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# PITSTONE, BUCKINGHAMSHIRE

Place making and connections for an expanding village



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## Contents

Introduction .....	1
Pitstone and Ivinghoe .....	2
The policy context .....	4
Initial observations .....	5
Design principles .....	6
Proposed interventions .....	7
Westfield Road Junction .....	9
New development acces .....	11
Recreation Ground Roundabout .....	12
Cheddington Road and Vicarage Road .....	14
Marsworth Road – Extending the shared path .....	15
Marsworth Road Junctions .....	17
Lower Marsworth Road .....	19
Brookmead School .....	20
Enhancing alternative access to the school .....	22
Wider traffic safety .....	23
Materials, costs and timescales .....	24
Conclusions .....	25

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## Introduction

Most villages develop and grow around a kernel of a church, a market square or a cross roads. New housing and activity may expand the size and shape of the settlement, but the core of most villages can be easily identified. Pitstone is an exception. Originally a tiny hamlet centred around St. Mary's Church End at the southern end of Vicarage Road, Pitstone's expanded northwards along the relatively new Marsworth Road. The construction, and more recent redevelopment of a major cement works underpinned this expansion. As a result, Pitstone is a somewhat fragmented village without a clear centre or focal point. The long, straight Marsworth Road, linking Pitstone to the neighbouring village of Ivinghoe, serves as both the main spine of Pitstone as well as a boundary, separating the main areas of housing from the newer developments at Castlemead.

Such fragmented settlements are particularly vulnerable to the pressures generated by traffic growth. The busy roads that link the disparate parts of the village also form part of the local highway network, linking the surrounding settlements of Aylesbury, Leighton Buzzard, Dunstable and Tring. Standard highway features have further eroded the identity of Pitstone. Drivers are less aware of the village context, resulting in a streetscape dominated by fast-moving traffic and vehicles. The opportunities

for walking and cycling are limited, resulting in greater dependence on cars for local journeys.

This study forms part of a set of initiatives by the Parish Council to address these issues. New housing, business, educational and recreational developments offer the opportunity to extend and strengthen the village centre. A Neighbourhood Plan is well advanced in preparation, offering an opportunity to improve the existing streetscape, and to strengthen the connections within Pitstone, especially along the spine of the Marsworth Road. The report is intended to supplement the Neighbourhood Plan, identifying the critical locations where small-scale changes and interventions could help to rebalance the relationship between traffic movement and the pedestrian and cycling routes essential to any coherent village.

A similar exercise is also underway for the adjoining parish of Ivinghoe, and the two studies are intended to be complementary. Although very different in character, both villages share a need to address the impact of growing traffic and speeds, and to retain and strengthen a sense of place. Access to Brookmead School, at the joining point of the two villages is one of a number of common themes. This study aims to expand the palette of measures available to developers and

the highway authority, and to build consensus and confidence amongst the local community around ways to improve safety, access and the quality of life in Pitstone. Both sites provide a starting point for a wider set of measures aimed at creating a safe, low-speed village environment.



Marsworth Road, Pitstone



## Pitstone and Ivinghoe

Pitstone and Ivinghoe lie on undulating chalklands at the foot of the Chiltern Hills. Marsworth Road, the main spine of the village, forms part of the B 489 and the Lower Icknield Way. Cheddington Road provides access from the north, with Vicarage Road linking south to the parallel Upper Icknield Way. The routes converge at a large roundabout adjoining the main recreation area. The junction carries around 8-9,000 vehicles per day\*, and its size and configuration dominates the heart of the village. Marsworth Road leads into the winding High Street of Ivinghoe to the east. To the west the new developments at Castlemead have been built around a new route, Westfield Road, connecting Pitstone to the Upper Icknield Way.

A new shared bicycle route has been constructed from Castlemead as far as the roundabout. From this point onwards the opportunities for safe cycling are limited. Marsworth Road presents the only direct and continuous route through to Ivinghoe and to Brookmead School. The existing cross-section and alignment of Marsworth Road is not conducive to cycling. The pavement is

too narrow for two-way shared use, and the width and arrangement of the carriageway with sporadic roadside parking discourages on-road cycling. Despite conventional speed humps, speeds remain high along the long, straight uninterrupted road\*. Almost all the residential areas of Pitstone are accessed from the north side, including four to five side roads off the main route. The southern edge includes a wide grassed verge, used for some informal parking and for a bus stop. Overall, Marsworth Road and the large roundabout feel outside the context of a village, and traffic speeds appear higher as a result.

The proximity and shared facilities of Pitstone and Ivinghoe add to the need for safe, direct and comfortable connections along Marsworth Road and Ivinghoe High Street. Around 80% of the Brookmead School pupils arrive from the Pitstone direction. The school's figures suggest a relatively high dependency on cars and buses, adding to the pressure for space outside the school entrance. The dominance of traffic in both villages erodes the connectivity and coherence that underpins successful communities.



Recreation Ground Roundabout

\* Traffic data from Pitstone PC mVAS monitoring (Dec 2014-August 2015) and Transport for Bucks records (2015)



## The policy context

Pitstone Parish Council's initiative to address traffic issues is well timed. The emerging Neighbourhood Plan provides a framework for directing developer contributions to address broader traffic and transport issues in the village. Co-ordinating the maintenance programme and future highways improvements of Transport for Buckinghamshire with locally initiated ideas offers a means to supplement private investment and enhance the public realm and streetscapes of Pitstone.

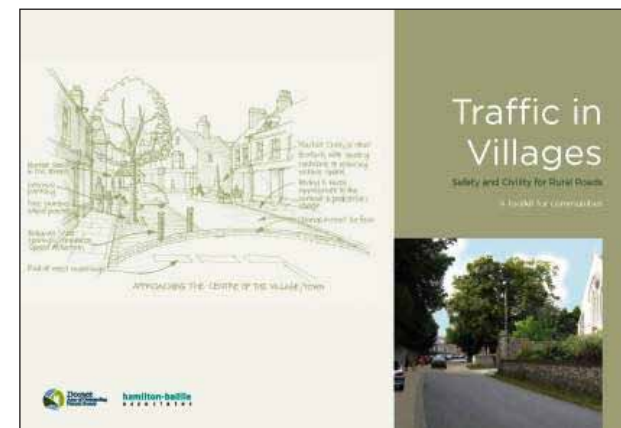
Policy and best practice for traffic in towns and villages are rapidly evolving as more is understood about driver behaviour and the significance of rural roads. The publication of Manual for Streets 2 in 2011 reflected a significant shift in policy towards place-making, and the importance of matching streets to their context and purpose. Guidance such as Traffic in Villages, launched by the CIHT in 2012, builds on the growing body of precedents to identify key design principles. Buckinghamshire, in common with many progressive highway authorities, is seeking ways to reduce clutter, simplify streets and reduce car dependency by fostering opportunities for walking, cycling and public transport.

A key policy for highway design and traffic in villages, reflected in Manual for Streets 2, aims to

match the form and context of roads and streets to reflect their role within the highway network. Wherever possible, through traffic should be directed away from village centres. Where streets are required to serve a strategic role whilst forming part of the public realm of a village, the mixed-use context of a village should be apparent to drivers from the change in scale and transition from the higher speed highway, from the emphasis on place-making and pedestrian routes, and from a combination of visual cues and psychological signals.



Poynton, Cheshire. Place-making and low speed movement in village centre



## Pitstone – Initial observations

Pitstone benefits from generous amounts of open space and recreation areas. It also enjoys open views south of Marsworth Road towards the Chilterns. As a result, there are few of the familiar clues of buildings framing and enclosing streets to alert drivers to the village surroundings. Traffic approaching from the west along the B489 passes no clear transition or change in scale of the road until the main roundabout, apart from an artificial set of roadside gates positioned with little reference to the context. There are few buildings, entrances or signs of activity until the main roundabout. The result is an unusually linear village, with few recognizable landmarks or places. This linearity continues along Marsworth Road, emphasized by the open countryside to one side. Few of the side turnings are immediately



Cheddington Road entry

apparent, making junctions such as Queen Street and Glebe Road harder to exit.

Access from the north along Cheddington Road is more contained, although the village entrance also relies on artificial white gates and extensive “dragons’teeth” road markings. Vicarage Road, like Marsworth Road, has housing mainly on just one side, although mature planting helps to contain and reduce the scale of the approach. With the Memorial Hall and Pitstone Green Museum set back from the road, it is the mature landscaping and trees of the Recreation Area that characterize the centre of the village.

The outline development plans under consideration in the Neighbourhood Plan



Marsworth Road – a wide highway approach

provide an opportunity to address the absence of village features in Pitstone. Educational and sports facilities to the west, and the L-shaped area of housing and other facilities surrounding the recreation area offer scope to fill some of the open gaps on the village approaches. Future development and new housing also present a means to tackle many of the practical issues facing Pitstone. These include the lack of a continuous bicycle route along Marsworth Road, and the disruptive size and scale of the large roundabout.

Pitstone is undergoing a period of growth and change, in which the planning and design of its public realm will determine its long-term character.



The large Recreation Ground roundabout

## Design principles

The proposed strategy to allow Pitstone to benefit from future development and investment builds on a combination of measures aimed at reducing speeds, discouraging through traffic, and strengthening the connections and coherence of the village. They also aim to reduce highway signage and clutter, and to minimise the maintenance costs for the highway authority. The measures draw on principles that have been employed elsewhere in the UK and mainland Europe to closely align highway engineering with good urban and landscape design. Such principles help to foster lower speeds and to promote safety, efficient traffic movement and civility through maximising driver awareness of his or her surroundings.

Clear entry points or gateways at the main thresholds to Pitstone are essential to distinguish the lower-speed village context from the higher-speed approach roads. Such thresholds require a definite change in scale and character in the road environment to clearly mark the transition, ideally closely aligned with signage and changes in speed limits. Where the village boundary is contiguous with an adjoining community, as is the case between Pitstone and Ivinghoe, then a distinctive place or recognizable event is necessary to reinforce the entry point.

The principle of place-making is vital in reducing the linear characteristics of roads in villages, and forms a key design principle. Wherever possible, buildings, intersections, and the activity and movement they generate can be emphasised to inform and alert drivers to the village context. Visual clues in the form of planting, changes in paving and dimensions and kerb positions all add to the legibility of the streetscape and road network.

Driver speeds are also strongly influenced by the apparent width of the carriageway. Reducing the visual width can be an important tool for reducing speeds and increasing driver awareness, without physically limiting traffic flows. Any on-street parking spaces should be clearly defined to help reduce apparent carriageway widths as well as discouraging inappropriate parking.





## Proposed interventions

The recommended strategy for Pitstone focuses predominately on the main linear spine of the Marsworth Road. Whilst measures will also be helpful in Cheddington Road, Vicarage Road and Westfield Road, Marsworth Road presents the most critical challenge and opportunity for any new developments, and for strengthening the connectivity and coherence of the village. It seems essential that the existing shared bicycle path be extended to serve Brookmead School, and that the character and perceptions of this linear spine from Castlemead to Ivinghoe be modified to a form more appropriate to the village context.

The strategy also promotes the link via Westfield Road and the Upper Icknield Way as an alternative through route to avoid the village centres.

The plan on page 8 illustrates the recommended approach. In addition to minor alterations to the general street section, the strategy identifies a number of key locations where modifications are required. These include a new village entry at the junction with Westfield Road and the potential access points to any new developments. Changes to the recreation ground roundabout are necessary to ease crossings and highlight the centre of the village. Between the roundabout and the boundary with Ivinghoe, a number of minor interventions are proposed along Marsworth Road to reduce speeds,

highlight the presence of the village and allow the bicycle route to be extended as far as the school. These interventions focus on the two relatively narrow bottlenecks at either end of the street, as well as the sequence of T-junctions with the main residential streets.

In addition to the measures for Marsworth Road, alterations are required to enhance the connections north and south of the roundabout. These will help improve connections to the Memorial Hall, the recreation grounds, as well as the residential and educational areas served by the Cheddington Road. Finally the connection of Vicarage Road with Upper Icknield Way requires some minor modifications to improve safety and to serve as a southern entry point, particularly in light of any increased traffic volumes on this parallel route to the Marsworth Road.

In combination these various measures create a long-term strategy to strengthen the identity, distinctiveness and coherence of Pitstone, whilst providing the practical improvements to access, safety and connectivity. The measures are likely to be undertaken over a number of years, and will help reverse the fragmentation of Pitstone and enhance the quality and practicality of the village's public realm.



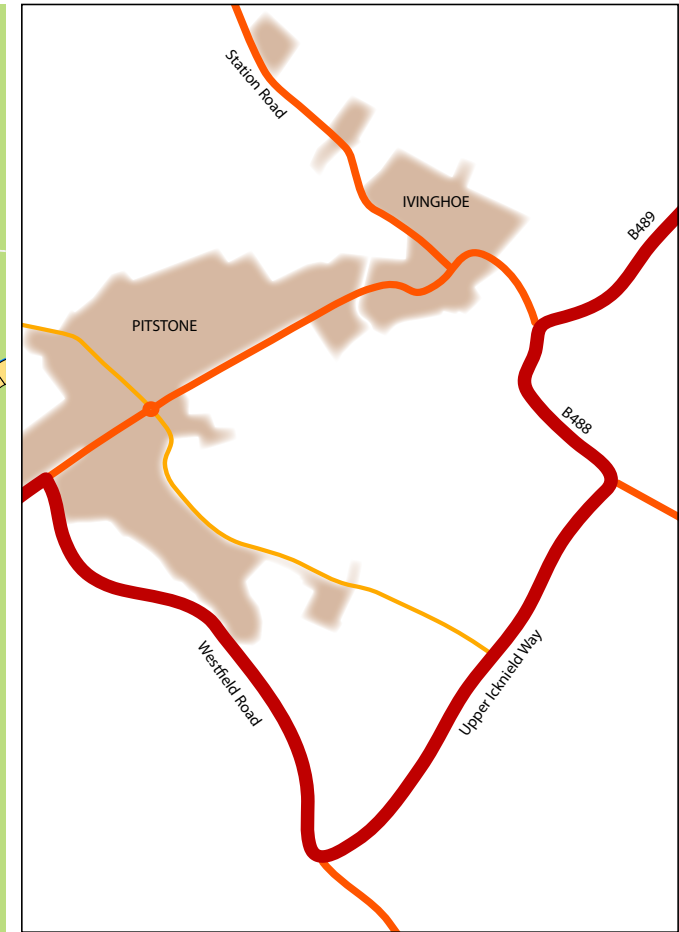
Vicarage Road junction with Upper Icknield Way



The scale and barrier effect of roundabout can be reduced



Proposed interventions



The potential alternative route

## Westfield Road Junction

Westfield Road is a new link provided as part of the redevelopment at Castlemead. Although not fully complete, its width and form offers a potentially useful link between the Upper and Lower Icknield Ways. This presents an opportunity for an alternative through route around both Pitstone and Ivinghoe for east- and west-bound traffic between Tring, Marsworth and Dunstable.

The existing eastbound entry to Pitstone from the railway bridge provides a wide, straight road interrupted only by the traffic island, signs and gateway marking the village boundary. The majority of through traffic continues towards the Vicarage Road roundabout.

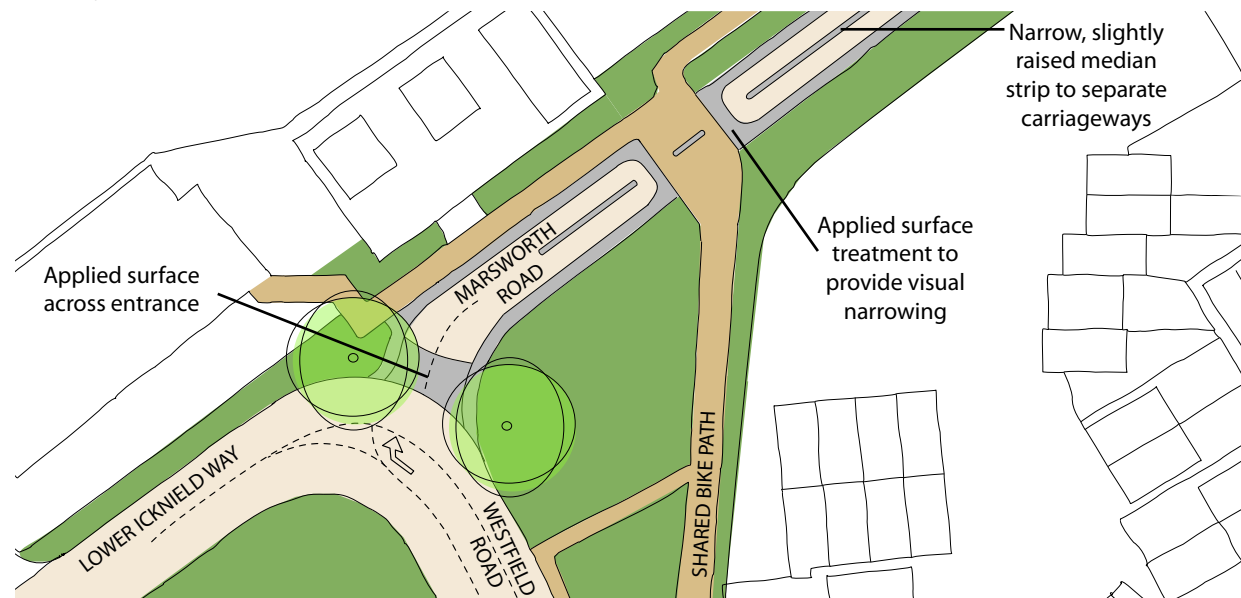
We would recommend a change in priority and alignment at this point, to channel the main route into Westfield Road. The turning into Marsworth Road and the centre of Pitstone would form a distinctive change in scale. Paving combined with new trees to frame the entrance mark the approach to the Pitstone, and we would recommend the insertion of a narrow median strip to reduce the apparent carriageway widths. To maintain and improve the connection for Castlemead, we would recommend a clearer and more generous crossing of the bicycle route across Marsworth Road, providing an additional signal to alert drivers to the lower speed context.



Existing village entrance from west

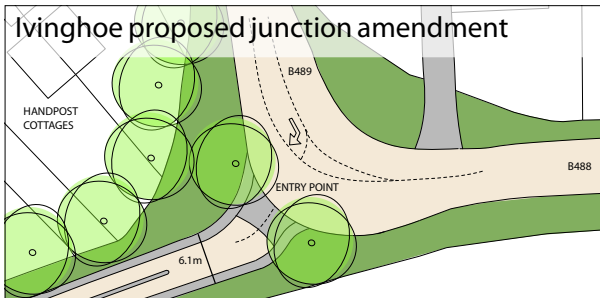


Existing Westfield Road junction





Ivinghoe existing junction



Ivinghoe proposed B488 junction

The revised junction at Westfield Road creates a clear entry to Pitstone and transition from highway to the lower-speed village scale.

A complementary arrangement is proposed by Ivinghoe Parish Council for the junction of the B488 and B489 at Handpost Cottages.



Westfield Road Junction, proposed

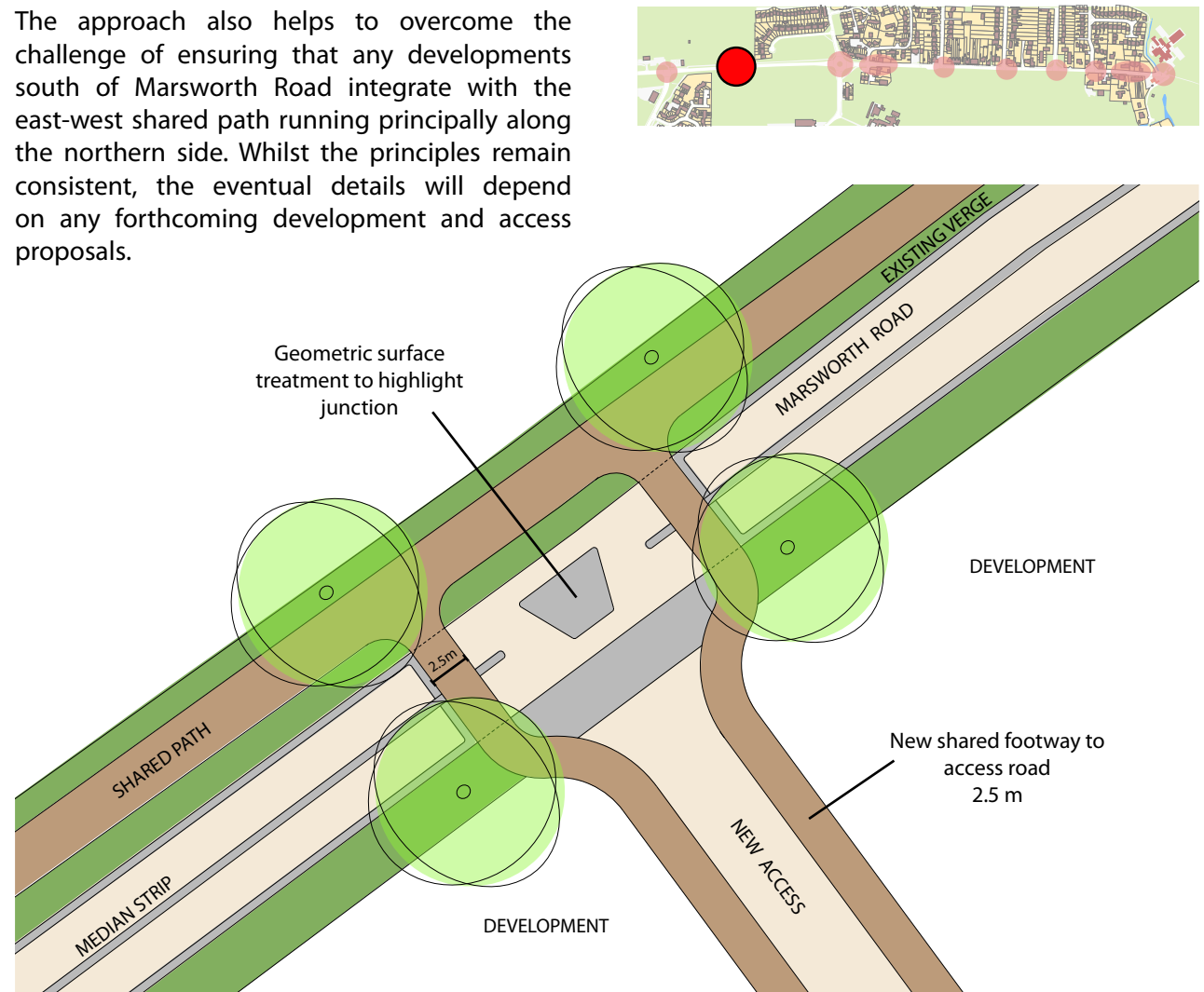
## New development access

The outline development plans for Pitstone indicate the future development of land to the south of Marsworth Road.

Any proposed access to such development sites provides an opportunity to reinforce the essential transformation of Marsworth Road from a wide, linear highway to a low speed village environment. It is also essential that the pedestrian and bicycle network of any new development integrates with the existing shared path.

To this end we recommend that any new junction includes measures to increase its visibility and provide strong emphasis to the pedestrian and bicycle connections to any new development. A simple geometrical shape of applied surface treatment, framed by a pair of courtesy crossings, interrupts the linear continuity of Marsworth Road. New trees add to the “place” characteristics of the access point, alerting drivers to the significance of the junction, helping to slow traffic approaching the roundabout. Highlighting such junctions as recognizable places is an essential element to reduce the apparent scale of the highway network and to minimise its barrier effect on the various parts of the village.

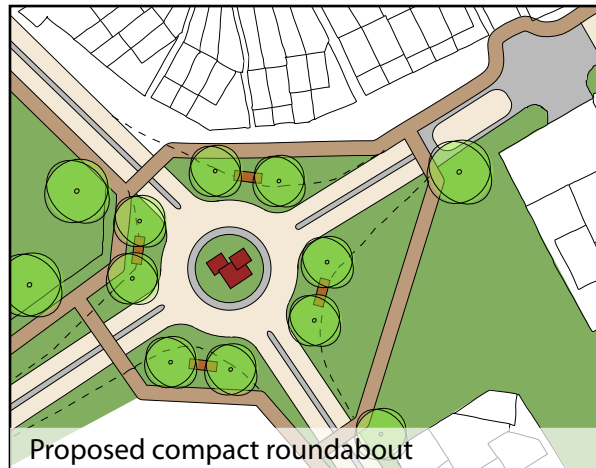
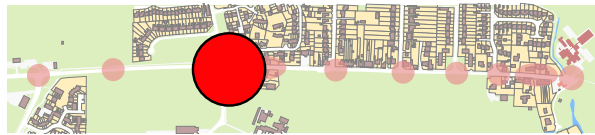
The approach also helps to overcome the challenge of ensuring that any developments south of Marsworth Road integrate with the east-west shared path running principally along the northern side. Whilst the principles remain consistent, the eventual details will depend on any forthcoming development and access proposals.



## Recreation Ground Roundabout

The larger roundabout at the junction of Marsworth Road with Cheddington Road and Vicarage Road plays a pivotal role in defining the character of Pitstone and the expectations of drivers. The existing arrangement involves wide, sweeping approaches and a large circulation area around a featureless asphalt circle. The resulting geometry encourages higher entry and exit speeds, and requires unusually wide pedestrian crossings on each of the arms. Designed to maximise traffic speeds and throughput, the roundabout physically and psychologically separates the parts of the village.

Were traffic volumes significantly lower, it would be possible to create an informal village square using a roundel or similar advisory marking to allow low-speed, free-flowing traffic and pedestrian movement without formal priority. However, the volumes of traffic are likely to remain such that a circulatory island is still required. For this reason we would recommend the modification of the existing arrangements in line with “continental” roundabout principles. This involves a reduction in scale, and the minimum of flaring of carriageways at exits and entry points. The central island is slightly enlarged with an over-runnable area to increase deflection, and the notional median strips separating the carriageways help to reduce speeds further. Combined pedestrian and bicycle crossings remain approximately in their existing positions, but are given much greater visibility



and prominence. A minimum 5 metre setback allows drivers to respond to pedestrians before negotiating entry into the roundabout.

It is important to give this key junction a distinctive identity, and there may be opportunities to animate and frame the space by adding planting, seating, public art etc. in the additional surrounding areas. Traffic speeds can be further reduced and the village identity strengthened by creating a strong vertical element in the central circle. Although access to underground services will still be necessary, there is an opportunity to site a significant piece of public art relating to Pitstone at this focal point.



Lengthy wide crossings to each arm.



Existing sweeping approach lanes



Existing featureless central circle



Compact low-speed, framed roundabout with central feature

## Cheddington Road and Vicarage Road



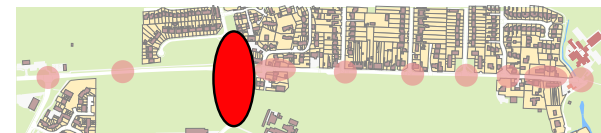
Proposed cycle links from roundabout



New path along Cheddington Road



Vicarage Road – Widen footway to 3m. to reach Memorial Hall



In addition to extending the shared bicycle path across Cheddington Road and further east along Marsworth Road, the re-alignment of the roundabout provides an opportunity to extend the shared path north and south along Cheddington Road and Vicarage Road. This would allow a continuous link to “The Crescent” and the residential areas to the north. To the south a widened or additional path would serve the Memorial Hall and Pitstone Green Museum.

On Cheddington Road it makes sense to route the extended path slightly away from the existing footway, passing behind a two trees and staying closer to the natural desire line. On Vicarage Road, a length of wooden fencing may need to be repositioned in order to allow the extended path to wind along the boundary of the recreation area.

It would be advisable to extend all the existing paths linking the crossings on each of the four arms to be widened to a minimum of 2.5 metres to accommodate bicycles and pedestrians.



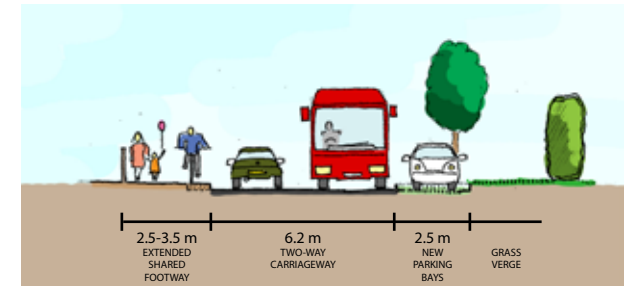
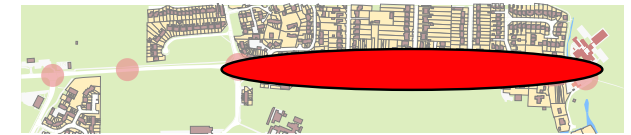
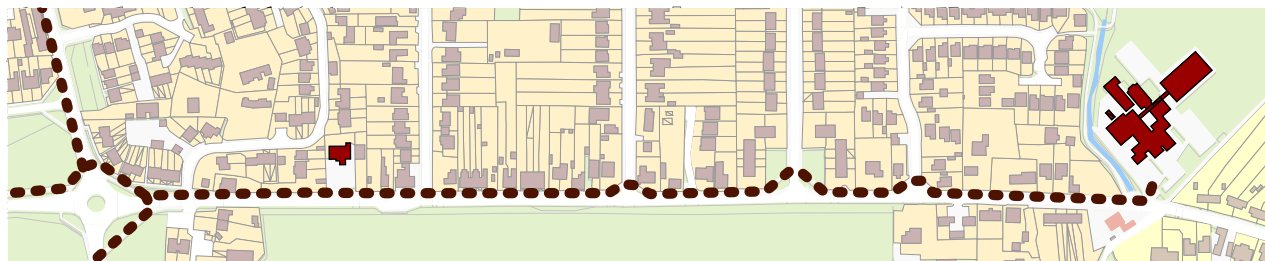
## Marsworth Road – Extending the shared path

One of the most critical challenges for Pitstone is to modify the arrangement of Marsworth Road east of the roundabout. The existing arrangements do not allow sufficient space for safe or comfortable cycling, and the current alignment requires speed cushions to counteract the straight, uninterrupted carriageway, in turn making crossing Marsworth Road or exiting the side junctions more difficult.

Whilst a broad highway verge to the south of much of the road would offer space for a bicycle path, we would not recommend this option. It would require additional road crossings at either end. More importantly the route needs to connect directly with the residential areas on the north side. In order to achieve an adequate shared route along Marsworth Road, it is necessary to modify and extend the footway on the north side, removing and simplifying the verge arrangement where necessary, and relocating all parking onto the grassy verge on the south side.

Such a programme will not be easy. Extensive discussions and explanation will be necessary with the residents fronting Marsworth Road to ensure that the north side is kept clear of obstruction. Where necessary, minor kerb extensions will be required to maintain a preferred width of 3 metres, with a minimum of 2.5 metres, for the shared path. The carriageway width can be reduced to 6.1 metres to allow slow two-way traffic including buses. For much of its length, the footway provides sufficient width, but particular attention is required for two narrower bottlenecks. The first involves a 50 metre length close of Forge Flats, and the second involves the final 100 metres of Lower Marsworth Road approaching Brookmead School.

We would recommend the use of reinforced grass surfacing for the new parking bays on the north side of the road in order to maintain the soft edge to the hedge and landscape. All existing speed cushions, build-outs and road markings can be removed.



Marsworth Road – proposed section with shared path



Rushendon Furlong

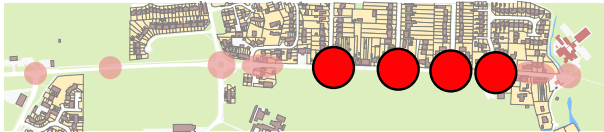


Reinforced grass paving to parking areas

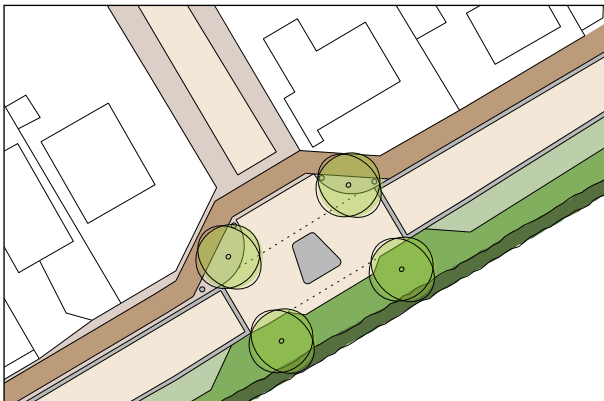


Marsworth Road with extended shared path. Forge Flats

## Marsworth Road Junctions



Queen Street



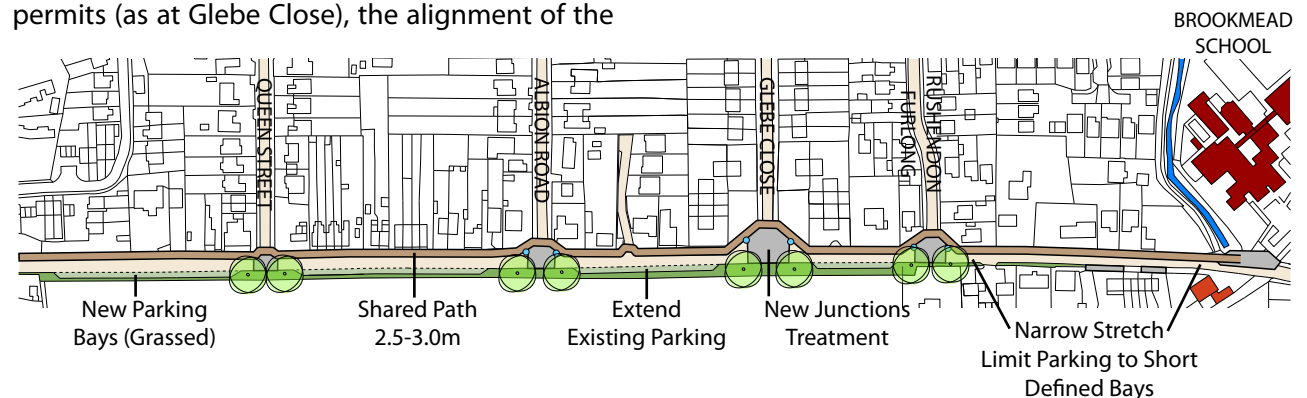
Typical junction treatment to form distinctive place

The modification of Marsworth Road to create a low-speed, continuous link for pedestrians, cyclists and traffic requires some changes to the four principle junctions serving Queen Street, Albion Road, Glebe Close and Rushendon Furlong. Each of these junctions varies in size and context, with Queen Street the most limited for space and sight-lines, located alongside the forecourt for a small convenience shop, Mason's Stores.

The recommended treatment of these junctions involves two overall principles. The first is to allow the continuity of the shared path to be emphasised across the mouth of each junction, to increase awareness of drivers turning into, or exiting, the various side roads. Where space at the junction permits (as at Glebe Close), the alignment of the

crossing should be set back some 5 metres from the mouth to maintain a short, simple crossing without excessive diversion.

The second principle involves increasing the visibility of each of the junctions to serve as a sequence of places along the length of Marsworth Road. Using surface treatments and vertical elements such as trees to emphasise the place qualities of each junction helps to reduce the speed profile of the route. A sequence of highly visible events at each of the intersections helps to reduce the linearity of the carriageway, permitting safer crossings to parking spaces, increasing the safety of the shared path, and allowing easier exiting from the side roads.



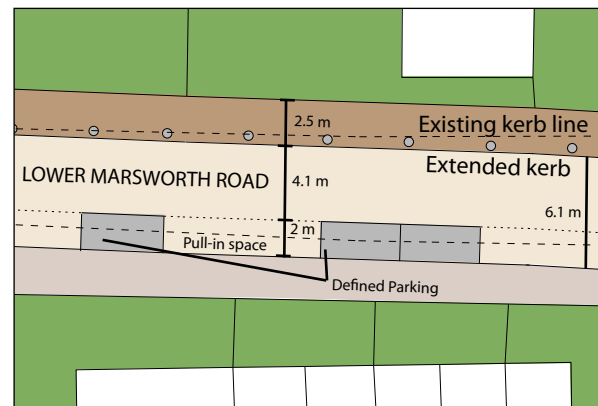


Marsworth Road junction treatment. Glebe Close

## Lower Marsworth Road

The final 100 metres of Marsworth Road, between Rushendon Furlong and the School, presents a particular challenge if the proposed shared footway is to extend to Brookmead. Not only is the existing pavement narrow along the northside, but the stretch is under particular pressure from school-related parking. There are limited off-street opportunities for residents' parking, with most cars often left straddling the kerb and carriageway.

It is essential that the narrowness of the street is made clear to drivers along this stretch, and that the north side is protected from parking on the extended 2.5 m. shared footway. This may require the insertion of carefully positioned bollards to maintain pavement continuity. Along the south side, a limited number of parking bays can be created tight against the highway boundary, in short blocks that can help slow traffic and allow passing places and eye-contact negotiations between drivers. The intention is to minimise expectations for short-term parking and to reduce the apparent width of the carriageway. This is achieved by clearly defining the few parking bays, and using any gaps as passing spaces.



The approach to Brookmead School

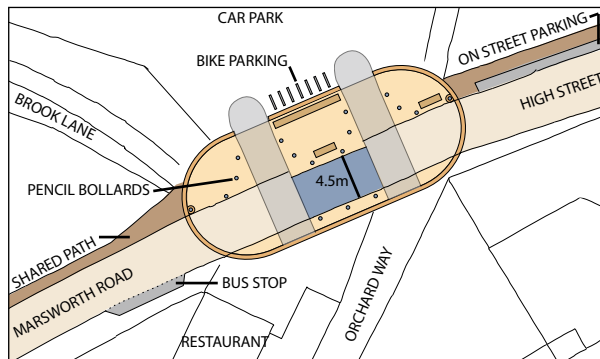


Parking has to be removed from north side



Carefully define parking bays on south side

## Brookmead School



Existing school frontage and gathering space

The existing streetspace fronting Brookmead School is always going to be under pressure. Despite determined initiatives by the school management to minimise reliance on private cars, the delivery and especially collection of pupils combines to create significant congestion and difficulties. There are some alternative options for remote temporary parking, courtesy of the May Fu Restaurant and Memorial Hall in Pitstone, but distance and the existing arrangements of Marsworth Road limit their usefulness.

At present passing drivers perceive a widening of the highway space outside the school and a largely undifferentiated combination of carriageway, footway and private space. Despite the opening up of the highway surroundings, the school remains surprisingly invisible, with little to indicate to passing traffic the significance of the space for the local community. The space lies on a dip where a small watercourse is bridged, with the unusually angled restaurant in the former Bell pub and the mouth of Brooke Lane defining the western end, and a narrow footpath and the unadopted Orchard Way converging at the eastern end.

Whilst needing to retain the entrance and exit to the school car-park, it is important to create a distinctive identity to the area fronting the school, an identity that recognizes the space as a gathering point for parents and children rather than a stretch of highway or parking opportunities. Any measures should emphasise the narrowness of the carriageway, and establish expectations of very low passing speeds. Our initial proposals would combine the access ways into the school with a widened footway, constraining passing traffic to the southern side. Surface treatment, bollards and some secondary lighting combine to differentiate the space and protect a limited area of public space from further erosion by traffic and parking.



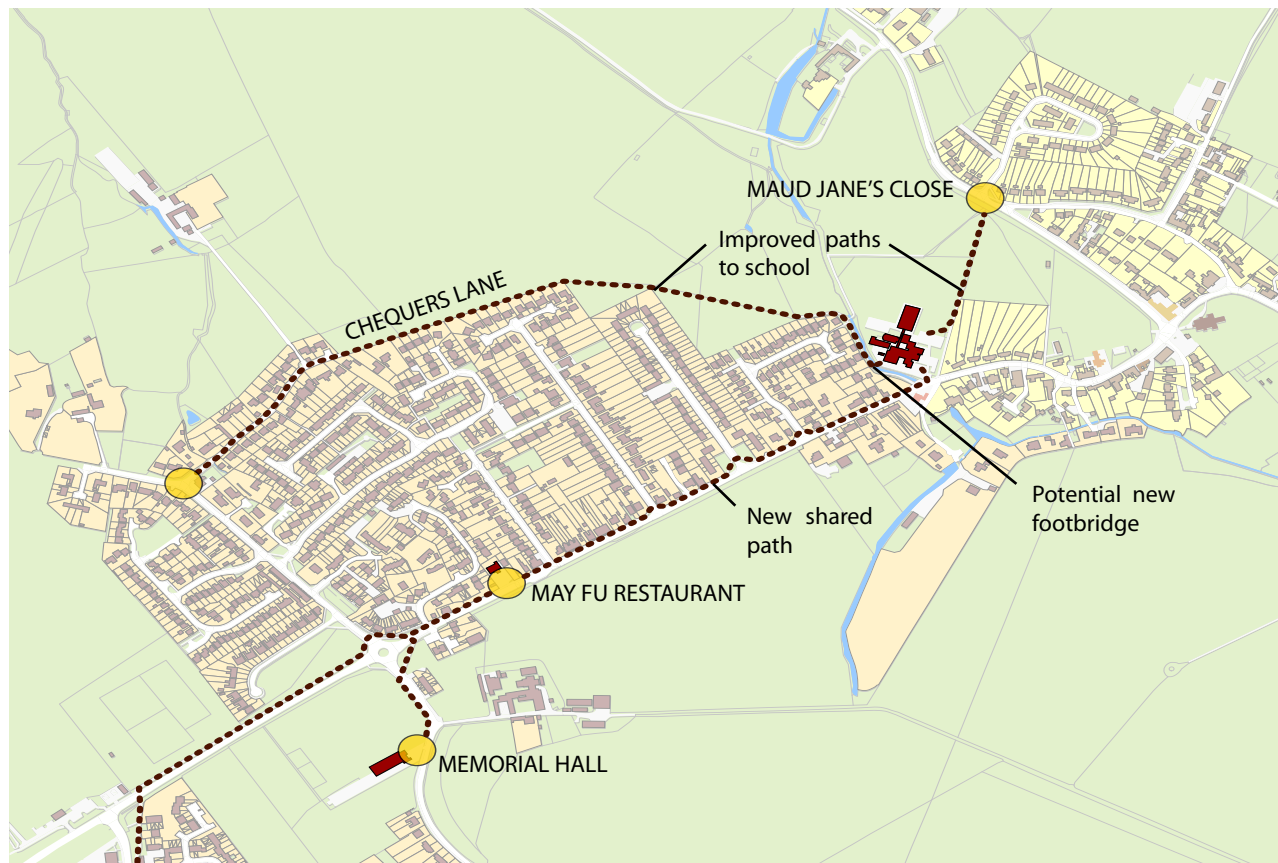
Brookmead School – proposed extended forecourt and entrances

## Enhancing alternative access to the school

The Marsworth Road will continue to provide the principal access to the school, and it is essential that an enhanced pedestrian and bicycle path is extended along this route. At the same time a number of additional routes for pedestrian access could continue to be enhanced to reduce pressure on the immediate school forecourt, and to promote other opportunities to walk to school from the adjoining villages.

Firstly, the unmade footpath linking Chequers Lane to Brookmead School along the northern boundary of the village should be carefully managed and improved wherever opportunities arise. The potential development off Rushendon Furlong would present one opportunity to improve and promote this link. At the same time there is a strong case for an additional footbridge and entry to the school at the southern end of Brooke Lane.

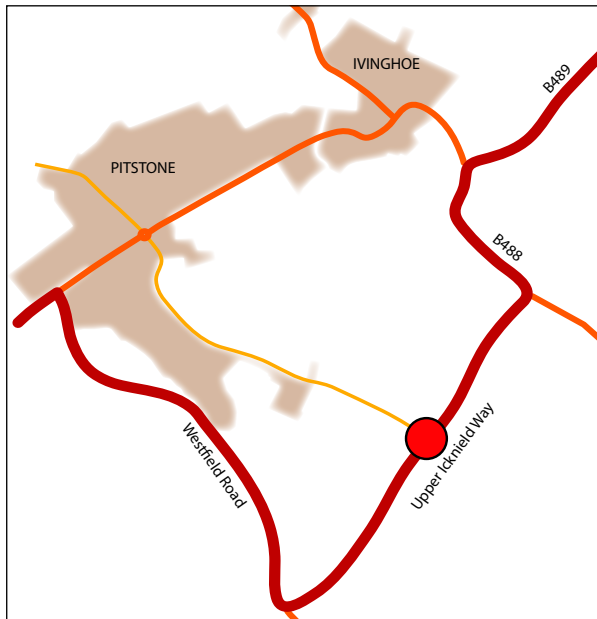
Brookmead School requires additional places where pupils might be dropped off without adding pressure to the main forecourt. For those arriving from the north, a bus stop and space around Maud Jane's Close could be used to allow pupils a short walk across the western boundary of Ivinghoe's open space. Again, small-scale developer contributions could allow the path to be improved for all-weather use.



School access routes



## Wider traffic safety



Additional measures to highlight junction

In combination, the proposed modifications to the streetscapes in Pitstone, especially along the Marsworth Road, aim to improve road safety for pedestrians, cyclists, cars and all road users. This is likely to be achieved as a result of reductions in traffic speeds as well as a heightened awareness of the village context. Tighter geometry at junctions, reduced visual widths of carriageways, and a sequence of distinctive places all contribute to such reductions.

One additional junction on the edge of the village would benefit from measures to improve safety and ease traffic flows. A T-junction connects the southern end of Vicarage Road with the Upper Icknield Way (the B488). The junction can be difficult to spot for drivers on the relatively fast main road approaches, and residents have concerns that any additional traffic on this route may increase difficulties for traffic exiting Vicarage Road.

Although the basic sightlines are adequate, there would be safety benefits from landscape and planting measures to highlight the position of the junction for drivers on the B488. These could include an area of distinctive low-level planting in the immediate surroundings of the junction, with four additional trees to frame the location.

It will also be helpful to introduce a small area of contrasting surface treatment to help improve the visibility and draw drivers' attention to the intersection.



Existing junction difficult to identify



Existing Vicarage Road junction

## Materials, costs and timescales

The proposed measures for Pitstone are likely to form part of a long-term plan associated with development proposals. Contributions from developers combined with public sector investment from a number of funding sources will determine both the timescales as well as the priorities and the extent of the programme.

There are a number of significant factors affecting costs for any work in the public highway. These include:

- The location and condition of any underground services
- The condition of the road surface and sub-base
- The choice of materials and finishes
- The extent of traffic management and disruption necessary.

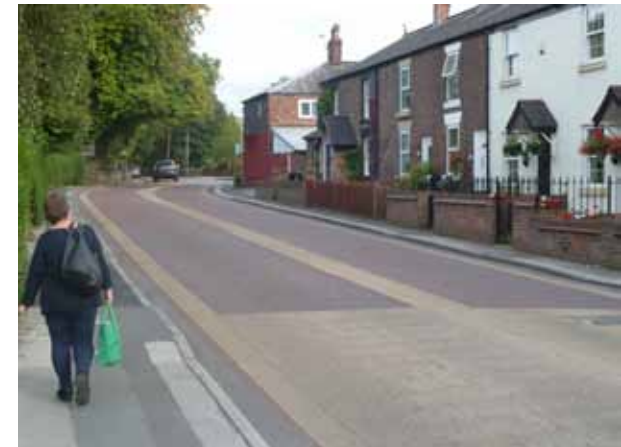
Recent schemes across the UK indicate that an average square metre cost of £140-£190 can be anticipated for the type of proposals outlined here. Of the various interventions described, the modification to the roundabout is likely to be the most significant element at around £200,000 – £230,000. Other smaller schemes are more likely to require between £20,000 and £30,000.

For the majority of the schemes outlined, we have presumed that applied surface treatments will be used, rather than blocks or setts. This is in order to work within the likely skills range of contractors as well as reducing maintenance costs for the highway authority. Co-ordinating measures with the highway maintenance and replacement programmes will reduce overall costs significantly.

Within the local network of streets in Pitstone, there are few opportunities for temporary closures or diversions. This means that work will need to be carried out within operational streets, and the traffic management can add as much as 25% to overall costs.

The modifications in the western end of Pitstone are more likely to be funded and programmed as part of a ten year development programme. The works associated with Marsworth Road and access to Brookmead School are more likely to be publically funded, and we would recommend a rolling programme of measures, starting at the school and working westwards, over a five year period.

The opportunity to remove and simplify the streetscape offers opportunities to reduce the maintenance burden borne by the highway authority. A lower speed environment at the core of the approach allows for a reduction in elements such as signs, road markings, speed humps and build outs. Lower speeds also reduce the long-term impact on, and maintenance costs of, the highway infrastructure. Locally organised and voluntary input forms an increasingly significant component of streetscape schemes in the UK. It is anticipated that much of the enhancement and maintenance of the footpath network and public spaces could be organised and carried out on a local level.



Simple low cost applied surfaces. Poynton

## Conclusions

Pitstone is not an easy village in which to rebalance the relationship between traffic and the public realm. Its position and layout alongside busy roads, and its fragmented and linear form make it especially difficult to maintain and enhance the essential informal connections and pedestrian routes necessary for a thriving and coherent community. The lack of a clear centre or identifiable boundaries, and the high volumes of traffic, have combined to present a formidable challenge to a Parish Council clearly determined to protect and enhance the quality of life in Pitstone.

This report intends both to address some of the underlying disadvantages and to build on the opportunities presented by potential development. It aims to complement, support and benefit from any changes in neighbouring Ivinghoe, and minimise traffic volumes and speeds. The approach draws on established principles for creating a distinctive identity and clear transitions from the wider highway network to generate lower speeds with greater emphasis on pedestrian and bicycle routes. Reducing the apparent width and scale of the streetscape combined with the principles of place-making underpin all the proposals.

Implementation will take many years, and will require a strong local consensus to be maintained over the long-term. This means addressing difficult decisions, such as the pattern of parking on Marsworth Road. It requires the continuing cooperation and support of the County Council and of Transport for Bucks as highway authority. This report provides the starting point for building such a consensus, and for preparing a strategy to guide all future public and private sector investment in the streetscape. Whilst each of the individual interventions can be refined and worked up in detail to suit the local circumstances, all of the measures combine to transform the long-term traffic environment of Pitstone through lower speeds, a stronger identity and enhanced connections.

The report is intended to supplement and inform the emerging Neighbourhood Development Plan, and to serve as a guide for negotiations and discussions with developers, planners, transport planners and highway engineers. Together with this broader plan, it aims to set out a long-term vision for Pitstone, a vision based on maintaining the strategic and local role of the street network while helping to build a coherent, safe and well-connected village community.

