Scaynes Hill - Lindfield Active Travel (SHLAT)

Feasibility Report for a

SAFE CYCLE/WALKWAY BETWEEN SCAYNES HILL & LINDFIELD

Scaynes Hill







Lindfield

MAIN REPORT & EXECUTIVE SUMMARY

September 2023

Foreword from Mims Davies MP for Mid Sussex





I very much thank all those in the local community who have worked together to bring forward this key report. I fully support the community proposal for a cycle and walking path between Scaynes Hill and Lindfield and will, as the local Member of Parliament, offer it every possible assistance and support.

Scaynes Hill is a popular rural area within the Mid Sussex District, that along with other rural communities, faces the challenges of accessing a wide range of services and shopping facilities without residents having access to a vehicle. Providing a safe, formal alternative route in the form of a cycle/footpath across the area is a vital lifeline to many and also offers the community positive environmental and health friendly benefits. It is therefore additionally pleasing to see that this proposal will have good connectivity with other existing and planned Active Travel schemes in the area. I think it would be very appropriate for this to move forward in any way possible.

The UK Government is a global leader on the environment with a legal commitment to net zero emissions by 2050 backed up by targets to reduce CO₂ faster than any other G7 nation. Promoting and increasing Active Travel by cycling and walking are very much a part of this.

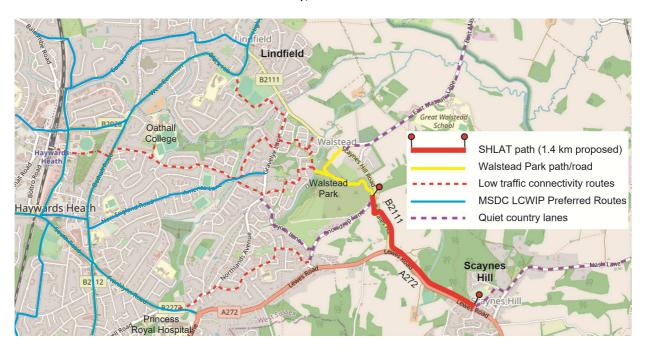
Mims Davies

Member of Parliament for Mid Sussex

EXECUTIVE SUMMARY

Public amenities in Scaynes Hill are limited and the current walking and cycling routes from Scaynes Hill to Lindfield or Haywards Heath to reach shops and services are either impractical or along busy roads (A272 & B2111) with no footway and therefore dangerous. The bus service in Scaynes Hill has only one bus per hour meaning that most people in Scaynes Hill have to own and use a car even for short trips. A project that would allow more people to make walking or cycling their mode of choice for short trips aligns with the Government's commitment to increase Active Travel due to all the benefits that it brings. Those benefits include improved health & well-being, reduced emissions of CO₂, improved air quality, reduced congestion on roads, reduced problems with parking particularly at schools, improved travel choices and economic growth. It would also align with similar policies at local government level.

There has been a desire and need for a safe dedicated cycling and walking connection between Scaynes Hill and Lindfield for decades as represented in the Scaynes Hill Village Plan (2011) and the Lindfield and Lindfield Rural Parish Neighbourhood Plan (2014). This was demonstrated again by public surveys carried out in 2021/2 when two thirds of the residents of Scaynes Hill and a similar number from Lindfield supported the project. The surveys represented over 1700 people, 97% of whom are supportive of the project, with only 1% opposed, and 84% indicating that they would be highly likely to use it. Local landowners are also included in the support of this project as they are prepared to allow the construction of the path on their land. In addition it has support from the local Member of Parliament and all the local Councillors at County, District and Parish levels.



The proposed route alongside the A272 and B2111 from Scaynes Hill to the north-east end of Snowdrop Lane is only 1.4 km long. It would connect with a path being provided as part of the Walstead Park development, which is currently under construction, giving onward connectivity via low traffic residential roads/paths to Lindfield and Haywards Heath. This includes connecting to the preferred network of routes proposed in the recent Mid Sussex District Council (MSDC) Local Cycling & Walking Infrastructure Plan (LCWIP). It would also give safe access to the countryside to the east of Haywards Heath for residents of the urban area via the quiet country lanes of East Mascalls Lane and Nash Lane, both already popular with cyclists. Therefore this is not a standalone project, but one that would connect well with other existing and planned routes.

The route is both technically feasible and deliverable, taking into account the latest Department for Transport guidelines for Active Travel projects. The base case scenario along the verge of the A272 would not alter either the width or alignment of the road carriageway. Along the narrow B2111 the path would be off road on private land along the adjacent field margins. In the context of the current WSCC review of their Speed Limit Policy where "Emphasis will be on the mix of vulnerable road users, such as pedestrians, cyclists, and equestrians first and then motorised traffic" speed limit reductions for traffic along the route are required to achieve design parameters.

The estimated cost of about £1.0 million may seem large but the analysis using the current Department for Transport assessment tool for this kind of project shows it to be in the top category of very high value for money. There is £135,000 of Section 106 money from the Swallows development in Scaynes Hill already specifically allocated to this project and a further £358,000 of Section 106 money from developments to the East of Gravelye Lane allocated to this project by West Sussex County Council (WSCC). There is also the potential for £100,000 more from the Walstead Park development. Therefore about 50% or more of the estimated project cost is covered by existing Section 106 funds. The balance of funds required still needs to be identified but we believe that such an amount could be obtained from the Active Travel Fund.

Alternative routes have been studied and a preferred route selected. In order to prepare a robust and reliable cost estimate an outline design has been carried out, taking account of route topography, existing structures, buried utilities, landscaping and finishing works. Land constraints adjacent to the existing carriageway have also been considered.

Owners with frontages adjacent to the road have been consulted. The design has been undertaken and costed by professional engineers with the result being subjected to cost benefit analysis. There is further work needed but we believe a feasible available route has been demonstrated in sufficient detail to support an application for funding by WSCC to the Active Travel Fund for the rest of the amount needed. There is a short window of opportunity to develop the project as the Section 106 funds need to be used within 10 years of their receipt or they will be lost to other schemes. The time limit for the Swallows Section 106 funds is March 2029, less than six years, while most of the other funds would have been received by WSCC earlier and will have a shorter deadline for use.

The proposed project is an excellent solution to a number of related problems. It will be using existing Section 106 funds to provide much needed travel choice to the local community, while encouraging behaviours to lower carbon emissions, which will support the fight against climate change. It is recommended that WSCC review this report with a view to developing and adopting the project in order to put in an application for further funding. The Scaynes Hill - Lindfield Active Travel (SHLAT) group, who have prepared this report, are available to discuss any aspect of this study with WSCC officers to clarify any issues and would be willing to collaborate with WSCC in preparing such an application if it would be helpful.

ENDORSEMENTS FROM LOCAL COUNCILLORS & PARISH COUNCILS

Statement from WSCC Councillor representing the local Electoral Division

"I am pleased to support the proposed cycle and walking route. The project has brought Councillors from County, District and Parish together in a common aim, to deliver a safe and environmentally friendly route, promoting community and health benefits for residents in line with, not only the policies and strategies of the County Council, but also those of Central Government."

Garry Wall, County Councillor for Lindfield & High Weald Division

Statements from MSDC Councillors representing the local Electoral Wards

"We are delighted to support this thorough and professional initiative by the local community to develop a new and much needed Active Travel infrastructure project serving not only the villages of Scaynes Hill and Lindfield but also the wider community by providing connectivity to the urban area of Haywards Heath and to the countryside to the East. The project would bring many benefits including increased travel choice, reduced road congestion and carbon emissions and improved health and well-being, particularly for young people travelling to school."

Paul Brown, District Councillor for Lindfield Rural & High Weald Ward Lorraine Carvalho, District Councillor for Lindfield Rural & High Weald Ward

"As local ward councillors we welcome the proposed Active Travel Infrastructure Project. A cycle and walking route between Scaynes Hill and Lindfield would be a valued resource to the local community. We support the objectives to reduce road traffic congestion and carbon emissions as well as to enhance the health and well-being of residents.

Anne-Marie Cooke, District Councillor for Lindfield Ward Cavan Wood, District Councillor for Lindfield Ward

Statement from the local Parish Councils

"Both Lindfield Rural Parish Council and Lindfield Parish Council acknowledge the benefits that this project would bring to the local communities and fully support the project objectives. This project is included in the Scaynes Hill Village Plan (2011) and our joint Neighbourhood Plan (2014-31)."

Lindfield Rural Parish Council Lindfield Parish Council

SHLAT Steering Group (June 2021 - May 2023)

Cllr Garry Wall WSCC - Councillor for Lindfield & High Weald electoral division

Cllr Paul Brown MSDC - Councillor for Lindfield Rural & High Weald ward
Cllr Lin Stockwell MSDC - Councillor for Lindfield Rural & High Weald ward

Cllr Anthea Lea MSDC - Councillor for Lindfield ward

Graeme de Lande Long SHSG - Resident of Scaynes Hill - Retired Civil Engineer

Cilla de Lande Long SHSG - Resident of Scaynes Hill - SHSG Chair Christian Bodé Resident of Lindfield - Transport Consultant

Nicholas Henry Resident of Scaynes Hill - Director Lion Structures

The following representatives from Lindfield Rural and Lindfield Parish Councils were invited and have attended the group's meetings in a consultation/liaison role:-

Cllr Trevor Webster Lindfield Rural Parish Council (Chairman)

Cllr Linda Grace Lindfield Parish Council

This report has been prepared by the following SHLAT members and reviewed/ratified by the whole group:-

Graeme de Lande Long, MA MICE, C Eng

Christian Bodé, BA(Hons) MA MSc (Transport Engineering & Operations), Transport Consultant Nicholas Henry, B Eng (Civil Engineering), Director Lion Structures

Further information

Website: https://scayneshillvillage.co.uk/shlat

E-mail: shlat@btinternet.com

Abbreviations & definitions

A list of abbreviations and definitions is included at the end of this report (p.48).

Generally at the first occurrence of any acronym the full name has been given. Thereafter the abbreviated initials have generally been used.

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1. INTRODUCTION

Background

1.1 There has been a clear desire and need for a safe cycling and walking route between Scaynes Hill and Lindfield for decades, particularly for use by children attending schools in Lindfield and Haywards Heath. The only current cycling route is along the A272 (50mph speed limit) and B2111 (40 mph speed limit). This has always been hazardous and has become increasingly impractical with the increasing volume of traffic on those roads. There is no footway for walkers, only a narrow and rough grass verge along the A272 in places overgrown with scrub vegetation and no verge along much of the B2111, making walking this route totally impracticable. There is a Public Right of Way (PROW) between the two villages passing through Costells Wood but for 5-6 months of the year it is so muddy as to be impassable without wellington boots. It is not a bridleway and so cannot be used by cyclists.



Fig 1.1 Map showing roads connecting Scaynes Hill, Lindfield & Haywards Heath

- 1.2 The desire and need for a safe cycling and walking route between the two villages was confirmed during the community consultation for the Village Plan in 2011¹ and again for the Neighbourhood Plan in 2013. A proposal for the creation of a safe route was included in both the Village Plan and the Final Neighbourhood Plan in 2014², which was prepared jointly by Lindfield Rural Parish Council (LRPC) and Lindfield Parish Council (LPC).
- 1.3 In 2018 a housing development for 55 dwellings in Scaynes Hill, known as The Swallows, went ahead and £135,000 of Section 106 monies were specifically allocated to this project alone³. In addition WSCC have allocated a further £358,000 of Section 106 monies from a series of large housing developments to the East of Gravelye Lane to this project, making a total of £493,000⁴.

1.4 A public survey carried out in 2021 (see below) by the Scaynes Hill Sustainability Group (SHSG) yet again confirmed the need and desire for this project with an unprecedented response in favour of the project with almost no opposition to it⁵. Following this survey the SHSG set up a working group including the local councillor from West Sussex County Council (WSCC) and three of the local councillors from Mid Sussex District Council (MSDC), who were all supportive of the scheme. Representatives from the two local parish councils were invited to attend the group's meetings in a consultation role. Later the group was also joined by a professional transport planner resident in Lindfield and the Director of a local construction company who is a resident of Scaynes Hill. The group is known as Scaynes Hill – Lindfield Active Travel (SHLAT). The SHLAT group has no funding and all members have worked on a purely volunteer basis.

Objectives

- 1.5 The SHLAT group identified its Terms of Reference to be:-
 - to produce a pre-feasibility report on alternative routes, gathering as much relevant information as possible, including issues of landownership, legal matters, technical difficulties, environmental considerations in order to inform a full costed feasibility study (to be prepared by others);
 - to identify and explore potential ways of achieving and funding a feasibility study;
 - to identify how to ensure community involvement and support is encouraged and retained;
 - to identify the optimum way to utilise the S106 monies from the Swallows development (or any other S106 funds similarly allocated) to benefit the community if the full cycle/walkway is not financially feasible by 10 year deadline date (2029 for the Swallows S106 funds).
- 1.6 Furthermore the group identified the objectives of the project to be:-
 - To connect the villages of Scaynes Hill and Lindfield by a safe, sustainable and accessible
 route for pedestrians, cyclists and mobility vehicles in order to avoid car use, reducing
 congestion on the roads, air pollution and carbon footprint.
 - To provide a leisure facility for the two villages and Haywards Heath, giving access to the countryside to the east, with all associated benefits for health and well-being.
 - To provide a safe route for children going to school (in Haywards Heath, Lindfield or Scaynes Hill) while reducing road congestion at peak times and parking congestion at schools.
 - To provide improved travel mode choices and easier access to jobs, services, public transport and amenities for all.

Purpose of this report

1.7 Although the initial remit of the SHLAT group was to prepare a pre-feasibility report and identify ways to fund a fully costed feasibility report by others, the amount of work done and the experience and skill sets of the group has meant that the group is in a position to prepare their

own feasibility report, including a robust cost estimate, to promote discussion and adoption by WSCC and ultimately to prepare an application for funding from Active Travel England (ATE) for detailed design and implementation. We appreciate that WSCC would be required to further develop and progress this proposal following standard industry procedures and associated surveys and studies. However this report demonstrates the feasibility of the route and its potential deliverability.

Methodology of study

- 1.8 The basis for this study has been that it should be evidence based with as much community involvement as possible to ensure and demonstrate the selected scheme would have the community buy-in and be as beneficial to the needs of the community as possible. To do this it was felt that the SHLAT group needed to be transparent in its workings and should try to engage the community to express their views at all stages so that these could be taken into consideration. The steps undertaken for the study were:-
 - Assess the need and support for the scheme via well publicised community surveys and to publish the results.
 - Review relevant national, district, county and local policy frameworks to ensure that the scheme would align with all current policies.
 - Identify potential alternative routes for the proposed scheme using local knowledge and maps.
 - Obtain highway ownership maps and collect data on traffic volume, and road collisions.
 - Initial screening of alternatives to identify constraints, opportunities or any show stoppers by walking the routes and approaching landowners where such routes would need landowner approval and consent.
 - The initial screening indicated only one principal viable and deliverable route, which was
 to follow the road alignment fairly closely so any possible variants of this basic corridor
 were identified.
 - Land Registry searches undertaken to establish owners of all land abutting the route, to identify ownership boundaries and owners' names.
 - All landowners were contacted and invited to submit comments. Subsequently meetings were held with landowners to discuss any concerns and identify potential mitigation measures.
 - The developer of the Walstead Park development was approached to explore potential synergies with the paths being provided in the Country Park part of the development.
 - Connectivity with other schemes and with possible quiet residential roads were studied to maximise the potential benefits and a preferred option selected.
 - A more detailed walking survey of the proposed route was done indentifying and taking measurements to key constraints, and cross-sections drawn to illustrate the work involved.
 - Outline designs were prepared and a cost estimate prepared.
 - A Benefit-Cost Analysis was prepared using latest DfT/ATE methodology.
 - The Feasibility Report was drafted and reviewed by the SHLAT group

2. ASSESSMENT OF NEED

Current situation

- 2.1 Scaynes Hill is a village with a population of about 900 situated about 3km from Lindfield and 4km from Haywards Heath. The village has no doctor's surgery or other community services. There is a primary school, taking about 100 pupils, many of whom come from outside the village. The nearest secondary school is Oathall College in Lindfield about 4km away. There are limited shop options, consisting only of a convenience store at the petrol station on the A272, the main east-west road through the village. There is also the Millennium Community Hall, St Augustine's Church and the Farmers pub.
- 2.2 The only cycling route to Lindfield is on-road along the busy A272 and then turning right across the oncoming traffic at Bedales Corner onto the B2111. Both roads have issues with high vehicle volumes, including HGVs, speeding and poor crash records. In 2021, the last year of records available, the Average Annual Daily Flow of vehicles along this stretch of the A272 was 13,169 vehicles/day, including 558 HGVs and only 21 cyclists⁶. The crash record for Bedales corner is shown in the Figure below, which indicates 3 serious accidents and 8 slight ones over 5 years, or 3 accidents/year and 7 casualties in the last 2 years⁷. In addition during our consultations with owners at the five properties named on the diagram below, all of them stressed the dangerous nature of the junction and said that there were many collisions there on a frequent basis which were damage only and unlikely to be reported or recorded by the police or other authority. In 2005 there was also a major crash on this stretch of the A272 near Scaynes Hill cricket ground, which resulted in 3 fatalities and 2 serious injuries.⁸



2.3 There is no pavement or other viable Active Travel provision linking to Haywards Heath or Lindfield. There is a limited bus service of one bus per hour to Haywards Heath and Warden Park School to the west, or to Uckfield to the East with no buses after about 6:30pm. There is no bus service to Oathall College, to where many of Scaynes Hill primary pupils progress, as it is less than 3 miles away. This is the legal walking distance/ qualifying distance from home to school for post-primary pupils and is measured by the shortest route along which a child, accompanied

as necessary, can walk with reasonable safety⁹. The only routes that are less than 3 miles are either along the A272 and B2111, which cannot be considered safe, or on the muddy PROW through Costells Wood, which cannot be used by cycles and for 5-6 months of the year is so muddy to be virtually impassable without wellington boots. Due to the limitations of these transport options residents of Scaynes Hill are effectively forced to own and use cars, even for short journeys, such as school trips.

Surveys

- 2.4 In 2021 the Scaynes Hill Sustainability Group (SHSG) carried out a public survey concerning the need and desire for a safe cycle/walkway to Lindfield in order to provide hard evidence to support the case for such a project. The initial survey was done in March by distributing paper copies to 460 houses in Scaynes Hill asking for either paper or online responses. 434 responses were received, 57% from Scaynes Hill residents and 43% from elsewhere. After analysing the responses and comments it was realised that there might be a similar desire for this scheme from residents of Lindfield. Therefore it was decided to carry out a second similar survey more specifically targeted at residents of Lindfield via an article in Lindfield Life and using social media. The second survey had identical questions so that the results could be combined, but there were also three additional questions to obtain some more detailed information about potential mode of use. For this reason the second survey was open to those who had done the first, and a further mandatory question was also added to indicate whether a response to the previous survey had been submitted to avoid duplication.
- 2.5 The second survey had 258 responses, of which 38 were from those who had also done the first, meaning that there were 220 new responses. Therefore together with the 434 responses from the first survey the total number of responses was 654. About a third of all responses were from individuals, while the other two thirds were from households. The average number of members in a household who were also said to be likely to use the cycle/walkway was about three.
- 2.6 The two surveys represent the views of over 1600 people. For those resident in Scaynes Hill, the surveys represent over 600 people (about 67% of the village), while for those in Lindfield they represent about 500 people. The level of responses is high for this type of survey, demonstrating the level of local support for the project. This must be an unprecedented result for any scheme, which furthermore has so little opposition.
- 2.7 The results indicated that:-
 - 88% of all respondents strongly agreed that a safe cycle/walkway was needed and a further
 9% agreed.
 - 84% of all respondents would be highly likely to use it with a further 12% moderately likely.
 - 33% said they would use it several times a week with a further 38% saying they would use it weekly, making on a conservative basis a total of over 67,000 return journeys per year.

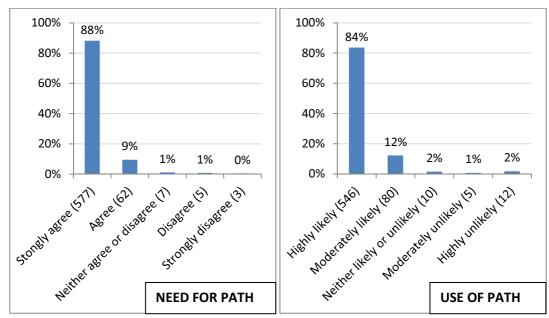


Figure 2.2 Results from 2021 survey on a cycle/walkway between Scaynes Hill & Lindfield

- 2.8 A report on the results of this survey⁴ was prepared and sent to councillors representing the local area at West Sussex County Council, Mid Sussex District Council and the two Parish Councils. At that time MSDC were gathering data for their Local Cycling & Walking Infrastructure Plan (LCWIP)¹⁰ and it was felt that this hard data might be useful in formulating the LCWIP. The Leader of the Council passed the survey report to the consultants preparing the LCWIP and promised that the SHSG would be included in the stakeholder consultations later that year. However, this did not happen and it became clear that the MSDC LCWIP was very urban centric concentrating only on the three towns of Haywards Heath, Burgess Hill and East Grinstead.
- 2.9 At the Scaynes Hill Eco Festival in October 2022 a similar survey was made available and a further 108 responses were received of which 62 were from people who had not responded to any of the previous surveys. The responses showed a similar pattern to the previous ones and when the new responses were added the results represented over 1700 people and indicated that the likely usage of the path was estimated to be:-
 - 200 return journeys per day (split equally between cycling and walking)
 - the indicative split between purposes:
 - 46% commuting/school
 - 42% leisure/social
 - o 12% commerce

Communications and transparency

2.10 A webpage set up on the Scaynes Hill Village Community website¹¹ was used to publicise the surveys and to make available the reports on the results as well as the progress of the SHLAT group. A dedicated e-mail address was also established for people to submit comments or to get in touch for further information. Unfortunately the first two surveys had not asked for respondents contact details (i.e. e-mail address), which was felt to be an omission. Therefore

the last survey in October 2022 did ask for contact details so that interested parties could be kept updated. In this way and by interaction with landowners and others in the village the SHLAT group obtained e-mail addresses for nearly 150 people who wanted to be kept informed more directly. At significant points in the progress of the study e-mail 'newsletters' were sent out to these people, which sometimes elicited relevant comments and it was through one of these 'newsletters' that the SHLAT group acquired the skills of a construction engineer to assist with some of the design issues and preparation of a robust cost estimate.

2.11 Being a constituted not-for-profited organisation the SHLAT group did not have to register with the Information Commissioner's Office (ICO), but has in place procedures to ensure that any data obtained or held by it is done so in a manner that is compliant with General Data Protection Regulations (GDPR).

3. SUPPORTING POLICY FRAMEWORK

National policy context

- 3.1 There has been a steady move in Government Policy towards encouraging more Active Travel (AT), starting with the Walking & Cycling Investment Strategy (2017)¹². National policy towards Active Travel shifted considerably further in 2020 with the publication by the Department for Transport (DfT) of two documents:
 - Gear Change a bold vision for walking and cycling (2020)¹³ establishing clear support for AT backed by a new audit/review process, a funding organisation Active Travel England and funding stream through the Active Travel Fund
 - LTN 1/20 Cycle Infrastructure Design (2020)¹⁴ a new design standard for inclusive mobility
- 3.2 These two documents significantly changed the future approach to Transport Planning and Design with an emphasis on the prioritisation of approaches that would lead to increased levels of walking and cycling. The same theme has been reiterated by the DfT's publication of "Decarbonising Transport A Better, Greener Britain" (2021)¹⁵ which states:

"Cycling and walking can help us tackle some of the most challenging issues we face as a society, not just climate change, but improving air quality, health and wellbeing, addressing inequalities, and tackling congestion and noise pollution on our roads. Increased levels of active travel can improve everyday life for us all."

Planning policy at a local level

3.3 Local planning policy has largely followed a similar trend towards measures to encourage more active travel. The WSCC Walking & Cycling Strategy (2016)¹⁶ was designed to complement the Government's then emerging WCIS. In the foreword to this strategy document by the WSCC Cabinet Member for Highways & Transport it outlines the same aims as the DfT's WCIS and states:-

"It is therefore important that we recognise walking and cycling as a key part of the transport mix, making improvements that promote these modes as the natural choice for shorter journeys."

- 3.4 The strategy identified about 300 potential routes in West Sussex suggested by various stakeholders, including two routes (ID213 & ID186), which share part of the route being proposed in this report. Neither of these was much more than a line on a map as there had been little or no work done on them and consequently they were not ranked highly by the Sustrans Rating tool.
- 3.5 The more recently updated WSCC Transport Strategy (2022)¹⁷ is also geared to increase active travel. The Vision of the Strategy states "The transport network will be on a pathway to achieve net zero carbon emissions by 2050" and "it will also be safer, more efficient and resilient overall with more walking & cycling." Under the Active Travel Strategy section it reiterates this and states "Our active travel strategy is intended to facilitate greater use of active travel modes (e.g. walking and cycling). If opportunities arise, we will work with partners to deliver skills training and promotion initiatives".
- 3.6 The recent announcement of the Speed Limit Policy Review by WSCC¹⁸ is also particularly relevant to the proposed project, and is discussed later in this report:

Vulnerable road users and active travel at heart of new speed limit policy

Emphasis will be on the mix of vulnerable road users, such as pedestrians, cyclists, and equestrians first and then motorised traffic

- 3.7 It is also understood that WSCC are starting to prepare their County wide LCWIP, considering inter-urban routes, to complement the recently completed MSDC LCWIP. We believe this would include village to urban routes such as that being promoted by SHLAT.
- 3.8 One of the key principles of the Draft MSDC District Plan¹⁹, which is currently going through the Regulation 18 consultation, is for Sustainable Development. In order to achieve this and promote sustainable communities in accordance with the National Planning Policy Framework and Sustainable Development Goals, the Plan aligns with the concept of 20-minute Neighbourhoods.

"The second approach, more suited to more rural areas of the district which are characterised by smaller villages and more remote from the three towns, is to encourage creation of a network of villages that collectively provide what most people need for their daily lives, joined by active travel and public transport arrangements."

3.9 At an even more local or community level the Scaynes Hill Village Plan (2011)¹ and the joint Lindfield & Lindfield Rural Parish Council Neighbourhood Plan (2014)² both include a desire to establish a safe cycling & walking route between Scaynes Hill and Lindfield.

4. ALTERNATIVE ROUTES STUDIED

Identification of alternatives

4.1 With local knowledge of the area and looking at the Ordnance survey map there are clearly only two principal routes from Scaynes Hill to Lindfield; the cross-country route (Route A) including its variants following the Pubic Rights of Way (PROW) and the alternative of a route alongside the existing roads consisting of the A272 & B2111 corridor (Route B). A third alternative along the A272 all the way to Haywards Heath (Route C) was also considered but does not form part of this study as it does not follow the route (desire line) covered by the survey.

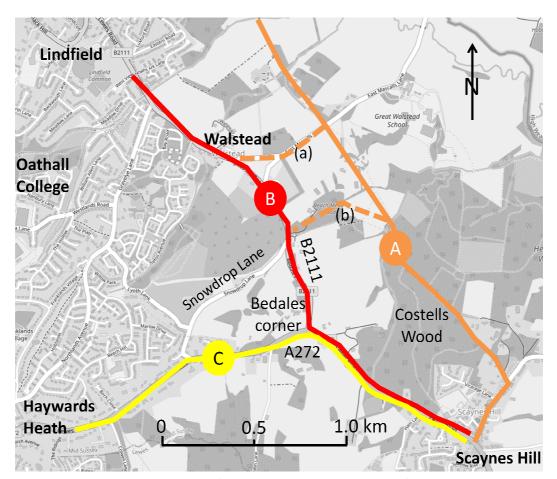
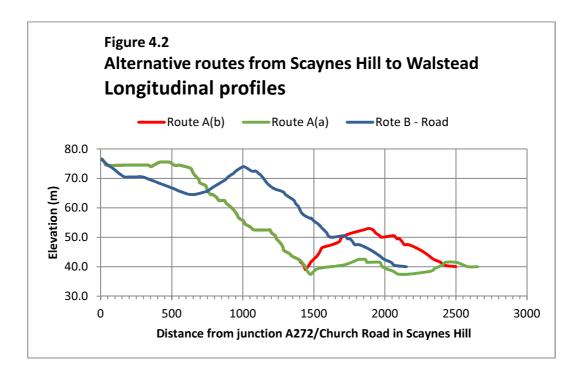


Figure 4.1 Main alternative routes from Scaynes Hill towards Lindfield & Haywards Heath

Initial screening

4.2 Scaynes Hill is at an elevation of about 40m higher than Lindfield and the terrain in between is quite undulating, particularly the first part of the route as far as Walstead. A comparison of the longitudinal gradients of the two routes was therefore considered relevant. These were plotted using elevations derived from Google Earth and can be seen below. Both routes had similar gradients although Route A(a) looked the best option on this basis.



4.3 It was clear that Route A or any of its variants which follow the existing PROW would be likely to be the least costly alternative and being away from motor vehicles would give the most pleasant user experience. However, as it is not a Bridleway and crosses private land for most of the route, landowner permission would be required. The path, which starts at Scaynes Hill common, continues for more than 1km through Costells Wood. This wood is owned by the Woodland Trust, and the path through it would be an essential part of any variants of this route. An initial informal approach was made to the Woodland Trust manager of the wood, who said that there were cases where the Trust had allowed cycle paths through their woods. However, he later came back to say he had consulted with colleagues and in this case this would not be permitted due to the wood's status as an ancient woodland and as such is deemed a sensitive habitat that is not suitable for such new access provision.



Figure 4.3 Existing path through Costells Wood

- 4.4 The SHLAT group appealed to the Woodland Trust with much more detailed information about what was being proposed, stating that the path would follow an already existing way-leave of at least 10m wide that is regularly kept clear by UK Power Networks for an overhead power line and making the case that this would be an ideal route for such a path and would not increase access into the wood. However, this appeal was also turned down by 'the Trust', who stated that they could not support or permit the proposal as it was in direct contravention of their charitable objectives.
- In parallel with the above discussions contact was made with the Walstead Stud, owner of the field that any variant of Route A would also have to cross as it exited from Costells Wood. This landowner also rejected the idea that the PROW s crossing their land could be used by cyclists. Subsequently, the owners of the wood on the other (north-east) side of the PROW through Costells Wood were contacted to see if they would consider the path on their land and they too declined such a proposition.
- 4.6 The relevant correspondence with these landowners (Owners D, K & L) is attached in Appendix D1.
- 4.7 Based on the above, Route A had to be abandoned as not deliverable, leaving Route B as the only viable option.

5. LANDOWNER CONSULTATION

Initial contacts

5.1 As described above the significant landowners had already been consulted in order to carry out the initial screening. Having identified the road corridor as the only viable option it then seemed appropriate to contact all owners of land or property who might be impacted by that proposal. As it was also becoming apparent that there might be synergy with paths being provided in the Walstead Park development (see Section 6 below) it was decided to concentrate

on land/property that abutted the first part of the road route, from Scaynes Hill to the junction of the B2111 and Snowdrop Lane at the edge of the development.

Landowner identification & consultation

- In order to identify what parcels of land lay adjacent to either side of this part of the route and who the owners were, it was necessary to obtain Land Registry data, which is publicly available for payment of a small fee for each record obtained²⁰. As there were 30 land parcels for which ownership information was required the cost of doing so was not insignificant and WSCC were kindly able to provide the information to the group using their access licence to the Land Registry.
- A standard letter, together with information on the proposed scheme, a sheet of Frequently Asked Questions (FAQs) and a GDPR Privacy Policy²¹ was sent to all 30 landowners asking for their comments or views. There were 15 responses received of which only one was against the scheme, four supportive, six supportive in principle but had concerns and four had no comments. The one objection was from a property owner on the B2111 opposite Snowdrop Lane who felt that speeding vehicles on that road would make it dangerous.
- 5.4 The six owners who indicated qualified support were contacted and meetings held with five of them to listen to their concerns and to explore potential mitigating measures that would be acceptable. Notes of the meeting held with the residents of the four houses near Bedales Corner (Cudwells Court, Old Cudwells Barn, Highfield, Archway Cottage see Fig 6.2) are included in Appendix D2 along with discussions with other landowners. One of their greatest concerns was the speed of vehicles along the A272 and the difficulty and danger of ingress/egress from their common driveway. They noted that there were frequent crashes there and one of them had been hit while trying to turn into the driveway. There were also concerns about screening from the road/path

6. ROUTE SELECTION

Identification of variants

6.1 Since the road corridor was the only viable option highway maps were obtained from WSCC to see what space might be available already within WSCC Highways ownership. These maps (see example in Fig 6.2 below) marked up with relevant details are included in Appendix A for reference. Along the stretch of the A272 from Scaynes Hill to the junction with the B2111 at Bedales corner the carriageway width is over 7m and WSCC own the verges on both sides varying in width from about 2m to 6m wide.



Figure 6.1 A272 looking east opposite Cudwells showing typical lane & verge widths

6.2 At the southern end of the B2111 near Bedales Corner WSCC ownership is restricted to not much more than the road width, which is about 6m wide with little or no verge. Further north along the B2111 the verge width varies from 1-2m wide and there are constraints of brick walls, fences, hedges within 2 m of the carriageway and several houses through Walstead with dropped kerbs and access onto the road. It is only from just beyond Langmore Lane that the verge on the west side widens to about 6m and would be adequate for an off-road cycle/walkway.

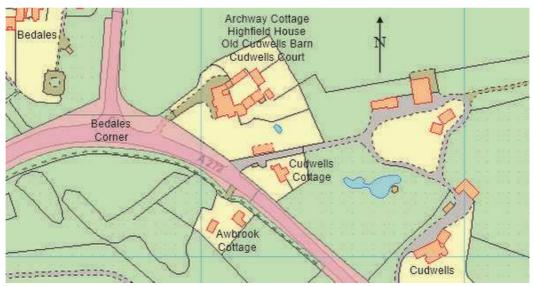


Fig 6.2 Highway ownership map at Bedales Corner (pink shading is WSCC owned)

- 6.3 This indicated that there were still some further possible variations to be considered:
 - Along the A272: choice between the north or south verge of the A272.
 - Along the B2111: choice between on-road path or possibility of using adjacent land either on the east or west side of the road.

Preferred route selection

6.4 Based on the requirement for a minimum 3-4m wide corridor for the path (see Section 7 below) it became apparent that along the A272 it might be necessary to encroach by a small amount onto private land or onto the existing carriageway. A walking survey was carried out to identify constraints or opportunities along both sides of the road and the information recorded on a

slide pack of photos along the route together with notes. Along the A272 the conclusion was that both verges had similar constraints or opportunities. To keep the path entirely on the verge and not need any narrowing of the carriageway, necessary measures in places might include provision of mini-retaining structures to support excavation where the verge sloped up from the road or filling material where the verge sloped away from the road. There were also locations on both sides where telegraph poles and road signs would need relocation, and the possibility of the need to remove one or two mature trees or hedges.

- 6.5 One advantage of the southern side was that it would give an improved pathway to the Scaynes Hill cricket field located on that side of the road about 200m outside the village boundary. It would also facilitate a later addition of the Route C path to Haywards Heath as it would then not have to cross the junction with the B2111 at Bedales corner. However, the southern side route would also need to incorporate a controlled and lit crossing of the busy A272 near Bedales corner in order to reach the B2111 safely. This was seen as a significant disadvantage to this route and so it was felt that the northern verge of the A272 overall provides the better alternative.
- 6.6 In response to the initial survey we had been contacted by the owners of Cudwells, a large house on the northern side of the A272, who also own Cudwells Cottage and the large field to the north which abuts the eastern edge of the B2111 for a distance of about 300m. They indicated that they were interested in a pathway along the northern side of the A272. This started a correspondence that led to two meetings in which they offered to make available a sufficiently wide strip of land along their frontage to the A272 to enable the path to be accommodated there, which had been one of the pinch points already identified. They also offered in principle the use of a strip of land in the field alongside the B2111 so that the path could be located entirely off the road behind the existing roadside hedge. Notes of the meetings are included in Appendix D2 (Owner E).



Figure 6.3 View along field boundary on east of B2111 looking North from Bedales Corner

6.7 Clover Cottage is located at the end of the field owned by Cudwells so the path could not continue further on that side of the road. Therefore the land owner of the field on the other side of the B2111, which is part of a property named The Barn located just off the A272, was contacted and asked whether he would consider allowing use of his field margin as far as the junction with Snowdrop Lane. He confirmed that in principle this would be acceptable (see e-mail in Appendix D2 from Owner H).



Figure 6.4 View along field boundary on West of B2111 looking South from Snowdrop Lane

- 6.8 The owner of Clover Cottage was consulted about the proposed route of the path and a potential road crossing near the entrance to the house. He was not against it in principle and would welcome any measures that would reduce the speed of traffic at this point but not anything that involved lighting or audible sounds. However, he had concerns about the proximity of the potential path to his property, being overlooked and the consequent security issues. A crossing of the B2111 that largely addresses these concerns is considered feasible given some assumptions, which are detailed in Section 7 and a plan showing the suggested arrangement is given in Appendix A.
- 6.9 This means the most challenging part of the B2111 from Bedales Corner to the junction with Snowdrop Lane along which there is no viable verge could be effectively by-passed.

Connectivity

6.10 The rest of the length of B2111 from Snowdrop Lane to Lindfield also has its challenges due to inadequate width of the verge. However, it was noted that there was potential synergy with the Walstead Park development, which has just started the construction phase. The Country Park part of this development, which abuts the B2111/Snowdrop Lane junction, will have a path through it from that point connecting to the quiet residential roads within the development and on to a cycle/pedestrian bridge being provided as part of the development across the stream into the adjoining Heathwood Park estate. This then opens up a whole range of possible onward connectivity to quiet low traffic residential roads suitable for cyclists and with pavements for pedestrians which would thus provide access to popular destinations in Lindfield and Haywards Heath (see Figure 6.6 below). Over time these routes could be improved even further but in their present state are considered far safer than the current alternatives and would give so much more incentive for people to walk or cycle for short trips, which is in line with the all the local and national policies for Active Travel.

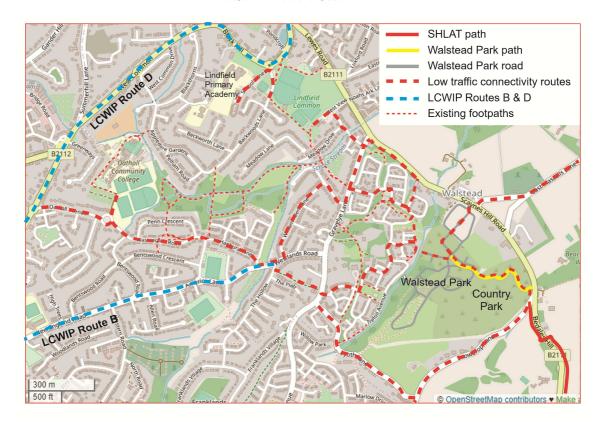


Figure 6.5 Map showing connectivity through Walstead Park and beyond

- 6.11 Following the path through the Country Park and on into the Heathwood Park estate would give access via Langmore Lane back onto the B2111, where there is sufficient verge width along the west side of the road as far as the junction with Gravelye Lane for an off-road cycle/walkway. From here it would be possible to get to Lindfield Common via a short length of Gravelye Lane and Meadow Drive.
- There would also be an alternative to going via the B2111, which would be to go into the neighbouring Lindfield Meadows estate and to emerge via Blackberry Drive a little further up Gravelye Lane. This would give the possibility of a relatively quiet cycling route to Oathall Community College via William Allen Lane, a short length of Westlands Road and then along Hanbury Lane where there is an existing entrance to the College grounds. By continuing even further along Oathall Avenue and crossing Oathall Road at the mini roundabout into Victoria Park and over the lighted crossing at Perrymount Road would give direct access to the Haywards Heath Station car park, where there is an established Cycle Hub for commuters and other rail users.
- 6.13 A further potential connectivity is with the MSDC LCWIP Route B from Church Road in the centre of Haywards Heath to America Lane. This could be joined at the junction of Westlands Road and America Lane as above or by following Langmore Lane in the opposite direction to cross Gravelye Lane to the existing Bridleway down to join America Lane at the same place. It seems likely that with all these potential connections it would lead to a considerable take-up by cyclists in Lindfield and Haywards Heath to reach the quiet rural lanes to the east.

- indicates that the relevant path through the Country Park is designed for pedestrian use only and would not be wide enough for bi-directional cycling and walking. Realising the potential synergy of this path with the SHLAT proposals the SHLAT group was in touch with the initial developer, Southern Housing Group (SHG), to set up a meeting to discuss upgrading the path to make it wider. However, SHG stopped work on the development and sold it on to the current developer, Vistry/Bovis Homes. Discussions with Vistry indicate that they would be prepared to consider changes to this path, provided the changes do not cause any significant Planning issues, but that they could not fund the change, which they estimated to be about £60,000. To incorporate any change in the current construction programme it would need to be completed by December 2023, when it is hoped to achieve first occupancy. Vistry has submitted sketches of the potential path changes to MSDC Planning in order to seek an opinion on Planning implications. We understand that MSDC Planning have indicated that a change of this nature would be considered a non-material amendment, which could be made relatively easily.
- 6.15 Regarding the starting point of the path in Scaynes Hill it was felt that the best point would be at the lit Puffin crossing of the A272 in the middle of the village. This would provide access to all parts of the village either via less trafficked cycle friendly residential roads or paths for pedestrians. There are two sections of existing pathway that ideally would be made suitable for cyclists as well, which are the link between the end of Hillcrest Lane and the Farmers pub and secondly the path from the Millennium Centre to Vicarage Lane. This latter path could easily be duplicated by running a new cycle path parallel to it on the edge of the recreation ground, a route that could be used now by cyclists in dry weather.

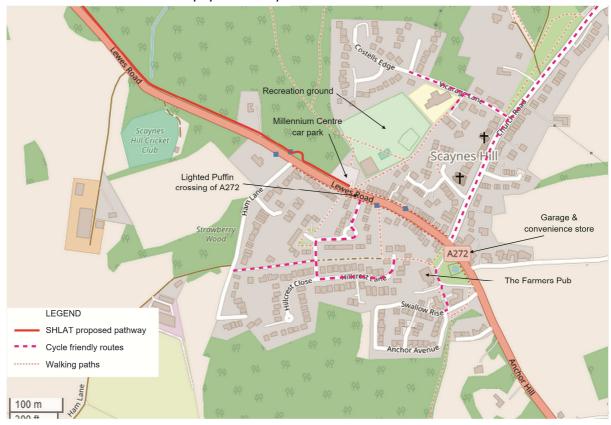


Figure 6.6 Map showing connectivity within Scaynes Hill village

6.16 In summary therefore the length of pathway proposed in this report is the length from the Puffin crossing opposite the Millennium Centre in Scaynes Hill to the junction of the B2111 with Snowdrop Lane a distance of about 1.4 km as indicated in Figure 6.7 below.

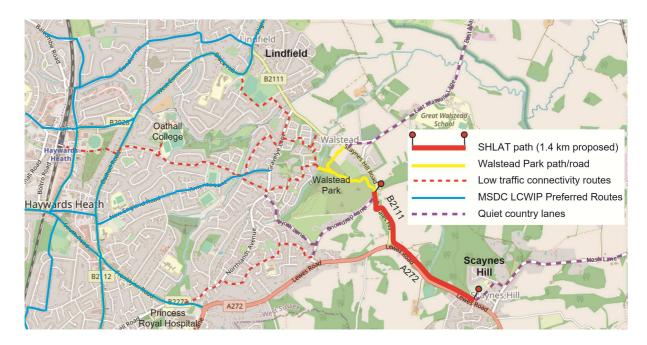


Figure 6.7 Overview of the full 1.4km route proposed from Scaynes Hill Puffin Crossing on A272 to the junction of the B2111 and Snowdrop Lane showing potential connectivity

Assessment Tools

There are various tools published by the DfT to assess cycling and walking routes for the LCWIPs. The Walking Route Audit Tool (WRAT) is intended for more urban areas but the Route Selection Tool (RST) for cycling is potentially applicable to include rural routes as it compares a number of factors (Directness, Gradient, Safety, Connectivity and Comfort). The higher the score the better and the summary results for this scheme shown below, indicate a large increase in Safety, Comfort and Connectivity. The maroon line represents the current score of the route and the blue line represents the score after implementation of the project. The full print out of the inputs and output is given in Appendix C.

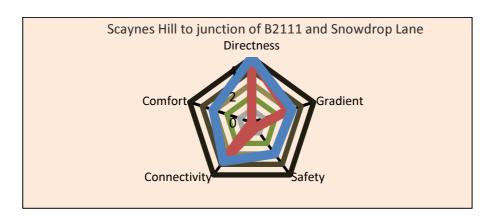


Figure 6.8 Output from RST showing improved Safety, Comfort & Connectivity

7. OUTLINE DESIGN

Approach

7.1 A more detailed walking survey of the proposed route was undertaken identifying and taking measurements of key constraints. These were plotted on Highway ownership maps and cross-sections drawn (at approximately 50m intervals along the route) to illustrate the potential key constraints and work involved (see Appendix A). Using this information an outline design for the path has been prepared in order to form the basis for a robust cost estimate. Final design details may differ as the project evolves but it was felt important to be clear what level of detail the cost estimate has been based on.

Speed limits

7.2 One of the concerns expressed by almost everyone consulted about the road route was relating to the current speed of traffic causing difficulties of ingress/egress from their properties and accidents. The crash record for Bedales Corner (see Fig 2.1) indicates a significant problem there and anecdotally there are probably far more minor damage only collisions there than the records indicate. Traffic speed is a critical factor in the design of roadside cycling and walking pathways and road crossings. The tables below from LTN 1/20 give criteria for the width of the path and the separation distance of a roadside path from the carriageway for different traffic speeds. This only applies to the length alongside the A272 where the path would be closest to the road.

Table 5-2: Cycle lane and track widths

Cycle Route Type	Direction	Peak hour cycle flow (either one way or two-way depending on cycle route type)	Desirable minimum width* (m)	Absolute minimum at constraints (m)	
Protected space for cycling (including light segregation, stepped cycle track, kerbed cycle track)	1 way	<200	2.0	1.5	
		200-800	2.2	2.0	
		>800	2.5	2.0	
	2 way	<300	3.0	2.0	
		>300-1000	3.0	2.5	
		>1000	4.0	3.0	
Cycle lane	1 way	All – cyclists able to use carriageway to overtake	2.0	1.5	

Table 6-1: Minimum recommended horizontal separation between carriageway and cycle tracks*

Speed limit (mph)	Desirable minimum horizontal separation (m)	Absolute minimum horizontal separation (m)
30	0.5	0
40	1.0	0.5
50	2.0	1.5
60	2.5	2.0
70	3.5	3.0

Figure 7.1 Tables from LTN 1/20 & Sustrans Design Guide for path width & separation

7.3 The addition of the above two parameters plus an allowance of 0.5m clearance from the edge of the path to any vegetation give the total width of roadside verge required to accommodate the path. The bi-directional cycle traffic anticipated for this path is less than 300 journeys/day so the table below (Figure 7.2) shows the desirable, minimum and proposed corridor width required for the different speed limits. The proposed widths are a compromise in order to restrict the total corridor widths since the actual width available is limited. This is based on the assumption of not narrowing the width or re-aligning the road by moving the kerbs, since this is likely to be the most cost effective solution.

		Separation (m)			Width of path (m)			Width of verge req'd (m)		
Speed										
limit										
(mph)	Desirable	Minimum	Proposed	Desirable	Minimum	Proposed	Desirable	Minimum	Proposed	
30	0.5	0.0	0.5	3.0	2.0	2.5	4.0	2.5	3.5	
40	1.0	0.5	1.0	3.0	2.0	2.5	4.5	3.0	4.0	
50	2.0	1.5	1.5	3.0	2.0	2.5	5.5	4.0	4.5	

Figure 7.2 Width of road margin required for different speed limits

- 7.4 In terms of pedestrian provision the DfT Inclusive Mobility guidance discusses footway/pavement widths. The proposed route would also serve pedestrians both enabling access to Lindfield but also giving those from there access to other footpaths and the Farmers public house. Minimum footway widths are 2m plus separation. Given the leisure element to the use of the path, those users are likely to be walking in groups. The width of an adult and child is 1.2m with 0.9m for an accompanying adult or someone walking in the opposite direction. On this basis the 2.5m proposed width would serve both cycle and accessible pedestrian needs.
- 7.5 In the light of the recent announcement by WSCC of their Speed Limit Policy Review, which will put the needs of vulnerable road users and active travel before the needs of motorists, it would seem reasonable to request WSCC to reduce the speed limit on the A272 between Scaynes Hill to Bedales corner from 50 mph to 40 mph, which would limit the total width of verge required to 4.0m. However, it would be possible to reduce this to the minimum width of 3.0m for short distances at points of physical constraint, like mature trees. It is worth noting that in the Scaynes Hill Village Plan, which represented about 60% of the village, a traffic calming measure which was supported by a majority was the creation of 40 mph buffer zones such as this on the village outskirts. The outline designs of the base case contained in this report are predicated on

that speed limit reduction. However, in Sections 8 (Land constraints & owner consultation) and Section 9 (Cost estimate) consideration is given to the option of providing a wider corridor by realigning the road or taking up some of the existing road width. This is currently 7.4 m but it would be possible to reduce this by 1.0 m to 6.4 m wide. Given the road widths remain unchanged from the historical 60 mph limit there is scope to narrow traffic lanes based on best practice to achieve lane widths more suited to the speed limit and support driver compliance.

7.6 Traffic speed on the B2111 is also of concern to adjacent residents. The completion of the Walstead Park development with over 200 dwellings will add considerably to the volume of traffic on this road, which currently has a 40 mph speed limit. For this reason it would also seem reasonable to expect WSCC to consider reducing the speed limit from 40 mph to 30 mph from Lindfield through Walstead, which already has many houses adjacent to the road, and on to beyond the entrance to Walstead Park. Minimum sight stopping distance for vehicles travelling at 30 mph (50m) is nearly half that of those travelling at 40 mph (80m). For the proposed road crossing of the B2111 where the sightlines are not ideal a reduction of the speed limit here from 40 mph to 30 mph would also probably be needed. Extending the 30 mph speed limit somewhat further to Bedales Corner would not seem unreasonable. Again the outline designs contained in this report are predicated on that speed limit reduction.



Figure 7.3 View north on B2111 from proposed crossing point (Clover Cottage on right)



Figure 7.4 View looking south on B2111 from proposed crossing point

7.7 There is also a good case for extending the current 30 mph limit on the A272 in Scaynes Hill by about 100m to the west so that the entrance to Costells Cottage is within the 30 mph zone. The map below summarises the speed limit changes proposed.



Figure 7.5 Proposed reductions in speed limits

Path geometric design

- 7.8 As far as is practicable the path would to comply with the requirements of LTN 1/20, some of which are given above, such as path width, separation, curvature of bends or changes in gradient, clearance to obstacles, sightlines, crossfalls etc.
- 7.9 Along the section of the route from Bedales Corner to Snowdrop Lane, where the path is no longer on the road but in the adjacent field margin separated by a hedge it is possible to increase the path width to the desirable 3.0m. Along this section the steepest longitudinal gradients exist so cycle speeds downhill are likely to be greater and the wider path would make this more comfortable for other users.
- 7.10 Due to the nature of the terrain the longitudinal gradient of this part of the route would be steeper than recommended by LTN 1/20. LTN 1/20 states "Cycle routes should, where possible, be designed in such a way that the steepness and maximum length of longitudinal gradients meets the requirements of Table 5-8." However, the criteria for longitudinal gradients are slightly less onerous in the Sustrans Traffic-Free Routes and Greenways Design Guide²³ (see below).

Table 5-8: Maximum length for gradients

Desirable maximum length of gradient (m)
150
100
80
60
50
40
30

Figure 7.6 LTN 1/20 Table of maximum gradients

Criteria	Gradient %	Gradient ratio
Desirable maximum	3%	1 in 33
Normal maximum up to 100m	5%	1 in 20
Limiting gradient up to 30m when there is no practical alternative	7%	1 in 14*
Desirable minimum gradient to ensure good surface water shedding	8%	1 in 12*

Figure 7.7 Sustrans Design Guide table of maximum gradients

7.11 The diagram below shows the longitudinal section of the original ground level (OGL) and existing road level of this part of the route obtained from Google Earth data. At the top of the hill it indicates a gradient in the field margin of about 7%. It would be possible to ameliorate the magnitude and length of these gradients by use of some minor cut and fill in the field as shown by the red line and labelled gradients. This would give a maximum gradient of 5% for the first 100m and lesser gradients elsewhere. This would be in line with the Sustrans Design Guide recommendations and has been the basis for the outline design.

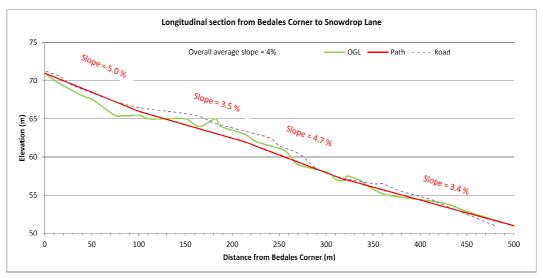


Figure 7.8 Longitudinal gradients from Bedales Corner to Snowdrop Lane

Path construction details

7.12 The details of path construction given in LTN 1/20 are fairly generic referring only to appropriate ground formation by removing vegetation and topsoil then compacting the sub-base and surfacing. However, it refers to the Sustrans Design Guide for further information and this has been used as the basis for cost estimating as given below.

- 7.13 The Guide states that typically, a sub-base thickness of 150mm, after compaction, will be enough. This may be reduced where the sub-grade is strong, or increased when soft, wet or poor native ground is encountered. For poor soils it advocates the use of a strengthening geotextile under-layer instead of increasing sub-base depth. For the purposes of cost estimating it has been assumed that after stripping vegetation and removal of about 250mm topsoil a geotextile grid would be laid followed by a 150mm layer of Type 1 sub-base topped with two layers of compacted tarmac, 60mm base course followed by a 20mm wearing course.
- 7.14 Kerbs or edgings are usually provided to contain a path and prevent failure of the path edge from traffic loading. It may also be appropriate to provide edgings to a path in locations where a more formal edge is required, such as through parks, or where a route passes through a public realm area. A large proportion of routes may not need kerbing or other edge restraints given that vehicle loadings will be minimal. Where kerbs or edging are not needed, the path should be constructed so the sub-base extends 300mm beyond the surface course on each side. It has been assumed that kerb edgings are not required and the details of construction used in the cost estimate are given in the typical cross section (Figure 7.9).

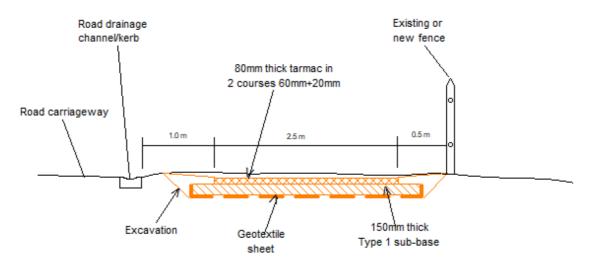


Figure 7.9 Typical cross section of proposed path construction

Supporting structures

7.15 There is a 100m long section of the route adjacent to the A272 where the road is on an embankment and the verge slopes away from the road (see location marked on the road maps in Appendix A)). In order to avoid extending the embankment more than necessary to support the formation of the path, and to minimise any disturbance to nearby trees, a retaining wall design has been envisaged. This would consist of I-section steel columns (king-pins) set in the ground at about 4m centres followed by 4m long precast concrete panels slotted in the gaps between to form a retaining wall against which fill material could be compacted to make the foundation for the path up to the same level as the road (see typical cross-section below). The land beyond the retaining wall belongs to Cudwells and the wall would not be visible from the house or garden as it would be screened by the trees.

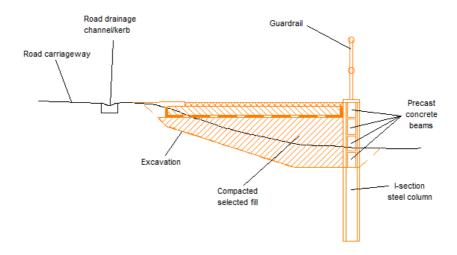


Figure 7.10 Typical cross section of king-pin retaining wall

7.16 Where the path runs in the field margin parallel to the B2111 the length of 100m or so near Bedales Corner would also need to be on fill if the longitudinal gradient was to be limited to 5%. This would be visible to some of the houses at Bedales Corner (Cudwells Court, Highfield, Archway Cottage) and to one of the outbuildings at Cudwells that is being converted into a dwelling. It is therefore proposed that this would be achieved by using a low earth embankment with the toe of the embankment blending into the general cross slope of the ground at that location. The opposite side of the path from the road would be screened by planting a new hedge at the top of this embankment and additional trees could be planted at key points to improve the screening as necessary.

B2111 road crossing

7.17 Details of discussion with the owner of Clover Cottage (Owner J) about the crossing of the B2111 which would be necessary near his house have been covered in Section 6 above, as have the speed limit and sightline issues. The option of having a signalised Toucan crossing there would require power and communications arrangements also involving lighting, and would thus not meet the approval of the owner of Clover Cottage. The outline design is therefore based on the principle of having chicane type traffic calming measures in the road similar to those which have been used on Beggars Wood Road on Chailey Common (see Google Maps Street View images below) incorporating a crossing so that cyclists or pedestrians would only have to cross one lane of the carriageway at a place where the traffic would be forced to stop or travel slowly.



Figure 7.11 View of chicane traffic calming on Beggars Wood Road (speed limit 40 mph)

7.18 A plan of a proposed arrangement of this crossing, which is predicated on the reduction of the speed limit at that point to 30mph and also addresses most of the concerns of the owner of Clover Cottage is given in Appendix A.

Buried utilities

- 7.19 There is an overhead telephone line alongside the A272 near Scaynes Hill which would need relocation and it is considered likely that there would be other buried services along the route so some research has been done to identify these.
- 7.20 By the presence of a gas distribution kiosk opposite Ham Lane it was noted there would probably be a gas main buried in the northern verge of the A272 along the route of the proposed path. A pipeline map was obtained from Southern Gas Networks (SGN) which confirmed that there was a 125mm diameter PE medium pressure gas line buried at a minimum depth of 600mm along the entire length of the verge from the gas kiosk in Scaynes Hill to Bedales Corner. SGN safety procedures generally require that there is no machine excavation within 0.5 m of their medium pressure lines. However, SGN were contacted and asked if construction of the proposed path, involving machine digging of the formation to a maximum depth of about 300mm, would be possible. SGN confirmed that provided some initial hand dug test pits were dug at intervals along the route to confirm the location and depth of the pipeline and excavation by machine was limited to 300mm they would be satisfied.
- 7.21 As there is a gravity sewer pipe (with flow direction northwards) running through Costells Wood along the open ride accessible from the wide gate giving access from the A272 it is thought that this probably serves the lower lying properties on the south side of the A272. Hence we would expect to find a buried sewer crossing under the road somewhere in that location. Given the slope of the land to the north and the road being on a slight embankment it seems likely that a gravity sewer would be located at a depth well below any proposed excavation. No other specific information on sewerage has been obtained from Southern Water.
- 7.22 As water pipes would be pressurised (not gravity flow) they would be more possible to divert if necessary. However, no searches have yet been done to identify if there are any in the north verge of the A272. No searches have been done to locate buried electrical cables.

Drainage provisions

7.23 Along the A272 there are existing road gullies taking surface run off. It is anticipated that the new pathway would have crossfalls to allow rainwater to drain to the adjacent verge, generally away from the road, but if the camber/crossfall meant drainage towards the road then drainage gaps would be left in the separation verge to allow the water to join the existing road drainage system. A SUDs arrangement could be used for the separation strip between the path and vehicle carriageway.

Lighting considerations

7.24 The existing road route is unlit as it is in a rural area. It is considered that this outweighs the argument for providing lighting for safety reasons because for much of the path usage foreseen (recreation, exercise, social, etc) is for activities that would be likely to be done in daylight hours. Even in winter school pupils going to school or returning home would do so in daylight. Attendance hours at Oathall College for example are from 08:30 - 15:05 hrs and the journey from Scaynes Hill by bicycle would take less than half an hour. In winter the latest sunrise is about 08:00 hrs and the earliest sunset at 15:50 hrs. The only likely users after dark are commuters returning from Lindfield or Haywards Heath in winter. Providing lighting would add to night sky light pollution and disturb those in sight of the path and so it has not been considered as necessary. This could be investigated further in the next stage of design as some low level lighting systems do exist.

Landscaping/finishing works

- 7.25 Along most of the length of the path, where existing hedges or fences were inadequate there would be a new fence to delineate the boundary and prevent public access to private land. Where specific hedges have to be removed they would be replaced on a like for like basis. New hedges are proposed for screening along the full length of the off road part of the path on private land from Bedales Corner to the road crossing and to replace the hedges along the A272 in front of Costells Wood Cottage, Cudwells and Cudwells Cottage.
- 7.26 As mentioned above some trees may need to be felled to make sufficient width for the path corridor. The exact number cannot be finalised as in the final design there would need to be an accurate topographic survey and a more detailed analysis of the pros and cons of balancing speed limit reduction, width of path corridor, utility diversions, environmental impacts, encroachment onto private land or onto the road width, taking account of the number of trees/hedges that would need to be removed and the costs involved.
- 7.27 There will need to be some additional planting of trees for screening at locations such as the road crossing and near Bedales Corner. There may also be the opportunity to plant additional trees closer to where they would be removed on private land. The principal of bio-diversity net gain would need to be observed but the details for this cannot be established until an ecological survey is done as part of the design process.
- 7.28 Some roadside signage would need to be relocated and new signage for the new path would be necessary to ensure that onward connectivity was clearly indicated at both ends of the path.
- 7.29 Contractor's temporary works during construction such as traffic management schemes, contractor's compound, working area to store excavated topsoil for re-use etc. have been considered below under Section 8 Cost Estimate.

8. LAND CONSTRAINTS & OWNER CONSULTATION

8.1 Alongside the northern verge of the A272 there are some obstructions to a path and issues where the width of WSCC verge ownership would appear to be insufficient to accommodate the full path corridor width, although ownership boundaries are not so well defined for that to be clear cut. All the owners of land along that side of the road have been consulted and are generally amenable to the path corridor. The table below lists the relevant properties, an anonymous ownership identity letter, whether they have given permission to encroach on their land and the length of road to which they are adjacent starting in Scaynes Hill and moving towards Bedales Corner. It also includes landowners alongside the B2111.

Length (m)	Property name	Consent to use land	Owner(s) ID	Comments
60	Recreation ground	No - not req'd	Α	MSDC car park to Millennium Centre
130	Costells Edge	Yes	В	Private owner of woodland
50	Costells Wood Cottage	No - not req'd	С	Private house & land
50	Costells Edge	Yes	В	Private owner of woodland
120	Costells Wood	No	D	Owned/managed by Woodland Trust
250	Cudwells	Yes	E	Private house & land
120	Cudwells Cottage	Yes	Е	Private house & land
20	Cudwells Court	No - not req'd	F	Private house & land
40	Highfield (Lorien)	No - not req'd	G	Private house & land
40	Cudwells Cottage	Yes	E	Private house & land
180	The Barn	Yes	Н	Private house & land
50	Clover Cottage	No - not req'd	J	Private house & land
130	Walstead Stud	No - not req'd	K	Private house & land
	Costells	No	Ĺ	Private house & land



Figure 8.1 Ownership of land alongside selected route

8.2 For each property the potential constraints and/or boundary issues are given below along each stretch of road illustrated with screenshots from Google Maps Streetview, which are all looking west along the A272 showing the verge for the path on the right hand side. Photos are also included of the field margins along the B2111 and at the proposed road crossing.

Owner A

- 8.3 Between the road and Owner A's land (the Millennium Centre car park) there is a hedge but between the hedge and road there is a pavement and bus lay-by giving a width of 3.7m which would be adequate as within the 30 mph speed limit the proposed corridor width is 3.5m. There is a telegraph pole near the entrance to the car park but this is set back nearly 4m from the road and would not obstruct the path.
- 8.4 No comment was received from MSDC who own the land but the trustees of the Millennium Centre said that they were in support of the project.



Figure 8.2 View along A272 at the Puffin Crossing outside the Millennium Centre

Owner B

8.5 Owner B's land borders the road along 180 m in two sections either side of a 50m stretch belonging to Costells Wood Cottage(Owner C). It is generally bordered by scrub vegetation which could easily be cleared to make sufficient width available. Just inside the village boundary there is a gas distribution kiosk almost adjacent to the road but protected from it by a low Armco barrier.



Figure 8.3 Gas kiosk on A272 opposite Ham Lane looking west

- At this point two options were considered. Realigning the road carriageway by moving the Armco barrier to protect the path and the kiosk would be possible as there is plenty of carriageway width on the opposite side of the road provided by a bus stop lay-by and the wide entrance to Ham Lane. The other alternative, which was explored with Owners B would be to take the path around the back of the kiosk away from the road. Owners B live in Scaynes Hill and are supportive of the project. Initial discussions with them and an inspection of the area indicate that this would be a possible solution which they would be happy to accommodate. They also confirmed that they would be flexible if the path corridor encroached by a metre or so on to their land at any point along the boundary with the road and that two or three mature trees that might be within the path corridor could be felled if necessary by incorporating them into their woodland management plan.
- 8.7 On the road verge adjacent to Owner B's land there are 4 telegraph poles of which 3 are within 3.5m of the road and would need to be relocated as would the road signs for the village and speed limit.

Owner C

8.8 Owner C is supportive of the project objectives, although concerned that the speed of traffic on the road would prevent its use. The 50m boundary between the road and Owner C is marked by a broad hawthorn hedge (about 1.5m wide) with a mesh fence behind it. The face of the hedge on the road side is about 3m from the road and the fence about 4m. The WSCC road map indicates that the verge width in their ownership is about 4m. It would seem that the hedge may originally have been planted on WSCC land and over time has gradually encroached onto it as the stems of the hedge are generally set back from the road. It is likely therefore that this hedge would at least have to be trimmed back about 0.5m to provide a width of 3.5m, or removed entirely to provide a width of 4.0m. If this were necessary then a new hedge could be planted on the Owner's land with a close boarded fence behind to provide instant screening, which would maintain the current appearance. Extending the village 30 mph limit to beyond this property would mean that the narrower corridor would be possible and it is proposed that this would be warranted as it would also make ingress/egress from this property safer, which is another of the Owner's concerns.



Figure 8.4 View along A272 at village boundary looking west showing the hedge

8.9 There is a pair of telegraph poles in the hedge close to the entrance drive, one of which appears redundant, both of which would need to be relocated or removed.

Owner D

- 8.10 Owner D is the Woodland Trust who own and manage Costells Wood, which is an ancient seminatural woodland and therefore a precious habitat. When consulted the Woodland Trust's concerns were for encroachment onto Trust land and/or loss of ancient woodland e.g. through road widening, any severance of tree roots e.g. through construction adjacent to woodland and indirect impacts e.g. lighting, littering.
- 8.11 Along the first part of the boundary up to the wide access gate into the woods, a distance of about 70m, the boundary is marked by a light wire and mesh fence on wooden posts and/or a sparse low hedge both of which are about 3.5m from the road. Along this stretch there are two mature trees right up against the fence where the verge also rises up in a bank. At this point the fence is rather closer to the road so it would be necessary to remove these trees or realign/narrow the road. The Woodland Trust's concerns would need to be discussed in more detail for this short length of about 70m so that a compromise between re-aligning the road or encroachment could be agreed.



Figure 8.5 View along A272 looking west alongside Woodland Trust land

8.12 There is also one further telegraph pole within 3.5m of the road which would need relocation. Beyond the wide access gate into the woods the verge widens so that the fence/hedge is 4-5m from the road and there is sufficient corridor width for the path.



Figure 8.6 View along A272 opposite gate into Woodland Trust land looking west

Owner E

- 8.13 Owner E (Cudwells) is supportive of the project and has offered the use of their land to accommodate long sections of the proposed path.
- 8.14 Owner E has a long boundary (nearly 400m) along the road with a variety of features. For the first 100m the land slopes away quite steeply from the road and the retaining wall solution detailed above would be required. Along this length there is a small reminder speed limit sign that would need relocation.



Figure 8.7 A272 adjacent to Cudwells land looking west - verge sloping away from road

Where this section ends the boundary is defined by a brick wall, which starts only 2.1m from the road but as the wall is not quite parallel to the road it reaches an offset of 4m from the road after a distance of about 20m. In our cost estimate we have allowed for rebuilding this part of the wall, and the gate in it, to give a 4 m wide corridor for the path. The wall continues for about 100m to the entrance to Cudwells, but it is set well back from the road. However the verge starts to slope up to the base of the wall to a maximum height of about 1m and some cut will be required to accommodate the path platform. At this point the wall is about 6m from the road and it would be possible to accommodate the required excavation without undermining the wall foundation. There are two or three semi- mature trees in this bank that would need to be removed.



Figure 8.8 view along A272 alongside Cudwells brick wall looking west

8.16 Beyond the entrance to Cudwells, which is still owned by Owner E, a hedge marking the boundary is set back from the road by about 3.5m with a fence behind at about 5.5m from the road. However, moving further along the road (about 120m) the hedge gradually gets closer to the road until it is only about 1m from the road, while the fence is nearly 4m from the road. There is a telegraph pole behind the hedge/fence but this is over 5m from the road so does not interfere with the path corridor. It is this hedge which Owner E has agreed in principle could be removed and replaced with a similar hedge further back. In the hedge near this point there are also two mature trees that would need to be removed. An alternative for re-aligning the road at this point is also possible.



Figure 8.9 View along A272 opposite Cudwells showing hedge looking west

Owners F&G

8.17 Beyond the entrance to Cudwells Cottage Owner F has a boundary of about 20m and Owner G about another 40m. There are also 2 other houses that share the same driveway and at a meeting with all four owners they said that they were generally supportive of the project but had some concerns. At this point there is a fence about 4.5m back from the road with tree branches overhanging it, which would need cutting back. There is also one mature tree about 3m from the road that would need to be removed and a telegraph pole, where the line crosses the road, located 3.5m from the road, which might need to be relocated. The Owners are concerned by the likely reduced acoustic and visual screening from the road that would result, which could be mitigated by placing close boarded fencing along the boundary line and possible additional planting on the side of the fence facing the properties.



Figure 8.10 View along A272 showing last 100m towards Bedales Corner

8.18 Along the last 40m to Bedales corner there is a very wide verge bordered by the field owned by Owner E, who has offered to accommodate the path along this field margin parallel to the B2111, and this is where the path would enter the field by making an appropriate gap in the hedge/fence there.



Figure 8.11 View of Bedales Corner with Owner E's field alongside the B2111 on right

Alternative road re-alignment on A272

- 8.19 An alternative to encroaching onto private land could be achieved by re-alignment and or narrowing of the carriageway of the A272. This would be possible along two stretches of the road as shown below.
- 8.20 The first stretch is about 300m long from Ham Lane to just beyond the entrance to the cricket ground. The road could be moved by up to about 2m to the south to give a much wider corridor on the north verge, which would probably eliminate all private land encroachment. However, the reduction in the southern verge would mean that it would no longer be possible to walk along that verge to the cricket ground. It would also be necessary to move the gate at the entrance to the ground back to allow a vehicle to be able to get completely off the carriageway before the gate is opened. At the same time as realigning the road it may be possible to reduce the width of the carriageway somewhat which might help overcoming these issues.

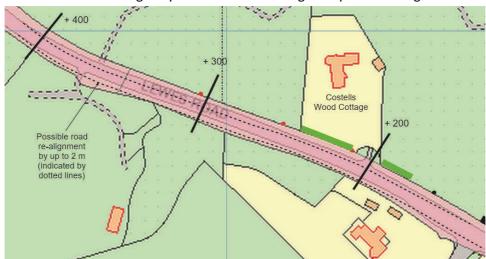


Figure 8.12 Potential road re-alignment near Scaynes Hill

8.21 The second possible section of road that could be re-aligned is a 200m stretch opposite
Cudwells to avoid having to remove and replace the hedge along their boundary with the A272.
However, this would require moving the road onto some private land on the other side in front of Awbrook Cottage. There is about 2 m of relatively flat verge here but then it slopes upwards

to the hedge line so it might not be possible to move the road sufficiently to avoid removing a short length of Cudwells hedge. There is not much opportunity to avoid re-building part of the Cudwells brick wall as there is very little spare verge on the other side of the road at this point. However, it might be possible to reduce the path width at that point to avoid rebuilding the wall.

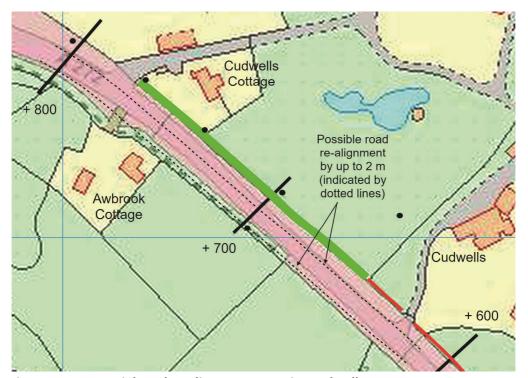


Figure 8.13 Potential road re-alignment opposite Cudwells

- 8.22 Realignment or narrowing of the road to minimise the impacts on private land is clearly a possibility, but would have an effect on the cost of the scheme. This is covered in the section below on the cost estimate. There is scope for some value engineering to look at these issues once a detailed topographic survey has been done.
- 8.23 Current lane widths are a legacy of higher likely 60 mph speed limits. Lane width is known to have an impact on speed limit compliance with narrower lanes more suited to lower speed limits. Current lane widths in excess of 3.65m are not appropriate for a 30-40 mph limit. Scope exists to narrow the lanes to 3.2m to both minimise works for the project and create better compliance with the speed limit.

Route along the B2111 - Owners E & H

8.24 Using the field margins on either side of the B2111 has been agreed in principle by the respective Owners E and H. Due to the side sloping nature of the ground in Owner E's field margin, there would need to be some cut and fill to provide a horizontal platform for the path. In two locations the path corridor would require removal of some scrub vegetation, which has extended out from the field boundary. However, there are two very tall and mature conifer trees in the field margin nearly opposite Stone Lodge, around which the path will need to

deviate from the fence line in order to prevent cutting into the side slope and damaging roots. Some fill material will be needed here to form a small embankment around the trees.

Owners J&K

8.25 The views of the owner of Clover Cottage (Owner J) near the proposed road crossing have been given in Sections 6 & 7 above (more details in Appendix D2) and although the path does not pass over his land the crossing would be situated about 30m from his property boundary and potentially have a significant impact on his outlook and security so his views must be taken into account. The Walstead Stud (Owner K) owns the land north of Clover Cottage but this will not be affected as the proposed path would be in the field margin on the opposite side of the road and not visible.

Owners L

8.26 For completeness Owners L, who own the woodland on the other (north-east) side of the PROW through Costells Wood, were contacted to see whether they would consider a path either following the PROW or on their land. They stated clearly that they would not accept such a proposal.

9. COST ESTIMATE

Methodology

- 9.1 The cost estimate has been prepared by an experienced construction cost estimator using the methodology that a construction company would use to price such a project if it were tendering for the contract. This is done by considering the time required to complete the work and making an estimate of the resources needed under the categories of materials, plant and labour. All prices used are based on current market costs (April 2023). For specialist works, subcontractors or material, quotes have been obtained from the open market. Quantities of work have been estimated from the plans and sections included in Appendix A and other details given in the text.
- 9.2 Costs for temporary works such as contractor's compound, storage area, traffic management etc have also been included. The sum of all costs has then been summed and an allowance of 10% for the contractor's overheads and profit added, which is a normal percentage for this type of work. The resulting sum is the estimated construction cost. The cost for surveys, detailed design and planning is not included in this cost estimate but an allowance of 20% of the construction cost has been included for this in the Benefit-Cost Analysis (see Section 10), which also allows a further 23% contingency on all costs to cover risks and other unknowns.

Assumptions & construction sequencing

- 9.3 The cost estimate has been made for the base case where no re-alignment or narrowing of the road is required. In addition a variation to this cost has been estimated for the alternative of partial re-alignment of the road as described in Section 8 above.
- 9.4 With the route being approx. 1.4km long, it was deemed that splitting the works up into several sections would be the most palatable to road users, with regard to disruption from traffic management schemes. However a balance must be struck with productivity and cost increases from splitting the work into too many, smaller sections. Therefore, seven sections of about 200m long was considered to strike the correct balance.
- 9.5 At each section Traffic Management (TM) would be established to separate the workforce from the live highway. There would be secure Heras fencing erected around one entire 200m stretch of the northern carriageway with access and egress gates installed. The TM would be traffic light controlled. The office and welfare would be established within the protected TM area along with all skips, storage and fuel containment. The worksite would be moved by first extending the TM to incorporate the next 200m section, moving all items within the TM to the new section, then reducing the fencing to only incorporate the new 200m stretch. The traffic lights would then be moved to the new location.
- 9.6 Along the route there are various utilities to be taken into account. Buried utility searches would need to be carried out before any ground breaking starts. Some utilities have already

been identified and considered but there may be others such as electrical cables and water supply pipes requiring diversion. Those that have already been identified are:

- Up to 6no BT Telegraph poles. This would require early engagement with the asset owner, BT, to plan and co-ordinate the moving of these poles either further away from the kerb line or to the other side of the road.
- Buried gas main within the northern verge. It has been agreed with the utility owner, Southern Gas Networks, that machine excavation can proceed over this main, provided that some test pits are dug to establish the exact depth of the main and that excavation depth is limited to 300 mm.
- Gas substation kiosk close to the road opposite Ham Lane. It has been agreed with the landowner that the path can be diverted away from the road and run on his land behind the gas kiosk.
- 9.7 A high level construction programme has been produced which arrives at a total duration for this proposed scheme of about 28 weeks and is the basis for the estimate. Any project would face the risks of unforeseen circumstances, which could lead to cost and/or time overruns. To shield the project from these, it is envisaged that the work should be let on a New Engineering Contract (NEC) Option A or B lump sum contract. This may attract a greater cost in terms of the risk pot built in by the contractor, but it would insulate the project from potential cost overruns due to design changes, weather, TM or variance in actual quantities to design quantities and also estimated total project duration.
- 9.8 The high-level work sequence at each of the 7no sections is envisaged as given below starting at the Millennium Centre and progressing westwards towards the Junction of the B2111 and Snowdrop Lane. The approximate position along the length of the road is identified by the chainage (eg Ch +200), which is the distance along the route measured in metres from the Puffin crossing opposite the Millennium Centre. The chainages along the road are shown on the highway plans in Appendix A. The descriptions below are for the base case not involving any road re-alignment or narrowing.

Section 1 – Ch+0 to Ch +200 (Millennium Centre to Costells Wood Cottage)

- 9.9 The bus stop lay-by on the eastbound carriageway would be incorporated into the new path. The route requires vegetation clearance from the back of the verge to the end of the existing footway. From this point the vegetation clearance required is from the edge of Costells Wood (Owner B) and around the back of the GRP Gas kiosk opposite Ham Lane. At least one mature tree would be need to felled. Before any excavation could take place to the west of the gas kiosk one or more hand dug test pits would be required to establish the precise location and depth of the gas main. There are also 2no telegraph poles to be moved.
- 9.10 With the route cleared of vegetation, there would follow topsoil stripping and excavation to formation level. Excess earthworks cut and all topsoil would be transported to a stockpile. A location for this has not been determined but it could be located on the path route in one of the fields adjacent to the B2111.

- 9.11 After laying of the geotextile fabric, Type 1 sub-base would be compacted to a thickness of 150mm in preparation for 2no layers of tarmac 60mm of AC20 base course and 30mm of AC6 wearing course to provide a 2.5m wide path.
- 9.12 The works would be completed by replacing topsoil to the edges of the excavation and dressing to the edge of the tarmac, seeding and any white lines or signage.

Section 2 – Ch+200 to Ch +400 (Costells Wood Cottage to Cricket Ground)

- 9.13 The work here is largely similar to Section 1. The section crosses the entrance to Costells Wood Cottage (Owner C), which would require the installation of dropped kerbs and resurfacing of the Cottage entrance bell mouth. It has been assumed that the hawthorn hedge in front of the property, which is on Highway land, would need to be removed, so for primary screening a close boarded fence would be erected and a new hedge planted, both on the owner's land. There are also 4no telegraph poles to be moved, although one is redundant.
- 9.14 Opposite the cricket ground the land is owned by the Woodland Trust (Owner D) and the path corridor is tight. If the road is not re-aligned there would be at least one mature tree which would need felling, or the path width reduced locally.

Section 3 – Ch +400 to Ch +600 (Cricket Ground to Cudwells)

- 9.15 The work here is largely similar to Section 1 but has some specific differences. There is the requirement for an engineered retaining wall solution over a stretch of about 100m due to the existing ground profile sloping down away from the back of the verge. The most cost-effective solution is considered to be a king post wall with precast concrete panel infills. To build up the cost estimate for this structure quotes were received from steel fabricators and precast concrete manufacturers, all quotes included delivery.
- 9.16 The king post wall would be installed by excavator digging a small pit to stand the steel posts in at 4m centres behind the verge. The posts would be concreted in place. Once this has hardened the precast concrete planks would be lifted into place to slot between the adjacent steel posts to create a retaining wall up to 1.2m high in places. The ground would be filled against the retaining wall using net arisings from the rest of the project and compacted in layers to create a level surface on which to build the cycle path.
- 9.17 At about Ch +400m there is an existing blocked road gulley, which has caused erosion of the embankment and collapse of the drainage pipe. This collapse has already been notified to the Highways Department and will need repairing sooner rather than later. It has been assumed that this repair would be done prior to cycle/walkway path works commencing.
- 9.18 As the path reaches the eastern boundary of Cudwells, there is a pinch point where there is a brick wall with a green metal gate into the rear yard area of the property. There is insufficient space here for the minimum width of the path. The only solution without re-aligning the road is

to remove the gate and demolish about 20m of the brick wall, then rebuild them like-for-like 1.5-2m further away from the road. The rest of the brick wall is further from the road and its foundation at a higher level. Here some semi-mature trees would need to be removed and some excavation of the bank required. Care would need to be taken to ensure that the gas main is not affected by this or the wall undermined.

Section 4 – Ch +600 to Ch +850 (Cudwells to Bedales Corner)

- 9.19 The work here is largely similar to Section 1 but has some specific differences. This section crosses the entrances to Cudwells main house, Cudwells Cottages and Cudwells Old Barn properties. These would require the installation of dropped kerbs and resurfacing of the entrance bell mouths similar to section 2. Surfaces would be replaced like-for-like.
- 9.20 There is a significant length of the Cudwells hedge, including two trees, between the front garden and the A272 that would need to be removed to create the minimum width required for the path if the road was not re-aligned. The owner (Owner E) has accepted that this section of hedge could be removed and replaced 1.5-2m further away from the road to give sufficient width for the path corridor.
- 9.21 Along the property boundary to the A272 for the houses at Bedales corner some large tree branches would need cutting back and a close boarded fence erected. Additional planting behind the fence would be needed to restore the level of screening.

Section 5 – Ch +850 to Ch +1160 (Bedales Corner to B2111 crossing)

9.22 Traversing along this section of field margin there are significant and varying gradients. In order to achieve more even and acceptable gradients some cut and fill would be required. There would be more fill required than cut so the additional material required would come from a balance of the net arisings from the cut to fill works at other sections as well as some of imported fill material such as recycled 6F2 / hardcore. Slopes would be built up in compacted layers as per normal construction guidelines. Geotextiles and soil nails may be utilised as the design is developed in order to reduce the total quantity of fill required and constrain the new slopes from encroaching too far into the field. A new hedge and fence would be created on the east side of the path to delineate and screen it from private land.

Section 6 – crossing of B2111 near Clover Cottage (Ch +1160)

- 9.23 The crossing would consist of an island across one carriageway to create a one-way chicane at that point. There would be two other similar islands, one on each carriageway either side of the crossing and about 75m from it to act as traffic calming measures. Traffic Management would be required for these works.
- 9.24 The islands are simple highways construction using HB2 concrete kerbs and bollards, set into a concrete sub-base and infilled with either concrete or Type1 sub-base with tarmac surfacing.

- 9.25 On the east side of the crossing a 3m wide gap would need to be made in the hedge there for the path to pass through. On the opposite side there are a few trees to get past before reaching the field margin. A route through the trees to reduce tree removal as far as possible would be part of the design but some vegetation clearance and/or tree felling may be required.
- 9.26 New road markings would be painted near the islands to indicate stopping points and which carriageway gives way. Where the path crosses the road there would be either painted lines or different coloured surfacing to highlight the crossing zone. There would also be associated signage on approach from both directions to alert drivers to the chicanes.

Section 7 – Ch +1160 to Ch +1400 (West side of B2111 to junction with Snowdrop Lane)

9.27 The final section of the path runs along the edge of the field behind the scrub vegetation and trees on the western side of the B2111 to the junction with Snowdrop Lane. Along this section the path would be laid at the natural grade of the edge of the field and a simple barbed wire fence erected to separate it from the adjacent field.

Cost estimate summary

9.28 A detailed breakdown of the cost estimate is given in Appendix B and can be summarised as:

	Cost (£)
Materials & sub-contractors	£591,000
Plant & equipment	£ 67,000
Labour	£152,000
Contractor's staff/office	£ 98,000
Sub-total	£908,000
Overheads & profit (10%)	£ 91,000
TOTAL	£999,000

- 9.29 It is perhaps interesting to compare this with an earlier rough cost estimate. When the SHLAT group applied to WSCC in July 2022 to have the project included in their Community Highway Scheme (CHS) or Local Traffic Improvement Programme (LTIP) a rough cost estimate was made using the parameters given in the CHS Guidance document²⁴, which gave an estimated cost of £960,000.
- 9.30 A further estimate, using the same methodology as the base case estimate, has also been made to identify the additional net cost (cost less savings) which would accrue if the A272 was realigned in accordance with Figures 8.12 & 8.13 above. This is also detailed in Appendix B and summarised below.

	Cost (£)
Base case (as above)	£999,000
Additional cost of re-alignment	£198,000
TOTAL	£1,197,000

Available funds

9.31 From the West Sussex County Council - Infrastructure Funding Statement 2021/22⁴ it can be seen that there are Section 106 funds available from various recent developments in the LRPC area already allocated to this project as follows:

Planning Ref.	Development title	Amount	Comments	
08/02532/OUT	Land At Junction Of Gravelye	£179,668	65 dwellings s at SW end of	
	Lane And Lyoth Lane		Langmore Lane (Croudace)	
12/04316/FUL	Land To The East Of Gravelye	£125,606	230 dwellings at Heathwood	
	Lane And North Of Lyoth Lane		Park (Barratt Wates)	
12/04316/FUL	Land To The East Of Gravelye	£19,000	Ditto - amendment	
	Lane And North Of Lyoth Lane			
DM/16/3119	Barns Cottage (The Swallows)	£134,514	55 dwellings at Barns Cottage	
			(The Swallows) in Scaynes Hill	
DM/16/5648	Land To The East Of Gravelye	£33,900	130 dwellings at Lindfield	
	Lane		Meadows (Taylor Wimpey)	
	TOTAL	£492,688		

WSCC have allocated all the above S106 funds to 'Scheme ID's 186 & 213 - Scaynes Hill to Lindfield'. These ID numbers refer to cycling/walking routes identified in the WSCC Walking and Cycling Strategy 2016-26. ID 213 is the route along the A272/B2111 (see Fig 4.1 Route B), which is the preferred route recommended in this report as far as Snowdrop Lane. ID 186 is the alternative route using the Public Rights of Way (see Fig 4.1 Route A(b)), which has had to be discounted due to lack of landowner support.

- 9.32 In addition to the above there is a further £100,000 of Section 106 funding from the Walstead Park development which is currently under construction, which the Section 106 agreement indicates is to be used for one or all of six projects, one of which is the Scaynes Hill Lindfield cycleway.
- 9.33 The above shows that the Section 106 funds already allocated to this project represent about half the estimated cost of the project and that the remaining half will still need to be raised.

 This is discussed below in Section 11.

10. COST BENEFIT ANALYSIS & PRIORITY

Methodology & assumptions

10.1 In order to rank this scheme with others that might be implemented in the County a benefit-cost analysis has been done using the methodology recommended by the DfT, the Active Mode Appraisal Toolkit (AMAT). This is a spreadsheet tool to which the user enters some input information about the scheme, including the predicted usage, anticipated life of the asset, the implementation and maintenance costs, funding available etc. and it calculates the benefits in

terms of health, mode shift and journey quality and gives a Benefit to Cost Ratio (BCR) in terms of Value for Money. The full spreadsheet input and output can be seen in Appendix C.

10.2 The BCR determines the priority of a scheme so that it can be compared with other schemes competing for the same funding. The range of BCR and associated priorities is as follows:

Box 5.1 Standard Categories (Transport cost outlays exceed revenues or cost savings)

VfM Category Implied by*		
Very High	BCR greater than or equal to 4	
High	BCR between 2 and 4	
Medium	BCR between 1.5 and 2	
Low	BCR between 1 and 1.5	
Poor	BCR between 0 and 1	
Very Poor	BCR less than or equal to 0	

10.3 The principal assumptions made for this analysis are as follows:

Appraisal year: 2023

• Opening year: 2026

Last year of funding: 2026

- Life of asset/appraisal period: 30 years (reasonable assumption for fixed civil asset)
- No of current trips: Cycling 10/day; Walking 10/day (supported by traffic data)
- No of anticipated trips: Cycling 100/day; Walking 100/day (based on survey)
- Length of path: 1.4 km
- Design cost: £200,000 (assumed 20% of implementation cost)
- Implementation cost: £1,000,000 (from cost estimate for base case)
- Private funding or Section 106 funds: £493,000 (from S106 funds already allocated)
- Maintenance costs: £1,000/year for life of asset (as previously proposed by WSCC)
- Cost contingency (Optimism bias): 23% (default setting considered appropriate)
- 10.4 Based on the above assumptions the BCR for this scheme comes out as 4.71, which equates to the highest category of Very High Priority in terms of value for money.

Sensitivity

10.5 The BCR is quite sensitive to the assumptions made, and below are the results obtained for the base case and by varying some assumptions.

S106 funds (50%): £250,000 BCR = 2.26 High Priority Implementation cost: £1.2m BCR = 2.92 High Priority Cycling/Walking: 20% less BCR = 3.41 High Priority Asset Life: 25 years BCR = 3.76 High Priority

Maintenance cost: £5,000/yr BCR = 4.13 Very High Priority
Base case (as above) BCR = 4.71 Very High Priority
Cycling/Walking: 20% more BCR = 6.01 Very High Priority

10.6 From the above it can be seen that this project should probably be rated as High-Very High Priority.

WSCC assessment criteria

10.7 In a response to a Freedom of Information request relating to the criteria for assessing such schemes as this WSCC responded as follows:

"Both Community Highway Schemes & LTIP schemes are assessed against the same set of criteria, which allows the County Council to consider the relative priority of schemes across different programmes. A blind scoring system is used to discourage manipulation of inputs to achieve a desired outcome. This ensures all applications are assessed fairly, evenly and without prejudice.

There is an initial and a detailed assessment undertaken. In the initial assessment it considers the following aspects:-

- 1. Is it likely that the scheme will deliver the vision of the adopted West Sussex Transport Plan?
- 2. Is it likely that a solution can be developed and delivered that will meet the scheme objectives?
- 3. Are potential dependencies with other schemes in the area fully understood?
- 4. Is the scheme likely to deliver value for money?
- 5. Is the scheme likely to comply with relevant national and local standards?
- 6. If the scheme requires other approvals or permissions, are they likely to be secured?
- 7. Is the scheme supported by the local member / community?

In the detailed assessment the above criteria are reviewed in greater detail."

- 10.8 Assessing the scheme as detailed above in this report it would seem that it meets all the above criteria very well. Below are responses to the above questions that demonstrates this:
 - Yes the following are relevant direct quotes from the Vision of the WSCC Transport Plan. "The transport network will be on a pathway to achieve net zero carbon omissions by 2050 through more local living ... and reduced use of fossil-fuels. It will also be safer, more efficient and resilient overall with more walking and cycling. It will connect communities and allow residents to live healthy lifestyles Active travel modes ... will be attractive options and rural communities will have access to the services they need." The scheme will deliver all the aspects of the Vision mentioned above.

- 2. Yes a deliverable solution has been identified that will meet the stated scheme objectives.
- 3. Yes there is a dependency with the Walstead Park development that has been given Planning Approval and is currently under construction. Liaison with the developers of Walstead Park indicates that they are prepared to modify the path through their Country Park to be suitable for bi-directional walking and cycling. There are also possible synergies with the LCWIP and the 'Quiet Lanes' strategy being developed by Mid Sussex District Council.
- **4.** Yes a proper Benefit-Cost Ration analysis using the approved DfT approved methodology based on evidence based input parameters has been done, which rates this scheme as high/very high priority.
- 5. Yes the relevant current guidance (eg LTN 1/20) has been taken into account in the outline designs and there is no reason why the scheme cannot be designed to comply with all relevant standards.
- **6.** Yes landowner approval in principle has been obtained for the off road parts of the route. All landowners along the rest of the route have been contacted and meetings held with several. There are no significant objections so Planning Approval should not be difficult to obtain. WSCC Highways approval is also obviously required.
- 7. Yes as detailed above surveys done in 2021/22 had over 700 responses representing over 1,700 local people, of which 97% were in favour of the scheme. The WSCC local member for this ward is ClIr Garry Wall who is part of the SHLAT group and supports this project. The local Member of Parliament and all the local MSDC Councillors for this area support the proposal as do the two local Parish Councils.

11. FURTHER WORK REQUIRED

Secure funding

11.1 There is already £493,000 of Section 106 monies allocated to this project from a number of recent developments in the LRPC area⁴, including the 2017 Swallows development in Scaynes Hill specifically allocated to this project alone³. There is also a further potential £100,000 of Section 106 monies from the current Walstead Park development that is listed in the Sixth Schedule of the Section 106 agreement²⁵ as being used by WSCC for any or all of six schemes, one of which is provision of a new cycle route along Lewes Road/Scaynes Hill Road to Lindfield in accordance with the Lindfield and Lindfield Rural Neighbourhood Plan². At the April LRPC meeting a motion was passed to request WSCC allocate the Walstead Park Section 106 money to this project. There are also two further developments proposed in Scaynes Hill included in the Revised District Plan, from which further Section 106 monies may become available in the future.

11.2 Clearly the next step will be to secure further funding either through an application to Active Travel England or further Section 106 monies or both. It is considered that this Feasibility Report provides a sound basis for such a funding application. A particular attribute of this project, which makes it a good candidate for a funding application is the massive local support and minimal opposition to it, unlike some other projects which WSCC are trying to promote.

Speed limit reductions

11.3 In the context of the revised WSCC Speed Limit policy a review of speed limits for the two stretches of road concerned would need to be undertaken. A reduction of the speed limit on the B2111 would be important to facilitate the design of the road crossing and on the A272 could help minimise the cost of this project and also make it a more attractive option for travelling on. Speed limit reductions on these roads would also be more consistent with arrangements elsewhere in the county.

Legal agreements with landowners

11.4 The implementation of the project depends on the continuing support and co-operation of landowners and it will be necessary to enter into legal agreements to clearly define any necessary alterations to boundaries or way-leave arrangements to allow the project to proceed. The Highways Act 1980 Section 25 Creation of footpath or bridleway by agreement²⁶ would appear to be the relevant basis for this. Landowners would need agreements that clearly define maintenance responsibilities and indemnities for damages.

Detailed design & Planning

- 11.5 Detailed design of the project would require a specialist consultant familiar with this type of work, who would be selected by public tender. To form a sound basis for detailed design of the project it will be necessary first to undertake some detailed surveys. These would include topographical and ecological surveys as well as the possibility of some geotechnical testing. It would be appropriate for the consultant appointed also to co-ordinate and manage these additional studies.
- 11.6 As for any development project it would need to go through the normal Planning process for which specific Planning drawings and documents would be required. This would most efficiently be achieved by including these under the remit of the above design consultant as well as preparation of detailed specifications and tender documents for selecting a contractor to build the scheme.

12. CONCLUSIONS & RECOMMENDATIONS

- 12.1 There has been a desire and need for a safe dedicated cycling and walking connection between Scaynes Hill and Lindfield for decades as represented in the Scaynes Hill Village Plan (2011), the Lindfield and Lindfield Rural Parish neighbourhood Plan (2014) and as so clearly demonstrated by the surveys in 2021/2 with two thirds of the residents of Scaynes Hill, with similar numbers from Lindfield, supporting the project. Most importantly local landowners are also included in the support of this project as they are prepared to allow the construction of the path on their land in order to make this possible. In addition the local Member of Parliament, local Councillors from County, District and Parish levels representing this area support the project.
- 12.2 In the context of government policies to reduce CO_2 emissions to Net Zero and fight climate change there has never been a more appropriate time than now to implement this project. The ability particularly for young people to be able to chose walking or cycling as a preferred mode of travelling on short trips would set up patterns of behaviour that encourage living a healthy lifestyle and would reap huge dividends in the future.
- 12.3 In this part of the county (Mid Sussex) the Active Travel provisions foreseen in the MSDC LCWIP are urban centric, concentrating on the three towns of Haywards Heath, Burgess Hill and East Grinstead, where there are at least already pavements for walking and lower speed limits for safer cycling. Provisions in rural areas are not so well considered and villages like Scaynes Hill are disadvantaged, having no safe alternative to using a car or a limited bus service for relatively short trips in order to access shops, services and amenities. This project would dramatically increase safety for all modes of transport by segregation of cyclists and pedestrians from motorist traffic.
- 12.4 There is often an element of leisure/tourism development resulting from better cycling provisions and this may well be the case for this project, giving access to the countryside to the East of the urban area of Haywards Heath. In addition to better access for those in Scaynes Hill to many of the independent shops in Lindfield, these factors would provide opportunities for economic growth in the local area.
- 12.5 This study has shown that a path only 1.4 km long, which would provide safe connectivity with Lindfield and Haywards Heath via a path to be provided as part of the Walstead Park development, is both technically feasible and deliverable. The estimated cost of about £1.0 million may seem large but the analysis using the Department for Transport assessment tools shows this to be very good value for money. There is already £493,000 of Section 106 money allocated to this project with the potential for £100,000 more from the Walstead Park development. Lindfield Rural Parish Council has recently voted to request WSCC to allocate the Walstead Park monies to this project as well.
- 12.6 This study has considered the alternatives and explored the potential constraints in sufficient detail to support an application for funding by WSCC to the Active Travel Fund for the rest of the amount needed. There is a short window of opportunity to develop the project as the Section

106 funds need to be used within 10 years of their receipt or they will be lost to other schemes. The time limit for the Swallows Section 106 funds is March 2029, less than six years, while most of the other funds would have been received by WSCC earlier and will have a shorter deadline for use.

12.7 The proposed project is an excellent solution to a number of related problems. It will be using existing Section 106 funds to provide much needed travel choice to the local community, while encouraging behaviours to lower carbon emissions, which will support the fight to prevent climate change. For all these reasons it is recommended that WSCC review this report with a view to developing and adopting the project in order to put in an application for further funding. The SHLAT group are available to discuss any aspect of this study with WSCC officers to clarify any issues and would be prepared to collaborate with WSCC in preparing such an application if it would be helpful.

Abbreviations & definitions

AADF Average Annual Daily Flow (traffic)
AMAT Active Mode Appraisal Toolkit
CHS Community Highway Scheme
DfT Department for Transport

GDPR General Data Protection Regulations
ICO Information Commissioner's Office

LCWIP Local Cycling & Walking Infrastructure Plan

LPC Lindfield Parish Council

LRPC Lindfield Rural Parish Council

LTIP Local Traffic Improvement Programme

LTN 1/20 Local Transport Note 1/20 Cycle Infrastructure Design

MSDC Mid Sussex District Council
NEC New Engineering Contract

NPPF National Planning Policy Framework

OGL Original Ground Level
RST Route Selection Tool
SGN Southern Gas Networks

SHLAT Scaynes Hill - Lindfield Active Travel
SHSG Scaynes Hill Sustainability Group

TM Traffic management

WCIS Walking & Cycling Investment Strategy

WSCC West Sussex County Council

WT Woodland Trust

On the first occurrence of any of the above in this report the full name has been given. Thereafter the abbreviated initials have generally been used.

References

- 1 Scaynes Hill Village Plan 2011
- 2 Lindfield & Lindfield Rural Neighbourhood Plan 2014-2031 'Made Version' 2014 (https://lindfieldrural-pc.gov.uk/wp-content/uploads/2020/12/lindfield-and-lindfield-rural-neighbourhood-plan.pdf)
- 3 Planning Obligation by way of Agreement pursuant to Section 106 relating to land at Barn Cottage, Scaynes Hill, signed 7th Feb 2017
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- 5 Results & analysis of a survey on the need for and potential use of a safe cycle/walkway from Scaynes Hill to Lindfield (Revised & Updated), Scaynes Hill Sustainability Group, June 2021 (https://scayneshillvillage.co.uk/cycle-walkway-survey-report/)
- 6 Department for Transport Road Traffic Statistics for West Sussex 2000 2021 (https://roadtraffic.dft.gov.uk/local-authorities/81)
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- 8 Triple fatal crash victims named http://news.bbc.co.uk/1/hi/england/southern_counties/4391267.stm
- 9 West Sussex County Council Home to School and College Transport Policy https://www.westsussex.gov.uk/media/11485/ws school and college transport policy.pdf
- 10 Mid Sussex District Council Local Cycling & Walking Infrastructure Plan(LCWIP) Final Report March 2023
- 11 Scaynes Hill Village Community website SHLAT page (https://scayneshillvillage.co.uk/shlat/)
- 12 Walking and Cycling Investment Strategy 2017
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 https://padocs.midsussex.gov.uk/PublicAccess Live/Document/ViewDocument?id=8E9A8BA8C6184
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- 24 Community Highways Scheme (SHS) Guidance https://www.westsussex.gov.uk/media/19082/chs guidance.pdf
- 25 Planning Obligation by way of Agreement pursuant to Section 106 of the Town & Country Planning Act 1990 relating to land south of Scamps Hill Lindfield, signed 9th Jun 2017 https://padocs.midsussex.gov.uk/PublicAccess Live/Document/ViewDocument?id=BE9498BA59721 1EBABA7C2B5D76EB8B7
- 26 Highways Act 1980 Section 25 https://www.legislation.gov.uk/ukpga/1980/66/section/25/enacted