OPTIMA
Intelligent Highways Solutions

GG119 ROAD SAFETY AUDIT RESPONSE REPORT

Project Information

Project Title:	Storthes Hall, Kirkburton
Project Team:	Optima Highways and Transportation Ltd
RSA Report Stage	Stage 1
RSA Organisation:	Road Safety Initiatives
RSA Report Reference:	RSI-MH-0225-006 Issue 1.0
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Report Title:	**Response Report to Stage 1 Road Safey Audit (rev 2)**
Reference:	250317 Storthes Hall, Kirkburton - Response Report (rev 2)

Authorisation

Prepared by:	Martin Whittaker FIHE MSoRSA
Position:	Director (Design Lead)
Team:	Designer
Signed:	
Date:	17th March 2025
Approved by:	Adam Darwin
Position:	Group Engineer
Signed:	
Date:	18th March 2025

Project Details

This Road Safety Audit Response Report relates to a Stage 1 Road Safety Audit dated 27th February 2025 prepared by Road Safety Initiatives, which considers the proposed access arrangements and off-site highway works associated with a proposed residential development at the former Storthes Hall Student Village, Kirkburton, Huddersfield (Planning Application Reference 2023/93667). Full details of the scheme can be found within the Road Safety Audit Brief dated 14/02/25.

Key Personnel

Overseeing Organisation

Kirklees Council Highways Service – Liz Cusick (Operational Manager – Highway Design & Safety)

Kirklees Council Scheme Manager – Adam Darwin (Group Engineer – HDM, Planning)

Organisation Promoting Improvement

Ubrique Investments Limited – Adnan Shaikh (Developer Scheme Manager)

Road Safety Audit Organisation

Road Safety Initiatives – Team Leader: Mark Hedley IEng MCIHT MSoRSA FIHE RegRSA (IHE) Certificate of Competency.

Road Safety Initiatives – Team Member: Martin Morley BSc (Hons) MCIHT MSoRSA Certificate of Competency

Design Organisation

Optima Highways and Transportation Ltd – Martin Whittaker FIHE MSoRSA (Design Lead)

Optima Highways and Transportation Ltd – James Stackhouse BA (Hons) MCIHT AMSoRSA (Designer)

Road Safety Audit Decision Log

Road Safety Audit Problem and Recommendation

3.1.1 Problem

Location: Southern access junction in Storthes Hall Lane.

Summary: Potential for 'vehicle-to-vehicle' incidents associated with parked vehicles.

Detail: On-street parking directly opposite the access junction (the access road will become two-way) may result in a vehicle turning right into the junction blocking through traffic. This may lead to possible 'shunts' or 'head-on' related collisions.

Recommendation: It is recommended that Storthes Hall lane is widened to allow unimpeded two-way movements, with on-street parking still present. If this is not practical, its recommended that parking restrictions are introduced or that the access junction is relocated away from on-street parking.

Design Team Response

RSA problem accepted.

Both recommended options have been investigated.

The proposed site access arrangements shown on drawing no. 18092/GA/02/REV G have been revised to include provision of a 'no waiting at any time' TRO in the vicinity of the junction to allow a bus and refuse vehicle to turn right in and right out of the development unimpeded. A vehicle swept path analysis of the proposals are shown on drawing no. 18092/ATR/02/REV A.

The proposed TRO will result in the loss of 6no. parked vehicle spaces opposite the junction. However, the equivalent number of formal visitor bays will be re-provided along the initial section of spine road to accommodate any displaced parking. The proposed TRO will also cover the junction radii and full extent of the visibility splays.

An alternative design has also been produced shown on drawing no. 18092/GA/06, which illustrates proposed road widening along Storthes Hall Lane to allow the existing on street parking to remain in situ.

In order to accommodate minimum through lane widths, the junction location would be required to relocate further north. The proposed carriageway widening and visibility splays require the boundary wall along Storthes Hall Lane to be set back into the root protection area of trees subject to a tree preservation by up to 1.8m over a length of circa 39m, resulting in additional tree loss.

A vehicle swept path analysis of the road widening option are shown on drawing no. 18092/ATR/05.

Overseeing Organisation Response

The RSA Problem and Recommendations are accepted.

The preferred option (in highways terms) to address this problem would be the localised widening of Storthes Hall Lane shown on drawing 18092/GA/06, as this option doesn't require the introduction of 'no waiting at any time' TRO's opposite the junction, which would displace existing on-street parking. However, this option would result in the loss of a number of large and/or TPO'd trees (as indicatively shown on the latest drawing). Therefore, the impact on these trees needs to be fully established and considered further by the planning case officer, who will need to confirm whether this option can be pursued.

Should it be determined that the localised widening option can be pursued, the following changes to drawing 18092/GA/06 and 18092/ATR/05 should be incorporated:

- The parking bay markings shown on the west side of Storthes Hall Lane are considered to provide little (if any) benefit. Therefore, these should be omitted. In their place, keep clear line markings (with no text) to diagram 1026.1 of TSRGD should be installed at the private drives on the west side of Storthes Hall Lane instead.
- Additional dimensions to be added to drawing 18092/GA/06. These should confirm the southbound lane width is to be narrowed to a consistent minimum width of 3.65m (e.g. between the drives to No. 62 and 59), and that the northbound traffic lane will be locally widened to 3.25m within the vicinity of the access (e.g. again, between the drives of No. 62 and 59).
- Tracking drawing 18092/ATR/05 to be updated to include the position of parked cars on the west side of Storthes Hall Lane (e.g. in lieu of the of the parking bays markings that are to be removed from the drawing – see above).

Post-RSA Action

Road widening scheme proposed. The requested minor amendments are shown on updated drawing 18092/GA/06 Rev B with revised tracking shown on drawing 18092/ATR/05 Rev B.

Road Safety Audit Problem and Recommendation

3.1.2 Problem

Location: Southern access junction in Storthes Hall Lane.

Summary: Potential for 'vehicle-to-vehicle' incidents associated with parked vehicles.

Detail: On-street parking directly opposite the access junction (the access road will become two-way) may result in a vehicle turning right out of the junction travelling on the wrong side of the road to pass parked vehicles. This may lead to possible 'head-on' related collisions.

Recommendation: It is recommended that Storthes Hall lane is widened to allow unimpeded two-way movements, with on-street parking still present. If this is not practical, its recommended that parking restrictions are introduced or that the access junction is relocated away from on-street parking.

Design Team Response

RSA problem accepted.

Both recommended options have been investigated.

The proposed site access arrangements shown on drawing no. 18092/GA/02/REV G have been revised to include provision of a 'no waiting at any time' TRO in the vicinity of the junction to allow a bus and refuse vehicle to turn right in and right out of the development unimpeded. A vehicle swept path analysis of the proposals are shown on drawing no. 18092/ATR/02/REV A.

The proposed TRO will result in the loss of 6no. parked vehicle spaces opposite the junction. However, the equivalent number of formal visitor bays will be re-provided along the initial section of spine road to accommodate any displaced parking. The proposed TRO will also cover the junction radii and full extent of the visibility splays.

An alternative design has also been produced shown on drawing no. 18092/GA/06, which illustrates proposed road widening along Storthes Hall Lane to allow the existing on street parking to remain in situ.

In order to accommodate minimum through lane widths, the junction location would be required to relocate further north. The proposed carriageway widening and visibility splays require the boundary wall along Storthes Hall Lane to be set back into the root protection area of trees subject to a tree preservation by up to 1.8m over a length of circa 39m, resulting in additional tree loss.

A vehicle swept path analysis of the road widening option are shown on drawing no. 18092/ATR/05.

Overseeing Organisation Response

The RSA Problem and Recommendations are accepted.

This problem would be addressed by either of the two options proposed to address this problem and Problem 3.1.1. Therefore, see the Overseeing Organisation Response in relation to Problem 3.1.1 for further details.

Post-RSA Action

Road widening scheme proposed. Refer to problem 3.1.1.

Road Safety Audit Problem and Recommendation

3.1.3 Problem

Location: A629 Penistone Road/Storthes Hall Lane (northern arm).

Summary: Potential for 'vehicle-to-vehicle' incidents.

Detail: The revised layout of the junction potentially results in uncertainty on the north side of the junction where the give-way road marking is replaced with an edge of carriageway road marking. There is a risk of 'vehicle-to-vehicle' collisions between vehicles entering Woodside Lees Lane (or parking area) and those egressing Woodside Lees Lane (or parking area) simultaneously. In addition, the diagonal lines of the proposed central hatching are 'back to front', possibly further adding to road user uncertainty.

Recommendation: It is recommended that the junction arrangement is clearly defined to inform drivers of their priority and route. It is also recommended that the new and modified road markings conform to Chapter 5 of the Traffic Signs Manual.

Design Team Response

RSA recommendation accepted.

The following changes have been made:

- The proposed give way marking has been extended to the north, to reflect the current arrangement of the junction;
- The edge of carriageway markings within the centre of the junction have been removed; and
- The central hatching markings to the north of the parking bays have been reoriented.

Overseeing Organisation Response

The RSA Problem and Recommendations are accepted.

The Design Team Responses are accepted.

Post-RSA Action

Amended lining shown on drawing 18092/GA/05 Rev D.

Road Safety Audit Problem and Recommendation

3.2.1 Problem

Location: A629 Penistone Road/Storthes Hall Lane (southern arm).

Summary: Potential for pedestrian falls.

Detail: The proposed footway along sections of Storthes Hall Lane will benefit pedestrians. However, the new footways are adjacent to low walls with steep drops. This may create a hazard and a risk of falls and injury to pedestrians, particularly during darkness and wintry conditions.

Recommendation: It is recommended that the walls/parapets are improved to prevent pedestrian falls.

Design Team Response

RSA recommendation is accepted.

Suitable pedestrian safety barriers/railings to the existing wall/parapet will be provided at the S278 detailed design stage, which are likely to include either a tubular steel handrail affixed to either the top of the wall or to the front face, immediately abutting the wall.

This has been noted on drawing 18092/GA/05 rev C.

Overseeing Organisation Response

The RSA Problem and Recommendation are accepted.

The Design Team Response is accepted.

However, should it not be feasible to affix a handrail to the top of the existing wall (e.g. for structural reasons), and a handrail is installed along the front face of the wall instead, this would reduce the proposed 1m wide footway to an affective width of circa 0.95m (assuming a 50mm tubular steel handrail

is used). Therefore, this could result in some pedestrians straddling the footway and carriageway (e.g. pedestrians pushing a wide buggy etc.). As such, the new footway should include a low height kerb (e.g. 30mm kerb check) along the narrow section of this footway, where the affective footway width is less than 1.5m, which is consistent with the existing footway provision further north on this one-way section of Storthes Hall Lane. This should be annotated on drawing 18092/GA/05.

Post-RSA Action

Note regarding low height kerb added to drawing 18092/GA/05 Rev D.

Road Safety Audit Problem and Recommendation

3.2.2 Problem

Location: A629 Penistone Road/Storthes Hall Lane (southeastern arm).

Summary: Turning traffic may be in conflict with crossing pedestrians.

Detail: The proposed footway along sections of Storthes Hall Lane extends into Penistone Road near the former 'Spring Grove Tavern'. There is no crossing for pedestrians using the western footway of Penistone Road and walking to/from the Huddersfield-bound bus stop. Turning traffic may be in conflict with crossing pedestrians, some of whom may not be aware that this section of Storthes Hall Lane is one-way.

Recommendation: It is recommended that there is a suitable pedestrian crossing in Storthes Hall Lane (southeastern arm) at its junction with Penistone Road.

Design Team Response

RSA recommendation accepted.

A flush dropped crossing has been added and noted on drawing 18092/GA/05 rev D

Overseeing Organisation Response

The RSA Problem and Recommendation is accepted.

he Design Team Response is accepted.

Post-RSA Action

Note regarding dropped pedestrian crossing added to drawing 18092/GA/05 Rev D.

Road Safety Audit Problem and Recommendation

3.2.3 Problem

Location: Southern access junction in Storthes Hall Lane.

Summary: Possible vehicle /pedestrian collision.

Detail: A few pedestrians may cross Storthes Hall Lane between the existing houses (on the west side) and the new residential development (on the east side). In the absence of a suitable crossing, there is a possibility of a vehicle / pedestrian collision.

Recommendation: It is recommended that the likely pedestrian crossing demand is assessed and that, if needed, a safe and convenient crossing is included in the proposals.

Design Team Response

RSA recommendation accepted.

Pedestrian crossing demand between the proposed development and existing small cluster of residential dwellings to the west of Storthes Hall Lane will be low.

Traffic volumes along Storthes Hall Lane are predicted to be around 220-239 vehicles during the busiest network peak hours at the design year of 2032 and clearly below this level during large periods of the day. Guidance contained in the document 'Assessment of Walked Routes to School' states that where two-way traffic flows are below 240 vehicles per hour a road is considered to be safe to cross as it provides a reasonable gap in traffic.

Following assessment of the likely demand and traffic volumes along Storthes Hall Lane, it has been determined that a formal crossing is not required.

Overseeing Organisation Response

The RSA Problem and Recommendation is accepted.

The Design Team Response is accepted.

Pedestrian crossing demand in this location is likely to be low (e.g. no significant increase over current crossing demand). Therefore, in combination with the relatively low two-way traffic flows on Storthes Hall Lane, it is agreed that a formal crossing point is not necessary in this location.

Post-RSA Action

No further action required.

Road Safety Audit Problem and Recommendation

3.2.4 Problem

Location: A629 Penistone Road Toucan crossing.

Summary: Possible for a collision involving a vehicle and a pedestrian/cyclist.

Detail: A pedestrian or cyclist may decide to cross 'halfway' to the central refuge however there will be no pedestrian button unit. There is potential for a collision involving a vehicle and a pedestrian / cyclist using at the Toucan crossing, if they are unable to call up the crossing phase.

Recommendation: It is recommended that a 'call button' is include in the central refuge at Toucan crossing.

Design Team Response

RSA recommendation accepted.

A call button has been added to drawing 18092/GA/05 rev D, which will be confirmed with the Council's UTC Team at the detailed design stage.

Overseeing Organisation Response

The RSA Problem and Recommendation is accepted.

The Design Team Response is accepted.

Post-RSA Action

Call button note added to drawing 18092/GA/05 Rev D with the exact specification of the call button (if required) determined by the Councils UTC Team at the detailed design stage.

Road Safety Audit Problem and Recommendation

3.3.1 Problem

Location: Southern access junction in Storthes Hall Lane.

Summary: Potential for a collision in darkness involving a vehicle and a pedestrian/cyclist.

Detail: There will be an increase in pedestrian and cyclist activity as a result of the development. There is potential for a collision in darkness involving a vehicle and a pedestrian/cyclist crossing the junction.

Recommendation: It is recommended that adequate lighting is provided.

Design Team Response

RSA recommendation accepted.

Appropriate street lighting will be provided at the S278 detailed design stage.

This has been noted on drawings 18092/GA/02 rev G and 18092/GA/06 (Note 4).

Overseeing Organisation Response

The RSA Problem and Recommendation is accepted.

The Design Team Response is accepted.

Post-RSA Action

Note regarding street lighting added to drawing 18092/GA/06 Rev B.

Road Safety Audit Problem and Recommendation

3.3.2 Problem

Location: Northern access junction in Storthes Hall Lane.

Summary: Potential for a collision in darkness involving a vehicle and a pedestrian/cyclist.

Detail: There will be an increase in pedestrian and cyclist activity as a result of the development. There is potential for a collision in darkness involving a vehicle and a pedestrian / cyclist crossing the junction.

Recommendation: It is recommended that adequate lighting is provided.

Design Team Response

RSA recommendation accepted.

Appropriate street lighting will be provided at the S278 detailed design stage.

This has been noted on drawing 18092/GA/01 rev F (Note 4).

Overseeing Organisation Response

The RSA Problem and Recommendation is accepted.

The Design Team Response is accepted.

Post-RSA Action

Note regarding street lighting added to drawing 18092/GA/01 Rev F.

Road Safety Audit Problem and Recommendation

3.3.3 Problem

Location: A629 Penistone Road Toucan crossing and A629 Penistone Road / North Road pedestrian and cycle crossing facilities.

Summary: Potential for a collision in darkness involving a vehicle and a pedestrian/cyclist.

Detail: There will be an increase in pedestrian and cyclist activity as a result of the development and the associated Toucan and pedestrian crossing and cycle right-turn facility. There is potential for a collision in darkness involving a vehicle and a pedestrian / cyclist using the facilities if the road lighting is inadequate.

Recommendation: It is recommended that adequate lighting is provided.

Design Team Response

RSA recommendation accepted.

Appropriate street lighting will be provided at the S278 detailed design stage. This has been noted on drawing 18092/GA/05 rev C (Note 6).
Overseeing Organisation Response The RSA Problem and Recommendation is accepted. The Design Team Response is accepted.
Post-RSA Action Note regarding street lighting added to drawing 18092/GA/05 Rev D.
****************End of RSA Stage 1 Decision Log ******************

5. Road Safety Audit Response Report Statements

On behalf of the Design Organisation, I certify that: **1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.**	
Name:	Martin Whittaker
Signed:	
Position:	Design Organisation Lead
Organisation:	Optima Highways and Transportation Ltd
Date:	17/03/25
On behalf of the Overseeing Organisation, I certify that: **1) The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Design Organisation; and,** **2) The agreed RSA actions will be progressed.**	
Name:	Adam Darwin
Signed:	
Position:	Kirklees Council Scheme Manager (Group Engineer – HDM, Planning)
Organisation:	Kirklees Council
Date:	18/03/25

End of Stage 1 RSA Response Report