Briefing Note

# Walking, Cycling and Other Issues at the Junction of Pulens Lane /Durford Road and Pulens Lane/ Barnfield Road

(including cycle links to Penns Field & The Heath)

## Foreword

This is the second version of the document which was prepared in response to comments received on the previous version. The analysis and conclusions have not changed materially, but the text has been clarified in several places. A list of "trip generators" has been added on Page 16. Two maps have been added to show the location of the junction of Pulens Lane and the locations of some of the issues discussed in the text, see Pages 17 and 18.

## 1. Introduction

The Petersfield Strategy Group (PSG) has prepared a list of potential schemes which are to be given priority in the context of the Petersfield Place-making Action Plan. This note has been written to support and inform the Action Plan with the emphasis on cycling and walking issues. It describes some of the problems encountered by pedestrians and cycle riders when moving around Petersfield and identifies some potential solutions. The intended readership are the councillors and officers who are contributing to the Petersfield Operational Group (POG) and the PSG, together with transport professionals who will be responsible for the detailed design of the schemes.

This note has been prepared by Cllr Robert Mocatta, Keith Hopper and Gethin Morgan-Owen.

The focus of this note is the stretch of Pulens Lane and Heath Road East from the Rival Moor Road junction past the junction with Durford Road /Heath Road, the junction with Barnfield Road, the crossing at the Tilmore Brook bridge and the junctions with Pulens Crescent, Moggs Mead, Love Lane and Hazelbank Close. It includes the Pulens Lane (B2199) intersection with the A272 in Sheet. The background is described below in terms of vehicle and pedestrian movement, followed by sections which describe the problems, explore possible solutions and draw early conclusions. The Appendix provides traffic statistics, measurements of footway widths, a list of development sites, and a summary of recent appraisals of the Pulens Lane area.

## 2. Background

### 2.1 The Road Network in the Eastern Part of Petersfield

The B2199 cuts off much of the Eastern part of Petersfield from the main Town and its centre. It runs from the B2146 at the South Eastern corner of Petersfield Heath to the junction with the A272 in Sheet, as illustrated in the map on Page 17. For traffic heading to or from Chichester and southern Sussex it is a major route for avoiding central Petersfield and performs the function of an unofficial eastern by-pass to the Town (ref: traffic counts in Section A1.2).

To the east of the road are the residential areas of Rival Moor Road, Durford Road, Pulens Crescent, Heathfield Road & Barnfield Road. The District council offices are also to the east of the road, as are the Town's main leisure facilities – the Taro Leisure centre, the Penns Field playing fields which are home to the Petersfield Rugby Club and are the main playing fields for Petersfield Town Juniors Football Club. Petersfield Cricket Club has one ground at Penns Place and another on the Heath. Churcher's College has two sports pitches at Penns Place. There is significant cross town movement of people, particularly children, to these leisure facilities. Comparison of the counted traffic movements on Pulens Lane at 11 am on Sundays near Barnfield Road and near Torberry Drive reflects the high movement of people to the sports clubs and leisure facilities (ref: traffic counts in Table 2 and Figure 1 in the Appendix). In the longer term, there is a proposal to use the old Midhurst railway line for a walking / cycling route to Midhurst, which emphasises the need for good crossing facilities on Pulens Lane.

To the west of the B2199 is Petersfield Heath, the other major leisure destination in the Town. The road is called Heath Road East for the first part of the journey from Sussex Road northwards. The road is long, flat and virtually straight, starting in a 40mph speed limit, with open heath on the West side and the fields of Heath Farm to the east. There are wide verges on both sides and good forward visibility. The T junction with Rival Moor Road is just within the 30mph speed limit and whilst there is still open heath to the west, the

eastern side of the road becomes residential with houses set back from the road. Families wishing to walk/cycle with their children towards the Infant School often choose to cross Heath Road East opposite Torberry Drive due to the good sight lines, despite the higher traffic speed, as this is a link to the footpath network across the Heath. Most of the accesses to the Heath are narrow, formed from short gaps in the hedging, which often results in pedestrians and dogs suddenly appearing on the edge of the road much to the concern of approaching drivers. This is an issue at many of the accesses around the Heath, some of them no doubt formed by members of the public wanting to create short-cuts. The status of the Heath would benefit from these being widened, formalised and appropriately signed as a form of welcome. It will be advantageous for the boundary of the Heath to be removed in places so as to blend the Heath into the Heath Road East road scene, and emphasising the crossing points. Cycling by adults is not permitted on The Heath. The recent Covid crisis has resulted in a large increase in use of the Heath, noticeable through the numbers of cars parked in the area and people taking exercise (including dog walkers and children playing). This has put a strain on the facilities and it is suggested that the Heath and its pond are likely to be more heavily used in the future also. Whilst active travel is encouraging people to walk and cycle to the Heath, the issue of adequate car parking facilities has to be considered also. At the current time, visitors to the Heath would appear not to park on Heath Road East or Pulens Lane so there is no problem there, but parking in Heath Road adjacent to the hedge has now become a problem.

The road becomes Pulens Lane where it intersects with Heath Road (to the west) and Durford Road to the East. This junction has been the location of numerous accidents over recent years, including a fatality, and has been subject to junction improvements by HCC. Durford Road is a major access route for cars going to/from Penns Place and the residential areas of the Rival Moor Road and other estates. It is also the main route for children heading towards the secondary school (TPS) on the Causeway and the Infant School. The Serpent Trail crosses the B2199 at this crossroads. The peak hours are a problem for both pedestrians and cyclists, as the vehicle movements are quite varied, leaving little time for pedestrians to feel that they can safely cross the road. This is a major problem for pedestrian movement in the area and is made worse by the lack of footway space for standing waiting on the west side.

Heading north, there are houses on both sides, and there is a downhill left-hand bend with vehicles picking up speed as they head north. On the apex of this curve is a T junction with Barnfield Road which will be the only road access for the new housing development of 85 houses on Penns Field, work on which has already started. The footway is on the south bound (east) side of Pulens Lane only.

Just beyond the junction with Barnfield Road is the access to the Rotherlands and the road bridge over the Tilmore Brook, which is adjacent to the heavily used (by pedestrians and cyclists) informal road crossing. The Brook has come from the Town Centre through the Herne Farm development and joins the River Rother to the north of the Taro Centre. The possibility of creating a cycle route alongside the Brook and into Penns Field should be considered further.

There is a shared cycle/footpath through the Herne Farm estate alongside the Brook, which becomes a well-used footpath only through Rotherlands to the east of Pulens Lane. The informal crossing point where it crosses the B2199 is the location of a school crossing patrol and is used by pupils from the Herne Junior School, by families en route to both the Infant school and TPS in the Town Centre, as well as Churcher's College. Unmanned crossing points further to the north are also used for the Junior School and Churcher's College which can both be accessed from Love Lane.

### 2.2 Safety Concerns

Pulens Lane is basically a heavily trafficked (in the peak hours) narrow two-way road with a single narrow footway on the east side only. It is heavily developed with houses on both sides, with drives coming straight onto the footway through narrow gaps in the hedging. The 85$^{th}$ percentile speed of traffic is 35-41 mph in a 30 mph area and vehicles have to be driven very close to the kerb due to the lack of road width. The footway is well used by pedestrians and there are a number of major crossing places. The common view of residents, pedestrians, cyclists and even drivers is that the road feels very unsafe to use and is certainly not a pleasant part of any journey. Some pedestrians and cyclists are known to avoid the area if at all possible and there are concerns that current and future developments in the Penns Field and Penns Place area will exacerbate the problems. This is a sad indictment and very far from the aims of "Active Travel".

Safety at the Tilmore Brook crossing point in particular is a major concern for both pedestrians and cyclists, due to a lack of visibility to the south because of the bend in the road, the speed of traffic and the steepness of the approach ramp from Lower Mead. The narrow footways on both sides also lead to conflict between opposing pedestrians and cyclists, making the situation even more dangerous. There are houses on both sides

(but footways only on the East side), and a series of intersecting roads coming in from both sides. These are (heading northwards) Pulens Crescent, Moggs Mead, Pulens Crescent (again), Love Lane and Hazelbank Close. The junctions are very varied in layout, some with good visibility, and steady usage throughout the day. However, there are visibility issues at Hazelbank Close for both exiting drivers and pedestrians crossing from the west side.

Pulens Lane ends at the intersection with the A272 in Sheet. This junction is on a slight incline, and is often heavily backed up at busy times of day due to the traffic on the A272. Traffic going straight across or turning right has to cross the southbound traffic stream, pausing half way across what used to be the main London – Portsmouth Road. Equally traffic heading north along the A272 turns right into Pulens Lane via a dedicated right-turn lane, but there is considerable conflict and confusion at peak times. The fast moving traffic in both directions is extremely challenging for both pedestrians and cyclists and is feared and avoided by many, much against the aims of Active Travel. The impatience and frustration of some drivers can also lead to dangerous reactions as they interface with other road users.

Traffic heading south along the B2199 Pulens Lane initially has good visibility on both sides, with houses set back some way from the road, and plenty of warning of the series of junctions. The bridge over Tilmore Brook is on a downslope and can catch drivers unawares if not used to it, hence the need for the crossing patrol. Further on the Durford Road crossroads is at the top of an incline, and carriageway markings and special signing have been used in an attempt to give advance warning to drivers.

The road sees a constant trickle of cyclists who need local access or are avoiding even more unpleasant conditions elsewhere. However, cyclists heading to Penns Place from the Town Centre will typically use either the shared cycle route by Tilmore Brook (which is narrow with numerous obstructions), or Heath Road before it crosses into Durford Road.

The main pedestrian crossing points are at Love Lane, Moggs Mead, the Tilmore Brook bridge, Durford Road junction or at Torberry Drive into the Heath. The footway is continuous on the East side of Pulens Lane right through from A272 to Rival Moor Road but is minimal on the West side, only appearing over short lengths. Unfortunately, the width of the footway is narrow (ref: Table 2) and in places much restricted by overgrowing hedges, resulting in pedestrians having to walk close to the vehicles travelling at speed very close to the kerb. This is the case throughout the length of Pulens Lane, as is the speed issue and this is made even worse by the need for pedestrians to walk in the carriageway to maintain distance during the Covid period of social distancing. In addition, some lengths are in theory shared with cyclists. Many people say that they feel very unsafe here and Pulens Lane has become a major obstacle for pedestrian and cycle movement. It should be noted that the footway widths in Heath Road and Durford Road are also very restricted by overgrowing hedges (ref: Table 3) and much in need of a formal "Footway Width Review" followed by urgent householder action to remove the excessive growth and reinstate the original width of footway. Ideally the width should be even greater so as to accommodate two pedestrians side by side as an absolute minimum, but that is not felt to be achievable in many locations.

Once consideration is given to the concept of "Active Travel", the need for action appears quite different. Measures need to be taken to give pedestrians and cyclists a much improved quality of life. Crossing over Pulens Lane should be made much easier and safer as should be walking longitudinally along the road, both activities being quite unpleasant at present and feel unsafe. The lack of a footway on both sides of the road means that pedestrians can only cross at certain locations. In addition to this cycling has its own difficulties with the only benefit to them being the shared footpath / cycleways alongside the Tilmore Brook and on the Pulens Lane footway between the Tilmore Brook and Durford Road. The footways are very narrow and unsuitable for shared use but cycling along Pulens Lane in the midst of the traffic is not a pleasant experience and many would decline to do so. For these reasons, it is felt that any solution to the problems associated with Pulens Lane should look more at the problems that are faced by pedestrians and cyclists, and find solutions compatible with Active Travel. The difficulties experienced in Pulens Lane were recognised during the early planning process for the Penns Field development, when a traffic calming scheme for Pulens Lane was prepared.

In order to find solutions that overcome these problems, there are a number of issues that require consideration:

- Reducing the speed of traffic throughout the length of Pulens Lane and Heath Road East, is absolutely essential before other benefits can be achieved.
- The key locations for carrying out works to improve the quality of life for pedestrians and cyclists are the Durford Road junction, the Barnfield Road junction and the Tilmore Brook crossing.

- Improving cycling access for those heading East-West (and vice versa) right across the length of the B2199. The shared path by the Tilmore Brook is too narrow (ref: Table 6), too obstructed and leads to inevitable conflict with pedestrians. It is acceptable for family cyclists but another route is needed for experienced cyclists.
- Improving pedestrian crossing points, throughout the length both into the Heath and multiple crossings towards Herne Junior School.
- Reducing congestion on the side roads at the A272 is a long term goal, but a separate study is required to look into this.

## 3. Finding Solutions

The problems on this section of road have existed for many years, but recent action has been limited to the Durford Road junction (with its record of serious collisions) and the Tilmore Brook Crossing where concerns for pedestrian safety have led to tree clearance, the erection of warning signs and laying friction surfacing on the carriageway. Vehicles dominate the street scene throughout and pedestrians and cyclists have to cross the road wherever they can find suitable gaps in the traffic. There is little evidence of drivers giving way to pedestrians in a friendly helpful way and the atmosphere is highly adversarial. In the future this is likely to get worse due to the Penns Field development which is now under way and to any future Harrier Way developments, unless suitable action is forthcoming (see Section A1.7 for a list of on-going and likely developments).

Whilst there are common problems at the different locations along Pulens Lane where action will really benefit pedestrians and cyclists, they can be implemented at varying degrees of intervention. The single aspect that will give most benefit to pedestrians and cyclists is the reduction of traffic speed (currently 35-41 mph 85$^{th}$ percentile in a 30mph limit). Traffic calming features along the full length will reduce speeds but it will only be when they can reduce it to 20mph that tangible benefits can be achieved for pedestrians. The construction of speed cushions will do little towards changing driver attitudes but the use of a broad range of features within a 20mph zone would produce a step change in behaviour. Whilst Pulens Lane cannot be reduced further in width, it does lend itself to the installation of micro roundabouts at some of the junctions with plateaux, flat topped tables at crossing points, narrowings (pinch points) at a number of locations, but the main point is that features have to be used on a regular basis along the road so as to keep the “calm” idea in driver’s minds. A feature could be made of the stonework remains of the overbridge where the Midhurst railway used to pass over the road. A micro roundabout at the Barnfield junction could be a feature and assist with the movement of vehicles out of the side road (and the Penns Field development).

The more problematic sites are the Tilmore Brook crossing and the Durford Road junction, both of which need to have features that will assist pedestrians and cyclists in some numbers. Tilmore Brook is very unsatisfactory because of the mix of pedestrians and cyclists trying to share the very narrow footways, especially the eastern end approaching Pulens Lane with its final steep gradient and many obstructions. The construction of a wide footbridge over the Brook on the west side or a widening of the existing bridge, could enable a Toucan Crossing to be installed south of the existing bridge (by piping the ditch and constructing a wide landing behind the Pulens Lane west kerbline). A wider shared footway up as far as Barnfield Road would then enable cyclists to either share this or use the carriageway before turning left into Barnfield Road. Making the timings friendly to pedestrians and cyclists would be a great assistance.

At Durford Road junction it is much more difficult to help pedestrians crossing the road and an informal crossing via a flat topped hump would not be safe, as drivers attention would be focused on other vehicle movements to the detriment of the pedestrians. Simple three phase traffic signals with each road having its own phase and pedestrians the third could work well and overcome the public’s concerns that insufficient “safety work” has been carried out to date and that it is still too dangerous a junction. There is no answer to this as public opinion or bias is very difficult to change. However the benefit to pedestrians and cyclists in having a more formal layout would be considerable. The restriction of some of the turning movements at the Durford Road junction (eg closure of Durford Road) should be considered, as it could assist pedestrians and cyclists by reducing the conflicting movements of vehicles. The effect on residents would be a big issue requiring consideration of the benefits and disbenefits in so doing, no doubt with a full public consultation. The mixing of formal and informal crossing places on a length of road is normally not good as drivers are less likely to acknowledge the needs of pedestrians on informal crossings and voluntarily give way to them, but careful design and signing of the overall layout should be able to overcome this.

As has been stated above, Pulens Lane is a very divisive road for the two communities living either side. There are a number of crossing places which need to be formally acknowledged and marked in similar ways. The

choice of crossing type is very important – the use of a Toucan crossing at the Tilmore Brook and traffic signals at the Durford Road junction could be the right choice and would fit in with traffic calming and a 20mph zone, but the other crossing places require a more informal solution. This could be simple flat topped tables or a sequence of zebra crossings, but this might not look good environmentally. It may be possible for a lesser type of crossing to be installed but this will only be possible if the DfT can give approval. Trials have been carried out in the past to find a less obtrusive crossing that is still safe and can be seen but the legal position would need to be confirmed.

It is recommended that discussions are held with the Traffic Signs Team at DfT to assess the current position and to discuss the likelihood of finding a suitable innovative solution. The Design Team will clearly be using their skills to achieve the optimum layout along the full length of Pulens Lane and all options and combinations should be considered.

## 4. The Key Outcomes

The key outcomes required for the design:

1. The full length of Pulens Lane and some of Heath Road East will look friendly and inviting to pedestrians and cyclists for both cross and longitudinal movements.
2. The Tilmore Brook Crossing on Pulens Lane will be pedestrian and cyclist friendly enabling them to cross safely, with ease and with little delay.
3. The layout of the Durford Road junction will be more friendly for pedestrians ensuring that they have their own time slots for safely crossing the road.
4. The speed of traffic on the B2199 should be considerably lower than at present, preferably less than 20 mph, with traffic moving smoothly but slowly during peak hours.
5. Cyclists will feel much more able and willing to keep to the roads in a 20mph zone, rather than share footways that are too narrow and cannot easily be widened.
6. The revised Barnfield Road junction should be able to cope with the increased flow of traffic from the new development, as well as increased numbers of pedestrians and cyclists.
7. Easier crossing of Pulens Lane and entry from the side roads should encourage cyclists to use more routes east-west across the Town.

Other possibilities that could stem from this:

- Improved access to The Heath from Heath Road East, through changes to the hedges, forming gateways, erecting suitable signing and paved approaches and entry.
- Improved cycle access across town if Pulens Lane becomes more friendly to cyclists (via Moggs Mead or Heath Road).
- Frontagers to be requested to cut back their hedges to the line of the highway boundary, once more allowing pedestrians to walk side by side as originally intended.
- The best cycle route from Town to the Taro Centre could be using Pulens Lane, Barnfield and Heathfield.
- Improve visibility at the south end of Heath Road East by reducing the height of the hedge on the junction with Sussex Road. This would assist drivers turning out of Heath Road East, turning left or right.
- Improve visibility for traffic turning right out of Rival Moor Road onto Heath Road East – hedge trimming required.

The junction of the B2199 with the A272 should have its own separate assessment, for changes which will reduce the negative aspects of the current layout.

## 5. Conclusions

Pulens Lane and Heath Road East form a major artery that divides much of Petersfield. They are dominated by vehicles, with pedestrians and cyclists having a poor quality of life and discouraged from using them. Vehicles are being driven at too high a speed, for which the roads are too narrow and totally unsuited. The simple act of reducing speed to 20mph would enable things to be very different and would transform life out of doors for both pedestrians and cyclists. If HCC and EHDC wish to encourage Active Travel in the Town, particularly for children, traffic speeds must be reduced so as to enable the free movement of people with more numerous safe crossing places on all roads, but especially Pulens Lane and Heath Road East.

The location, layout and any equipment at the crossing places will be a key aspect of the design. As there are so many crossing sites it is likely that some will be informal crossings, sited where vehicles are naturally being

driven slowly (perhaps at road humps). The optimum solution will be the one benefiting pedestrians and cyclists whilst still retaining the good-will of drivers, who have to be able to see why their freedom is being limited.

A major issue in studying these roads has been the poor quality of pedestrian environment, where footways have been allowed to deteriorate (mainly in terms of width) through the unrestricted growth of trees and hedges and also in some instances the grass in the verges. The action should come from frontagers but there is a need for the highway authority to demand the action in the first place. Resolving some of these problem areas could become fairly easy early "wins".

**Acknowledgement**

The Place-making Team at East Hampshire District Council commissioned this briefing note in order to ensure that local knowledge and experience of active travel issues was made available to the transport professionals of Hampshire County Council. The authors of this briefing note would also like to record their appreciation for the support and encouragement received from the many councillors and officers involved from all three levels of Local Government, as well as from the South Downs National Park Authority.

# Appendix 1

# Traffic Statistics, Pedestrian Movements, and Cycling Issues

## A1.1 Introduction to Appendix 1

This appendix provides detailed traffic and other statistics for Pulens Lane and some adjacent roads (it is likely that HCC and EHDC hold more topical and comprehensive statistics). The pedestrian movements are described and the cycling issues are described in greater detail. A list of development sites near Pulens Lane is provided. The relevant parts of the Petersfield Neighbourhood Plan and the Local Cycling and Walking Infrastructure Plan (LCWIP) are identified.

## A1.2 Traffic Speed and Volume

Pulens Lane is subject to a 30 mph speed limit. It is 5.6 m wide from Old Mill Lane to the southern arm of Pulens Crescent and 6.2 to 7.3 m wide to the Durford Road-Heath Road junction.[1]

HCC carried out a survey in September 2020 which provided speed and vehicle count data at three points in Pulens Lane and Heath Road East. Data is also available from previous surveys in 2013 and 2014. A single day manual count has been undertaken annually for DFT in Heath Road. Data from these surveys is summarised in the three tables which follow.

| Location | Direction | Vehicle speed measured in 2020 (mph, 85th percentile) | Vehicle speed measured in 2013 (mph, 85th percentile) |
|---|---|---|---|
| Heath Road East at Torberry Drive | North bound | 38.4 | - |
| Heath Road East at Torberry Drive | South bound | 39.3 | - |
| Pulens Lane at Barnfield Road | North bound | 41.2 | 40.4 |
| Pulens Lane at Barnfield Road | South bound | 40.6 | 37.8 |
| Pulens Lane at Pulens Crescent | North bound | 35.9 | - |
| Pulens Lane at Pulens Crescent | South bound | 36.8 | - |
| Pulens Lane north of Hazelbank Close | North bound | - | 36.0 |
| Pulens Lane north of Hazelbank Close | South bound | - | 35.0 |
| Sources:<br>2020 data: HCC traffic survey, September 2020.<br>2013 data: Bellamy Roberts, Land at Penn's Field Petersfield, Transport Assessment on behalf of Kebbell Homes, December 2015. | | | |

**Table 1: Measured vehicle speeds in Heath Road East and Pulens Lane**

| Location | Vehicles per hour during AM peak in 2020 | Vehicles per day (weekday average) in 2020 | Vehicles per day (weekend average) in 2020 | Vehicles per hour during AM peak in 2013 |
|---|---|---|---|---|
| Heath Road East at Torberry Drive | 463 | 4,150 | 3,782 | - |
| Pulens Lane at Barnfield Road | 718 | 6,185 | 5,314 | 715 |
| Pulens Lane at Pulens Crescent | 821 | 6,637 | 5,526 | - |
| Sources: | 2020 data: HCC traffic survey, September 2020.<br>2013 data: Bellamy Roberts, Land at Penn's Field Petersfield Transport Assessment on behalf of Kebbell Homes, December 2015. | | | |

**Table 2: Traffic counts in Heath Road East and Pulens Lane**

[1] Havant Borough Council Transport and Implementation, Pulens Lane Traffic Calming Feasibility Study, 2015.

| Street/road | Vehicles per hour during the AM peak in 2014 | Vehicles per day (weekdays) |
|---|---|---|
| Pulens Lane - at the junction with Durford Rd etc | 449<br>Source: 2014 survey | - |
| Heath Rd - between Hearn Road and Heath Road East | - | 1,812<br>Source: DfT |
| Heath Rd - at the junction with Pulens Lane, Durford Rd etc | 150<br>Source: 2014 survey | - |
| Durford Road Rd - at the junction with Pulens Lane, Heath Rd etc | 201<br>Source: 2014 survey | - |
| Rival Moor Road - at the junction with Heath Road East | 155<br>Source: 2014 survey | - |
| Heath Road East - south of Rival Moor Road | 278<br>Source: 2014 survey | - |
| Sources: Transport Planning Associates, Transport Statement Addendum, Percentage Impact Assessment at Local Junctions, SDNP/14/04278/OUT, Durford Oaks, Petersfield, December 2014. This reports a survey undertaken on Tuesday 9th December 2014.<br>DFT: annual one day traffic count during a weekday in July in Heath Road (between Hearn Road and Heath Road East), see: roadtraffic.dft.gov.uk. The figure above is the average count over 5 years (2015-2019). | | |

**Table 3: Traffic counts undertaken in Pulens Lane, Heath Road, Durford Road, Rival Moor Road and Heath Road East in 2014**

The B2199 mainly serves drivers heading for the following destinations:

- Local residents using their cars for commuting, for the school run, for shopping for leisure etc. Also trades people and delivery drivers visiting local residents.
- Drivers heading towards Chichester who want to avoid the centre of Petersfield, as is evident in Table 2 and Table 3.
- Drivers using the Town's leisure facilities which straddle the B2199. Pulens Lane and Durford Road and Heath Road see significant traffic to and from the Heath, the Taro Leisure Centre, and the sports fields. About 900 people visited the Heath every day during the summer of 2019 and about 1,500 in June-July 2020[2]. A survey conducted in June 2019 found that 86% of visitors had travelled to the Heath by car. Table 3 suggests that Durford Road, rather than Rival Moor Road, carries most of the traffic to and from the Taro Leisure Centre and the sports fields.
- Drivers travelling to the offices at the Heath Farm business hub at the southern end of Heath Road East, see the Map on Page 17.

Table 7 provides a list of "trip generators" in this part of Petersfield. Figure 1 shows one hour traffic counts plotted against the time of day for two sites in Pulens Lane and for Heath Road East. These graphs illustrate the following:

- The peak of the flows on Saturday and Sundays is similar in count to the weekday peak but occurs in the middle of the day. This reflects a large number of families heading for the leisure facilities.
- The wide afternoon peak during the week may be caused by school picks ups.
- The volume of traffic is highest in the northern end of Pulens Lane.

The survey carried out by HCC in September 2020 showed that about 17% of vehicles using Pulens Lane and Heath Road East were over 5.2 m long.

[2] Attachment to the minutes of the Petersfield Town Council Grounds Committee for March 2021.

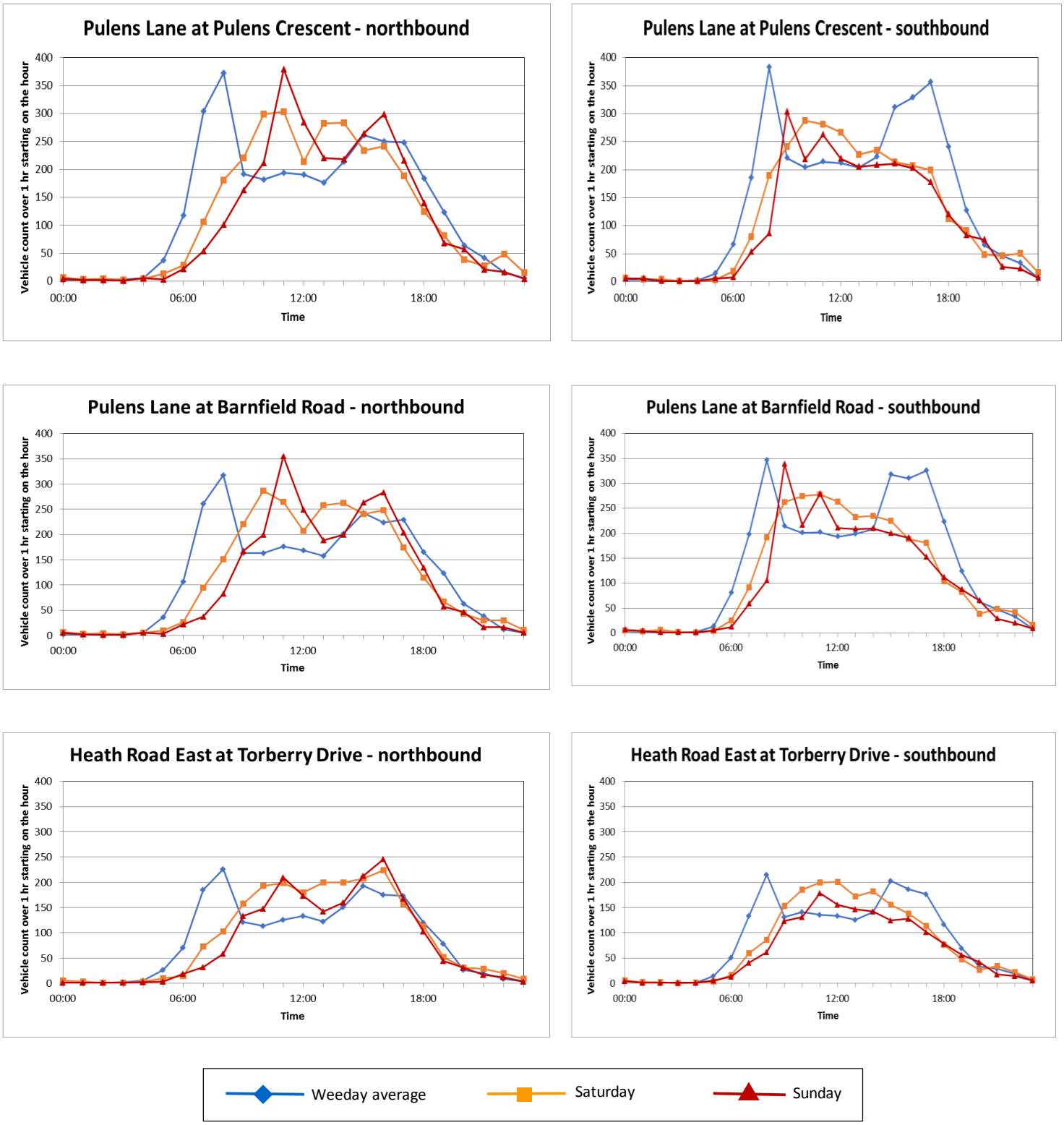



**Figure 1: One hour traffic count plotted against time of day for two sites in Pulens Lane and for Heath Road East. The counts were undertaken by HCC in September 2020.**

## A1.3 Pedestrian Movements

The following geographic factors influence both the pedestrian and the cycle flows at and near these junctions:

- A large population lives in the residential area to the east of the B2199. There are 2300 adults[3] in Petersfield's Heath Ward, most of whom live on the east side of the B2199.
- The four schools in Petersfield are to the west of the road, including Herne Junior school which is 400m from Pulens Lane. There is a significant east-west flow of teenage school children and younger accompanied children.
- The greater part of the Town is to the west including the High Street, the Square, the Station and most office and business sites. This is well within walking distance and so there are significant flows of people walking to work, to go shopping and to access services in the Town Centre.
- The leisure facilities for the Town straddle the B2199. Hence these roads see pedestrian movements to and from the Heath, the Taro Leisure Centre, the sports fields, the Rotherlands nature reserve, and the Town's sports clubs.
- The majority of the pedestrian traffic flows east-west and west-east. There is less demand for North-South pedestrian traffic, unless it is accessing suitable crossing points. The East side of the B2199 south of the Tilmore Brook crossing is particularly heavily used as this is the main crossing point. On the west side of this crossing, most pedestrians continue up into Lower Mead and Moggs Mead. Many pedestrians also cross from Durford Road to Heath Road and vice versa, mostly on the north side in view of the single footway on Heath Road which is on the north side (in addition there is a footpath across the Heath but it is muddy for much of the year).
- There are four informal crossing points of Heath Road East between Heath Road and Rival Moor Road which connect to footpaths across the Heath. Two of these crossing points are no more than holes in the hedge on the west side of Heath Road East (one is opposite Torberry Drive and the other is between Torberry Drive and Rival Moor Road). The opening near Rival Moor has a dropped kerb and a few metre of tarmac path. The most northerly crossing point is marked with two brightly covered bollards.
- The residents living in the 15 houses on the west side of Pulens Lane where there is not a footway have little choice but to cross Pulens Lane from their front gates or drives.
- The 65 mile Serpent Trail route initiative encourages walkers to proceed from the Heath and to cross Pulens Lane at the Durford Road crossroads. The route proceeds along Durford Road, see the map on Page 17.

## A1.4 Cycle Movements

The geographic factors described above also give rise to cycle movements. The majority of these are also east-west and west-east. In addition, there is also a flow of cyclists north-south along Pulens Lane. This consists of a mixture of experienced recreational road cyclists who use this as a route to reach villages and the countryside to the south of Petersfield and who also use Pulens Lane to bypass Petersfield Town Centre with its cycle-unfriendly roads and junctions. In addition there are a few utility cyclists who use Pulens Lane when travelling to and from Sheet.

The only cycle count data that has been found is from DfT's annual one day traffic count during a weekday in July in Heath Road (between Herne Road and Heath Road East). The average daily count over 5 years (2015-2019) is 118 bicycles (two way flow).

## A1.5 Issues with Pulens Lane from the Walking Perspective

### A1.5.1 Footway Problems

Table 4 shows the width of the footway along Pulens Lane is sub-standard. Narrow sections are found on both the southern and the northern ends of Pulens Lane. The footways on Durford Road and Heath Road approaching the Pulens Lane junction are also narrow, see Table 5.

[3] This was the size of the electorate in 2018 according to a Boundary Commission Report after rounding down to the nearest one hundred adults.

| Location | Footway (cycleway) width (m) | Remarks |
|---|---|---|
| North of Hazelbank Close | **1.3 - 1.8** | The narrowest section is outside Nos 34-42 |
| Between Hazelbank Close & the northern arm of Pulens Crescent | 1.4 - 2.3 | |
| Between the northern arm of Pulens Crescent & Tilmore Brook | 1.4 - 1.9 | There is a grass verge between the footway and the carriageway along this section |
| Landing area on east side of the footway/cycleway crossing | 1.9 | There is a 1.1 m verge between tarmac footway/cycleway & a boundary fence |
| On the bridge over Tilmore Brook | **1.3** | Shared footway and cycleway |
| Between the Bridge and Barnfield Road | 1.7 - 1.9 | Shared footway and cycleway |
| Between Barnfield Close & Montague Gardens | 1.5 - 1.8 | Shared footway and cycleway |
| Between Montague Gardens & Durford Road | **1.2 - 1.5** | Short section of cycleway stops south of Barnfield Road. It serves no useful purpose. |

**Table 4: width of the single footway in Pulens Lane (for the most part there is not a footway along the west side of Pulens Lane) [4]. The narrowest sections of footway are shown in a bold font.**

| Location | Footway (cycleway) width (m) | Remarks |
|---|---|---|
| Heath Road - from the junction with Pulens Lane to the start of the bend about 100 m to the west | **0.9 – 1.6** | Overhanging hedges |
| Heath Road East - the single footway from Duford Road to Rival Moor Road | ~1.5 m | |
| Durford Road, north side - from the junction with Pulens Lane to Home Way | **1.1 - 1.7** | Overhanging hedges |
| Durford Road, south side - from the junction with Pulens Lane to Home Way | **1.0 - 1.7** | Overhanging hedges/shrubs. |

**Table 5: Width of the footways in parts of Heath Road and Durford Road.**

The document "Manual for Streets" states that the minimum footway should generally be 2.0 m in residential streets[5]. This is about the minimum width for two people to pass comfortably. Wheel chairs and buggies need a little more width. The triple buggies from the nursery school in Sheet which use Pulens Lane need significantly more width. More width is also required to ensure pedestrians are clear of the wing mirrors of vehicles driving past and are not splashed in wet weather.

### A1.5.2 Problems with Shared Paths

About 80% of the shared footway and cycleway from Tor Way to the Taro Leisure Centre is too narrow. The width of each section is set out in Table 6. The sightlines are poor at two locations. Cyclists are put at risk by closely staggered steel barriers and by 3 poorly positioned lighting columns.

The recommended minimum width for 2-way shared-use routes is 3.0 m, with 4.0 m preferred (source: LTN 1/20 Sections 5 and 6). The section across Penns Playing Fields is less unsatisfactory, but at the time of writing there is uncertainty about the impact on this route from the Penns Field development (SDNP/ 20/ 05682/

[4] Measured with a steel tape measure, as were the dimension shown in Table 5.

[5] DFT, Manual for Streets, 2007, Paragraph 6.3.22.

CND). Another problem is the convergence of roads and cycle routes at the junctions of Pulens Lane -Barnfield Rd and Heathfield Rd-Barnfield Rd.

The problems where the Tilmore Brook shared path crosses Pulens Lane are described in Section 2.2.

| | Section | Sub-section | Width (m) | Length (m) | Remarks |
|---|---|---|---|---|---|
| 1 | From Tor Way to Crundles and the Co-op | Junction with Tor Way to section parallel with Idsworth Down including the 2 right angle bends | 3.0 | 80 | |
| 2 | | Section parallel with Idsworth Down Rd from right angle bend to Herne Rd | 4.0 | 68 | |
| 3 | | Herne Road to Marden Way | 4.0 | 267 | |
| 4 | | Marden Way to junction with footpath to the Crundles | 3.0 | 153 | |
| 5 | Crundles and the Co-op to Harting Down | - | 2.0 | 83 | |
| 6 | Harting Down to Lower Mead | - | 2.0 | 363 | The width is reduced to less than 2.0 m by vegetation in a few places. Limited potential for increasing the width. |
| 7 | Lower Mead to Pulens Lane | - | 1.6 | 35 | Grass has grown over the tarmac. |
| 8 | Pulens Lane to the Taro Centre | Pulens Lane crossing to the bridge over Tilmore Brook | 1.7 | 9 | The landing area on the east side of the crossing is 1.9-2.1 m wide. |
| 9 | | On the bridge over Tilmore Brook | 1.3 | 10 | |
| 10 | | From the bridge over Tilmore Brook to Barnfield Rd | 1.8 | 50 | |
| 11 | | Heathfield Road to the footpath near the Taro Leisure Centre | 2.3 | 521 | |
| **Total length with width of 2 m or less** | | | | 550 | ~33% of the total length |
| **Total length with width of 3 m or less** | | | | 1,304 | ~80% of the total length |
| **Total length with width of 4 m or less** | | | | 1,639 | 100% of the total length |

**Table 6: The width of the Tilmore Brook Shared Path[6]**

## A1.6 Issues with Pulens Lane from the Cycling Perspective

### A1.6.1 Pulens Lane

Cyclists riding on Pulens Lane and Heath Road East are obliged to mix with vehicles travelling at 35-41 mph (85$^{th}$ percentile) this is a key factor in making it feel unsafe, especially when combined with a relatively high volume of traffic for a residential road. Pulens Lane is narrow and so vehicles can only overtake cyclists when there is a gap in on-coming traffic. Thus cyclists often have one or two vehicles tailing them closely while they wait to overtake. This is stressful.

There is no respite from the heavy traffic during the weekends, as is shown in Figure 1, when families may wish to use their bicycles to reach the Heath or the Taro Leisure Centre.

According to Figure 4.1 of LTN 1/20, the speed and volume of traffic and the lack of protected space are such that most people will have safety concerns in Pulens Lane. If the speed limit was reduced to 20 mph, the volume of traffic is still sufficiently high to exclude some potential cyclists. There is insufficient space for a segregated cycle way one each side of Pulens Lane but this would be appropriate if there was the space.

### A1.6.2 Pulens Lane-Durford Road-Heath Road-Heath Road East Junction

Southbound drivers on Pulens Lane have limited overtaking options between the Moggs Mead junction and the junction with Durford Road. The gradient hides the junction ahead. It is common for drivers who have

[6] Path was measured with a steel tape measure. The length of each section was estimated using the aerial photographs and the measuring tool available on gridreferencefinder.com, except for the short lengths which were paced.

followed cyclists towards this junction to overtake while the cyclist is crossing the junction. Fast and close passes are commonly experienced by cyclists on this junction. One author has been overtaken here on two occasions when positioned on the outside of the lane with an arm raised to indicate a right turn. Such driving behaviour is very frightening for cyclists as it puts them at risk of serious injury.

At peak times, cyclists wishing to cross between minor arms of the Pulens Lane-Durford Road crossroads have to cross two flows of heavy and fast moving traffic. This is a daunting prospect. Sometimes there is the additional issue of a driver emerging from the opposite arm who fails to communicate their intentions and turns across a cyclist who has already started to proceed onto the junction. Some experienced cyclists adopt the strategy of waiting until the arm in front of them is clear in addition to the traffic from left and right. However this requires patience on behalf of the cyclist and also being prepared to hold up drivers waiting behind them until it is safe to cross. Inexperienced cyclists may feel intimidated in this situation.

Southbound cars on Pulens Lane approaching this junction sometimes swing out when turning into Durford Road because they misjudge the tight radius. Long vehicles also tend to swing out. Westbound cyclists positioned in the centre of their lane while waiting to cross are very vulnerable in this situation.

#### A1.6.3 Pulens Lane Crossing of the Tilmore Brook Shared Path

Cyclists wishing to cross Pulens Lane at the crossing of the Tilmore Brook Shared Path share the problems faced by pedestrians. In addition the gradient on the west side is awkward and could catch out inexperienced cyclists (LTN 1/20 Para 5:11 explains that gradients greater than 3% are problematic in these circumstances). This is a problem for wheelchairs, scooters, cycles etc. The clutter (poorly placed steel barriers, a bin, a sign and two plastic bollards) makes manoeuvring a bicycle difficult. On the east side of the crossing there is a lack of manoeuvring space.

### A1.7 List of Development Sites in the Pulens Lane Area

There are a number of developments which are likely to increase the population and the traffic in the area of Pulens Lane:

- Planning permission (SDNP/15/06484/FUL) has been granted for 85 dwellings on the 3 hectare Penns Field site and construction has commenced. Several organisations and many residents have pointed out that this development is likely to degrade the amenity value of the long established shared path across Penns Field, but that there are opportunities to re-route it. There is also concern that the active travel routes from the north of the site along the desire line to the Town Centre will be inadequate unless investment is forthcoming.
- Planning permission has been granted for an assisted living community complex with 70 dwellings for older people on land off Harrier Way.
- The South Downs Local Plan strategic policy SD85 identifies a site between Pulens Lane and the Rother to be suitable for 15-18 dwellings.
- The South Downs Local Plan strategic policy SD20 identified the disused railway from Petersfield to Pulborough via Midhurst as a high priority non-motorised transport route. When completed, this new route will attract cyclists and pedestrians towards this part of the Town, both residents and visitors. It is likely to be popular judging by the significant number of users on similar long distance off-road routes.
- Recently EHDC allocated £150k to explore planning options for the site of the Penns Place Offices.
- A long term ambition of PTC to create a sports hub at Penns Field (Minutes of PTC Grounds Committee (Oct 2019). In addition, it should be assumed that there will be growth in the utilisation of the current sports and leisure facilities as the population of the Town and the surrounding area grows.

The location of these sites is illustrated in the maps on Pages 17 and 18. All of the above will significantly increase movements from the east side of Town towards the Town Centre and underlines the need for good crossing facilities on Pulens Lane.

### A1.8 Developer Contributions

The developer contributions for SDNP/15/06484/FUL (permission January 2017). Penns Field, Heathfield Road, Petersfield, Hants, have been described as follows:

> *Transport/Highways Contribution (£312,682) - The contribution would be used for proposed traffic calming measures at Pulens Lane and towards the implementation of local identified schemes set out in the Development Brief including traffic calming measures on Heathfield Road and Barnfield Road,*

*the Petersfield to Midhurst cycle route and improvements to the junction of Pulens Lane with London Road.*

The developer contributions for SDNP/15/05258/FUL (permission May 2016). Land at Causeway Farm, have been described as follows:

*A contribution of £700,000 for transport infrastructure improvements and secure their implementation. This is to include traffic calming at 6 locations in Petersfield - 1) Pulens Lane / London Road Junction; 2) Pulens Lane / Durford Road Junction; 3) Moggs Mead / Tor Way Junction; 4) Station Road; 5) Chapel Street; and 6) High Street - and associated approach roads.*

### A1.9 The Petersfield Neighbourhood Plan

The Petersfield Neighbourhood Plan seeks improved pedestrian and cycling access to the Town Centre (GAP1).

Policy NEP6 seeks to protect off-road cycle routes including along Tilmore Brook and onward to the Taro Leisure Centre.

The getting around policies in Table 10 on Page 76 identified the improvement to the Durford Road - Pulens Lane junction as priority A (out of a list from A-L). Four of the 19 identified traffic improvements were situated along the length of Pulens Lane. New cycle paths are suggested adjacent to Rival Moor Road, Heath Road East and along Heath Road.

### A1.10 The Local Cycling and Walking Infrastructure Plan (LCWIP)

The East Hampshire Local Cycling and Walking Infrastructure Plan (LCWIP) identified many relevant improvements including the following:

- Two quick wins for cyclists to the East of Petersfield. The first is the removal of the pointless staggered barriers at Lower Mead (this is disputed by parents with very young children as they value having a barrier of some sort), and a need to widen the shared path to the East of Pulens lane south of Tilmore Brook. Item Ptr 55 identified the need for a study to improve the shared path alongside Pulens Lane.
- Traffic calming along Moggs Mead; consider filtering, £100k, (Ptr63).
- Improve the Taro Trail at Pulens Bridge (the Tilmore Brook bridge) at an estimated cost of £50k (Ptr 67).
- Widen Taro Trail to min 3.0 m including segregation on sections with poor forward visibility (crossing the Brook), £200k (Ptr65).

### A1.11 Long Term Planning of Cycling and Walking Routes in the Eastern Part of Petersfield

The Town lacks a good[7] cycling route which links the Town Centre including the High Street, the Station, the schools in central Petersfield (PIS, TPS) with the residential neighbourhoods near Durford Road, the Taro Leisure Centre or to the planned Rother Valley Way[8]. The new developments planned for the eastern side of the Town, as identified in Section A1.7, make the need to improve the existing route and to develop new routes more important.

The Petersfield Neighbourhood Plan identified improvements to cycle routes along Heath Road, Heath Road East and Rival Moor Road. There is a suggestion within the LCWIP that Heath Road and the route along Tilmore Brook should be part of the Town's cycle network (in Figure 5.4). These ideas need further investigation so that routes for active travel are developed in a coordinated and systematic manner. However based on these ideas and other informal discussions, it is recommended that the following working assumptions are made until such time that this problem is studied in detail:

- **A route east for experienced cyclists** could follow Heath Road and Durford Road. However some improvements are required. The problems with Durford Road include a constant flow of through traffic to the Taro Leisure Centre and kerbside parking which reduces the road to a single lane width. Heath Road sees lighter traffic and is wider but "car dooring" is a constant risk, as are "hedge poppers". The LCWIP recommends constructing some shared-use paths across the Heath (Ptr 30).

[7] In this context "good" means meeting the core design principals set out in LTN 1/20, free of conflict with pedestrians, suitable for all types of cyclist, including children, and with adequate capacity for growth.

[8] The Rother Valley Way is the title used by SDNPA for their initiative to provide a cycling and walking route along the former railway line from Petersfield to Midhurst and Pulborough.

However LTN 1/20 does not recommend shared path except in the last resort. Another option may be routing a cycleway on the edge of the Heath along Heath Road and on Heath Road East.

- **A route east for inexperienced cyclists and family groups** could follow the shared footway/cycleway along Tilmore Brook and then east onto Barnfield/Heathfield Roads and then the Taro playing fields. However this route requires numerous interventions, including re-routing to avoid the narrow sections, widening where there is space, improved sightlines, improved crossings and the removal of unnecessary barriers.
- **Route east for residents of Sheet** will be along Love Lane. Interventions are required to remove overgrown vegetation, poor drainage, increase the width and improve some junctions with some side roads.

The SDNPA development brief for the site off the northern end of Pulens Lane (Stocklands Farm) proposes the construction of a non-motorised vehicle route parallel with the Rother which could potentially connect the north end of Pulens Lane to the Penn's Playing Fields, the Taro Centre, the future Rother Valley Way and the Serpent Trail. Such a route could significantly enhance pedestrian and cycle access to these destinations from many neighbourhoods adjacent to Pulens Lane.

Some neighbourhoods on the eastern side of Petersfield, such as the Herne Farm estate, currently have an adequate network of pedestrian routes to provide onward connections to key destinations such as the Town Centre, the Heath and the Taro Leisure Centre, but there are exceptions. The developments that followed on after the construction of the Petersfield to Midhurst railway have resulted in a lack of north-south routes between the Herne Farm estate and the Heath, meaning that the Heath is not easily accessible on foot or on a bicycle for many residents and that Pulens Lane is a key route for many There is also a lack of north-south pedestrian routes between Penns Field and Claire Gardens (off Durford Road).

However, many of the pedestrian routes are suffering from reduced footway widths due to a combination of incorrect location of hedging plants (planting too close to the highway boundary) and / or lack of maintenance by the householder resulting in thick hedges which restrict the use of part of the footway, causing pedestrians to have to walk single file and too close to the traffic, are therefore at greater risk than they need be.

A concerted effort townwide will be required to resolve this issue, but it is very important that it is carried out on Pulens Lane, Heath Road East, Heath Road and Durford Road where the lack of footway width has become such a major problem.

The Serpent Trail ends at the Heath having taken walkers along the length of Durford Road and across the Durford Road crossroads. Perhaps there is potential to find a safer and pleasanter way for walkers to traverse this part of the Town.

Table 7 overleaf demonstrates that there are many trip generators in this part of Petersfield. The busiest ones are the Taro Leisure Centre and associated destinations (the Rugby Club and the playing fields) and the Heath. However it is difficult to reach these from some neighbourhoods on foot or using a bicycle.

| Id | Description | Notes |
|---|---|---|
| 1 | Hearn Junior School | The 2018 school travel survey reported the following travel modes by pupils to reach this school. Walk: 238, cycle: 21, bus: 4, park & stride: 234, train: 1, car share:10, car 139, scooting: 44. |
| 2 | Herne Farm Leisure Centre | Offering a hall (seating for up to 90 people), a swimming pool and two squash courts. The Herne Farm Preschool which used the Leisure Centre appears to have closed. |
| 3 | The Co-operative Food, 11 The Crundles, Moggs Mead | Convenience store selling groceries, newspapers & magazines, Hermes drop-off etc. |
| 4 | Londis - Heathside Stores, 22 Durford Road | Convenience store selling groceries, newspapers & magazines, cash machine. |
| 5 | Taro Leisure Centre | Turnstile data indicated about 1,100 people per day visited in 2019/20 (source email from DFB 13-Apr-20). |
| 6 | Petersfield Rugby Club | Minutes of the 2016 AGM suggested that the club house sees 70-80 visitors/day. |
| 7 | Penns Place, Offices of East Hampshire District Council | Main council offices for East Hampshire District Council. |
| 8 | Penns Farm Playing Fields and the children's play area near the Taro Leisure Centre | 4 adult rugby pitches, rugby training area. 4 junior football pitches. One cricket pitch. Mostly owned by PTC, EHDC owns THE field to rear of the Rugby Club house. Churcher's College owns an rugby/cricket ground. |
| 9 | Petersfield waste water treatment plant, Durford Road | Likely to generate HGV movements. |
| 10 | The Little School by the Lake, Heath Road | A nursery school. 60 places. |
| 11 | South Petersfield Golf Club, Sussex Road | A 12 hole pay and play course. |
| 12 | Petersfield Cricket Club, The Club House, The Heath. | |
| 13 | The Heath | About 900 people /day visited the Heath during the summer of 2019 and about 1,500 / day in June-July 2020. A survey conducted in June 2019 found that 86% of visitors had travelled to the Heath by car. Source: Minutes of PTC Grounds Committee, March 2021. |
| 14 | Feefo Holdings Ltd, Barn Heath Farm, Heath Road East. | Information technology consultancy offering marketing-related services, employing about 110 people in 2020. |
| 15 | Ann-Marie Powell Gardens, The Old Tractor Shed, Heath Farm, Heath Road East. | Garden and landscape design. |
| 16 | Azalea Co Ltd, Heath Farm, Heath Road East. | PR/marketing consultancy for sports people. Employed about 14 people in 2020. |
| 17 | Location Landscapes, The Old Parlour, Heath Farm, Heath Road East | Garden maintenance and soft landscaping for domestic gardens. |

**Table 7: Trip generators within Petersfield to the east and to the South of Hearn Junior School. Additional entries in the future could include the Rother Valley Way (SDNPA's aspiration for the old railway line between Petersfield to Midhurst and Pulborough to become a cycling and walking route). Also possibly a sports hub or housing at the Penns Place site.**

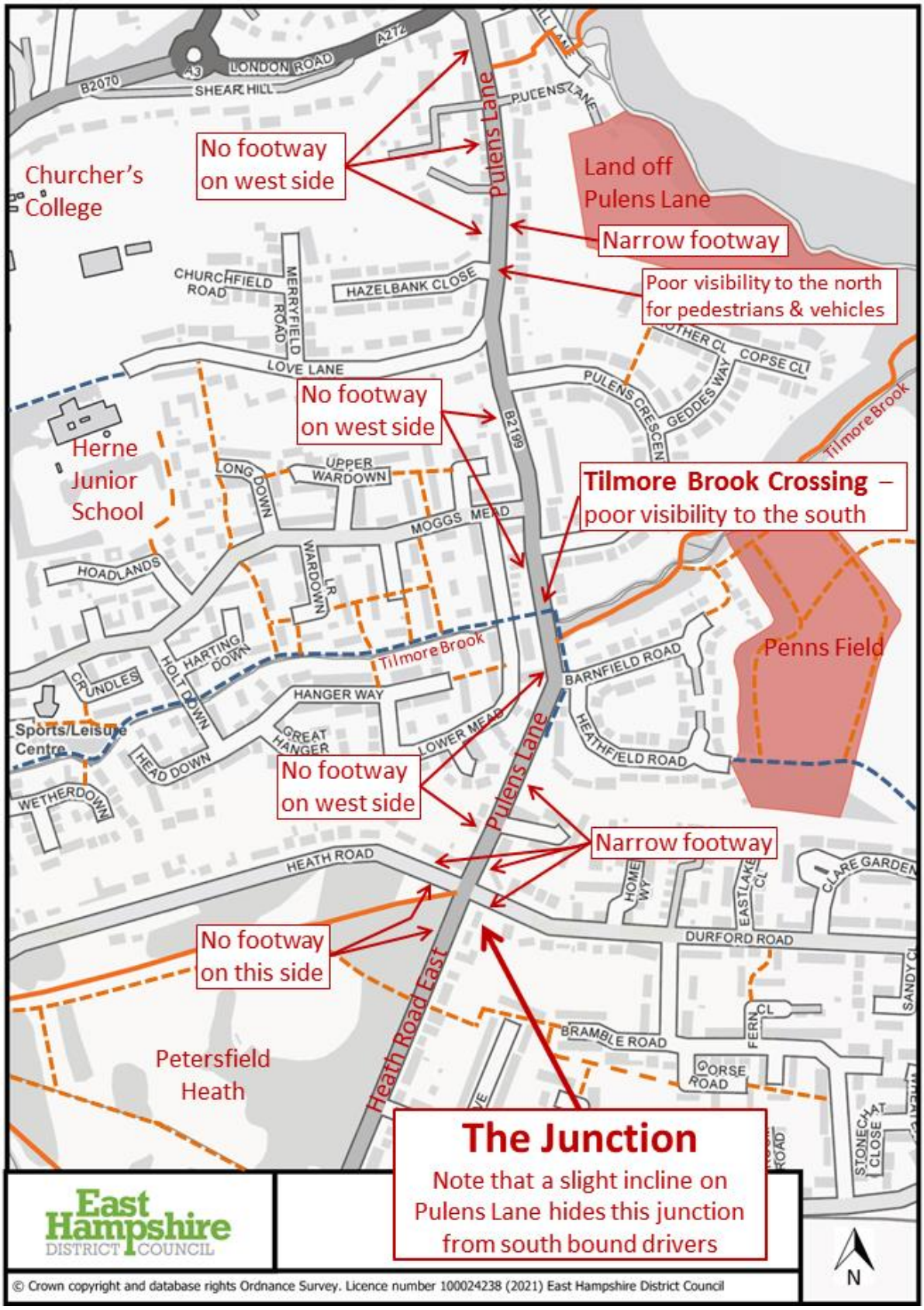
## Map 1 - the east side of Petersfield


**Legend**

- Footpath
- Serpent's Trail footpath
- Shared footpath and cycle route

Warning – some features have been added by hand by the authors. Hence there may be errors in the shape and alignment of some features.

**Map 2 - Pulens Lane**




**Legend**

- Footpath used by the public
- Footpath - public right of way
- Shared footpath and cycle route

Warning – some features have been added by hand by the authors. Hence there may be errors in the shape and alignment of some features.