

# Transport for London

A201 Blackfriars Station Redevelopment

Permanent Highway Layout

Road Safety Audit

Interim Stage 3

Ref: 1639/000/A201/TLRN/2012

Prepared for:

**TfL, Traffic**

By:

**Road Safety Audit  
TfL Roads Directorate**

Report Date: **June 2012**

Issue Version: **Interim A**



## Safety Audit Document Control Sheet

Audit Title: A201 Blackfriars Station Redevelopment  
Permanent Highway Layout

Audit Stage: 3

Audit Reference: 1639/000/A201/TLRN/2012

Prepared by: Shane Martin

Checked by: Andrew Coventry

Approved by: David Condon

Version	Status	Date
Interim A	Audit report issued to Client	20/06/2012
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## 1.0 INTRODUCTION

### 1.1 Commission

- 1.1.1 This report results from a Interim Stage 3 Road Safety Audit carried out on the A210 Blackfriars Station Redevelopment, Permanent Highway Layout.
- 1.1.2 The Audit was undertaken by TfL Roads Directorate in accordance with the Audit Brief issued by the Client Organisation on 11<sup>th</sup> June 2012. It took place at the Palestra offices of TfL on 19<sup>th</sup> June 2012 and comprised an examination of the documents provided as listed in Appendix A, plus a visit to the site of the proposed scheme.
- 1.1.3 The visit to the site of the proposed scheme was made on 19<sup>th</sup> June 2012. During the site visit the weather was overcast and the existing road surface was dry.
- 1.1.4 Due to various time constraints and the size of this scheme this Audit has been agreed to be completed as an interim Audit. A police representative and night time visit will be included as part of the full Stage 3 Road Safety Audit, when final works have been completed.

### 1.2 Terms of Reference

- 1.2.1 The Terms of Reference of this Audit are as described in TfL Procedure SQA-0170. The Audit Team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem the Audit Team may, on occasion, have referred to a design standard without touching on technical audit.
- 1.2.2 Safety issues identified during the Audit and site visit that are considered to be outside the Terms of Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, are set out in section 4 of this report.
- 1.2.3 Unless general to the scheme, all comments and recommendations are referenced to the detailed design drawings and the locations have been indicated on the A3 plan located in Appendix B.

### 1.3 Main Parties to the Audit

#### 1.3.1 Client Organisation

Client Officer: Edward Preedy, TfL – Capital Development Team  
[Edward.Preedy@tfl.gov.uk](mailto:Edward.Preedy@tfl.gov.uk)

Senior Client Officer: Glynn Barton, TfL - Traffic

#### 1.3.2 Design Organisation

Designer: Glynn Barton, TfL - Traffic

#### 1.3.3 Audit Team

Audit Team Leader: Shane Martin, TfL Roads Directorate

Audit Team Member: Andrew Coventry, TfL Roads Directorate

### 1.4 Purpose of the Scheme

- 1.4.1 After the recent completion of Blackfriars Station, the adjacent road layout has been altered to facilitate new pedestrian crossings. The new layout also provided enhanced cycle facilities and urban realm.



## 2.0 ITEMS RAISED IN PREVIOUS ROAD SAFETY AUDITS

Due to time constraints as a consequence of the current Olympics work and the turnaround time required to provide comments before works are finalised, this section has not been completed at this interim stage. It will be completed as part of either further interim audits or the final Stage 3 Audit.

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## 3.0 ITEMS RAISED AT THIS INTERIM STAGE 3 ROAD SAFETY AUDIT

### 3.1 CYCLE FACILITIES

#### 3.1.1 PROBLEM

**Location:** A – Approach layouts for cyclists to travel ahead to Queen Victoria Street.

**Summary:** Provision requires cyclists to keep left without a clear route to transition to Queen Victoria Street.

The Audit Team are concerned that the mandatory cycle lanes guide cyclists to the left of the carriageway without any clear route towards Queen Victoria Street. This results in users performing various manoeuvres including crossing three lanes of traffic within a very short section in which other traffic is often changing lanes, increasing the risk of side-swipe type collisions between cyclists and other traffic. Cyclists performing this manoeuvre also ignored the stop lines and crossing facilities in order to 'beat traffic'.

The potential for conflict between cyclists and other traffic is perceived to be significant due to the various manoeuvres that general traffic perform at this location and the short length in which cyclists cross these three busy lanes.

This issue is exacerbated further by the issue raised in 3.3.2 below.

Failure to provide cycle guidance information may increase the potential for confusion and therefore hesitation, increasing the potential for conflict.

#### **RECOMMENDATION**

Provide additional facilities to enable cyclists to access Queen Victoria Street safely.

#### 3.1.2 PROBLEM

**Location:** B – Approach layouts for cyclists to right turn to Victoria Embankment.

**Summary:** Provision requires cyclists to keep left without a clear route to enable the right turn.

Similarly to the above issue (although not witnessed as a significant movement during the site visit) The Audit Team are concerned that the mandatory cycle lanes guide cyclists to the left of the carriageway without any clear route towards Victoria Embankment. The potential for conflict between cyclists and other traffic is increased due to the various manoeuvres that general traffic perform at this location and the short length in which cyclists cross up to three busy lanes.

Failure to provide cycle guidance information may increase the potential for confusion and therefore hesitation, increasing the potential for conflict.

#### **RECOMMENDATION**

Provide additional facilities to enable cyclists to access Victoria Embankment safely.



## 3.2 PEDESTRIAN FACILITIES

### 3.2.1 PROBLEM

**Location:** C – New Bridge Street between Queen Victoria Street and Watergate.

**Summary:** Pedestrian desire line not catered for with controlled crossing facilities.

The Audit Team are concerned that a high number of pedestrians were witnessed crossing at this location without the assistance / protection of a crossing facility. The lack of pedestrian crossing facility at what appears to be a significant desire line increases the risk of conflict as users cross between traffic with an increased risk of being obscured.

The potential for conflict is exacerbated by the busy nature of this area (both pedestrians and vehicles) and the various approaches which vehicles may approach from, sometimes at speed.

#### RECOMMENDATION

Ensure that provision of pedestrian facilities encourages users to safely cross the carriageway. This may include provision of a controlled crossing facility at this desire line.

### 3.2.2 PROBLEM

**Location:** D – Western crossing point between Victoria Embankment and Queen Victoria Street

**Summary:** Pedestrians may not anticipate flowing traffic in lanes 1 & 2 whilst lane 3 is stationary.

The Audit Team are concerned that pedestrians start to cross as they notice lane 3 (ahead for Queen Victoria Street) is held. Although a 'green-man' is not shown, users of the crossing facility anticipate that any approaching vehicles in lanes 1 & 2 will also be held and so attempt to cross. This may lead to an increased potential for conflict as users have a false sense of security and do not anticipate the approaching vehicles not stopping.

It was also noted at this location that the louvres applied to the pedestrian aspects of the signals mean that the green man cannot be seen at mid-points of the eastern tactile paving.

#### RECOMMENDATION

It is recommended that additional measures / alterations are undertaken to clarify when it is safe to cross. This may include the re-phasing of the traffic signals.



### 3.3 JUNCTIONS

#### 3.3.1 PROBLEM

**Location:** E – Queen Victoria Street junction with Blackfriars Bridge

**Summary:** Potential for head on type collisions.

The Audit Team are concerned that the alignment between the ahead lane into Queen Victoria Street and lane 2 exiting Queen Victoria Street are aligned in a way that they could be perceived as leading towards one another. During the site visit various users were hesitant at this location and one user inadvertently travelled the wrong side of the traffic island towards approaching traffic. An increased potential for 'head on' type conflicts may occur as a result.

#### RECOMMENDATION

It is recommended that the layout is clarified to ensure that users do not inadvertently enter the opposing traffic lane. This may include alignment alterations, additional signs and road markings to clarify the intended route.

#### 3.3.2 PROBLEM

**Location:** F – Blackfriars Bridge approach to Queen Victoria Street

**Summary:** Poor lane discipline may increase potential for conflict

The Audit Team are concerned that various vehicles were witnessed during the site visit entering Queen Victoria Street from lane 2 of Blackfriars Bridge which is meant for users continuing left to New Bridge Street. An increased potential for shunt and / or 'side-swipe' type collisions may occur as vehicles performing this manoeuvre have to stop at an unexpected location and then attempt to merge with vehicles in lane 3 entering Queen Victoria Street.

#### RECOMMENDATION

Provide additional lane allocation guidance / information to users approaching Queen Victoria Street from the south.

**End of list of Problems identified and Recommendations offered in this Interim Stage 3 Audit**



#### 4.0 ISSUES IDENTIFIED DURING THE INTERIM STAGE 3 ROAD SAFETY AUDIT THAT ARE OUTSIDE THE TERMS OF REFERENCE

Safety issues identified during the audit and site inspection that are considered to be outside the Terms of Reference, but which the Audit Team wishes to draw to the attention of the Client Organisation, are set out in this section. These issues could include maintenance items, operational issues or existing poor provision. It is to be understood that, in raising these issues, the Audit Team in no way warrant that a full review of the highway environment has been undertaken beyond that necessary to undertake the Audit as commissioned.

Not completed at this interim stage due to time constraints. Will be completed as part of further interim audits and / or the final Stage 3 Audit.

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## 5.0 AUDIT TEAM STATEMENT

We certify that we have examined the drawings and documents listed in Appendix A. to this Safety Audit Report. The Road Safety Audit has been carried out with the sole purpose of identifying any feature that could be removed or modified in order to improve the safety of the measures. The problems identified have been noted in this report together with associated suggestions for safety improvements that we recommend should be studied for implementation.

No one on the Audit Team has been involved with the design of the measures.

### AUDIT TEAM LEADER:

Name: Shane Martin MCIHT, MSoRSA Signed:  
Position: Senior Road Safety Auditor Date: 20<sup>th</sup> June 2012  
Organisation: Transport for London  
Road Safety Audit  
Roads Directorate  
Address: 8<sup>th</sup> Floor Palestra,  
197 Blackfriars Road,  
London,  
SE1 8NJ

### AUDIT TEAM MEMBER:

Name: Andrew Coventry Signed:  
BEng (Hons), CMILT, MCIHT MSoRSA  
Position: Senior Road Safety Auditor Date: 20<sup>th</sup> June 2012  
Organisation: Transport for London  
Road Safety Audit  
Roads Directorate  
Address: 8<sup>th</sup> Floor Palestra,  
197 Blackfriars Road,  
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## APPENDIX A

### Documents Forming the Audit Brief

#### DRAWINGS

- Dwg. Y4S00098A/OPTION\_2 Rev.8      Alignment Option 2

#### DOCUMENTS

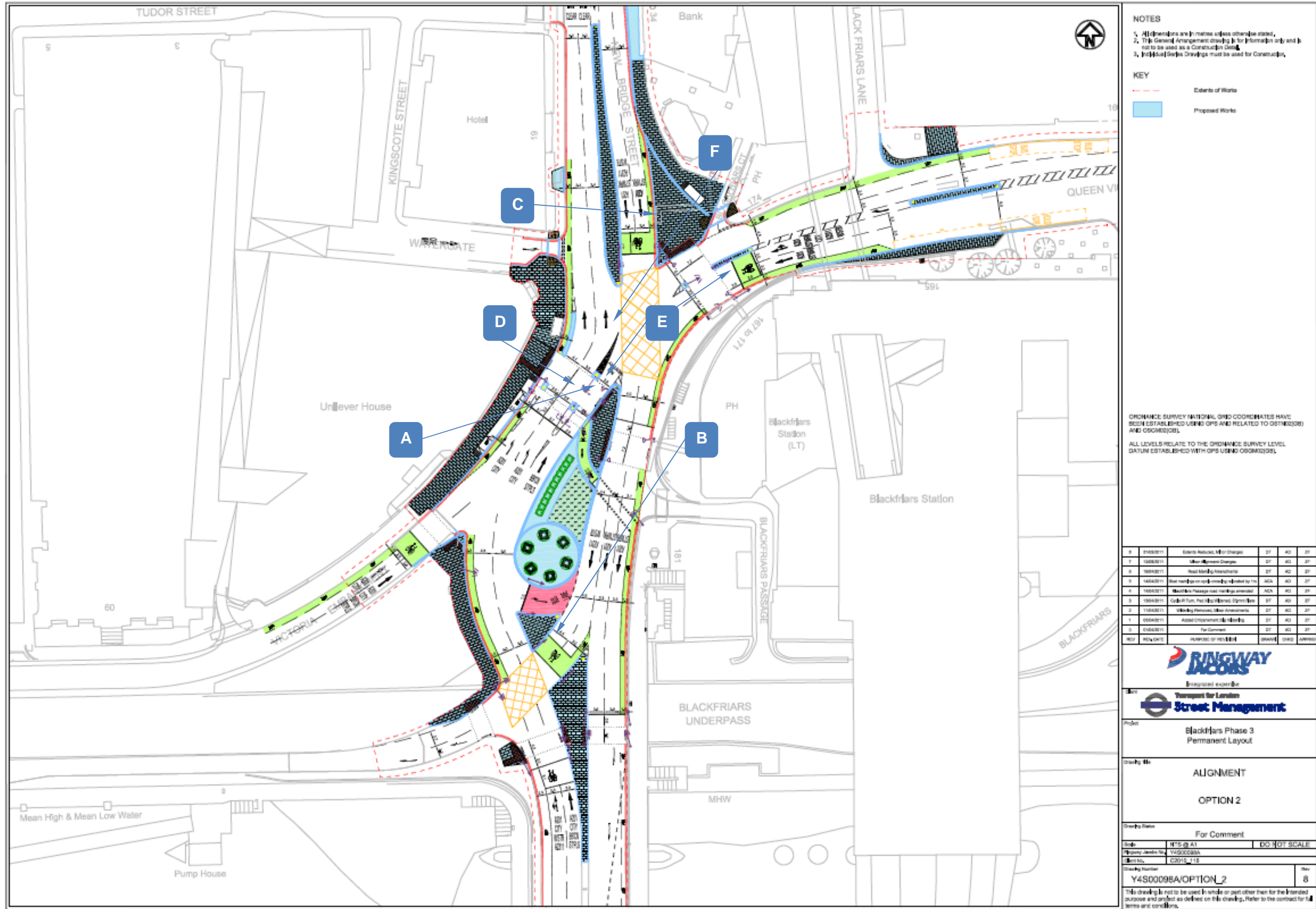
- Safety Audit Brief Checklist
- Stage 1/2 Safety Audit Report (1436/000/A201/TLRN/2011) Rev A June 2011
- Stage 1/2 Safety Audit Response Report (1436/000/A201/TLRN/2011) Rev A June 2011



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## APPENDIX B

### Problem Locations



**NOTES**  
 1. All dimensions are in metres unless otherwise stated.  
 2. This General Arrangement drawing is for information only and is not to be used as a Construction Detail.  
 3. For final details, the relevant drawings must be used for construction.

**KEY**  
 - - - - - Limits of Works  
 Proposed Works

ORDNANCE SURVEY NATIONAL GRID COORDINATES HAVE BEEN ESTABLISHED USING GPS AND RELATED TO OSMED(08) AND OS06M(08).  
 ALL LEVELS RELATE TO THE ORDNANCE SURVEY LEVEL DATUM ESTABLISHED WITH GPS USING OS06M(08).

1	14043211	Earth Retention, Minor Changes	27	AD	27
2	14043211	Minor Access Changes	27	AD	27
3	14043211	Road Marking Amendments	27	AD	27
4	14043211	Street Furniture and Signage (as detailed in the	ACA	AD	27
5	14043211	Blackfriars Passage road markings amended	ACA	AD	27
6	14043211	Grid in Plan, Post-Installation Operations	27	AD	27
7	14043211	Utility Relocation, Minor Amendments	27	AD	27
8	14043211	Access to Blackfriars Station	27	AD	27
9	14043211	For Comment	27	AD	27
REV	14043211	Amended or Revised	27	AD	27

**RAILWAY**  
 Integrated expertise

**Transport for London**  
 Street Management

Project: **Blackfriars Phase 3 Permanent Layout**

Drawing No: **ALIGNMENT OPTION 2**

Drawing Date: **For Comment**

Scale: **1:15 @ A1** **DO NOT SCALE**

Project Number: **Y4S00098A/OPTION\_2** Rev: **8**

This drawing is not to be used in whole or part other than for the intended purpose and project as defined on this drawing. Refer to the contract for full terms and conditions.