

## **Appendix H Stage 1 Road Safety Audit**



# West of Park Farm, Thornbury

**Designers Response Report  
to Stage 1 Road Safety Audit**

On behalf of **Barwood Development Securities Ltd & North West Thornbury  
Landowner Consortium**

Project Ref: 39304 | Rev: - | Date: August 2018

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## Document Control Sheet

**Project Name:** West of Park Farm, Thornbury

**Project Ref:** 39209

**Report Title:** Designers Response Report to Stage 1 Road Safety Audit, West of Park Farm

**Doc Ref:** -

**Date:** August 2018

	Name	Position	Signature	Date
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<b>For and on behalf of Peter Brett Associates LLP</b>				

Revision	Date	Description	Prepared	Reviewed	Approved
-	16.08.2018	Draft for Client review	JHo	SG	MP

This report has been prepared by Peter Brett Associates LLP ('PBA') on behalf of its client to whom this report is addressed ('Client') in connection with the project described in this report and takes into account the Client's particular instructions and requirements. This report was prepared in accordance with the professional services appointment under which PBA was appointed by its Client. This report is not intended for and should not be relied on by any third party (i.e. parties other than the Client). PBA accepts no duty or responsibility (including in negligence) to any party other than the Client and disclaims all liability of any nature whatsoever to any such party in respect of this report.

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# 1 Introduction

## 1.1 General

- 1.1.1 Peter Brett Associates LLP (PBA) has been commissioned by Barwood Development Securities Ltd & North West Thornbury Landowner Consortium (Client) to provide transport advice in support of proposed mixed-use development at West of Park Farm, Thornbury, Gloucestershire.
- 1.1.2 A Road Safety Audit was requested by South Gloucestershire Council (SGC) for the site access junctions to support the Transport Assessment (TA). The scope of the Transport Assessment was the highway improvements and site accesses on Oldbury Lane, Thornbury.

## 1.2 Stage 1 Road Safety Audit

- 1.2.1 TMS Consultancy (TMS) were commissioned by PBA on behalf of our Client to undertake an RSA on the proposed site accesses.
- 1.2.2 An RSA brief was submitted to TMS to inform the RSA. The brief was agreed by SGC prior to the RSA being undertaken on 16<sup>th</sup> August 2018. A copy of the brief can be provided upon request.
- 1.2.3 The audit was carried out on 20<sup>th</sup> August 2018, the weather was reported as dry and overcast.
- 1.2.4 A copy of the RSA is provided in **Appendix A**.

## 1.3 Problems and Improvements Raised in the RSA

- 1.3.1 Oldbury Lane site access problems are identified in PBA drawing **39209/5501/SK15**, PBA drawing **39209/5501/SK16 Western Access Refuse Vehicle SPA** and PBA drawing **39209/5501/SK17 Eastern Access Refuse Vehicle SPA**.
- 1.3.2 Oldbury Lane Site Access are shown on PBA drawing **39209/5501/SK15**
- 1.3.3 The RSA 'Problems' have been duplicated within this report, each problem has been responded to by the designer as set out in this report.

## 2 Designers Response to Stage 1 RSA

### Oldbury Lane, Site Access Junctions to West of Park Farm, Thornbury

#### 2.1 Location – Oldbury Lane

##### Summary: Risk of collisions involving overtaking vehicles

2.1.1 There is a risk that westbound drivers could use the additional lane to overtake slower-moving vehicles and collide with eastbound vehicles entering either of the right turn lanes.

2.1.2 Risk rating: Low

##### Recommendation

2.1.3 Solid islands, with appropriate signing, should be installed in the hatched areas of the proposed ghost island. Alternatively, double white centre lines should be installed to prohibit overtaking from either direction on the approach to and through the right turn lanes (this would also discourage the misuse of the western right turn lane by westbound vehicles turning right into properties on the north side of Oldbury Lane).

2.1.4 Risk rating if recommendation implemented: Low

##### Designers Response

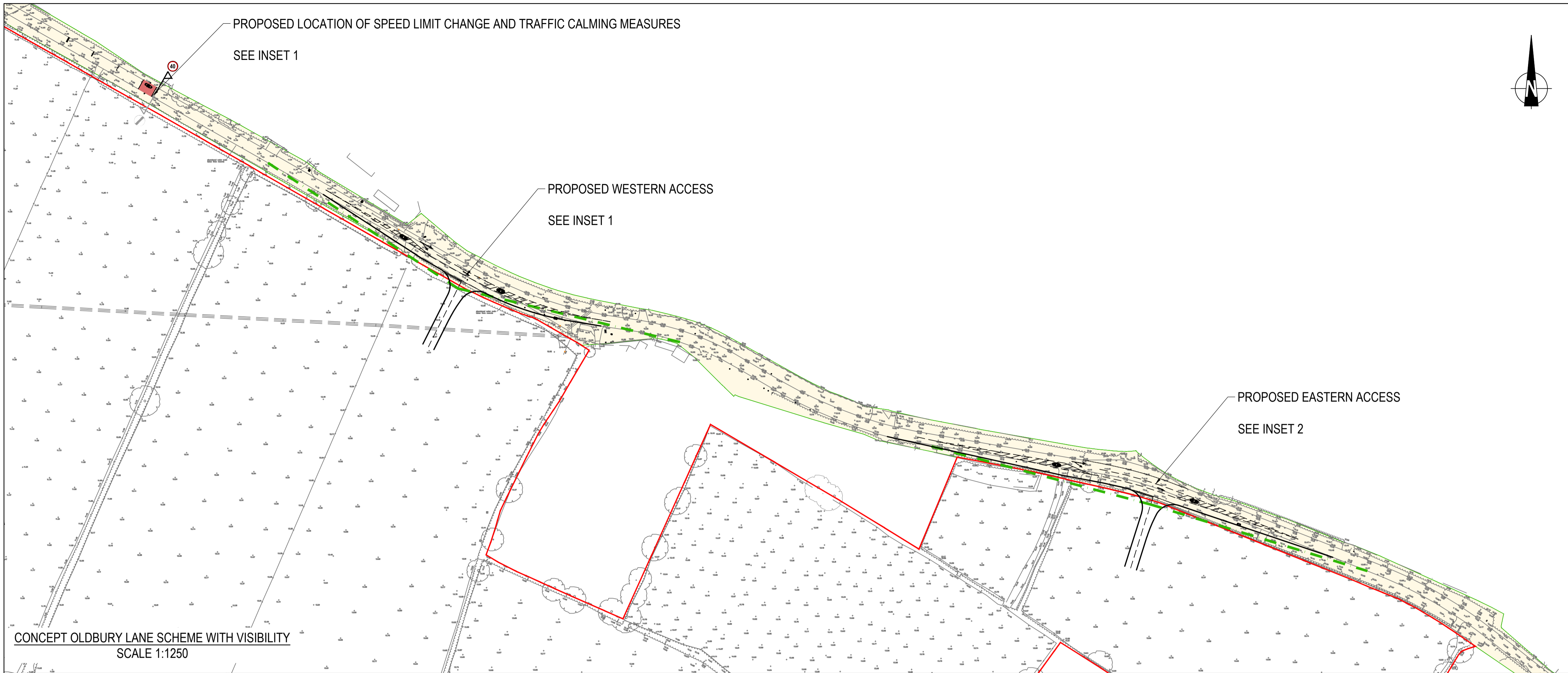
2.1.5 The recommendation to Problem 2.1 is accepted.

2.1.6 Solid islands have been added to the hatched areas of the proposed ghost islands in locations shown in **Drawing 3902/5501/SK15 Rev A**, which will limit the opportunity to overtake using the right turn lanes. Appropriate signage will be specified at the detailed design stage.

# Drawing

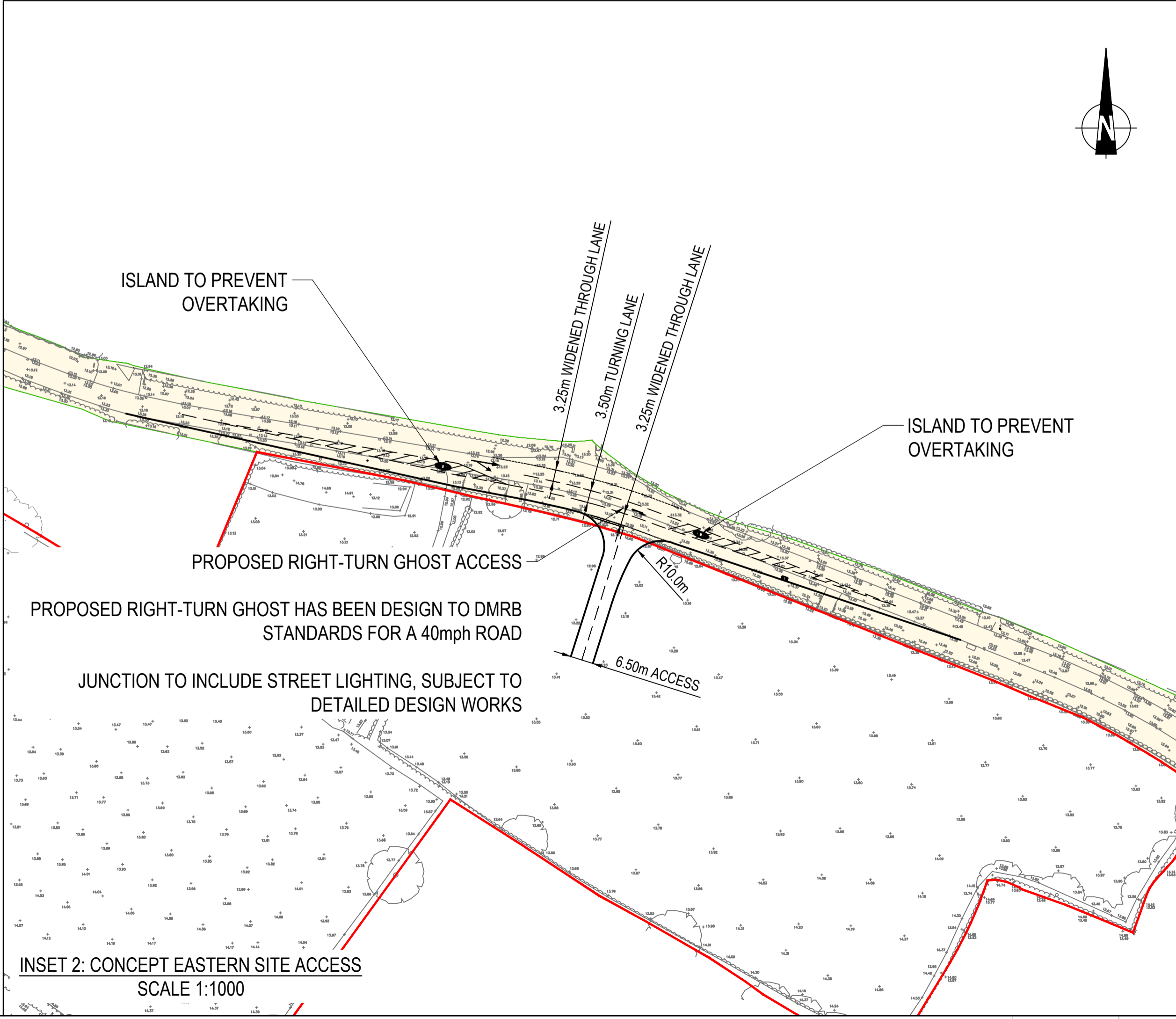
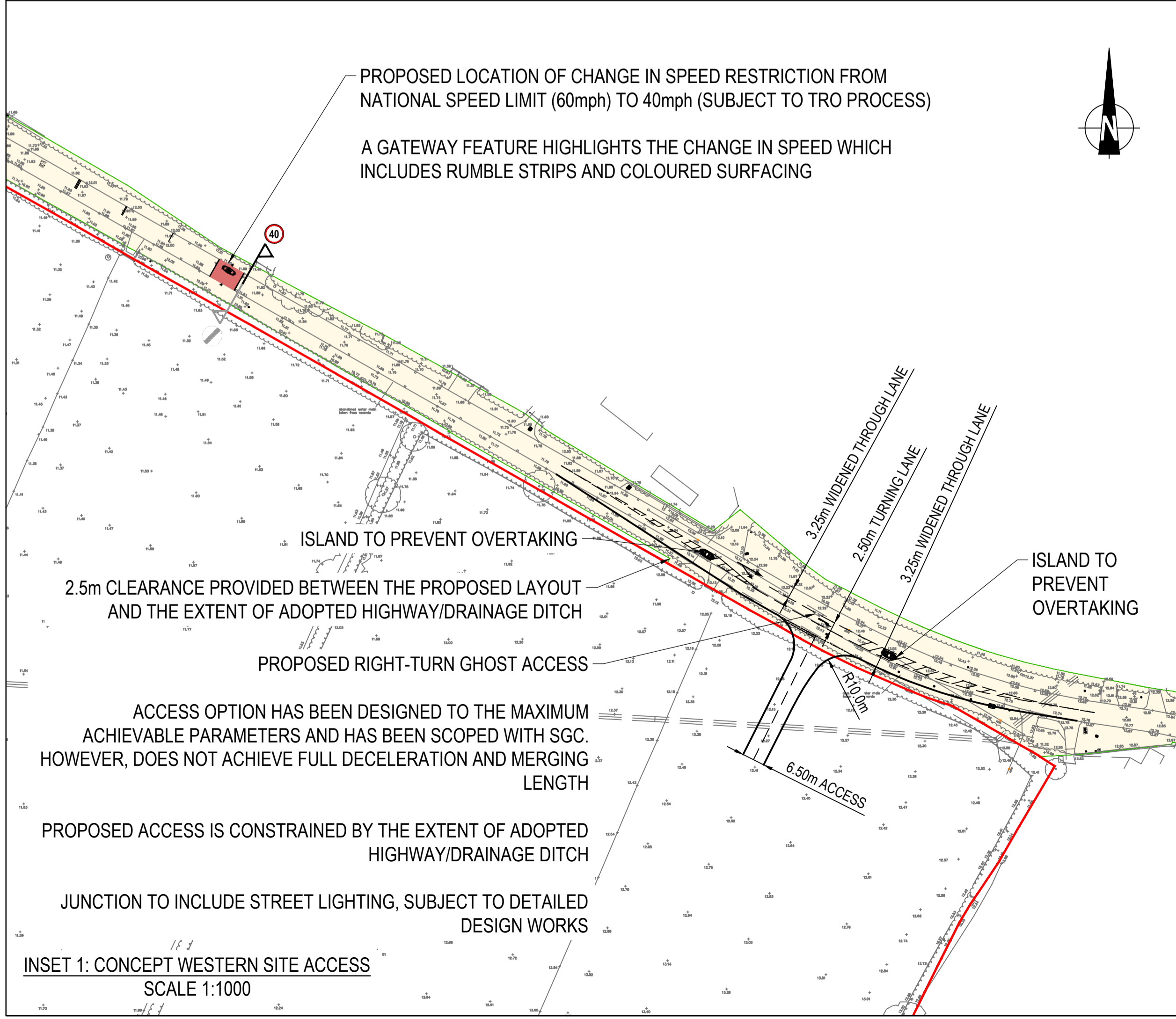






- NOTES:**
1. THE LAYOUT IS SUBJECT TO DETAILED DESIGN, CAPACITY TESTING, GROUND INVESTIGATIONS RESULTS & EARTHWORKS MODELLING, UTILITIES & SERVICES AND CONFIRMATION OF LAND OWNERSHIP;
  2. THE DETAILED DESIGN LAYOUT WILL BE DESIGNED IN ACCORDANCE WITH ALL RELEVANT DESIGN GUIDANCE AND STANDARDS;
  3. THE LAYOUT HAS BEEN BASED ON THE APPROPRIATE DESIGN SPEED FOR OUR CURRENT PROPOSALS;
  4. THIS DRAWING SHOULD BE READ IN CONJUNCTION WITH ALL RELEVANT ASSOCIATED DOCUMENTS;
  5. THE USE OF THE DRAWING DOES NOT ABSOLVE THE CLIENT FROM THEIR RESPONSIBILITIES IN REGARDS TO HEALTH & SAFETY AND CDM REGULATIONS;
  6. TOPOGRAPHICAL SURVEY UNDERTAKEN BY ANTONY BROOKES SURVEYS LTD ON 26.04.2018; AND
  7. SITE BOUNDARY PROVIDED BY BARTON WILLMORE ON 29.04.2018

- KEY:**
- INDICATIVE SITE BOUNDARY PROVIDED BY BARTON WILLMORE ON 29.04.2018
  - HIGHWAY BOUNDARY INFORMATION RECEIVED FROM SGC 25.04.2018 AND INTERPRETED BY PBA
  - 4.5M X 120M VISIBILITY SPY IN ACCORDANCE WITH DMRB FOR A 40MPH ROAD



Mark	Revision	Date	Drawn	Chkd	Appd
A	ADDED ISLANDS TO PREVENT OVERTAKING	23.08.18	JP	JHo	SG

SCALING NOTE: Do not scale from this drawing. If in doubt, ask.  
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake their own investigation where the presence of any existing sewers, services, plant or apparatus may affect their operations.

Drawing Issue Status  
**CONCEPT**

**WEST OF PARK FARM, THORNBURY**  
**CONCEPT SITE ACCESS LAYOUT**  
**RIGHT-TURN GHOST OPTION**

Client  
**BARWOOD DEVELOPMENT SECURITIES LTD**

Date of 1st Issue: 06.08.2018  
Designed: JDS  
Drawn: JDS

A1 Scale: AS SHOWN  
Checked: JHo  
Approved: RH

Drawing Number: 39209/5501/SK15  
Revision: A

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# Appendix A Stage 1 Road Safety Audit





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**West of Park Farm, Thornbury, Gloucestershire**

**Road Safety Audit Stage 1**

on behalf of Peter Brett Associates

**TMS reference no: 14427**

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## West of Park Farm, Thornbury, Gloucestershire

### Road Safety Audit Stage 1

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#### 1. Introduction

- 1.1 This report describes a Stage 1 Road Safety Audit carried out on proposed highway works in Oldbury Lane, Thornbury, Gloucestershire, on behalf of Peter Brett Associates. The audit was carried out on 20<sup>th</sup> August 2018 in the offices of TMS Consultancy.
- 1.2 The audit team members were as follows:

#### **Audit Team Leader**

Mark Steventon - LLM, EngTech, MIHE, MCIHT, MSoRSA  
Highways England Approved RSA Certificate of Competency  
Senior Road Safety Consultant, TMS Consultancy

#### **Audit Team Member**

Amy Sutherland - BSc (Hons) MCIHT, MIHE  
Highways England Approved RSA Certificate of Competency  
Assistant Engineer, TMS Consultancy

- 1.3 The audit comprised an examination of the documents listed in **Appendix A**. The Road Safety Audit was undertaken in accordance with the South Gloucestershire Council Road Safety Audit Brief, dated 16.08.2018, provided by Peter Brett Associates. The site was visited by the Audit Team at 12.10pm on Monday 20<sup>th</sup> August 2018. The weather was overcast but dry. Traffic flows were light. There was no pedestrian or cycle traffic during the site survey.
- 1.4 The terms of reference of the audit are as described in HD 19/15, with the addition of a risk assessment element, which is described in **Appendix B**. The 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.
- 1.5 All of the problems described in this report are considered by the audit team to require action in order to improve the safety of the scheme and minimise accident occurrence. The locations of specific problems are referenced on the plan in **Appendix C**.

- 1.6 The scheme consists of two new priority T-junctions, with right turn ghost islands, in Oldbury lane to give access to a development of 630 residential dwellings, a primary school and a retail and community hub. The scheme also includes the implementation of a 40mph speed limit eastwards along Oldbury Lane from a point west of the proposed new accesses.



## **2. Items resulting from this Stage 1 Audit**

### **2.1 PROBLEM**

Location – Oldbury Lane

Summary: Risk of collisions involving overtaking vehicles

There is a risk that westbound drivers could use the additional lane to overtake slower-moving vehicles and collide with eastbound vehicles entering either of the right turn lanes.

*Risk rating: Low*

#### **RECOMMENDATION**

Solid islands, with appropriate signing, should be installed in the hatched areas of the proposed ghost islands. Alternatively, double white centre lines should be installed to prohibit overtaking from either direction on the approach to and through the right turn lanes (this would also discourage the misuse of the western right turn lane by westbound vehicles turning right into properties on the north side of Oldbury Lane).

*Risk rating if recommendation implemented: Low*

### 3. **Audit Team Statement**

We certify that the terms of reference of the road safety audit are as described in HD 19/15, incorporating a risk assessment based upon the principles described in GG 104.


#### **Audit Team Leader**

Mark Steventon - LLM, EngTech, MIHE, MCIHT, MSoRSA  
Highways England Approved RSA Certificate of Competency  
Senior Road Safety Consultant, TMS Consultancy




Signed   
Date 21<sup>st</sup> August 2018

#### **Audit Team Member**

Amy Sutherland - BSc (Hons) MCIHT, MIHE  
Highways England Approved RSA Certificate of Competency  
Assistant Engineer, TMS Consultancy

Signed   
Date 21<sup>st</sup> August 2018

**TMS Consultancy**  
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Coventry, CV4 7EZ

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## Appendix A

### Documents Examined:

- Drawing No. 39209/5501/SK15
- Drawing No. 39209/5501/SK16
- Drawing No. 39209/5501/SK17

### Other Information Provided:

- Drawing No. 27982/9400/Rev.3 – Concept plan with NDA
- Drawing No. 27982/9601/ Rev. A – Parameter plan, land use and access
- Figure 5.1 – Transport assessment, access and movement alternative strategy 1
- Figure 5.2 – Transport assessment, access and movement alternative strategy 2
- P/I collision data (01.01.2013 – 31.12.2017)
- Traffic speed / flow data for Oldbury Lane

## Appendix B

The risk assessment has been carried out in accordance with the below risk assessment matrix, using engineering judgement and is based only on the information supplied by the client and observations made during the site visit. The matrix is based upon the principles described in the DMRB document "GG 104 - Requirements for Safety Risk Assessment".

### Risk Evaluation

Numerical value of likely severity of harm (S)		
1	Minor	Minor damage or loss / no injury
2	Moderate	Slight injury or illness / moderate damage or loss
3	Serious	Serious injury or illness / substantial damage or loss
4	Major	Fatal injury / major damage or loss
5	Catastrophic	Multiple fatalities / extreme loss or damage

Numerical value of probability of harm (P)		
1	Extremely unlikely	Highly improbable / never known to occur
2	Unlikely	Less than 1 per 10 years
3	Likely	Once every 5 to 10 years
4	Extremely likely	Once every 1 to 4 years
5	Almost certain	Once per year or more

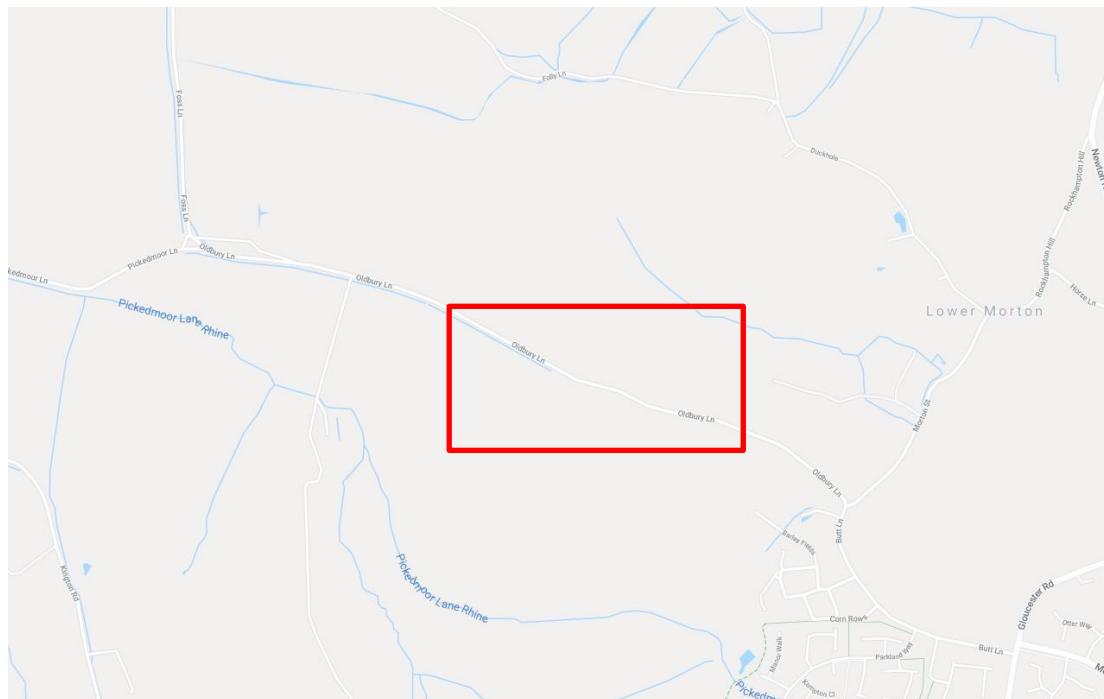
Risk Assessment Matrix		Likely severity (S)				
		1	2	3	4	5
Probability (P)	1	1	2	3	4	5
	2	2	4	6	8	10
	3	3	6	9	12	15
	4	4	8	12	16	20
	5	5	10	15	20	25

Risk evaluation and required control		
1-7	Low	Ensure existing control measures are maintained and reviewed as necessary
8-19	Medium	Additional control measures needed to eliminate or reduce the risk
20-25	High	Cease the activity and implement control measures to eliminate or reduce the risk

## Appendix C

Please refer to the following page for a plan illustrating the locations of the problems identified as part of this audit (location numbers refer to paragraph numbers in the report).

The location of the scheme is shown below:

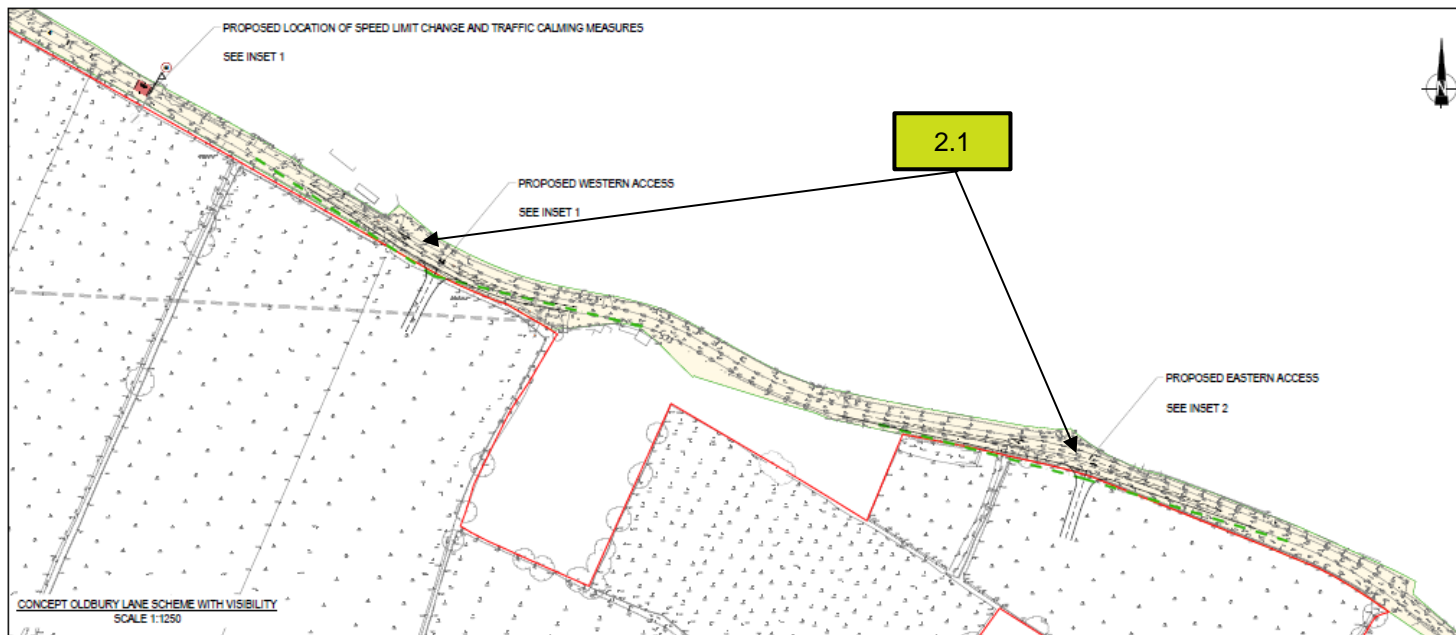




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Client: Peter Brett Associates

Scheme: West of Park farm, Thornbury, Gloucestershire

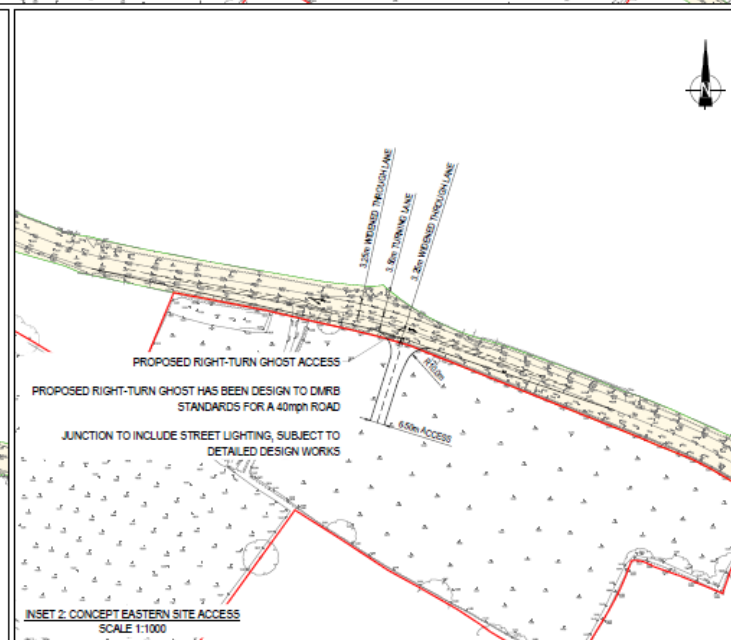
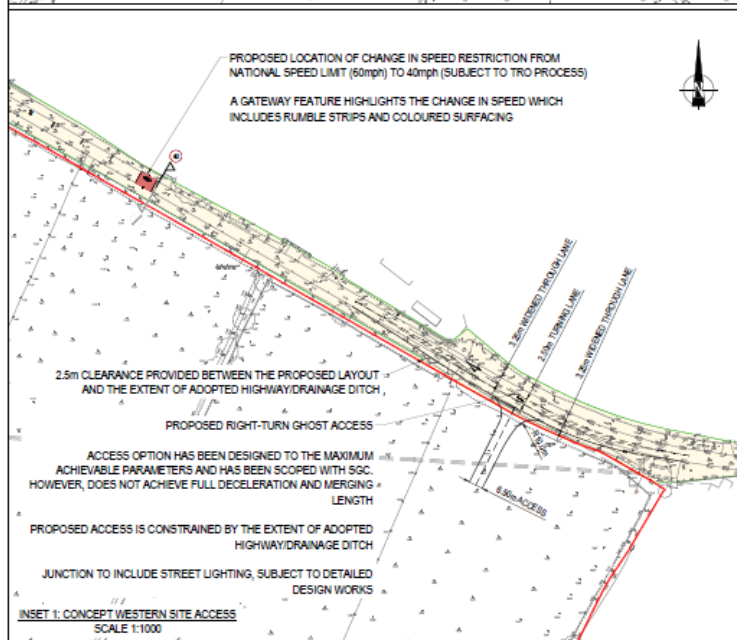


**NOTES:**

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WEST OF PARK FARM, THORNBURY

CONCEPT SITE ACCESS LAYOUT  
RIGHT-TURN GHOST OPTION

Client:  
BARWOOD  
DEVELOPMENT  
SECURITIES LTD



Date of Issue	06.05.2018	Design	JDS	Check	JDS
By Name	AG SHIMON	Checked	JDS	Approved	RTS
Working Number	39209/5501/SK15	Revised	-	Revised	-