

NATIONAL EXPRESS NEW PERRY BARR DEPOT - FACTS & FIGURES

The new bus and maintenance depot at the junction of Wellhead Lane and Aston Lane is a crucial pillar in National Express West Midlands' business strategy for Birmingham, both in the immediate future and for decades to come.

Background

National Express West Midlands employs around 450 people at its existing Perry Barr depot on Wellhead Lane, including drivers, engineering staff and back office workers. Most of the people who work there are from north Birmingham neighbourhoods. All these people are moving to the new facility.

The depot houses a fleet of over 150 buses that run services on more than 20 routes across north, east and north-east Birmingham - Chelmsley Wood, Hamstead, Sutton, Pheasey, Kingstanding, Witton, Perry Common and Erdington.

The current National Express West Midlands Perry Barr depot has been in operation since 1932 and the layout and fabric of the existing depot do not lend themselves to modernisation or changes to infrastructure that future technology vehicles require.

This is the first new National Express bus depot to be built since Coventry Pool Meadow in 1986. Being able to design a brand-new, state-of-the-art, future-proof bus depot from scratch is an incredible opportunity for passengers and staff.

The final buses will leave the old Perry Barr depot on the morning of Saturday 10th December and return from service to the new depot later that day. All services will run out of the new Perry Barr depot from Sunday 11th December.

Environment and Sustainability

National Express West Midlands worked hard to make the existing Perry Barr depot as energy efficient as possible. However, the technology and techniques available in a 21st-century new-build bring a massive reduction in our carbon footprint.

The new facility benefits from many energy efficiency measures, and in addition has the capacity to house electric buses and their chargers. It opens up the possibility of zero-emission bus services for north and east Birmingham - contributing to the fight against climate change, as well as reducing toxic emissions in some of the most deprived areas of the city.

- The depot has an Energy Performance Certificate B rating
- It is capable of accommodating a full fleet of electric buses - part of National Express' commitment to a zero-carbon bus fleet by 2030
- There is no gas on site. Heating is via a hybrid heating system including Air Source Heat Pumps (ASHP), electric overhead radiant panels and Variable Refrigerant Flow, supplemented with solar panels
- There is roof space for further expansion of solar panels and air source heat pumps

- A green wall on acoustic panelling will help to improve air quality whilst reducing noise pollution. A wild flower garden has been planted behind the acoustic panelling to improve habitats for wildlife
- A 432m² green roof with a 22 species planting mix on an ultra-light sedum. By next summer, there will be up to 90% coverage helping improve air quality and habitats for wildlife
- A self-contained water recycling system for bus washes
- A storm water system has been installed under the car park allowing rainwater to feed into the local infrastructure at a controlled rate

Safety and Efficiency

At National Express, safety is incredibly important. Our aim in all our operations is to keep people and vehicles apart as much as possible. Being able to build a new facility allowed us to design a safer, more efficient layout for operations and maintenance than was possible in a 90-year-old depot.

For example, our bus parking plan makes it as quick and easy as possible to get services out in the morning, using minimal reversing. With nearly 200 buses to put out on time, every second counts.

A separate service lane for washing and fuelling the vehicles means the engineering team can do their work away from operations.

People

The new facility incorporates plenty of well laid-out resting areas for drivers and engineers, who work a variety of hours and shift patterns. Male and female showers, ablution units, a quiet room, a cafe with seating for up to 56 people, snooker tables and TVs have also been included in the new depot.

The on-site cafe will offer breakfast, lunch and dinner with a selection of homemade hot and cold food - including vegetarian, vegan and halal meat options. There will also be a refrigerated vending machine with sandwiches, soups and pastries and microwaves to heat up these foods, along with any food brought from home.

Two snooker tables have been moved from the old depot for staff to use in the break time or before and after shifts.

The new site also includes a purpose built training function, separated from the everyday running of the garage. This includes waiting areas, training and assessment rooms for new drivers, as well as space for programmes to develop our existing staff, such as National Express' award-winning Master Driver scheme.

All of the Perry Barr team have been on visits to their new workplace ahead of it becoming operational and have been included in the project, including helping decide the colour schemes.

The Local Community

Because the new site is so close to the existing depot, bus services can follow the same routes they do now - so there will be no extra local bus traffic brought about by the slight change of location.

A big bus depot in a large city like Birmingham will always be an almost 24-hour operation. Although the depot is not moving far, the new depot is on an industrial site, with fewer houses nearby than the existing location so there should be less disturbance with the early and late comings and goings of a busy transport depot.

The separation of the bus servicing lane also means any mechanical noise will be as far away as possible from most of the nearby houses.

Heritage

Entrance gates from previous tenants of the new site have been maintained as part of the redevelopment.

Along with staff and buses, the following items have also moved to the new site:

- 2 snooker tables
- 1 fish tank
- 1 heritage mirror

Murals from the old garage will be recreated on canvases to be displayed in the new building.

The Project

BAM is the principal contractor for the site, appointed following a procurement process for a two stage design and build process.

Work started on site in July and September 2021 for enabling works and full construction works respectively.

BAM employed 946 people to work on the scheme at various stages. The project also used 18 local sub-contractors and 14 local suppliers.

418 tonnes of carbon were saved by a steelwork redesign of the project. Through the innovative use of ground stabilisation and use of fibre mesh for the ground floor slab, BAM has also:

- diverted 20,500m³ of waste materials from landfill
- reduced quarried hardcore by 11,900T
- reduced the need for 1,400m³ of concrete
- reduced the need for 140T of steel reinforcement

On site there will be:

- 171 bus parking spaces
- Cycle rack for up to 20 bikes
- 79 car parking spaces for staff and visitors
- 14 electric vehicle bays
- 12 maintenance bays, 3 fuel bays, 3 bus washes and 1 chassis wash

- 150 solar panels
- Heating via a hybrid system including Air Source Heat Pumps (ASHP), electric overhead radiant panels & Variable Refrigerant Flow, supplemented with solar panels - meaning there is no need for gas onsite.
- A green wall on acoustic panelling to help improve air quality whilst reducing noise pollution. A wild flower garden has also been planted behind the acoustic panelling to improve habitats for wildlife.
- A self-contained water recycling system for bus washes
- Rainwater harvesting for toilets and urinals

Bus Simulator

Working closely with manufacturer Simfor, National Express West Midlands is the first UK company to use this state of the art virtual reality technology. We aim to have four simulators in the business by the end of the year.

The first simulator was installed at our National Express Coventry garage earlier this year and another has been installed on a National Express bus which can travel around our West Midlands garages and recruitment shows, enabling all current and new or trainee drivers to experience the digital world of driving. Two others will be set up at our training academy in Walsall and at our brand new depot in Perry Barr.

The DriVR bus simulator gives our drivers the most realistic driving experience and enables us to provide training on high-risk manoeuvres, without the risk. To date, 300 of our drivers have tried it with 100% recommending it to others.

As part of our recent Road Safety week activity, we used the simulator to prepare nearly 100 drivers, who had never driven before in such weather conditions, for driving in the snow.

Recent figures show our driver standards have improved by 75% and our aim is for every new driver to have a session on the simulator as part of their licence acquisition - it will aid them when it comes to driving the real thing at our training centre.

We can create scenarios for any time of day, in any weather condition. The simulator training will be developed throughout its lifecycle to keep it relevant for our drivers, with refreshed material on a regular basis.