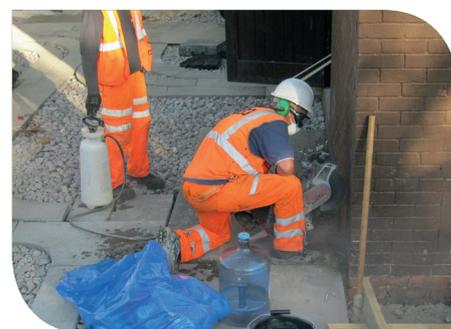


Building Case Study

Clapham Junction - TFL London Overground

SCHEME: London Overground
LOCATION: Clapham Junction Station
DATE: June 2013



Introduction

BCM delivered an extension and phased regeneration of Platforms 1 and 2 including a new overbridge, canopy and commercial unit installation at Clapham Junction. The works were adjacent to the operational railway and the platforms were open to the public during the works. With Clapham being the busiest train movement station in the UK, BCM developed an innovative materials distribution solution at the adjacent viaduct and conducted a meticulous programme of material and plant deliveries, whilst co-ordinating with all relevant project stakeholders.

These rail building works were successfully secured through a competitive tendering process, via an existing relationship with a rail infrastructure client.

The project was successfully completed on time and within budget, establishing a new and important railway link for London Overground's "Orbital Railway". The completed scheme enabled a new connected route to be established from Surrey Quays to Clapham Junction.

Project Deliverables

BCM as a Rail, Building and Civils Contractor, provided a fully managed build solution, one which effectively coordinated with all scheme stakeholders to achieve full compliance with all relevant railway standards. The work scope included:

- full project risk management, including coordination of relevant risk workshops with all applicable project stakeholders;
- preparation of a detailed hour-by-hour programme of works;
- site mobilisation, including the erection of all relevant site segregation;
- surveys, service locating and ground investigation works;
- construction of an 80m x 5m solid filled platform extension with block fronted and reinforced concrete rear walls;
- provision and installation of all associated drainage, service ducts and chambers;
- supply and installation of new galvanised platform fences, gates and stairs.
- a new staircase including stainless steel finishes, movement joints, stair treads, stair landing and tactile pavers;
- a new canopy roof cladding and drainage connections;
- supply and installation of new platform furniture, signs and barriers;
- demolition of existing commercial units and removal off site;
- new concrete slab and service ducts, drainage and water connections;
- provision and installation of a new architect-designed glazed and clad waiting room;
- relocation and re-establishment of the connected existing modular coffee shop;

Challenges and Solutions

BCM faced a number of project challenges; the single biggest being the limited access for materials storage and delivery.

BCM developed a phased programme of delivery activities, utilising midweek access for lightweight materials and weekends for larger plant and materials. This needed careful thought to ensure the safe passage of rail passengers and other pedestrians, as the site was open to public.

By negotiating the use of an adjacent access point and establishing a bespoke scaffolding lift, BCM, were able to provide a fully segregated passenger, pedestrian and lightweight material access solution during the week. During weekend closures, the same safe access and egress solution was maintained for the public, however a crane was utilised for large plant movements and bulk material deliveries, ensuring that the works proceeded diligently.

During the course of the works, a number of design changes were received, which had the potential to impact the completion date. These included complexities around breaking through between the existing and new buildings and the removal and renewal of the canopy structure.

BCM's building professionals worked with the clients design team, bestowing our experience upon them, to provide buildable solutions. By researching and locating suitable materials and developing bespoke structural interfaces to match the existing construction, BCM were able to absorb these changes with the minimum of fuss.

Although BCM pride themselves on self-delivery, due to the complexity of some of the architectural details, we were required to outsource some elements of the works to our specialist supply chain. Due to our robust, tried and tested management systems we secured an internally approved subcontractor and delivered the works to meet the clients expectations.

Benefits

BCM's acting as a rail building contractor was able to ensure platforms remained operational during the majority of the works with only occasional pre-agreed weekend closures of the existing stairs.

As an experienced UK rail principal contractor, BCM were able to undertake a detailed review of the possession strategy and provide a fully prioritised plan, which included a robust set of track access requirements for each and every project milestone.

The collaborative effect of BCM's approach not only extended to clients and third party interests; it also extended to its own workforce and those of its sub-contractors. This co-operation gave BCM the flexibility to determine its logistics for delivery of materials and plant - allowing the works to stay firmly on programme.

This co-operative spirit throughout also allowed BCM to increase resource when needed, during the greatest periods of activity. This helped to ensure that project safety and quality were never compromised.

By taking full ownership of the challenges, addressed them head on and developing robust solutions that did not impact on cost or programme, BCM supported the creation of new legacy passenger service from West to East London for the New London Overground route.