



**4 AND 20 BUSINESS PARK, FARINGDON
PROPOSED JUNCTION WITH PARK ROAD**

STAGE 1 ROAD SAFETY AUDIT

JUNE 2008

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Appendix 1	Site Location Plan
Appendix 2	Cole Easdon Plan No. 2232/201 - Revision C (Ghost Island Major/Minor Junction Layout Plan (Draft))
Appendix 3	Site Photographs



1.0 INTRODUCTION

- 1.1 This report identifies safety concerns and recommendations arising from the Stage 1 Road Safety Audit which has been carried out on the proposed access road which is to serve a new Business park on land off Park Road, Faringdon. The development site is currently greenfield land which is bounded on its South Western boundary by Park Road (A417) and on its South Eastern boundary by the A420 trunk road between Swindon and Oxford. An existing light industrial development is situated adjacent to the North Western boundary of the site, see location plan within Appendix 1.
- 1.2 The following Stage 1 Audit has been carried out independently. The Auditor has had no involvement in the design of the scheme or discussed any safety concerns raised in this report with members of the Design Team.
- 1.3 The proposed works include the widening of Park Road to introduce a ghost island right turn junction to serve the development site and the widening of the approach lane to the A420 roundabout to assist with traffic flows arising from the proposed Business Park and also a new residential development off Park Road approximately 200 metres north west of the Business Park access.
- 1.4 The Stage 1 Audit comprised of examining the following drawing:
- § Cole Easdon Consultants – Plan No. 2232/201 Revision C (Ghost Island Major/Minor Junction Layout Plan (Draft) included within Appendix 2
 - § A site visit was carried out on Friday 20th June 2008 between 3pm and 4pm. Site photographs are included within Appendix 3

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STAGE 1 ROAD SAFETY AUDIT



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- 1.5 No details have been provided of signage, street lighting, surfacing, carriageway, longitudinal sections or drainage for the access road, therefore this audit is based on the plan referred to above and the site visit.



2.0 GENERAL COMMENTS

- 2.1 The development is to be accessed from Park Road, A417.
- 2.2 Park Road is currently 7.3 metres wide where it fronts the development and is subject to a 40mph speed limit.
- 2.3 Actual traffic speeds were not recorded during the site visit although it was assessed that traffic was travelling in the region of the 40mph speed limit.
- 2.4 No accident data was available for the highway network bounding the site.



3.0 VEHICULAR AND HIGHWAY ASPECTS OF DESIGN

Safety Concern

- 3.1 There is a potential clutter of street furniture and vegetation (road Signs, street lighting columns, trees) when approaching the proposed access from Faringdon Town Centre towards the A420 which may affect the intervisibility between the traffic on Park Road and those exiting the development (see Photo 1, Appendix 3).

Recommendation

Consider position of street furniture during detailed design of road widening and ensure overhanging vegetation is cut back to ensure adequate intervisibility exists.

3.2 Safety Concern

The large bellmouth (kerb radii 15 metres) forming the proposed junction into the Business Park may result in vehicles entering and exiting the development at increased speeds resulting in a possible conflict with oncoming vehicles on Park Road or vehicles/pedestrians/cyclists using the development access road.

Recommendation

Reduce junction radii to assist reduced traffic speeds entering and exiting the development. Ensure HGV ingress and egress is not compromised. Alternatively consider the use of coloured surfacing or road markings to make the junction appear narrower to car drivers whilst still allowing HGV access.



3.3 **Safety Concern**

The large kerb radii referred to in paragraph 3.2 above may enable drivers of vehicles turning left from the development towards the A420 to orientate their vehicles such that they are looking over their shoulder to check for oncoming traffic on Park Road owing to the angle of approach to the giveway line.

Recommendation

Same recommendation as paragraph 3.2 above to ensure vehicles exiting the development are positioned more perpendicular to Park Road when approaching the giveway line.

3.4 **Safety Concern**

Track plots have not been provided for HGV's exiting the development to check for conflicts with vehicles waiting in the ghost island turning lane. There may also be a conflict between HGV's exiting the development at a slow speed and vehicles travelling along Park Road at 40mph.

Recommendation

Check HGV track plots for vehicles exiting the development to ensure no conflicts exist. Ensure adequate warning signs and visibility splays are provided to warn drivers on Park Road of the development access road.



3.5 Safety Concern

Visibility to the left and right when exiting the proposed development onto Park Road is obscured by overhanging vegetation. Furthermore the existing roundabout direction sign currently situated in the verge when looking left from the proposed access road impedes visibility owing to the height of the sign in relation to the elevated exit from the A420 roundabout (see Photos 2 and 3, Appendix 3).

Recommendation

Ensure overhanging vegetation is cut back and tree canopies raised as necessary to achieve the required visibility splay. Ensure the position and height of the roundabout warning sign does not encroach into the visibility splay.

3.6 Safety Concern

A field access exists directly opposite the proposed development access. It is unclear how often this access is used but there may be a potential conflict with vehicles turning right into the field from the Faringdon direction across the ghost island (see Photo 4, Appendix 3).

Recommendation

Identify the regularity of vehicles wishing to access the field opposite the development site to see if a conflict exists. Adjust the detailed design accordingly.



3.7 Safety Concern

The widening of the approach to the A420 roundabout is situated adjacent to an existing embankment with the resultant risk of approaching vehicles accidentally leaving the highway down the embankment (see Photo 5, Appendix 3).

Recommendation

The detailed design of the road widening is considered in relation to the embankment and adequate highway barriers are provided in accordance with TD19/06 of the DMRB and to the satisfaction of the approving Highway Authority.

3.8 Safety Concern

Track plots for vehicles approaching the widened entry of the A420 roundabout from the direction of the proposed development have not been provided. Lane widths and circulatory movement on the roundabout have therefore not been assessed.

Recommendation

Track plots are considered when preparing the detailed design of the roundabout approach widening.



4.0 ROAD MARKINGS, SIGNAGE & STREET LIGHTING

4.1 Safety Concern

Details of signage and street lighting are not available.

Recommendation

Ensure the proposed access road is adequately lit and signed taking into consideration previous comments in this report concerning junction visibility.

4.2 Safety Concern

The 'keep clear' markings adjacent to the proposed access do not fully encompass the turning manoeuvre shown on the track plots.

Recommendations

Reposition the 'keep clear' markings accordingly.



5.0 HIGHWAY DRAINAGE

5.1 Safety Concern

No detailed design of highway drainage was available.

Recommendation

The detailed design of the scheme must include adequate highway drainage.

5.2 Safety Concern

The large junction area and road widening on Park Road may lead to ponding occurring during wet conditions with the resultant danger to road users.

Recommendation

Ensure adequate longitudinal and crossfalls are provided during the detailed design process for the junction works and also sufficient highway drainage is provided.



6.0 EMERGENCY VEHICLE ACCESS

6.1 Emergency vehicle access is considered adequate.



7.0 PEDESTRIANS AND CYCLISTS

7.1 Safety Concern

Pedestrians crossing from the proposed bus stop on the opposite side of Park Road from the development site via the pedestrian refuge have their visibility impaired to the left by an existing road sign and to the right by overhanging vegetation (see Photos 6 and 7, Appendix 3).

Recommendation

Reposition or raise the height of the road sign and cut back the overhanging vegetation.

7.2 Safety Concern

The proposed footway to the bus stop on the opposite side of Park Road from the development site is situated behind high level kerbs. The gradient of the proposed pram crossing to access the footway may be excessive for bus users owing to the level difference between the road channel and the existing verge on which the footway will be constructed.

Recommendation

Ensure the design of the footway and pram crossing complies with relevant design standards.



7.3 Safety Concern

Pedestrians using the proposed 2m wide footway along Park Road will be walking adjacent to a busy 40mph carriageway which is also heavily used by HGV's.

Recommendation

Widen the path to 2.5 metres to allow a 0.5m 'safety margin' between pedestrians and vehicles using Park Road.

7.4 Safety Concern

The layout and crossing point of the 2m footway and the cycle lane within the development site will be dependant on the internal layout of the Business Park and associated road geometry.

Recommendation

Ensure the footway provision and crossing points within the development follows the desire lines and the internal layout of the Business Park does not compromise the intervisibility between drivers and pedestrians. Similarly the provision of the 'on-street' cycle lane will need to be considered when determining the layout of the Business Park.



8.0 AUDIT STATEMENT

I certify that the drawings and other items listed have been examined. A site visit has been made with the objective of identifying any features of the scheme at the design stage that could be removed or modified in order to improve the safety of the scheme. This has been undertaken generally following guidance provided in HD 19/03.

Signed Jon Candy (Senior Engineer)

A handwritten signature in black ink, appearing to read 'Jon Candy', is written over a light grey rectangular background. The signature is cursive and ends with a long, sweeping horizontal line that extends to the right.