

PROPOSED RESIDENTIAL DEVELOPMENT, LAND AT HARTFORD END
STAGE 1 ROAD SAFETY AUDIT DESIGNER'S RESPONSE

Project Details:

Project Title:	Proposed Residential Development, Land East of B1417 Hall Lane, Hartford End Proposed Highway Access, Stage1 Road Safety Audit Designer's Response
Date:	15.09.2023
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On behalf of:	Stockplace Investments Ltd

Authorisation Sheet:

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Introduction and Context

This Designer's Response report has been produced in response to a Stage 1 Road Safety Audit (RSA) carried out at the request of Essex County Council, by Allen Transport Consultancy Ltd, with reference ATC/860/ITL/1 V1.0 and dated 12 September 2023.

The Safety Audit considered the preliminary design for the proposed highway junction to serve the proposed residential development site, amounting to 50 units, off the B1417 in Hartford End.

In summary, the proposals considered as part of the Stage 1 RSA report were:

- Provision of a new access junction on the B1417 Hall Lane to serve the proposed development,
- Provision of footways on the eastern and western sides of the B1417 Hall Lane;
- Provision of an uncontrolled pedestrian crossing facility at the northern end of the site,
- Provision of bus stops on the north and southbound lanes of the B1417;

This report has been prepared in accordance with the approach set out in GG 119.

Key Personnel:

Overseeing Organisation:	Essex County Council
RSA Team:	Lisa Allen of Allen Transport Consultancy Ltd – RSA Team Leader Adriano Cappella of Allen Transport Consultancy Ltd – RSA Team Member
Design Organisation:	Intermodal Transportation Ltd

Road Safety Audit Decision Log

Reference	RSA Problem	RSA Recommendation	Design organisation response	Overseeing Organisation response	Agreed RSA Action
2.2.1	Existing telegraph pole located near the proposed access junction could result in a potential increased risk of vehicles striking the telegraph pole or vehicular and pedestrian collisions occurring, whereby vehicle occupants and pedestrians could sustain personal injury.	It is recommended that the existing telegraph pole should be annotated on the scheme drawing. Should the existing telegraph pole impact upon the proposed access junction or proposed western footway, it is further recommended that the telegraph pole should be shown to be relocated.	The position of the telegraph pole to be reviewed at the detailed design stage of the project and to be relocated if necessary.		
2.3.1	Potential vertical alignment issues at the proposed site access junction with the B1417 Hartford End could result in a potential increased risk of side impact vehicular collisions occurring, whereby vehicle occupants could sustain personal injury.	It is recommended that a proposed dwell area / flat plateau should be provided where the access road junction meets the B1417 Hartford End carriageway. Ideally, the approach gradient of the access road should be 2% or a gradient of 1:50. Additionally, where possible, the design should seek to achieve a level section of at least 15m length adjacent to the B1417 Hartford End carriageway.	This detailed design matter would be considered at the appropriate stage of the project and it would be ensured that the proposed levels and gradient of the access would comply with the Essex Design Standards.		
2.3.2	Location of the proposed access junction in relation to Ridley Green could increase the potential risk of side impact collisions occurring, whereby vehicle occupants could sustain personal injury.	It is recommended that the location of the proposed access junction should be in line with Local Authority policies on junction spacing. If for whatever reasons the above cannot be achieved, then it is recommended that approval for the current proposals should be sought and agreed with the overseeing organisation, i.e. the Local Highway Authority, Essex County Council.	<p>The distance between the site access and the Ridley Green access is 46m. The distance between Ridley Green and the Mill Lane access located to the south is 70m. Littley Park Lane is situated on the opposite side of the B1417 and in the middle of Ridley Green and Mill Lane, i.e. approximately 35m from each. The Essex Design Guide indicates that the spacing between two junctions on the same side of the road in situations such as this is to be 100m and the distance between two junctions on opposite sides should be 50m. The spacing between the existing junctions to the south does not accord with the EDG requirements but it is noted from the Essex TraffWeb website that there were no Personal Injury Accidents (PIAs) recorded at these junctions within the latest available 5 year period from August 2018.</p> <p>The proposed access location has been proposed on the basis of achieving visibility splays within the highway boundary. The access location was also agreed with Essex Highways during pre-app scoping discussions and no concerns</p>		


			<p>were raised. Relocation of the access would result in reduced visibility splays.</p> <p>In the light of the above it is considered that the position of the proposed access junction should be regarded as acceptable.</p>		
2.3.3	<p>Restricted visibility could result in a potential increased risk of side impact collisions occurring, whereby vehicle occupants could sustain personal injury.</p>	<p>It is recommended that the proposed visibility splay should be kept clear of any impediments in order to mitigate the above described potential collision scenario. If for whatever reasons the above cannot be achieved, then it is recommended that approval for the current proposals should be sought and agreed with the overseeing organisation, i.e. the Local Highway Authority, Essex County Council.</p>	<p>The hedge at the frontage of Hillside would be trimmed back up to the highway boundary in order to achieve the visibility splays shown on the scheme drawing and which are commensurate with the results of the speed survey.</p>		
2.3.4	<p>Stationary buses located within the either of the proposed northbound bus stop locations impact upon the visibility splays between drivers emerging from either the proposed access junction or the existing Ridley Green junction and vehicular traffic on the B1417 Hartford End. This situation could result in a potential increased risk of side impact collisions occurring, whereby vehicle occupants could sustain personal injury.</p>	<p>It is recommended that either the northbound bus stop should be located outside the visibility splays for the proposed development site access junction and the existing junction of Ridley Green or a bus stop layby should be provided, in order to mitigate the above described potential collision scenario.</p>	<p>The existing bus services are infrequent and operate approximately 1 bus every 2 hours. Furthermore, every service may not call at the stops, i.e. passengers may not wish to board / alight every passing service, which would further reduce the frequency with which buses call at the stops. ITL note that the existing northbound Brewery bus stop to the north is located on carriageway to the south of Camsix Chase potentially within the visibility splay of that junction and that Essex TraffWeb indicates that no PIAs were recorded at that junction within the latest available 5 year period from August 2018.</p> <p>The proposed bus stop locations are based on the ability to provide footways on appropriate width within the limits of highway boundary.</p> <p>In the light of the above it is considered that the possible positions for the proposed northbound bus stop should be regarded as acceptable.</p>		
2.3.5	<p>Potential swept path requirements of vehicles entering and exiting the proposed development site access junction could result in a potential increased risk of head or side swipe type collisions occurring, whereby vehicle occupants could sustain personal injury.</p>	<p>It is recommended that swept path analysis exercises should be undertaken in order to assist with the required geometry of the development site access junction. Should the swept path analysis exercises indicate that the current access junction proposals impact upon the swept path requirements, where by vehicular collisions could occur, then it is further</p>	<p>As indicated within Manual for Streets it is considered that if infrequent larger vehicles cross the centreline of minor roads when entering / exiting those roads that should not give rise to highway safety concerns. Furthermore, it is considered that drivers of infrequent large vehicles would wait for gaps in the main road traffic flow, which</p>		

		recommended that the junction geometry should be modified, in order to mitigate the above described potential collision scenarios.	would be relatively frequent in this rural location, before potentially entering the opposing traffic lane as part of a turning manoeuvre. Refuse collection vehicles currently entering and existing Ridley Green do over sail the centre line of the B1417. We note that there were no accidents recorded at this junction within the latest available 5 year period.		
2.4.1	Assumed kerb heights could result in a potential increased risk of pedestrian trips and falls occurring, especially for those pedestrians who are blind, visually or mobility impaired, where by pedestrians could sustain personal injury.	It is recommended that dropped kerbs and tactile paving should be provided across the access junction, in order to mitigate the above described potential injury scenario.	Dropped kerbs and tactile paving to be shown at the detailed design stage of the project.		
2.4.2	Potential restricted inter-visibility at the uncontrolled pedestrian crossing facility could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.	It is recommended that the inter-visibility should be kept clear of any impediments, in order to mitigate the above described potential collision scenario. This is likely to require the removal of existing vegetation.	Vegetation would be trimmed, as far as possible within the limits of the highway boundary, in order to maximise inter-visibility.		
2.4.3	An existing ditch is present near the proposed footway, which could result in a potential increased risk of pedestrian slips and falls occurring, especially during the hours of darkness at the B1417 is unlit, whereby pedestrians could sustain personal injury.	It is recommended that suitable and adequate measures, such as fencing or a culvert, should be provided, in order to mitigate the above described potential injury scenario.	There would be a 0.5m verge between the back edge of the footway and the top of the ditch. However, if deemed appropriate by the Local Highway Authority a wooden knee rail fence or similar could be provided at the back edge of the footway.		
2.4.4	Lack of pedestrian continuity for pedestrians seeking to access the southbound bus stop could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby pedestrians could sustain personal injury.	It is recommended that a continuous footway should be provided in order for local residents to access the southbound bus stop, without having to walk within the existing carriageway, in order to mitigate the above described potential collision scenario.	The stretch of footway on the eastern side of the road is to provide access to the southbound bus stop only and there are no other stretches of footway on that side of the road within the vicinity of the site. Furthermore, there is not sufficient width within the highway verge on the western side of the road to provide a continuous footway and there are very few / no properties on that side of the road within the vicinity of the site. As such, a continuous pedestrian route on the western side of the road is proposed linking to existing footway provision in the area and the proposed crossing point towards the northern end of the site. At present, there is not a continuous stretch of footway along the B1417. There is no footway section leading to the existing bus stops to the north of the site		

			<p>and pedestrians would have to walk on the carriageway while accessing the stop.</p> <p>In the light of the above it is considered unlikely that pedestrians would walk along the western side of the road and that the proposed continuous pedestrian route on the eastern side of the road would provide betterment for existing residents.</p>		
2.4.5	Existing telegraph pole located within the proposed eastern footway could result in a potential increased risk of vehicular and pedestrian collisions occurring, whereby vehicle occupants and pedestrians could sustain personal injury.	It is recommended that the existing telegraph pole should be annotated on the scheme drawing. Should the existing telegraph pole impact upon the proposed eastern footway, it is further recommended that the telegraph pole should be shown to be relocated.	The position of the telegraph pole to be reviewed at the detailed design stage of the project and to be relocated if necessary.		

Design Organisation and Overseeing Organisation Statements

Design Organisation Statement

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:	Devesh Shrivastava
Signed:	
Position:	
Organisation:	Intermodal Transportation Ltd
Date:	15/09/23

Overseeing Organisation Statement

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:	
Signed:	
Position:	
Organisation:	
Date:	