Unblocking the Croydon bottleneck
Network Rail is proposing to upgrade the Brighton Main Line – one of the busiest and most congested routes in the country – to provide more reliable, more frequent and faster services.

Key to the upgrade are major proposals to remove the most challenging bottleneck on Britain’s railway network, the ‘East Croydon to Selhurst Junction Capacity Enhancement Scheme’ (the Scheme).

We are now speaking with passengers and the public about our proposals and would like to hear your views.

At the time of this consultation, the Scheme is unfunded. While we develop our plans, we will continue to build the case for investment in this Scheme and this vital growth corridor.

This booklet provides information on our proposals, the potential benefits, how we propose to build it, the planning process we will go through and how you can have your say.

All images and descriptions are indicative of current proposals and will evolve during the design process and following this consultation.

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Background

More than 300,000 passengers and 1,700 trains pass through the Croydon area each weekday, making it the busiest part of the country’s rail network.

The complex railway through the area means the Croydon bottleneck is widely considered to be the most operationally challenging railway junction in the UK, regularly causing delays on the Brighton Main Line, its branches and the wider network.

The Scheme includes the following key elements:

- Expansion of East Croydon station from six to eight platforms providing significant station and interchange improvements
- Construction of three additional railway tracks between East Croydon station and the Selhurst triangle
- Rebuilding Lower Addiscombe Road/Windmill Bridge to make space for additional tracks, with associated changes to the surrounding road network
- Remodelling track layouts and railway junctions including physically separating existing surface (flat) railway junctions by constructing new flyovers and dive-unders
- Expansion of the current railway operational boundary to allow the construction and operation of the new railway outlined above

What you’ve told us so far

Network Rail first consulted on the Scheme in November 2018. Feedback received has been used to shape our designs.

You said:

- Minimise traffic disruptions at Lower Addiscombe Road/Windmill Bridge
- Maximise development above and around East Croydon station
- Maximise the benefits delivered by the project
- Minimise construction impacts to passengers and lineside neighbours

We have considered this feedback as part of our plans and this consultation includes information about how we would build and install the bridge, most likely commencing over a Christmas period when we know the roads are quieter.

An additional grade separation has been incorporated into the Scheme to further improve rail operations. This change has resulted in a proposed eight track formation between East Croydon station and the Selhurst triangle.

This has steered our design further towards ‘offline’ construction for the railway works and influenced the site logistics design to minimise local lorry movements.

The following pages describe the current operational constraints, our proposals to overcome them and the associated benefits.
Selhurst triangle

Current constraints
The Selhurst triangle is one of the busiest and most complex parts of the rail network because of the high number of flat junctions and the frequency of trains.

Regular travellers through the area will know that trains often have to wait at red signals while other trains pass, causing knock-on delay and making it difficult to recover the service when an incident occurs.

Our proposal
We propose to provide ‘grade separation’ of all the key rail junctions in the Selhurst triangle. To achieve this, new viaducts, bridges and dive-unders are proposed to separate the tracks as they cross each other. This means trains should no longer have to wait at a signal for others to pass in front.

These works would be completed in phases with new railway constructed offline and lifted into place to reduce disruption to services.

We are also proposing to build three additional tracks north of East Croydon station, increased from two in our original designs, to maximise the performance and capacity benefits delivered to passengers.

Benefits
- Less waiting at red signals
- Improved punctuality
- Capability for more trains to run
- New, modern and more reliable assets
- New sidings to further improve operations
- Signalling and rail equipment replaced to provide long-term reliability

6 new viaducts comprising earthworks, embankments, reinforced concrete boxes

40 km of new track

Indicative flyover structures
Indicative dive-under structure
Indicative aerial view of the Selhurst Junction area, looking south
East Croydon station

Current constraints
The station currently has six platforms which means that incoming trains often have to queue outside the station for a platform to become available.

Accessibility at the station is limited as the existing access ramps are steep and congested, the small concourse regularly becomes overcrowded and passenger facilities are limited.

Our proposal
We propose to reconstruct East Croydon station in phases, while trains continue to run, increasing the number of platforms from six to eight, four to serve northbound services and four to serve southbound services.

Since the first consultation, our design development has identified that it is not possible to just add two additional platforms into the tight railway corridor, which is constrained by high-rise buildings on both sides.

Instead it is proposed that the redeveloped station will move north by approximately 100m and be fully reconstructed.

The reconfigured platforms will be accessible by lifts, stairs and escalators; the recently constructed footbridge will be retained and repurposed to form the new gateline into the station.

Access to the main entrance would be available from the tram and bus stations, from Caithness Walk and from Cherry Orchard Road. A new northern concourse with an improved entrance will be created, accessible from Lansdowne Road.

As well as increasing capacity on the Brighton Main Line, the reconstruction would provide major opportunities to improve the station and support the ongoing regeneration of central Croydon.

Benefits
- More reliable services
- Capability for more main line and suburban trains
- Improved passenger facilities
- Dedicated directional platform islands to reduce short notice platform changes
- Better access to platforms
- Increased concourse space
- More retail opportunity
- Improved urban realm
- A new gateway station to support the ongoing regeneration of Croydon

<table>
<thead>
<tr>
<th>8 escalators or stairs per platform</th>
<th>2 improved entrances</th>
<th>2 additional platforms</th>
<th>2 lifts serving each platform</th>
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</table>

Indicative view of the main entrance

Indicative internal view of the platform area
Lower Addiscombe Road/Windmill Bridge

To provide more platforms at East Croydon station and allow the Selhurst triangle junctions to be remodelled we need to expand the railway from five to eight tracks north of East Croydon. This means we need to rebuild the road bridge over the railway, increasing its span, to provide space for three additional tracks.

**Benefits**

- Longer bridge to accommodate additional tracks
- Dedicated cycle lanes
- Vehicle weight restriction removed
- Opportunity for new pedestrian and cycle links under the bridge

**Our proposals**

The construction of the new bridge would take place early in the programme as it is a key enabler for the rest of the Scheme. To construct the new bridge, we would:

1. Permanently close the southern end of Gloucester Road (the ramp to the bridge)
2. Build the new bridge offline south of, and next to, the existing structure, reducing disruption to road users
3. Slide the new bridge deck across the railway without closing the track below
4. Close the existing bridge to traffic and pedestrians
5. Use the new bridge in its temporary location as a pedestrian and cycle route while the existing bridge is closed
6. Demolish the existing bridge and slide the new bridge into its permanent position.

Temporary diversions for road traffic would be in place during any road closures needed to construct the new bridge.

Temporary parking arrangements would be in place to accommodate the temporary bridge location. We would continue to work with key local stakeholders to manage the impact until the new bridge is reopened.

The Little Road playground is needed temporarily whilst we construct the bridge. We will continue to work with key local stakeholders to manage this impact until it is reopened.
Keeping the railway running

A major redevelopment such as this will result in changes to services but we are planning our proposals to keep trains moving and minimise disruption to passengers.

Our proposed approach would allow us to maintain the majority of weekday train services throughout construction.

East Croydon station

We would aim to keep five platforms open during the majority of the works by constructing the platforms in stages.

Work would start with the construction of a new platform outside of the existing layout.

Once this new platform is in place and in operation, we will have the ability to reconstruct existing platforms progressively from west to east, two platforms at a time.

Work would be planned to reduce the number of changes within the station, helping to minimise disruption to passengers.

Selhurst triangle

To keep passengers moving we would rebuild the Selhurst triangle in stages, constructing new structures next to the operational railway so that trains can continue to run. This means we could deliver passenger benefits in phases.

Learning from other major projects

We have also incorporated key principles and best practice from other recent significant infrastructure schemes such as the Thameslink Programme. This will help us run a reliable service during construction and reduce disruption to our neighbours.

East Croydon station – first phase

Existing platform 1 will be taken out of use whilst we build the first new platform; existing platforms 2-6 will remain operational.

East Croydon station – second phase

Once new platform 1 is operational, existing platform 2 will be taken out of use and rebuilt, along with new platform 2 and existing platform 1.

Working progressively from west to east, new platforms would then be brought into operation before the next ones are taken out of use to maintain five platforms for the majority of the works.
Managing construction

In the 2018 consultation, you told us that you were concerned about local disruption during the works. This has been factored into our plans and construction programme.

Construction logistics
We have carefully considered our approach to ensure we can transport large quantities of construction materials and equipment to the right place at the right time as construction progresses.

Rail
Our proposed logistics plan will require regular deliveries using the road network, although we will minimise this where possible, notably with core construction materials such as ballast and sleepers being delivered direct to site by rail.

Road

Site compounds
We propose to establish three main site compounds to support the different elements of the Scheme.

The two main compounds, located at Tait Road (for the Selhurst triangle works) and Lansdowne Road (for the East Croydon station works) would include site accommodation, material storage and other logistics. There would also be smaller compounds around Lower Addiscombe Road/Windmill Bridge during those works.

Site access
We propose that the main site access point will be from St James’s Road, accessed from the west just before Windmill Bridge. From this point, all parts of the site would be accessible internally. We would also create a screened lorry holding area off Milton Road for vehicles should the site not be ready to receive them. This would keep vehicles off local roads and minimise disruption.

Internal haul road
We propose a logistics haul road within our worksite which would:
- Provide a connection between worksites to enable efficient logistics
- Minimise the amount of traffic that has to use the local roads
- Facilitate access for contractors/maintenance throughout the works

It is proposed that vehicles from the haul road will exit onto the highway network via a new ramp from the railway up to the south side of Tennison Road Bridge. Further traffic modelling and assessments will continue as our proposals develop.
Managing impacts

Environmental Impact Assessment
We will be undertaking a detailed Environmental Impact Assessment of our Scheme proposals.
A scoping exercise was completed in 2018 to determine which environmental topics are relevant to the Scheme, and we have been undertaking baseline environmental surveys of the site and surroundings. These surveys have helped inform design decisions.

The assessment is being undertaken to identify potential significant effects on the environment and local community as a result of the construction and operation of the Scheme.

The assessment will also identify mitigation measures to address construction and operational effects and a Code of Construction Practice will be prepared.

The findings of the assessment will be presented in an Environmental Statement and Non-Technical Summary. This will be submitted with our consent application (see the section on the Transport and Works Act Order on page 18).

Sustainability
At Network Rail, sustainability means making sure that everything we build, manage, service or develop leaves a lasting positive legacy for future generations, and that we keep potential impacts on the environment and society at the forefront of all decisions.

This approach to sustainability will also be applied to this Scheme.

We believe that good management of our economic, social and environmental impacts is key to maintaining a strong and prosperous business.

In delivering this Scheme we will drive efficiency, build trust and create long-term value for our stakeholders and the community.

We are applying a globally recognised sustainability assessment scheme to drive genuine, measurable sustainability outcomes throughout the design, specification, construction and operation phase of the Scheme.

Topics being assessed

Noise and vibration  Air quality  Cultural heritage  Ecology and nature conservation  Flood risk and water resources  Ground conditions and land contamination  Socio-economics  Townscape and visual  Traffic and transport  Climate change  Material assets and waste
Transport and Works Act Order (TWAO)

As the Scheme proposals will require work to take place outside the railway boundary we will need to prepare and apply to the Secretary of State for Transport for a Transport and Works Act Order (TWAO) to authorise both the construction of these works and to use land outside the railway boundary either temporarily or permanently for the construction and operation of the Scheme.

As our plans for the Scheme have developed over the past two years, we have been establishing contact with the owners and occupiers of land/properties that may be affected by the Scheme proposals and will continue to do so in the months and years ahead.

Once we submit an application for a TWAO it will be the Secretary of State for Transport who will decide, taking into account the proposed benefits and likely impacts of the Scheme, whether or not to give consent through the TWAO for the Scheme to proceed.

If any objections to the TWAO application for the Scheme are made it’s likely that a public inquiry would be held by an Inspector to help inform this decision.

If the TWAO is granted, we would then have the necessary powers to use or acquire the land needed to construct and operate the Scheme. We would continue to work with affected landowners to manage this process in a sensitive manner.

Permitted Development Works

Where railway works are to be constructed within the existing railway boundary, these works may be able to be constructed under Network Rail’s existing permitted development rights and so could be delivered in advance of the works requiring TWAO consent, helping to deliver benefits as early as possible.

In this instance we would still engage with the public, stakeholders and the wider rail industry on our proposals and follow Network Rail’s project and contract management controls to minimise any potential impacts from such works.

Other potential planning applications

We would submit separate planning applications for any adjacent site developments around East Croydon station. Such developments would not form part of the TWAO application and would not be permitted development works.

Proposed scheme timeline

- 2018 – Round one consultation
- 2020 – Round two consultation
- 2021 – Targeted submission of the application for the TWAO to the Secretary of State for Transport
- 2022 – Likely public inquiry
- 2022 – Permitted development works start (e.g. railway systems works)
- 2023/24 – Railway works requiring TWAO consent start
- 2023 – Anticipated TWAO decision from the Secretary of State for Transport
- 2028 onwards – Benefits realisation, in stages
- 2033 – Indicative completion; associated capacity and performance benefits

All time-scales are indicative and dependant of approvals and subject to funding.
How to have your say

We want your feedback to help us develop the detail of the Scheme in preparation for a TWAO application. You can submit your feedback by sending in our freepost feedback form, taking our online survey at:

grouptext

networkrail.co.uk/Croydon

or by emailing:

grouptext
consultation@cars2.networkrail.co.uk

For further information you can also call Network Rail’s national helpline on:

03457 11 41 41

Or follow us:

@NetworkRailSE

Visit our website or call the helpline to find out the dates of the consultation period.

What happens next

Following analysis of the feedback gathered from this consultation we will review our design and make any appropriate changes before working up the TWAO application.

Prior to depositing the application, we will hold a public information round so you may view our finalised proposals.

While we continue to develop the Scheme proposals we will also continue to consider and review potential funding models that may be available to help fully fund the delivery of the proposals.
Fill out the form below, fold in half and glue together, then send back to us no stamp required.

1) How do you feel about our proposals to unblock the Croydon bottleneck?
   [ ] Strongly support  [ ] Support  [ ] Undecided  [ ] Do not support  [ ] Strongly do not support

   Please give a reason for your choice

2) How do you feel about our proposals for the redevelopment of East Croydon station?
   [ ] Strongly support  [ ] Support  [ ] Undecided  [ ] Do not support  [ ] Strongly do not support

   Please give a reason for your choice

3) How do you feel about our proposals for the reconstruction of Lower Addiscombe Road/Windmill Bridge?
   [ ] Strongly support  [ ] Support  [ ] Undecided  [ ] Do not support  [ ] Strongly do not support

   Please give a reason for your choice

4) How do you feel about our proposals to provide grade separation of the Selhurst triangle?
   [ ] Strongly support  [ ] Support  [ ] Undecided  [ ] Do not support  [ ] Strongly do not support

   Please give a reason for your choice

5) Do you have any further comments or other ideas for our proposals to unblock the bottleneck?

   __________________________________________________________
   __________________________________________________________
   __________________________________________________________

Privacy notice
The information will be collected and held solely by Network Rail in accordance with the requirements of the General Data Protection Regulations. The information you provide will be used to help the decision-making in this scheme.

We may share your information with our consultants. We will not publish your personal details but may publish your response with personal details removed. If you have consented to be added to our consultation mailing list, we may send you details of the consultation results and information about other consultations. You retain the right to opt out of the mailing list at all times. We will not sell your personal details or pass them to any other organisation except those directly involved in compiling and analysing the consultation responses.

Your details
Name:

Postcode (to identify concerns/opportunities by location):

Email address:

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Would you like to be added to our mailing list?  [ ] Yes  [ ] No

Are you happy for Network Rail to contact you via email to find out more about your views?  [ ] Yes  [ ] No
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