Fiveways Croydon: preferred option and updated design

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## Contents

Executive summary ............................................................................................................. 1

1. Why is a scheme needed? ............................................................................................ 2

2. What design approaches were originally considered? .............................................. 4

3. Shortlisted proposals considered ............................................................................. 5

4. Option appraisal .......................................................................................................... 8

5. Preferred option selection ......................................................................................... 9

6. Next steps .................................................................................................................... 11
Executive summary

This report presents a brief overview of the process and considerations that led Transport for London (TfL) to select a preferred option for a scheme at Fiveways Croydon, as well as the steps that TfL will take to progress that option.

We identified Fiveways Croydon as an area in need of improvement, given the current high congestion around Waddon and the growth planned in Croydon town centre.

In conjunction with Croydon Council, we considered a number of possible design approaches to reduce congestion in the area and improve a number of issues with the existing road layout.

In February 2015, we consulted on two shortlisted proposals to find out the views of the public, including local residents and stakeholders:

- **Proposal 1.** A road, cycle and pedestrian bridge connecting the A232 between Croydon Road and Duppas Hill Road
- **Proposal 2.** Widening the A23 where it crosses the railway by Waddon station, and widening the western end of Epsom Road and converting it to allow two-way traffic

Ahead of making a final decision, the following considerations were taken into account:

- The results of the consultation
- Additional feasibility and design work
- The benefits and compromises of each proposal, including additional land requirement, and
- The views of Croydon Council, noting the decision taken by the Croydon Council Cabinet on 14 December 2015

A decision has now been made to take forward Proposal 2 as the preferred option for the proposed new design. Having considered the consultation feedback, we are also proposing updated cycling facilities and a new design at Fiveways Corner to simplify the junction operation.

We plan to consult the public on the details of the updated Proposal 2, including the new design at Fiveways Corner in autumn 2016.
1. Why is a scheme needed?

Traffic congestion around Waddon is high, particularly around Fiveways Croydon, which includes Fiveways Corner and the A23/A232 intersection. Road users and bus passengers at Croydon Fiveways frequently experience delays at peak times, especially on weekend afternoons. With 7,300 new homes and 8,000 new jobs planned in the Croydon Opportunity Area and the growth forecast in London as a whole, this is predicted to get worse in the future. We therefore identified this area for improvement in order to reduce congestion, accommodate future growth, and improve accessibility for all transport users.

An initial public consultation was held between 2 February and 15 March 2015, and demonstrated a clear local desire to see a change in the current transport network. Only 12 per cent of respondents to the consultation said they did not support the principle of a road improvement scheme in the Fiveways Croydon area.

The existing road layout

Fiveways Croydon is the intersection between the A23 and A232, TfL’s two strategic roads in the London Borough of Croydon, acting as essential North-South and East-West corridors, respectively. As shown in Figure 1 below, traffic from the A23 and A232 shares the same road space between Croydon Road and Epsom Road. Additionally, eastbound A232 traffic currently travels via Fiveways Corner. This adds to congestion in the area and can make the road network busy and difficult to access for pedestrians and cyclists.

We propose to address a number of issues with the existing road layout as part of the scheme, including:

- Limited road capacity on the A23 Purley Way and the A232 between Croydon Road and Duppas Hill Road
- The likely impacts of increased traffic, caused by growth in the economy and population
- The impacts of congestion on bus journey time and reliability
- Lack of cycle facilities and difficulty for cyclists to cross the A23
- Complicated and only partially accessible pedestrian crossings
- Narrow and unattractive pavements and walkways
- Poor access to Waddon station for pedestrians, cyclists and bus users
Figure 1: Existing traffic route map between Croydon Road and Duppas Hill Road
2. What design approaches were originally considered?

Before the initial public consultation on two proposals, we looked at a number of possible design approaches to reduce congestion at Fiveways Croydon. Design approaches considered before the initial public consultation included the following:

**Minimal interventions**
Minimal interventions include alterations to signs and signal timings and reallocating local roads to the TfL Road Network (TLRN). Many have already been implemented and further minor works would not have any significant benefit on the existing traffic issues or support future growth.

**Road widening**
Three road widening approaches were considered to increase the road capacity and relieve pressure on Fiveways Corner. These were:

- Widening the A23 carriageway on the approaches to the bridge over the railway
- Widening the A23 bridge over the railway by Waddon station
- Making Epsom Road wider to accommodate two-way traffic

These three options were combined into a single option for further design work and subsequently became Proposal 2.

**Full grade separation**

- A new tunnel for north / south or east / west traffic. This was not taken forward due to the significant costs, the topology of the area, (which does not lend itself to a tunnel) and the space constraints of the local area
- A new bridge over the railway connecting Croydon Road with Duppas Hill Road and separating A23 and A232 traffic. This option was selected for further design work and subsequently became Proposal 1
3. Shortlisted proposals considered

Between 2 February and 15 March 2015, we held a public consultation to find out the views of local residents and stakeholders on the current situation in the Fiveways Croydon area and on two proposals. Some design and feasibility work was undertaken for these proposals, and they were presented as part of the initial public consultation as Proposal 1 and Proposal 2:

- **Proposal 1**: A road, cycle and pedestrian bridge connecting the A232 between Croydon Road and Duppas Hill Road providing a direct route for east and west A232 traffic
- **Proposal 2**: Widening the A23 over the railway by Waddon station and widening Epsom Road to accommodate two-way traffic, removing the need for A232 eastbound traffic to use Fiveways Corner.

More information on both proposals consulted on can be found on the Fiveways consultation webpage: [www.tfl.gov.uk/fiveways-croydon](http://www.tfl.gov.uk/fiveways-croydon).

**‘Do nothing’ option**: While we did not make a ‘do nothing’ approach explicit in the consultation, the survey questions gave respondents the opportunity to support one, both or neither of the proposals. We considered a ‘do nothing’ scenario in our option appraisal (see section 4).

**How consultation feedback has been used**

One of the key aims of the consultation was to ensure that we understood the views of local residents and businesses, road users and stakeholders. The response to the consultation and high attendance at public exhibitions demonstrated the keen interest of the local community in developing how their streets look and operate. The majority of respondents to the consultation were supportive of the need for improvements in the area. We published our consultation report on 11 November 2015, which detailed the responses to the public consultation.

We have carefully considered the views of the public, stakeholders and Croydon Council, the benefits and impacts of each proposal, and undertaken further design and feasibility work for both proposals to ensure that the chosen proposal best meets the needs of the local community, whilst accommodating economic and population growth in Croydon. Some of the responses to the consultation prompted us to revise or edit parts of the proposals. These changes are detailed below.
**Updated Proposals**

Further design work on both proposals was undertaken following the public consultation in order to address concerns raised by the public and inform the preferred option selection.

During the consultation, some respondents suggested that cycle facilities for both proposals were insufficient.

We considered these comments and made changes to the designs of each proposal to introduce signal-controlled junctions to separate cyclists from motorised vehicles in time and space and to provide cycle facilities on Epsom Road, giving access to Waddon station.

In addition, following comments received during the consultation the design of Proposal 1 was altered to introduce a pedestrian crossing on Duppas Hill Road.

The design of Proposal 2 would require Epsom Road to be widened in order to be converted to two way traffic. It is not possible to do this within the existing highway boundary, so we are currently considering a number of options for how this could be achieved. We do know that some land would need to be purchased from third parties and we will contact owners directly who could potentially be affected by our proposals.

We plan to consult on the detailed proposals in autumn 2016. For details of the proposals and the consultation report, please visit [www.tfl.gov.uk/fiveways-croydon](http://www.tfl.gov.uk/fiveways-croydon).

**A new design at Fiveways Corner**

During the consultation, some respondents suggested other possible designs or alterations to the scheme. A number of expressed concern that neither of the proposals went far enough to significantly improve the experience for road users at Fiveways Corner.

Having considered these comments, we looked at how we could improve the junction further for all road users. We are now proposing a new design for Fiveways Corner which simplifies the existing junction operation, provides a quicker route for pedestrians across the A23, delivers potential improvements to pedestrian safety and aims to reduce wait times for all users.

The existing Fiveways Corner junction layout contributes to long wait times for all road users. The new design would change the road layout by removing Denning...
Avenue from Fiveways Corner, reducing the number of arms on the junction from five to four. Instead, Denning Avenue would join the A23 directly opposite the retail park (as shown in Figure 2 below). All turning movements in and out of Denning Avenue would be allowed. This would decrease the traffic signal phases required at Fiveways and the wait times for traffic on the A23 and Stafford Road.

The new road layout would require some land acquisition. We will contact owners of potentially affected properties individually. We intend to make the full design available as part of the consultation planned for autumn 2016.
## 4. Option appraisal

A summary of the benefits and compromises of each proposal, which were considered key elements of the decision process, can be found in the table below, along with a ‘do nothing’ scenario. This summary shows the complex issues considered when appraising options, by both TfL and Croydon Council during their independent decision making processes.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Do Nothing</th>
<th>Proposal 1</th>
<th>Proposal 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>✓ Lower short term cost to TfL</td>
<td>✓ Delivers motor vehicle journey time benefits</td>
<td>✓ Has a lower capital cost</td>
<td>✓ Does not improve cycle facilities on Duppas Hill</td>
</tr>
<tr>
<td>✓ No changes to local land uses</td>
<td>✓ Delivers bus journey time benefits</td>
<td>✓ Provides better pedestrian and cycle connectivity into existing road network</td>
<td>✓ Requires greater residential land acquisition</td>
</tr>
<tr>
<td>✓ Delivers greater journey time benefits</td>
<td>✓ Improvements to pedestrian crossings</td>
<td>✓ More in scale with the local area</td>
<td>✓ Less popular overall during consultation</td>
</tr>
<tr>
<td>✓ More strongly supported during the public consultation</td>
<td>✓ Less complex and faster journeys for pedestrians</td>
<td>✓ Upgrades an existing asset that would require replacement</td>
<td>✓ Traffic impacts during construction will need to be managed</td>
</tr>
<tr>
<td>✓ Both proposals would give better access to Waddon Station</td>
<td>✓ Opportunity to improve urban realm and local centre</td>
<td>✓ Does not improve cycle links across the existing A23 bridge</td>
<td>✓ Takes part of Duppas Hill Park</td>
</tr>
<tr>
<td>✓ Improved east-west cycle link across A23</td>
<td>✓ Strong consultation support for an improvement at Fiveways</td>
<td>✓ Involves construction of a new bridge which will have a visual impact</td>
<td>✓ Less support from immediately adjacent local residents</td>
</tr>
<tr>
<td>✓ Opportunity to improve urban realm and local centre</td>
<td>✓ Does not improve cycle links across the existing A23 bridge</td>
<td>✓ Less support from immediately adjacent local residents</td>
<td>✓ Introduces a new asset requiring maintenance</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Compromises</th>
<th>Do Nothing</th>
<th>Proposal 1</th>
<th>Proposal 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>× Increase in journey times and congestion</td>
<td>× Does not improve cycle links across the existing A23 bridge</td>
<td>× Does not improve cycle links across the existing A23 bridge</td>
<td></td>
</tr>
<tr>
<td>× Only 12% of consultation respondents supported doing nothing at Fiveways</td>
<td>× Involves construction of a new bridge which will have a visual impact</td>
<td>× Involves construction of a new bridge which will have a visual impact</td>
<td></td>
</tr>
<tr>
<td>× The urban realm at Waddon would remain poor and hinder the development of a Waddon local centre</td>
<td>× Takes part of Duppas Hill Park</td>
<td>× Takes part of Duppas Hill Park</td>
<td></td>
</tr>
<tr>
<td>× The urban realm at Waddon would remain poor and hinder the development of a Waddon local centre</td>
<td>× Less support from immediately adjacent local residents</td>
<td>× Less support from immediately adjacent local residents</td>
<td></td>
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<tr>
<td>× Introduces a new asset requiring maintenance</td>
<td>× Introduces a new asset requiring maintenance</td>
<td>× Introduces a new asset requiring maintenance</td>
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</tr>
</tbody>
</table>
5. Preferred option selection

Both Proposal 1 and Proposal 2 offer advantages and disadvantages which were taken into account during the option selection process. Both proposals have been fully considered by TfL and Croydon Council.

Proposal 1 would improve local pedestrian and cycle facilities, has greater traffic benefits and was more strongly supported during the public consultation. However, it requires land from Duppas Hill Park and the loss of a number of mature trees. Proposal 2 also delivers traffic benefits and improvements to the local pedestrian and cycle facilities, but without the environmental impact of Proposal 1, although with a greater residential land requirement.

On 14 December 2015, the Croydon Council Cabinet agreed Proposal 2 as its preferred design proposal for the A23/A232 intersection. The report to the Cabinet recommended Proposal 2, concluding that it is the stronger in terms of effects on ‘place’ whilst still predicted to deliver required vehicle ‘movement’ benefits. The Cabinet meeting minutes can be found at: www.croydon.gov.uk/meetings

Following careful consideration of the consultation results alongside Croydon Council’s preference and further design and feasibility work, TfL selected an updated Proposal 2 with a new junction layout at Fiveways Corner as its preferred option. TfL’s preferred option would deliver benefits for all road users, avoid taking public open space, enable the transformation of Fiveways Corner and upgrade an existing asset (the bridge over the railway) which will require intervention in the future regardless.

TfL will work with Croydon Council to progress the preferred option to the next stage of design and consultation.
Figure 2: Map of the preferred option proposed road layout

Proposal 2: Changes to Epsom Road and the A23 bridge at Waddon station

- Replace and widen existing bridge
- New road layout and improvements for pedestrians and cyclists at Fiveways Corner
- Widen Epsom Road and convert to two way working
- A232 eastbound traffic flow
- A232 westbound traffic flow
- Some urban realm improvements and reduced traffic

Legend:
- to central London
- to central Croydon
- to Sutton
- to Purley
- Fiveways Corner
- Waddon
- Purley Way
- Epsom Road
- Stafford Road
- Croydon Road
- Dupps Hill Road
- B275 Denning Avenue
6. Next steps

The updated Proposal 2 and the new design of Fiveways Corner will be progressed and more information will be included in the public consultation planned for autumn 2016.

TfL will discuss the preferred option with key stakeholders and potentially directly affected property owners ahead of the wider public consultation.

Subject to the outcome of the consultation and other relevant approvals, construction is anticipated to start in winter 2018/19.

More documents relating to the Fiveways proposal will be published as appropriate at [www.tfl.gov.uk/fiveways-croydon](http://www.tfl.gov.uk/fiveways-croydon)