HAZELWALLS FARM, UTTOXETER

DESIGNER’S RESPONSE TO ROAD SAFETY AUDIT STAGE 1
HAZELWALLS FARM, UTTOXETER

DESIGNER’S RESPONSE TO ROAD SAFETY AUDIT STAGE 1

1 March 2017

Our Ref: CL/JR/sjs/lh/JNY8013-01

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1 INTRODUCTION

1.1 This report has been prepared by RPS Planning and Development as a Designer’s Response to the Stage 1 Road Safety Audit undertaken by Badingham Limited which is included as Appendix A.

1.2 The proposed highway modifications that were the subject of the Stage 1 Road Safety Audit are shown on RPS Drawing No. JNY8013-53E which is included as Appendix B.

1.3 This report has been compiled by Craig Lauder, Principal Engineer, RPS Planning and Development (Infrastructure) on behalf of David Wilson Homes.

1.4 Where a safety audit recommendation is accepted, this report details the actions proposed to comply with the recommendations and references how this can be incorporated at the detailed technical approval stage on a revised drawing. Where a safety audit recommendation is rejected, this report details the justification for rejection.

1.5 This Designer’s Response is to be regarded as the formal Safety Audit Exception Response if required and where applicable.
2 ITEMS RAISED AT PREVIOUS AUDITS

2.1 No previous Road Safety Audits have been undertaken.
3 VEHICULAR AND HIGHWAY ISSUES

PROBLEM 3.1

Location: Proposed junction.

Summary: Westbound alignment.

3.1 The junction proposals introduce a ‘kink’ in the alignment for traffic on the A518 travelling west, which makes use of a section of carriageway at the nose of the island that is on a gradient. The junction appears constrained, especially for HGVs, which comprise a significant proportion of the traffic flow. There is a concern that traffic (particularly large vehicles) negotiating the junction on a green signal may, as a result of this gradient and alignment, collide with the tip of this island where a signal pole is also to be located, or with the island and signal pole located on the eastbound splitter island.

RECOMMENDATION

3.2 It is recommended that a smoother, wider, and more level approach path through the junction is provided for westbound traffic.

Designer’s Response

3.3 The junction has been designed to accommodate all HGVs. Swept path analysis has been undertaken and the path through for large vehicles is well defined as can be seen on the original drawing in Appendix C. Articulated and rigid vehicles, 16.48m and 10.00m long respectively were utilised, with both vehicles able to traverse the layout without issue.

3.4 Notwithstanding, drawing No. JNY8013-53-F, included within Appendix D demonstrates that the island has been further re-shaped and the alignment amended to ease the path of HGV’s through this part of the junction. It is considered that this issue is addressed by such further measures and that any residual issues will be picked up at the Stage 2 and Stage 3 audits.

PROBLEM 3.2

Location: North side of A518

Summary: Potential restricted residential access.

3.5 The introduction of the signal junction may impact upon residential access to the properties on the north side of the A518. There is a risk of turning vehicles colliding with the splitter islands (for example agricultural machinery or car with caravan). The driveway of one property appears to be located within the signal junction. Drivers egressing from this location will not have clear sight of the signal aspects and thus an understanding as to when it is safe to proceed. There is a risk of collisions with other traffic using the junction.
**Recommendation**

3.6 It is recommended that a swept path assessment be undertaken for the largest typical vehicle anticipated to regularly and frequently visit the properties on the north side of the A518 to demonstrate safe and efficient access. Also, that safe access is provided for any properties with an access located within the junction itself.

**Designer’s Response**

3.7 The eastbound island has been repositioned to allow all movements from the residential properties to the north. The Highway Code is clear that the green signal is only an invitation to proceed (with care and attention) and not an explicit right-of-way and the same duty falls on all traffic using a junction, i.e. to proceed with care being attentive, looking and preparing to stop. There are numerous examples of private accesses with signalised junction arrangements, and given the good inter-visibility between the private access points and all arms of the junction, this is not considered a material issue. Accordingly, it is considered that these measures address the issues raised.

**PROBLEM 3.3**

**Location: Proposed junction.**

**Summary: Traffic speeds**

3.8 During the site inspection vehicles on the A518 eastbound were noted to regularly activate the existing 40mph speed sign demonstrating that vehicles are travelling in excess of the signed 40mph limit. The downhill gradient encourages increased vehicles speeds. There is a concern that high vehicle speeds combined with late braking decisions may lead to loss-of-control or skid-type collisions, particularly in wet or icy conditions.

**Recommendation**

3.9 It is recommended that the junction is placed within a 30mph speed limit on both the A518 and B5013 and that high friction surfacing is applied to the approaches.

**Designer’s Response**

3.10 The speed limit is commensurate for the road and at this stage no speed reduction limit reduction is anticipated. The presence of the new signalised junction and associated advance warning signage will act as a speed calming measure, with approaching vehicles decelerating on approach to the junction from the west. High friction surfacing will be investigated in detailed design, and provided where appropriate. Accordingly, it is considered that these measures address the issues raised.
**PROBLEM 3.4**

*Location: B5013 approach.*

*Summary: Vehicle queues.*

3.11 Anecdotal evidence from local residents during the site inspection suggests that during busy periods there is extensive queuing on the B5013 extending back from the existing junction. The introduction of signals may introduce increased delay on this approach and lead to queues blocking back across the proposed adjacent site access roundabout to the detriment of highway safety.

*Recommendation*

3.12 It is recommended that measures are introduced to ensure vehicle queues do not block back across the proposed adjacent site access roundabout.

*Designer's Response*

3.13 The junction has been modelled within the Linsig computer model, and this demonstrates the junction will operate within capacity, with a six-vehicle queue within the peak periods, the longest queue anticipated on the B5013. There is therefore more than sufficient stacking space for the maximum six vehicles to queue whilst respecting the yellow box. The traffic count data used for the basis of the assessment did not record the extensive queuing referred to in the anecdotal evidence, and it is on the empirical evidence that the assessment has been undertaken. Accordingly it is considered that these measures address the issues raised.

**PROBLEM 3.5**

*Location: B5013 / A518.*

*Summary: Large vehicle access.*

3.14 The swept path assessment for an articulated vehicle travelling from the B5013 to the A518 (east) shows it passing close to the northern carriageway edge and the traffic island. There is a risk of large vehicles over-running the footway endangering users or colliding with the traffic island and signal pole.

*Recommendation*

3.15 It is recommended that sufficient carriageway space is provide to ensure vehicles do not over-run the footway or collide with the traffic island.

*Designer's Response*

3.16 Whilst it is considered that the original design leaves sufficient space, the revised layout found in Appendix D has increased the kerb realignment works in certain locations to further ease all tracking manoeuvres. Accordingly it is considered that the issues raised are addressed by these measures.
PROBLEM 3.6

Location: A518.

Summary: Interaction with bus stops

3.17 There is a risk that the proximity of the bus stops on the east side of the junction on the A518 may conflict with the safe operation of the proposed signal junctions, for example when drivers seek to over-take a waiting bus. There is a risk of collisions between over-taking vehicles and opposing on-coming traffic. Waiting buses may delay eastbound traffic exiting the junction. Similarly, refuse vehicles serving the properties will need to be taken into consideration.

Recommendation

3.18 It is recommended that the bus stops are located further east if necessary and satisfactory servicing arrangements confirmed.

Designer’s Response

3.19 The bus stop is in excess of 60m to the east of the junction, and this is considered to be sufficient distance to allow for overtaking manoeuvres as necessary. The bus stop itself is a demand stop, currently served by a single bus route, which provides around four services per day in both directions. Accordingly, the level of frequency and hence potential for conflict is not considered to require any amendments to the scheme.

3.20 In terms of refuse vehicles, given the low frequency of this vehicles operation, and the low number of properties affected this is not considered to be a material issue, as collections are currently taken from the road.

PROBLEM 3.7

Location: Proposed signal junction.

Summary: Blocking back within junction

3.21 There is a risk that A518 traffic turning right to the B5013 may be blocked by traffic queuing at the B5013 eastbound stop line and block across the path of A518 westbound traffic. There is a risk of side-impact type collisions.

Recommendation

3.22 It is recommended that suitable measures are introduced (keep clear markings?) to prevent blocking back in this location.

Designer’s Response

3.23 The designer does not agree with this issue. It is not considered a material issue; road users will not turn right until the way forward is clear to do so. The Linsig shows that there are low flows associated with this movement, and there is sufficient space to stack two vehicles in the right turn lane. Accordingly, when considering the low levels of traffic flow the provision of the stacking space is considered to be sufficient and not likely to result in an increase of collisions as suggested.
4 NON-MOTORISED USERS

PROBLEM 4.1

Location: North side of A518

Summary: Signal pole creating potential obstruction

4.1 The introduction of a signal pole in the footway may obstruct users, particularly as the footway in this area is of limited width. This can cause difficulties for visually impaired users in particular and may lead to pedestrians stepping off the footway and into the path of vehicular traffic leading to collisions.

Recommendation

4.2 It is recommended that the footway remains free of obstruction in this location.

Designer’s Response

4.3 The footpath currently serves five properties past the proposed signal pole, with the footpath being 1.35m wide at the point in question. MfS suggests that a wheelchair user requires 900mm on a footpath as an absolute minimum, if the signal pole is set back from the kerb approx. 350mm this minimum width could be achieved over this short section.

4.4 Notwithstanding this, this element of the design will be picked up in detailed design, and if an acceptable design cannot be arrived at then a cantilever pole arrangement could be further investigated. Accordingly it is considered that there is sufficient width within the footway to accommodate the level of usage.

PROBLEM 4.2

Location: Proposed signal junction

Summary: Lack of controlled crossing facilities

4.5 There is a footpath signed in this location that may prove an attractive recreational route for future residents. However, no pedestrian crossing facilities are included within the proposed junction, which would also assist access to the nearby eastbound bus stop. There is a risk of collisions between pedestrians and vehicles.

Recommendation

4.6 It is recommended that pedestrian crossing facilities are provided.
Designer’s Response

4.7 Pedestrian connectivity is provided with the provision of the southern footpath. Pedestrian crossing facilities through the junction are deemed unnecessary as there is no reason for pedestrians to walk west. The proposed footpath links to the proposed future development, and continues east to connect to the pedestrian facilities in front of The Plough Inn Public House. If necessary, an informal dropped kerb could be provided at this point, on the pedestrian desire line, to the eastbound bus stop if deemed a requirement. No provision has been made at this stage given the low level of expected patronage of the bus service. This issue will be reconsidered at the detail design stage.

PROBLEM 4.3

Location: Proposed signal junction

Summary: Lack of cycle facilities

4.8 No facilities for cyclists are included within the design such as advance stop lines. The constrained nature of the junction and lane widths may lead to cyclists being ‘squeezed’ by traffic such as when travelling on the A518 westbound. There is a risk of collisions.

Recommendation

4.9 It is recommended that measures are introduced for cyclists including the provision of increased carriageway space through the junction.

Designer’s Response

4.10 There are no cycle facilities currently provided along the A5018, and given that the route turns into national speed limit to the west, and maintains 40mph through the junction any cyclists on the link will be experienced riders capable of safely traversing the traffic flow as part of the traffic stream. Furthermore, there are no segregated facilities for cyclist within the vicinity of the junction. Advance cycle stop lines are only appropriate where width allows and where cyclist can be routed to the advance stop line. This is not possible in this location and hence providing these would be counter-productive as it would encourage cyclists to ‘squeeze’ past stationary traffic. Furthermore, providing short term additional width through the junction would encourage drivers to pass cyclists, and drivers may mistakenly attempt this on the narrower carriageway found either side of the junction. Accordingly, it is considered that such measures cannot be provided and should the scheme be amended to seek to provide these, such provision may well result in further safety issues.
5 ROAD MARKINGS AND SIGNAGE

PROBLEM 5.1

Location: B5013

Summary: Lack of advance warning.

5.1 The bend in the road alignment may restrict driver visibility on approach to the traffic signals. There is a risk that drivers may not comprehend the junction sufficiently leading to late-braking and loss-of-control type collisions.

Recommendation

5.2 It is recommended that advance warning sign of the signals and possible queues ahead are introduced on the B5013 approach to the junction.

Designer's Response

5.3 The proposed development is accessed via a roundabout to the south of the junction, so any approach speeds will be low as drivers negotiate the roundabout. Notwithstanding, signage will be reviewed during the detailed design process and provided as appropriate.
6 STREET LIGHTING

6.1 No observations.
7 DRAINAGE

7.1 No observations.
8 SUMMARY

8.1 The measures raised in the RSA Stage 1 have now been addressed, either by way of amendments to the scheme or via justification of the measures proposed. Accordingly, it is considered that there are no outstanding safety issues associated with the proposed scheme.
APPENDIX A - STAGE 1 ROAD SAFETY AUDIT
Hazelwalls Farm, Uttoxeter. Proposed Highways Works

Road Safety Audit – Stage 1 (Preliminary Design Stage)

Client: David Wilson Homes

20th February 2017
### DOCUMENT ISSUE

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SECTION 1: INTRODUCTION

General

1.1 This Road Safety Audit Stage 1 (Preliminary Design) report has been undertaken at the request of the Highway Authority. It relates to the signalisation of the existing priority junction of the B5013 and A518 at Blounts Green, Uttoxeter, Staffs.

1.2 East Staffordshire Borough Council is the local planning authority for the area. Staffordshire County Council is the local highway authority.

Audit Team

1.3 A. R. J. Setter BA (Hons) MSc CMILT MCIHT AMICE CoC
Badingham Limited

D. F. Rogers JP CEng BEng (Hons) MICE MSoRSA
Ashburn

Audit Brief

1.4 The Road Safety Audit has been undertaken in accordance with the Road Safety Audit Brief contained in Appendix 1.

1.5 The terms of reference for this Road Safety Audit are described in HD 19/15. The Audit Team has not been made aware of any departures from standard.

1.6 The Road Safety 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 design to any other criteria.
Main Parties to the Audit

1.7 The following are the main parties to the audit:

- Client Organisations: David Wilson Homes
- Overseeing Organisation: Staffordshire County Council
- Design Organisation: RPS

1.8 The Audit Team visited the site together on Monday 20th February 2017 between 11.30am and 12.00pm. The weather was cloudy with some surface damp. There were no adverse traffic conditions to affect the audit. Photographs are included where relevant.

1.9 The location of the site is shown on Figure 1 Site Location Plan and Figure 2 Aerial Photo. The area of the audit extends solely to the works shown on the drawings included in the Audit Brief. Issues identified are cross-referenced by paragraph number to Figure 3 Audit Plan.

1.10 The proposals comprise the introduction of signal control at the existing uncontrolled priority junction arrangement. No facilities are provided for pedestrians. A footway is proposed on the south east side of the B5013 leading from the site towards The Plough Public House. The A518 links Uttoxeter in the east with Stafford and the M6 Motorway in the west. The B5013 connects Uttoxeter with Rugeley to the south. Both highways are bus routes and busy roads with a mix of traffic including articulated vehicles.
1.11 The A518 is provided with street lighting and has a footway flanking its northern side. It is subject to a 40mph speed limit and there is a vehicle actuated sign located adjacent to the junction. The A518 has a significant downhill gradient falling from the west and has broken centre line markings. On its northern side, there is residential ribbon development and an access road and footpath on the north side of the junction. The B5013 is derestricted and rural in character, enclosed by hedgerows and a farm wall. No street lighting or footways are provided. A one-way movement is permitted from the A518 (east) to the B5013. The central island to the junction is constrained by historic stone stock pillars. It is understood that a significant proportion of the commercial traffic using this junction is associated with the Toyota works at Burnaston and the JCB facilities at Rocastle and Rugeley.
SECTION 2: ITEMS RAISED AT PREVIOUS AUDITS

2.1 No previous audits have been undertaken.
SECTION 3: VEHICULAR AND HIGHWAY ISSUES

3.1 PROBLEM

Location: Proposed junction.

Summary: Westbound alignment.

3.1.1 The junction proposals introduce a ‘kink’ in the alignment for traffic on the A518 travelling west, which makes use of a section of carriageway at the nose of the island that is on a gradient. The junction appears constrained, especially for HGVs, which comprise a significant proportion of the traffic flow. There is a concern that traffic (particularly large vehicles) negotiating the junction on a green signal may, as a result of this gradient and alignment, collide with the tip of this island where a signal pole is also to be located, or with the island and signal pole located on the eastbound splitter island.

RECOMMENDATION

3.1.2 It is recommended that a smoother, wider, and more level approach path through the junction is provided for westbound traffic.
3.2  **PROBLEM**

*Location:* North side of A518.

*Summary:* Potential restricted residential access.

3.2.1 The introduction of the signal junction may impact upon residential access to the properties on the north side of the A518. There is a risk of turning vehicles colliding with the splitter islands (for example agricultural machinery or car with caravan). The driveway of one property appears to be located within the signal junction. Drivers egressing from this location will not have clear sight of the signal aspects and thus an understanding as to when it is safe to proceed. There is a risk of collisions with other traffic using the junction.

**RECOMMENDATION**

3.2.2 It is recommended that a swept path assessment be undertaken for the largest typical vehicle anticipated to regularly and frequently visit the properties on the north side of the A518 to demonstrate safe and efficient access. Also, that safe access is provided for any properties with an access located within the junction itself.
3.3 **PROBLEM**

*Location:* Proposed junction.

*Summary:* Traffic speeds.

3.3.1 During the site inspection vehicles on the A518 eastbound were noted to regularly activate the existing 40mph speed sign demonstrating that vehicles are travelling in excess of the signed 40mph limit. The downhill gradient encourages increased vehicles speeds. There is a concern that high vehicle speeds combined with late braking decisions may lead to loss-of-control or skid-type collisions, particularly in wet or icy conditions.

**RECOMMENDATION**

3.3.2 It is recommended that the junction is placed within a 30mph speed limit on both the A518 and B5013 and that high friction surfacing is applied to the approaches.
3.4 **PROBLEM**

*Location:* B5013 approach.

*Summary:* Vehicle queues.

3.4.1 Anecdotal evidence from local residents during the site inspection suggests that during busy periods there is extensive queuing on the B5013 extending back from the existing junction. The introduction of signals may introduce increased delay on this approach and lead to queues blocking back across the proposed adjacent site access roundabout to the detriment of highway safety.

**RECOMMENDATION**

3.4.2 It is recommended that measures are introduced to ensure vehicle queues do not block back across the proposed adjacent site access roundabout.
3.5 **PROBLEM**

*Location:* B5013 / A518  

*Summary:* Large vehicle access.

3.5.1 The swept path assessment for an articulated vehicle travelling from the B5013 to the A518 (east) shows it passing close to the northern carriageway edge and the traffic island. There is a risk of large vehicles over-running the footway endangering users or colliding with the traffic island and signal pole.

**RECOMMENDATION**

3.5.2 It is recommended that sufficient carriageway space is provide to ensure vehicles do not over-run the footway or collide with the traffic island.
3.6 PROBLEM

Location: A518.

Summary: Interaction with bus stops.

3.6.1 There is a risk that the proximity of the bus stops on the east side of the junction on the A518 may conflict with the safe operation of the proposed signal junctions, for example when drivers seek to over-take a waiting bus. There is a risk of collisions between over-taking vehicles and opposing on-coming traffic. Waiting buses may delay eastbound traffic exiting the junction. Similarly, refuse vehicles serving the properties will need to be taken into consideration.

RECOMMENDATION

3.6.2 It is recommended that the bus stops are located further east if necessary and satisfactory servicing arrangements confirmed.
Badingham

3.7 PROBLEM

Location: Proposed signal junction.

Summary: Blocking back within junction.

3.7.1 There is a risk that A518 traffic turning right to the B5013 may be blocked by traffic queuing at the B5013 eastbound stop line and block across the path of A518 westbound traffic. There is a risk of side-impact type collisions.

RECOMMENDATION

3.7.2 It is recommended that suitable measures are introduced (keep clear markings?) to prevent blocking back in this location.
Photo 7 - View south to B5013.
SECTION 4: NON-MOTORISED USERS

4.1 PROBLEM

Location: North side of A518.

Summary: Signal pole creating potential obstruction.

4.1.1 The introduction of a signal pole in the footway may obstruct users, particularly as the footway in this area is of limited width. This can cause difficulties for visually impaired users in particular and may lead to pedestrians stepping off the footway and into the path of vehicular traffic leading to collisions.

RECOMMENDATION

4.1.2 It is recommended that the footway remains free of obstruction in this location.
4.2 PROBLEM

Location: Proposed signal junction.

Summary: Lack of controlled crossing facilities.

4.2.1 There is a footpath signed in this location that may prove an attractive recreational route for future residents. However, no pedestrian crossing facilities are included within the proposed junction, which would also assist access to the nearby eastbound bus stop. There is a risk of collisions between pedestrians and vehicles.

RECOMMENDATION

4.2.2 It is recommended that pedestrian crossing facilities are provided.
4.3 PROBLEM

Location: Proposed signal junction.

Summary: Lack of cycle facilities.

4.3.1 No facilities for cyclists are included within the design such as advance stop lines. The constrained nature of the junction and lane widths may lead to cyclists being ‘squeezed’ by traffic such as when travelling on the A518 westbound. There is a risk of collisions.

RECOMMENDATION

4.3.2 It is recommended that measures are introduced for cyclists including the provision of increased carriageway space through the junction.

Photo 10 - Note lack of available lane width for cyclists if HGV passes.
SECTION 5: ROAD MARKINGS AND SIGNAGE

5.1 PROBLEM

Location: B5013.

Summary: Lack of advance warning.

5.1.1 The bend in the road alignment may restrict driver visibility on approach to the traffic signals. There is a risk that drivers may not comprehend the junction sufficiently leading to late-braking and loss-of-control type collisions.

RECOMMENDATION

5.1.2 It is recommended that advance warning sign of the signals and possible queues ahead are introduced on the B5013 approach to the junction.

Photo 11 - B5013 view north.
SECTION 6: STREET LIGHTING

6.1 No observations.
SECTION 7: DRAINAGE

7.1 No observations.
SECTION 8: AUDIT STATEMENT

8.1 We certify that the documents and information listed in the Audit Brief have been examined. Site inspections have been undertaken to identify any features of the scheme that could be revised in order to improve safety.

8.2 Issues identified have been noted in this audit together with any associated safety recommendations. We confirm that we have not been involved with the design or construction of the scheme.

8.3 This audit has been undertaken in accordance with HD 19/15.

Road Safety Audit Team Leader

A. R. J. Setter BA (Hons) MSc CMILT MCIHT AMICE CoC
Managing Director
Badingham Limited
16 Ashley Piece, Ramsbury, Marlborough, Wiltshire, SN8 2QE

Signed: [Signature] Date: 20th February 2017

Audit Team Member

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Ashburn
5 Mayfield, Upper Wanborough, Swindon, SN4 0ED

Signed: [Signature] Date: 20th February 2017
HAZELWALLS FARM, UTTOXETER.
ROAD SAFETY AUDIT STAGE 1 (PRELIMINARY DESIGN STAGE)

Badingham

FIGURES
Notes:
1. Do not scale from this drawing.
2. All dimensions must be checked on site.

Source: JNY8103-53-E

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Hazelwall Farm, Uttoxeter
Stage 1 Road Safety Audit Brief

7th February 2017

Prepared By: Andrew Jennings

On Behalf of: RPS Group

Document Reference: Road Safety Audit Brief.docx
AUTHORISATION SHEET

Project: Hazelwall Farm, Uttoxeter

Report Title: Stage 1 Road Safety Audit Brief

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Name: Andrew Jennings
Signed: 
Organisation: RPS Group
Date: 09.02.17

APPROVED ON BEHALF OF THE OVERSEEING ORGANISATION BY:
Name: 
Signed: 
Organisation: 
Date: 
1. General Details

| 1.1 Highway Scheme Name & Road Number | Stafford Road / B5013 junction |
| 1.2 Type of Scheme | Convert priority junction to a signalised junction |
| 1.3 Road Safety Audit Stage | 1 & 2 | Interim | 1 | 2 | 1 & 2 | 3 | Interim | 4 (12 Months) | 4 (36 Months) |
| 1.4 Overseeing Organisation Project Sponsor Details | Design Organisation Details |
| David Wilson Homes | RPS Group |
| Remus 2 | 140 London Wall |
| 2 Cranbrook Way | London |
| Solihull Business Park | EC2Y 5DN |
| Solihull | |
| B90 4GT | Tel: 020 7280 3300 |

| 1.5 Design Organisation Details | Maintaining Agent Contact Details |
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| | Stafford |
| | ST16 2DH |
| | Tel: 0300 111 8000 |

| 1.6 Police Contact Details (RSA3 Only) | Road Safety Audit Team Membership (if known) |
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| | D F Rogers |
| | JP, CEng BEng (Hons) MICE MSoRSA |
| | Ashburn Consultants |

1.8 Terms of Reference

The Stage 1 Road Safety Audit (RSA) is to be undertaken fully in accordance with DMRB Standard HD 19/15, as well as the contents of this Road Safety Brief (Document Reference: Road Safety Audit Brief.docx)

2. Scheme Description/Objective

2.1 General (including scheme purpose and start date for construction)

430 residential dwellings are proposed on an area of land 200m south of the Stafford Road / B5013 priority junction on the B5013. It is proposed this junction is to be signalised whilst maintaining the section of an island containing a set of stones (bollards) located within the junction.

2.2 Design Standards Applied to the Scheme

The proposed access road has been designed fully in accordance with the Design Manual for Roads and Bridges (DMRB), Manual for Streets and Staffordshire County Council Residential Design Guide

2.3 Design Speeds

40 mph
### 2.4 Speed Limits (state whether mandatory or advisory)

40 mph

### 2.5 Existing Traffic Flows/Queues

2016 07 12 MCC Traffic Flows

### 2.6 Forecast Traffic Flows

- 

### 2.7 Non-Motorised User (NMU) Desire Lines

See drawing JNY8013-53E Signalised Layout at A518

### 2.8 Environmental Constraints

Maintain pound stones on island

### 3. Description of Locality (provide details of any relevant factors, which may affect road safety)

#### 3.1 General Description

This junction currently takes the form of a “Y” junction with traffic from the B5013 (minor road) giving way to traffic on Stafford Road (major road). Traffic turning right from Stafford Road to B5013 also has to give way to traffic on the B5013 at a secondary give-way marking. Traffic turning left from Stafford Road to B5013 does not give way to any traffic and a section of the B5013 is one-way. The proposed method of control for the junction would be MOVA as it would be a remote standalone junction. The signalised junction would also have a private driveway within the junction on the northern side of the A518 Stafford Road. This driveway serves three / four dwellings from which the traffic demand would be minimal

#### 3.2 Relevant Factors which may affect Road Safety

The following factors have been identified that may affect road safety:

- 

### 4. Personal Injury Collision Analysis (provide personal injury collision data covering both the extent of the scheme and the adjoining sections of highway)

#### 4.1 Summary of Personal Injury Collision Data (a minimum of the most recent 36 months available)

Personal injury accident data has been obtained from Staffordshire County Council for the last five years including the period between 1 April 2009 and 12 April 2014

#### 4.2 Personal injury Collision Details

- See attached Uttoxeter accident data.

### 5. Departures and Relaxations from Standards (including details of their status - approved or pending) plus any Design Strategy Records produced for improvements to existing motorways and trunk roads.

#### 5.1 General

None

### 6. Previous Road Safety Audit Reports, Road Safety Audit Response Reports and Exception Reports

#### 6.1 Stage 2 & 3

None

#### 6.2 Exception Reports

none
7. **Strategic Decisions** – Items outside the scope of this Road Safety Audit

**General**

No items outside this scope of this Road Safety Audit have identified

8. **List of included documents and drawings**

**Documents**

8.1 Accident Data - Uttoxeter_accdata – Feb 2015

ATC - 2014 ATC Results – 2014


8.2 **Drawings:**

<table>
<thead>
<tr>
<th>Drawing No.</th>
<th>JNY8013-53E &amp; JNY8013-53E Tracks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Title:</strong></td>
<td>Signalised Layout at A518 &amp; Signalised Layout at A518 Tracks</td>
</tr>
</tbody>
</table>

9. **Checklist (tick all that are included and provide reasons for those omitted.)**

<table>
<thead>
<tr>
<th>9.1 Road Safety Audit Brief, including description of scheme objectives</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2 Site Location Plan</td>
<td></td>
</tr>
<tr>
<td>9.3 Scale layout plans</td>
<td>x</td>
</tr>
<tr>
<td>9.4 Construction/typical details</td>
<td></td>
</tr>
<tr>
<td>9.5 Previous Road Safety Audit Reports</td>
<td>9.6 Previous Road Safety Audit Response Reports</td>
</tr>
<tr>
<td>9.7 Road Safety Audit Exception Reports</td>
<td>9.8 Departures and Relaxations from Standards</td>
</tr>
<tr>
<td>9.9 Traffic signal staging</td>
<td>9.10 Personal Injury Collision data</td>
</tr>
<tr>
<td>9.11 Personal Injury Collision plot</td>
<td>9.12 Traffic Counts</td>
</tr>
<tr>
<td>9.13 Speed surveys</td>
<td>9.14 NMU Desire Lines</td>
</tr>
<tr>
<td>9.15 NMU Context and Audit Report</td>
<td>9.16 Items outside the scope of the RSA/strategic decisions</td>
</tr>
<tr>
<td>9.17 Other that may impact on road safety</td>
<td>9.18 Design speeds/speed limits</td>
</tr>
<tr>
<td>9.19 Design Standards used</td>
<td>9.20 Adjacent land uses</td>
</tr>
</tbody>
</table>
Road Safety Audit Brief Approved By:

Name:

Position:

Signed:

Date:
APPENDIX B - JNY8013-53E - PROPOSED SIGNALISED JUNCTION ARRANGEMENT

(Drawing Submitted for Safety Audit)
NOTES

1. If the drawing has been received electronically it is the recipients responsibility to print the document to the correct scale.
2. All dimensions are in metres unless stated otherwise. It is recommended that information is not scaled off this drawing.
3. This drawing should be read in conjunction with all other relevant drawings and specifications.

Key:
- Junction Intervisibility zone
- Pedestrian route
- Phase Boundary
- New kerb line
- Highway Boundary
- Existing private access to be maintained
- Proposed footpath link
- Approximate location of Mile Post

---

Ped visibility > 102.1 m
90 m SSD

Stafford Road
B5013

Blounts Hall Farm
G18

T33
T34
T35
T36
T37

STAFFORD ROAD  B518

4.8 m x 120 m visibility splay
2.4 m x 120 m visibility splay

120.0 m SSD

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APPENDIX C - JNY8013-53E - PROPOSED SIGNALISED JUNCTION ARRANGEMENT TRACKS
1. If this drawing has been received electronically it is the recipient's responsibility to print the document to the correct scale.

2. All dimensions are in metres unless stated otherwise. It is recommended that information is not scaled off this drawing.

3. This drawing should be read in conjunction with all other relevant drawings and specifications.

**NOTES**

**Stafford Road B518**

**Stafford Road B5013**

**B5013**

2.0m

- **Staked Path Review**
- **Hazelwall Farm, Uttoxeter**

**Signalised Layout**

at A518 / B5013 Junction

**Swept Path Review**
1. If this drawing has been received electronically it is the recipient's responsibility to print the document to the correct scale.

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NOTES

14.09.16

07.10.16

10.10.16

26.01.17

28.02.17
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