Cycle network study

Sidmouth and East Devon

March 2017

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Head Office
Sustrans
2 Cathedral Square
College Green
Bristol
BS1 5DD

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Authors	Rupert Crosbee David Lucas
Checked	Simon Murray
Authorised	Simon Pratt

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Introduction

The Brief

Sustrans is working with a sub-group of the Sid Valley Neighbourhood Plan Steering Group and the Otter Trail Group to develop plans to encourage walking and cycling as an everyday transport choice in Sidmouth and neighbouring settlements, and to review the existing National Cycle Network Route 2 which passes through the East Devon Area of Outstanding Natural Beauty (AONB).

The partners in the project are represented by a local steering group which includes a wide range of local people, all with an interest in local transport, representing the Sid Vale Association, the County Council at member and officer level; the AONB; and Save our Sidmouth. At the request of the local steering group, the brief for the project has shifted its focus slightly from the original brief as set out in the funding application. This is reflected in the following summary:

1. A desk top survey of the AONB will be undertaken to establish the location of existing signed cycle routes, and we will research other initiatives for developing new routes, e.g. The Otter Trail and the Stop Line Way.
2. We will audit the existing National Cycle Network route between Budleigh Salterton and Seaton, through the AONB and recommend enhancements if necessary.
3. We will make recommendations for linkages within the built up area of Sidmouth, a link to the proposed Otter Trail, and the options for the Otter Trail south of and crossing the A3052.

We will recommend new and enhanced routes and facilities, but the scope of the project does not extend to public or other consultation, nor contacting private or other land interests which could be affected. We will however consult the Highway Authority, Devon County Council and East Devon DC with reference to the local plan. We will engage with the community by making contact through the local steering group.

We will seek to align our recommendations with public policy and the AONB management plan.

Context

Sid Vale Neighbourhood Plan (NP)

The NP process was started in summer 2016 with a public survey as the first step towards gathering the evidence of local people's needs and priorities which will be used to develop the NP. The report on the survey showed "Traffic – cars, speeding, congestion, pollution, narrow footpaths. Lack of pedestrian crossings. HGVs in town centre" as the least liked aspect of local life. A subsequent much less extensive report by the NP Cycling Focus Group found that many local people found that traffic on the roads is perceived as a danger to cycling.

The second most important issue in the survey responses was:

"Transport (parking, traffic management, walking, cycling, driving)"

In summary:

The [NP]vision for transport in the valley across the next 15 to 20 years can be summarised as;-a pedestrian town centre, improved parking and road system, reasonable parking charges, a pollution free environment, few HGV's, and better cycling facilities. It must be recognised that many of these are incompatible with the natural geography and layout of the town, and although some improvements might be achieved, it is important to carefully manage expectations about these concerns. Transport issues it should be noted are responsibilities of Devon County Council and East Devon District Council, therefore working with these agencies to influence change that is realistic and possible is required.

Our report is a response to these issues, and can we believe contribute to achieving this vision, and will be available as evidence to the NP as it develops.

Previous studies

We are anxious that we do not duplicate previous work, and we have referred in our work to the following studies:

- The National Cycle Network in South Devon, Proposals for Route 2, Sustrans 1998
- Feasibility study into the use of disused railway lines in East Devon as cycle paths, Peter Addie on behalf of Sustrans 2000 (Commissioned by East Devon District Council)
- Feniton to Sidmouth (Otter Valley) Trail, Feasibility Study Draft Report Sustrans 2014
- The Otter Trail; Proposed Tipton to Bowd Path; Detail of Works required, Kim Littlewood 2016

East Devon Local Plan

The Local Plan 2013-2031 was adopted in January 2016 and sets out strategic policy for development across East Devon and the full suite of policies for the seven main towns of the district.

It is a key plan objective to: To help reduce carbon emissions and also provide wider benefits encourage sustainable forms of transport and initiatives to reduce the need to travel and reliance on the motor car.

Strategy 5B Sustainable Transport states Development proposals should contribute to the objectives of promoting and securing sustainable modes of travel and transport. New development in Sidmouth is expected to be very limited with a housing allocation of just 125 homes.

The local plan section for Sidmouth does not explicitly support specific provision for improved cycling facilities, but does emphasise pedestrian access and a strategy for infrastructure being "better management of road space in the town centre to alleviate congestion, and park and change provision to incorporate car parking provision accessible to local bus routes and services."

East Devon AONB Management Plan

The policies of the AONB support development and improvement of recreational walking and cycling trails:

Policies ART 1 In partnership with others encourage and support the provision of high quality, sensitive, physical access for as wide a range of users as possible and the on-going sustainable development of key recreational routes where this does not conflict with the conservation of internationally protected sites and species. Priority Actions include (inter alia)

- Support improvements to the cycle, mountain bike and bridleway network.

Development in Sidmouth

Although limited development is planned in Sidmouth in the next twenty years, any that does come forward should contribute to sustainable transport – potentially helping deliver any new initiatives especially if these will aid residents and employees access the development.

The local steering group has highlighted three developments:

1. Sidford Business Park: an application for a business park on the northern fringe of Sidford has been refused, but the site is allocated in the local plan for employment so its development in the future seems likely. The plans included a link for walking and cycling to The Byes and to Sidbury. We have been asked not to research this further as it is in hand with the County Council.

2. Port Royal: a site at the eastern end of the sea front is allocated for mixed use development. A master plan is being drawn up by the District Council. This has potential benefits for contributing to changes to benefit walking and cycling in the town centre.

3. Knowle: the current offices of the district council are allocated for residential development. There is an issue with access by cycle to this site on Station Road and any development proposals could help address this.

4. Park & Change site: a green field site at the north end of Woolbrook Road has been identified as a potential site for a 'park & change' site which it is hoped would reduce congestion in the town centre. The site is sandwiched between the former railway and Woolbrook Road.

Flooding

The steering group was keen that we were aware of long standing issues with run off from the land west and north of the town which gives rise to flooding after periods of prolonged rainfall from Wool Brook which affects the west side of the town bordering Woolbrook Road.

A Sidmouth Surface Water Management Plan was published by the county council in 2014. For the purposes of any proposals we make, it is important that flood risk is taken into account and drainage systems provided which do not add to the risk of flood.

Traffic management

The local plan notes the desire to further pedestrianise the town centre and includes policies to support this. Our proposals for measures to be taken on the highway network are strongly tied in

to traffic management and we have referred to this as appropriate. There are ongoing discussions about a 'park and change' facility which would reduce the traffic entering the town, and the steering group has advised us that a review of traffic management in the town will be undertaken in the near future. We hope this report will be useful to that exercise.

Methodology

Urban area

Desktop study: In order to understand the likely demand for movement in Sidmouth we have mapped existing cycle facilities and locations we consider to be the main attractors for local trips, such as the town centre and major employment sites. From this information we have made a preliminary assessment of the principal movement corridors where we focus our effort in the site survey.

Core principles for routes used by cyclists	
Coherence	• link all potential origins and destinations • be continuous and recognisable • offer consistent standard of protection throughout • be properly signed • include well located cycle parking
Directness	• be based on desire lines • result in minimal detours or delays • provide a positive advantage in terms of directness and priority over motor traffic
Safety	• be safe and perceived as safe • provide personal security • limit conflict between cyclists and pedestrians and other vehicles
Comfort	• be smooth, non-slip, well maintained, drained and free of debris • have sufficient width for the level of use • have easy gradients • be designed to avoid complicated manoeuvres • enable cyclists to maintain momentum • minimise impacts of noise, spray and headlight dazzle from other traffic
Attractiveness	• be attractive and interesting • integrate with and complement their surroundings • contribute to good urban design • enhance personal security • be well maintained

Source: Sustrans Design Manual

Site survey

We have assessed existing infrastructure, and existing and potential links to it against the following:

We have sought to identify and report barriers which may be discouraging people from cycling regularly. Although our brief is focussed on cycling, we also have taken account of the of the needs of walkers and the less able / wheelchair users.

Consultation

At the conclusion of the site survey phase, and the collation of the information we gathered, there was an opportunity for the local steering group to meet to review the findings and offer comment. This served as a sense check from a local perspective, and allowed us to benefit from the extensive local knowledge in the group, and if necessary re-focus the report.

The steering group met on 16th February and confirmed that the focus for effort should be Woolbrook Road, and the former railway route.

Report

The final report will include the information gathered, recommendations for infrastructure measures to be taken, and suggestions for the next steps for the group in the future.

Background information

Our first step was to consider the constraints which affect travel in Sidmouth. This is largely a desk top exercise, but is important in understanding where local journeys originate and might need to reach.

Public transport

The map figure 1 shows the bus routes in Sidmouth. These include double decker services which serve Exeter and Axminster, and which share road space with other users. These are of special relevance in any consideration of on highway measures for cycling which could impact on bus service comfort, safety and reliability.

Demography

According to the 2011 Census, the total population of Sidmouth was a little below 15,000. Sidmouth attracts large numbers of retired people, with over sixty-fives representing 45% of the total adult population, and 38% of the total population of all ages.

18-64 year olds represent 55% of the adult, and 46% of the total population.

Under 18's represent 16% of the total population.

With increasing life expectancy, and the greater propensity for older people to maintain their health and fitness into later life, it is not a safe assumption that a high proportion of the population lacks the ability or inclination to travel on foot or cycle. The health and wellbeing of older people benefits from regular walking and cycling an ideal form of exercise which can be combined with their daily needs conveniently and at little or no cost.

More than 6 in 10 of Sidmouth's population is under sixty-five, a significant potential population which may have a propensity for making more journeys by active travel.

Topography

The map figure 2 shows the road layout and topography of the town. It can readily be seen that Sidford Road, Woolbrook Road and Station Road follow the line of easiest available gradients into the town, and that the bulk of the population is housed on the slopes above and either side of Woolbrook Road and Sidford Road.

The town's topography is a significant factor influencing the selection of routes in this study. For cyclists making short journeys avoiding climbing hills is a key consideration, and the inclusion of even modest climbs in a route will depress usage. Clearly some climbing cannot be avoided in Sidmouth, but we have sought to minimise these in our proposals.

Electric bikes are becoming relatively cheaper, lighter, and more reliable, and are being adopted more and more especially in older age brackets. It is anecdotal a conversation with the bike shop in Sidmouth seems to indicate that electric bikes are selling well and being well used locally. Electric bikes assist older people and effectively level the landscape.

Road network

The principal roads are Station Road and Sidford Road which carry the majority of traffic in and out of the town. Neither of these roads would comply with current guidance for cycle provision despite being within the 30 mph limit, due to volume of traffic and the absence of on road facilities.

Woolbrook Road appears also to be used as a route in and out of town, with higher levels of traffic than would be expected for this type of road. Further consideration is given below.

We were informed by the steering group that Alexandria Road and Manstone Lane are used inappropriately by HGV's going to and coming from the industrial units on Station Road.

Residential roads throughout the town are generally quiet and well suited to cycling.

Trip attractors

The map figure 3 combines population density and the location of the main attractors of trips in the town. These factors, alongside the topography and road network, have determined our identification of the corridors where we have focussed this study.

We have made the assumption that demand for access is emanating in the residential areas, and is for access to the main attractors – schools, town centre, retail etc. Taking into account the available infrastructure of roads and other public access, the topography – avoiding hills where possible, and distance, the overview map figure 4 shows the corridors we have identified as being those where demand is likely to be maximised. This approach we confirmed by the steering group at our meeting to review our initial conclusions.

Figure 1: Sidmouth Bus Services

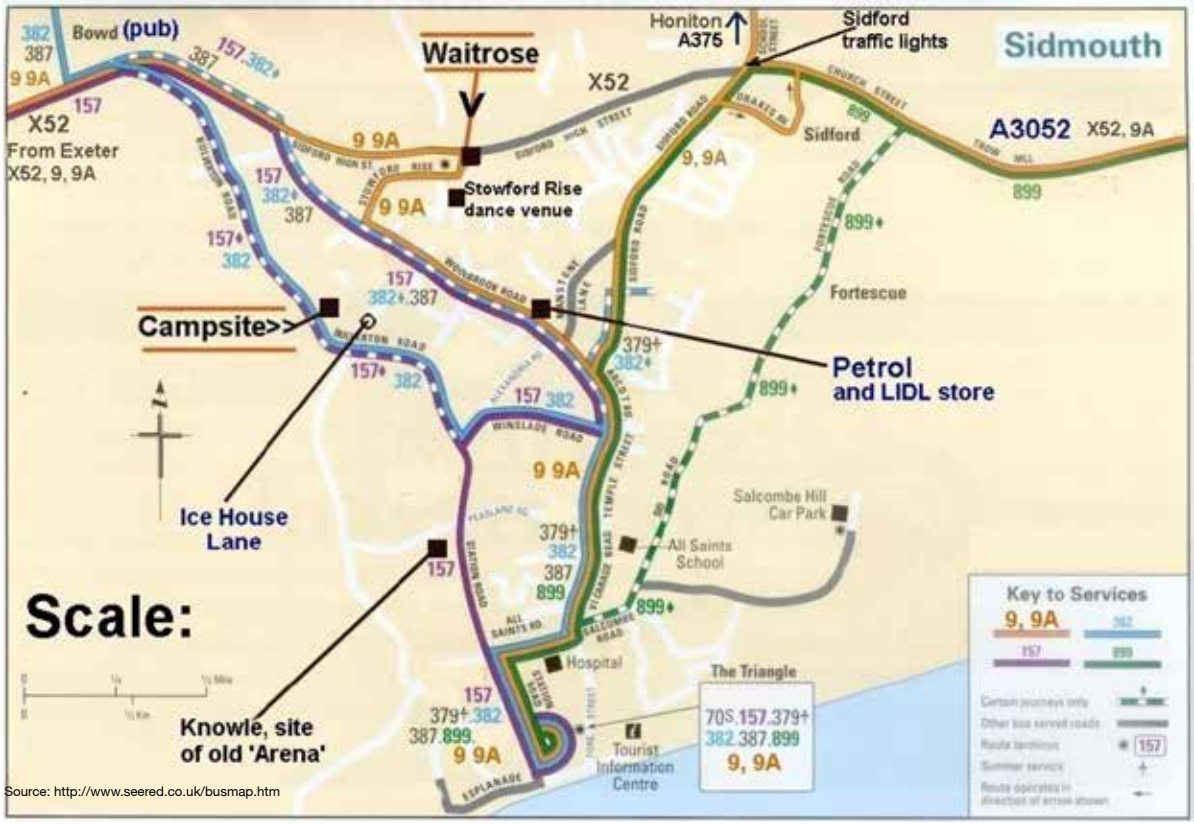
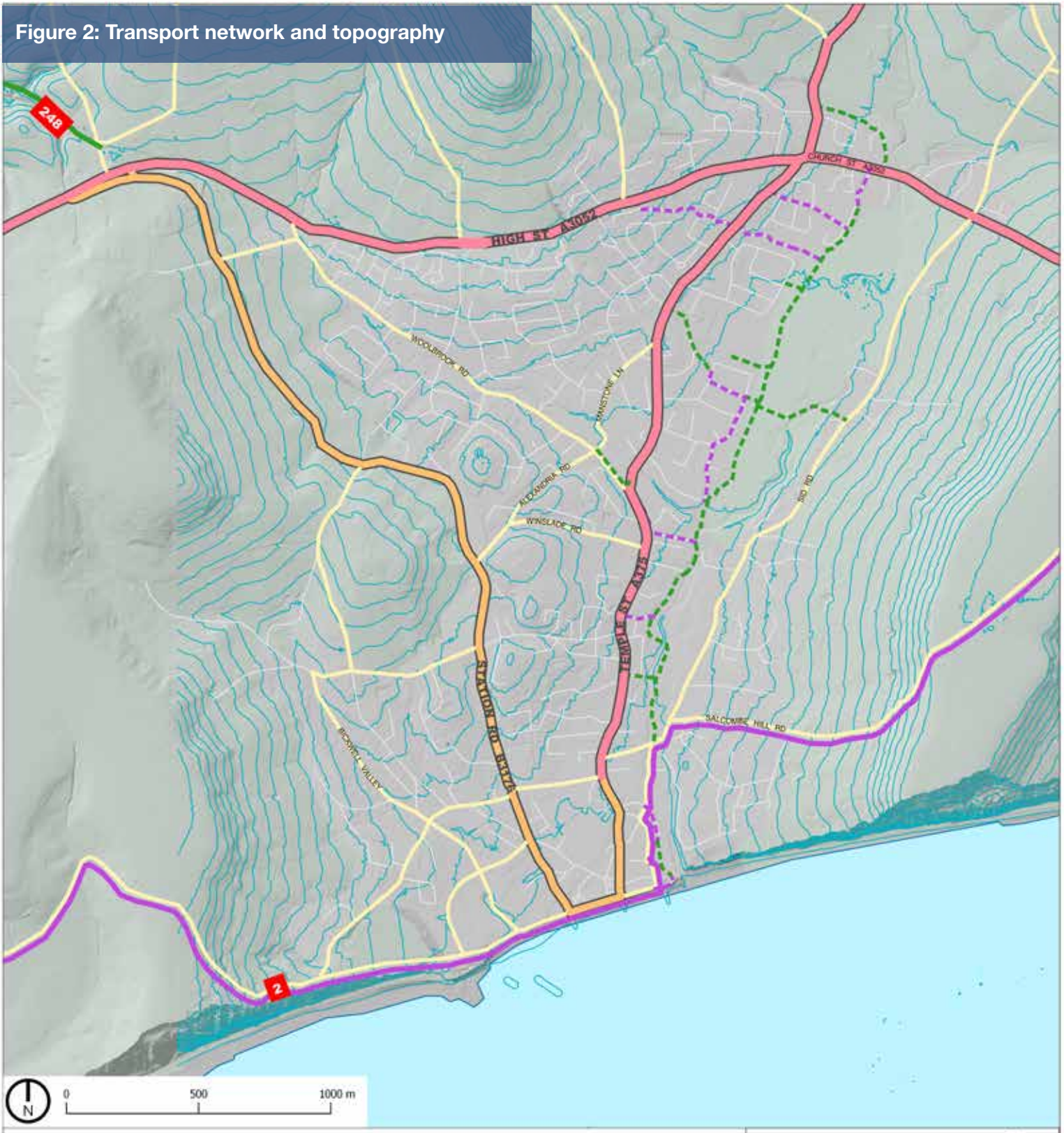


Figure 2: Transport network and topography



KEY

National Cycle Network

- Off-Raod
- On-Road

Local Cycle Network

- Off-Road
- On-Road

Road Network

- A Road
- B Road
- Minor Road

Contours 10 m intervals

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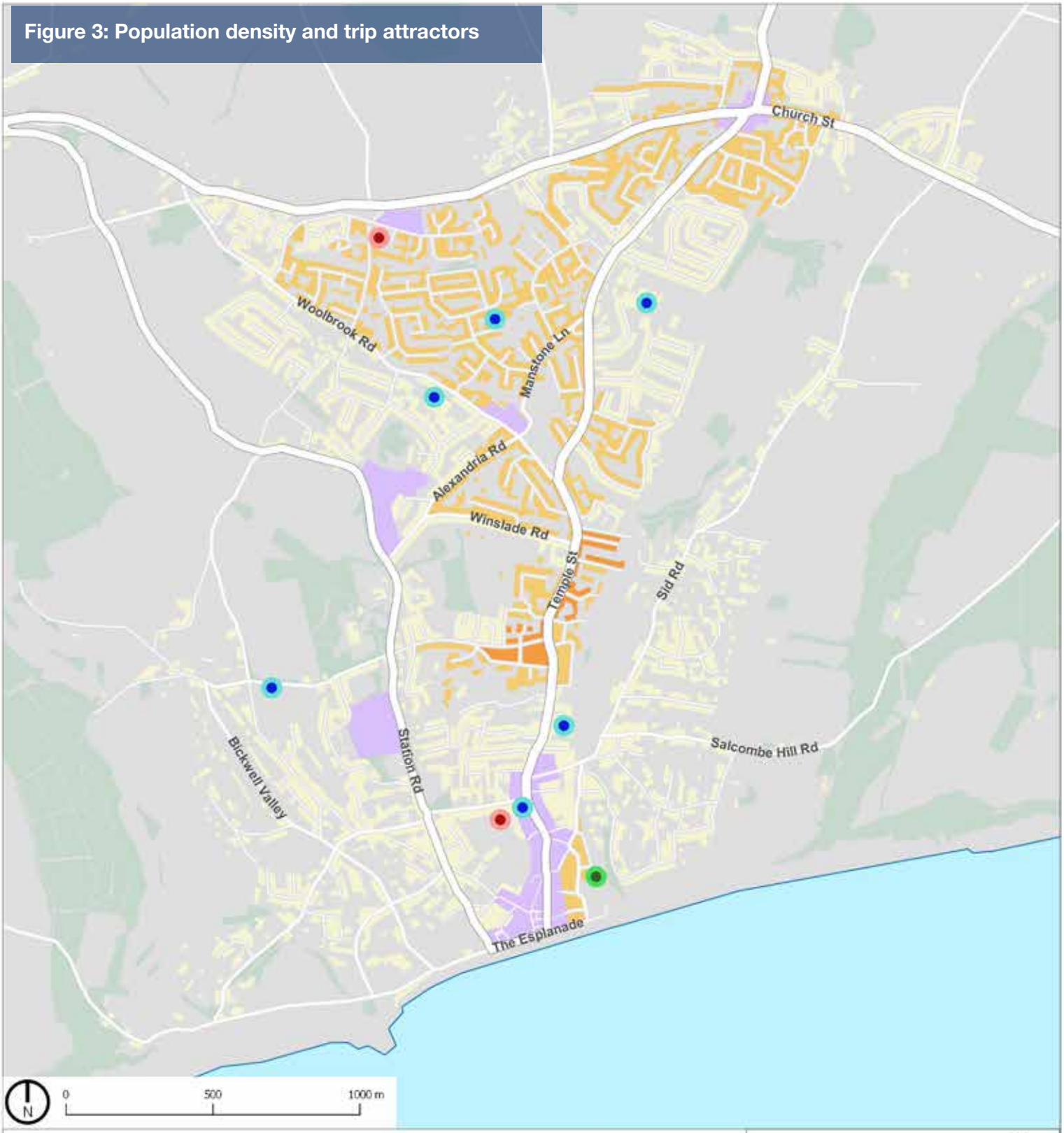
PROJECT
Recommendations for Improved Cycle Access

TITLE
Transport Network Map

Drawn	Checked	Date	Scale at A4
DL	XX	27/2/2017	1:20,000

STATUS: DRAFT
REVISION: X

Figure 3: Population density and trip attractors



KEY

Significant Local Destinations

- Education
- Health
- Leisure
- Retail/Employment Area

Population Density
(Persons Per Hectare)

- 0 - 30
- 30 - 60
- 60 - 90

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PROJECT
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TITLE
Trip Generators
and
Local Attractors

Drawn	Checked	Date	Scale at A4
DL	XX	9/2/2017	1:18,000

STATUS: DRAFT
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Existing Conditions

The Local Cycle Network

There are very limited options for north south travel in Sidmouth with traffic mostly restricted to the A375 and B3176, both these roads see significant volumes of traffic combined with limited road space make the safe overtaking of cyclists difficult, this renders both these roads unappealing to cycle and not suitable for all levels of cyclist. The Byes although off set from the main desire line along the A375 provides the spine north/south cycle route through the town and facilitates safe access to a significant portion of Sidmouth. Conditions on the A3052 that skirts the north of the town are unappealing due to a high volume and heavy mix of traffic that includes a significant number of large vehicles. Although this road has stretches with 20mph restrictions the lack of space and the importance of this link as a through route makes riding this road difficult even for experienced cyclists.

Figure 4: Overview Map Showing Main Study Areas

Area Porosity Analysis

Sidmouth has the potential to be a good place to cycle with the Byes route forming part of a more comprehensive joined up network however as things current stand there are significant coverage issues, with safe cycle access currently heavily weighted in favour of the eastern side of the town. An Area porosity Analysis has been used here as a way of highlighting this imbalance.

> *Area porosity is a measure of how many places there are for cyclists to enter, pass through and leave an area comfortably. A location that is 'porous' is a space that cyclists can pass through with ease and comfort – usually a junction. If the porosity of an area is high, then overall it is very permeable for cyclists (but often less so for other vehicles).*
>
> *London Cycle Design Standards, Chapter 2, Section 2.3.5, Page 18*

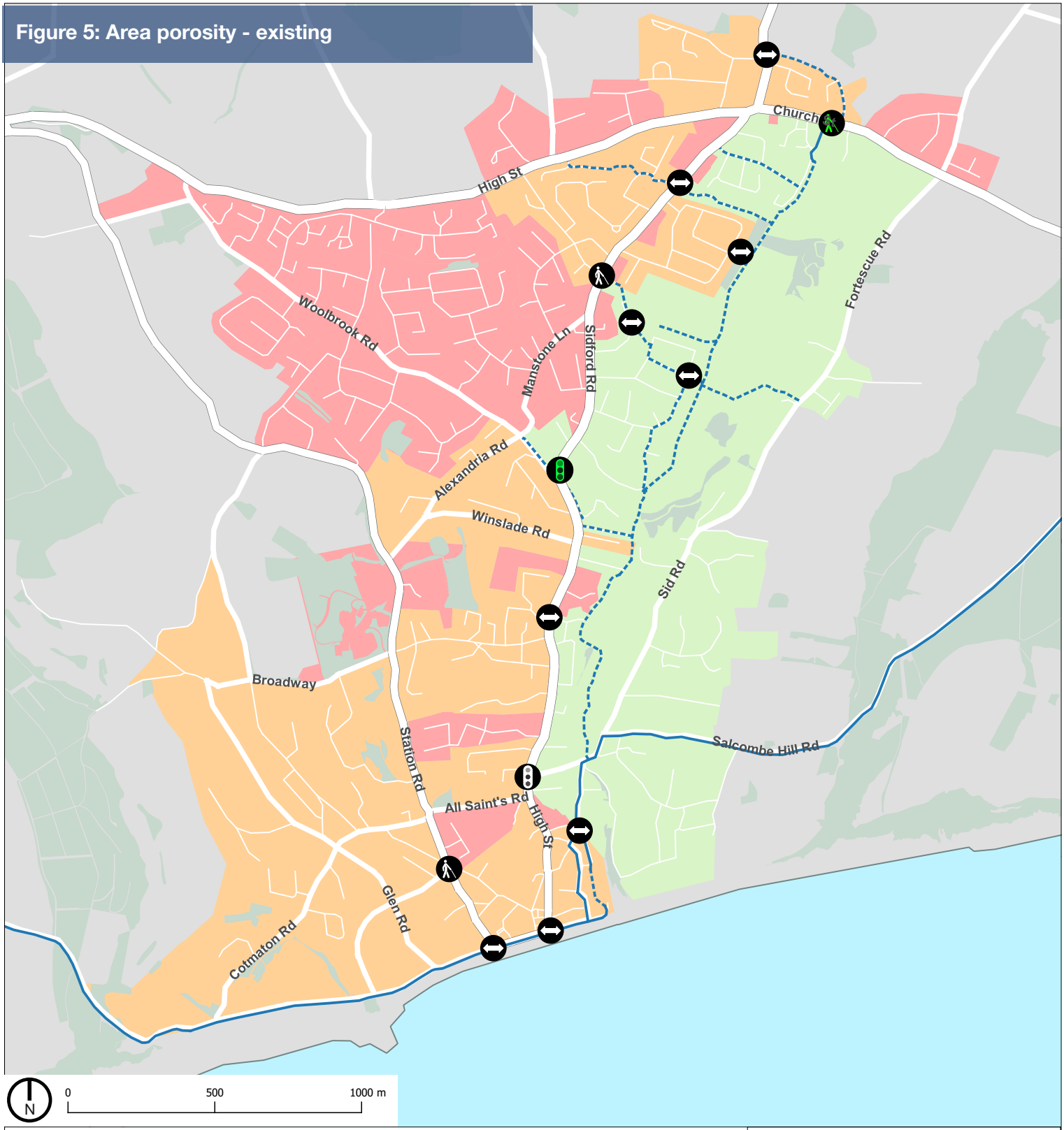
Method

Figure 5 shows groups of streets bound by 'busy roads' which include the A375, B3176 and A3052. Comfortable crossings are shown as gateways as these effectively open up areas to less confident cyclists. These gateways are listed in the key under connection type. Where areas are bound by 'red roads' and have no gateways, then they are coloured red. Where they have one gateway they are coloured amber and where they have two they are coloured green. In the case of Sidmouth a slight change has been made to the standard method described in the guidance. In this instance where residential streets are not directly connected by a gateway but are in a short walking distance of an access point to the Byes then these cells have been shown as orange.

Existing Pattern

As shown in Figure 5 the residential areas in the north west of the town branching off of Woolbrook Road have very poor connectivity in relation to cycling. This grouping of residential streets is effectively cut off from the rest of the town by busy roads, significantly limiting the ability of residents within this area to safely cycle, especially amongst less able cyclists. In light of this pattern of severance this report will specifically investigate options for improving cycle access into this area.

Figure 5: Area porosity - existing



KEY

Connection Type

- Link
- Signal
- Toucan
- Zebra
- Parallel

Degree of Permeability For Cycling

- Porous
- Semi-permeable
- Impermeable

Cycle Network

- Off-Road
- On-Road

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PROJECT
Recommendations for Improved Cycle Access

TITLE
Area Porosity Analysis
Existing Conditions

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Corridor assessments

1. The Byes

Summary

The Byes is a good quality existing route made up of sealed off-road track through park land and consists of either a cycle track separated from a parallel footpath, or a line segregated shared path. How this route, skirting down the eastern side of Sidmouth links into the rest of the town is key and improving access onto and off this route has been the main focus of this part of the study.

It should be noted that although the existing route is well established and sees high levels of ridership the general width of the track would be classed as substandard width when measured against national guidance, this also applies to various transition points along the route between the road and the off-road track. None of these issues are a major safety concern and as a result improvements especially potential widening should be seen as a low priority compared to some of the larger more pressing barriers to cycling in SIdmouth.

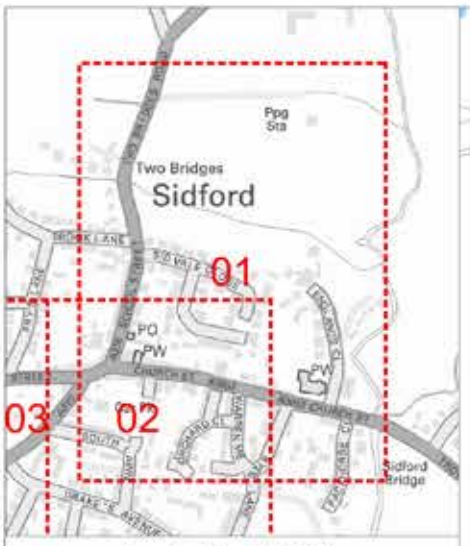
The Byes path is a natural and attractive access from adjacent housing for the town centre, leisure centre and Sidmouth College. It is being extended northwards via a new crossing on the A3052, and Laundry Lane opening access to a larger population.

On our visits the path was well used and we would expect many of the journeys made to be for utility purposes - shopping, commuting etc. - but also many for exercise and leisure. Increasing the usage of the path can potentially be achieved by enhancing access from nearby residences by removing barriers to access.

Table 1 shows a list of potential interventions aimed at improving access:

Table 1- **Proposed Interventions**

ID	Intervention
1.A1	New traffic free shared use path
1.C1	Maintenance
1.C3	Improve crossing facilities
1.C5	Create shared use and widen dropped kerbs to serve informal crossing
1.D	Install drop kerb
1.F3	Install section of barrier
1.F4	Improve access controls at junction with Yardelands
1.F5	Upgraded zebra to a Parallel crossing, widen footway either side & upgrade to shared use
1.G2	Re-locate bus stop further north to reduce cycle & pedestrian conflict
1.G3	Widen shared use access to Toucan, imporve access controls and add parking restrictions
1.H	Add parking restrictions and widen and make flush this drop kerb transition
1.I1	Address defects in transition
1.I2	Consider allowing contra flow cycling
1.K	Add parking restrictions, improve access controls and investigate urban realm improvements that assist cyclists and pedestrians crossing



Location Plan (1:10,000)

1.A1

TYPE
Opportunity, Stakeholder
DESCRIPTION
Proposed Sidford to Sidbury traffic free path.
COMMENT
The 2016 proposal by Devon CC is on hold pending the outcome of a proposal to develop the allocated employment land north of Sidbury. The main road is considered unsuitable for all but the most confident cyclists and has no provision for walkers.
INTERVENTION
New traffic free shared use path in fields to east of A375

1.A2

TYPE
Existing, Opportunity
DESCRIPTION
Englands Close and Laundry Lane Link Church Street to School Street
COMMENT
Quiet road leading to narrow lane between bank and fence. Laundry Lane opens up access to The Byes path from the Brook Lane estate.. Laundry Lane to be widened Feb/March 2017
INTERVENTION
N/A

1.A3

TYPE
Existing, Opportunity
DESCRIPTION
Crossing School Road
COMMENT
There does not appear to be any means to improve facilities on School Street to assist users at the crossing point
INTERVENTION
N/A

1.A4

TYPE
Existing
DESCRIPTION
Tiger crossing of A3052
COMMENT
N/A
INTERVENTION
N/A

SIDFORD

KEY

Assessment Location
Assessment Section
Existing Off-Road
Existing On-Road

0 50 100 m

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PROJECT Recommendations for Improved Cycle Access
TITLE Route Assessment The Byes Drawing 1

Drawn	Checked	Date	Scale at A4
DL	RC	28/2/2017	1:2,000

STATUS DRAFT
REVISION A

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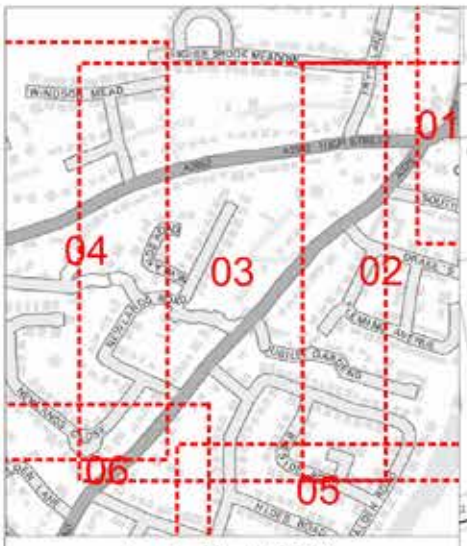
PROJECT	Recommendations for Improved Cycle Access	Drawn DL	Checked RC	Date 28/2/2017	Scale at A4 1:2,000
TITLE	Route Assessment The Byes Drawing 2	STATUS DRAFT		REVISION A	



Location Plan (1:10,000)

1.C3

TYPE
Existing, opportunity
DESCRIPTION
Sidford Road crossing
COMMENT
This crossing is aligned off the natural desire line for cyclists, with awkward tight turns incorporated.
INTERVENTION
The wide footway on the east side of Sidford Road is suitable for shared use, and flush kerbs on both sides of the road could create a more convenient crossing. Visibility for crossing appears acceptable but would need checking. The existing bollards alert users to the junction at the foot of the slope down from Newlands Road.

1.C2

TYPE
Existing
DESCRIPTION
Jubliee Gardens is a quiet residential raod with traffic calming very suitable for cycling. Gentle gradient rises towards Sidford Road
COMMENT
N/A
INTERVENTION
N/A

1.C4

TYPE
Existing
DESCRIPTION
Quiet residential road
COMMENT
The network of local streets feed in to Newlands Road opening access to The Byes cycle path.
INTERVENTION
N/A

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

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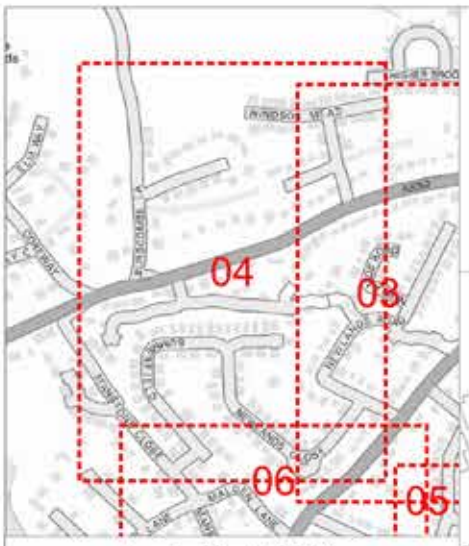
PROJECT	Recommendations for Improved Cycle Access	Drawn: DL	Checked: RC	Date: 28/2/2017	Scale at A4: 1:2,000
TITLE	Route Assessment The Byes Drawing 3	STATUS: DRAFT		REVISION: A	



Location Plan (1:10,000)

1.C5

TYPE
Existing, opportunity
DESCRIPTION
Crossing of A3052
COMMENT
The footway on the south side of the A3052 would lend itself to shared use, in which case an informal crossing point to Burscombe Lane could be made by adapting the existing dropped kerbs. This would benefit the small number of residences accessed from Burscombe Lane.
INTERVENTION
Additional length of dropped kerb in line with crossing point on Burscombe Lane.

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

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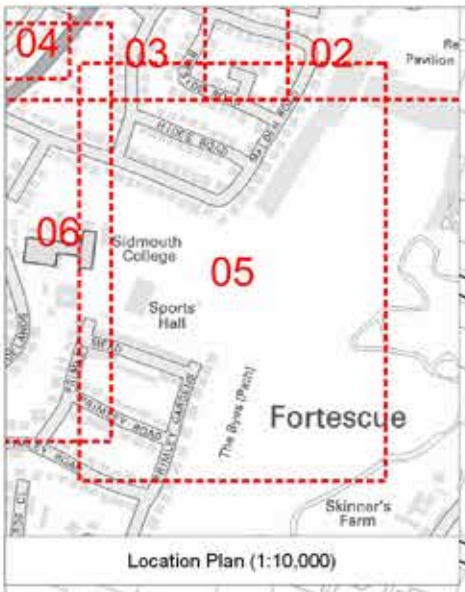
PROJECT	Recommendations for Improved Cycle Access
TITLE	Route Assessment The Byes Drawing 4

Drawn	Checked	Date	Scale at A4
DL	RC	28/2/2017	1:2,000

STATUS	REVISION
DRAFT	A



1.D

TYPE
Existing
DESCRIPTION
Link path from the Byes with access to Malden Road, width 1.9 metres between the fenced section.
COMMENT
This path is the only point of access from the Maldon Road estate to The Byse path. There is a narrow fenced section just 1.9 m wide, which is narrower than recommended for shared use, but would be acceptable over this short ditance of 25 metres, with cyclists to give way to pedestrians.
INTERVENTION
Add drop kerb at Malden Road.

1.E

TYPE
Existing
DESCRIPTION
Access to Sidmouth College
COMMENT
Open for college access only
INTERVENTION
N/A

1.F2

TYPE
Existing
DESCRIPTION
Connection to The Byes, existing blind bend, visivity issue at parh intersection
COMMENT
This access is only suitable for pedestrian use.
INTERVENTION
N/A

1.F1

TYPE
Existing
DESCRIPTION
Primley Road
COMMENT
Quiet residential roads. Heavily trafficked by school pupils on foot and cycle at peak times.
INTERVENTION
N/A

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

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PROJECT Recommendations for Improved Cycle Access

TITLE Route Assessment The Byes Drawing 5

Drawn	Checked	Date	Scale at A4
DL	RC	28/2/2017	1:2,000

STATUS DRAFT

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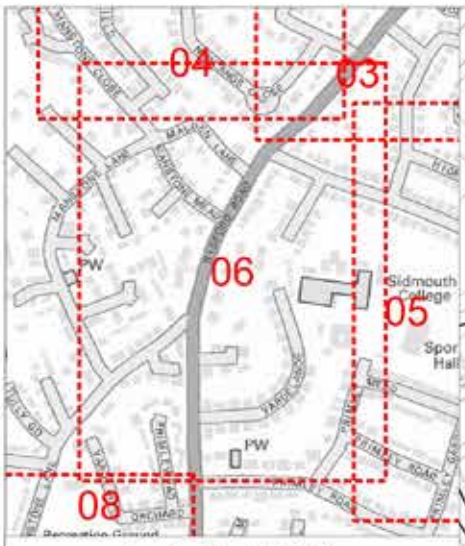

Location Plan (1:10,000)

1.F5

TYPE
Existing
DESCRIPTION
Zebra crossing
COMMENT
Pedestrian access to the College.
INTERVENTION
If the zebra could be upgraded for shared use, and the short lengths of footway either side widened, this could form a link to Manstone Mead, linking the population in this area to The Byes.

1.F4

TYPE
Existing
DESCRIPTION
Existing link from byes to zebra crossing of main road, alley 2.4m wide and lit, tree lined track 1.7m unlit, also access to Yardelands and college
COMMENT
Has potential for cycle use with minimal intervention if restricted width for shared use were acceptable.
INTERVENTION
Improve access controls at junction with Yardelands.

1.F3

TYPE
Constraint
DESCRIPTION
At east side of link track narrows between residential buildings dropping to 1.6m wide, there's no drop kerb onto Primley Rd and visibility is restricted
COMMENT
N/A
INTERVENTION
Visibility for users at the blind bend could be improved by installing a short section of barrier on the north side to force users into position to extend forward visibility.

KEY

Assessment Location
Assessment Section
Existing Off-Road
Existing On-Road

N
0 50 100 m

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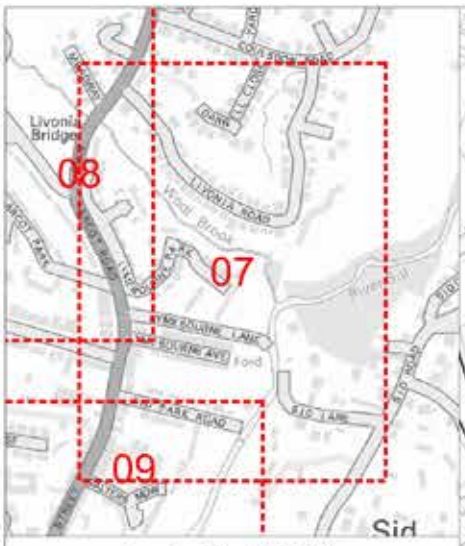
PROJECT Recommendations for Improved Cycle Access
TITLE Route Assessment The Byes Drawing 6

Drawn	Checked	Date	Scale at A4
DL	RC	28/2/2017	1:2,000

STATUS DRAFT
REVISION A



Location Plan (1:10,000)

1.F1

TYPE
Existing
DESCRIPTION
Primley Road
COMMENT
Quiet residential roads. Heavily trafficked by school pupils on foot and cycle at peak times.
INTERVENTION
N/A

1.G1

TYPE
Existing
DESCRIPTION
Traffic free access linking towards Woolbrook area.
COMMENT
N/A
INTERVENTION
N/A

1.H

TYPE
Existing, Opportunity
DESCRIPTION
Sid Park Road is a residential access only street that links to the Byes
COMMENT
Existing provision is good but some of the details could be improved
INTERVENTION
Add yellow lines to keep entry point clear, widen and make flush drop kerb transition moving south

0 50 100 m

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

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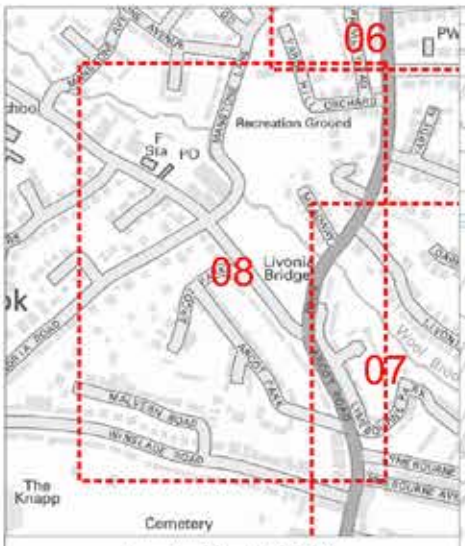
PROJECT	Recommendations for Improved Cycle Access	Drawn DL	Checked RC	Date 28/2/2017	Scale at A4 1:2,000
TITLE	Route Assessment The Byes Drawing 7	STATUS DRAFT		REVISION A	



Location Plan (1:10,000)

1.G4

TYPE
Existing
DESCRIPTION
Existing shared use path running north/south. Woolbrook has 20mph restrictions moving north from this point
COMMENT
N/A
INTERVENTION
N/A

1.G3

TYPE
Existing
DESCRIPTION
Toucan crossing
COMMENT
Toucan approach and park entrance 1.5m, parking partially blocks south side transition into Lymebourne Park, there's no drop kerb access for cyclist travelling north on Arcot Road making it difficult to access the park
INTERVENTION
Widen access and add parking restrictions

1.G2

TYPE

DESCRIPTION
Conneciton between quiet residential road and the Byes via Lymeborne.
COMMENT
The bus stop on Arcot Road at the junction with Lymebourne Lane is an obstacle and the shared use section has a substandard width.
INTERVENTION
Consider re-locating bus stop further north, or re-routing path behind bus stop, though this could entail significant impact on nearby trees as excavation would be inevitable due to the level differences needed to reach Lymbourne Lane.

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

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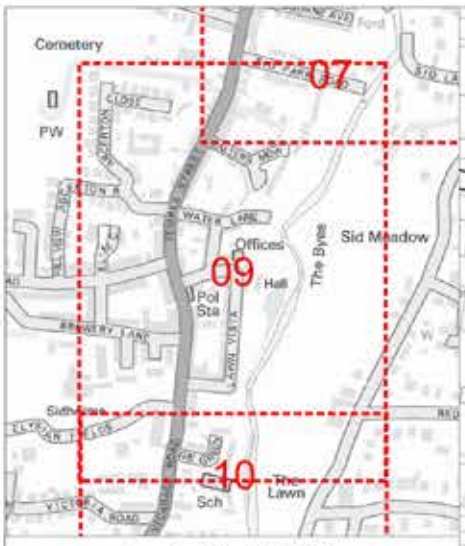
PROJECT	Recommendations for Improved Cycle Access
TITLE	Route Assessment The Byes Drawing 8

Drawn	Checked	Date	Scale at A4
DL	RC	28/2/2017	1:2,000

STATUS	REVISION
DRAFT	A



1.I2

TYPE
Constraint,Existing
DESCRIPTION
Water Lane is local access only and links to a direct Crossing of the A375, it's one way and is signed for cycling and walking, it's lit and has no parking restrictions
COMMENT
Crossing westbound view is restricted looking North
INTERVENTION
Consider allowing contra flow cycling

1.I1

TYPE
Existing,Opportunity
DESCRIPTION
Substandard 1.5m track on this section of the Byes, access to Water Lane, substandard drop kerb transition, road is local access only
COMMENT
Address defects in transition
INTERVENTION
N/A

1.J

TYPE
Constraint,Existing
DESCRIPTION
Bridge access to Byes from Lawn Vista
COMMENT
The bridge is a pinch point with a width that narrows to 1.2 metres making this unsuitable as a cycle connection
INTERVENTION
N/A

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

0 50 100 m

sustrans JOIN THE MOVEMENT	PROJECT: Recommendations for Improved Cycle Access	Drawn: DL	Checked: RC	Date: 28/2/2017	Scale at A4: 1:2,000
	TITLE: Route Assessment The Byes Drawing 9	STATUS: DRAFT		REVISION: A	

1.K

TYPE
Constraint,Opportunity

DESCRIPTION
Offset Junction with some access controls on the north side

COMMENT
The key access point to the Byse can be blocked by parking, traffic levels and speeds are low and theirs good visibility

INTERVENTION
Extend parking restrictions, investigate improving this uncontrolled crossing with urban realm improvements

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

0 50 100 m

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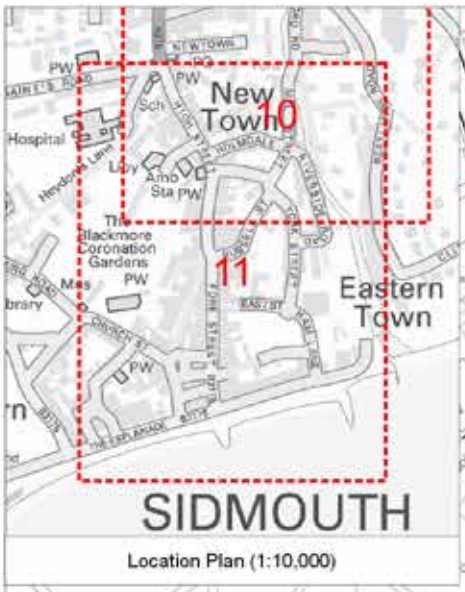
PROJECT: Recommendations for Improved Cycle Access

TITLE: Route Assessment The Byes Drawing 10

Drawn	Checked	Date	Scale at A4
DL	RC	28/2/2017	1:2,000

STATUS: DRAFT

REVISION: A



Location Plan (1:10,000)

1.L

TYPE
Existing
DESCRIPTION
Shared use alleyway
COMMENT
N/A
INTERVENTION
N/A

ONE WAY

ONE WAY

EASTERN TOWN

The Blackmore Coronation Gardens

Coburg Pleasure Ground

Recreation Ground

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

0 50 100 m

sustrans JOIN THE MOVEMENT	PROJECT: Recommendations for Improved Cycle Access	Drawn: DL	Checked: RC	Date: 28/2/2017	Scale at A4: 1:2,000
	TITLE: Route Assessment The Byes Drawing 11	STATUS: DRAFT		REVISION: A	

2. Woolbrook Road

Summary

Woolbrook Road at a glance appears to have good potential for cycling with it's 20mph speed restrictions covering a 500m stretch of this 1500m road. Double yellow line restrictions at the shops turn to single yellow restrictions (Mon-Fri AM/PM) for the same 500m stretch as far as Manstone Lane. There are fifteen side roads but only three provide through route access, Stowford Rise, Alexandria Road and Manstone Lane, the rest are local access only, therefore limiting the risk to cyclists of turning traffic. There is also a high quality shared use path skirting the west side of Long Park linking to the Toucan crossing of the A375. Unfortunately the road has a number factors that mean it would score badly if assessed using the Welsh Cycling Route Audit Tool set out in Welsh Active Travel Design Guidance or measured against national Bikeability standards, these factors are discussed below:

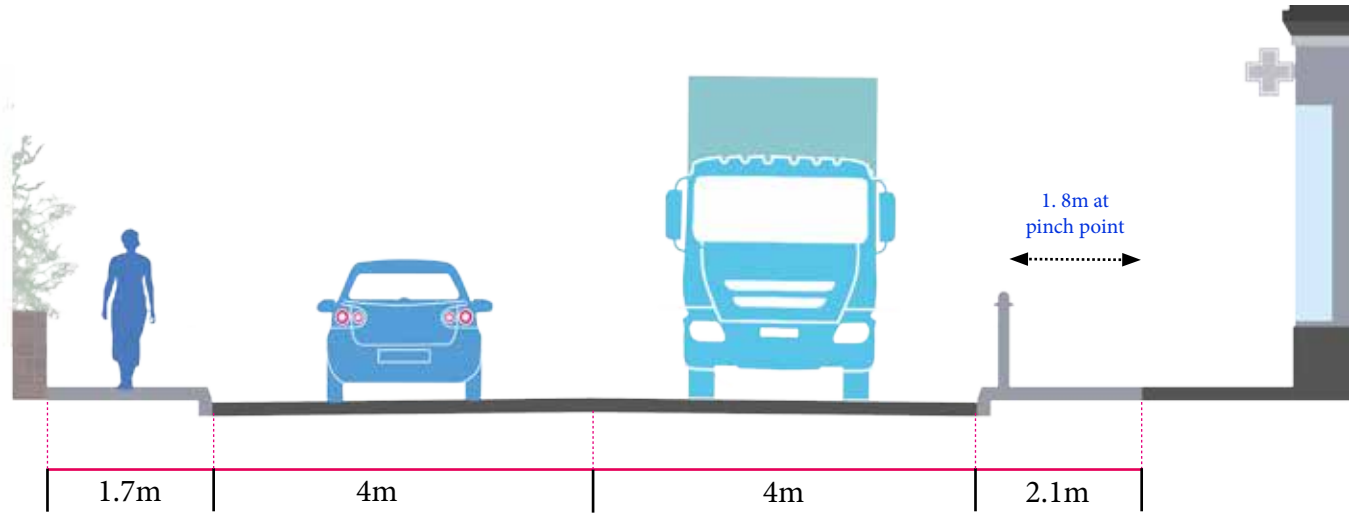
Road Widths

Woolbrook Road is relatively wide at the east end next to Long Park but as shown by cross sections 3 and 4 this drops significantly from Woolbrook Close onwards. Such conditions make it difficult for cars to safely pass cyclists and a substantial proportion of the road has widths that fluctuate between 3.2 and 4m creating unsafe conditions for cyclists as shown by the London Cycle Design Standards:

> *"The rule-of-thumb is to avoid situations where motorised vehicles and cyclists are expected to move together through a width between 3.2 metres and 4 metres. Where lane widths are between these two dimensions, there is uncertainty about space for overtaking and a high risk that other vehicles will seek to pass cyclists too closely thereby putting the more vulnerable road user at risk".*
>
> *London Cycle Design Standards, Chapter 4, Section 4.4.2 Traffic lane widths, Page 55*

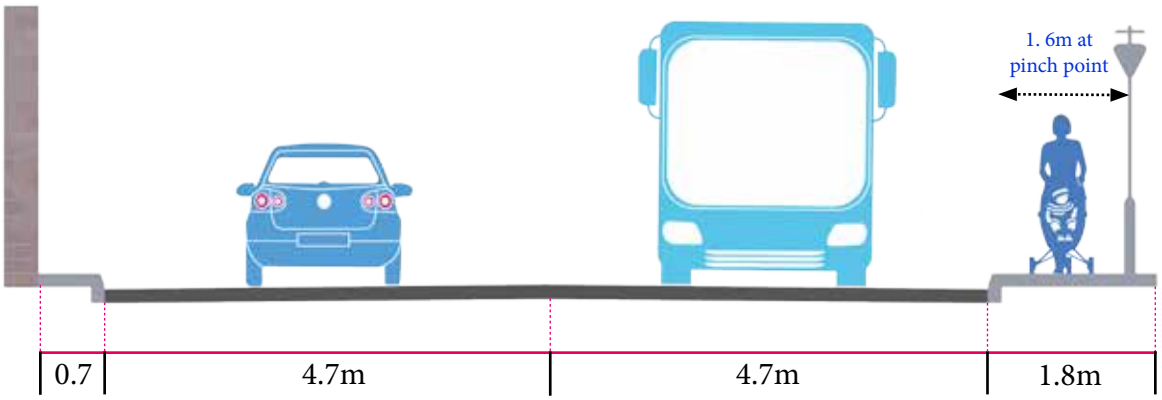
Cross Section 1 - *See Assessment ID 2.A2*

East End of Woolbrook Road at the Junction with Alexandria Road View West



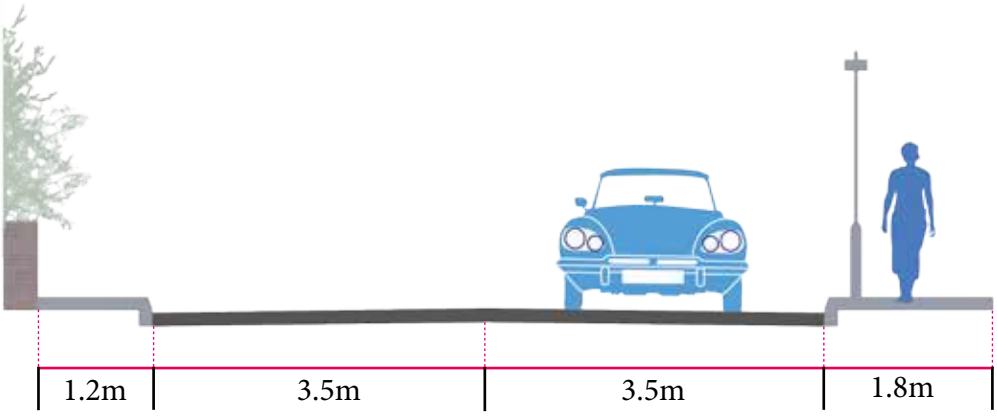
Cross Section 2 - *See Assessment ID 2.A2*

West of the Junction of Woolbrook Road and Woolbrook Close View West



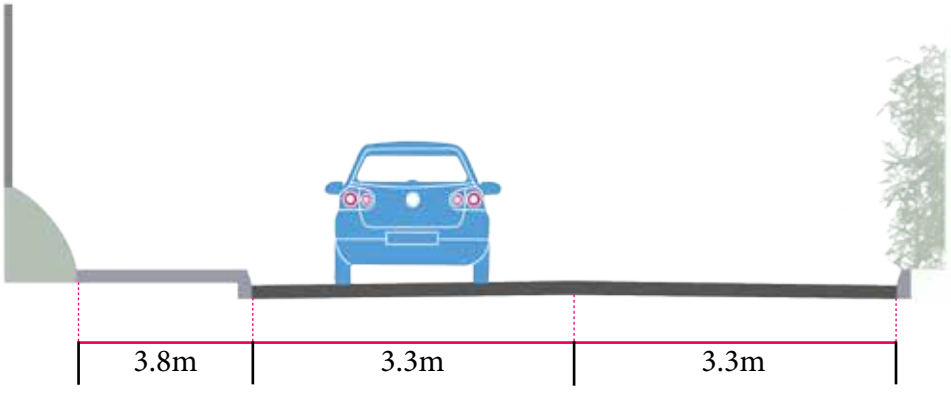
Cross Section 3 - *See Assessment ID 2.C1*

Woolbrook Road outside Sidmouth Primary School View West



Cross Section 4 - *See Assessment ID 2.D3*

Woolbrook Road west of the Junction with Barn Hayes View West



Traffic Volume

As shown in Table 2 traffic flows on Woolbrook Road are relatively high for a road of this character and despite the speed restrictions average daily volumes of 6322/5840 are high, combine this with the restricted widths and conditions become more significantly worse for cyclists sharing the carriageway.

Table 2- **Woolbrook Road Traffic Count** (Nov 10)

Time	Workday	7 Day
07:00- 1900	5574	5153
06:00-22:00	6168	5681
06:00-24:00	6276	5784
00:00-24:00	6322	5840

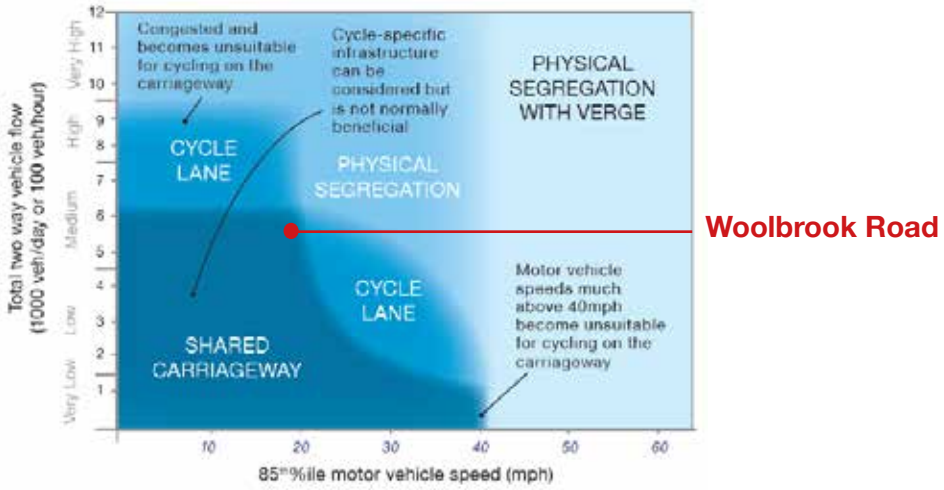
It's worth noting that the traffic counts where done in November, low season and therefore road conditions are likely to be higher during the summer tourist season.

Mini-Roundabouts

The two mini-roundabouts at the east end of the route pose a significant barrier and the lack of provision through these two junctions cuts of access to the existing off-road path through the park.

> *"Mini-roundabouts are not generally recommended for inclusion on cycle routes. The main problems they raise are failure of vehicles to observe give way due to the geometry and failure to reduce speed through the junction."*
>
> *London Cycle Design Standards, Chapter 5, Section 5.5.4, Page 51*

Figure 6: Sustrans Guidance on Provision Required as a Function of Speed/Volume



Options

On-Road Provision

As shown in Figure 6 existing vehicle flows are at the very limit of what Sustrans Design Guidance would consider for a shared carriageway, equally when referenced against DfT standards, the guidance advises that flows must be 2,500 or less to allow a combined traffic solution even in a situation where the whole road is restricted to 20mph.

Figure 7 - DfT Guidance on Minimum Provision for Cycle Routes

Speed Limit (mph)	Motor Traffic Flow (AADT-Average Annual Daily Traffic)	Minimum Provision for Cycle Routes
40 and over	All flows	Cycle Tracks (excluding stepped cycle tracks)
30	0-5,000	Cycle Lanes
	>5,000	Cycle Tracks
20	<2,500	Cycle Streets or Quiet Streets: combined traffic
	2,500-5,000	Cycle Lanes
	>5,000	Cycle Tracks

Woolbrook Road

Recent guidance (figure 7: DfT Interim Advice Note 195/16) shows that the volumes of traffic on Woolbrook mean segregation between cyclists and motor traffic would be the only acceptable provision. This was the first option considered here however as shown by cross sections 3 and 4 the lack of available width in the highway boundary along the majority of the road makes the provision of any form of segregation more or less impossible, at least not without long sections that are substandard and in some cases unsafe (figure 8).

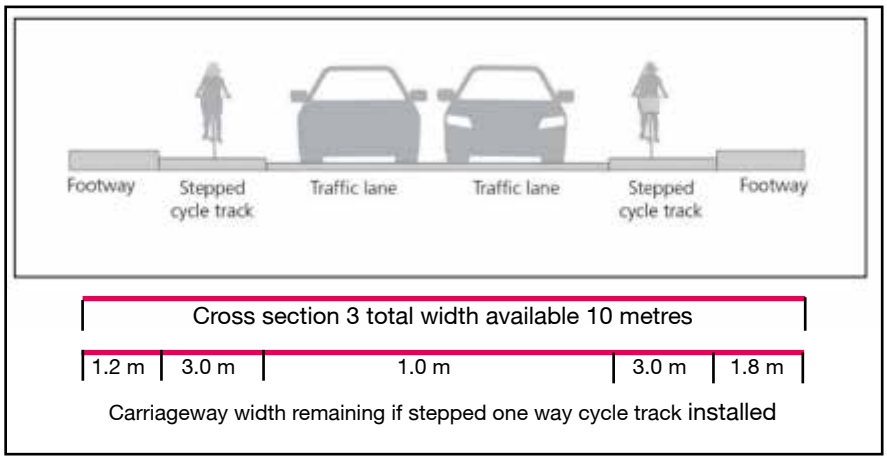
Figure 8 - DfT Guidance on minimum widths for cycle routes

Cycle Route Type	Peak hour cycle flow (either 1-way or 2-way depending on Cycle Route Type)	Desirable Minimum Width	Absolute Minimum Width (for sections up to 100m)
Cycle Lane	<150	2.0m	1.5m
Cycle lanes with light segregation	<150	2.5m	1.5m
1-way cycle track (including stepped cycle track)	<150	2.5m	1.5m
	150-750	3.0m	2.5m
	>750	4.0m	3.5m
2-way cycle track	<150	3.0m	2.5m
	>150	4.0m	3.5m

Woolbrook Road

Figure 9 demonstrates the impossibility of installing compliant segregated infrastructure within the limits of the existing highway space. If the existing footways are retained, and cycle tracks 3.0 m wide installed in both directions, the highway space is fully occupied. Even if lower standard provision were provided, the remaining road width would not be adequate for existing uses.

Figure 9: DfT Guidance on Minimum Provision for Cycle Routes as applied to Cross section 3



Traffic Calming

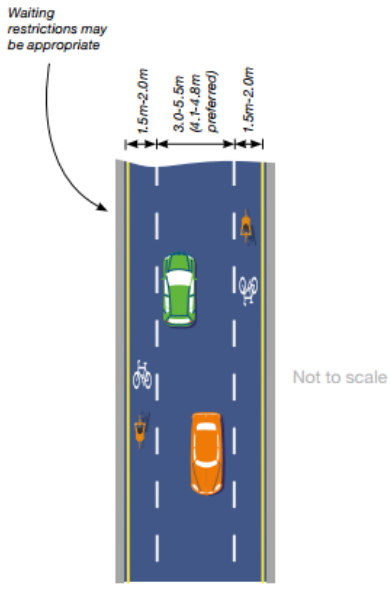
A suggested alternative approach to segregated provision for cycling is traffic calming measures to reduce speeds and discourage the use of Woolbrook Road as a through route, thus depressing the volume of traffic.

We observed on site that despite the existing 20mph limit, compliance was not uniform and there is anecdotal evidence that traffic commonly increases speed towards the northern end of Woolbrook Road approaching the junction with the A3052. Physical traffic calming is an option and this would probably improve adherence to the existing speed limit and lower vehicle numbers however we would not expect this would reduce the flow to less than 2,500 vpd to comply with the upper limit for on highway cycling.

Traffic calming measures would be recommended at intervals of around 70 metres. This implies that on Woolbrook Road, over a1320 metres, about 15 speed humps or other measures would be needed to be effective. Such physical measures would make the road very uncomfortable to use for all vehicles, and would especially impact on buses and emergency services, both of whom could be expected to raise strong objections.

A lower impact approach which is commonly used in Holland and Germany, but rarely in the UK, would be the removal of the centre line on Woolbrook Road, and the provision of advisory cycle lanes on both sides.

Advisory lanes with centre line removed (Cardiff Cycle Design Guide)



The removal of carriageway centrelines is an effective tool to reduce vehicle speeds. It can be used on urban roads with speed limits of 30mph or less and is generally used on routes with relatively low traffic flows or on mixed priority routes such as high streets. Recent trials in London have shown removing centre lines can be effective at reducing speeds in other situations, on routes which carry significant traffic flows, including buses and HGVs.

For low to medium traffic volumes (up to 10,000vpd as on Woolbrook Road), the technique is suitable on roads with widths of 6.0m wide or more. This will accommodate cycle lane widths of 1.5m - 2.0m in each direction and a single general traffic lane 3.0m - 5.5m wide. The preferred general traffic lane width is in the range 4.1m – 4.8m. This range

keeps speeds low, while enabling most vehicles to pass without significantly encroaching into the cycle lanes.

Area Wide Traffic Management

The traffic counts referred to seem to indicate that a significant amount of non-local traffic is using Woolbrook Road. It would be possible to conduct a survey to establish where car trips originate and end, but this is obviously not available to us now. We did observe that there are a lot of right turn movements from Woolbrook Road to Stowford Rise, possibly suggesting that Stowford Rise is being used to reach the A3052 heading east.

We propose that it would be possible to create conditions which are attractive for cycling on the carriageway by reducing the flow of traffic. To achieve this we would aim to limit use of Woolbrook Road primarily to local journeys, deterring its use as a through route.

This would clearly be a controversial measure, and would need the support of the community to succeed. Within the limits of this study we are not able to propose detailed or specific interventions to manage traffic, but we understand that a review of traffic management in the town is shortly to be undertaken by the County Council and we urge that this proposal is taken into account in that review.

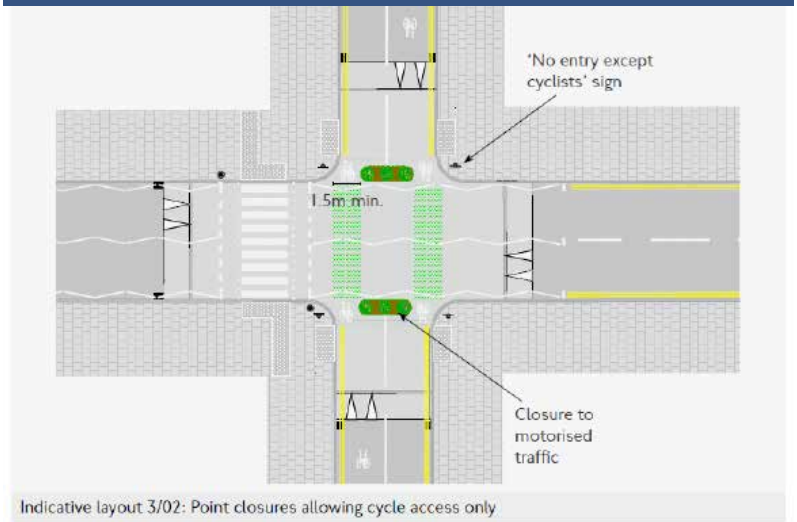
The streets for treatment, which we consider key to a traffic reduction scheme, are:

- Potential closures to the west end of Woolbrook Road into Stowford Rise, prohibiting all vehicles except buses and cycles;
- Alexandria Road / Winslade Road to reduce through traffic which is reputedly originating or bound for the industrial estates, by installation of barriers retaining only cycle access;
- Manstone Lane for the same reasons by installation of barriers retaining only cycle access.
- To deal with traffic transferring to other routes, Peaslands Road may also need to be considered for cycle only access.

Any of these measures would need careful and thorough engagement with the community to understand the willingness, as perhaps expressed in the Neighbourhood Plan consultation, for such changes.

We would also strongly urge that if the community were supportive, then trial measures to test outcomes and impacts on surrounding streets should be taken forward before any final implementation.

Example Closure Layout from the London Cycle Design Guide



Indicative layout 3/02: Point closures allowing cycle access only

Urban Realm Improvements

The lower part of Woolbrook Road, between the two mini-roundabouts, is a local centre with Lidl, a garage, pub and local shops. It is a difficult space for cycling, with a particularly awkward transition from the Long Park cycle path.

Creating a space that is less dominated by motor traffic could benefit all vulnerable users, and enhance the urban environment, as well as helping cyclists though this section of Woolbrook Road. Other communities in the UK have successfully introduced such schemes which typically include:

- Shared space with greater priority for vulnerable users often achieved by removal of road marking and changing road surfacing;
- 'Blurring' the differentiation of carriageway and footway to equalise priorities of users;
- Landscaping and planting to bring life and nature into the street environment;
- Reduced speed limits.

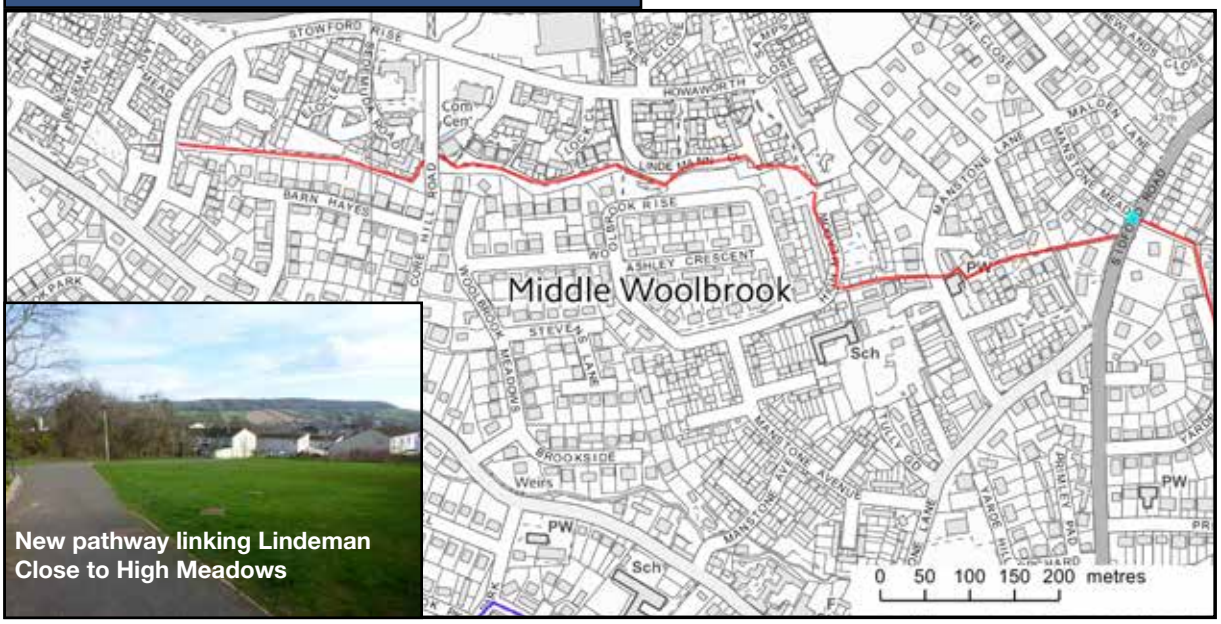
These and other measures could be considered in parallel with the traffic management that we have advocated.

Alternative routes to Woolbrook Road

Woolbrook Road is the easiest graded route for this area, and is the most accessible by the most people. There are however alternatives which we have not commented on in detail, but have inspected.

South of Woolbrook Road, Woolbrook Park offers quiet roads which link to Balfours and Woolbrook Road near the Balfours pub. Higher Woolbrook Park has only one access, to Woolbrook Road. This is of limited utility as a through route for cycles, being hilly and indirect; many users accessing their homes would need to gain more height than necessary on indirect routes. Higher Woolbrook Park is isolated.

Figure 10: Woolbrook pathways



North of Woolbrook Road, there is a series of linked footpaths, separate from the highway. Their width is narrow but, except for some pinch points, could be widened for shared use. The map figure 10 shows how the footways weave through the housing estates. This route includes some climbing, but it is more cycle friendly than the roads to the south of Woolbrook Road. However it is of limited utility as a through route for the local community, being poorly accessible from the south, downhill from the path, where most potential users would be deterred by having to climb to reach the path, when their destination is most likely down hill, via Manstone Avenue. These paths are however very useful for local journeys and to the supermarket on Stowford Rise, and they very effectively link the different estates around the north of the town.

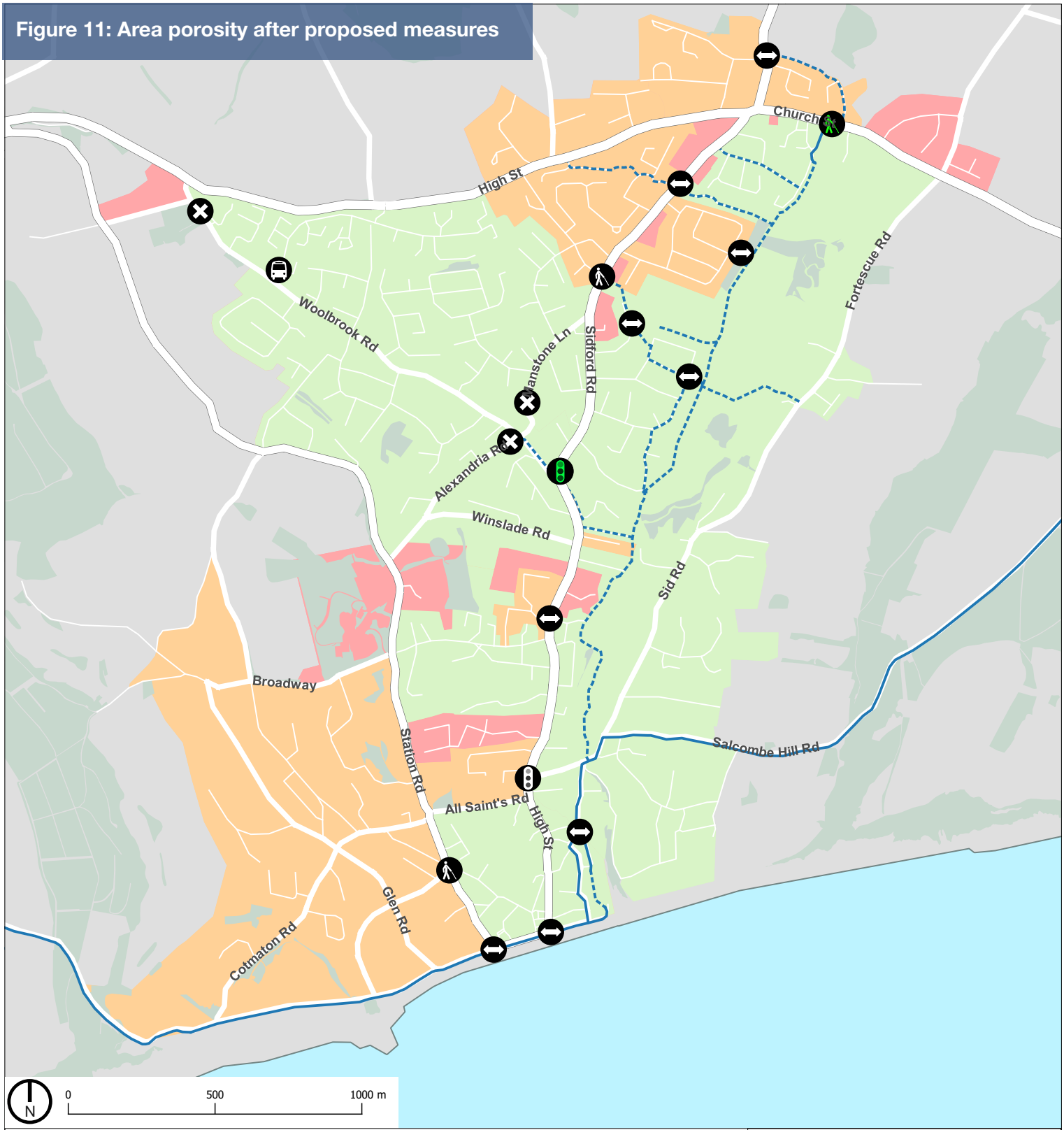
Extending these pathways through between High Meadows, Tyrell Mead and Sidford Road is not likely to be feasible due to severe width restrictions between properties, and two or three sets of steps. This is a useful pedestrian link.

Impact of proposals on access by cycle

The map (figure 11) shows a re-analysis of the porosity using the methods as described on page 11 on the assumption that measures as recommended for area wide traffic management have been successfully implemented.

This graphically demonstrates that it would be possible to significantly improve conditions for cycling, and walking, across the greater part majority of the urban area.

Figure 11: Area porosity after proposed measures



KEY

Connection Type

- Link
- Signal
- Toucan
- Zebra
- Parallel

Degree of Permeability For Cycling

- Porous
- Semi-permeable
- Impermeable

Cycle Network

- Off-Road
- On-Road

Potential Intervention

- Filter
- Bus Only

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PROJECT
Recommendations for Improved Cycle Access

TITLE
Area Porosity Analysis Including Possible Improvements

Drawn	Checked	Date	Scale at A4
DL	XX	9/2/2017	1:18,000

STATUS: DRAFT
REVISION: X

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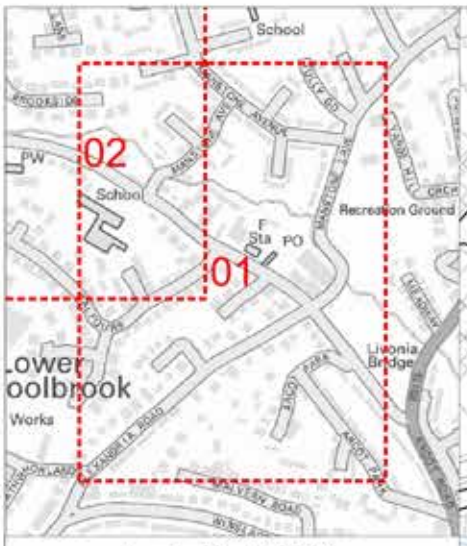

Location Plan (1:10,000)

2.B1

TYPE
Constraint
DESCRIPTION
Width = Footway south has ample space with a wide verge, Raod approx 7 m, Footway north 1.9m. There's parking on the north side (Limited 10am/6pm Mon to Sat) and 3 unrestricted parking spaces in front of pub and two entrances to the pub car park..
COMMENT
N/A
INTERVENTION
N/A

2.A4

TYPE
Constraint,Opportunity
DESCRIPTION
Width = Footway south 1.5m, Road approx 7 metres, widens to 8 at bus stop, Footway north 1.6m, Lidl access footway 2m on either side
COMMENT
Woolbrook Close is a dead end
INTERVENTION
Remove hatching

2.A3

TYPE
Barrier,Constraint,Existing
DESCRIPTION
Width = Footway south 2m, Road approx 8m, Footway north 3.1m, there's an existing zebra
COMMENT
Entry points for the Petrol Station and Lidl would reduce the quality of shared provision if installed on this side of the road
INTERVENTION
A possible option would be to extened the shared use along north side and upgrade the zebra to a parallel crossing

2.B2

TYPE
Constraint
DESCRIPTION
Width = Footway south 1.6m, Road approx 6.5m, Footway north 2.2m widening to 3.2m. Bus stop north side and single line parking restrictions on both sides with double yellows around side roads (no parking 10 to 6 p.m.)
COMMENT
Manstone Avenue and Balfours provides access to a moderate number of residential properties
INTERVENTION
N/A

2.A5

TYPE
Barrier,Constraint
DESCRIPTION
Width = Footway south pinches at 0.7m, Road approx 9.5m, Footway north side pinches at 1.6m with 1.8m overall. There's emergency service access on the north side
COMMENT
Limited footway space on either side in this location makes an off road option difficult to achieve,
INTERVENTION
Significant road width could be used here to bring users on and off the road linking into shared provision past the shops

2.A2

TYPE
Barrier,Constraint
DESCRIPTION
Width = Footway south 1.7m, Road approx 8m, Footway north 1.7m (at narrowest point)
COMMENT
Footway on north side widens out past pharmacy and petrol station
INTERVENTION
Investigate options for extending shared use past the mini roundabouts or explore potential urban realm improvements that give pedestrians priority across this section of road between the park and Lidl

2.A1

TYPE
Existing, Constraint
DESCRIPTION
Shared use provision ends at the mini roundabout junction with no transition from the shared use back onto the road
COMMENT
There's no onward connection moving west and the two consecutive mini roundabouts are a barrier
INTERVENTION
N/A

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

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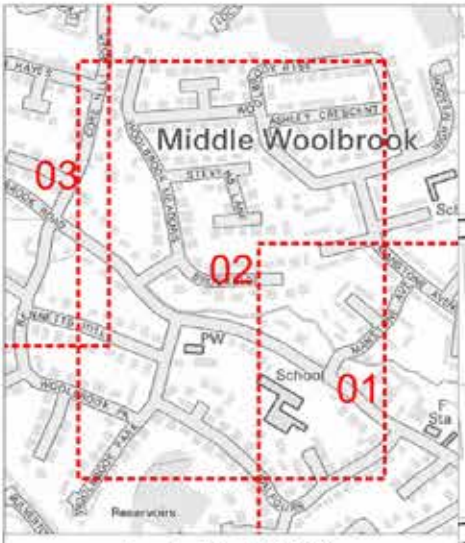
PROJECT	Recommendations for Improved Cycle Access	Drawn: DL	Checked: RC	Date: 28/2/2017	Scale at A4: 1:2,000
TITLE	Route Assessment Woolbrook Road Drawing 1	STATUS: DRAFT		REVISION: A	



Location Plan (1:10,000)

2.C2

TYPE
Constraint, Existing
DESCRIPTION
Width = Footway south 1.8m, Road approx 7m Road space, Footway north 1.2 metres. 20 mph ends here, 30mph zone moving west. Single line parking restrictions on both sides (Mon-Fri am/pm)
COMMENT
N/A
INTERVENTION
N/A

2.C1

TYPE
Constraint, Existing
DESCRIPTION
Width = Footway south 1.2m, Road approx 7m, Footway north 1.8m. Existing uncontrolled crossing servicing the school. Bus stop on Southside (10 to 6pm single line restrictions on both sides)
COMMENT
N/A
INTERVENTION
Upgrade crossing and add traffic calming for school

2.D1

TYPE
Constraint
DESCRIPTION
Width = Footway + verge south 4.10m, Road approx 7m, Footway north 2m, Parking restrictions end moving west
COMMENT
Woolbrook Meadows provides access to a moderate number of residential properties
INTERVENTION
N/A

2.B2

TYPE
Constraint
DESCRIPTION
Width = Footway south 1.6m, Road approx 6.5m, Footway north 2.2m widening to 3.2m. Bus stop north side and single line parking restrictions on both sides with double yellows around side roads (no parking 10 to 6 p.m.)
COMMENT
Manstone Avenue and Balfours provides access to a moderate number of residential properties
INTERVENTION
N/A

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

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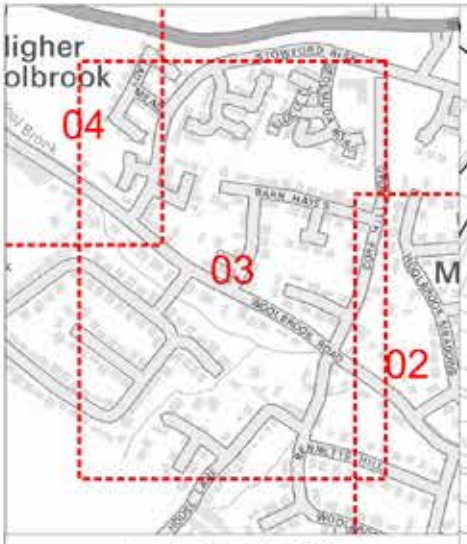
PROJECT	Recommendations for Improved Cycle Access
TITLE	Route Assessment Woolbrook Road Drawing 2

Drawn	Checked	Date	Scale at A4
DL	RC	1/3/2017	1:2,000

STATUS	REVISION
DRAFT	A



Location Plan (1:10,000)

2.E1

TYPE
Constraint
DESCRIPTION
Footway south 1.4m, Road approx 8m, The footway on the north side starts again at this point and extends west.
COMMENT
N/A
INTERVENTION
N/A

2.D3

TYPE
Constraint
DESCRIPTION
Width = Footway South 1.8m, Road approx 6.5m
COMMENT
Side roads on both sides are local access only
INTERVENTION
N/A

2.E2

TYPE
Constraint
DESCRIPTION
Stowford Rise is a through route providing access to Waitrose and the Heath centre and forms part of the bus route for all three buses the serve Sidmouth
COMMENT
This junction sees a significant number of turning vehicles
INTERVENTION
N/A

2.D2

TYPE
Constraint
DESCRIPTION
Width = Footway 1.1m south, Road approx 7m, Footway north 1.8m. Footway disappears on north side from the junction with Core Hill Road moving west. There are bus stops on either side
COMMENT
Core Hill is local access only but provides cycle access to Waitrose and the Health Centre.
INTERVENTION
N/A

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

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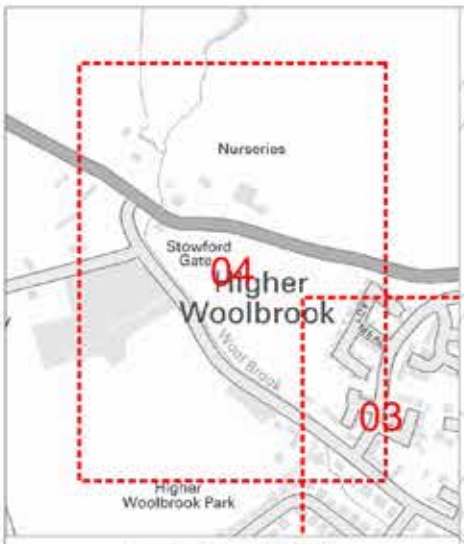
PROJECT Recommendations for Improved Cycle Access
TITLE Route Assessment Woolbrook Road Drawing 3

Drawn	Checked	Date	Scale at A4
DL	RC	1/3/2017	1:2,000

STATUS DRAFT
REVISION A



Location Plan (1:10,000)

HIGHER WOOLBROOK

2.E3

TYPE
Constraint, Existing
DESCRIPTION
Width = No footway on Southside moving west, Road approx 3.5m Road, Footway northside diverts into the new housing estate. Priority single file traffic calming at this location.
COMMENT
N/A
INTERVENTION
N/A

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

sustrans
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PROJECT	Recommendations for Improved Cycle Access
TITLE	Route Assessment Woolbrook Road Drawing 4

Drawn	Checked	Date	Scale at A4
DL	RC	1/3/2017	1:2,000

STATUS	REVISION
DRAFT	A

3. The Old Railway: the Otter Trail and Sidmouth Link

Summary

The Otter Trail is a longstanding proposal to develop a route for walking horse riding and cycling following the former railway and quiet lanes between Otterton and Feniton. Previous studies as referenced in the introduction have covered this project extensively. There is an active volunteer group, the Otter Trail Group, who have been very generous in their support of this study, and with whom we have closely liaised.

The southern section of the Otter Trail is also referenced in the section of this study relating to the National Cycle Network in East Devon AONB.

The steering group have emphasised to us that the link between Sidmouth and the Otter Trail is an important route for the town, which has potential as an attraction for visitors, a leisure resource for local people, a walking route to and from the putative 'park and change' proposed north of the town and a useful link for local journeys.

Other studies have considered a number of options for this link, which we have not duplicated. The consensus of the earlier reports appears to favour the use of the former railway if possible.

Options

We have covered two route options in this study, and three locations for a road crossing.

1. **Woolbrook Road** – a route assessment is included in this report. If good conditions for cycling can be achieved on Woolbrook Road, this could form the route from the Sidmouth promenade to The Bowd, via an at-grade crossing of the A3052.

2. **The old railway** – we have inspected the old railway where accessible and our findings are set out in the following pages.

Map data ©2017 Google

Sidmouth link to the Otter Trail

The alignment of the former railway between Feniton and Sidmouth can be readily traced on the ground, and much of the formation is intact. From Feniton it reached the northern outskirts of Sidmouth at The Bowd, and a section immediately north of The Bowd is open to public access with permission of the landowner. The remaining railway south towards Sidmouth is in private ownership and not generally accessible, but, except at the southern end, it has not been developed, and if land rights could be secured, there is the possibility that a walking and cycling route could be created on this alignment.

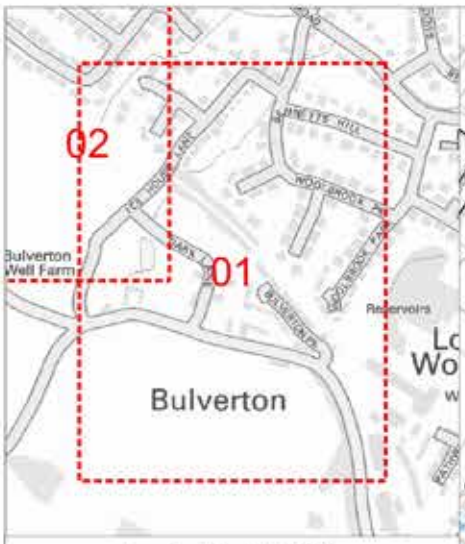
The railway terminated at Sidmouth station at the junction of the B3146 and Alexandria Road. The station buildings and yard are now an industrial estate. The old railway to the north of the estate has been developed for housing – Woolbrook Park and Bulverton Park.

We do not consider that accessing Bulverton Park from the old railway to the north would deliver a route which could link to the town centre due to the difficult topography and private ownership of the industrial estate which effectively blocks access to the old railway at the south end.

If at some time in the future the estate were re-developed, the possibility could be reconsidered.

Our route assessment therefore starts in Dark Lane, and looks at the route going northwards.

The critical issue is crossing the A3052, and our preferred option would be for a bridge as at about the point the railway crossed. This has the potential to be a landmark structure advertising Sidmouth's pride in its environment and encouragement of sustainable transport, and advertising the route and the Otter Trail.



Location Plan (1:10,000)

3.A1

TYPE
Opportunity, Stakeholder Constraint
DESCRIPTION
Former railway line and adjacent public footpath across open field. Private land
COMMENT
Possible access point from Dark Lane, a very quiet narrow road.
INTERVENTION
Partial closure of the Dark Lane to vehicles could be considered, retaining access to the five properties from Station Road. A new path across the field to the former railway would require considerable groundworks, and on the railway line there is evidence of badger activity. Although the access is less direct than from Ice House Lane, the gradient at the entrance is easier.

3.A2

TYPE
DESCRIPTION
Public footpath between fences 1.2 m wide.
COMMENT
Suitable for pedestrian access only
INTERVENTION
N/A

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

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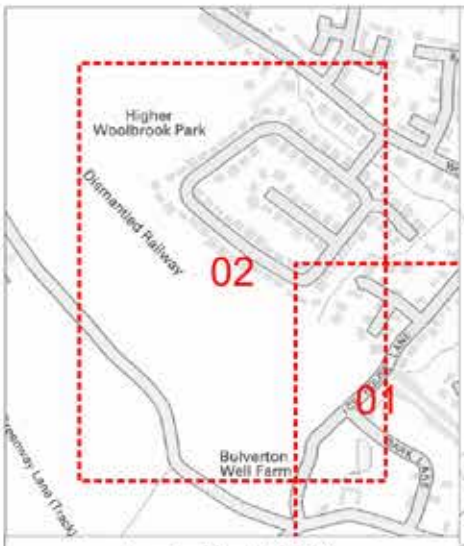
PROJECT Recommendations for Improved Cycle Access
TITLE Route Assessment Old Railway Drawing 1

Drawn	Checked	Date	Scale at A4
DL	RC	28/2/2017	1:2,000

STATUS DRAFT
REVISION A



Location Plan (1:10,000)

Higher Woolbrook Park

3.A4

TYPE

DESCRIPTION
Public footpath between fences 1.2 m wide.
COMMENT
Suitable for pedestrian access only
INTERVENTION
N/A

3.B

TYPE
Opportunity, Stakeholder Constraint
DESCRIPTION
Former railway formation at ground level leading into cutting northwards. Private land.
COMMENT
There are known flooding issues which need to be taken into account on any groundworks. The railway is very overgrown and mostly inaccessible. There have been excavations for drainage in the past.
INTERVENTION
The former railway could provide a very gently sloping route northwards. Screening planting may be desirable to protect the privacy of the neighbouring homes, and design of the path should aim to create a linear park using the width of the formation and the interesting level changes across it.

3.A3

TYPE
Opportunity, Stakeholder
DESCRIPTION
Public footpath across field
COMMENT
The public footpath could form the link from Ice House Lane to the former railway, however, it may be preferable for the path to follow more closely the field boundary to minimise impact on the farm.
INTERVENTION
New surfaced path; live stock protection may be required.

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

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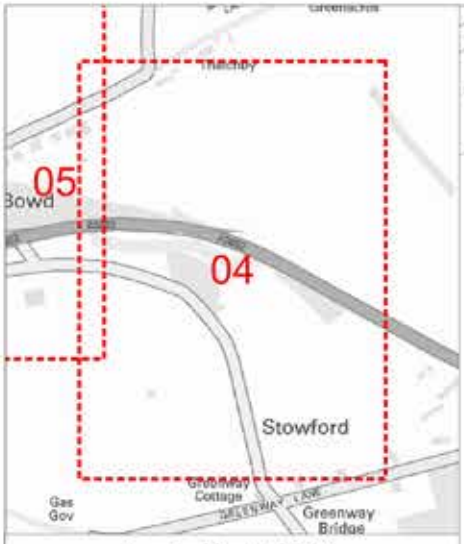
PROJECT	Recommendations for Improved Cycle Access			
TITLE	Route Assessment Old Railway Drawing 2			
		Drawn: DL	Checked: RC	Date: 28/2/2017
		STATUS: DRAFT		REVISION: A

Scale at A4: 1:2,000



3.F2

TYPE
Opportunity, Stakeholder, Constraint
DESCRIPTION
Private land. Field edge on north side of A3052, climbing towards the west.
COMMENT
Option for crossing the A3052. The fields are set above the road level and the line of the path would have to be set to avoid unacceptable steepness.
INTERVENTION
N/A

3.F1

TYPE
Opportunity, Stakeholder
DESCRIPTION
Possible location for new bridge over A3052.
COMMENT
The remnant railway bridge abutment can be seen on the south side of the old road, now a lay by. The railway crossed in a north-westerly alignment but the abutment and embankment on the north side of the main road has been removed, though traces of the old line can be seen a little further west.
INTERVENTION
The road at this point is in a cutting, so a bridge spanning here would require little in the way of ramped approaches and could be supported with a central pier, or by extending the abutment on the south side.The landing on the north side is in the field north of the road about 5 m above road level.

KEY

- Assessment Location
- Assessment Section
- Existing Off-Road
- Existing On-Road

N

0 50 100 m

sustrans
JOIN THE MOVEMENT

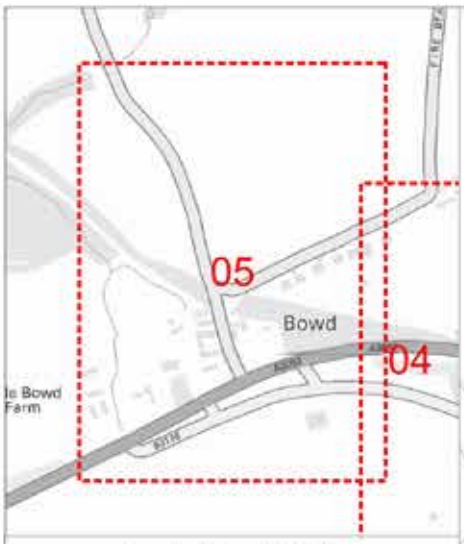
PROJECT Recommendations for Improved Cycle Access

TITLE Route Assessment Old Railway Drawing 3

Drawn	Checked	Date	Scale at A4
DL	RC	28/2/2017	1:2,000

STATUS DRAFT

REVISION A



3.J

TYPE
Opportunity, Stakeholder, Constraint
DESCRIPTION
Infilled railway overbridge.
COMMENT
The road crosses the railway cutting on a stone bridge, which has been filled with unknown material, possibly from the works to re-align the road after railway closure.
INTERVENTION
The ramp up from the path which is open northwards is steep, and could be re-aligned to improve the gradient. This would require crossing the road at grade. The traffic volume and speed at this location appear to be acceptable for a crossing without any additional measures. An alternative would be to excavate the material from the bridge and create a grade separated crossing, ramping up into the rear of the Bowd Inn. This could involve significant land from the Inn, and open up risks for the bridge structure.

3.F5

TYPE
Opportunity, Stakeholder, Constraint
DESCRIPTION
Option for path and bridge over A3052 at The Bowd. Private Land Not surveyed
COMMENT
Link between railway path and the Bowd would require cooperation of private land owners.
INTERVENTION
A new bridge over the A3052 would need to have substantial approach ramps on both sides. The link along the south side could impact one dwelling and a caravan site.

KEY

Assessment Location
Assessment Section
Existing Off-Road
Existing On-Road

N
0 50 100 m

sustrans
JOIN THE MOVEMENT

PROJECT Recommendations for Improved Cycle Access
TITLE Route Assessment Old Railway Drawing 4

Drawn	Checked	Date	Scale at A4
DL	RC	28/2/2017	1:2,000

STATUS DRAFT
REVISION A

4. The Town Centre

The town centre is the principal retail and leisure destination in Sidmouth and immediately adjoins the sea front and promenade.

The remit of this study does not allow a detailed study of the town centre, and indeed this is being considered by the NP Steering Group with a panel of consultants. We therefore offer only some general comments from the perspective of cycle access to the town centre.

Sidmouth's retail offer is varied and extensive aimed at meeting locals' everyday needs and visitors' expectations. It is within easy cycling distance of the whole town and probably the most important destination for everyday trips. It is therefore important that the town centre caters well for cyclists if cycling is to be grown as a proportion of trips to the town centre.

The streets in the town centre are mainly pedestrianized (except Fore Street), but allow vehicles of permit holders and commercial deliveries. Cycling is not permitted. The streets have been re-surfaced with brick paviours, and the ambience is pleasant and attractive.

All town centre streets are one-way only, with the flow generally being north to south, egress being to the sea front or Church Street. It is not therefore possible to enter the town centre legally on a cycle from the promenade or the west.

There is good provision of cycle parking but it is concentrated at only one location, near the market.

We recommend that in any review of the town centre for the Neighbourhood Plan, consideration is given to:

- Extending the pedestrianisation scheme to Fore Street and incorporate the Promenade through improving the public realm to reduce the impact of motor traffic.
- Allowing cycling in the pedestrian areas in both directions (cycle contra-flow)
- Installing additional cycle parking stands across the town centre, if necessary replacing on-street car parking to do so.
- Allowing cycling on the Promenade off-highway.
- Ensuring where space permits two way cycle access in the streets to the east of the centre to link to The Byes path.

Fore Street

High Street - cycle parking

Church Street

The promenade

The National Cycle Network in East Devon AONB

National Cycle Network (NCN) Route 2 runs along the south Devon coast between Dawlish and Seaton, where it turns inland to Axminster. NCN2 includes the phenomenally popular and spectacular Exe Estuary Trail, the traffic free railway path between Exmouth and Budleigh Salterton, and challenging hilly lanes between Otterton and Seaton, via Sidmouth. (Figure 12)

There are active developments of the NCN between Seaton and Axminster where the route will run through the Seaton Marshes Nature Reserve, and where a new path has recently opened.

Some sections of the NCN 2 are well used commuter routes, for instance the Exe Estuary, but principally this is a route for recreation exercise and leisure users.

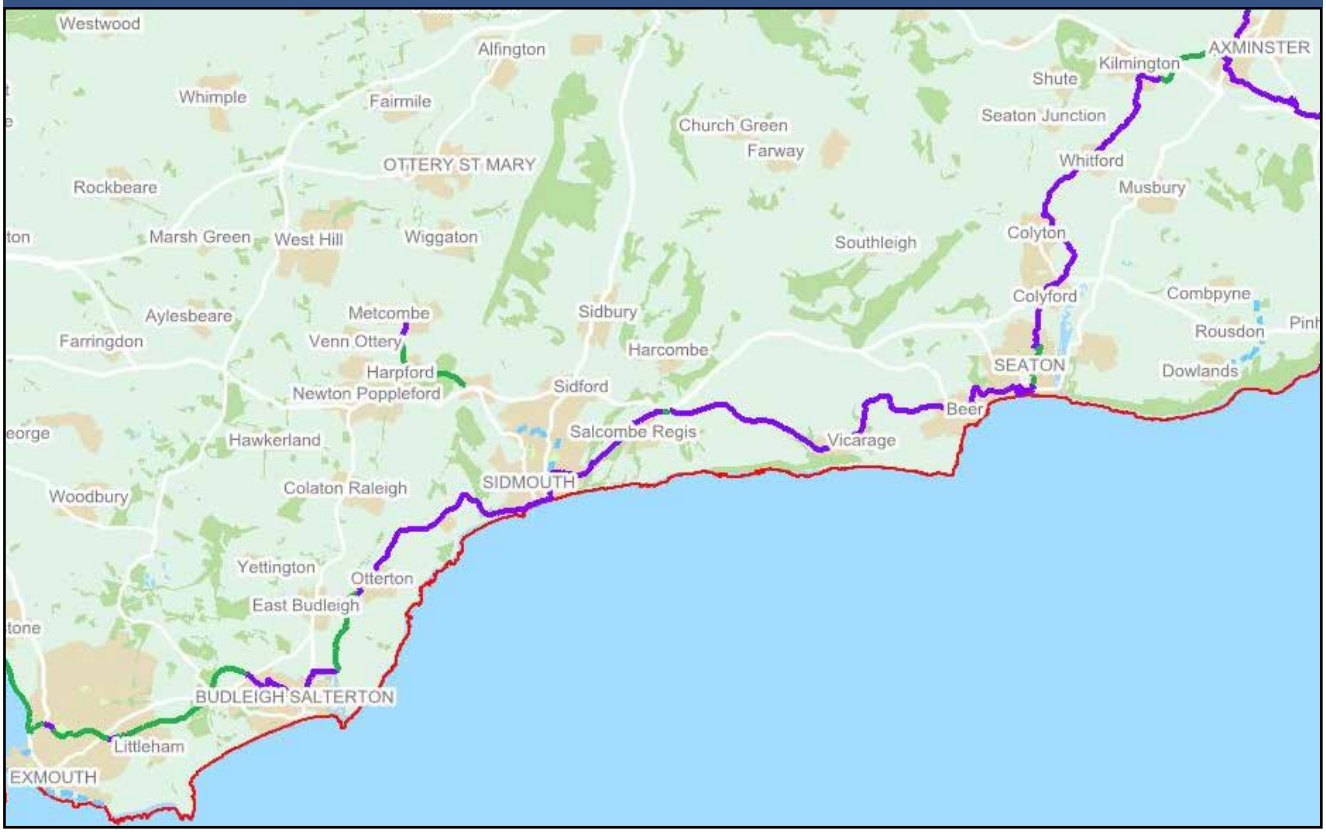
During 2016 Sustrans undertook a detailed review of NCN 2 and we have the benefit of the data collected, which is itself being reviewed by Sustrans staff prior to an action plan for improvements being developed.

We have also inspected the routes for this report.

We offer this appraisal of the NCN routes in the AONB under the following headings. It is not a comprehensive review, and we have restricted ourselves to highlighting particular issues where these require early attention, and to potential improvements to the routes through re-alignment.

For the purposes of this study the routes between Exmouth and Axminster are included.

Figure 12: NCN2 in East Devon



1. Safety

This considers road crossings, and suitability for an unaccompanied twelve year old child with Level 2 Bikeability skills.

1.1. Dangerous Crossings

1.1.1. Gammons Hill Kilmington (flood alternative route)

1.2. Not considered suitable for an unaccompanied twelve year old child

1.2.1. NCN on East Budleigh Road

1.2.2. Swan Hill Road in Colyford

2. Surface Quality

This considers smoothness of surface, type of surface and surface material. The following are locations where attention will be required.

2.1. The closed road between Budleigh and Otterton has suffered a land slip as a result of which the fence line has been moved restricting width. In itself the surface is acceptable at present, but the road closure has removed the road from the County Council maintenance programme, so that the surface, which is in part used by farm traffic is deteriorating.

3. Access and barriers

This considers access for cycles, on foot and wheelchair.

3.1. Wheelchair access to the Phear Park in Exmouth is restricted by a steep ramp.

3.2. Wheelchair access to the Budleigh to Exmouth railway path is restricted by steep ramps in several locations.

3.3. Wheelchair access to the path at Seaton, from Hillymead and Colyford Road is restricted by path width and steepness.

3.4. Wheelchair access is limited on several sections of the route due to the natural topography of steep hills and valley sides.

4. Route alignment

4.1. As mentioned the route between Otterton and Budleigh has a limited future. An alternative route could be investigated possibly using the former railway west of the River Otter. The B3178 would not be a suitable alternative route being national speed limit with no segregated facilities for cycling. It may however be more economic for the Council to accept the cost of routine maintenance as a walking and cycling route on the existing alignment.

4.2. The route between Otterton and Sidmouth climbs Peak Hill, 150 m climb. While the view from Peal Hill is spectacular on a fine day, and the approach to Sidmouth memorable, an alternative relatively flat route could be created perhaps via Colaton Raleigh, Newton Poppleford and Tipton St.John. This could only be contemplated however if the crossing on the A3052 at The Bowd to access Sidmouth existed.

4.3. The NCN 2 east of Sidmouth suffers significant changes of level and steep gradients, but no alternative routes are available. This will remain a challenging route, albeit through some of Devon's most attractive villages, Branscombe and Beer.

4.4. The route northwards from Seaton is being improved incrementally by Devon CC. A new section has recently been constructed at Seaton Marshes, and construction of the path linking Seaton to the Marshes Nature Reserve await the final agreement on land acquisition.

NCN 2 in East Devon - highlights and challenges

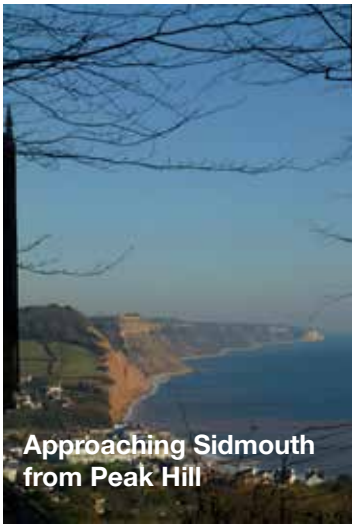
Railway path approaching Budleigh

Deteriorating path surface Budleigh to Otterton

Path above land slip narrowed between Budleigh and Otterton

Otterton village High Street

Branscombe - looking toward the steep climb to the west



Approaching Sidmouth from Peak Hill

Seaton Marshes Nature Reserve - new shared use path

Linking the NCN with the Otter Trail

The map figure 13 shows the existing NCN 2 along the south coast between Otterton and Sidmouth, and the proposed alignment of the Otter Trail.

The link at Sidmouth is described in section 3 above. If the suggestion for re-alignment of the NCN route 2 made above were taken forward the Otter Trail could link to the NCN at Newton Poppleford as well. We have not reviewed this alternative alignment on the ground, and have relied on information provided by others, including the Otter Trail Group.

It would be useful for a more thorough review of this section to be undertaken, but resources allowed for this study did not extend to this exercise.

There are a number of potential problems with the alignment indicated:

The river crossing between Colaton Raleigh and Burnthouse Farm is reportedly used by local cyclists but we do not believe the river bridge is designed for cycling.

The A3052 at Newton Poppleford is heavily trafficked by a mixture of vehicles. It would be necessary to negotiate a short length of the road within the village 30 mph limit, but a further assessment would be needed on its suitability.

Figure 13: Overview Map: NCN 2 and Otter Trail

Next steps for the local community

We have made a number of specific and general recommendations within this report all aimed at increasing the level of cycling and walking in Sidmouth and on the NCN in East Devon. A number of bodies will have to be engaged in order to actually deliver what we have recommended – if our recommendations are accepted – but we have been asked to suggest the next steps for the local community; actions which are within their scope and influence.

Woolbrook Road

- The suggestions we have made for Woolbrook Road will be controversial locally and a debate on the principle and the detail of any intervention should be encouraged. Ideally this would be conducted in an open way which can meaningfully engage local people. It would require funding, but one approach would through structured workshops with local people to produce a design that attracted a consensus approval. We would strongly urge that in any event any interventions should be trialled as temporary measures to assess the impact on local transport.

The Old Railway

- The old railway route and the link to the Otter Trail, if this is the preference as opposed to Woolbrook Road, has the potential to inspire local people and there are a number of actions which the community could undertake directly, and the organisations, such as the Otter Trail Group, already exist which could take a lead on this. The Otter Trail Group is already working with other communities and bringing the project to public attention, and this should continue.
- The critical factor in creating a new traffic free route is land ownership. The railway route has been mooted many times in the past. If it is ever to happen, the land must be secured. If some funding were available, a relatively low cost of achieving this could be through conditional agreements or purchase options with landowners which would allow fund raising for the cost of design, construction and ongoing maintenance to proceed with confidence.
- The crossing of the A3052 is also critical to the Otter Trail link if the railway route is preferred. If the land agreements for the Sidmouth approach, and further northwards could be secured with the confidence that the long distance route was deliverable, a design competition for a new bridge could be launched and could raise the profile of the Otter Trail project significantly.

The Neighbourhood Plan

- The content of this report will we hope be a useful contribution to the Neighbourhood Plan process. The project steering group is well placed to develop these ideas and feed into the emerging Plan.

Signing and Parking

- Lack of cycle parking discourages people from cycling, where they have to leave their, often valuable, bikes in poorly secured locations. The community could engage with the local authorities to identify good locations for extra cycle parking in line with published guidance, for instance Sustrans Design Guide, and to raise funds locally for installation.
- Signing serves a practical purpose of wayfinding but also advertises the existence of walking and cycling routes to non-users. There are some signs installed on the existing routes, but the community could undertake a detailed survey and identify where additional signs would be useful, to improve legibility and continuity and seek funding for implementation. Sustrans Design Manual includes a chapter on signing.
- A local map showing routes for walking and cycling and making it widely available would encour-

age greater usage of the existing networks.

Promotion

- There is a high quality access from the Byes to Sidmouth College, the main secondary school. It is likely that there is potential to encourage more school trips by bike and on foot, and contacts with the school could explore the possibility of starting a joint project to realise this potential. Sustrans can offer generic guidance on this.