

For general release

REPORT TO:	Streets, Environment & Homes Scrutiny Sub-Committee 12 September 2017
SUBJECT:	Fiveways Croydon – A review of the design proposals subject to public consultation
LEAD OFFICER:	Heather Cheesbrough – Director of Planning & Strategic Transport
CABINET MEMBER:	Councillor Stuart King, Cabinet Member for Transport and Environment
PERSON LEADING AT SCRUTINY COMMITTEE MEETING:	Ian Plowright – Head of Transport Richard Lancaster – Transport Projects Manager

ORIGIN OF ITEM:	This item has been identified by Streets, Environment and Homes Scrutiny Sub-Committee as an item of Scrutiny
BRIEF FOR THE COMMITTEE:	To review the design proposals that are currently subject to public consultation as part of the Fiveways Project

1. EXECUTIVE SUMMARY

- 1.1 The report is presented to enable Scrutiny Sub-Committee to review the design of the 'Fiveways project' and provide observations / recommendations relating to the scheme. It is intended that the recommendations of the Committee are treated as a project consultation response and any specific design observations will be reviewed and considered as part of the next stage of scheme development.
- 1.2 The Croydon Opportunity Area Planning Framework (2013) identified the A23/A232 intersection as a key congestion hotspot predicted to worsen without intervention as a result of growth in Croydon Town Centre and surrounding areas. Subsequently, the Council and TfL entered into a Transport Infrastructure Agreement to deliver improvements to the A23.
- 1.3 Traffic congestion in the area remains high, bus passengers frequently experience delays during peaks, and there is poor provision for cyclists and pedestrians. The existing Waddon Station bridge is also forecast to require replacing / upgrading by 2023.
- 1.4 The proposals will make Fiveways junction simpler and increase capacity to accommodate expected traffic changes arising from population and economic

growth in the area. The project will also improve conditions for walking and cycling, with better cycle links between central Croydon and Sutton, and simpler pedestrian journeys and new public spaces. The proposals aim to make the streets more accessible and people-friendly, in line with some of the key objectives of the Mayor's emerging Transport Strategy, and also support the development of a future masterplan for the area to help shape a new local centre for Waddon.

- 1.5 From the early stages of the design process, and in line with the project requirements which were set out and agreed by TfL and LB Croydon, TfL has sought to ensure that the design proposals improve conditions for east/west cycle movement to and from the Croydon Opportunity Area. More recently, as Croydon Council has begun to develop proposals for a network of cycle Quietways and other routes, the importance of aiding cycling through all parts of the scheme has become clearer. Hence, as part of the most recent Croydon Council decision associated with the scheme on 29th June 2017, supporting the current public consultation, an additional recommendation was included to ensure that TfL seek to include further cycling facilities in their scheme proposals, along with the flexibility to bring about additional improvement post-implementation.
- 1.6 This additional recommendation has been included to ensure that the cycle-ability through all parts of the scheme area are accounted for as far as feasible within the existing design, and to retain the flexibility (subject to the detailed design process) to provide cycling facilities between Epsom Road and Fiveways Corner in the future.

2. FIVEWAYS DESIGN JOURNEY

Background

- 2.1 The Council entered into a Transport Infrastructure Agreement with TfL to support growth in the Croydon Opportunity Area, agreeing to provide £20m towards improvement on the A23. Croydon officers have been working in partnership with TfL to develop design proposals which seek to enhance highway capacity through the A23/A232 intersection and deliver pedestrian, cycle and public realm improvements to support the development of a local centre in Waddon and wider Croydon growth.
- 2.2 Two proposals were developed (proposal 1- an elevated link road between Croydon Road and Duppas Hill Road, and proposal 2 – widening of the existing bridge over Waddon Station) and consulted on in early 2015. At its December 2015 meeting, Croydon's Cabinet agreed Proposal 2 as the preferred option expressing a strong preference for further design work on this option to ensure the retention of the Waddon Hotel (Minute ref:A121/15). The main features of Proposal 2 were:
 - to widen the bridge which carries A23 and A232 traffic over the railway by Waddon Station; and

- to make the A232 Epsom Road two way for general traffic and cyclists.

Cabinet also agreed to delegate to the Executive Director of Place (acting in consultation with the Cabinet Member for Transport and Environment) authority to take such steps as are deemed appropriate and necessary to assist TfL to implement Proposal 2 (Minute ref:A121/15).

More Recent Design Development and Recommended Design

- 2.3 TfL has continued design development since the Cabinet decision. The design proposals now retain the Waddon Hotel, widening to the north side of the road instead of the south. In addition, responding to feedback received during the first stage consultation (which suggested more could/should be done to improve Fiveways Corner itself), TfL's design now turns Fiveways into a simplified four arm junction. This achieves additional general traffic and bus journey time benefits and significantly improves pedestrian crossing facilities and public realm at the junction.
- 2.4 TfL has also undertaken further 'optioneering' to select a preferred solution and alignment for the new / widened bridge carrying the A23/A232 traffic over Waddon Station bridge. As part of this work TfL procured Ramboll UK and Taylor Woodrow (bridge design engineers) to complete the concept level design of the proposed widened bridge over Waddon Station. They have undertaken a thorough assessment of a series of options for widening / replacing the bridge carrying the A23/A232 over the railway. Much of this information is summarised in Ramboll's 'Concept Design Option Appraisal Report' produced in Spring 2017 to inform TfL and Croydon Council of the costs/benefits of proceeding with each option. This information was then considered as part of a wider appraisal including but not limited to land take requirements and deliverability/network impact during construction, which was presented for full consideration at the Fiveways Project Board (attended by LB Croydon) in April 2017. Twelve options were originally developed as part of a long list appraisal. From this, three options were shortlisted for further development.

The shortlisted options were as follows:

- Option 1 – closely matching the 'Proposal 2' bridge alignment reflected in the 2015 consultation
 - Option 2 (intermediate between options 1 and 3) – a similar bridge alignment to Option 1, but slightly further west to minimise the land take requirements.
 - Option 3 – relocating the bridge alignment further to the west so as to avoid any impact on Network Rail infrastructure, aid constructability (ie less utility diversions and reduced Health and Safety risk in constructing the new bridge offline compared to working on a partially demolished structure) and minimising construction phase impacts on traffic movement.
- 2.5 Following appraisal of the shortlisted options, TfL's recommendation (with TfL Project Board endorsement (including LB Croydon representation), was for

Option 3 be taken forward to consultation and beyond. Croydon Council endorsed the overall design proposals, including the preferred bridge alignment, prior to public consultation via a Delegated Decision on 29th June 2017.

Option 3

- 2.6 In all scenarios Network Rail requires the new bridge deck to be higher than the existing, to ensure that sufficient clearance is in place over the railway. This makes the vertical tie-in with Epsom Road difficult to achieve in Options 1 and 2 which are sited closer to Epsom Road. Placing the new bridge to the west of the current alignment alleviates this issue.
- 2.7 Option 3 has considerable construction benefits including:
- 'Off-line' construction allowing much of the work to be completed whilst traffic continues to use the existing structure before 'switch over';
 - Options 1 and 2 would require the new bridge to be constructed and the existing bridge to be demolished incrementally which would see a reduction in the number of lanes from 4 to 2 for large phases of the build programme. This would increase Health and Safety risks compared to Option 3 due to live traffic continuing to run adjacent to major construction work;
 - Option 3 may also enable the building of the new bridge, alongside the highway works at Fiveways Corner, rather than in series, potentially shortening the overall construction programme.
- 2.8 Option 3 has been assessed as providing greater general traffic and bus benefits compared to the other two options.
- 2.9 Delivery of all of the options would require acquisition of some land and property (including commercial), which (if it cannot be acquired by agreement) will require compulsory purchase.
- 2.10 Elements of the proposals, including the proposed bridge structure, will require planning permission and may potentially require an Environmental Impact Assessment (EIA) and Statement. Subsequently, it is the intention to submit a planning application for the whole scheme. As part of the planning process, Croydon Council will need to consider the effects and acceptability of the proposals (in the light of all material considerations) in its role as the Local Planning Authority.
- 2.11 The strategic fit of the scheme with the Mayor's Draft Transport Strategy and Healthy Streets programme has been reviewed and further information on this is provided in Appendix 1.

3. CONSULTATION

- 3.1 The public consultation relating to the scheme is currently open, running from 10th July to 18th September 2017. The consultation provides the general public and stakeholders with the opportunity to comment on the detailed proposals

before the concept design is finalised and prior to any planning application or land acquisition to support delivery of the scheme. The consultation material has been jointly badged as that of TfL and Croydon Council. Council officers have also joined TfL officers to staff 6 public consultation exhibitions / events on the following dates:

Tuesday 18th July 2017
Thursday 20th July 2017
Saturday 29th July 2017
Saturday 12th August 2017
Thursday 7th September 2017
Saturday 9th September 2017

- 3.2 In addition, two invite-only drop-in sessions were arranged for residents either directly affected (ie where acquisition of property may be required) or affected (ie those impacted by the realignment of the bridge with it moving closer to their properties), with the first for certain Lynwood Gardens and Wrangthorn Walk residents on Monday 17th July 2017 and the second for residents of Bradley Court on Wednesday 19th July 2017. Bradley Court, which contains 15 residential flats, form all of the directly affected residential properties, with the block needing to be completely demolished to facilitate the modifications at Fiveways Corner, particularly the realignment of Denning Avenue.
- 3.3 Letters were also sent to the impacted Commercial landowners (Skoda and Porcelanosa) offering an opportunity to attend a meeting with the project team to discuss their individual circumstances, and meetings have taken place early in the consultation period.
- 3.4 The proposals have also been presented to specific interest groups including Croydon's Place Review Panel on 25 April 2017 and the Croydon Cycle Forum on Thursday 24th August 2017. In addition, the project went before Croydon's Mobility Forum on 6th September 2017. The consultation also included:
- Residents letter (detailed letter to those in circa. 500m of the site)
 - Leaflet to approx. 12000 local residents
 - Stakeholder email (to c.30,000 people)
 - Local newspapers (Croydon Advertiser, Croydon Guardian)
 - Website: tfl.gov.uk and consultation website as appropriate
 - Fiveways email address for consultees to contact with any specific enquiries throughout the consultation
 - Croydon comms channels (Twitter, email, e-bulletins, website banner, 'Your Croydon' magazine)
 - 3D visualisations / CGIs
 - Physical 3D model of bridge option (exhibitions)

4. SCHEME DETAILS

4.1 Overview

- 4.1.1 The scheme has been developed to address some of the key challenges

currently presented by the road network in this area. Currently congestion is high, bus passengers frequently experience delays, and there is poor provision for cyclists and pedestrians.

- 4.1.2 The proposals are intended to make the Fiveways junction simpler and increase capacity to accommodate the anticipated growth in traffic arising from population and economic growth in the area. The project is also designed to improve conditions for walking and cycling, with better cycle links between central Croydon and the London Borough of Sutton, simpler pedestrian journeys and new public spaces. Detailed information relating to the proposed changes is included in sections 4.2 – 4.6.

4.2 Road Layout Changes

A23 Purley Way

- 4.2.1 The proposals include realigning and widening Waddon Station bridge. This proposal provides an opportunity to replace the bridge, which would otherwise require a significant intervention (either maintenance or full replacement) by 2023. The proposals also include:
- An increase the number of traffic lanes from two to three in each direction
 - The introduction of two-metre wide cycle lanes in both directions on the A23 bridge, with segregation at junctions for left turns, improving cycling connections
 - The creation of footways with a minimum of two metre width on each side of the carriageway

Figure 1 A23 Purley Way / Waddon Station bridge - Existing



Figure 2: Artist's impression of A23 Purley Way / Waddon Station bridge



Figure 3: A23 Purley Way with A232 Croydon Road – Existing



Figure 4: Artist's impression of junction of A23 Purley Way with A232 Croydon Road



Epsom Road

4.2.2 The scheme proposals include:

- Opening up Epsom Road to two way traffic. This would remove A232 traffic from the junction at Fiveways Corner. The carriageway would be widened to the north side impacting some property frontages
- Introducing new 1.5 metre wide 'stepped' cycle lanes in both directions on Epsom Road to provide a new east-west cycle link from Croydon Road to Duppas Hill Road
- Removing the parking bays from Epsom Road to provide space for two-way traffic and new cycle lanes
- Allowing southbound vehicles to turn left from the A23 (Purley Way) into Epsom Road and making access to the A232 more direct. This would reduce the amount of traffic using Stafford Road and reduces congestion at the Fiveways Corner junction

Epsom Road / Stafford Road junction

4.2.3 The scheme proposals include:

- Banning the left turn from Stafford Road into Epsom Road, providing a simpler junction with realigned pedestrian crossing facilities on the key desire line. This would bring the crossing closer to the station and make it easier for pedestrians to access Waddon Station
- Improving journey times by allowing for more time for the green signal phase

Figure 5: Epsom Road at Waddon Station - Existing



Figure 6: Artist's impression of Epsom Road at Waddon Station



Stafford Road

4.2.4 The proposals include

- Introducing a new northbound bus lane on Stafford Road, operating from Monday to Saturday between 07.00 and 10.00, and 16.00 and 19.00. Cyclists, motorcyclists, and taxis would be able to use the bus lane

- Relocating southbound bus stop 'WB', served by routes 154 and 157, approximately 60 metres north on Stafford Road, to a new position opposite Fernleigh Close
- Changing 58 metres of parking bay on the northbound side and 76 metres on the southbound side of Stafford Road to be inset into the footway. This would allow cycles to pass parked cars whilst staying within the bus lanes. 10 metres of parking bay on the southbound side would be removed

Figure 7: Stafford Road (towards junction with Epsom Road) – Existing



Figure 8: Artist's impression of Stafford Road (towards junction with Epsom Rd)



Fiveways Corner

- 4.2.5 The existing road layout at Fiveways Corner is complicated. The junction was not designed for the levels of traffic that currently passes through it. This contributes to long wait times for all road users, including pedestrians.
- 4.2.6 To improve the junction for all users, it is proposed to:
- Realign Denning Avenue to remove it from the Fiveways Corner junction, re-routing it to join the A23 opposite the retail park (entrance to Morrisons). This would reduce the number of arms on the junction from five to four, introducing a crossroads arrangement which would simplify the junction and improve road capacity. This would decrease the number of signal phases required at the junction reducing waiting times for traffic on all approaches to the junction
 - Create a new, attractive public space for people to sit and rest, supporting Croydon Council's aspirations for Waddon to have a local centre at Fiveways
 - Upgrade all pedestrian crossing facilities to provide signalised controlled facilities at all arms around the junction. Crossings facilitating north-south cycle movements along the A23 would be upgraded to 'toucan' cycle friendly crossings.
 - Provide new cycle facilities, including cycle parking, and Advanced Stop Lines.
 - Introduce a left turn lane on Stafford Road (southern arm) for northbound traffic for the A23 to improve capacity at the junction
 - Allow the right turn for southbound traffic on Stafford Road (northern arm) into the northbound A23 Purley Way

Figure 9: Fiveways Corner (looking south to A23 Purley Way) – Existing



Figure 10: Artist's impression of Fiveways Corner (looking south to A23 Purley Way)



4.3 New and updated cycle facilities

4.3.1 The scheme would provide new and enhanced cycle facilities which link in with the existing local cycle network as well as creating a new east-west cycling route through the scheme area. The proposals are intended to provide a safer environment for cycling by introducing the following changes:

- New 1.5 metre wide cycle lanes in both directions on Epsom Road, to provide a new east-west cycle link from Croydon Road to Duppas Hill Road. The cycle lanes would be 'stepped', meaning they would be at a height of approximately 75mm above the road level, and 75mm below the footway
- New 2 metre wide cycle lanes in both directions on the A23 Purley Way bridge, with segregation at junctions for left turns. This would improve the connection for cyclists and remove the barrier to east-west cycle movement currently formed by the A23
- Separate phases for northbound cyclists and left-turning traffic at the junction of A23 Purley Way with Croydon Road, including early release signal arrangements
- New eastbound cycle lane on Croydon Road on the approach to the A23
- New Advanced Stop Lines at the junction of Stafford Road with Epsom Road and on Stafford Road at Fiveways Corner
- Partially inset parking bays on both sides of Stafford Road, to allow cycles to pass parked cars whilst staying within the bus lane.
- Toucan crossing style shared pedestrian / cyclist signals and crossings at each of the signal controlled junctions

- New cycle parking facilities

4.4 Pedestrian and Public Space Improvements

- 4.4.1 The proposed public space and pedestrian improvements include:
- Creating new public spaces at Fiveways Corner and on the A23 (Purley Way) Waddon Bridge
 - Creating attractive places for pedestrians to sit and rest
 - Tree-planting and introducing new green spaces
 - Relocating the pedestrian crossing on Epsom Road from its junction with Duppas Hill Road to opposite the Waddon Hotel, to provide more direct access to Waddon Station
 - Introducing signalised pedestrian crossing facilities on A23 Purley Way junctions with A232 Croydon Road, and Epsom Road
 - Signalised crossings on all arms of Fiveways Corner and more direct crossings
- 4.4.2 It is also the intention to introduce the following changes:
- Localised improvements to the general appearance of Stafford Road and Epsom Road
 - Improved lighting, decluttering, and repaving where required

4.5 Changes to bus services

- 4.5.1 It is the intention to change the location of two existing stops in Fiveways Croydon:
- Bus stop 'WB', served by routes 154 and 157, would be moved approximately 60 metres north on Stafford Road, to a new position opposite Fernleigh Close.
 - Bus stop 'WD', served by routes 119 and 663 would be moved to match the new alignment of Denning Avenue
- There will be no reductions in services as part of the scheme.

4.6 What changes would there be to traffic flow?

- 4.6.1 The scheme has been modelled to 2031 and the proposals are anticipated to result in changes to journey times for all road users. It is anticipated that there will be a net positive impact on journey times for vehicles travelling in and around the Fiveways area. Furthermore, as Epsom Road is opened up to two way traffic movements, it is expected that the A232 traffic which presently travels down the A23 and along Stafford Road will re-assign to Epsom Road, thus reducing the overall traffic flow at Fiveways Corner and on Stafford Road, enabling the significant changes proposed at the southern extent of the scheme.

5. EQUALITIES IMPACT

- 5.1 An Initial Equalities Analysis was undertaken to analyse any potential impact that Proposal 2, as the preferred design proposal for the A23/A232 Fiveways

project, would have had on protected groups compared to non-protected groups. This concluded that whilst there are differences between people of different groups that share a “protected characteristic” (Disability, Race/ Ethnicity, Gender and Age) and those who do not share a ‘protected characteristic’ in terms of access to the car and travel modes used, that by recommending / selecting one design proposal over the other will not affect any protected groups more significantly than non-protected groups.

- 5.2 However in undertaking the detailed design of the selected option, there will be the opportunity to maximise the accessibility of the public realm and hence help the Council in advancing equality of opportunity between people who belong to certain protected groups (in particular people with certain disabilities) and those who do not. An access audit will be undertaken as part of the detailed design process to help ensure that the opportunity is taken and maximised.
- 5.3 Option 3 (subject of this consultation) minimises the gradient of Epsom Road at its western end. Epsom Road is the route to Waddon Station. Any further increase in gradient would impact on those people with impaired mobility accessing the station and those using buggies etc.
- 5.4 The scheme has been presented at Croydon’s Mobility Forum on 6th September and Mobility Forum representatives have also attended the public consultation events.
- 5.4 The council is separately investigating the possibility of achieving direct access to the northbound platform at Waddon Station via the car park adjacent to McDonalds. However, this does not form part of the scope of this project.

6. ENVIRONMENTAL IMPACT

- 6.1 An Environmental Impact Assessment will potentially be required, subject to a screening assessment. The screening opinion is planned to be submitted in September / October 2017 once post-consultation design changes have been incorporated.
- 6.2 TfL has prepared an Environmental Evaluation Report which outlines the anticipated noise, air quality and visual impacts of the proposal.

Air Quality

- 6.3 NO₂ concentrations at 31 of 40 modelled sensitive receptors are predicted to reduce. There is predicted to be slight to moderate adverse impact on the remaining 9 receptors. The overall changes to PM₁₀ concentrations across the scheme extents are predicted to be negligible.

Noise

- 6.4 The net noise effect of the scheme is predicted to be negative.⁷ properties (at various locations around the scheme extents) are currently predicted to experience a significant increase in noise levels. TfL’s preference is to stop the noise at source and so as design progresses TfL will be looking to maximise the noise protection that can be provided (i.e. via baffling).

Visual

- 6.5 Some residents of Lynwood Gardens and the very eastern end of Croydon Road will have a close view of the new bridge structure. Residents of Wrangthorn Walk will be in close proximity to the new stretch of road linking Denning Avenue with the A23. At each location optimum screening will need to be provided.

7. CRIME AND DISORDER REDUCTION IMPACT

- 7.1 TfL's Community Safety and Crime Prevention team looked at both of the initial proposals during feasibility design and provided a series of 'Main observations and recommendations'. These include the recommendation that the project be used to promote natural surveillance and activity in the area. The observations and recommendations also included regular pruning of trees; safe and secure cycle parking; street lighting; CCTV; and seating. TfL will undertake an assessment for the current proposals including the preferred bridge alignment option.

8. SUMMARY

- 8.1 The Croydon Opportunity Area Planning Framework (2013) identified the A23/A232 intersection as a key congestion hotspot predicted to worsen without intervention as a result of growth in Croydon Town Centre and surrounding areas. Subsequently, the Council and TfL entered into a Transport Infrastructure Agreement to deliver improvements to the A23.
- 8.2 Traffic congestion in the area remains high, bus passengers frequently experience delays during peaks, and there is poor provision for cyclists and pedestrians. The existing Waddon Station bridge is also forecast to require replacing / upgrading by 2023.
- 8.3 The proposals will make Fiveways junction simpler and increase capacity to accommodate expected changes arising from population and economic growth in the area. The project will also improve conditions for walking and cycling, with better cycle links between central Croydon and Sutton, and simpler pedestrian journeys and new public spaces. The proposals aim to make the streets more accessible and people-friendly, in line with some of the key objectives of the Mayor's emerging Transport Strategy, and also support the development of a future masterplan for the area to help shape a new local centre for Waddon.
- 8.4 From the early stages of the design process, and in line with the project requirements which were set out and agreed by TfL and LB Croydon, TfL has sought to ensure that the design proposals improve conditions for east/west cycle movement to and from the Croydon Opportunity Area. More recently, as Croydon Council has begun to develop proposals for a network of cycle Quietways and other routes, the importance of aiding cycling through all parts of the scheme has become clearer. Hence, as part of the most recent Croydon Council decision associated with the scheme on 29th June 2017 (Appendix 1),

supporting the current public consultation, an additional recommendation was included to ensure that TfL seek to include further cycling facilities in their scheme proposals, along with the flexibility to bring about additional improvement post-implementation.

- 8.5 This additional recommendation has been included to ensure that the cycle-ability through all parts of the scheme area are accounted for as far as feasible within the existing design, and to retain the flexibility (subject to the detailed design process) to provide cycling facilities between Epsom Road and Fiveways Corner in the future.
- 8.6 The public consultation is currently live, running from 10th July 2017 to 18th September 2017. Subsequently, as part of the consultation, the Committee has the opportunity to review the design of the 'Fiveways Project' and provide observations / recommendations relating to the scheme. It is intended that the recommendations of the Committee are treated as a scheme consultation response and any specific design observations will be reviewed and considered as part of the next stage of scheme development.

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APPENDICES: Appendix 1 – Strategic Fit of Fiveways with Mayor's Draft Transport Strategy and Healthy Streets

BACKGROUND DOCUMENTS:

Croydon Cabinet Report (December 2015)

<https://secure.croydon.gov.uk/akscroydon/users/public/admin/kab14.pl?operation=SUBMIT&meet=43&cmte=CAB&grpId=public&arc=1>

Fiveways Croydon Preferred Option Report (January 2016)

https://consultations.tfl.gov.uk/roads/fiveways-croydon-2015/user_uploads/fiveways-croydon-preferred-option-report.pdf

Croydon Council, Delegated Decision Report endorsing Design Option 3 for public consultation (June 2017)

<https://www.croydon.gov.uk/sites/default/files/articles/downloads/29%20June%202017%20%E2%80%93%20decision%20by%20Executive%20Director%20Place%20%E2%80%93%20Fiveways%20design%20proposals.pdf>