

# DMMason

Engineering Consultants Ltd

METIS HOMES

LAND AT HORNDEAN ROAD, EMSWORTH

**STAGE 1 SAFETY AUDIT DESIGNERS RESPONSE**

**D M MASON  
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**METIS HOMES**

**LAND AT HORNDEAN ROAD, EMSWORTH**

**STAGE 1 SAFETY AUDIT DESIGNERS RESPONSE**

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**Reference: DMM/AJB/M.096**

**July 2019**

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## **Appendices**

Appendix 1 Stage 1 Safety Audit by Ted Smith, Traffic Safety Consultant.

Appendix 2 Designers Response Report

**1.0      INTRODUCTION**

- 1.1      D M Mason Engineering Consultants Ltd has been instructed by Metis Homes to prepare a Safety Audit and response for access to land at Horndean Road, Emsworth for residential development.
- 1.2      A Stage 1 Safety Audit dated June, 2019 has been undertaken by Ted Smith, Traffic Safety Consultant. This document is the Designers Response to the Safety Audit.
- 1.3      The proposed development is for 16 dwellings comprising six 2-bed, eight 3-bed and two 4-bed houses. Access to the site is from Horndean Road.

## **2.0      SAFETY AUDIT EXTRACTS AND DESIGNERS RESPONSE**

Paragraphs from the Stage 1 Safety Audit prepared by Ted Smith, Traffic Safety Consultant, which is provided in Appendix 1, are given below followed by the designers response for each paragraph. This section maintains the paragraph numbering in the Safety Audit for simplicity.

The commentary in the Safety Audit is given in *italic sans serif text*, the designers response is given in serif text.

### **3.1      GENERAL**

#### **3.1.1      PROBLEM                      (Drawing Ref: Un-numbered Site Plan Proposal)**

**Location:** *(A) Vicinity of the proposed Development Site Access.*

**Summary:** *Risk of insufficient surface water drainage arrangements.*

*Whereas currently at the Preliminary Design Stage, there may be risks that surface water may flow between the Private Land and the Public Highway and be hazardous to pedestrians, especially during icy weather conditions.*

#### **RECOMMENDATION**

*The existing carriageway drainage and existing/new levels associated with the proposed Access Junction should be investigated at the Detailed Design Stage to ensure that any positive drainage of surface water that may be required will be incorporated at that time.*

### 3.1 DESIGNERS RESPONSE

It is illegal to drain private land onto the highway. The site design and the S278 Works will account for drainage of the site and the adjacent highway to ensure drainage problems do not cause difficulties to highway users.

\*\*\*\*\*

### 3.3 JUNCTIONS

#### 3.3.1 PROBLEM *(Drawing Ref: Un-numbered Site Plan Proposal)*

**Location:** *(B) Proposed Site Access, at the junction with B2148 Horndean Road.*

**Summary:** *Risk of insufficient access road width at junction.*

*No actual width is currently shown for the Site Access Road, whilst additionally the access road is quite long and appears narrow. Owing to the only apparent passing space being a layby shown at the western end labelled as "visitors parking", there appear risks that opposing vehicles meeting at the junction may give rise to an entering vehicle being unable to pass a vehicle waiting to join the main road, whereby the entering vehicle may attempt to stop or reverse back onto the main line and collide with close passing traffic.*

#### **RECOMMENDATION**

*The proposed Site Access Road, should be revisited and the apparent verges at either side should be utilised to locally widen the proposed roadway in order to provide a minimum width of 5.5m at the junction with the main road, which should also extend a minimum of 15m into the Site.*

#### 3.3.1 DESIGNERS RESPONSE

The site access road has been amended to incorporate a 5.5 metre width length for 15 metres into the site.

\*\*\*\*\*

**3.0      SUMMARY**

- 3.1      The S278 scheme design will be undertaken to incorporate comments made by the safety audit team as noted and following discussions with the highway authority.

## Appendix I

Stage I Safety Audit by Ted Smith, Traffic Safety Consultant.

# **“LAND OFF HORNDEAN ROAD”**

**B2148 HORNDEAN ROAD, EMSWORTH  
HAMPSHIRE**

**PROPOSED S278 ACCESS HIGHWAY WORKS**

**Road Safety Audit  
Stage 1 – Preliminary Design**

**June 2019**

**Report Ref 1938**

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# 1 INTRODUCTION

1.1 This report describes the results of a Stage 1 Preliminary Design Road Safety Audit carried out on the proposed S278 Adoptable Access Highway Construction Works, associated with Development of "Land Off Horndean Road", B2148 Horndean Road, Emsworth, Hampshire. The Audit was carried out at the request of D M Mason, Engineering Consultants Limited, 161 Marlborough Road, Old Town, Swindon, SN3 1NJ, on behalf of Metis Homes. The Design Organisation is 'adp architects ltd', Richmond Court, 94 Botley Road, Park Gate, Southampton, SO31 1BA.

1.2 This scheme comprises of proposed S278 Highway Works to create a new footway crossover junction and access site road at the southwest side of Horndean Road, between existing properties numbered "27 and 35", in connection with proposed vehicular and pedestrian access arrangements to new residential development of 16 new dwellings on land to the rear of those properties.

1.3 The Road Safety Audit Team membership comprised as follows:

Ted Smith, CoC

Traffic Safety Consultant

Martin Brownsey, BSc, DipEM, MCIHT, CoC  
Director, MB Projects Ltd

Highways Consultancy

Each member specialises in Highway Safety and Traffic Engineering and have operated independently of the design team responsible for the scheme and have had no involvement with the design of the proposals.

1.4 This Audit was carried out in the offices of the Team Members during May and June 2019, comprising of an examination of the documents listed in Appendix A, in accordance with Audit brief and instructions within emails from D M Mason. An inspection of the site was carried out on the late morning of Monday 3<sup>rd</sup> June 2019, during which time it was clear and sunny with dry road surface conditions. Traffic flows were light to moderate, whilst no pedestrians or cyclists were seen in the near vicinity.

1.5 The object of this audit is to identify any existing safety related problems that may be exacerbated or any new problems that may be introduced by the proposed Highway Works.

1.6 No Relaxations or Departures from Standards were reported by the Designer for this scheme.

- 1.7 The terms of reference of the Road Safety Audit are in accordance with the principles of Highways England DMRB Document GG119, (formerly HD 19/15) and the incorporated categories of checklists, as appropriate. The Road Safety Audit Team has examined and reported only on the road safety implications of the S278 scheme as presented on the drawings and documents listed in the Appendix to this report, and has not examined or verified compliance of the design with any other criteria or standard.
- 1.8 Details of recorded injury collisions were provided for this Audit for the five year period from 1<sup>st</sup> November 2012 to 31<sup>st</sup> October 2017 in which one serious injury collision was recorded as occurring during August 2016 at Horndean Road at the junction with Bellevue Lane, involving a car driven by an elderly person northwest along Horndean Road, which collided with the rear wheel of a pedal cycle also travelling northwest in front, causing rider to fall and their hit head, sustaining the serious injuries. However, it appears that event is unlikely to affect the current access proposal.
- 1.9 All problems and recommendations identified in this report are considered to be of sufficient importance to warrant attention and each are uniquely referenced and indicated on the Problem Location Plan at Appendix B.

\*\* \*\* \*

## **2      PREVIOUS ROAD SAFETY AUDITS**

- 2.1    No previous Road Safety Audit Reports were available for reference in this current Stage 1 Audit of proposed works.

         \*\*      \*\*      \*\*      \*\*      \*\*      \*\*      \*\*

### **3 PROBLEMS RAISED AT THIS STAGE 1 ROAD SAFETY AUDIT**

#### **3.1 GENERAL**

##### **3.1.1 PROBLEM** *(Drawing Ref: Un-numbered Site Plan Proposal)*

**Location:** (A) Vicinity of the proposed Development Site Access.

**Summary:** Risk of insufficient surface water drainage arrangements.

Whereas currently at the Preliminary Design Stage, there may be risks that surface water may flow between the Private Land and the Public Highway and be hazardous to pedestrians, especially during icy weather conditions.

##### **RECOMMENDATION**

The existing carriageway drainage and existing/new levels associated with the proposed Access Junction should be investigated at the Detailed Design Stage to ensure that any positive drainage of surface water that may be required will be incorporated at that time.

#### **3.2 LOCAL ALIGNMENT**

##### **3.2.1** No road safety related problems are identified in this category at this Stage 1.

#### **3.3 JUNCTIONS**

##### **3.3.1 PROBLEM** *(Drawing Ref: Un-numbered Site Plan Proposal)*

**Location:** (B) Proposed Site Access, at the junction with B2148 Horndean Road.

**Summary:** Risk of insufficient access road width at junction.

No actual width is currently shown for the Site Access Road, whilst additionally the access road is quite long and appears narrow. Owing to the only apparent passing space being a layby shown at the western end labelled as "visitors parking", there appear risks that opposing vehicles meeting at the junction may give rise to an entering vehicle being unable to pass a vehicle waiting to join the main road, whereby the entering vehicle may attempt to stop or reverse back onto the main line and collide with close passing traffic.

##### **RECOMMENDATION**

The proposed Site Access Road, should be revisited and the apparent verges at either side should be utilised to locally widen the proposed roadway in order to provide a minimum width of 5.5m at the junction with the main road, which should also extend a minimum of 15m into the Site.

### **3.4 WALKING, CYCLING & HORSE RIDING**

3.4.1 No road safety related problems are identified in this category at this Stage 1.

### **3.5 SIGNS, CARRIAGEWAY MARKINGS AND LIGHTING**

3.5.1 No road safety related items are identified in this category at this Stage 1

**\*\* \*\* No further road safety related items are identified at this Stage 1. \*\* \*\***

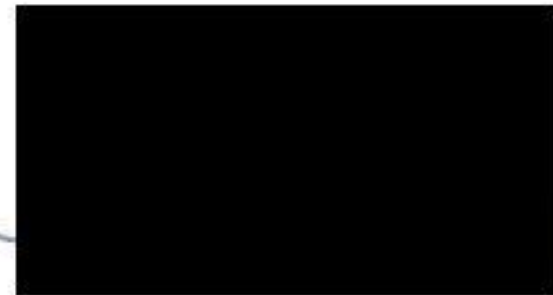
## 4 AUDIT TEAM STATEMENT

- 4.1 We certify that this Road Safety Audit has been carried out in accordance with GG119.

### ROAD SAFETY AUDIT TEAM LEADER

Ted Smith CoC  
Traffic Safety Consultant  
1a The Parade  
East Wittering  
Chichester  
West Sussex  
PO20 8BN

Signed



Date

3<sup>rd</sup> June 2019

Tele 01243 672004  
Mob 07774 882168  
Email: tedsmithsafety@btinternet.com

### ROAD SAFETY AUDIT TEAM MEMBER

Martin Brownsey BSc, DipEM, MCIHT, CoC  
Director  
MB Projects Ltd  
Highways Consultancy  
Farthings  
Grants Lane  
Oxted  
Surrey  
RH8 0RH

Signed



Date

3<sup>rd</sup> June 2019

Tele 01883 712680  
Mob 07802 323264  
Email: info@mbprojects.co.uk

## APPENDIX A

### LIST OF DOCUMENTS EXAMINED

| Drawing No         | Date                     | Scale              | Description                                                                                                                                               |
|--------------------|--------------------------|--------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Un-numbered        | None shown               | None clearly shown | Site Plan Proposal                                                                                                                                        |
| Title Plan SH41421 | None                     | 1:1250             | O/S Map Ref SU7406NE<br>Hampshire: Havant                                                                                                                 |
| O/S Map            | --                       | --                 | Map of Emsworth Area                                                                                                                                      |
| ATC Report         | February 2018            | --                 | Emsworth ATC Data 16 <sup>th</sup> – 22 <sup>nd</sup> February 2018<br>Includes 85 <sup>th</sup> ile speeds of 37.4 mph Northbound and 36.4mph Southbound |
| Report & Plot      | 12/02/2018               | --                 | Personal Injury Collision Details<br>Five years from 1 <sup>st</sup> November 2012 to 31 <sup>st</sup> October 2017<br>(Hampshire Police)                 |
| emails             | 07/05/2019<br>10/05/2019 | --                 | Audit brief & instructions from D M Mason                                                                                                                 |
| **                 | **                       | **                 | **                                                                                                                                                        |

## APPENDIX B

### PROBLEM LOCATION PLAN

#### Copy of Un-Numbered Site Plan Proposal





| RSA Problem                                                                                                                                                                                                                                                                                                                                                                                                                    | RSA Recommendation                                                                                                                                                                                                                                                              | Design Organisation Response | Overseeing Organisation Response | Agreed RSA Action |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|----------------------------------|-------------------|
| <p><b>3.1.1 PROBLEM</b></p> <p><b>Location: (A)</b> Vicinity of the proposed Development Site Access.</p> <p><b>Summary:</b> Risk of insufficient surface water drainage arrangements.</p> <p>Whereas currently at the Preliminary Design Stage, there may be risks that surface water may flow between the Private Land and the Public Highway and be hazardous to pedestrians, especially during icy weather conditions.</p> | <p>The existing carriageway drainage and existing/new levels associated with the proposed Access Junction should be investigated at the Detailed Design Stage to ensure that any positive drainage of surface water that may be required will be incorporated at that time.</p> |                              |                                  |                   |
| <p><b>3.3.1 PROBLEM</b></p> <p><b>Location: (B)</b> Proposed Site Access, at the junction with B2148 Horndean Road.</p> <p><b>Summary:</b> Risk of insufficient access road width at junction.</p>                                                                                                                                                                                                                             | <p>The proposed Site Access Road, should be revisited and the apparent verges at either side should be utilised to locally widen the proposed roadway in order to provide a minimum width of 5.5m at the junction</p>                                                           |                              |                                  |                   |

**Report: Road Safety Audit – Stage 1 Preliminary Design****Report Title: S278 Access & Highway Works, Land off Horndean Road, Emsworth****RSA Team: Ted Smith & Martin Brownsey (MB Projects Ltd)****RESPONSE REPORT****Report reference 1938****Date: June 2019**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                              |  |  |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|--|--|--|
| No actual width is currently shown for the Site Access Road, whilst additionally the access road is quite long and appears narrow. Owing to the only apparent passing space being a layby shown at the western end labelled as “visitors parking”, there appear risks that opposing vehicles meeting at the junction may give rise to an entering vehicle being unable to pass a vehicle waiting to join the main road, whereby the entering vehicle may attempt to stop or reverse back onto the main line and collide with close passing traffic. | with the main road, which should also extend a minimum of 15m into the Site. |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                              |  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                              |  |  |  |
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**Report: Road Safety Audit – Stage 1 Preliminary Design**  
**Report Title: S278 Access & Highway Works, Land off Horndean Road, Emsworth**  
**RSA Team: Ted Smith & Martin Brownsey (MB Projects Ltd)**

**RESPONSE REPORT**  
**Report reference 1938**  
**Date: June 2019**

|                                                                                                                                                                                |                                                                                                                                                                                                                                       |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| On behalf of the Design Organisation I certify that the RSA actions identified in response to the RSA problems have been discussed and agreed with the Overseeing Organisation | On behalf of the Overseeing Organisation I certify that:<br>1. The RSA actions identified in response to the RSA problems have been discussed and agreed with the Design Organisation<br>2. The agreed RSA actions will be progressed |
| Name: ????????????                                                                                                                                                             | Name: ???????????????????                                                                                                                                                                                                             |
| Signed:                                                                                                                                                                        | Signed:                                                                                                                                                                                                                               |
| Position:                                                                                                                                                                      | Position:                                                                                                                                                                                                                             |
| Organisation: ????????????????                                                                                                                                                 | Organisation: ????????????????                                                                                                                                                                                                        |
| Date:                                                                                                                                                                          | Date:                                                                                                                                                                                                                                 |

Appendix 2  
Designers Response Report.

| RSA Problem                                                                                                                                                                                                                                                                                                                                                                                                                    | RSA Recommendation                                                                                                                                                                                                                                                              | Design Organisation Response                                                                                                                                 | Overseeing Organisation Response | Agreed RSA Action |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------|
| <p><b>3.1.1 PROBLEM</b></p> <p><b>Location: (A)</b> Vicinity of the proposed Development Site Access.</p> <p><b>Summary:</b> Risk of insufficient surface water drainage arrangements.</p> <p>Whereas currently at the Preliminary Design Stage, there may be risks that surface water may flow between the Private Land and the Public Highway and be hazardous to pedestrians, especially during icy weather conditions.</p> | <p>The existing carriageway drainage and existing/new levels associated with the proposed Access Junction should be investigated at the Detailed Design Stage to ensure that any positive drainage of surface water that may be required will be incorporated at that time.</p> | <p>It is proposed that the entire development road be positively drained.</p> <p>This matter will be dealt with at the detailed design stage.</p>            |                                  |                   |
| <p><b>3.3.1 PROBLEM</b></p> <p><b>Location: (B)</b> Proposed Site Access, at the junction with B2148 Horndean Road.</p> <p><b>Summary:</b> Risk of insufficient access road width at junction.</p>                                                                                                                                                                                                                             | <p>The proposed Site Access Road, should be revisited and the apparent verges at either side should be utilised to locally widen the proposed roadway in order to provide a minimum width of 5.5m at the junction</p>                                                           | <p>The site access road will be widened to 5.5 metres for at least 15 metres from its junction with Horndean Road.</p> <p>The verges/service strips will</p> |                                  |                   |

**Report: Road Safety Audit – Stage 1 Preliminary Design****Report Title: S278 Access & Highway Works, Land off Horndean Road, Emsworth****RSA Team: Ted Smith & Martin Brownsey (MB Projects Ltd)****RESPONSE REPORT****Report reference 1938****Date: June 2019**

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                              |                                                                  |  |  |
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|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                              |                                                                  |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                              |                                                                  |  |  |
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| Name:                                                                                                                                                                          | Name:                                                                                                                                                                                                                                 |
| Signed:                                                                                                                                                                        | Signed:                                                                                                                                                                                                                               |
| Position:                                                                                                                                                                      | Position:                                                                                                                                                                                                                             |
| Organisation:                                                                                                                                                                  | Organisation:                                                                                                                                                                                                                         |
| Date:                                                                                                                                                                          | Date:                                                                                                                                                                                                                                 |

