
**LAND NORTHEAST OF M1
JUNCTION 22,
MARKFIELD,
LEICESTERSHIRE**

**WHITWICK ROAD/A50
WESTBOUND SLIP ROAD**

**UPDATED STAGE 1
ROAD SAFETY AUDIT REPORT**

**REQUESTED BY:
RIDGE AND PARTNERS LLP**

JUNE 2026



RKS
Associates

Project: Land Northeast of M1 Junction 22, Markfield, Leicestershire
Whitwick Road/A50 Westbound Slip Road

Client: Ridge and Partners LLP

Document: Updated Stage 1 Road Safety Audit

RKS Associates Ref: VRP2236-02- RSA 1

Issue date: 26th June 2026

Status: Final

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RKS
Associates

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Appendix A: Location of Problems Identified During Updated Stage 1 Road Safety Audit

Appendix B: Road Safety Audit Decision Log

1.5 The main parties to this Road Safety Audit include the following:

Road Safety Audit Team Leader	Vimal Patel BEng (Hons), GMICE, FIHE, Reg. RSA (IHE), NH Cert Comp
Road Safety Audit Team Member	Beth Newiss MCIHT, MSoRSA, NH Cert Comp
Local Highway Authority	Leicestershire County Council
Design Organisation	Ridge and Partners LLP

1.6 The Audit was undertaken following examination of the submitted documents, including reference to a site visit undertaken on Thursday 18th June 2026 between the hours of midday and 1pm. The weather during the site inspection was sunny and the carriageway dry with moderate traffic flows and no pedestrian and cycle flows were observed along the A50 and lower traffic and no pedestrian and cycle flows were observed along Whitwick Road.

Terms of Reference

1.1 The Audit Team is independent of the project design team and has no other involvement with the project apart from undertaking the Stage 1 Road safety Audit on the original scheme in September 2025. This Stage 1 RSA has been undertaken in accordance with the relevant sections of GG-119 Revision 2, part of the Design Manual for Roads and Bridges (DMRB).

1.1 The Safety Audit Team has examined only matters relating to road safety implications of the updated scheme and has not verified compliance of the design to any other criteria. The Audit Team has not been made aware of any Departures from Standard and have been provided with the Designers Response to the Stage 1 Road Safety Audit conducted in September 2025 on the original scheme. For ease of reference any issues that have not been addressed in the designers response have been reiterated in this Updated Stage 1 Road Safety Audit.

1.2 All of the problems identified in this report are considered by the Audit Team to require action in order to improve the safety of the scheme and to minimise accident occurrence for all users. The location of the problems identified in this Safety Audit is shown in **Appendix A** where the reference numbers relate to the problems identified in this report.

1.3 The recommendations in this report are aimed at addressing the identified road safety problems; however, there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities. The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit and would encourage the Designer to consult them on this matter.

1.4 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the As-Built design pack to be provided and retained by the Local Highway Authority on completion.

- 1.5 For ease the Road Safety Audit Decision Log template is included in **Appendix B**. This enables the Designers and Overseeing Organisations Response to the Audit to be documented along with an agreed RSA Action.

Collision Data

- 1.6 Publicly available Personal Injury Collision (PIC) information obtained from the Crashmap UK website (www.crashmap.co.uk) for the 5-year period up to December 2023 has been reviewed within the vicinity of the highway works. The collision data indicates that a total of 5 collisions have occurred on the wider highway network, however no collisions have occurred within the vicinity of the highway works.

Trip Generation/Traffic Flow Data

- 1.7 The Design Engineers Ridge and Partners LLP have provided details of the likely trip generation associated with the proposed development via an email. The trip generation assessment indicates that the proposed development is likely to generate 531 and 348 two-way vehicle trips during the AM and PM peak hour periods respectively.

2 ISSUES IDENTIFIED DURING UPDATED STAGE 1 ROAD SAFETY AUDIT

2.1 **Problem:**

Summary: Potential risk of collisions associated with poor drainage

Location: *General.*

No details have been provided in respect of surface water drainage or other services, and it is therefore not possible to ascertain whether there will be any safety implications. The absence of surface water drainage may result in the collection of surface water which could increase the risk of loss of control collisions.

Recommendation:

Ensure that the detailed design incorporates surface water drainage to mitigate localised flooding/ponding.

2.2 **Problem:**

Summary: Potential risk of vehicle collisions associated poor alignment

Location: *Whitwick Road southbound approach to traffic signal-controlled junction*

There is concern that the horizontal alignment of Whitwick Road southbound approach to traffic signal-controlled junction results in a deviation for vehicles continuing ahead. The deviating in the horizontal alignment may result in vehicle traveling ahead from north to south to collide into the proposed central island in front of the right turn lane or may result in loss of control collisions as motorists make sudden movements to avoid the central island.

Recommendation:

Review and amend the layout to provide a smooth horizontal alignment for vehicles traveling ahead from north to south along Whitwick Road.

2.3 **Problem:**

Summary: Potential risk of vehicle collisions associated part signalisation

Location: *A50 westbound off-slip left turn give way junction*

There is concern that the partial signalisation of the A50 westbound off-slip left-turn may lead to driver confusion with the combination of signal control and give-way operation within the same junction. The layout and operation may not be clear to all users, particularly for those unfamiliar with the arrangement. This may result in inappropriate or hesitant manoeuvres with motorists incorrectly assuming signal control applies to all movements or failing to give way where required which may lead to an increased risk of sideswipe, rear-end, or shunt-type collisions.

Recommendation:

Review and amend the layout to ensure that the traffic control arrangement is clear and intuitive for all road users. If possible, the left-turn movement from the A50 westbound off-slip onto Whitwick Road south should be signal controlled to provide a consistent form of control across the junction and reduce the potential for driver confusion.

2.4 Problem:

Summary: Potential risk of vehicle collisions associated with obstruction to visibility

Location: *A50 westbound off slip entry onto A50*

Observations during the site inspection noted that vegetation between the A50 westbound on-slip and the A50 where vehicles will merge onto the A50 may be restricted by vegetation. Poor visibility for vehicles attempting to merge onto the A50 may increase the risk of sideswipe collisions between vehicles inadvertently merging onto the A50 and A50 westbound through traffic.

Recommendation:

Ensure that Vegetation between the A50 westbound on-slip and the A50 is cut back and regularly maintained.

2.5 Problem:

Summary: Potential risk of pedestrians struck by collisions associated with unclear layout

Location: *Proposed pedestrian crossing across A50 westbound off slip*

There is concern that the combination of controlled and uncontrolled pedestrian crossing facilities across the A50 westbound off slip is poorly defined and may lead to confusion for pedestrians. Consequently, pedestrians may inadvertently attempt to cross the junction at inappropriate times, increasing their exposure to traffic and the likelihood of being struck by passing vehicles. Road safety may be further compromised where pedestrians crossing the A50 off-slip left-turn lane from south to north misinterpret a green signal aspect at the controlled crossing as applying to their movement. This could result in pedestrians entering the carriageway when traffic on the left-turn slip lane is not required to stop, increasing the risk of conflict

Recommendation:

Review the layout, it would be more appropriate to provide a fully controlled pedestrian crossing facility across the A50 off-slip arm.

2.6 Problem:

Summary: Potential risk of pedestrians struck by collisions associated with unclear layout

Location: *Proposed pedestrian crossing across A50 westbound off slip*

There is concern that the no details in relation to the visibility splays to and from the proposed tactile landings at the uncontrolled crossing facility across A50 westbound off slip have been provided. Poor visibility for pedestrians using the crossing may encourage them to step out onto the carriageway to observe oncoming vehicles which may increase the risk of them being struck by turning vehicles.

Recommendation:

Review the layout to ensure visibility splays to and from the tactile landings are provided any obstructions in the visibility should be removed.



3 AUDIT TEAM STATEMENT

- 3.1** We certify that this audit has been carried out in accordance with GG-119 Revision 2 of Design Manual for Roads & Bridges Volume 5 Section 2 - Road Safety Audits. Its sole purpose being to identify features of the scheme that could be removed or modified to improve safety. No member of the Audit Team has been involved in the scheme design.

Audit Team Leader

Vimal Patel
BEng (Hons), GMICE, FIHE, Reg. RSA (IHE), NH Cert Comp

Signed: 

Date: 26th June 2026

Audit Team Member

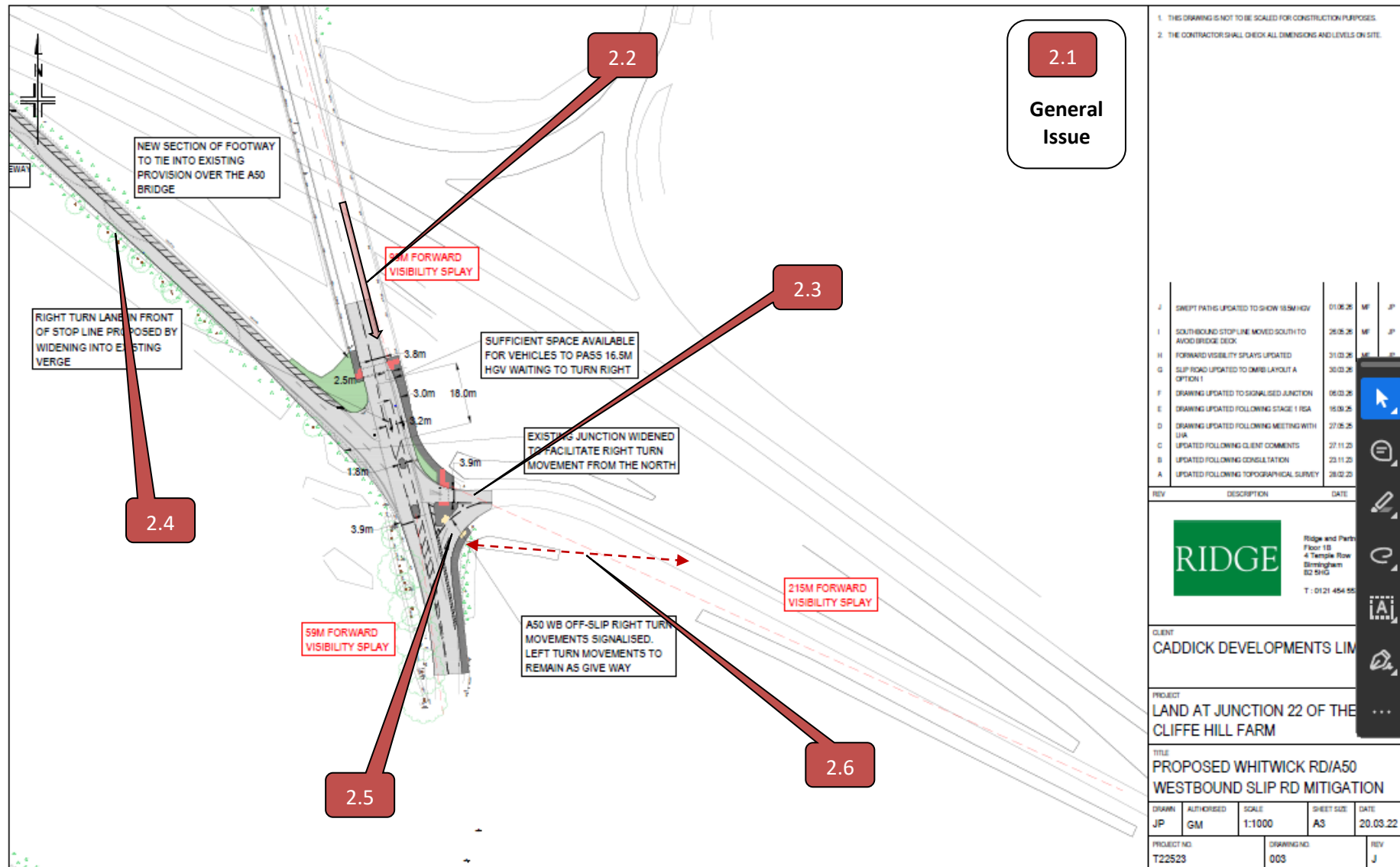
Beth Newiss
MCIHT, MSoRSA, NH Cert Comp

Signed: 

Date: 26th June 2026



Appendix A





Appendix B



Issue N°	RSA Problem	RSA Recommendation	Design Organisation Response	Overseeing Organisation Response	Agreed RSA Action
2.1	No details have been provided in respect of surface water drainage or other services, and it is therefore not possible to ascertain whether there will be any safety implications. The absence of surface water drainage may result in the collection of surface water which could increase the risk of loss of control collisions.	Ensure that the detailed design incorporates surface water drainage to mitigate localised flooding/ponding.	Accepted, this will be dealt with at the detailed design stage, limited to the extent of the works.		



2.2	There is concern that the horizontal alignment of Whitwick Road southbound approach to traffic signal-controlled junction results in a deviation for vehicles continuing ahead. The deviating in the horizontal alignment may result in vehicle traveling ahead from north to south to collide into the proposed central island in front of the right turn lane or may result in loss of control collisions as motorists make sudden movements to avoid the central island.	Review and amend the layout to provide a smooth horizontal alignment for vehicles traveling ahead from north to south along Whitwick Road.	Accepted. It is proposed that a white dashed line is provided between the pedestrian crossing studs and the right turn lane to guide southbound vehicles through the junction. This adopts the same principle as the High Street and Tamworth Road approaches to the Tamworth Road/Burton Street/High Street traffic signal junction in Measham (LCC area) where no PIAs have been recorded in the latest five-year period (source: CrashMap). A secondary signal head is also proposed to be placed on the central island, which will make the central island more prominent (and to also provide a second signal for right turning vehicles waiting in front of the stop line); the final details will be confirmed as part of the detailed design stage. A note has been added to Drawing T22523.003 rev K. Additionally, forward visibility to the junction from the north is very good and will provide drivers plenty of time adjust their speed and react to the layout accordingly. Therefore, no further design changes have been made.		
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2.3	There is concern that the partial signalisation of the A50 westbound off-slip left-turn may lead to driver confusion with the combination of signal control and give-way operation within the same junction. The layout and operation may not be clear to all users, particularly for those unfamiliar with the arrangement. This may result in inappropriate or hesitant manoeuvres with motorists incorrectly assuming signal control applies to all movements or failing to give way where required which may lead to an increased risk of sideswipe, rear-end, or shunt-type collisions.	Review and amend the layout to ensure that the traffic control arrangement is clear and intuitive for all road users. If possible, the left-turn movement from the A50 westbound off-slip onto Whitwick Road south should be signal controlled to provide a consistent form of control across the junction and reduce the potential for driver confusion.	Partly accepted. This layout is common at signal junctions across the UK and there are no inherent safety issues with this type of layout. The proposed mitigation scheme would not require changes to driver behaviour for those who are turning left onto Whitwick Road from the A50 WB Off-Slip. Additionally, give way signs will be provided to reinforce the need for left turning vehicles to give way; the final location of which would be determined at the detailed design stage. Louvres can also be provided to reduce the likelihood of see through issues, which can be specified at detailed design stage. Therefore, no design changes have been made.		
2.4	Observations during the site inspection noted that vegetation between the A50 westbound on-slip and the A50 where vehicles will merge onto the A50 may be restricted by vegetation. Poor visibility for vehicles attempting to merge onto the A50 may increase the risk of sideswipe collisions between vehicles inadvertently merging onto the A50 and A50 westbound through traffic.	Ensure that Vegetation between the A50 westbound on-slip and the A50 is cut back and regularly maintained.	Accepted. The vegetation located within the public highway will be cut back where necessary as part of the s278 works to achieve the forward visibility splays set out within the audited drawings. The visibility splays will be maintained by LCC as the local highway authority thereafter.		



2.5	There is concern that the combination of controlled and uncontrolled pedestrian crossing facilities across the A50 westbound off slip is poorly defined and may lead to confusion for pedestrians. Consequently, pedestrians may inadvertently attempt to cross the junction at inappropriate times, increasing their exposure to traffic and the likelihood of being struck by passing vehicles. Road safety may be further compromised where pedestrians crossing the A50 off-slip left-turn lane from south to north misinterpret a green signal aspect at the controlled crossing as applying to their movement. This could result in pedestrians entering the carriageway when traffic on the left-turn slip lane is not required to stop, increasing the risk of conflict	Review the layout, it would be more appropriate to provide a fully controlled pedestrian crossing facility across the A50 off-slip arm.	Not accepted. The shortest walking distance between the two crossing points is c.4.5m, which is a sufficient gap for users to realise the two crossing points are not linked, and also for users to check for oncoming traffic. The alignment of the uncontrolled crossing is significantly different to the controlled crossing, which means that there would be no 'see through' issues. Therefore, no design changes have been made.		
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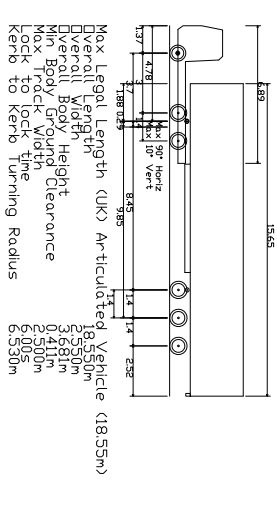


2.6	There is concern that the no details in relation to the visibility splays to and from the proposed tactile landings at the uncontrolled crossing facility across A50 westbound off slip have been provided. Poor visibility for pedestrians using the crossing may encourage them to step out onto the carriageway to observe oncoming vehicles which may increase the risk of them being struck by turning vehicles.	Review the layout to ensure visibility splays to and from the tactile landings are provided any obstructions in the visibility should be removed.	Partly accepted. The visibility splays from 1.5m back from the kerb line has been shown on Drawing T22523.011. For pedestrians waiting on the southern side of the crossing, a 1.5m x 39m visibility splay can be achieved (equivalent to 28mph design speed), which would result in an improvement on the existing situation with some vegetation within the highway boundary being cut back. For pedestrians waiting on the proposed refuge island, a 1.5m x 59m visibility splay could be achieved, equivalent to 37.5mph; allowing for the existing give way sign setback 60 yards from the junction. If this sign was relocated, a 1.5m x 85m visibility splay could be achieved as shown in Drawing T22523.011. Given that vehicles will be slowing down on approach to the junction, the visibility splays are considered to be appropriate. Where required, the vegetation, which is located within the public highway, will be cut back as part of the s278 works to achieve this splay and maintained by LCC as the LHA thereafter.		
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Drawings

1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.



K	DRAWING UPDATED FOLLOWING STAGE 1 RSA	01.07.26	MF	JP
J	SWEPT PATHS UPDATED TO SHOW 18.5M HG	01.06.26	MF	JP
I	SOUTHBOUND STOP LINE MOVED SOUTH TO AVOID BRIDGE DECK	26.05.26	MF	JP
H	FORWARD VISIBILITY SPLAYS UPDATED	31.03.26	MF	JP
G	SLIP ROAD UPDATED TO DWIRB LAYOUT A OPTION 1	30.03.26	MF	JP
F	DRAWING UPDATED TO SIGNALISED JUNCTION	06.03.26	MF	JP
E	DRAWING UPDATED FOLLOWING STAGE 1 RSA	16.09.25	JP	GN
D	DRAWING UPDATED FOLLOWING MEETING WITH LHA	27.05.25	JP	GN
C	UPDATED FOLLOWING CLIENT COMMENTS	27.11.23	BHB	JP
B	UPDATED FOLLOWING CONSULTATION	23.11.23	BHB	JP
A	UPDATED FOLLOWING TOPOGRAPHICAL SURVEY	28.02.23	ML	JP

REV	DESCRIPTION	DATE	BY	AUT
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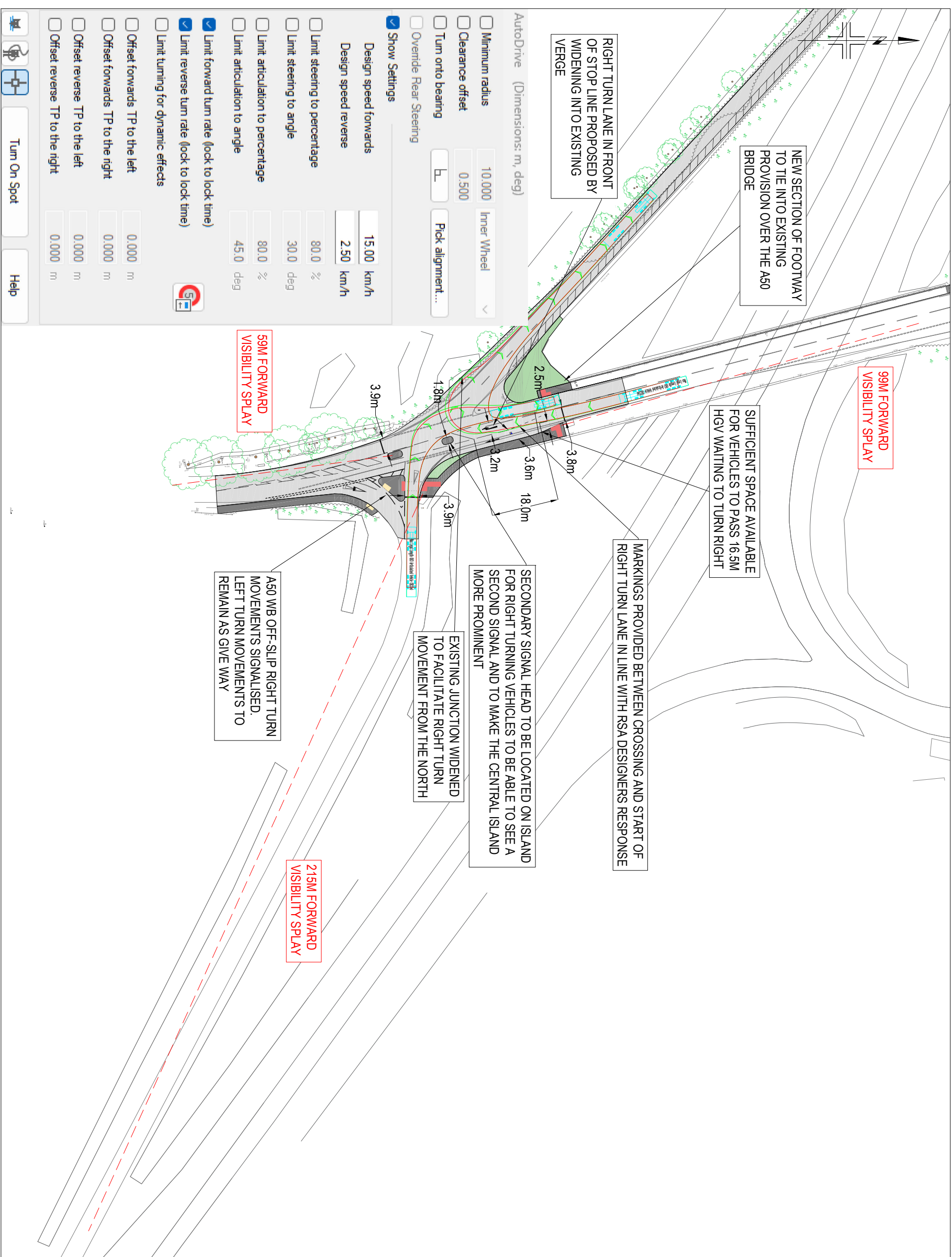
CLIENT
CADDICK DEVELOPMENTS LIMITED

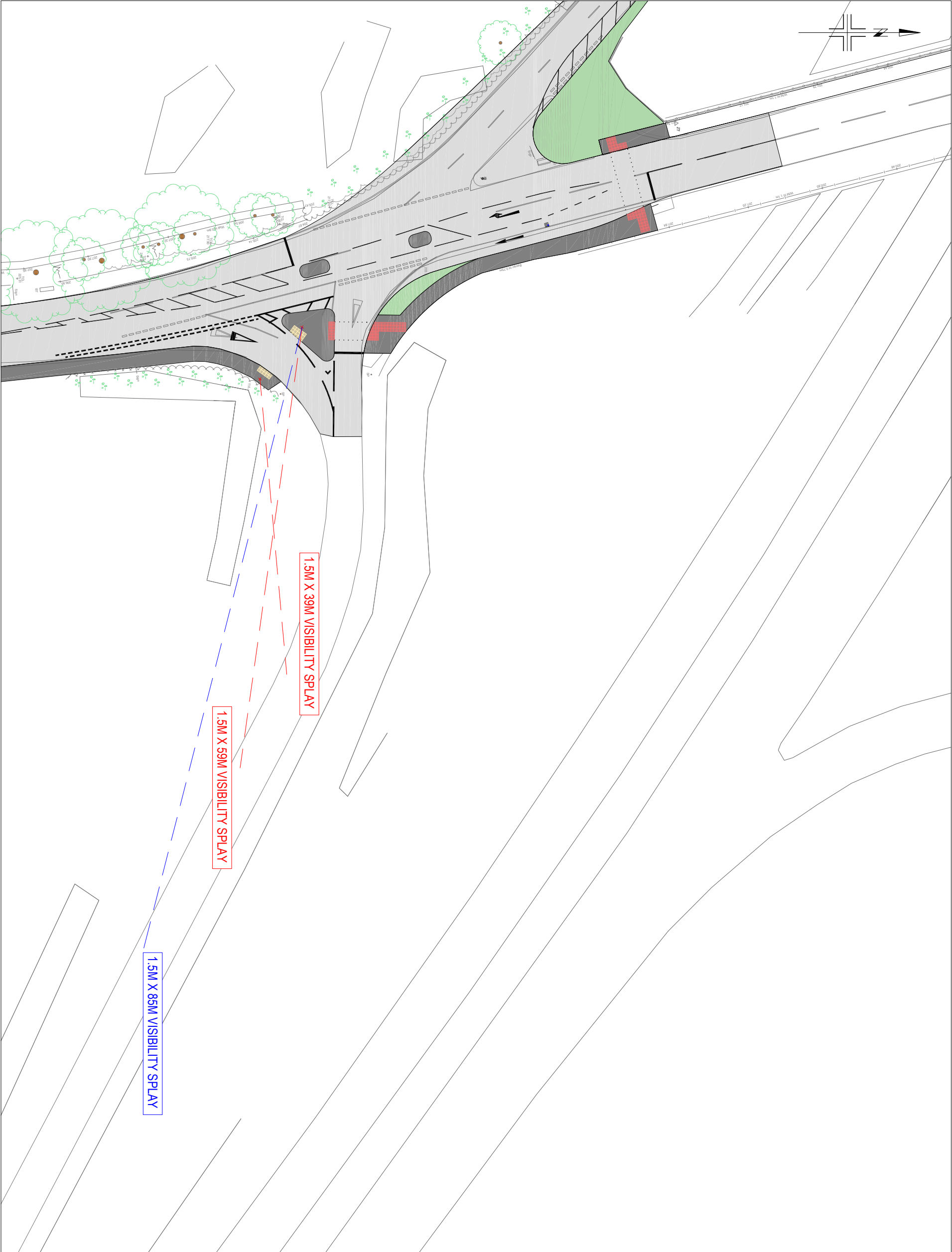
PROJECT
LAND AT JUNCTION 22 OF THE M1
CLIFFE HILL FARM

PROPOSED WHITWICK RD/A50 WESTBOUND SLIP RD MITIGATION

DRAWN	AUTHORISED	SCALE	SHEET SIZE	DATE
JP	GM	1:1000	A3	20.03.22

PROJECT NO. T22523	DRAWING NO. 003	REV K
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1. THIS DRAWING IS NOT TO BE SCALED FOR CONSTRUCTION PURPOSES.
2. THE CONTRACTOR SHALL CHECK ALL DIMENSIONS AND LEVELS ON SITE.

REV	DESCRIPTION	DATE	BY	AUTH



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CADDICK DEVELOPMENTS LIMITED

PROJECT
LAND AT JUNCTION 22 OF THE M1
CLIFFE HILL FARM

TITLE
A50 WESTBOUND OFF-SLIP
CROSSING VISIBILITY SPLAYS

DRAWN	AUTHORISED	SCALE	SHEET SIZE	DATE
MF	JP	1:500	A3	01.07.26
PROJECT NO.	DRAWING NO.	REV		
T22523	011	-		