

Proposed Housing Development  
Pear Tree Farm, Church Street,  
Brierley, Barnsley, S72 9JR.

Designer's Response Report to RSA Stage One Audit.

## Introduction

The purpose of this document is to provide an assessment against the Stage One Safety Audit provided by TMS for the Residential development at Church Street Brierley, Barnsley, S72 9JR. This DRR has been undertaken by Building Link Design accompanies a Full Planning Application Erection of 10No. new dwellings following demolition of existing bungalow, Farmhouse and Outbuilding accessed via church street a 0.495Ha.

This Designer's Response Report addresses the issues raised within the Stage 1 Road Safety Audit (RSA1) dated 5th June 2025, conducted for the proposed Section 278 highway works to support a 10-dwelling residential development at Pear Tree Farm, Church Street, Brierley, Barnsley.

The report considers and responds to the sole road safety problem identified in the RSA1 and draws upon empirical data from the Access Appraisal (Matrix, Dec 2014), including traffic speed and volume surveys. The design also considers contextual alignment with planning policies and surrounding infrastructure as detailed in the Design and Access Statement (4038 – DAS).



Site Location

## RSA Problem & Recommendation

### Problem 3.1: Excessive Approach Speeds May Lead to Vehicle Conflict at Site Access

RSA Location: Proposed site access junction with Church Street, specifically the westbound approach where Church Street bends.

Summary of Problem: The RSA team observed that vehicles approaching from the west, negotiating the right-hand bend near the site, appeared to be travelling at speeds which may exceed what the proposed visibility splay can safely accommodate. There is concern that if actual speeds exceed the design assumption (30 mph), this could lead to increased risk of 'pull-out' type collisions, where vehicles turning out of the site are struck by through-traffic.

RSA Recommendation: Undertake a speed survey to verify actual approach speeds. If 85th percentile speeds are significantly above the 30 mph posted limit, then measures to reduce approach speeds should be considered, such as:

- Road markings (e.g., 'SLOW'),

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- Physical traffic calming features,
- Narrowing carriageway via markings or physical design elements.

## Designer's Response

Speed Survey and Results Analysis: A 7-day Automated Traffic Count (ATC) was conducted on Church Street, approximately 50 metres west of the proposed access, to capture vehicle speeds and flow in both directions.

Key Data – Eastbound (Approaching Site Access from Bend):

85th Percentile Speed: Recorded at 25.6 mph (7-day average)

Well within the 30-mph limit, and below the threshold that would justify a 62m visibility splay.

Average Speed: 22.0 mph, suggesting a calm traffic environment.

Speed Profile: 90% of vehicles travel between 21-35 mph; only a handful exceed 35 mph, and none exceed 50 mph.

The speeds are consistent throughout the day and do not indicate peak-time anomalies.

Conclusion from Survey: The observed and recorded speeds do not justify any immediate speed-reduction measures or raise concerns about visibility-related collision risks.

The proposed visibility splays from the new site access are as follows: 44 metres to the North, in the direction of the observed bend and 86 metres to the South, toward the town centre.

These distances were measured at a 2.4m x-distance set-back, in line with Manual for Streets (MfS) guidance.

MfS Speed-Splay Guidance:

85th Percentile Speed	Required Visibility Splay
25 mph	43 metres
30 mph	60 metres

The 86m splay to the South exceeds the requirement for speeds up to 30mph.

The 44m splay to the North matches the requirement for 25mph – consistent with actual observed speeds. Conclusion from Design Review: The proposed visibility splays are safe and compliant with National Design Standards based on actual traffic speeds.

## Design Team Conclusion.

The design team has reviewed the RSA concerns thoroughly and concludes the following:

Traffic Speeds Are Within Design Expectations: Verified by the ATC speed survey, the 85th percentile speed is 25.6 mph, below the 30 mph threshold.

Visibility Splays Are Adequate: The proposed splay distances of 86m (South) and 44m (North) either meet or exceed the visibility requirements as per Manual for Streets.

No Physical Calming Measures Needed: In light of the above, additional physical traffic calming or road narrowing measures are not necessary at this time. However, should future RSA stages (Stage 2/3) or site

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observations during construction indicate changes in traffic behaviour, low-cost remedial actions such as 'SLOW' carriageway markings could be introduced as a contingency.

No Design Amendments Required: The design meets all applicable road safety, visibility, and accessibility standards, and integrates well within the context of Church Street and the village of Brierley.