

# Feasibility Report into the required improvements at the crossing of

## A2203 Blackwall Lane by Tunnel Avenue

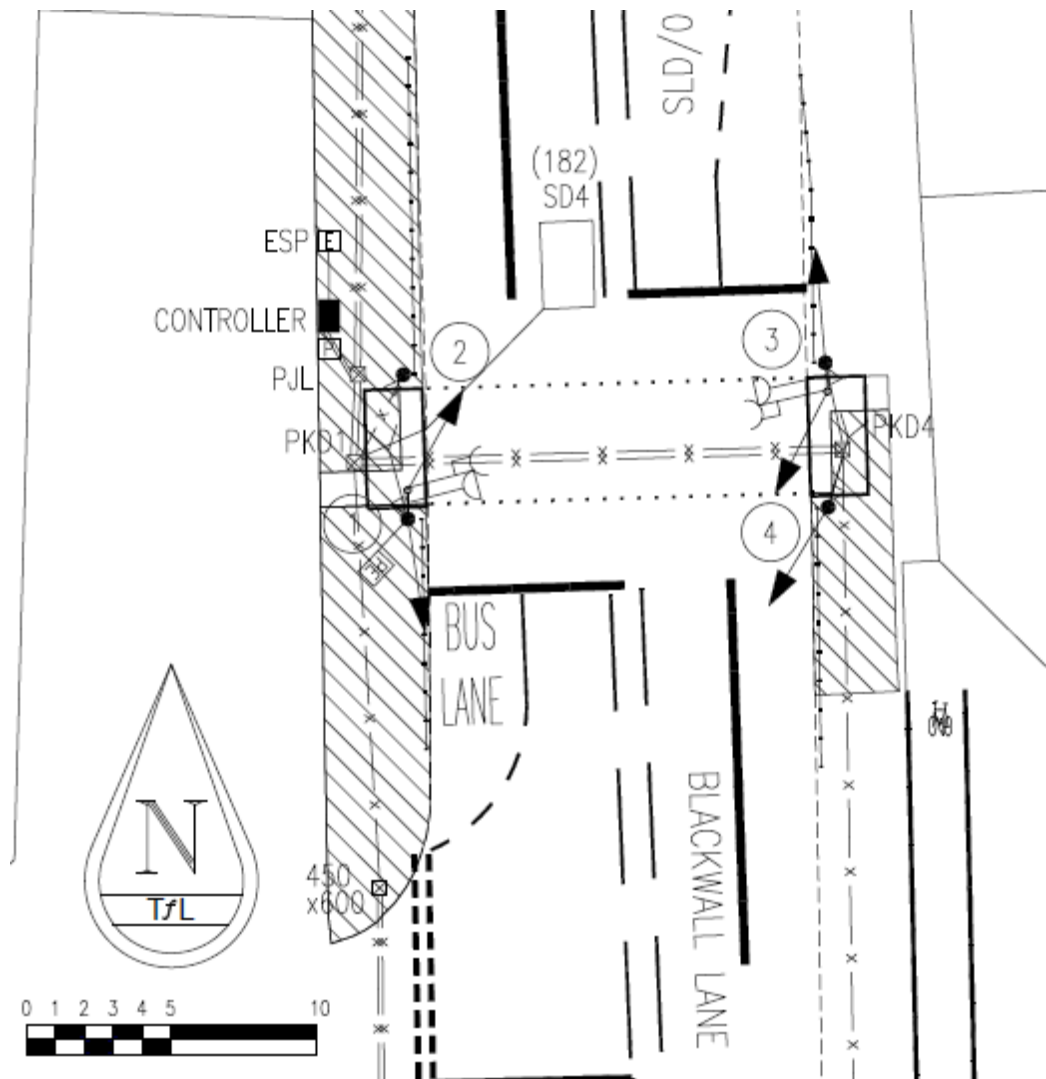
### TFL Signal Ref: 06/248



Senior Engineer | Transport Infrastructure | TFL Engineering

Date of Site Visit: 18/07/2019

Date of Report: 20/07/2019



## Background:

06/248 is a single toucan crossing. It is located on Blackwall Lane on a reasonably straight and level section of road.

The visibility of the signals has been called into question following a recent complaint from a member of the public which has come to our attention via [REDACTED] MP.

In order to assess the validity of this complaint and suggest reasonable solutions to improve the safety of the crossing I was asked to visit the location and compile this report.



## Findings:

Despite the level and straight section of road on which this crossing sits the visibility of the signal, even without traffic blocking the approaches is less than adequate, as can be seen in the picture above.

The crossing has dual lane (one bus lane and one general traffic lane) approaches in both directions, however the Southbound has two traffic signal heads and the north bound three. When high sided traffic is present, some or all of these signal heads are blocked to other approaching vehicles.

If a bus were to be waiting at the bus stop on the south bound approach the prominence of the crossing would be almost non-existent to other vehicles.

Despite the fact that this is a stand along crossing it does not have zig-zag markings. It has been a requirement for these marking to be in place at all stand-alone crossings since the beginning of 2007. In the time since then and now this site has been modified and should have been rectified by now.

The lack of correct road markings adds to the inconspicuousness of the crossing point. Zig-zags would forewarn traffic that they were approaching a crossing point and users would be more alert to visibly seek out confirmation of the state of the crossing.

The crossing being a single straight over crossing is suitable considering the width of the road but the lack of centre islands or mast arm signals in the middle of the carriageway makes the multilane layout unsuitable with the current signal infrastructure.

I agree with the complainant that the visibility of this crossing is lacking and steps need to be taken in order to improve the safety of this asset.

## Suggestions:

First of all the crossing needs to have zig-zag markings installed. It is not acceptable for this to be left non-compliant more than a decade after the deadline to add these markings to stand-alone toucan crossings.

Secondly the prominence of the traffic signal heads needs to be greatly improved. Simply adding an additional secondary signal or offsetting a pole would not be sufficient as this would be just another signal head blocked by buses / high sided vehicles.

In order to increase this prominence I feel there are three viable options. I have listed them here in descending order of preference and their ability to rectify the visibility issue:

1. Install a centre island and mount poles and head in the middle of the crossing.
2. Install a mast arm with associated additional signal heads.
3. Install 6m poles on the crossing and add to the signals with high level aspects.

## **Addition of a centre island:**

This could easily be accommodated by modifying the bus lane marking and number of lanes on the southbound approach.

Moving the start of the bus lane to the south of the crossing and continuing the single lane on the southbound approach right up to the crossing would free up usable road space.

Using the strip of carriageway between the north and south bound carriageways, together with a small reduction in the width of this single lane would be enough to accommodate a suitably wide traffic island. This island would be wide enough to house traffic signal equipment and leave clearance to the carriageway. As this is not designed as a refuge the poles would not need push button units and they would be offset from the crossing point so as to make it clear this is not a refuge.

This would clearly place signal equipment in a prominent position and remove all issues of vehicles or stationary buses blocking the other signal aspects.

## **Addition of a mast arm:**

Again this would clearly place signal equipment in a prominent position and remove all issues as traffic would be alerted to the presence of the crossing well in advance. It's visibility would not be effected by other vehicles or stationary buses as the other signal aspects can be.

However positioning of this mast arm and associated foundation may prove difficult with limited footway space and the location of utility infrastructure occupying the footways.

## **Addition of 6m poles:**

Converting poles 2 and 4 to 6m poles and adding in additional signal heads at the 6m position would potentially solve the issue under some circumstances.

A red aspect in the high level position of a 6m pole would still be obscured by high sided vehicles and so, while approaching the crossing there is a chance one or more of these additional aspects may also be blocked.

However, the likelihood of the signals being blocked for a significant proportion of the approach is reduced and the overall prominence of the facility would likely increase.

Although this may not completely resolve the issue this solution would be easier to install than the mast arm solution.

## **Conclusion:**

In summary the crossing should be modified to include centre islands and addition traffic signal equipment added to those islands. This can be easily achieved and coupled with the inclusion of the required zig-zag markings would completely remove the issue that has been identified.

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