

M4 Smart Motorway



As part of Highways England’s £1.5 billion Smart Motorway Programme, the Balfour Beatty VINCI joint venture is converting a 32-mile stretch of the M4 to a smart motorway. Extending from Junction 3 near Heathrow Airport to Junction 12 at Reading, the upgrade will increase capacity, reduce congestion and shorten journey times for the thousands of road users who use this part of the motorway network every day.

Extra capacity is being added to the motorways through the conversion of the hard shoulder to an additional lane of traffic. Electronic signs are being installed to impose electronically-policed variable speed restrictions and manage the flow of traffic in response to driving conditions. As part of the works, 11 overbridges are being replaced with larger span structures and six under-bridges are being widened to accommodate four lanes.

Customer Name

M4 Smart Motorway Upgrade

Value

£800 million

Project and Location

Stretch of motorway between Heathrow and Reading

Duration

4-year project

Sector

Infrastructure

Products (Inc Quantity)

26 Eco-specification Units,
Several groundhog (towed welfare cabins)
Generators

The Challenge

The M4 smart motorway scheme is classed as a nationally significant infrastructure project (NSIP) with very strict timeframes. Hundreds of Balfour Beatty and VINCI workers are involved in the project and a large accommodation complex was required with welfare facilities, canteen areas and office facilities for Balfour Beatty VINCI workers on the site, as well as sub-contractors and visitors. Balfour Beatty and VINCI are actively tackling environmental and sustainability issues so it was crucial that the accommodation units were environmentally efficient. Balfour Beatty VINCI were seeking a one-stop solution, whereby the supplier could provide a fully project managed accommodation complex, so it was important that the chosen supplier had the scale and scope to provide this.

The Solution

Balfour Beatty VINCI selected A-Plant to supply the temporary accommodation needs for this high profile project, as a complete solution could be provided. Not only could A-Plant Accommodation supply a high specification double stacked accommodation complex, but another division within A-Plant - Mather+Stuart Power Solutions - could also provide the generators to power the units. Not only that but A-Plant also supplied a range of large plant equipment for use on the site, thus eradicating the need to deal with a multitude of different suppliers.

A-Plant Accommodation designed 2x double stacked complex with six welfare cabins on the ground floor comprising canteen, toilet and drying facilities, and a further six accommodation units on the upper floor with office and meeting room areas. Additional double stacked units comprising of three cabins and several stand-alone welfare units have also been installed which are used as offices.

In addition A-Plant also set up the accommodation complex and the associated power generation, ensuring that everything was fully functioning as efficiently as possible. All units provided by A-Plant Accommodation were of eco specification with features such as fully insulated floors, walls and doors, double glazed windows, dual flush toilet cisterns, wash basins with non-concussive taps and low energy lighting. In line with Balfour Beatty’s corporate identity, the units were provided in Balfour Beatty’s corporate colours of white and blue.

The Results

Balfour Beatty VINCI are delighted with the accommodation complex provided by A-Plant Accommodation and the company’s ability to provide a one-stop solution with power generation and associated services. Not only have the units provided workers with comfortable and attractive welfare facilities, they also meet the Joint Venture’s objectives to embed sustainability throughout the project. The M4 smart motorway scheme is scheduled for completion in 2022 so the accommodation units are being used on a long-term basis.