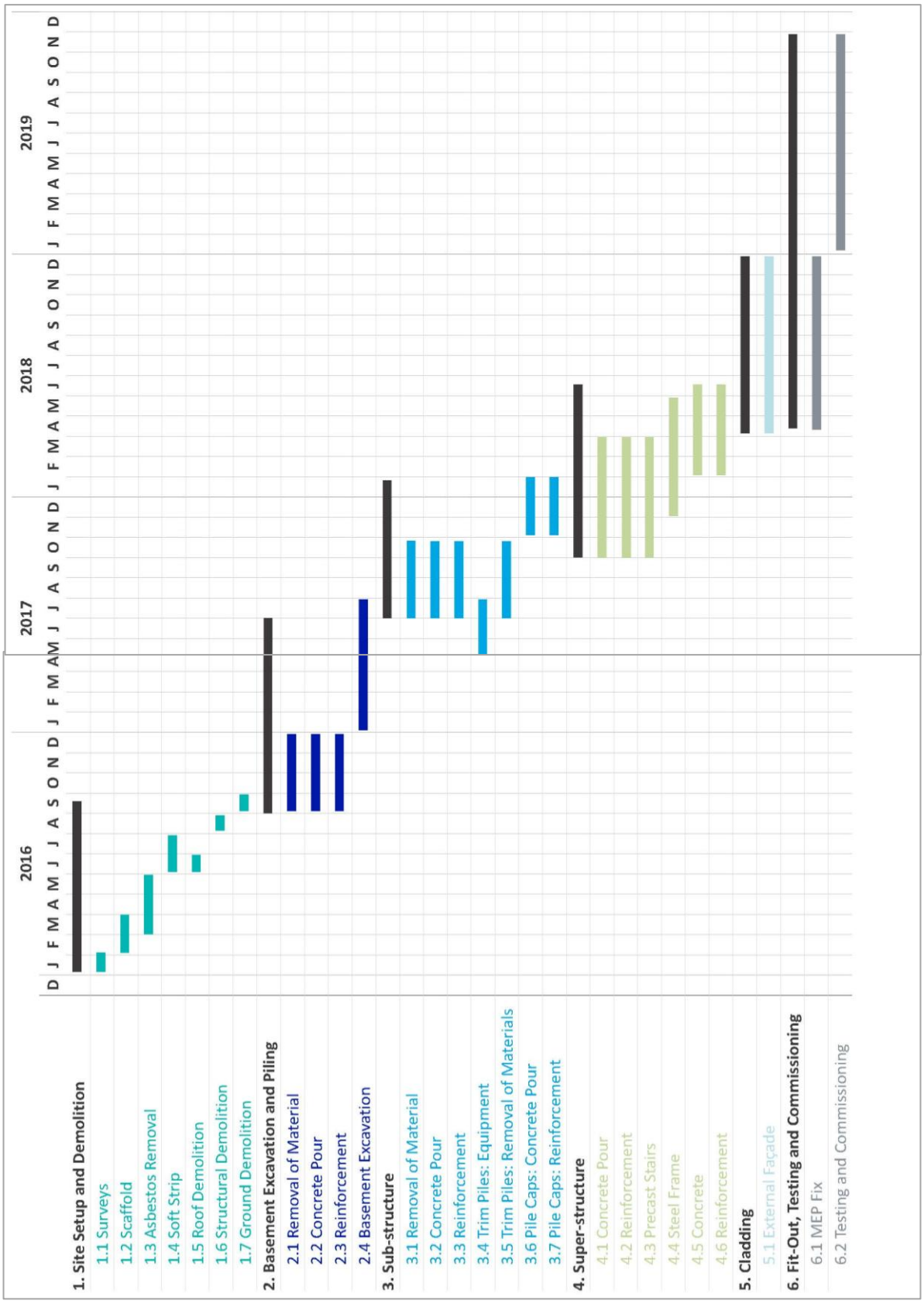
The lower ground floor basement will be extended adding office space, a loading bay and disabled parking spaces.

Some elements of the façade will be retained, such as the art deco bricks, whilst a new façade will be constructed using a range of materials, textures, details and proportions which will be used to diversify the original buildings in a way that reflects the area.

The building's internal design focuses on exposed concrete, masonry and M&E services.

The site is also partly in the Wider Strategic Viewing Corridor and the re-development will need to ensure that key views are not obstructed through increased heights of buildings and that the view as a whole is enhanced.

Construction Programme



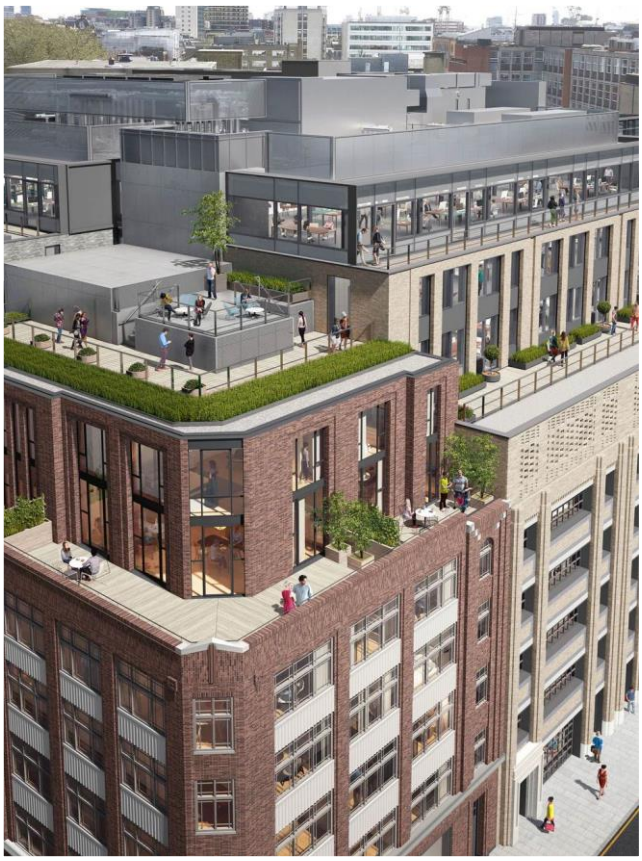
Construction Programme

Phase 1:

Site setup and demolition

9 months/36 weeks

Consisting of enabling and ground works, scaffolding, asbestos removal, soft strip, heavy plant delivery, de-construction and spoil away, this phase will be £10 million of the total build cost with a material spend of 40%.



Phase 2:

Basement excavation and piling

11 months/48 weeks

The contractor will commence works by piling the perimeter basement wall with a total of 400 contiguous piles. This will require material to be removed, replaced with concrete and reinforced with rebar.

The contractor will then then excavate to a depth of 5.5m for the new basement (temporary propping will be installed as they progress). The total cost of this phase is expected to be £3 million with 50% on materials.

Phase 3:

Sub-structure

7 months/28 weeks

Following basement excavation, internal piling and reinforcement will commence. There will be 2 piling rigs used to excavate, concrete pour and reinforce a total of 720 piles. The total cost of this phase is expected to be £10 million with 40% on materials.

Phase 4:

Super-structure

9 months/36 weeks

On completion of the building sub-structure and internal piling, the contractor will commence raising the building from basement level by jump forming the central concrete core. This will have a total volume of 250m^3 of concrete with 37.5t rebar reinforcement. When the central core is 4 storeys up the contractor will then form a suitably designed basement slab to accommodate utility requirements, and building services, such as lift pits etc.

Following installation of a traditional table form ground floor slab, the contractor will continue to raise the core to roof level and follow this activity up the building with the floors, and prefabricated glazed and solid form cladding system. The total cost of this phase is expected to be £30 million with 40% on materials.

Phase 5:

Cladding

9 months/36 weeks

A total of 2300m^2 glass panels per elevation will be lifted by crane to form the external façade. This will be from designated picking points suitably located to minimise travel over the site. It is assumed 12 panes can be delivered per HGV load. The total cost of this phase is expected to be £10 million with 40% on materials.

Phase 6:

Fit out, testing and commissioning

20 months/80 weeks

All materials for the fit out of all floors will be brought into site via the Ground Floor Service Yard and manhandled in to location via designated travel routes and the service lift. The fit out will commence in earnest on the water tightening of the floors and follow up the building. The fit out will include all MEP services and plant (both rooftop, and basement) and internal flooring, portioning and ceiling works. The total cost of this phase is expected to be £40 million with 40% on materials.