

Our proposals

Overview

In this section we set out our proposals for expanding the airport. Our proposals for getting to and from the airport are set out in more detail in section 4.

The proposed development boundary for our application for development consent incorporates the airport itself together with the proposed area of new landscaping and public open space, car parks and off-site highway improvements.

In preparing our proposals, we have sought to achieve the following goals:

- Make best use of the existing runway to accommodate increasing demand in accordance with aviation policy and Green Controlled Growth described further in this section
- Enhance the existing airport facilities rather than replace them
- Increase capacity for commercial passengers to 32 mppa, while also continuing to provide capacity for business aviation
- Be a good neighbour, by minimising and mitigating environmental impacts, including air pollution and noise, in line with our commitment to responsible and sustainable development
- Provide at least 10% biodiversity net gain*
- Enhance and encourage at least 45% of passenger journeys to the airport to use public and sustainable transport as an alternative to private vehicles by a target date of 2039
- Maintain as much of Wigmore Valley Park as we can, and provide at least 10% more public open space than currently exists
- Minimise disruption during construction to the existing airport and local infrastructure
- Maximise benefits to the local and sub-regional economy
- Enable the airport to handle flights to longer-haul destinations
- Maintain the airport as an important site for aircraft maintenance and repair
- Retain existing cargo operations, subject to limitations on night-time aircraft noise
- Deliver best value, improved facilities and good levels of service to cater for the diverse and wide-ranging needs of all users of our airport
- Phase development to deliver additional capacity to respond to growth in demand in two phases related to increasing capacity at the existing terminal (Phase 1), and the construction of the new Terminal 2 (Phase 2), as described in section 5 of this brochure

***Biodiversity net gain is an approach which aims to leave the natural environment in a measurably better state than it was before.**

Our proposals will be designed to be as sustainable as possible following the Green Controlled Growth initiative described in this section, minimising negative impacts on the environment wherever we can. Specific measures include:

- Supporting the fullest possible use of sustainable transport
- Securing the most efficient use of energy, a reduction in emissions, and a minimal carbon footprint
- Developing a drainage strategy to prevent water pollution, real-time monitoring of pollution levels and new treatment facilities
- Minimising vulnerability to climate change and increased rainfall through our surface water strategy
- Using electric vehicles both airside and landside
- Providing high quality public open space
- Setting targets to meet our carbon objectives
- Delivering sustainable waste management
- Incorporating rainwater harvesting and grey water recycling
- Ensuring the proposals safeguard the ability to adapt to changes in aircraft fuel technologies to deliver a shift away from fossil fuels

Please note that all plans and figures in this brochure are indicative only and may change as we develop our proposals.

The permitted capacity of the airport is currently 18 mppa³. The technical work underpinning our current development proposals shows that we can carry out a phased increase in the airport's capacity to handle 32 mppa.

Why 32 mppa?

During the options development stage, we considered options that would have supported expansion up to 36-38 mppa. However, following the response to our non-statutory consultation in 2018 and further assessment work, we progressed with an option that would only expand the airport's capacity up to 32 mppa at this time. The main reasons for this are that there would not have been enough capacity on the road network to support the higher number of passengers and it would have meant more development within the Green Belt, which we wanted to avoid.

Key changes to our proposals since 2019

The feedback we received during our previous consultation in 2019, along with the impact that Covid-19 has had on the aviation industry, led us to undertake an extensive and in-depth review of our proposals. Following this review, we have made some important changes.

The changes include:

- Inclusion of a new Airport Access Road and improvements to the Airport Way/Percival Way junction as part of our application for development consent, which changes the development boundary for the application

³ On 1 December 2021, the local planning authority (Luton Borough Council) resolved to grant permission for the current airport operator (LLAOL) to grow the airport up to 19 mppa, from its previous permitted cap of 18 mppa. Since then, the Secretary of State for Levelling up, Housing and Communities has issued a 'holding direction' which prevents Luton Borough Council from issuing a final decision while the Secretary of State considers whether he should call-in and decide the 19 mppa planning application. All of the assessment work to date has been undertaken using a 'baseline' of 18 mppa. Nonetheless, in anticipation of LLAOL's 19 mppa planning application, the preliminary environmental assessments included sensitivity analysis of the implications of the permitted cap increasing. As a result, the consultation assessments are considered to be sufficiently representative of the likely significant effects of expansion, whether the baseline is 18 mppa or 19 mppa. Where the change of the baseline does affect an assessment topic, in most cases it means that the 'core' assessments (using an 18 mppa baseline) report a marginally greater change than would be the case with a 19 mppa baseline. Further consideration will be given to updating the assessments after the consultation, alongside any other revisions made as a result of consultation feedback.

Our proposals

- A range of sustainability design measures, including additional solar energy production and water efficiency measures
- Improvements to the replacement open space for Wigmore Valley Park to protect more valued existing habitat and landscape features, provide improved enclosure and screening to development at the airport, improve connectivity to the existing parkland areas to be retained, and to reposition it nearer to the community it serves
- Reducing the size of the platform needed to bring the expanded airport level with the runway, meaning a reduction in earthworks (engineering works involving moving and excavating earth). Compared to the scheme we previously consulted upon the scale of the reduction in earthworks to build the platform is equivalent to two Wembley Stadiums
- Reconfiguring taxiways, reducing aircraft parking stands, and re-positioning the engine run-up bay with noise barriers
- Reducing the footprint of the car parking
- A new approach to managing the potential effects of future expansion, called Green Controlled Growth – details about this can be found on page 49

Phasing

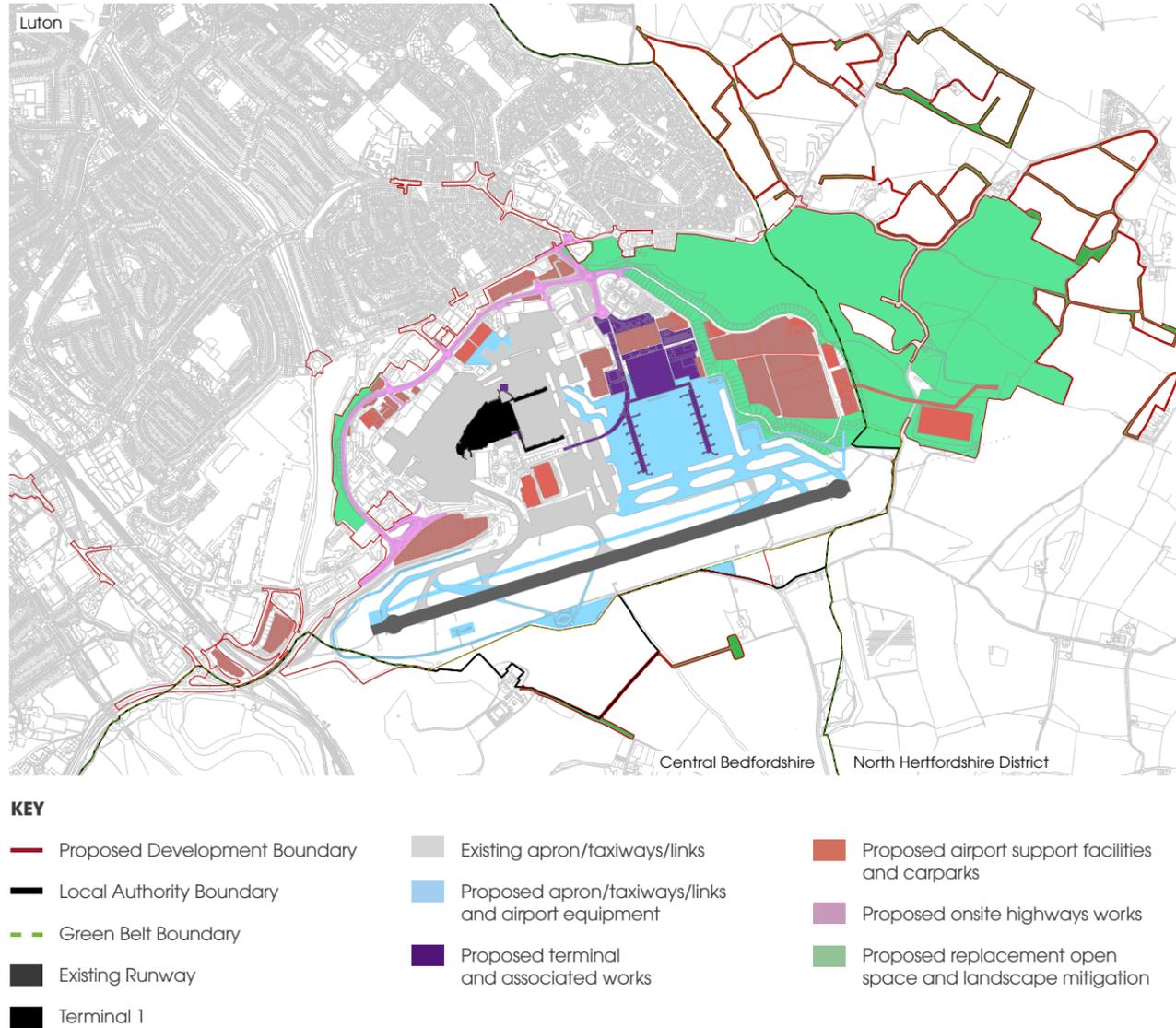
The scheme will deliver additional capacity in two works phases related to increasing capacity at the existing terminal (Phase 1), and the construction of Terminal 2 (Phase 2). However, for the purposes of our assessment work three phases are considered, as follows:

- **Phase 1: Expansion of Terminal 1 and associated facilities to increase capacity from currently consented capacity to approximately 21.5 mppa.**
- **Phase 2a: Construction of new Terminal 2 and associated facilities to increase airport capacity from 21.5 mppa to 27 mppa.**
- **Phase 2b: Further expansion of Terminal 2 and associated facilities to increase from 27 mppa to 32 mppa.**

You can read more about the phasing for the construction of the scheme in section 5 of this brochure.



Figure 3.1 Proposed indicative layout for the scheme



Green Controlled Growth

We take our environmental responsibilities incredibly seriously. In support of our application for development consent, we are carrying out a thorough and robust assessment of the environmental impacts of expansion using the best available data and modelling techniques. This is referred to as an Environmental Impact Assessment, the outputs of which will be captured in an Environmental Statement.

We are proposing to build on this by introducing a unique and ground-breaking initiative which we call Green Controlled Growth (GCG).

GCG is a new, environmentally-focused approach to managing growth at the airport. It will introduce binding limits for the airport’s noise, carbon, air quality and surface access impacts. We selected these impacts because these are the areas where, as the airport grows over time, there is most scope for impacts to increase in line with growth. Crucially, these environmental limits are not airy aspirations, but would be legally binding. Assessing whether limits are being breached will be carried out by an independent body.

GCG includes ongoing monitoring of these impacts and regular public reporting. If monitoring were to suggest at any point that these limits were in danger of being breached, then plans must set out how that breach would be avoided. If environmental limits were ultimately breached, further growth would be stopped, and mitigation required.

Figure 3.2 Environmental impacts addressed by GCG



The GCG limits will also include a robust system of governance and independent oversight to ensure that performance against the environmental limits is properly monitored and managed. We will set up a new body, independent of Luton Rising, to hold the airport operator to account and ensure that appropriate action is taken based on the results of monitoring.

We believe GCG would be one of the most far-reaching commitments to the sustainable operation of an airport ever to be introduced in the UK.

You can read more about this in our **Draft Green Controlled Growth Proposals** document.

Airfield

The main airfield elements of our proposal are:

- A new second taxiway parallel to the runway at its eastern end together with extensions to the existing parallel taxiway allowing more efficient taxiing and manoeuvring of aircraft, optimising the overall capacity of the runway. This will reduce aircraft ground noise and reduce greenhouse gas and NO₂ emissions from the aircraft.
- New apron areas to accommodate additional aircraft stands, located adjacent to terminal areas, including necessary services such as floodlighting to ensure safe operations.
- Additional taxiway links connecting the runway to the taxiways and in turn to the new apron to reduce taxiing distances and queuing.
- Aircraft ground handling and vehicle holding facilities to serve airfield operations including electric vehicle charging areas.
- Substations, including standby generators.
- Relocation of the Fire Training Ground to the south of the runway to provide space for the proposed apron.
- Provision of a new engine ground running bay (to test aircraft engines after maintenance) with modern acoustic barriers. This new facility is required as the existing facility is located within the site of the proposed apron.
- Provision of a location to isolate an aircraft (safe aircraft separation from other airport activities).
- An additional surface movement radar to maintain safety and monitoring of aircraft taxiing during periods of low visibility given the increased airport footprint.

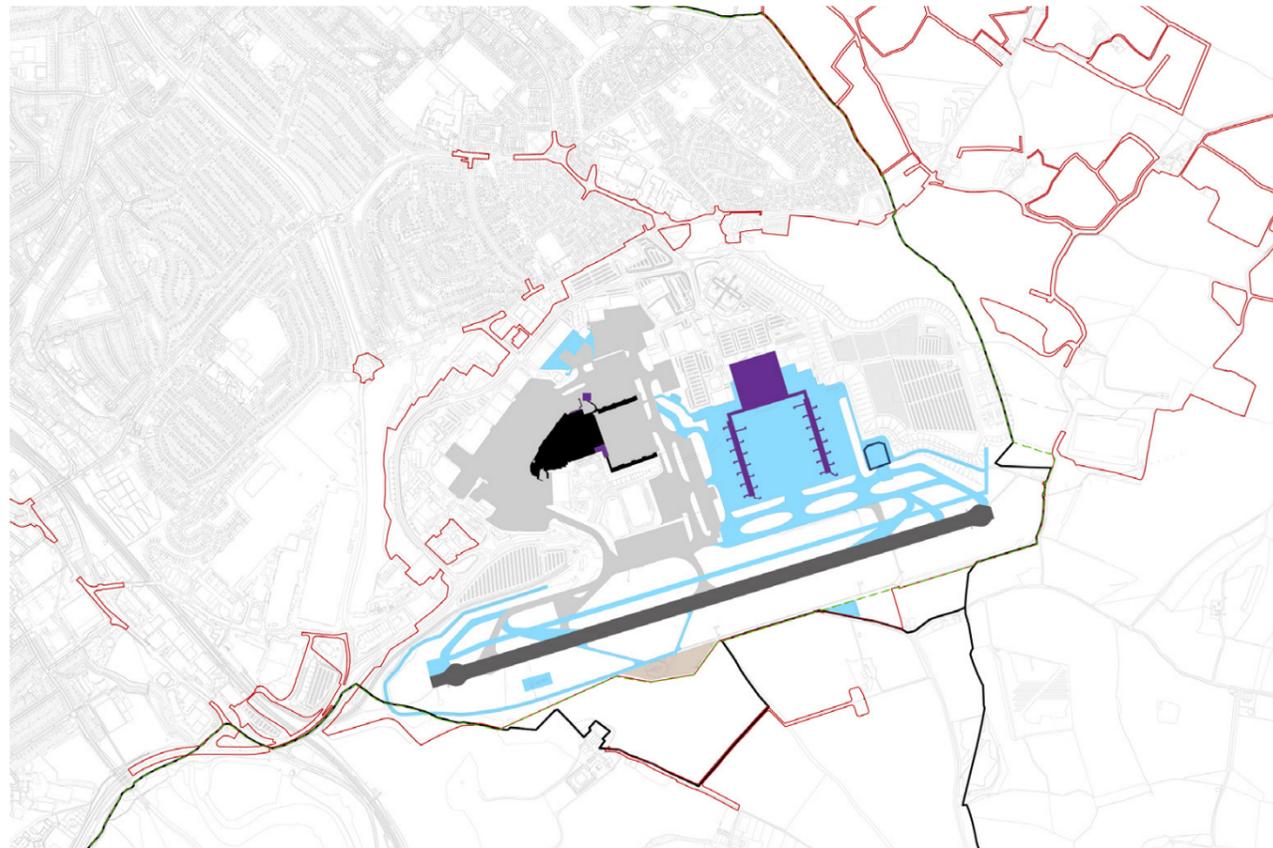
The principles followed for the design of the expanded airfield meet international standards and will allow us to construct the facilities in phases to support operational need and demand.



The overall layout of the airfield has been optimised to minimise land take. Nonetheless, account has been taken of the operational interfaces with the existing airfield and, to the extent possible, the strategy will be to construct most of the works outside the current airfield to minimise impacts on operations during construction.

For more information on the airfield scheme development, please refer to **Chapter 4 of the PEIR** and the **Works Description Report**.

Figure 3.3 Proposed airfield layout



KEY

- Proposed Development Boundary
- Local Authority Boundary
- Green Belt Boundary
- Terminal 1
- Existing apron/taxiways/links
- Proposed Terminal 1 and Terminal 2
- Proposed apron/taxiways/links
- Proposed Engine Run-up Bay
- Proposed Fire Training Ground

Changes to existing terminal

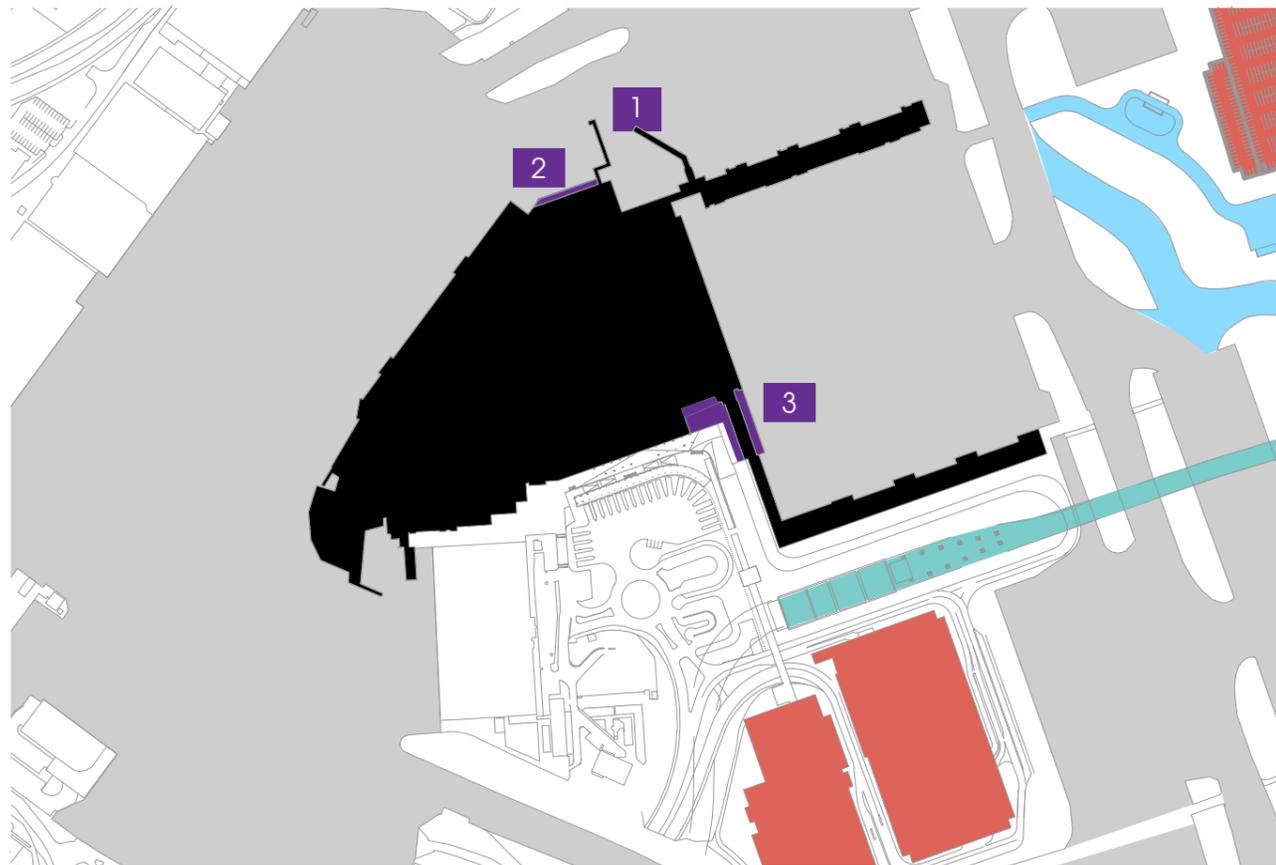
To accommodate the forecast passenger demand in the first phase of development (up to 21.5 mppa), our proposals include new facilities and extensions to increase the capacity of the existing terminal building. A set of potential solutions have been assessed in order to define the best way to accommodate the future demand at Terminal 1.

The following extensions have been assessed in the PEIR. However, these may be adapted and refined to meet future operational needs, dependent on how the demand evolves over the next few years. Should alternative options be adopted, the location, scale and nature of the extensions will be similar to those described and are not considered to give rise to materially different effects to those reported in the PEIR. Additionally, any remodelling works to increase the capacity of key facilities such as check-in, security check point, outbound baggage system, and inbound baggage system would not require additional buildings and would be delivered within the existing terminal.

- An extension of the current building to the north (ground floor only) to increase the existing passenger queuing area at Immigration, including remodelling and optimising the layout of desks and e-gates.
- An extension of the existing building to the south side is proposed to increase the terminal area at both ground and first floor levels. At ground floor level, this would provide additional space for key facilities such as security search and check-in. At the first floor level, the additional area would provide additional space for the departure lounge to increase the provision of seating for departing passengers. Other options provide additional departure gates within the existing terminal building by optimising and extending the use of some functions of the departure gate areas to the south.
- An increase in the number of departure gates (3 to 4 gates) is required to manage the growth in demand planned in Phase 1. A set of options have been explored to find the best solution which will be defined depending on how the demand in the peak evolves over the next few years. One option is to build a new bussing gate facility external to the existing building in order to operate the departures from the new aircraft stands. Other options provide additional departure gates within the existing terminal building by optimising and extending the use of some functions of the departure gate areas to the south.
- In addition to the proposed extensions to the existing terminal, various terminal areas would be remodelled to increase the capacity of the terminal within the current terminal footprint.

The proposed changes would increase the capacity of the terminal to approximately 21.5 mppa, which would be supported by the early construction of some new stands on the site to be used eventually for Terminal 2.

Figure 3.4 Proposed changes to Terminal 1



| KEY | |
|--|--|
| Terminal 1 (T1) | Existing apron/taxiways/links |
| Proposed associated works | Luton DART station |
| 1 T1 Temporary bus lounge | Proposed airport support facilities including car parking |
| 2 T1 North extension | Proposed apron/taxiways/links |
| 3 T1 South extension | |

New terminal

We are proposing a new terminal (Terminal 2) located to the east of the existing terminal complex. The new terminal would be constructed in phases to match demand.

We envisage the terminal building being:

- A facility of the scale appropriate to handle 12 mppa
- A separate building to minimise disruption to existing operations during construction
- Inclusive of check-in facilities, security, baggage handling, food and beverage, retail, staff welfare etc

- Inclusive of passenger boarding piers compatible with passenger boarding bridges if required by airlines
- Capable of modular and phased construction
- Able to incorporate modern practices in lighting, heating and ventilation to minimise energy use while creating a comfortable experience for passengers and staff
- Provided with onsite renewable energy sources, for example photo-voltaic cells on the terminal roof to generate electricity
- Able to incorporate modern practices for rainwater harvesting to minimise the need to use mains water
- Equipped with sustainable methodologies to minimise the carbon footprint of the new terminal (considering both construction and operation)

The new terminal will require its own dedicated aircraft apron and stands. The proposed new apron area will accommodate 28 aircraft contact stands with direct access from the passenger boarding piers. They will service a range of aircraft, including up to six larger aircraft of wingspan up to 65 metres occupying multiple stands.

Our proposed apron and taxiways have been positioned such that the aircraft taxiing time to the runway is minimised. This will reduce aircraft ground noise and reduce greenhouse gas and NO₂ emissions from the aircraft.

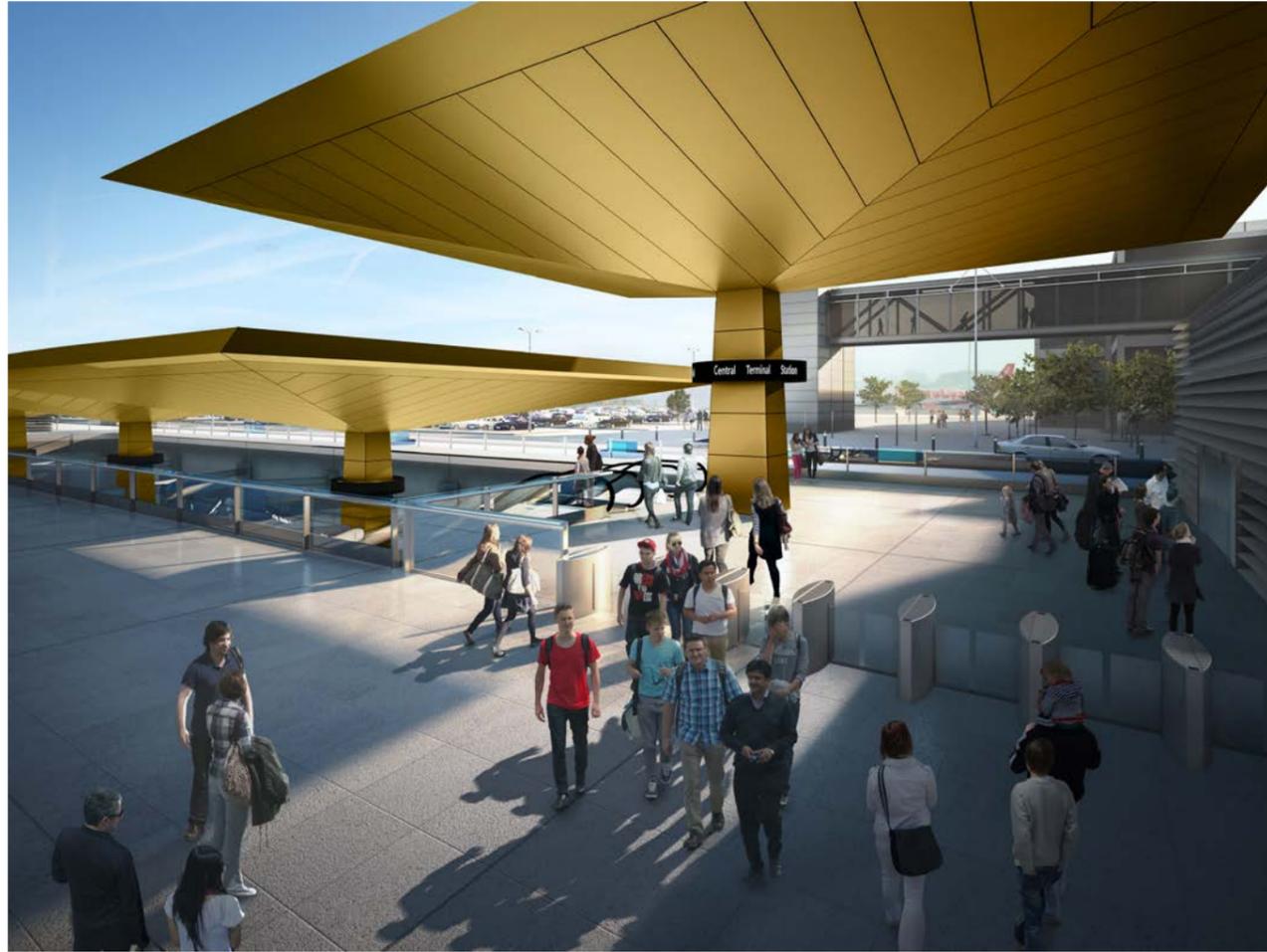
New support facilities would include:

- Operational support accommodation and airfield security post
- Aircraft maintenance hangars
- Fuel storage facility (pages 67-69)
- Luton DART extension
- Forecourt and coach station

Public transport

Luton DART and rail access

Terminal 2 would be connected to Luton Airport Parkway station, with a new station for the Luton DART passenger transit service (expected to open in 2022). We are proposing to extend the Luton DART from the existing terminal to Terminal 2, to provide passengers with a quick and reliable choice of public transport.



Forecourt and coach station

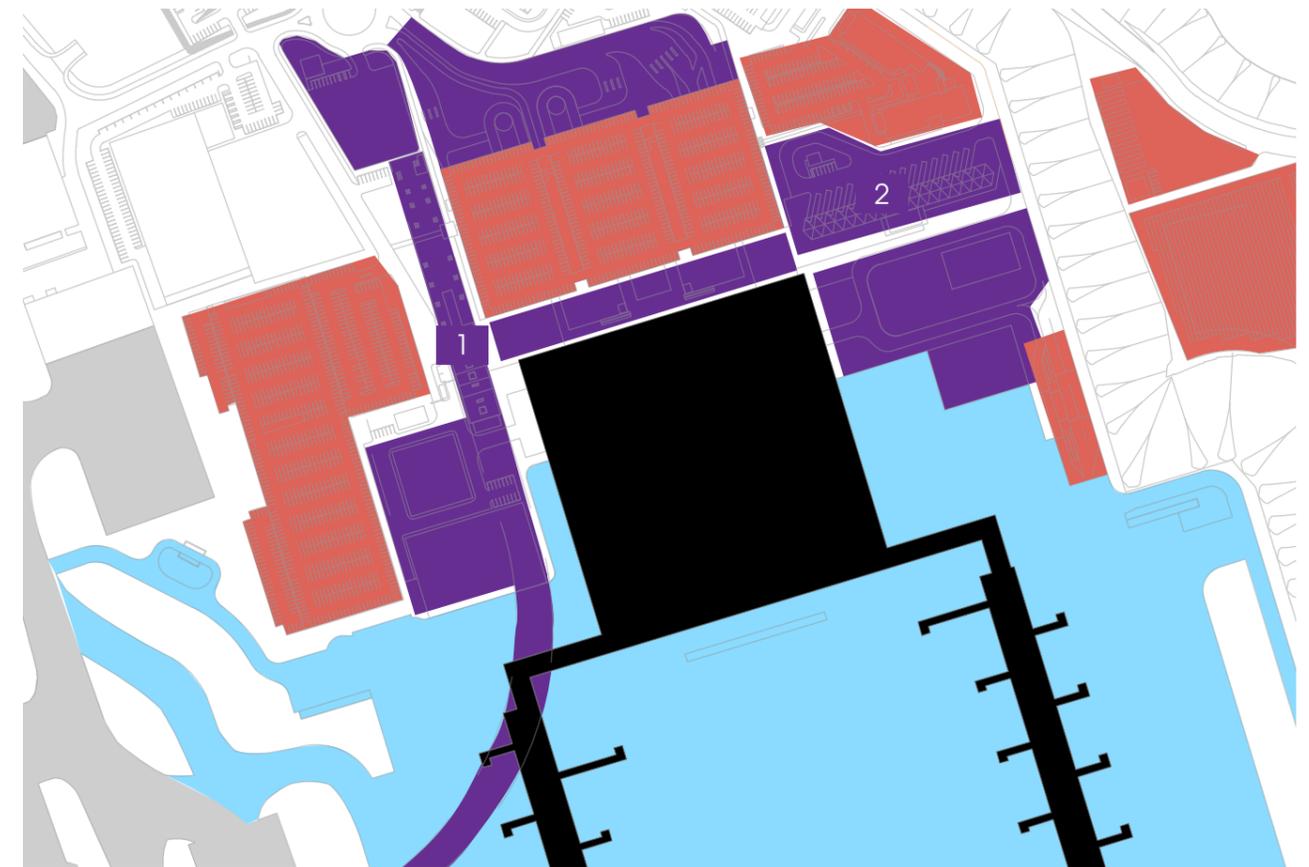
A new forecourt area with passenger pick-up/drop-off and eight bus stands would serve the new terminal.

It has been designed to cater for the airport’s busiest hours and accommodate pick-up/drop-off, taxis, local buses and shuttlebuses. The design is based on the principle of private car drop-off activity taking place at ground level, with a short-stay multi-storey car park located directly above for pick-up activity. It is anticipated payment would be required for drop-off activity and this may include differential pricing related to a vehicle’s carbon emissions.

Taxis and buses would be located on the southern aisles of the forecourt, closest to the terminal building, allowing taxi and bus passengers to directly access the terminal.

A separate coach station would be located to the immediate east of the forecourt, which would serve longer distance coach services.

Figure 3.5 Proposed public transport facilities at Terminal 2



KEY

- Proposed Terminal 2
- Proposed T2 associated works
- Proposed Luton DART station
- Proposed coach station
- Proposed airport support facilities and car parking
- Proposed apron/taxiways/links

Car parking

Our goal is for at least 45% of passenger journeys to and from the airport to be made by public transport and other sustainable travel methods, and we have calculated our required car parking numbers on this basis.

We are considering including a road charging strategy for airport roads within our application for development consent.

To meet the anticipated parking requirements at 21.5 mppa the majority of the existing parking provision will be retained, including the existing multi-storey car park facilities at Terminal 1, a reconfigured long-stay car park and the mid-stay car park on Airport Approach Road. New areas of surface level car parking would also be provided adjacent to the proposed Terminal 2 site, which would be upgraded to a multi-storey car park at 32 mppa.

The existing mid-stay and the replacement long-stay car parks will still require shuttle buses.

For the expanded 32 mppa airport, figure 4.2 on page 75 shows the proposed location of the short, mid-stay and long-stay car parks. Further information about the phasing of these facilities is contained in section 6 of this brochure. Staff parking is proposed to be accommodated within a decked car park on the site of the existing staff car park and car hire centre, located to the north of Percival Way. Additional provision for dedicated airport employee parking would be made within the proposed car parks near Luton Airport Parkway station.

It is anticipated that drivers parking in the employee car parks adjacent to Luton Airport Parkway would be able to use the Luton DART to reach both terminals.

Table 3.1 Proposed number of parking spaces

| Parking Type | Number of Parking Spaces | | |
|------------------------|--------------------------|---------------|---------------|
| | 21.5 mppa | 27 mppa | 32 mppa |
| Short Stay | 4,150 | 4,800 | 5,800 |
| Mid Stay | 2,600 | 3,000 | 3,650 |
| Long Stay | 4,675 | 5,400 | 6,550 |
| Employee | 4,400 | 4,900 | 5,200 |
| Car Hire | 500 | 600 | 700 |
| Valet Pick Up/Drop Off | 75 | 100 | 125 |
| Total | 16,400 | 18,800 | 22,025 |

Landscape

Our proposals would change the landscape that surrounds the airport, impacting on public access, land use, land cover and landform. We have sought to make our proposals sympathetic to the surrounding environment and to cause the least damage to valued wildlife habitats, amenity assets and heritage assets, but some adverse impacts would be unavoidable. Further detail about these impacts is provided in section 6 of this brochure.

Our landscape strategy seeks to protect valued assets of the landscape wherever possible, mitigate significant adverse environmental impacts and, wherever possible, to introduce positive changes that would help to strengthen the local landscape character and green infrastructure, improve public access to the countryside, and integrate the airport into its surroundings.

Our landscape strategy would increase public open space by at least 10% and would:

- Plant over 10.7 hectares of native broadleaf woodland
- Plant over 1.95 hectares of native scrub vegetation
- Plant or restore over 17.5km of mixed-species hedgerows
- Plant over 1,500 new hedgerow or parkland trees
- Deliver over 37.6 hectares of neutral meadow grassland
- Deliver over 27 hectares of low-intensity grazed grassland
- Deliver over 12.5 hectares of low-intensity grazed calcareous grassland
- Retain, protect and improve the management of over 9.5 hectares of existing woodland vegetation
- Construct over 5km of new surfaced paths or rights of way

Our proposals upgrade several sections of footpaths to multi-user bridleways, and would encourage access to the wider countryside by improving all rights of way within our landholdings, either through surfacing, new signage or improved connectivity.

Our proposals also support our aspiration for the airport to be one of the most sustainable airports in the UK, promoting solutions that:

- Nurture wildlife
- Conserve water and energy
- Reduce soil and water pollution
- Reduce construction waste
- Decrease surface water run-off

The proposals would also deliver a high-quality of public realm that would improve people’s experience of using and working at the airport.

You can read more about our landscape proposals in **Chapter 4 of the PEIR** and **Work No. 5 of the Works Description Report**.