

Milton Keynes Road Safety Strategy 2013-2018

Annex A Road Safety Audit Policy & Procedures





This document has been prepared by
Milton Keynes Council

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Throughout this document reference will be made to the Road Safety Audit (RSA) Team, this should also be taken to read Road Safety Auditor in the case of Road Safety Assessments (RSAss).

1. INTRODUCTION

1.1 Purpose

Road Safety Audit (RSA) is a systematic and objective method for checking the safety aspects of a wide range of highways schemes to:

- ensure that highways schemes operate as safely as practicable
- minimize the occurrence and severity of road accidents
- consider the safety of all road user groups
- improve the awareness of safe design practices by design, construction and maintenance staff

RSA's identify potential road safety hazards within the design of highways schemes and make practical recommendations to mitigate or eliminate hazards.

The RSA process is **not**:

- a technical check
- a check of compliance with design standards
- an assessment of the safety benefits of a scheme

If any of these are necessary then these should be undertaken independently.

An RSA should be carried out with consideration for each of the following highway users, examining how they are likely to interact with the proposed scheme:

- Vehicle occupants
- Pedestrians (child, adult, elderly, mobility impaired (incl. motorized scooters), sight and hearing impaired)
- Cyclists
- Motorcyclists
- Equestrians
- Those working in the highway (where appropriate)

1.2 Background

In 2003, the Highways Agency produced a new standard on RSAs (HD19/03), which amended previous advice on the way audits should be undertaken. Although the standard is mandatory only to trunk roads and motorways, it is "commended to other highway authorities".

This policy and procedure document is prepared with reference to HD19/03 and the current Milton Keynes Council policy. It will revoke all previous procedures and become the Milton Keynes Council agreed policy for undertaking RSA and Road Safety Assessments.

1.3 The need for Road Safety Audit

RSA has an important part to play in achieving the road safety objectives of the Milton Keynes Council Road Safety Strategy.

To assist the design and construction process, designers should be encouraged to seek RSA's as early as is practicable. This will result in less need for time-consuming fundamental changes at crucial periods such as tendering. Similarly designers should commission Interim RSA's between formal stages if considered appropriate. The results of Interim Audits should be recorded on the design file and in the audit records. Such interim audits do not replace the need for formal audits at the normal stages.

2. Function & Structure

2.1 Scope

This document outlines the practices, which will be adopted and applied by Milton Keynes Council in the performance of Road Safety Audits (RSA's) and Road Safety Assessments (RSAss's).

RSA's and RSAss's will apply to schemes implemented on highways for which Milton Keynes Council is the Highway Authority. RSA's will be carried out on all the highway schemes indicated below. The only exception to this will be where the client, in agreement with the Senior Road Safety Engineer or the Road Safety Team Leader and in accordance with this document, decides that a particular scheme does not require a formal RSA and will be subject to an RSAss.

The RSA process may be applied to the following types of highway scheme:

- New highway schemes (including residential developments)
- Major improvements
- Minor improvements
- Traffic management schemes
- Development-led schemes
- Major maintenance schemes
- Casualty Reduction Schemes
- Cycleway & Redway Schemes

The above list is not exhaustive and does not preclude the client from requesting a RSA be undertaken on any scheme, for example Temporary Traffic Management (TTM) schemes which apply for an extended period of time.

RSA's for Development-led and Highways Adoptions schemes may be carried out by auditors selected by the Developer or by members of the Road Safety Engineering Team at Milton Keynes Council. The Developer will bear the costs of the RSA and should make allowances within project plans for the completion of RSA's.

RSA's will be completed within ten working days of receipt of all relevant information.

2.2 RSA Stages

There are four main stages of RSA, with Interim stages as described below.

All Highways and Transportation schemes should be subject to an RSA or RSAss at the following stages throughout their planning, design and construction phases.

At all stages, the particular needs of all road users should be taken into consideration.

Stage F: Feasibility Study

This stage of Audit will be carried out on an informal basis. It may examine the purpose and the function of the road in the hierarchy, the choice of route, standards applicable, the number and types of junctions. This stage may be necessary for major planning developments. This stage will only be carried out at the specific request of the Client.

Stage 1: Completion of Preliminary Design

This stage of Audit will assess the basic principles and design of the scheme and will include horizontal and vertical alignments, sight lines, cross-falls and layouts and suitability of junctions. This stage will usually be a 'desktop' study of drawings and information. It is recommended that a site visit is carried out.

Stage 2: Completion of Detailed Design

This stage of Audit will assess detailed junction layout, highway markings, signs, street lighting, landscaping and other design details.

Stage 1-2 (Combined) Completion of Detailed Design

Stages 1 and 2 can be combined for schemes where there are no distinct preliminary design/detailed design phases. Information to undertake a Stage 1-2 RSA will be to the same level of detail as that for a Stage 2 RSA.

Stage 3: Scheme completion

This stage of audit will examine the completed scheme as soon as possible after the completion date, by driving, walking or cycling the length of the scheme (as appropriate). The scheme may, where considered appropriate, be examined during the hours of darkness to ensure that there are no darkness road safety issues.

Interim: During design

An Interim Audit can be carried out on an element of the scheme as it is progressing through design. This stage of Audit will only be carried out at the specific request of the Client and will not replace Audits at any other stage.

Stage 4: Scheme Monitoring - 1 year and 3 years after completion

This stage of audit will examine the annual Personal Injury Collision (PIC) data prior to the implementation of the scheme and compare it with the PIC data for the 12 month period after the completion of the scheme (Stage 4a) and for the 36 month period after the completion of the scheme (Stage 4b). Other reported road safety problems and comparisons should be made with control data and typical PIC types for similar locations. Separate reports will be produced for 1 year and 3 years after completion of the scheme.

Stage 3 RSA's can be carried out in two parts for major schemes. These are stage 3(a) - (substantial completion) and 3(b) - (immediate post-opening in both daytime and darkness conditions). For minor schemes Stage 3 RSAs should be carried out at either pre-opening or immediate post-opening.

Specialist representatives from the Police or a Traffic Signals Engineer may be invited by the Audit Team Leader to attend any RSA Stage at the discretion of the RSA Team Leader. The specialist representatives are present as advisors and do not formally constitute part of the RSA Team.

2.3 The RSA Team

RSAs will be carried out either by suitably qualified staff from the Road Safety Engineering Team at Milton Keynes Council or by specifically appointed consultants.

It is essential that RSA's are carried out by a team of at least two people who are independent of the scheme design. This improves the quality of the audit and reduces the risk of safety problems being missed. The team should have suitable road safety engineering expertise and training to undertake the RSAs (in accordance with the guidance in HA 19/03). Details of carrying out an RSAs are given in Section 4.

Additional specialist staff may be brought into specific projects to act as advisors as required. They will not formally constitute part of the RSA Team.

There are three categories of Road Safety Auditor:
(The suitable qualifications for these categories are provided in Table 1.1 of Appendix 1.0)

- **Audit Team Leader** – the person that manages the Safety Audit and signs the Audit Report.
- **Audit Team Member** – the second person in the Audit Team who supports the Team Leader and counter signs the Audit Report.
- **Audit Team Observer** – someone who is being trained to undertake RSAs (no more than two Observers should be present on any RSA or RSAs) and may counter sign the Audit Report.

3.0 PROCEDURE

3.1 Definitions and roles within RSA

The Client:

For the purpose of this RSA Policy, The Client will be the person responsible for commissioning the scheme design and ensuring the progression of the scheme.

- In the case of development-led schemes the client may be the lead Highway Development Control Engineer or Highways Adoption Engineer.
- For major schemes the Capital Projects Team Leader or identified Project Manager.
- For Safety Engineering Schemes the Scheme Designer will assume the responsibility as the Client.
- For any scheme submitted for safety audit and not covered by the above criteria the person commissioning the scheme will be identified as the Client.

The Design Team:

The team responsible for the design and overseeing construction of a highway or transportation scheme.

RSA Team:

A team of two people (an Audit Team Leader and an Audit team Member) independent of the scheme design, comprising staff with the required experience and training, which considers the scheme from a road safety point of view. The Audit Team will be drawn from staff in the Road Safety Team or specifically commissioned consultants. The Audit Team may be accompanied by up to two Audit Observers.

RS Auditor:

A member of staff with the required level of experience and training to meet the requirements for a Team Member under HD 19/03 or the employee of any specifically commissioned consultant meeting those qualifications and requirements.

RSA Report:

A report produced by a member of the RSA Team detailing the road safety issues raised by the audit and proposing appropriate recommendations.

Client/Designers Response & Exception Report:

A report prepared by the Client/Designer in response to the RSA Report. The Client/Designers Response should give details of either acceptance or rejection of the recommendations made in the RSA Report. If recommendations are rejected, the Client/Designer must prepare an Exception Report for inclusion in the Client/Designers Response. The Exception Report must provide details of the grounds for rejection and state the subsequent actions of the Client/Designers in respect of the issue raised.

Road Safety Team Leader:

The person responsible for approving RSA teams/auditors, and overseeing the RSA and RSAss Procedure.

3.2 Information and time required to carry out Road Safety Audits

The Client should provide all of the information required by the RSA Team as part of the RSA Brief (see Appendix 4.0). The list below provides examples of the information that will be required.

The information supplied for RSA should include the following:

- design brief describing the purpose and operation of scheme
- scheme plans (2 printed sets and an electronic copy (pdf format))
- departures from Design Standards
- other relevant information (speed restrictions, speed data, traffic flow, Non Motorized User (NMU) data, existing layout and street furniture)
- copies of any previous externally undertaken RSA Reports
- copies of any previous externally submitted Exception Reports
- notification of key dates in the design/construction process.

The RSA Report should, dependant on scale and complexity, be completed within ten working days of receipt of all relevant information by the RSA Team. For large scale or more complex schemes, timescales for the delivery of the report will need to be agreed in advance.

It is the responsibility of the Client to ensure that adequate time for the RSA process and for potential post-RSA design amendments are considered within the overall project programme.

The RSA Team will retain a copy of all information submitted for Audit together with the RSA Report and any Designer Response/Exception Reports. If the Audit is carried out by commissioned consultants, a copy of the Draft RSA Report and subsequent Client/Designers Response should be sent to the Road Safety Team Leader and the Senior Road Safety Engineer at Milton Keynes Council, prior to submission of the final documents. Agreement on the content of the RSA Report must be reached between the Road Safety Team Leader, the Senior Road Safety Engineer at Milton Keynes Council and the authors of the RSA Report.

The Road Safety Team will maintain a register of all RSA's and RSAss's carried out by Milton Keynes Council and will set up a system to remind the Client of the need for subsequent RSA stages.

3.3 Carrying out Road Safety Audits

The Audit Team Leader will check the information provided for completeness. Any missing or additional information required should be identified and requested from the Client. The time delay in obtaining this information will not count towards the agreed time for delivering the RSA Report.

The Audit Team Leader may delay the audit process until all the required information is provided. Any delay should be notified to the Client.

Stage F, 1, 2 and 1-2 (combined) Audits

These audits will consist briefly of:

- An examination of the scheme details.
- A visit to the site by the Audit Team (plus any advisors if appropriate)
- Recording of notes and photographs (where appropriate) of possible road safety problems.
- Checklists may be used to ensure that no potential safety problems have been missed, but should not be appended to the Audit Report.
- A discussion by the Audit Team of the potential safety problems and recommendations.
- A final Audit Report to be sent to the Client/Design Team (with a copy to the Road Safety Team Leader if the RSA is carried out by commissioned consultants).
- An electronic copy of the RSA Report will be securely stored on the Milton Keynes Council computer network.

Stage 3 Audits

These audits will consist briefly of:

- The Audit Team Leader arranges the site visit and may invite a specialist representative such as the Police, Fire Service or Technical expert, to attend as deemed appropriate.
- A visit to the site by the Audit Team (plus the specialist representative /advisors if appropriate) during daylight hours.
- A visit to the site by the Audit Team during darkness.
- A discussion by the Audit Team of the potential safety problems and recommendations before leaving the site.
Recording of notes and photographs of possible road safety problems.
- Checklists may be used to ensure that no potential safety problems have been missed, but should not be appended to the Audit Report.
- A final Audit Report to be sent to the Client/Design Team and the specialist representatives/advisors who attended the site visit. With a copy to the Road Safety Team Leader if the RSA is carried out by commissioned consultants.
- An electronic copy of the RSA Report will be securely stored on the Milton Keynes Council computer network.

Interim Audits

Interim Audits may be requested by the Client in response to a particular requirement during the design process. These Audits will normally be reported less formally than the other stages, and can be in the form of a written instruction between the Audit Team and the Client/Design Team.

Stage 4 Audits

These Audits will be carried out 1 year and 3 years after the completion of the schemes. The purpose of this audit is to examine any subsequent safety problems, PIC trends and report on how engineering designs can be improved to reduce accidents and improve road safety. Copies of the reports will be sent to the Client/Design Team.

Copies of RSA Reports

Electronic copies of all RSA Reports will be securely saved on the Milton Keynes Council Road Safety network drive.

Key issues

The main purpose of RSA or RSAss is to identify potential road safety hazards within the design of schemes and make practical recommendations to eliminate or minimize these hazards.

A number of checklists are available to assist in the Audit process. These are not a substitute for road safety experience and training. They may be used to assist the auditors in the completion of their examination of the scheme and act as a means of recording the observations and considerations made on-site.

The checklists can also be valuable as an aid to train Road Safety Auditor Observers.

RSA's and RSAss's should be carried out from the point of view of how the highway is used in a variety of conditions. It is not a check for technical or design standards compliance. This process may involve role-play as different road users.

Where there are concerns raised by the RSA Team regarding the Client/Designer Exception Report and an agreement between the RSA Team and the Client/Designer can not be reached, the concerns can be escalated to an appropriate Head of Service for mediation with support from the Road Safety Team Leader.

The appropriate Head of Service will consider the evidence provided by both parties and recommend either acceptance or rejection of the exception.

In exceptional cases the concerns may be escalated to an Assistant Director for decision. In this case the Assistant Director's decision will be final and recorded.

3.4 The RSA Report

The RSA report will be prepared in the style of the sample reports contained in HD 19/03 (MKC version attached Appendix 5.0).

An introductory statement setting out the terms of reference, and listing the RSA Team members, will be included. The statement will describe when and where the RSA was carried out. It will refer to plans and documents checked by the RSA Team, which should be listed in an appendix to the report.

The report will detail all identified road safety problems and related recommendations for improvement. The report will be signed by all Audit Team members.

The report will be written in a concise and specific format. Each problem will be documented in terms of a specific or potential road safety problem.

Recommendations are provided to address the identified problems; more than one recommendation may be included to allow the Client to choose an appropriate action.

Once the RSA Team has completed the RSA and produced a report, copies of the final report should be sent to the Client/Design Team.

It is the responsibility of the Road Safety Team Leader to ensure that the quality and consistency of RSA Reports are monitored.

3.5 The Designers Response and Exception Report

The Client/Design Team must consider the issues raised and recommendations made in the RSA Report.

The Client/Designer must prepare a report in response to the issues raised and recommendations made in the RSA Report. The Client/Designers Response should give details of either acceptance or rejection of the recommendations made in the RSA Report.

If recommendations are rejected, the Client/Designer must prepare an **Exception Report** for inclusion in the Client/Designers Response. The Exception Report must provide details of the grounds for rejection and state the subsequent actions of the Client/Designers in respect of the issue raised. An example of a Client/Designers Response Report is given in Appendix 2.0

If the recommendations are accepted, the Client will instruct the Design Team to make those changes to the designs that are required as a result of the RSA Report.

Where an alternative recommendation is proposed by the Client/Designer, discussions can be held with the RSA Team before finalizing the action and producing the Client/Designers Response Report. The timescales for these discussions should be agreed between the Client/Designer and the RSA Team.

The Client should forward a copy of the Client/Designers Response (including an Exception Report as required) to the RSA Team Leader.

If there are fundamental differences between the recommendations of the RSA Report and the views of the Client, the RSA Team Leader should notify the Road Safety Team Leader and the Head of Service of their concerns, stating the grounds for not accepting the Clients views. The RSA Team Leader should also notify the Client of this action.

The RSA Team Leader, Road Safety Team Leader and the Head of Service should discuss the issues and reach a resolution. The RSA Team Leader should also notify the Client of the outcome of this discussion.

In some exceptional cases the issue may be referred to the Assistant Director.

The revisions to the scheme may necessitate a revised RSA undertaken. The Client/Design Team should consult the Audit Team Leader if in any doubt.

3.6 Procedures for undertaking Road Safety Audits on typical schemes

The procedures to be followed in applying RSA's to typical schemes are outlined in Appendices 3.0 to 3.3

4 ISSUES ARISING FROM THESE PROCEDURES

4.1 Training

All RSA Teams should have the required training and experience set out in Table 1.1

All consultants carrying out RSAs on behalf of MKC should submit the Curriculum Vitae (CV) of staff that will be undertaking RSA's to the Road Safety Team Leader or the Senior Road Safety Engineer at MKC. If additional staff are used after the consultants have been commissioned, the Road Safety Team Leader should approve CV's before RSA's are undertaken. MKC staff training records or CV's should be updated every year to ensure that CPD training is being carried out.

Milton Keynes Council is committed to providing suitable training for staff undertaking RSA's. Short-term awareness training courses will be provided for staff designing schemes or commissioning RSAs to ensure an understanding of these procedures. A formal record of training and audits undertaken for all staff employed in the Road Safety Engineering Team will be maintained.

4.2 Exceptions to this Procedural document relative to HD 19/03

Road Safety Assessments (RSAss)

Although it is desirable that every highway scheme in MKC will be subject to an RSA at all stages in accordance with HD 19/03, it is not operationally or financially viable to embark on this practise.

Within MKC there will be a number of small-scale schemes where formal RSA's are not considered necessary. For these schemes a Road Safety Assessment (RSAss) may be carried out.

As with an RSA, an RSAss will consider all aspects of the highway scheme. It will be performed to the same criterion as an RSA.

MKC staff that meet the requirements to be Audit Team Members may carry out RSAss's. The RSAss can be undertaken by one member of staff and will include a site visit.

The decision to adopt the RSAss system should be made by agreement between the Client and the Road Safety Team Leader or the Senior Road Safety Engineer and recorded by the Client. The request for an RSAss together with the required documentation will be forwarded to the Senior Road Safety Engineer.

The RSAss report will be prepared by the engineer undertaking the RSAss, reviewed and countersigned by another suitably qualified engineer.

The RSAss Report, once completed, will be sent to the Client in hard copy and electronically. Requests for RSAss's will be recorded as for RSA's and an electronic copy will be saved on the MKC computer network drive. The RSAss Report should be produced within ten working days of receiving all relevant information.

Safety Assessment Background

A Road Safety Assessment (RSAss) is a formal assessment of a scheme in terms of its road safety implications. The assessment will be carried out at the same points in design and implementation that apply to RSA's.

An RSAss can be applied to minor highway or traffic management schemes where the Client in consultation with the Road Safety Team Leader or the Senior Road Safety Engineer, considers that a more formal RSA is not necessary.

When an RSAss is required, the Client should document the reasons for departing from the normal course of action in commissioning an RSA on the Road Safety Assessment request form.

Methodology

The RSAss can be carried out by one person. The person undertaking the RSAss should have experience in road safety engineering and should meet the requirements under HD 19/03 for Audit Team Member and should not be involved in the scheme design.

Scheme plans should be examined and a site visit carried out during the design stage. When the scheme is completed, a daylight site visit should be carried out. A visit in darkness may be required if the Safety Assessor considers it necessary.

The request for an RSAss will be processed in the same way as the request for an RSA, except that these will exclusively be undertaken by MKC. The assessor undertaking the RSAss will decide, unless specifically requested by the Client, the need for a night time site visit.

A report will then be prepared highlighting any safety problems. The final RSAss report will be sent to the client and an electronic copy will be securely saved on the Milton Keynes Council computer network.

Identification of Schemes for a Safety Assessment

As previously stated, the decision to carry out an RSAss instead of a RSA will be an agreement between the Client and the Road Safety Team Leader or the Senior Road Safety Engineer. The following list identifies possible schemes where an RSAss may be applicable.

- Minor signing and lining schemes with no carriageway alterations and in accordance with The Traffic Signs Regulations and General Directions, the Traffic Signs Manual and any MKC Highways Policies.
- Schemes where no alteration or construction is occurring between kerb lines.
- Gateway signing schemes in accordance with MKC Highways Policies.
- Cycleway/Redways

- Bus Lay-bys/Stops
- Pedestrian Refuges
- Tactile/Corduroy Paving

4.3 Night-time visits at Stage 3 (applicable to both Safety Audit and Safety Assessment)

It is acknowledged that the requirement for the Audit Team to visit the site during darkness at Stage 3 can have resource implications. There are some schemes which are unlikely to have any specific problems during the hours of darkness (e.g. safety fence schemes). In these cases the RSA Team Leader may decide that only one member of the RSA Team needs to visit the site in darkness.

If this decision is made, the decision must be recorded within the RSA Report. However it is also accepted that some schemes, at RSA stage 2, may require a night-time visit especially if the scheme is addressing a night-time PIC pattern. The RSA Team Leader will be able to request that a night-time visit is undertaken for these schemes.

4.4 Finance

The costs incurred by the Road Safety Team in the performance of a RSA or RSAss and for the production of the RSA/RSAss Report will be re-charged to the appropriate Capital Code and/or Development Scheme. These costs will be based on the hourly 'charge-out' rates for the officers performing the RSA or RSAss. A record of the time spent in performing the RSA or RSAss and the production of the resulting reports will be made and included with the reports as necessary.

Appendix 1.0 - Road Safety Auditor credentials

TABLE 1.1	RSA TEAM REQUIREMENTS
	<ul style="list-style-type: none"> • Audit Team Leaders should at least have: <ul style="list-style-type: none"> ○ 4 years' Road Safety Engineering/Accident Investigation experience and currently undertaking this role. ○ carried out 5 RSAs in the last 12 months ○ attended a UK accredited 10 day Accident Investigation/Road Safety Engineering training course ○ obtained 2 days CPD in RSA, Road Safety Engineering or Accident Investigation in the last 12 months
	<ul style="list-style-type: none"> • Audit Team Members should at least have: <ul style="list-style-type: none"> ○ 2 years' Road Safety Engineering/Accident Investigation experience (recent) ○ carried out 5 RSAs in the last 24 months ○ attended a UK accredited 10 day Accident Investigation/Road Safety Engineering training course ○ obtained 2 days CPD in RSA, Road Safety Engineering or Accident Investigation in the last 12 months
	<ul style="list-style-type: none"> • Audit Team Observers should at least have: <ul style="list-style-type: none"> ○ 1 year's Road Safety Engineering/Accident Investigation experience (recent) ○ attended a UK accredited 10 day Accident Investigation / Road Safety Engineering training course
	<p>Note</p> <ul style="list-style-type: none"> • A working knowledge of design standards and the design and effectiveness of accident remedial measures is desirable • Highway engineers or other engineers without the required current Accident Investigation or Road Safety Engineering training and experience are not acceptable as auditors • All RSA teams should be approved by the Road Safety Team Leader prior to undertaking RSAs. In the case of external auditors, the CVs of the audit team should be approved by the Road Safety Team Leader and/or the Senior Road Safety Engineer before the audit team is deemed acceptable. • A record of the Milton Keynes Council Audit Team's experience will be kept on file. • Administration of the registration and completion of the RSA's and RSAss's will be carried out by the Transportation Admin Team.

Appendix 2.0

RSA CLIENT/DESIGNERS RESPONSE REPORT

Scheme name: _____

Client/Designer name: _____

Date: ___ / ___ / _____ **Audit registration number:** _____

Audit Stage: 1 1-2 2 3 4 (circle appropriate)

Client/Designer Reference Number: _____

(Client to enter)

With reference to the highway scheme named above, I/we have received and read the Road Safety Audit (RSA) Report submitted by the Road Safety Team at Milton Keynes Council.

With reference to the issues raised and recommendations made in the RSA Report, I/we would respond with the following:

RSA Report para. no.	Recommendation accepted Yes/No	Action required

If any of the recommendations are **not** accepted, the Client/Designer **must** complete an Exception Report for inclusion with this report.

Appendix 2.1

RSA CLIENT/DESIGNERS EXCEPTION REPORT

Scheme name: _____ **Date:** _____
 ___ / ___ / _____

Client/Designer name: _____

Audit registration number: _____ **Audit Stage: 1**
 1-2 2 3 4 (circle appropriate)

Client/Designer Reference Number: _____ (*Client to enter*)

Safety Audit Report para. no.	Safety Audit Recommendation accepted Yes/No	Client Comments	Action required or reason for exception

Signed.....Designation.....

Name.....

Appendix 3.0

RSA Procedure for a Typical Major Scheme.

- 1) Client commissions a consultant's /contractors/ in house Design Team to design the scheme
- 2) Design Team confirms that preliminary design of the scheme is complete
- 3) Client completes the RSA Brief and forwards to the Road Safety Team complete with all required documentation (see Appendix 2.0)
- 4) Road Safety Team Leader decides who should do the Audit (Road Safety Team or consultants) and Road Safety Team includes the scheme in the Safety Audit Register.
- 5) RSA completed and RSA Report sent to Client and/or Design Team (and Road Safety Team Leader if RSA carried out by consultants).
- 6) Client discusses implications of the RSA report with Design Team.
- 7) Client/Designer and RSA Team discuss any contentious issues raised or recommendations made in the RSA Report.
- 8) Any unresolved concerns escalated to the Road Safety Team Leader and the Head of Highways Services for mediation.
- 9) Client/Designer prepares Client/Designers Response. Copies of the Designers Response sent to the Design Team, the RSA Team Leader (and Road Safety Team Leader if RSA carried out by consultants).
- 10) Client instructs Design Team to make design changes in light of the Audit Report and Client/Designers Response Report. All correspondence relating to a RSA will be kept on file.
- 11) Design Team confirms that detailed design of the scheme is complete.

Steps 3 to 11 are repeated for a Stage 2 RSA

- 12) Tender for the scheme construction is let and the scheme is completed.
- 13) Client confirms that the scheme is complete.

Steps 3 to 10 are repeated for a Stage 3 RSA

- 14) Client instructs Design Team to make changes on site in light of the Audit Report.
- 15) Road Safety Team Leader/Road Safety Team arranges for completion of all details in the RSA register and sets up reminders for Stage 4 Audits in one and three years' time.

Appendix 3.1

RSA Procedure for a Typical Minor Scheme

The following points are relevant to a formal RSA. If a Safety Assessment is commissioned (at Step 3 below) the steps will be the same. Details of the Safety Assessment will be included in the RSA register.

The small-scale nature of the scheme may require a combined Stage 1-2 RSA rather than two separate stages.

- 1) Client commissions Design Team to carry out design.
- 2) Design Team informs Client that preliminary and detailed designs are complete.
- 3) The Client in agreement with Road Safety Team Leader or the Senior Road Safety Engineer, decide to carry out an RSA or RSAss as appropriate.
- 4) Client/Design Team sends RSA or RSAss Brief to the Road Safety Team.
- 5) Road Safety Team Leader to allocate Audit to Audit Team Leader or consultants. If a Road Safety Assessment is required, the Road Safety Team Leader will allocate the assessment to the appropriate staff member if required and Road Safety Team include the scheme in the Safety Audit register.
- 6) RSA or RSAss completed and Report sent to Client/Design Team (and Road Safety Team Leader if Audit or Safety Assessment carried out by consultants).
- 7) Client discusses implications of the RSA or RSAss report with Design Team.
- 8) Client/Designer and RSA Team discuss any contentious issues raised or recommendations made in the RSA Report.
- 9) Any unresolved concerns escalated to the Road Safety Team Leader and the Head of Highways Services for mediation.
- 10) Client/Designer prepares Client/Designers Response. Copies of the Client/Designers Response sent to the Design Team, the RSA Team Leader (and Road Safety Team Leader if RSA carried out by consultants). All correspondence relating to an RSAss will be kept on file.
- 11) Client instructs Design Team to make design changes in light of the RSA/RSAss.
- 12) Work instruction given and scheme constructed
- 13) Client confirms that the scheme is complete

Steps 4 to 11 are repeated for a Stage 3 RSA.

- 14) Client instructs Design Team to make changes on site in light of the Stage 3 RSA.
- 15) Road Safety Team Leader/ Transport Admin Team arranges for all details to be recorded in the Safety Audit register and sets up reminders for Stage 4 Audits in one and three years' time.

Appendix 3.2

RSA Procedure for a Typical Development-led Scheme.

For Development led schemes involving the Milton Keynes Council Road Safety Engineering Team.

For Road Safety Audit (RSA) Stage 1 and Stage 2:

- 1) Planning Application passed to Highways Development Control (HDC) as consultee.
- 2) HDC assess, in consultation with the Road Safety Engineering Team, whether a Road Safety Audit (RSA) or Road Safety Assessment (RSAss) is required dependant Development Control and Highways Adoption criteria.
- 3) HDC/Highways Adoption (HA) Team submits an RSA Brief to the Road Safety Team.
- 4) RSA Brief allocated the RSA Team and the received date entered in the RSA Register.
- 5) RSA completed and an RSA Report sent to HDC/HA Team electronically and in hard copy.
- 6) HDC/HA discuss the RSA Report with the RSA Team as appropriate
- 7) HDC/HA discusses implications of the RSA Report with Developer.
- 8) Developer/Designer prepares Client/Designers Response, including an Exception Report as appropriate. Copies of the Client/Designers Response sent to the RSA Team Leader.
(All correspondence relating to a RSA will be kept on file)
- 9) HDC/HA Team agrees design changes in light of the RSA Report with Developer.
- 10) Developer/Designer and RSA Team discuss any contentious issues raised or recommendations made in the Client/Designers Response/Exception Report.
- 11) Any unresolved issues/concerns may be escalated to the Road Safety Team Leader and the Head of Highways Services for mediation and possibly to the

Assistant Director of Highways & Transportation Services for a decision.

- 12) Following the mediation decision, the Developer makes appropriate changes in the detailed design.
- 13) Developer confirms that detailed design of the scheme is complete.
- 14) Tender for the scheme construction is let and the scheme is completed.
- 15) Developer confirms to the HDC/HA Team that the scheme is built.

For Stage 3 RSA repeat steps 3 to 12 are repeated, then go to step 16.

- 16) HDC/HA Team agrees changes in light of the RSA Report with Developer.
- 17) RSA Team Leader arranges for completion of all details in the RSA Register and sets up reminders for Stage 4 RSA's at one and three year intervals.

The costs of all Development-led RSA's undertaken by the MKC Road Safety Engineering Team will be recharged to Developer.

HDC/HA should ensure that a clause is added to the Section 278 Agreement, that the Developer will accept the costs for all RSA's and pays any additional scheme costs that may arise from any of the RSA's.

The costs incurred by the Road Safety Team in the performance of a RSA or RSAss and for the production of the RSA/RSAss Report will be re-charged to the appropriate Capital Code and/or Development Scheme. These costs will be based on the hourly 'charge-out' rates for the officers performing the RSA or RSAss. A record of the time spent in performing the RSA or RSAss and the production of the resulting reports will be made and included with the reports as necessary.

Appendix 3.3

RSA Procedure for a Typical Development-led Scheme.

For Development led schemes involving external consultants.

For Road Safety Audit (RSA) Stage 1 and Stage 2:

- 1) Planning Application passed to Highways Development Control (HDC) as consultee.
- 2) The Developer will not normally be asked to supply a Stage 1 RSA with an application for Outline Planning.
- 3) The Developer may be asked to supply a Stage 1 RSA when making Full Application on Reserved Matters, dependant upon Highways Adoption (HA) and HDC criteria.
- 4) External consultants performing RSA's on schemes, for which MKC will be the responsible authority, will need to submit the CV's of staff carrying out the

RSA to the Road Safety Team at MKC for approval.

- 5) External consultants carry out RSA.
- 6) All details of RSA's will be recorded on the MKC RSA Register.
- 7) The RSA Report will be sent, by the consultant, to the HDC and Road Safety Engineering (RSE) Team, electronically and in hard copy.
- 8) The HDC/HA Team discusses the RSA Report with the RSE Team.
- 9) HDC/HA Team discusses any issues and additional items raised by the RSE Team and the implications of the RSA Report with Developer.
- 10) Developer prepares Client/Designers Response, including an Exception Report as appropriate and forwards the document to the HDC/HA and RSE Teams, electronically and in hard copy.
(All correspondence relating to a RSA will be kept on file)
- 11) The HDC/HA Team discusses the Client/Designers Response/Exception Report with the RSE Team.
- 12) HDC/HA Team agrees any design changes in light of the Client/Designers Response/Exception Report with Developer.
- 13) Developer/Designer and HDC/HA Team discuss any contentious issues raised or recommendations made in the Client/Designers Response/Exception Report.
- 14) Any unresolved issues/concerns may be escalated to the Road Safety Team Leader and the Head of Highways Services for mediation and possibly the Assistant Director of Highways & Transportation Services for a decision.
- 15) Following the mediation/decision, the Developer makes appropriate changes in the detailed design.
- 16) Developer confirms that detailed design of the scheme is complete.
- 17) Tender for the scheme construction is let and the scheme is completed.
- 18) Developer confirms to the HDC/HA Team that the scheme is built.

For a Stage 3 RSA repeat steps 5 to 13 and then go to step 19.

- 19) A member of the MKC RSE Team must be invited to be part of the RSA Team as a Specialist Representative.
- 20) The RSA Team carries out the audit.
- 21) The RSA Team submits the RSA Report, which must include any comments from the Specialist Representatives, to the Developer.

- 22) Developer prepares Client/Designers Response, including an Exception Report as appropriate and forwards the document to the RSA Team, the HDC/HA Team and RSE Teams, electronically and in hard copy.
- 23) Any actions arising from the Client/Designers Response/Exception Report must be approved by the HDC/HA and RSE Teams.
- 24) The MKC Road Safety Team arranges for completion of all details in the RSA Register and sets up reminders for Stage 4 RSA's at one and three year intervals.

HDC/HA should ensure that a clause is added to the Section 278 Agreement, that the Developer will accept the costs for all RSA's and pays any additional scheme costs that may arise from any of the RSA's, including Stage 4.

Appendix 4.0

Road Safety Audit Brief	
Scheme Details:	
Title:	
Location:	
Date:	
Scheme Project Manager:	
Designer:	
Road Safety Audit Stage:	Feasibility: <input type="checkbox"/> Stage 1: <input type="checkbox"/> Stage 2: <input type="checkbox"/> Stage 3: <input type="checkbox"/> Stage 4a: <input type="checkbox"/> Stage 4b: <input type="checkbox"/> (12 months) (36 months)
Road Safety Assessment* Stage:	Feasibility: <input type="checkbox"/> Stage 1: <input type="checkbox"/> Stage 2: <input type="checkbox"/> Stage 3: <input type="checkbox"/> Stage 4a: <input type="checkbox"/> Stage 4b: <input type="checkbox"/> (12 months) (36 months)

* A Road Safety Assessment (RSAss) will be carried out to the same standards as a Road Safety Audit, with the exception that the audit will be carried out by one suitably qualified person.

1.0 Roles and Responsibilities

- 1.1 It is the responsibility of the Designer to prepare the Road Safety Audit Brief (RSA Brief).
- 1.2 A copy of the RSA Brief must be forwarded to the Project Manager, prior to submission to the Road Safety Audit Team (RSAT).
- 1.3 The Project Manager may instruct the Designer to delete unnecessary items or include additional information as appropriate.
- 1.4 The Project Manager must document any changes and state the reason(s) for the changes.
- 1.5 The Project Manager must issue the RSA Brief to the RSAT.

- 1.6 The Project Manager must agree time-scales with the RSAT Leader.
- 1.7 The RSA Brief must contain sufficient information* to allow an efficient Road Safety Audit to be carried out.
- 1.8 It is the responsibility of the RSAT Leader to assess the information contained within the RSA Brief and to request additional information as appropriate.
- 1.9 The Project Manager must record any requests for additional information and state the reason(s) for the request(s).
- 1.10 The RSAT Leader must identify and record any changes in agreed time-scales and notification of delays made to the Project Manager as soon as possible.

* 'Sufficient information' **must** include any **Departures from or Relaxation of Standards** and should include any traffic flow and/or traffic speed data as appropriate.

Conformance to known Milton Keynes Council Policies should also be included.

2.0 The Brief

Please carry out a Stage 1 / 2 / 3 / 4 Road Safety Audit on the scheme described in Section 3 of this document.

3.0 The Scheme

Brief description and purpose of the scheme:
Scheme details that give an understanding of the purpose of the scheme and how it will operate.

4.0 The Site

Example:
With reference to drawing no.: LSS/ER-LL1.1 and site location details

The A123 (Edwards Road) at its junction with the B345 (Leo's Lane) forms part of the southern section of the Cardensville one-way system. The junction is controlled by automatic traffic signals.

Both Edwards Road and Leo's Lane are subject to 30mph speed limits. A system of street lighting is present. Cycle lanes do exist on the nearside lane of Edwards Road and on Leo's Lane through the crossings.

The scheme proposes to provide pedestrian phases at the traffic signals together with dropped kerbs, tactile paving and associated lining changes. Skid resistant surfacing is also proposed on the approaches to the crossings

5.0 Documents Included in this Road Safety Audit Brief

A Road Safety Audit Brief should be submitted with the following:

- Scheme drawings/plans showing drawing number, revision number, the geographical location and extent of the scheme, including area's of tie-in points.
- Details of any departures or relaxations from standards.
- Scheme details that give an understanding of the purpose of the scheme and how it will operate.
- Design Speeds.
Where appropriate.
- Speed Limits
- Traffic Flows and Forecast Flows.
Where appropriate.
- Non-Motorised Flows and Desire Lines.
Where appropriate.
- Details of nearby developments, school, retirement/care homes and accesses for emergency vehicles.
Where appropriate.
- Two A3 or A4 size drawings/plans of an appropriate scale that the Road Safety Audit Team can mark up for inclusion in the Road Safety Audit Report.
- An electronic copy of all drawings/plans for retention by the Road Safety Audit Team.
- Any relevant information relating to conformance to known Milton Keynes Council Policies should also be included.

6.0 Additional Information

As necessary

7.0 Appendices/Attachments

As necessary

Appendix 5.0 – Milton Keynes Council Road Safety Audit Report (example)

Road Safety Audit Report

To: _____, Project Manager,
Milton Keynes Council.

Our Ref: TT/MK/70/MH
Your Ref:

From: M Howes, Road Safety Engineer,
Milton Keynes Council.

Date:

Stage 3 Safety Audit, experimental no right turn, H6 Childs Way / Knowl Gate Junction, Loughton.

INTRODUCTION

This report results from a Stage 3 Safety Audit carried out on the experimental no right turn at the junction of H6 Childs Way and Knowl Gate, Loughton at the request of Morgan Munyebvu, Project Manager, Milton Keynes Council dated 18th August 2010.

The audit comprising a visit to the site was carried out on the 15th September 2010. Weather conditions during the site visit were overcast and the road surface was dry. A further site visit is to be undertaken during the hours of darkness; any additional items identified during this visit will be the subject of a separate report.

*The Audit Team membership was as follows:
K Paradine, Senior Road Safety Engineer, Milton Keynes Council,
M Howes, Road Safety Engineer, Milton Keynes Council.*

The audit has been undertaken with reference to the procedures and scope set out in Departmental Standard HD19/03. 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 designs to any other criteria.

The scheme involves the introduction of

A. ITEMS RAISED AT THE STAGE 1 AUDIT.

A Stage 1 Safety Audit was carried out on 5th January 2010. A response to the issues raised by the safety audit was received from Trevor Dove, the then Traffic and Transportation Manager, on 3rd February 2010. The response stated that monitoring would be undertaken in respect to the issues raised by the Stage 1 safety audit.

B. ITEMS RAISED AT THE STAGE 2 AUDITS.

No Stage 2 audit was requested or undertaken.

C. ITEMS RAISED AT THE STAGE 3 AUDIT.

C1 General

C1.1 PROBLEM

The Stage 1 safety audit raised the issue that, as no engineering measures were proposed to enforce the prohibited movement, it will be possible for road users to turn right out of Knowl Gate in contravention of the prohibition, either intentionally or unintentionally; this will create the potential for conflict and collision.

RECOMMENDATION

Has monitoring at any of the locations been undertaken? The measures introduced at this junction were part of a larger scheme which involved the implementation of identical right turn movement bans at a number of other grid road junctions throughout Milton Keynes.

C1.2 PROBLEM

All road users wishing to turn right onto the H6 now have to turn left and are faced with a considerable diversion to South Grafton Roundabout in order to continue their journey. This may contribute to abuse of the prohibition as well as creating additional road safety issues at South Grafton Roundabout.

RECOMMENDATION

C2 Local Alignment

No issues.

C3 Junctions

No issues.

C4 Non Motorised User Provision

No issues.

C5 Road Signs, Carriageway Markings and Lighting

C5.1 PROBLEM

RECOMMENDATION

AUDIT TEAM STATEMENT

I certify that this audit has been carried out with reference to the requirements of HD 19/03.

Audit Team Leader:

K Paradine I Eng. FIHE Senior Road Safety Engineer, Milton Keynes Council

Signed

Date

Audit Team Member:

M Howes BEng MCIHT MSoRSA Road Safety Engineer, Milton Keynes Council

Signed

Date

Milton Keynes Council

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