Delivering effective solutions for Crossrail







A wealth of experience unites to get Crossrail on track

Balfour Beatty, BeMo Tunnelling, Morgan Sindall plc and VINCI Construction, four leading international engineering construction companies, have joined together to form a civil engineering partnership of excellence.

Having worked together to deliver some of the UK's highest profile projects, including Heathrow Terminal 5 tunnels, the joint venture, known as BBMV, are now working to deliver station and tunnel infrastructure at Liverpool Street and Whitechapel Stations for Crossrail.

Together the four businesses employ more than 200,000 people and have a combined turnover exceeding £40 billion world-wide, £10 billion of which is achieved in the UK. Additional strength is also brought to the partnership through BBMV's specialist in-house businesses, including Bachy Soletanche and Balfour Beatty Ground Engineering.

The BBMV partnership is defined by a commitment to shared values and proven methodologies:

- A total commitment to the highest levels of safety, minimising waste and engineering out cost
- Building collaboratively around our integrated team, effectively engaging with stakeholders and our supply chain to distill out the optimum solution for Crossrail
- Working sustainably in harmony with environmental requirements and tailored to the needs of the local community
- A culture of innovation and continual improvement intent on reducing cost, improving value and designing out waste
- A comprehensive team with the breadth and depth to engineer a world class project

A clear approach to sustainable development

The partnership shares a recognition of, and commitment to, the creation of sustainable assets that are both socially and environmentally robust. Together, the team has a desire to create assets that have an enduring value today, tomorrow and into the future through careful life-cycle assessment.

Rail



Terminal 5 Rail and Road Tunnels, UK

Tunnelling and railway extension works to the Heathrow Express and Piccadilly Line railways from the existing Central Terminal Area Stations to Terminal 5.

- Mechanical & Electrical services fit-out in the station/interchange areas
- Upgrades to the network branch line
- Provision of service galleries, ventilation and emergency shafts



Mitzholz Tunnel, Switzerland

Construction of a triple tube railway tunnel bored using drill and blast method, average tube section 65m².

Total length of the three tubes: 26,500m.

Metro



East London Line Extension, UK

Construction of a new railway between Dalston Junction and Croydon for Transport for London. Scope involved railway works including track, signalling, telecommunications and electrification, and major civil engineering works. The project also included the construction of two large new bridges, new stations and depot.



Docklands Light Railway Three Car Project, UK

Project objective was to increase capacity of the network from two to three car operation. Works included a new delta junction, platform lengthening at over 30 stations, bridge strengthening and associated track works.

World class delivery of Underground Railways

- Geotechnical and foundation engineering
- Bored and spray concrete lined tunnelling
- Station construction and fit-out

- Mechanical and electrical systems delivery
- Urban logistics
- Commissioning and assurance



Channel Tunnel Rail Link King's Cross Station, UK

Construction of the phase II complex tunnelling works, plus the new Northern Ticket Hall.

The works have significantly increased the capacity of this heavily used London station.



King's Cross Western Ticket Hall, UK

Formation of a new ticket hall and station concourse to serve the Metropolitan and Circle lines. Works included major civil engineering and building within a live station environment which was also Grade I listed.



Docklands Light Railway Woolwich Station Extension, UK

Construction of 2.5km of twin track tunnels deep beneath the River Thames and a new terminus station in a deep box adjacent to the existing North Kent Line station at Woolwich Arsenal. Scheme challenges included complex technical requirements, plus extensive local community interfaces. The project was successfully completed eight weeks ahead of schedule.



North Downs Tunnel (CTRL 410) and Channel Tunnel, UK

Completion of a 3km long single-tube tunnel completed with the New Austrian Tunnelling Method, earthworks for the construction of a 1.3km railway bridge and three road bridges.

Turnkey construction of three bored tunnels totalling 150km (54km of which was under the sea) including two single track railway and a service tunnel.



Metro, Athens-Greece, new lines from 2 "Sepolia-Daphni" and 3 "Keramikos-Pentagono" and extension of line 2 towards Elliniko

Following the earlier construction of two complete new metro lines, current involvement includes detailed design, management and synthesis of this 5.7km long structure, which includes a 5m bored tunnel, four stations and 600m cut and cover sections.



Metro, Algeria, Line 1, technical and architectural trades of the stations

Finishings, technical and architectural trades of 10 stations (nine underground stations and one elevated), construction of a 16,000m² technical building and workshops.



Metro do Porto, Portugal

Design, supply, installation, test and commissioning of the fixed installations for this new light rail transit system. Scope included the construction of 33 substations, contact line over 60km track length (7km in tunnel), 68 stations of which 12 were underground, plus electrical and mechanical works and the Control Centre.



Metro tunnels and stations, Cairo-Egypt

Construction of 11km of 9m diameter tunnels (Slurry TBM) and nine underground stations.

A team built on successful experiences





Balfour Beatty

Balfour Beatty is a world-class engineering, construction, services and investment business. We create and care for essential assets: hospitals, schools, road, rail, utility systems and major structures. We work in partnership with sophisticated customers who value the highest levels of quality, safety and technical expertise — applying our skills to meet their individual needs. We aim to deliver reliable, responsible growth over the long-term.

www.balfourbeatty.com





BeMo Tunnelling is a specialist in the engineering and construction of all kinds of underground structures, whether new construction, refurbishment, reinstatement or reconstruction. Our experienced staff and know-how make us a world leader in our field, as can be seen from our excellent project record. Our highly qualified and committed team of experts is known internationally for its broad scope of technical competence and innovative solutions for the design and delivery of complex and challenging tunnel works. It is our goal to maintain and further build our excellent global reputation well into the future.

www.bemo.net



MORGAN

SINDALL

Morgan Sindall plc is a UK construction, infrastructure and design business with a national network of local offices. We work for private and public sector customers on projects from £50,000 to over £500 million. Our activities range from small works and repair and maintenance, to the design and delivery of complex construction and engineering projects where we are able to provide specialist tunnelling, utilities, building, civil engineering and mechanical and electrical services. We operate across the commercial, defence, education, energy, healthcare, industrial, leisure, retail, waste, water and transport sectors. With revenues in excess of £1.2 billion, Morgan Sindall plc is part of Morgan Sindall Group plc, a leading UK construction and regeneration group operating through five divisions of construction and infrastructure, affordable housing, fit out, urban regeneration and investments.

www.morgansindall.com





VINCI Construction is part of VINCI, the world's leading concession and construction group. VINCI Construction has all the key competencies required to deliver complex projects. VINCI construction designs and builds major civil engineering structures (tunnels, bridges, dams, liquefied natural gas tanks, road and railway infrastructure, etc) and buildings (high-rise buildings, shopping centres, hotels, major industrial facilities, nuclear sites, etc) throughout the world. Here in the UK, we can draw upon the capabilities and expertise of our subsidiaries VINCI Construction Grands Projets and VINCI Construction UK Ltd.

Vinci Construction (represented by VINCI Construction Grands Projets and Taylor Woodrow)

www.vinci-construction-projects.com/british-isles www.taylorwoodrow.com