



March 2026

Transport Statement Addendum

Land South of The Bowling Green The Daisycroft Henfield West Sussex BN5 9RN

Enclosure

N/A

Preamble

This Transport Statement Addendum has been prepared in support of the planning application for nine dwellings on land south of the Bowling Club at The Daisycroft, Henfield.

The Highway Authority has requested additional two-way swept path tracking along the site access. In addition to providing that tracking information, this addendum undertakes a proportionate operational assessment of the initial constrained section of the access, taking account of cumulative traffic using the route, including the existing Bowling Club and allotments.

The purpose of this note is to demonstrate, using a realistic but robust worst case scenario, the probability of opposing vehicles meeting within the constrained section and to confirm that the access arrangement operates safely and efficiently in practical terms.

Constrained Section

The initial section of the accessway approaching the Bowling Club and application site incorporates a localised constrained width before widening to provide a defined passing place.

The measured length of the constrained section is 46 metres. Beyond this point, the access widens sufficiently to allow vehicles to pass and manoeuvre safely within the site.

The constrained section serves the existing Henfield Bowling Club (approximately 21 parking spaces), 10 allotment plots (with space for up to 5 vehicles), and the proposed nine dwellings.

Cumulative Traffic Assessment

A cumulative worst realistic peak scenario has been assessed.

The published Bowling Club fixture list for 2026 confirms that activity is seasonal (April to September) and that peak arrival periods occur prior to organised afternoon or evening fixtures.

For robustness, it has been assumed that all 21 parking spaces fill within a 45-minute arrival window prior to a fixture. This represents a deliberately conservative scenario.

The corresponding arrival rate is:

$21 \text{ vehicles} \div 0.75 \text{ hours} = 28 \text{ inbound vehicles per hour}$

In respect of the allotments, although a maximum of 5 vehicles may be present, visits are typically staggered. A conservative assumption of 4 two-way movements per hour has therefore been applied to represent turnover during a busy period.

The proposed development generates approximately 5 two-way vehicle movements per hour during peak periods, as established within the submitted Transport Statement.

Accordingly, the total two-way movements using the constrained section during the worst realistic combined hour are:

28 (bowling inbound)

- 5 (development)
 - 4 (allotments)
- = 37 movements per hour

The average interval between vehicle movements during this combined peak hour is therefore:

$$60 \div 37 = 1.62 \text{ minutes}$$

= approximately 97 seconds between vehicle movements

Traversal Time of Constrained Section

To assess encounter likelihood, the time taken for a vehicle to traverse the 46 metre constrained section must be established.

Assuming a conservative internal vehicle speed of 5 mph:

$$5 \text{ mph} \times 0.447 = 2.24 \text{ metres per second}$$

Traversal time is therefore:

$$46 \div 2.24 = 20.5 \text{ seconds}$$

A vehicle will therefore occupy the constrained section for approximately 20 seconds.

Occupancy and Encounter Probability

When compared against the 97 second average arrival interval, the constrained section occupancy ratio during the worst realistic combined hour is:

$$\begin{aligned} 20.5 \text{ seconds} \div 97 \text{ seconds} &= 0.21 \\ &= 21\% \end{aligned}$$

This represents the proportion of time that any vehicle occupies the constrained section. It does not equate to opposing vehicle conflict, as the majority of movements during peak bowling periods are directional.

During fixture arrival periods, movements are predominantly inbound. Outbound flow during this period comprises development departures (approximately 2.5 vehicles per hour) and allotment departures (approximately 2 vehicles per hour), giving a combined outbound flow of approximately 4.5 vehicles per hour.

The corresponding directional outbound arrival interval is:

$$\begin{aligned} 60 \div 4.5 &= 13.3 \text{ minutes} \\ &= \text{approximately } 800 \text{ seconds} \end{aligned}$$

The probability of an outbound vehicle arriving during the 20 second occupancy window of an inbound vehicle can therefore be expressed as:

$$20 \div 800 = 0.025$$
$$= 2.5\%$$

Accordingly, even under deliberately robust and temporally coincident assumptions, the probability of opposing vehicles meeting within the constrained 46 metre section during the busiest realistic hour of the year is approximately 2–3%.

It is important to note that this represents a short seasonal arrival period associated with organised fixtures and does not occur daily. The assessment also assumes uniform random arrival, which in practice overstates encounter likelihood given the directional clustering of bowling arrivals and departures.

Operational Context

It is also important to recognise that bowling fixtures are seasonal and do not occur daily. Movements during fixture arrival periods are highly directional rather than random.

Vehicle speeds within the access are low, forward visibility is available and an internal passing place is provided beyond the constrained section. The access does not function as a through route and serves destination based movements only.

In practical terms, the access operates as a lightly trafficked shared residential drive where informal yielding behaviour governs movement.

Summary & Conclusions

The constrained section measures 46 metres in length and serves a combination of existing and proposed uses. A cumulative worst realistic scenario has been assessed incorporating bowling fixtures, allotment activity and residential traffic.

Even under robust combined assumptions, the statistical probability of opposing vehicle conflict within the constrained section remains low, in the order of approximately 2–3% during the busiest realistic hour of the year. This represents a short seasonal peak rather than a daily condition.

Having regard to the modest scale of development, the seasonal nature of bowling activity, the limited scale of allotment use and the short, constrained length, the access arrangement operates safely and efficiently in operational and highway safety terms. There are no transport or highway capacity grounds arising from the constrained access length that would justify refusal of planning permission.

-----END-----

Alistair McMurray MSc BSc CEng MCIHT MCILT

Director – Traffic Engineering and Transport Planning



Sarnlea

Consulting Engineers