
IVINGHOE, BUCKINGHAMSHIRE

Safety, civility and lower speeds in an historic village



Version 02
December 2015
For Ivinghoe Parish Council

This report was prepared by Hamilton-Baillie Associates Ltd

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For Ivinghoe Parish Council
With support from Buckinghamshire County Council.



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Contents

Introduction	1
Background to the study	2
The village of Ivinghoe	3
Initial observations	4
Design principles	5
Proposed interventions	6
Minimising east-west through traffic	8
Great Gap	10
Ford End Bridge	12
Maud Jane's Close	14
Church Road transition	16
Approach to The Centre	18
Ivinghoe Centre	20
The village shop and library	22
Brookmead School	24
Wider measures for School access	26
Materials, costs and implementation	28
Conclusions	29

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Introduction

Transport, traffic and movement are an integral part of rural life. For villages located at the intersection of busy routes, the relationship between traffic and the built environment is often the most critical factor in defining the quality of life and patterns of movement. Across the UK and elsewhere, local communities struggle to maintain a balance between the inescapable realities of traffic and the need to maintain the coherence and quality of public space in villages.

Ivinghoe in Buckinghamshire is one such village. Its position at the intersection of the busy B488 and B489, and its close proximity to several larger centres of population means that traffic issues have dominated local concerns for many years. The quality of the historic fabric of the village is reflected in the long-established conservation area, recently reviewed and extended. Ivinghoe is a village community where the distinctive character of its buildings, streets and spaces defines its identity and popularity. Growing traffic speeds and volumes, and the gradual encroachment of highway measures can easily erode such character, unless very determined efforts over time are taken to influence driver perceptions, expectations and behaviour.

This study explores the potential for a number of small-scale measures that can help to reduce speeds and maintain the quality, safety and civility of Ivinghoe's village environment whilst coping with the realities of rural traffic movement. The measures are intended to establish a set of principles to reconcile high volumes of traffic with the essential qualities of place that make Ivinghoe an attractive community. The strategy aims to achieve this balance by integrating minor highway measures with the landmarks and locations that define this historic village.



Background to the study

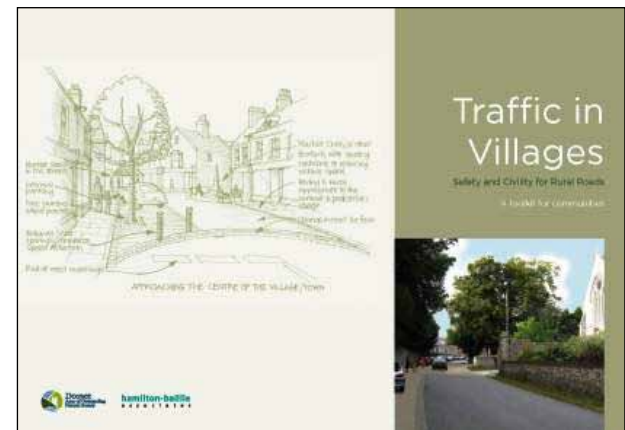
These notes, sketches and observations build on a visit and community seminar held in April 2015. This event explored a number of core principles for successfully coping with traffic in villages, and drew on many similar initiatives elsewhere in the UK and mainland Europe. A strategy for adapting and managing the streets and highway spaces within the village forms part of related initiatives by the Parish Council such as the development of a neighbourhood plan and the review of the conservation area.

As in so many towns and villages in the south-east of England, Ivinghoe is under pressure to provide additional housing. This study and the neighbourhood plan are intended to ensure that any such developments benefit the community as a whole, and can contribute by helping to minimise the impact of increasing traffic in the village. The report is intended to help establish a consensus behind a series of measures that can guide the contribution of future developers at the same time as informing programmes for improvement, maintenance and repair by the highway authority.

The study is supported and funded by the Great Brickhill Local Area Forum of Buckinghamshire County Council. Whilst the proposals outlined are very specific to the particular context of Ivinghoe,

the core principles can be applied in other villages under pressure from traffic. Publications such as Manual for Streets 2 and Traffic in Villages underpin the recommendations, which reflect the highway authority's need to reduce maintenance costs and to minimise reliance on excessive signs, marking and physical constraints such as road humps.

A parallel exercise is underway for the adjoining village of Pitstone to the west of Ivinghoe, and the two studies are intended to be complementary. However the measures outlined can stand alone as a means to support the long-term aspirations of the Parish Council and its partners to retain and enhance the special character of this historic village.



The village of Ivinghoe

Ivinghoe lies at the foot of the Chiltern Hills in an area of rolling chalklands. Its tall ancient church stands at the centre of a predominately linear village form. The churchyard terminates the long sweeping route of Church Road into the village from the B489 to the east. To the north, Station Road leads out toward Cheddington and Horton, passing by the small outlying hamlets of Ford End and Great Gap. To the west, the High Street drops down towards Brookmead School, and leads out through Pitstone on the B488.

The village is unusual in retaining extensive public open space right into the centre. The Lawn provides a valuable resource in the heart of the village, containing a well-used playground and giving an open backdrop to the Church, the Town Hall, Village Shop and Library, and the former schoolhouse now converted to a community hub. Mature trees reinforce the sense of rural space and help to create a distinctive open character to the centre of Ivinghoe. Although blessed with an excellent legacy of attractive listed buildings, the structures themselves do not contain or enclose the village centre. The dispersed and open nature of the village continues along Station Road and the High Street, where the boundaries of the village are not well-defined.

* Ivinghoe PC mVAS recordings, 2014-2015

Traffic volumes of between 4,000 and 5,000 vehicles per day pass along Station Road according to recent traffic counts. Speed recordings suggest particular problems on Station Road, and tend to be higher than 35 mph on the approaches*. In and around the Centre, vehicle speeds are not particularly high, but sufficient to create a degree of severance between the different parts of the village.



Conventional traffic calming measures in the form of a chicane on Church Road and some occasional speed humps appear insufficient to maintain an appropriate balance between traffic and the public realm of Ivinghoe.



The Lawn Playground



High Street & Town Hall

Initial observations

Ivinghoe presents an example of a village whose layout and distinctive characteristics make it particularly vulnerable to growing traffic flows. The dispersed and linear form of Ivinghoe makes it more difficult to establish a low-speed context, a problem made more difficult by the absence of clearly defined boundaries between the village and the surrounding highways. Road markings and signage further accentuate the linearity, combining to erode a sense of place.

This loss of a sense of place is particularly notable when driving through Ivinghoe. There is little visible connection between the important open spaces and buildings and the streets themselves. The school, the Community Hub, the library and even the magnificent church are not immediately evident to the driver. The result is a village that

does not announce its presence to drivers in ways that foster the critical change in driver expectations and behaviour.

This lack of definition is exacerbated by the absence of clear boundaries to signal the village centre. There are three entry points to the village, and each presents challenges. From the east the junction of the B488 and B489 creates a wide and fast approach along Church Road. To the north, the scattered housing of Great Gap and Ford End blur the boundary with Ivinghoe. To the west, the village of Pitstone appears to merge with Ivinghoe in the absence of a distinctive space outside Brookmead School or any other change in the scale of the road. Clarifying the sense of arrival in Ivinghoe will help re-establish a clear village context.



The Centre



Road markings add to linearity



Town Hall, Library and Shop



Ivinghoe western entrance

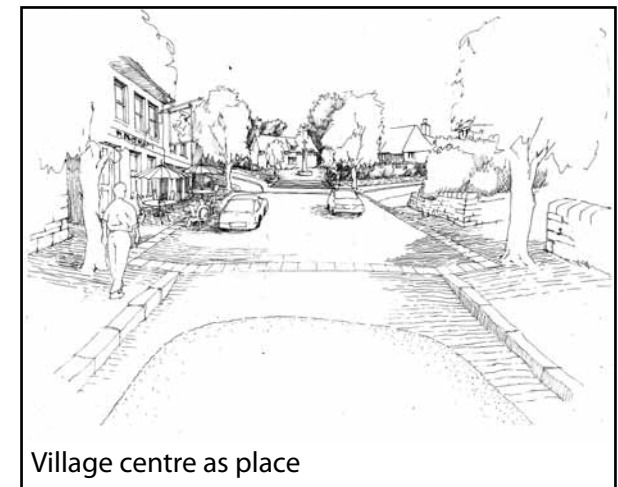
Design principles

Our recommendations for Ivinghoe build on a combination of measures designed to reduce speeds, discourage through traffic, and to increase driver awareness of the particular characteristics and context of Ivinghoe. They aim to supplement existing speed limits by changing the perceptions and responses of drivers to the streetscape environment. They also aim to reduce highway signage and clutter, and to build on the intrinsic qualities of the conservation area.

Reducing the apparent width of the carriageway is one important element. We would recommend that centre-line markings be allowed to fade and not be renewed. Wherever appropriate on-street parking spaces should be clearly delineated from the carriageway, and a simple edge treatment used to visually narrow roads at key locations.

Such visual narrowing would be supplemented by the principle of place-making at strategic locations. This may require modifying some junctions to give emphasis to surrounding buildings and the activities they generate. Such place-making may involve the introduction of a degree of ambiguity to alert drivers to the particular circumstances of a place, and to reduce the sense of driver entitlement.

Above all, the approach builds on a careful understanding of pedestrian activity and desire lines, to give strong and visible emphasis to the physical and psychological connections and routes within the village. Such links help to inform and alert drivers to their surroundings, and to foster low speeds and increased care, even where pedestrian numbers are relatively low. The village and its activities inform the design of the highway, rather than the reverse.



Proposed interventions

The initial analysis and public event in April 2015 and subsequent discussions prompted the selection of the key sites for modification. The specific locations offer the most cost-effective measures to modify speeds and improve the safety and quality of public space in Ivinghoe. Although similar measures may be helpful in other places, the sites focus on the boundaries and the village centre of Ivinghoe.

A potential alternative east-west through route for traffic between Aylesbury and Dunstable could use the Upper Icknield Way. Modifying the key junctions in both Pitstone and on the north-eastern edge of Ivinghoe to give greater prominence to this southern route would help distinguish the village from the strategic highway network. Although this will not reduce traffic on Station Road, it offers an alternative to through traffic using Church Road and High Street, avoiding Brookmead School and the centre of the village.

The small car-park serving Pitstone Windmill could help to highlight the start of Ivinghoe for traffic approaching on the B488. However the site is well outside the village, and we would, on reflection, recommend a focus on locations within, or on the edge of, the village itself. To this end, the modifications include measures on the northern approach in Great Gap and Ford End, in Church Road, and on the key sites surrounding The Lawn, including the junction of Maud Jane's Close, the front of Brookmead School, and the village centre itself.

The changes to the B488/B489 Junction at Handpost Cottages should be combined with improved crossings and footways to link Ivinghoe to the footpath network (Middle Path) and to the Windmill car park.

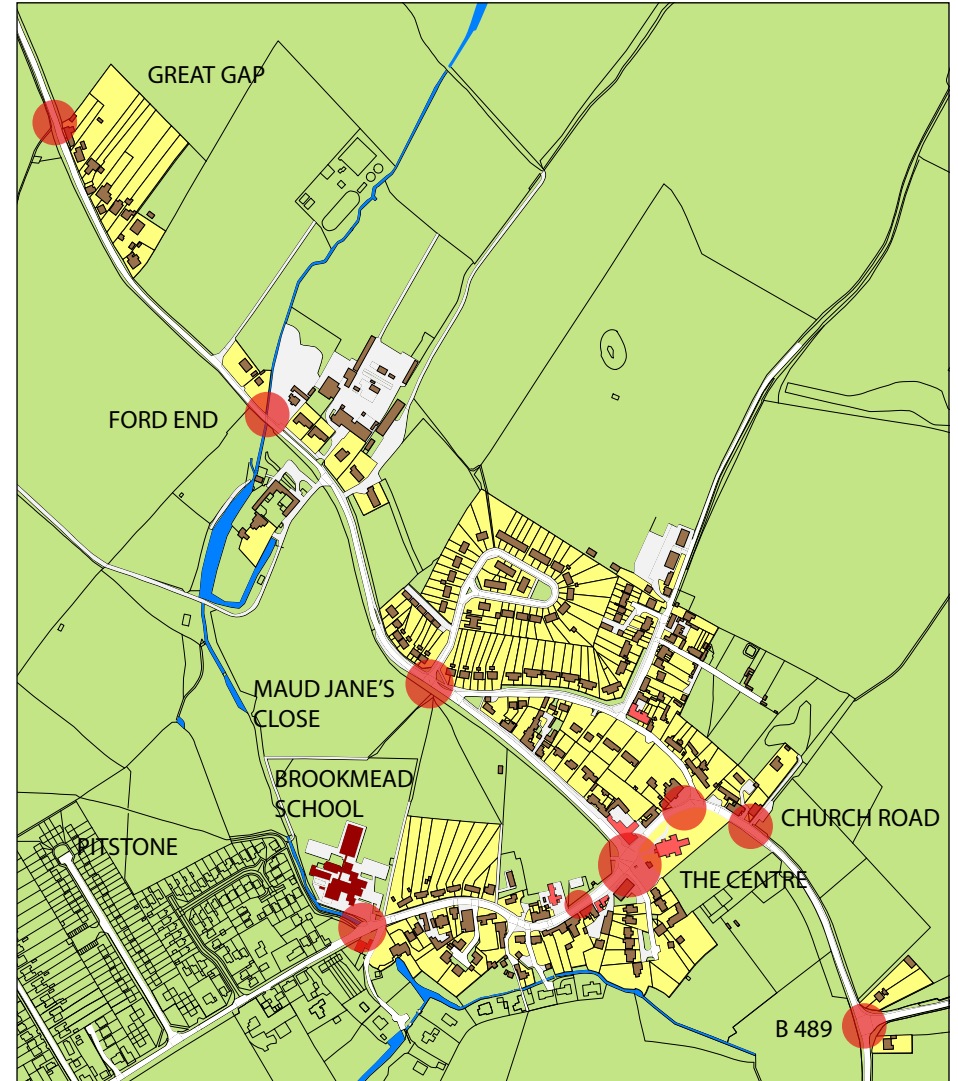


Pitstone Windmill car park

The potential alternative route



Key Sites for modification



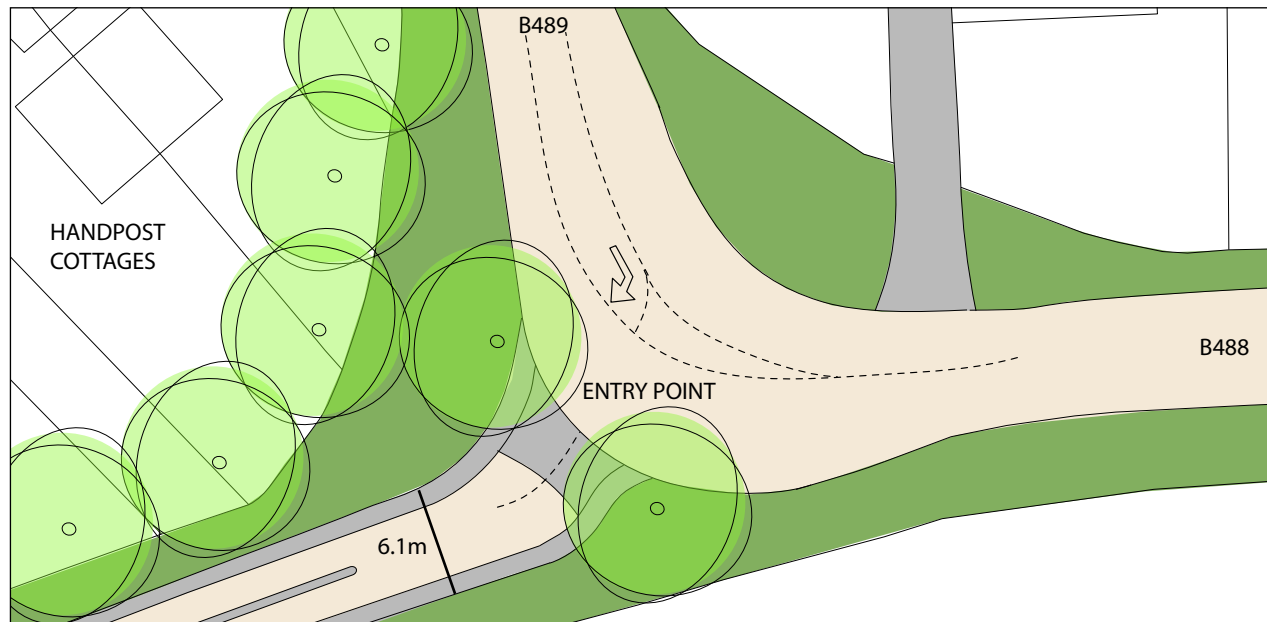
Minimising east-west through traffic

The existing junction between the B488 and B489 near Handpost Cottages to the west of Ivinghoe presents a wide and fast approach to the village. The speed of traffic has been partly modified by an artificial chicane, but the scale of the road is at odds with the village context.

We would recommend modifying the priority at the junction to direct and encourage through traffic away from the village via Upper Icknield Way. The approach to Ivinghoe could be scaled down to the width of 6.1 metres, creating an initial entry point framed by trees and contrasting

surface treatment. Edge strips to the existing verges could be applied to maintain the narrower scale, which would allow the chicane island to be removed.

A similar measure could be introduced at the junction of Westfield Road and Marsworth Road in Pitstone to effectively re-align the B489. In combination with smaller-scale signing, this modification helps to establish a lower-speed entry into Church Road and Ivinghoe itself.



Existing junction



Chicane to be removed



Great Gap

As its name implies, the small collection of houses to the north of Ivinghoe are separated from the main village. The existing sign and artificial entry gate are located well to the north of the hamlet, and south-bound traffic passes alarmingly close to the front doors and gardens. The width and alignment of the road does little to draw drivers' attention to the residential context of the approaching village, and consequently entry speeds are especially high.

We would recommend measures to strengthen the gateway at this northern approach. By formalising the existing verge parking opposite the houses, the connections between the cars and the houses could become much more evident. We would also recommend a simple change in surface treatment to visually narrow the road, the removal of the centre line, and the planting of two trees to frame the entrance. Repositioning the nameplate helps to connect the road environment with the adjacent buildings. This modification could be carried out, in part, as a local residents' initiative, and continued through Great Gap as far as resources allow.



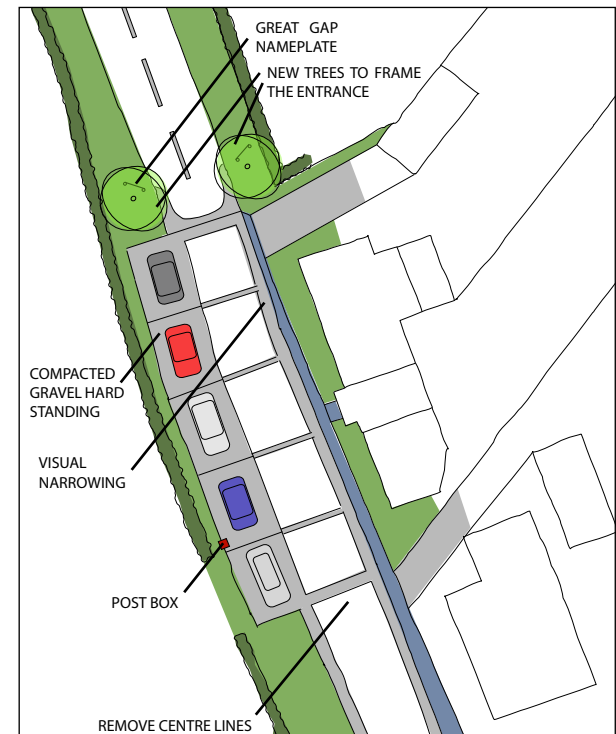
Entry signs well outside hamlet



Houses screened on approach



Fast carriageway close to dwellings



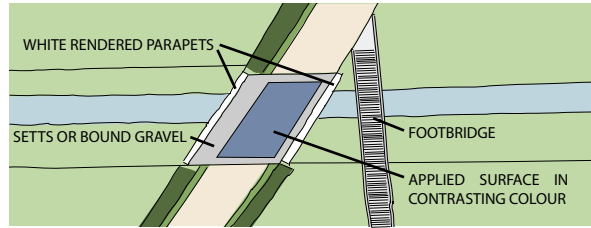


Ford End Bridge

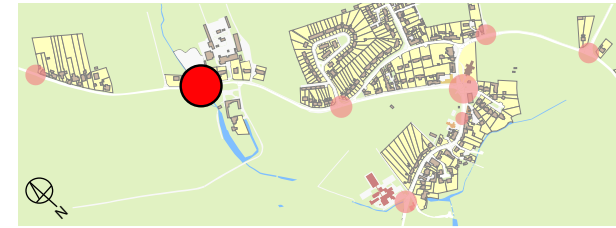
Ford End describes a second set of outlying farms and buildings north of Ivinghoe. The hamlet is isolated from the main village, and bicycle or pedestrian links are limited because of the high traffic speeds. Such speeds are, in part, a reflection of the lack of any cues or “events” to connect this long approach road with its context. Ford End now forms part of the extended conservation area.

An opportunity is presented by the ancient road bridge over the Whistlebrook Stream. At present, the bridge is difficult to identify, and few drivers are aware of its presence. The resulting high speeds, especially of larger HGV's, appears to be threatening the integrity of the structure. Lower speeds would save longer-term capital and revenue spending.

We would recommend highlighting the parapets with a white renderwash, and the use of a small area of setts to establish the presence of the bridge as a pedestrian place. A surface applied tone and finish could highlight the diagonal line of the bridge and watercourse, and make the bridge a more distinctive and recognizable place in Ford End.



Ford End leading down to Whistlebrook Bridge



Existing road details obscure bridge location



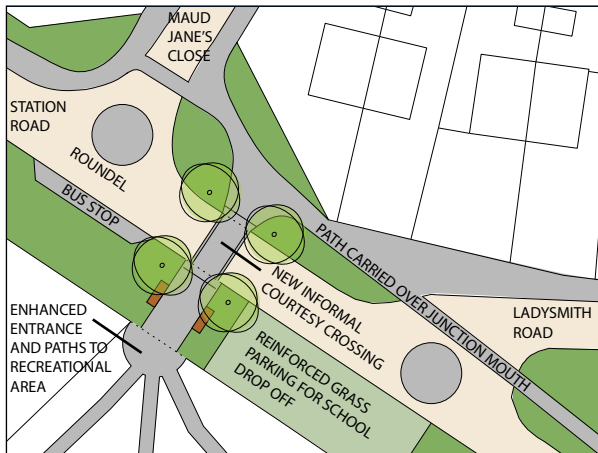
Verge treatment to highlight bridge



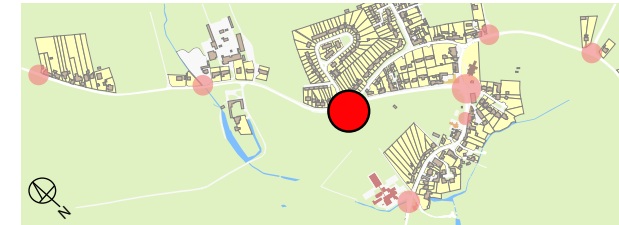
Whistlebrook Bridge- highlight parapets and crossing



Maud Jane's Close



Maud Jane's Close Junction defines edge of village centre



The northern approach to Ivinghoe presents problems in lacking any notable incident or landmark between Ford End and the village centre. Should further housing development take place to the north of the village, this may help to define an entry point.



Gateway into recreation area and bus stop create natural crossing point



A stronger crossing helps define a place in this large area

The most appropriate location to announce the edge of the village centre is junction where Maud Jane's Close and Ladysmith Road join Station Road. This is a natural crossing point connecting the open space of the recreation ground with housing to the north of the road, and provides the first glimpse of the approaching village centre. It also forms the boundary of the conservation area.

An informal courtesy or zebra crossing at this location could combine with the bus stop to create a distinctive space at this strategic point. There is also the opportunity to allow space on the existing verge to enable the drop-off for children heading for Brookmead School from the north. Highlighting the entrance to the open space, and encouraging as much activity as possible are vital means to modify driver speeds at this point.



Church Road transition

Church Road bends around the churchyard of St. Mary's Church towards Vicarage Lane and the village centre. Numbers 19 and 21 Church Road mark the edge of the conservation area and the start of the village centre. A small concealed driveway emerges at this point.

This location provides an opportunity to align the carriageway with the change of scale of the historic village core. Here, very simple surface treatments in a tone and colour to complement the buildings can be applied to the carriageway edges, and to highlight the driveway. The centre line markings should not be replaced from this point to the centre. Once in place, the chicane further south-east need no longer be maintained, and speed humps can be removed.

An additional surface treatment could be used to highlight the junction with Vicarage Road, and to create an informal space between the churchyard and the historic buildings surrounding the intersection.



The sweep of Church Road on the approach to the village centre



A driveway emerges at the entry to the conservation area



The village core requires a reduction in scale and speed



Approach to the centre – Church Road

The tall spire of St. Mary's Church provides a notable landmark for Ivinghoe. But despite its commanding height, the church remains visually isolated from drivers approaching the village centre along Church Road. There is only a very narrow footway on the Churchyard side.

Providing emphasis to potential pedestrian routes and paths can help to raise awareness of the village context amongst drivers. The sketch proposal for the narrow approach would highlight the line of the church path and its connection to the rest of the village, using a simple applied finish. Although the arrangement does not represent a specific crossing, it would be sufficient to change drivers' expectations and reduce speeds on the approach to the village centre. Removal of the white lines and speed cushions will reduce ongoing maintenance costs, and establish a simplified, small-scale streetscape appropriate to the conservation area and to the pedestrian activity in the centre.

In combination, the small-scale modifications to Church Road create a village entry with sufficiently low speeds to allow simplification of the Station Road junction to operate informally.



The church gate marks the approach requiring very low speeds



Church Road and the centre of the conservation area



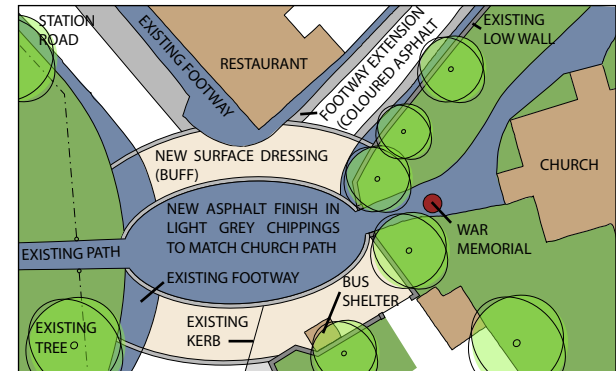


Ivinghoe Centre

The space where the main routes into Ivinghoe converge defines the centre of Ivinghoe. Shaded by mature trees, the space combines the T-junction with a natural gathering point as a forecourt to the church, a bus shelter, as well as an entry point to The Lawn and recreation ground. Its potential role as a focal point is currently compromised by the emphasis on the main route between Church Road and the High Street, and the resulting traffic speeds.

We recommend downplaying the traffic priority, and creating a stronger sense of place by emphasising the connections with both the Church and the open space. An elliptical shape in a distinctive surface treatment would form a slow-speed junction that could continue to cope with traffic volumes whilst highlighting the pedestrian crossing movements. Replacing stop lines and the "Give Way" triangle may not prove necessary. The reconfigured space helps to unite the Kings Arms, the Church and the village's key assets to establish a distinctive centre with an identity consistent with the conservation area.

The arrangement introduces a deliberate element of ambiguity and uncertainty for drivers to alter the balance of priorities and to reduce speeds. The junction combines the management of The Lawn and other public space with innovative highway measures to create a space unique to Ivinghoe





The village shop and library

Ivinghoe benefits from a community library, a post office and local shop and a notable town hall. These assets establish a strong pedestrian connection between The Lawn, The Hub, and the playground and bus stop across the High Street. At present this relationship is not made visible to drivers or expressed in the arrangement of the road.

Adding a simple courtesy crossing at this point would both improve the awareness of pedestrians as well as helping to slow traffic on the approach to the centre. Such a feature would help to unite the various assets of the village. We would recommend providing a distinctive surface treatment for the parking spaces outside the shop and library in order to reduce the visual width of the High Street. Adapting the bus shelter to serve also as a formal entrance into The Lawns would further emphasise this natural crossing point.



The entrance to the library and Town Hall on the right



Pedestrian crossing movements are currently uncomfortable



The understated entrance and crossing point from The Lawn



Brookmead School

Although nominally in neighbouring Pitstone, Brookmead School is a vital part of Ivinghoe's community. The existing relationship between the school front and the adjoining road at the foot of High Street is particularly difficult, and the school forecourt will always be under intense pressure during school hours. Despite its size, the presence of the school is not apparent to passing drivers, and the forecourt opens onto an ill-defined space at the convergence of smaller roads and paths.

Two elements are essential in order to improve the safety and the usefulness of the school front for pupils and parents. Firstly, the school needs to project a presence into the space and establish a clearly recognizable forecourt. Secondly, the passing drivers need to perceive a clear shift in the road's alignment and character, indicating the need for particular care and awareness to negotiate a more enclosed and contained space.

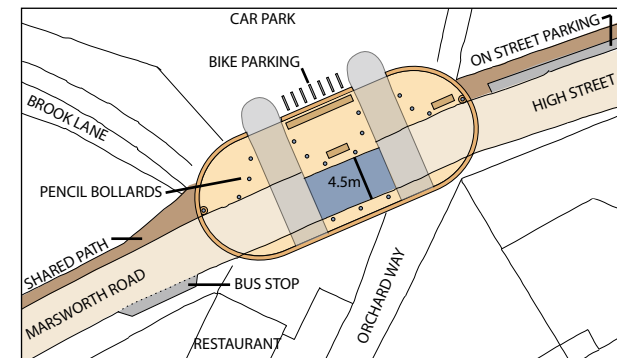
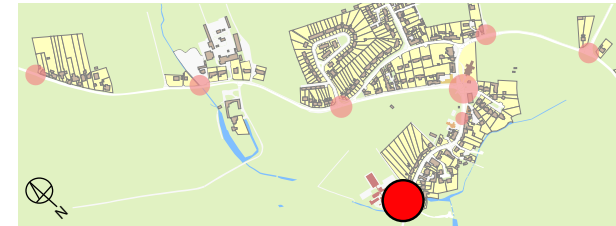
The outline proposal would extend the footway on the school side, and deploy a combination of bollards, low benches and planting to define a gathering space and create a shift in the alignment of the carriageway. The width of the carriageway is reduced to the minimum for very slow two-way traffic, and the whole space is clearly defined by paving and street furniture to discourage short-term parking.



The minimal space outside the school, despite the apparent widening of the road



Creating a means to slow traffic and mark the school's position is essential



The existing wide and ill-defined space outside the school

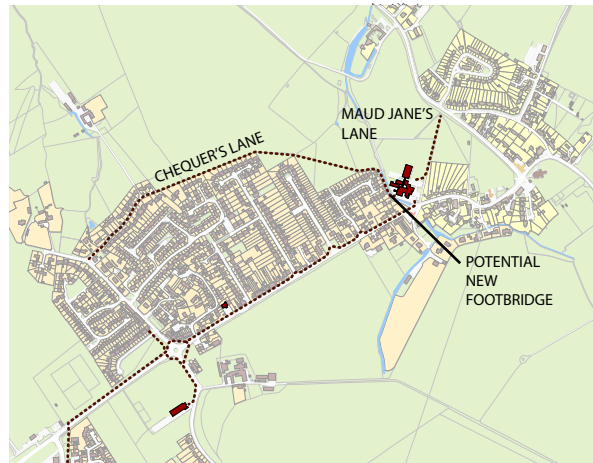


Wider measures for School access

Physical changes alone will not be sufficient for the school. Promoting the use of remote drop-off spaces may help relieve some of the pressure, and an additional location might be possible opposite Maud Jane's Close. An additional footbridge into the school from Brooke Lane would significantly improve pedestrian access, especially from an upgraded footpath from Chequers Lane.

Whilst an improved shared path for bicycles and pedestrians is proposed for Marsworth Road in Pitstone, it is unlikely to be feasible to remove sufficient on-street parking in the High Street to continue such a path. However Ivinghoe is better served with off-road links across The Lawn and recreation grounds. Defining parking spaces and removing the centre line on High Street will help to discourage on-pavement parking, whilst visually reducing the carriageway width.

Congestion at school times is inevitable. Despite its inconvenience and disruption, such delays will ultimately encourage use of the alternative through route via Upper Icknield Way to avoid Pitstone and Ivinghoe High Street. Creating a distinctive space outside the school signals a shift in priorities towards the needs of the school. At the same time, the space establishes an important gateway to establish the low-speed environment of both Pitstone and Ivinghoe.



School pedestrian/bike access diagram



Discouraging pavement parking is necessary to maintain pedestrian and bicycle access



The route up High Street to the centre needs clearer parking and visual narrowing



Materials, costs and implementation

The strategy for Ivinghoe implies the removal or reduction of many conventional highway elements such as road markings, chicanes and road humps. In their place we propose a stronger focus on place-making, allowing a clearer connection to be established between streets and spaces and the surrounding built environment. Whilst lower speeds and simplified streetscapes allow some maintenance costs to be reduced (such as structural repairs on Whistlebrook Bridge), there are costs associated with additional surface treatments.

The preference of the highway authority for applied surface treatments over blocks or setts has guided the recommendations. Techniques for adding appropriate chippings to asphalt when resurfacing also provides a simple alternative for creating distinctive finishes. Costs for such finishes will depend on both the condition of the asphalt surface and sub-base, as well as the location and condition of any underground surfaces. It is also vitally important that schemes such as these inform and are co-ordinated with routine maintenance programmes.

Square metre costs of between £130 and £190 can be used as a guide to capital costs, although these can vary greatly depending on the ability to carry out temporary road closures. Traffic management requirements can influence costs by as much as 25%. However the use of applied surfaces avoids the need for extensive heavy engineering, and allows elements of the programme to be carried out with the least possible disruption.

In practice the changes proposed for Ivinghoe are likely to form part of a long-term programme over 5-10 years. Measures such as the promotion of the southern through route, and the modifications to Brookmead School, are likely to come forward earlier and be co-ordinated with Pitstone Parish Council. Other elements of the strategy are likely to be implemented on a phased basis, with priority recommended for the Village Centre, working outwards towards the village boundaries. Locally organised and voluntary input is increasingly significant for schemes such as these, both for physical measures such as bridge parapet painting, and for the patient task of fund assembly.



Creating a low-speed environment enables existing signs and humps to be removed



Applied aggregate finishes to existing asphalt

Conclusions

Ivinghoe is not alone in attempting to address the impact of traffic. Across the country, communities are placing particular emphasis on seeking ways to stem the erosion of public space resulting from growing traffic levels. What makes Ivinghoe different is both the quality and distinctiveness of its form and fabric. This makes it both more vulnerable to such erosion, but also offers clues to ways to successfully integrate the highway network with the historic environment. Ivinghoe also demonstrates a degree of local consensus and determination through its Parish Council to explore innovative approaches to the problem.

This report outlines such an approach. Although Ivinghoe will continue to experience high traffic volumes, it is possible to reduce speeds and ameliorate the impact of traffic on village life and movement through adapting and modifying key spaces and points of intersection. The report builds on the particular shape and structure of the village to suggest ways to balance pedestrian activity and the qualities of place with the realities of traffic flows. It aims to complement measures under consideration in neighbouring Pitstone, and to offer the highway authority the means to tackle issues of speeds and safety without recourse to additional signage or heavy engineering. In broad terms the approach involves a transfer of

emphasis towards capital investment in order to reduce long-term maintenance costs.

Further public discussion will be required to agree and refine the approach. The support and advice of Transport for Bucks as highway authority will be essential. Implementation will take some years, and will require a clear local consensus to be maintained over the long-term. The proposals are intended to supplement and inform the emerging Neighbourhood Plan, and offers the opportunity for a distinctive vision for Ivinghoe that can guide all decisions relating to traffic and streetscapes within the village.

