

Annex E – Stage 1 Road Safety Audit

Sunnica Solar Farm: Newmarket Road/ Site Access Junction

Stage 1 Road Safety Audit

Sunnica Energy

Project number: 60589004

October 2021

Quality information

Prepared by

MW
Associate Director, AECOM

Checked by

KP
Principal Transport Planner, AECOM

Approved by

MW
Associate Director, AECOM

Revision History

Revision	Revision date	Details	Authorised	Name	Position
-	30/09/21	DRAFT	MRW	MW	Associate Director
	05/10/21	FINAL	MRW	MW	Associate Director

Distribution List

# Hard Copies	PDF Required	Association / Company Name
---------------	--------------	----------------------------

Prepared for:

Sunnica Energy

Prepared by:

AECOM Limited
Saxon House
27 Duke Street
Chelmsford CM1 1HT
United Kingdom

© 2021 AECOM Limited. All Rights Reserved.

This document has been prepared by AECOM Limited ("AECOM") for sole use of our client (the "Client") in accordance with generally accepted consultancy principles, the budget for fees and the terms of reference agreed between AECOM and the Client. Any information provided by third parties and referred to herein has not been checked or verified by AECOM, unless otherwise expressly stated in the document. No third party may rely upon this document without the prior and express written agreement of AECOM.

Table of Contents

1.	Introduction.....	5
2.	Scheme Description	7
3.	Matters Outstanding from Previous Road Safety Audits.....	8
4.	Matters Arising from the Stage 1 Road Safety Audit.....	9
A	GENERAL	9
B	LOCAL ALIGNMENT	9
C	NON-MOTORISED USER PROVISION	9
D	JUNCTIONS	9
E	ROAD SIGNS, CARRIAGEWAY MARKINGS & LIGHTING.....	9
5.	Audit Team Statement	10
	Appendix A Document copies.....	11
	Appendix B Locations of Problems.....	12

1. Introduction

This report results from a Stage 1 Road Safety Audit carried out for the proposed solar farm site access on Newmarket Road, near Mildenhall, Suffolk. The Audit has been carried out at the request of the AECOM St Albans Development Planning team on behalf of the client: Sunnica Energy.

The Road Safety Team consisted of the following members:

MW

BA (Hons) MCIHT MSoRSA CoC

Audit Team Leader AECOM Limited

KP

BSc (Hons) CMILT MSoRSA CoC

Audit Team Member AECOM Limited

The Road Safety Audit was undertaken in accordance with the instruction to proceed and the RSA brief. The RSA brief was prepared by AECOM's St Albans Development Planning team and issued to the Audit Team on 15th September 2021. The Audit Team confirm that they are happy with the brief provided.

The Road Safety Audit comprised of an examination of the documents provided by the design team, which are listed in **Appendix A**, and an examination of the site during daylight hours.

The Road Safety Audit took place during September and October 2021 and the site was examined during the hours of daylight on the 20th September 2021. The weather during the site visit was overcast and the road surface was wet. The Audit was undertaken between the off-peak hours of 09:30 and 10:45 when traffic on the network in the vicinity of the works was flowing freely.

The locations of problems are shown in conjunction with the scheme proposals in **Appendix B** where the reference numbers relate to the problems identified in this report.

The Terms of Reference of the Audit are as described in GG 119 'Road Safety Audit' of Highways England's Design Manual for Roads and Bridges (DMRB). The advice issued in the GG 119 applies to trunk road and motorway highway improvement schemes, as well as highway schemes on the Trans-European Road Network (TERN) but has been used in this report to define the scope of this Audit.

The scheme has been examined, and this report compiled, only with regards to the safety implications to road users of the scheme as presented. It has not been examined or verified for compliance with any other standards, best practice guidance or criteria. However, to clearly explain a safety problem or the recommendation to resolve a problem, the Road Safety Audit Team may, on occasion, have referred to a design standard without touching on technical audit.

The RSA does not consider structural safety or cover health and safety issues concerning road users during the construction, maintenance and operation of the road.

An absence of comment relating to specific road users/ modes in **Section 4** of this report does not imply that they have not been considered; instead the Audit Team feels they are not adversely affected by the proposed changes.

This Road Safety Audit is not intended to identify pre-existing hazards which remain unchanged due to the proposals; hence they are not raised in **Section 4** of this report as they fall outside the remit of Road Safety Audit in general.

Nothing in this Audit should be regarded as a direct instruction to include or remove a measure from within the scheme. Responsibility for designing the scheme lies with the designer and as such the Audit Team accepts no design responsibility for any changes made to the scheme as a result of this Audit.

All traffic sign and road marking diagram number references are made to the Traffic Signs Regulations and General Directions, 2016 (TSRGD).

2. Scheme Description

The proposed priority T-junction that forms the scope of this audit is to be located on Newmarket Road approximately 2km south of Mildenhall town centre and 2.5km north east of Red Lodge village. The A11(T) runs in a northeast to southwest direction in the vicinity of the junction; Newmarket Road forms the minor arm of an all-movements priority junction with the dual carriageway A11(T) approximately 70-80m south of the proposed new junction location. At a similar distance north of the proposed junction Newmarket Road forms the two major arms of a 'crossroads' junction, with the minor arms consisting of Golf Links Road to the west and a private access to the east.

Newmarket Road, at the location of the proposed junction, is a single carriageway road with a single running lane in each direction. Newmarket Road has no street lighting and is derestricted in terms of speed limit at this location. There are no footways, pedestrian crossings or marked cycle routes in the immediate vicinity.

The location of the proposed T-junction that forms the scope of this audit is at that of a prior (now blocked up) bell-mouth junction. The purpose of the proposed junction is to provide HGV access to/ from a proposed solar farm site during its construction phase, over a period of 13 months. Following the construction of the solar farm the site access is to be removed with vegetation replanted, as it is not to be used during the operational phase.

In terms of junction usage an average of between 9-12 HGVs (18-24 movements) daily are expected within the first five months of the 13-month construction programme; this figure will be reduced to between 2-3 HGVs (4-6 movements) daily for months six to thirteen.

Vehicles will only be permitted to turn left into and right out of the site access, ultimately taking access and egress routes via the A11(T) junction to the south. Although outside of the scope of this audit it is understood that development related vehicles will be restricted to left in/ left out turns only at the A11(T)/Newmarket Road Junction.

Visibility splays of 215m to the north and 100m to the south (extending to the A11(T) junction) have been shown on the plans provided (drawing reference: TRA_005).

The scope of this RSA covers the site access junction only, as shown on drawing reference TRA_003.

3. Matters Outstanding from Previous Road Safety Audits

The audit team are not aware of any other Road Safety Audits having been undertaken on the proposed scheme.

4. Matters Arising from the Stage 1 Road Safety Audit

The following problems have been identified from the documents submitted:

A GENERAL

No comments.

B LOCAL ALIGNMENT

No comments.

C NON-MOTORISED USER PROVISION

No comments.

D JUNCTIONS

D1 PROBLEM

Location: Proposed construction access junction.

Drawing: TRA_003_Golf_Links_Road_Option_2

Summary: Slow moving HGVs turning right from access may be at risk of being struck by northbound vehicles on Newmarket Road.

The proposed construction access is located close to the A11(T) junction. Construction vehicles turning right out of the site will do so relatively slowly and vehicles heading north on Newmarket Road, having turned from the A11 may collide with the slow turning construction vehicles.

RECOMMENDATION

Although it is acknowledged that the RSA brief states that warning signs are proposed along Newmarket Road warning motorists of the site access and HGVs turning, it is recommended that, at detailed design stage, a suitable clear warning signage strategy is designed (and reviewed as part of the Stage 2 Road Safety Audit) to ensure that drivers joining Newmarket Road from the A11 are aware of the construction access and potential for slow turning vehicles ahead. It is advised that the signage is provided as a 'gateway' on entry to Newmarket Road so that it is clearly seen by both right turning and left turning traffic from the A11.

E ROAD SIGNS, CARRIAGEWAY MARKINGS & LIGHTING

No comments.

5. Audit Team Statement

We certify that this Audit has been carried out in accordance with Road Safety Audit Standard (GG119).

AUDIT TEAM LEADER:

MW

BA (Hons) MCIHT MSoRSA CoC

AECOM

Saxon House
27 Duke Street
Chelmsford, Essex
CM1 1HT
UK

Signed:

Date: 05/10/2021

AUDIT TEAM MEMBER:

KP

BSc (Hons) CMILT MSoRSA CoC

AECOM

Saxon House
27 Duke Street
Chelmsford, Essex
CM1 1HT
UK

Signed:

Date: 05/10/2021

Appendix A Document copies

The following documents were submitted as part of the Road Safety Audit:

Drawings

Drawing Title	Drawing Number
Swept path analysis for 16.5m articulated vehicle	TRA_003_Golf_Links_Road_Option_2.pdf (brief states dated 03.08.21)
Swept path analysis for 16.5m articulated vehicle - with topographical information	TRA_004_Golf_Links_Road_Option_2.pdf (brief states dated 03.08.21)
Visibility Splays	TRA_005_Golf_Links_Road_Option_2_Visibility_Splay_v2.pdf (brief states dated 03.08.21)
Swept path analysis for 16.5m articulated vehicle (A11 junction)	TRA_006_A11_Swept_Path_16.5m_Artic.pdf (brief states dated 03.08.21)*
Proposed site access layout, swept path analysis and visibility splays	210803_Golf_Links_Road_Site_Access_Option_2.dwg (brief states dated 03.08.21)

*out of RSA scope

Documents

RSA Brief – dated 15.09.21

Departures from Standards

The RSA brief states that the fully 215m visibility to the north can be achieved along Newmarket Road however based on the existing visibility an approximate 100m visibility splay is achievable towards the A11. It is proposed to undertake a speed survey on Newmarket Road between its junctions with Golf Links Road and the A11.

Appendix B Locations of Problems



