EDITED PRESS AND NEWS RELEASES

TRANSPORT FOR LONDON

ART ON THE UNDERGROUND UNVEILS ARTWORK BY HEATHER PHILLIPSON

7 June 2018

Art on the Underground has today unveiled “my name is lettie eggsyrub”, a new commission by British artist, Heather Phillipson, on the disused eastbound District Line platform at Gloucester Road Underground station. The artwork is Art on the Underground’s most ambitious project to date, and will be on display at the platform for the next 12 months.

The artwork is a focal point of Art on the Underground’s year-long programme of women artists, which forms part of the Mayor of London’s #BehindEveryGreatCity campaign – a major new campaign to draw attention to the progress that has been made by women over the past 100 years and champion the achievements and contributions that women make to London.

Heather Phillipson works in video, sculpture, online media, music, drawing, poetry and installation. Relationships between human and non-human animals are a recurring theme in her work and for this commission she will focus on the egg as an object of reproduction, subject to human interference.

See also ‘From the Papers’, page 456, this issue.

Photo: Transport for London

SIEMENS MOBILITY LIMITED TO BE AWARDED TfL CONTRACT TO DESIGN AND MANUFACTURE A NEW GENERATION OF TUBE TRAINS

15 June 2018

TfL confirmed today its intention to award Siemens Mobility Limited a contract of around £1.5bn to design and build 94 new generation Underground trains that will transform the experience of Piccadilly Line passengers. More than 700,000 passengers use the Piccadilly Line every day. However, the combination of limited fleet size and old signalling technology has restricted the ability to increase capacity across the line for many decades[1]. Twenty-two UK suppliers have been identified in the bid to potentially work with Siemens Mobility Limited on the build of the trains.

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[1] This really is ‘recent’ signalling, in that the computer signalling installed in 1981-83 at the east end of the Piccadilly Line caused the reduction in service to a maximum of 24 trains per hour from December 1982.

The award of this contract is a significant step allowing Siemens Mobility Limited to progress its plan to build a new factory in Goole, East Yorkshire, to manufacture and commission trains. The Siemens Mobility factory would employ up to 700 people in skilled engineering and manufacturing roles, plus up to an additional 250 people during the construction phase of the factory. After completion, TfL will work with Siemens Mobility Limited to maximise the number of Piccadilly Line trains being built in this facility. This order – the first under the Deep Tube Upgrade Programme (DTUP) – will mean the replacement of the entire Piccadilly Line 1973 Tube Stock fleet.

From 2023, 94 new state-of-the-art Inspiro trains will be delivered on the Piccadilly Line enabling up to 27 trains-per-hour (tph) to operate at peak times by the end of 2026 (up from the current service level of 24 tph).

NEW DESIGN FEATURES

Combined with a signalling upgrade and the purchase of additional trains, peak period capacity on the busiest central sections of the Piccadilly Line will increase by more than half by the end of the 2020s and will mean an additional 21,000 passengers will be able to board trains every hour during peak times. The four Deep Tube lines make up a third of the Underground network, carrying around two million passengers per day on key corridors linking the City, the West End, King's Cross and Heathrow Airport.

The Deep Tube Upgrade Programme aims to replace the life-expired rolling stock, signalling and control systems across the four lines. In total, the upgrade programme will deliver a 36% increase in capacity across the four lines by 2035.

First delivered in 1974, the existing Piccadilly Line trains were introduced in passenger service from 1975. These trains are the second oldest train fleets in passenger service on the Underground, originally with a design life of 40 years. The new trains will have a host of new design features that will significantly increase passenger comfort. Each new train will be six metres longer than the existing Piccadilly Line trains. They will include walk-through, fully air conditioned carriages and improved accessibility, and will be specially designed to optimise the space constraints in the narrow Deep Tube tunnels. While this order is for an initial 94 trains, the contract will be awarded on the expectation of a single manufacturer building the trains for all four Deep Tube lines.

The combination of the limited fleet size (86 trains) and current signalling system design restricts the current peak period service on the Piccadilly line to 24 trains-per-hour. The introduction of an initial fleet of 94 trains on the line, which will be delivered from 2023, will enable 27 tph to operate at peak times by the end of 2026. On completion of line-wide re-signalling and with the purchase of seven additional trains (up to a total of 101 trains), the service levels on the Piccadilly Line will be progressively increased to 33 tph. The new signalling system will be designed with a capability to allow further timetable enhancements to a maximum of 36 tph – as is the case on the Victoria Line currently – to meet expected future demand. This capability would require the purchase of a further eight trains (to a maximum fleet size of 109 trains), subject to affordability. This would mean an additional 21,000 passengers able to board trains every hour during peak times.

The Deep Tube Upgrade Programme will see approximately:

- 100 trains for the Piccadilly Line giving 60% more capacity (current fleet size: 86 trains).
- 40 trains for the Bakerloo Line giving 25% more capacity (current fleet size: 36 trains).
- 100 trains for the Central Line giving 25% more capacity (current fleet size: 100 trains).
- 10 trains for the Waterloo & City Line giving 50% more capacity (current fleet size: 5 trains).

Both photos: Siemens Mobility Ltd.

FIRST NEW STATE-OF-THE-ART LONDON OVERGROUND TRAIN UNVEILED

20 June 2018

The first new British built and designed London Overground train was unveiled today by Transport for London. Hosting a range of new features, the first of the new trains will be in passenger service by

November 2018. The new features of the Class 710 electric trains include the latest intelligent lighting and temperature control for more comfortable journeys, as well as Wi-Fi, USB charging points and digital information screens giving passengers higher quality real time travel information while on board.

In total, a fleet of 54 new air-conditioned trains has been ordered and will come into service initially on the Gospel Oak to Barking route. The number of people using the Gospel Oak to Barking service has grown exponentially since it became integrated into the TfL network and the new trains will have four cars, doubling the capacity of the current diesel stock to almost 700 passengers per train, relieving congestion on this north and east London line. The trains are being built at Bombardier Transport UK's site in Derby.

Operated by Arriva Rail London (ARL), on behalf of TfL, the new trains will debut a new colour scheme and unique seat moquette. The trains are constructed from strong but lightweight material, making them much more energy efficient to operate, and feature walk-through carriages for greater capacity and improved accessibility with more wheelchair spaces. Final approval of the work carried out by Network Rail to electrify the Gospel Oak to Barking route was completed last week, which signals the next phase of this project. The new trains will now be tested on this new infrastructure over the summer.

A new simulator has been created with a precise representation of the driver's cab and life-like graphics of the London Overground route to enable drivers to experience driving the new trains through all conditions, including severe weather and trespassers on the track.

All photos: Transport for London

Drivers will undergo training and familiarisation over the summer before the first train enters passenger service.

After the introduction on the Gospel Oak to Barking route, they will then be introduced between Watford and Euston, and on West Anglia routes from Liverpool Street, the latter replacing the current fleet, some which are over 35 years old that TfL inherited when it took over the suburban routes from Abellio Greater Anglia in 2015. The new trains will also be used on the extension to Barking Riverside when it is completed in 2021. The Barking Riverside extension will add 4km to the London Overground Gospel Oak to Barking route, and take it from Barking to a new station at Barking Riverside. Construction is expected to begin in 2018, with train services starting during 2021.

Arriva Rail London is the train operating company responsible for running the London Overground network under a Concession Agreement with Transport for London (TfL). The seven and half year concession commenced on 13 November 2016.

BESPOKE MAINTENANCE TRAINS TO HELP CROSSRAIL KEEP RUNNING

28 June 2018

New state-of-the-art maintenance trains that will be used on Crossrail are being tested in Europe ahead of delivery to London later this year.

A new rail milling train and two multi-purpose engineering trains with bespoke machinery attachments will be delivered to London ahead of the Crossrail opening. These trains will be using the latest in railway technology to deliver the high levels of monitoring and maintenance that Transport for London will require. The 48 metre long rail milling train is the first of its kind to be used in the UK rail industry. It is able to scan the rails using electromagnetic crack detection, looking for any defects. If it identifies any issues with the track, it can mill the surface of the rail to remove defects and cracks, reducing wear on train wheels and the tracks. Metal chips will be collected in a container on the train and later recycled as high quality scrap metal. The milling process eliminates the problems of sparks, fire and dust created by traditional rail grinding trains, leaving a smoother surface that will provide a quieter, more comfortable ride for passengers. Using this state-of-the-art technology will reduce the need for major track maintenance, meaning less passenger disruption. Manufactured by Austrian company Linsinger in Steyrermühl in Austria, it has two drivers' cabs and space for up to four members of staff as well as a welfare facility. The rail milling train is a Linsinger MG31 UK and has been tested between Salzburg and Linz, Austria. It will be transported to London by road and ferry across the English Channel

The two multi-purpose engineering trains, supplied by Plasser UK, have been manufactured by ROBEL Bahnbaumaschinen in Freilassing in Germany. They can be configured to be between 40 and 80 metres long, depending on the task, with a number of modular attachments. The trains' unique gantry system provides the capability to change a five tonne, 35 metre switch rail within the short overnight engineering hours. The trains can also be configured for different purposes, using cranes, a scissor lift for working on overhead line equipment or cabling, and a water tank and jet for drainage clearance and tunnel cleaning.

All photos: Transport for London

These trains will also be the main way to transport new rail, platform screen doors, station transformers and more, through the central section of the line once stations are complete. The two multi-purpose engineering trains are being supplied by Plasser UK and they have been tested between Salzburg and Vienna in Austria. They will be transported to London through the Channel Tunnel. All three maintenance trains are fitted with the new central section signalling system, enabling them to move around the railway while passenger trains are still running to maximise the time spent working during the night.