

MAGNA

GG104 SAFETY RISK ASSESSMENT

RETENTION OF EXISTING ACCESS ARRANGEMENTS
REDWINGS LODGE BALDOCK, HINXWORTH, SG7 5EX

On behalf of **Redwings Lodge**
Report Reference: **25/601/SRA/A**
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REPORT CONTROL SHEET

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1 INTRODUCTION

1.1 Purpose Of Report

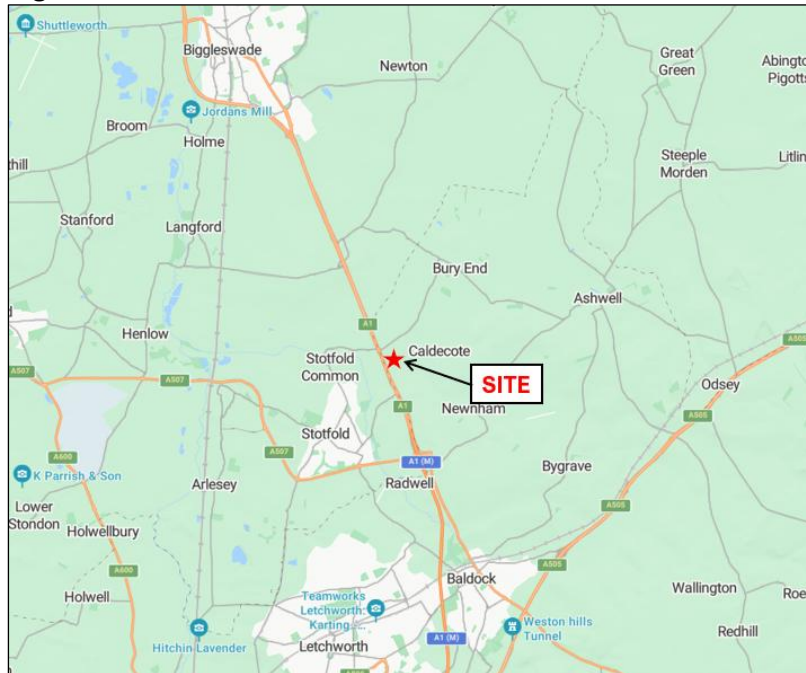
- 1.1.1 This Safety Risk Assessment (SRA) has been prepared by Magna Transport Planning Ltd on behalf of Redwings Lodge in support of a planning application for the extension of the existing hotel at Great North Road, Hinxworth.
- 1.1.2 The proposals comprise the construction of a two-storey extension providing approximately 51 additional guest bedrooms, increasing the capacity of the existing hotel from 40 bedrooms to approximately 91 bedrooms. No alterations are proposed to the existing vehicular access onto the southbound carriageway of the A1.
- 1.1.3 The application site is accessed directly from the A1 southbound carriageway via an established left-in/left-out junction, which has served the hotel and associated uses for many years. The access incorporates a nearside diverge taper which is shorter than that required by current DMRB standards due to the close proximity of the adjacent Lodge Kennels access.
- 1.1.4 During pre-application discussions National Highways confirmed that the retained access arrangement was acceptable in principle for a hotel extension comprising approximately 40 additional bedrooms. The proposed development has subsequently increased to approximately 51 additional bedrooms and National Highways has requested that the planning application be accompanied by a Safety Risk Assessment prepared in accordance with GG104.
- 1.1.5 Accordingly, this report considers whether the modest increase in traffic associated with the revised proposals would materially alter the existing level of safety risk associated with the retained access arrangement.
- 1.1.6 The proposals seek to increase the capacity of the existing hotel by providing additional guest bedrooms, together with associated parking, landscaping and ancillary works. The purpose of this report is to assess the transport and highways implications of the proposed development and to demonstrate that it can be accommodated safely and satisfactorily within the existing highway network.

2 EXISTING SITUATION

2.1 The Site

- 2.1.1 The application site comprises an established hotel facility located on the eastern side of the A1 southbound carriageway near Baldock, Hertfordshire. The site location is shown in Figure 2A.

Figure 2A Site Location

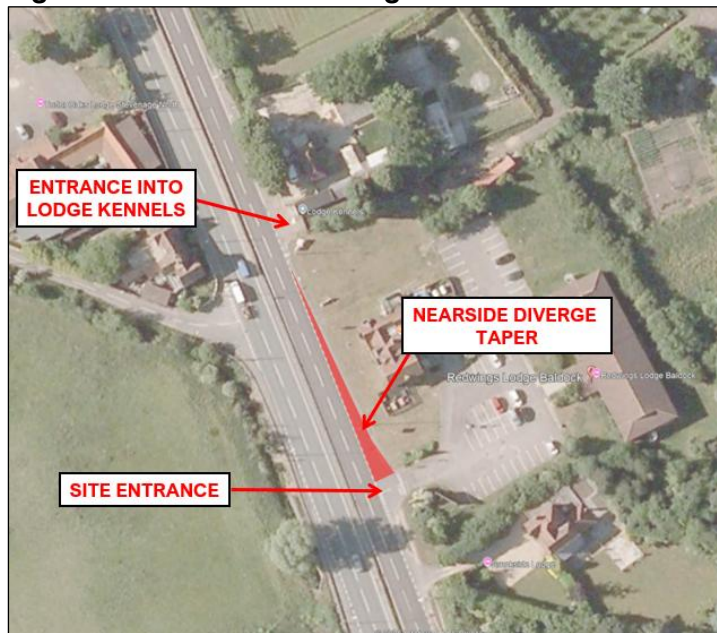


- 2.1.2 The wider site also accommodates Brookside Lodge, Cotey's Restaurant and five residential flats, all of which share a common vehicular access onto the A1 southbound carriageway. The access has therefore accommodated a mixture of hotel guests, restaurant patrons, residents, staff, servicing and maintenance vehicles over an extended period.

2.2 Existing Access

- 2.2.1 Vehicular access is provided by a left-in / left-out junction incorporating a nearside diverge taper approximately 55 metres in length. The access arrangement has been in place for a significant period of time and continues to serve the existing hotel safely and effectively.
- 2.2.2 Immediately to the north of the start of the aforementioned diverge taper is a separate private access serving Lodge Kennels, as shown in Figure 2B.

Figure 2B Access Arrangements



- 2.2.3 Owing to the proximity of this junction, it is not practicable to extend the diverge taper to current DMRB requirements without adversely affecting the adjacent access arrangement.
- 2.2.4 The access nevertheless benefits from excellent forward visibility. Visibility splays measuring approximately 2.4 metres × 295 metres are available, which accord with DMRB stopping sight distance requirements for this section of the A1. The splays are shown in Appendix 1.
- 2.2.5 The existing site access has been reviewed against the relevant requirements of DMRB CD 123 Geometric Design of At-grade Priority and Signal-controlled Junctions. This confirms that the only aspect of the existing junction that does not accord with current design standards is the length of the nearside diverge taper.
- 2.2.6 No merge taper is currently provided for vehicles exiting the site. However, having regard to the requirements of CD 123, a merge taper is not required at this location. CD 123 requires a merge taper on a dual carriageway with a design speed of 85 kph or above only where one of the following criteria is satisfied:
- left-turning traffic in the design year exceeds 600 vehicles AADT;
 - left-turning traffic exceeds 450 vehicles AADT where HGVs exceed 20%; or
 - left-turning traffic exceeds 450 vehicles AADT where the merge occurs on an upgrade greater than 4%.

2.2.7 Based on the TRICS assessment within the submitted Transport Statement (TS), the existing development, together with the proposed hotel extension, would generate substantially fewer left-turning movements than the above thresholds. Accordingly, the provision of a merge taper is not required under the criteria contained within CD 123.

2.2.8 The only existing departure from current geometric standards is therefore the reduced length of the nearside diverge taper.

2.3 Existing Safety Performance

2.3.1 A review of five years of Personal Injury Collision data confirms that there have been no recorded collisions associated with vehicles entering or leaving the hotel access.

2.3.2 One recorded collision occurred at the separate Lodge Kennels access approximately 80 metres to the north. This collision is unrelated to the operation of the hotel access.

2.3.3 The absence of any identifiable collision pattern associated with the hotel access demonstrates that the existing arrangement has operated safely despite the reduced diverge taper.

3 GG104 ASSESSMENT FRAMEWORK

- 3.1 This Safety Risk Assessment has been prepared in accordance with GG104 Requirements for Safety Risk Assessment and the accompanying National Highways guidance A Step-by-Step Guide to Using GG104 Requirements for Safety Risk Assessment. The assessment follows the structured framework prescribed within those documents and has been prepared to support National Highways' consideration of the proposed development.
- 3.2 GG104 provides a structured framework for identifying hazards, assessing safety risk and supporting transparent, evidence-led decision making. It is not intended to determine compliance with current highway design standards, nor does it replace the requirements of the Design Manual for Roads and Bridges (DMRB). Instead, it considers whether an activity gives rise to an unacceptable change in safety risk for affected populations.
- 3.3 The proposed development does not seek to alter the existing site access or introduce a new access onto the Strategic Road Network. Rather, it proposes the continued use of an established access that has operated for many years in connection with the existing hotel and associated land uses. Accordingly, the purpose of this assessment is to determine whether the modest increase in development traffic associated with the proposed hotel extension would materially alter the existing level of safety risk.
- 3.4 Consistent with GG104, the assessment has been developed by first establishing the existing safety baseline before considering the effect of the proposed development on that baseline. Particular regard has been given to the existing operational characteristics of the access, recorded collision history, visibility provision, traffic generation and the nature of vehicle movements associated with the proposed development.
- 3.5 The assessment follows the eight-stage process established by GG104, comprising:
- Planning;
 - Activity categorisation;
 - Identification of affected populations;
 - Definition of the assessment scope;
 - Establishment of the existing safety baseline and safety objectives;
 - Safety risk assessment;

- Review and updating of the assessment; and
- Assumption validation and monitoring.

3.6 The report has been prepared proportionately to reflect the scale and complexity of the proposed development. The proposal comprises an extension to an existing roadside hotel served by an established left-in/left-out access, with no alterations proposed to the highway layout or the form of the junction. Consequently, the assessment focuses on whether the forecast increase in turning movements associated with the development would materially increase the safety risk associated with the retained access arrangement.

3.7 Throughout this report, the assessment considers changes in safety risk relative to the existing operation of the access. Existing highway characteristics that remain unchanged by the development are treated as part of the established safety baseline, with the assessment focusing on whether the proposed development introduces new hazards or materially changes the likelihood or consequence of existing hazards.

4 ACTIVITY CATEGORISATION

4.1 General

4.1.1 In accordance with GG104, the first stage of the safety risk assessment process is to categorise the activity being assessed. The purpose of the categorisation is to determine the level of rigour and governance required for the assessment, having regard to the nature and complexity of the activity. It is not, in itself, an assessment of safety risk.

4.1.2 The activity subject to this assessment is defined as:

- "The continued operation of the existing left-in / left-out access onto the A1 southbound carriageway to serve the proposed extension of Redwings Lodge from 40 to approximately 91 guest bedrooms."

4.1.3 The proposed development does not introduce a new access onto the Strategic Road Network, alter the form or geometry of the existing junction, or change the type of turning movements undertaken by vehicles entering or leaving the site. The assessment therefore relates solely to the potential effect of the forecast increase in development traffic on the existing access arrangement.

4.2 Activity Categorisation

4.2.1 Table 4A provides the activity categorisation assessment in accordance with GG104.

Table 4A GG104 Activity Categorisation		
GG104 Feature	Assessment	Category
Extent of prior experience	The continued operation of an existing roadside hotel access represents a well-understood activity with extensive operational experience. The proposal does not introduce a novel highway arrangement or operational characteristic.	A
Standards, procedures and legislation	The assessment considers an existing access serving an established development. No new highway standard, legislation or operational procedure is proposed.	A
Impact on the organisation	The proposal has no impact on National Highways' operational procedures, maintenance responsibilities or organisational arrangements.	A
Activity scale	The development results in a modest increase in traffic associated with an existing hotel use and is geographically confined to a single established access.	A
Technical complexity	The proposal does not introduce innovative engineering, new technology or an unconventional highway layout. The assessment concerns an existing access operating under established conditions.	A
Stakeholder interest	Whilst National Highways has requested a GG104 assessment due to the increase in development scale, the proposal remains a straightforward extension of an existing roadside hotel and does not generate significant strategic or technical complexity.	A

4.3 Overall Categorisation

- 4.3.1 Having regard to the assessment set out in Table 4A, the activity is considered to constitute a Type A activity under the GG104 framework.
- 4.3.2 This categorisation reflects the fact that the proposal involves the continued operation of an established vehicular access serving an existing roadside hotel. The development does not introduce a new junction, alter the existing highway layout or change the nature of vehicular movements at the access. Rather, it results in a modest increase in traffic associated with an established land use.
- 4.3.3 Accordingly, the activity is considered to represent a routine operational assessment supported by established evidence and engineering judgement, proportionate to the scale and nature of the proposed development. In accordance with GG104, a Type A activity does not require the additional governance arrangements applicable to Type B or Type C activities.

5 AFFECTED POPULATIONS

5.1 General

5.1.1 In accordance with GG104, a Safety Risk Assessment is required to identify the populations that may be affected by the activity under consideration. This ensures that the assessment considers the implications of the proposed development for all relevant users of the Strategic Road Network and enables the subsequent assessment to focus on those populations that could reasonably experience a change in safety risk.

5.1.2 GG104 identifies three principal population groups:

- Workers;
- Users; and
- Other Parties.

5.1.3 Each population has been considered below in the context of the proposed development.

5.2 Workers

5.2.1 The "Workers" population comprises individuals directly employed by, or undertaking activities on behalf of, National Highways, together with contractors undertaking inspection, maintenance, incident response or other operational duties on the Strategic Road Network.

5.2.2 The proposed development does not alter the geometry or operation of the Strategic Road Network, nor does it introduce any additional maintenance requirements or operational activities affecting National Highways' workforce.

5.2.3 The modest increase in hotel-related traffic would not be expected to materially influence the safety of workers undertaking routine activities on the A1.

5.2.4 Accordingly, the proposed development is not considered to materially affect this population and no further assessment is considered necessary.

5.3 Users

5.3.1 The "Users" population comprises all road users travelling on, entering or leaving the Strategic Road Network, including private motorists, commercial vehicles, public transport, emergency service vehicles, cyclists and motorcyclists.

- 5.3.2 The proposed development would continue to utilise the existing left-in / left-out access onto the A1 southbound carriageway.
- 5.3.3 Although no alteration is proposed to the physical form of the junction, the development would generate a modest increase in vehicular turning movements associated with the enlarged hotel.
- 5.3.4 Consequently, road users entering the site, leaving the site and travelling along the A1 southbound carriageway represent the principal population potentially affected by the activity.
- 5.3.5 Accordingly, this population forms the primary focus of the subsequent safety risk assessment.

5.4 Other Parties

- 5.4.1 The "Other Parties" population comprises persons who may be affected by the operation of the Strategic Road Network but who are neither users of the road nor workers operating on it. Examples include occupiers of adjacent land and neighbouring businesses.
- 5.4.2 The proposed development does not alter the operation of adjacent land, introduce new pedestrian activity on the Strategic Road Network or otherwise affect neighbouring properties from a highway safety perspective.
- 5.4.3 The proposal therefore does not materially alter the safety risk experienced by adjacent land users or neighbouring premises.
- 5.4.4 Accordingly, no further assessment of this population is considered necessary.

5.5 Summary

- 5.5.1 Table 5A summarises the outcome of the affected population assessment.

Table 5A Affected Populations

Population	Considered	Subject to Detailed Assessment
Workers	✓	No
Users	✓	Yes
Other Parties	✓	No

- 5.5.2 The assessment concludes that the only population for which there is potential for any change in safety risk is the road user population. This reflects the nature of the proposal, which involves the continued operation of an established vehicular access serving an enlarged hotel development.
- 5.5.3 The subsequent chapters therefore focus on whether the forecast increase in turning traffic associated with the proposed development would materially alter the existing level of safety risk experienced by road users.

6 SCOPE OF ASSESSMENT

6.1 General

6.1.1 In accordance with GG104, the scope of the Safety Risk Assessment has been established at an early stage to ensure that the assessment remains proportionate to the nature of the activity and is focused on those matters capable of influencing the safety outcome.

6.1.2 The assessment relates solely to the continued use of the existing vehicular access onto the A1 southbound carriageway in connection with the proposed extension of Redwings Lodge. It considers whether the forecast increase in traffic associated with the development would materially alter the existing safety risk associated with that access.

6.2 Matters Included within the Assessment

6.2.1 The assessment includes consideration of the following matters:

- the existing left-in / left-out access arrangement onto the A1 southbound carriageway;
- the operation of the existing reduced diverge taper;
- visibility available at the site access;
- the existing highway safety record associated with the access;
- forecast changes in turning movements associated with the proposed development;
- the interaction between development traffic and vehicles travelling on the Strategic Road Network; and
- the overall change in safety risk arising from the proposed development.

6.3 Matters Outside the Scope of the Assessment

6.3.1 The following matters fall outside the scope of this Safety Risk Assessment:

- the principle of the proposed hotel development;
- the internal layout and operation of the site;
- parking provision within the development;
- servicing arrangements within the site;
- operational capacity of the A1;
- wider highway network capacity;

- pedestrian, cycling and public transport accessibility;
- environmental impacts; and
- planning policy considerations.

6.3.2 These matters have been considered separately within the accompanying TS where appropriate and do not influence the assessment of the retained access from a GG104 safety risk perspective.

6.4 Assessment Assumptions

6.4.1 The assessment has been undertaken on the basis of the following assumptions:

- the existing vehicular access will remain in its current form with no alteration to its geometry;
- the proposed development will operate as an extension of the existing hotel and will not introduce a materially different land use;
- vehicular trip generation associated with the development is as set out within the accompanying TS, which forecasts approximately 15 two-way vehicle movements during the weekday AM peak hour and approximately 17 two-way vehicle movements during the weekday PM peak hour associated with the proposed extension;
- the existing visibility available at the access remains unchanged;
- the recorded collision history is representative of the current operation of the access; and
- no material change occurs to the operation of the adjacent Strategic Road Network beyond normal traffic growth.

6.5 Existing Safety Controls

6.5.1 In accordance with GG104, the assessment recognises the existing features of the highway that already contribute to the management of safety risk and which form part of the established safety baseline.

6.5.2 These existing controls include:

- the established left-in / left-out arrangement, which removes crossing movements across opposing traffic;
- excellent forward visibility along the A1 southbound carriageway;
- an existing diverge taper that assists vehicles leaving the main carriageway;

- a long-established access arrangement familiar to regular users of the route;
- relatively low turning volumes associated with the existing roadside hotel use;
and
- the absence of any recorded personal injury collision pattern associated with the hotel access during the five-year study period.

6.5.3 These existing characteristics form part of the safety baseline against which the proposed development is assessed in the following chapters.

7 EXISTING SAFETY BASELINE

7.1 General

- 7.1.1 GG104 requires a safety baseline to be established before considering the potential effects of the proposed activity. The safety baseline represents the existing level of safety against which any change in safety risk resulting from the proposed development can be assessed.
- 7.1.2 For the purposes of this assessment, the safety baseline comprises the existing operation of the established vehicular access onto the A1 southbound carriageway together with its documented operational performance, physical characteristics and recorded safety record.
- 7.1.3 The proposed development does not alter the location, geometry or method of operation of the access. Consequently, the assessment considers whether the forecast increase in development traffic would materially alter this established safety baseline.

7.2 Existing Operation

- 7.2.1 The site has operated as an established roadside destination for many years and currently accommodates:
- Redwings Lodge (40 bedrooms);
 - Brookside Lodge (20 bedrooms);
 - Cotey's Restaurant; and
 - five residential flats.
- 7.2.2 All of these uses are served via the existing left-in / left-out access onto the A1 southbound carriageway.
- 7.2.3 The access therefore accommodates a range of vehicle types, including:
- hotel guests;
 - staff;
 - servicing vehicles;
 - restaurant customers;
 - residents;
 - maintenance vehicles; and
 - occasional emergency service vehicles.

7.2.4 Accordingly, the existing access already experiences a broad range of turning movements representative of a typical roadside hotel operation.

7.3 Existing Physical Characteristics

7.3.1 The access comprises a left-in / left-out junction incorporating a nearside diverge taper of approximately 55 metres.

7.3.2 Whilst the diverge taper is shorter than would normally be expected under current DMRB design standards, the available visibility from the access measures approximately 2.4 metres × 295 metres, providing excellent forward visibility for both approaching and turning vehicles.

7.3.3 The reduced diverge taper is an existing characteristic of the access and results from the close proximity of the neighbouring Lodge Kennels access immediately to the north.

7.3.4 No alteration to these physical characteristics is proposed as part of the development.

7.4 Existing Safety Performance

7.4.1 The most reliable indicator of existing safety performance is the recorded operational history of the access.

7.4.2 A review of Personal Injury Collision data covering the most recent five-year period has identified no recorded collisions associated with vehicles entering or leaving the hotel access.

7.4.3 Although one Personal Injury Collision has been recorded at the separate Lodge Kennels access approximately 80 metres to the north, there is no evidence that this collision was related to the operation of the hotel access.

7.4.4 Similarly, the limited number of collisions recorded elsewhere on the A1 within the wider study area are unrelated to the operation of the site access.

7.4.5 Accordingly, there is no identifiable collision pattern that would indicate an existing highway safety deficiency associated with the operation of the retained access.

7.5 Existing Traffic Characteristics

- 7.5.1 The existing hotel already generates regular turning movements throughout the day associated with guest arrivals, departures, servicing activity and staff movements.
- 7.5.2 These movements occur within the established operating environment of the A1 southbound carriageway and have done so over an extended period.
- 7.5.3 The accompanying TS demonstrates that the proposed extension would generate approximately:
- 15 two-way vehicle movements during the weekday AM peak hour; and
 - 17 two-way vehicle movements during the weekday PM peak hour.
- 7.5.4 This equates to approximately one additional vehicle movement every three to four minutes during the busiest hours of the day.
- 7.5.5 Although this represents an increase in turning traffic, the frequency of additional movements remains modest in the context of the operation of the Strategic Road Network.
- 7.5.6 Traffic flows recorded by the DfT permanent traffic counter (Site 16073) demonstrate that the A1 southbound carriageway carries approximately 1,729 vehicles during the weekday AM peak hour and 2,202 vehicles during the weekday PM peak hour.
- 7.5.7 The accompanying TS forecasts that the proposed hotel extension would generate only 3 inbound vehicle movements during the weekday AM peak hour and 11 inbound vehicle movements during the weekday PM peak hour. As vehicles entering the site are the only movements that utilise the nearside diverge taper, these movements represent the relevant comparison when considering the operation of the retained access.
- 0.17% during the weekday AM peak hour ($15 \div 1,729$); and
 - 0.50% during the weekday PM peak hour ($17 \div 2,202$).
- 7.5.8 These figures demonstrate that the increase in traffic utilising the existing diverge taper is negligible when considered in the context of the overall traffic flow on the A1 southbound carriageway. Consequently, whilst the proposal marginally increases the number of vehicles entering the site, the increase in exposure to the existing hazard is extremely small.

7.6 Baseline Summary

7.6.1 The established safety baseline can therefore be summarised as follows:

- an existing left-in / left-out access serving established roadside uses;
- good forward visibility in accordance with DMRB stopping sight distance requirements;
- an existing reduced diverge taper constrained by adjacent infrastructure;
- no alteration proposed to the highway geometry;
- no identifiable collision pattern associated with the operation of the hotel access;
- an established history of safe operation serving a mixture of hotel, restaurant and residential traffic; and
- a modest forecast increase in turning movements associated with the proposed hotel extension.

7.6.2 The subsequent assessment therefore considers whether the additional development traffic would materially alter this established safety baseline or introduce any new or unacceptable safety risk to users of the Strategic Road Network.

8 SAFETY OBJECTIVES

8.1 General

8.1.1 GG104 requires the Safety Risk Assessment to establish clear safety objectives against which the effects of the proposed activity can be assessed. The safety objectives should be proportionate to the nature of the activity and informed by the established safety baseline.

8.1.2 The existing access has operated over an extended period serving the existing hotel and associated land uses, with no identifiable pattern of personal injury collisions attributable to vehicles entering or leaving the site. Consequently, the existing operation represents an appropriate safety baseline against which the proposed development can be assessed.

8.2 Safety Objectives

8.2.1 Having regard to the existing safety baseline and the nature of the proposed development, the following safety objectives have been adopted for this assessment:

- The proposed development shall not introduce any new highway safety hazards associated with the operation of the existing site access.
- The proposed development shall not materially increase the likelihood of existing highway safety hazards occurring.
- The proposed development shall not materially increase the potential consequences of existing highway safety hazards.
- The existing access shall continue to operate safely for users of the Strategic Road Network following occupation of the proposed hotel extension.
- The proposed development shall not result in a material deterioration in the existing highway safety performance of the retained access arrangement.

8.3 Assessment Criteria

8.3.1 The subsequent safety risk assessment considers each potential hazard associated with the retained access and evaluates whether the proposed development would:

- introduce a new hazard;
- materially increase exposure to an existing hazard;
- materially increase the severity of an existing hazard; or
- materially alter the residual level of safety risk experienced by road users.

- 8.3.2 Where none of the above occurs, it is considered that the proposal satisfies the safety objectives established by this assessment.
- 8.3.3 The detailed hazard identification, likelihood/severity scoring and residual risk assessment are provided in Appendix 2, which has been prepared using the example recording format set out in Appendix E/C of GG104.

9 HAZARD IDENTIFICATION AND SAFETY RISK ASSESSMENT

9.1 General

9.1.1 In accordance with GG104, this chapter identifies the principal hazards associated with the continued operation of the retained site access and considers whether the proposed hotel extension would materially alter the existing level of safety risk.

9.1.2 The assessment has been undertaken relative to the established safety baseline described in Chapter 7. Consequently, the assessment does not reconsider the acceptability of the existing access in isolation, but instead focuses on whether the proposed development introduces new hazards or materially changes the likelihood or consequence of existing hazards.

9.1.3 The assessment has regard to:

- the existing highway geometry;
- the recorded collision history;
- the operational characteristics of the access;
- forecast development traffic;
- existing highway safety controls; and
- engineering judgement.

9.1.4 A summary of the hazard identification and safety risk assessment is provided in Appendix 2. This records the identified hazards, affected populations, before and after risk values, existing controls, residual risk and monitoring requirements.

9.2 Hazard 1 – Existing Reduced Diverge Taper

Existing Hazard

9.2.1 The existing access incorporates a nearside diverge taper of approximately 55 metres, which is shorter than that required by current DMRB design standards. This is an existing characteristic of the access resulting from the proximity of the adjacent Lodge Kennels access.

9.2.2 The purpose of a diverge taper is to facilitate the deceleration of vehicles leaving the main carriageway before entering the site. A reduced taper has the potential to reduce the available distance over which vehicles can comfortably decelerate.

Existing Safety Controls

9.2.3 Notwithstanding the reduced taper length, several existing factors contribute positively towards the safe operation of the access:

- the access operates as left-in / left-out only;
- excellent forward visibility is available;
- the access has operated in this form for many years;
- driver expectancy is well established;
- no personal injury collisions have been recorded at the hotel access during the study period.

Effect of the Proposed Development

9.2.4 The proposed development does not alter the geometry of the access or the diverge taper.

9.2.5 The only change is a modest increase in turning traffic associated with the enlarged hotel.

9.2.6 The accompanying TS forecasts that the proposed development would generate only 3 inbound vehicle movements during the weekday AM peak hour and 11 inbound vehicle movements during the weekday PM peak hour. These are the only development-generated movements that would utilise the existing diverge taper. In comparison with observed southbound traffic flows on the A1, these movements represent an increase of approximately 0.17% and 0.50% respectively.

9.2.7 The additional turning traffic represents less than 1% of the existing southbound traffic flow on the A1 during the peak hours. Consequently, whilst the proposal marginally increases exposure to the existing hazard, the increase is not considered sufficient to materially alter the likelihood or consequence of a safety event.

Assessment

9.2.8 Given that the proposal would increase the number of vehicles utilising the diverge taper by less than 1% of the prevailing southbound traffic flow during both peak hours, together with the established collision record and unchanged highway geometry, the proposal is not considered to materially alter either the likelihood or consequence of the identified hazard.

9.3 Hazard 2 – Vehicle Deceleration on the A1

Existing Hazard

- 9.3.1 Vehicles entering the site are required to decelerate from prevailing traffic speeds before leaving the A1 southbound carriageway.
- 9.3.2 As with any roadside access on a high-speed road, this creates the potential for interaction between turning vehicles and following traffic.

Existing Safety Controls

- 9.3.3 The existing controls include:
- dedicated diverge taper;
 - excellent forward visibility;
 - clear access definition;
 - left-turn entry only;
 - established driver expectation.

Effect of Proposal

- 9.3.4 The proposal would marginally increase the frequency of turning vehicles entering the site.
- 9.3.5 However, the manoeuvre itself remains unchanged and no additional conflict points are introduced.

Assessment

- 9.3.6 Given the modest increase in turning frequency and absence of any existing collision pattern associated with rear-end shunt collisions, the proposal is not considered to materially increase this safety risk.

9.4 Hazard 3 – Vehicles Exiting the Site

Existing Hazard

- 9.4.1 Vehicles exiting the site merge into the A1 southbound carriageway.

Existing Safety Controls

- 9.4.2 Existing controls comprise:
- left-turn exit only;

- good visibility;
- established acceleration opportunity;
- no crossing manoeuvres.

Effect of Proposal

9.4.3 The number of exiting vehicles would increase marginally in line with the enlarged hotel.

9.4.4 No change is proposed to the geometry or method of operation of the junction.

Assessment

9.4.5 The proposal does not introduce any new conflict points and is not considered to materially increase the existing safety risk.

9.5 Hazard 4 – Driver Expectancy

Existing Hazard

9.5.1 Unexpected turning movements on high-speed roads can reduce driver expectancy.

Existing Safety Controls

9.5.2 In this instance:

- the access is long established;
- the hotel has operated for many years;
- regular users are familiar with the junction;
- the access is clearly identifiable.

Effect of Proposal

9.5.3 The proposal does not alter the location or appearance of the junction.

9.5.4 The modest increase in turning traffic would not materially alter driver expectancy.

Assessment

9.5.5 No material increase in safety risk is identified.

9.6 Overall Safety Risk Assessment

9.6.1 The assessment demonstrates that the proposed development does not introduce any new highway safety hazards associated with the retained access.

- 9.6.2 The identified hazards all relate to existing characteristics of the access and have been considered against the established safety baseline.
- 9.6.3 Whilst the proposal results in a modest increase in turning traffic, the increase in exposure is limited and does not materially alter the likelihood or consequence of the identified hazards.
- 9.6.4 The existing access has operated safely over an extended period and there is no evidence of an existing collision pattern that would indicate an underlying highway safety problem attributable to the operation of the junction.
- 9.6.5 Having regard to the existing safety controls, operational history, recorded collision data and forecast development traffic, it is concluded that the proposed hotel extension would not result in a material deterioration in the existing level of safety risk experienced by users of the Strategic Road Network.
- 9.6.6 The assessment set out in Appendix 2 confirms that the residual safety risk associated with each identified hazard remains Low following the proposed development. No additional mitigation or monitoring is therefore required beyond the continued operation of the existing access arrangement.

9.7 Hazard Summary

Table 9A Hazard Summary

Hazard	Existing Controls	Effect of Proposal	Residual Risk
Reduced diverge taper	Left-in/left-out, visibility, established operation	Slight increase in exposure only	No material change
Vehicle deceleration	Diverge taper, visibility	No change in manoeuvre	No material change
Vehicles exiting site	Left-turn exit, visibility	Slight increase in exiting traffic	No material change
Driver expectancy	Established access	No change to layout	No material change

10 CONCLUSIONS

- 10.1 This Safety Risk Assessment has been prepared in accordance with the principles of GG104 to consider the effect of the proposed extension of Redwings Lodge on the operation of the existing vehicular access onto the A1 southbound carriageway.
- 10.2 The assessment has been undertaken using the structured process prescribed by GG104, including the identification of affected populations, definition of the assessment scope, establishment of the existing safety baseline, formulation of safety objectives and assessment of the principal highway safety hazards associated with the retained access.
- 10.3 The assessment demonstrates that the proposed development does not introduce a new vehicular access, alter the geometry of the existing junction or change the nature of vehicular movements associated with the operation of the site. The only material change arising from the proposal is a modest increase in turning movements associated with the enlarged hotel.
- 10.4 The accompanying TS forecasts that the proposed 51-bedroom extension would generate approximately 15 two-way vehicle movements during the weekday AM peak hour and approximately 17 two-way vehicle movements during the weekday PM peak hour, equivalent to approximately one additional vehicle movement every three to four minutes during the busiest periods of the day.
- 10.5 The retained access has operated over many years serving the existing hotel together with associated residential and commercial uses. During this period, there has been no identifiable pattern of Personal Injury Collisions associated with vehicles entering or leaving the hotel access. This operational history represents an important component of the established safety baseline against which the proposed development has been assessed.
- 10.6 Whilst the existing diverge taper is shorter than current DMRB standards would normally require, this is an established characteristic of the access rather than a consequence of the proposed development. The assessment concludes that the modest increase in traffic associated with the proposed hotel extension does not materially alter the likelihood or consequence of the existing hazards associated with the retained access.

- 10.7 The assessment has identified no new highway safety hazards arising from the proposed development. Furthermore, no evidence has been identified to indicate that the forecast increase in turning movements would materially increase the existing level of safety risk experienced by users of the Strategic Road Network.
- 10.8 Accordingly, it is concluded that the continued operation of the existing access to serve the proposed 91-bedroom hotel would not result in an unacceptable increase in safety risk and would satisfy the safety objectives established by this assessment.

Appendix 1. EXISTING SITE ACCESS VISIBILITY SPLAYS

Appendix 2. SAFETY RISK ASSESSMENT SUMMARY

Hazard Ref	Hazard Description	Risk Description (If...Then...)	Population Affected	Sub-population	Before (L/S/R)	Response Measures	After (L/S/R)	Details and Assumptions	Monitoring
H1	Reduced diverge taper at existing access	If a vehicle decelerates to enter the site using the reduced diverge taper, then following traffic could fail to react appropriately, leading to a rear-end shunt.	Users	Southbound A1 traffic; vehicles turning into the site	2 / 3 / 6	Existing left-in/left-out arrangement; 295 m visibility; established access; no collision history; modest traffic increase only.	2 / 3 / 6	Existing access retained. No geometric changes proposed. No recorded injury collisions associated with the hotel access. Additional development traffic is modest.	None beyond normal operation.
H2	Deceleration of vehicles leaving the A1	If vehicles reduce speed to enter the hotel, then speed differentials could increase the risk of interaction with following traffic.	Users	Southbound A1 traffic	2 / 3 / 6	Existing diverge taper; excellent forward visibility; established driver expectancy; no change to manoeuvre.	2 / 3 / 6	Development increases turning frequency only. Nature of manoeuvre remains unchanged.	None.
H3	Vehicles exiting the site	If vehicles merge from the hotel access onto the A1, then inadequate gaps could result in a collision with through traffic.	Users	Vehicles exiting the site; southbound A1 traffic	2 / 3 / 6	Left-turn exit only; excellent visibility; no crossing manoeuvres; established access arrangement.	2 / 3 / 6	Proposal results in only a modest increase in exiting vehicles and no alteration to access geometry.	None.
H4	Driver expectancy	If drivers are unaware of turning vehicles, then unexpected braking or lane positioning could occur.	Users	Through traffic	1 / 3 / 3	Long-established hotel access; clearly visible junction; established roadside destination; existing private signage and visibility.	1 / 3 / 3	Proposal does not alter the position, appearance or operation of the access. Driver expectancy remains unchanged.	None.
H5	Increased turning movements associated with hotel extension	If additional hotel traffic increases the number of turning manoeuvres, then exposure to existing hazards could increase.	Users	Vehicles entering and exiting the site; through traffic	2 / 3 / 6	Additional traffic limited to approximately 15 two-way AM peak trips and 17 two-way PM peak trips; no new conflict points introduced.	2 / 3 / 6	The increase represents approximately one additional movement every three to four minutes during the busiest periods and does not materially alter the established safety baseline.	None.