Draft Carterton and the surrounding area Local Cycling and Walking Infrastructure Plan

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OXFORDSHIRE COUNTY COUNCIL

Document information

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Executive summary

Carterton is a rural town and service centre in West Oxfordshire with strong connections to the surrounding settlements and RAF Brize Norton, which is located to the south and west of the town. There are opportunities to make the cycling and walking provision in Carterton and the surrounding area safer due to the close proximity of amenities and road layout, supporting healthier travel choices for residents and the environment.

Local Cycling and Walking Infrastructure Plans (LCWIPs) identify issues with and potential improvements to the cycling and walking networks within a place. They aim to support more people to cycle and walk (including wheeled users) for short journeys or as part of longer journeys. LCWIPs are an Oxfordshire County Council (OCC) policy requirement as established in OCC's Local Transport and Connectivity Plan (LTCP) and supporting Active Travel Strategy. The promotion and development of active travel is key in contributing to Oxfordshire County Council and West Oxfordshire District Council pledges to be carbon neutral by 2030 and have a net-zero energy system by 2050, due to a reduction in vehicle emissions.

The Carterton and surrounding area LCWIP was developed in collaboration with Carterton Town Council and other key stakeholders. Department for Transport (DfT) technical guidance for producing LCWIPs and national and local policies were considered in the development of the LCWIP also.

The Carterton and surrounding area LCWIP vision is to create: *'a thriving and sustainable town. Walking, cycling, public and shared transport are the natural choice for journeys within and beyond Carterton due to safe, coherent and connected routes between neighbourhoods, the town centre, green spaces, leisure facilities, educational facilities and employment. All growth supports and is supported by sustainable connectivity*.'

This LCWIP includes the current and proposed cycling and walking network in Carterton and the surrounding area. Areas for improvement have been identified through site auditing, stakeholder and community engagement and review of background data to ensure a connected, place centred approach plan. Proposed improvements focus on creating a safe and accessible cycling and walking environment for all journey purposes (including those connecting to other modes such as bus). Improvements include the provision of crossings, narrowing junctions, implementing dropped kerbs and tactile paving, and implementing segregated cycle provision. Wycombe Way, Brize Norton Road, Monahan Way and Upavon Way are the highest prioritised routes for improvement due to the positive level of impact improvements would bring, including for school journeys.

The prioritised areas for improvement will guide the funding that is sought by OCC and where funding is spent so that local needs are met. Funding will come from a variety of sources, including developer contributions and central government bids. The LCWIP will be reviewed and updated every two years or in light of significant development.

1. Introduction

Chapter Overview: This chapter introduces Local Cycling and Walking Infrastructure Plans (LCWIP) as evidence-based plans for improving cycling and walking infrastructure in certain locations so that more people can safely cycle and walk in and between places. It details the seven-step process for developing an LCWIP (determining scope, gathering information, network planning for cycling, network planning for walking, prioritising improvements and integrating and applying improvements). The chapter also details the vision for Carterton in terms of cycling and walking.

1.1. What is a LCWIP?

A LCWIP is an evidence-based plan for improving the cycling and walking experience for everyone in a place so that it is safer, more convenient, and more enjoyable to cycle (by all bike types) and walk (including wheeled users) for all or part of a journey. LCWIPs are an evolving plan that take a long-term approach to developing cycling and walking networks and the improvements identified guide future investment.

1.1.1. Process

The development of an LCWIP follows Department for Transport (DfT) Technical Guidance:[1]

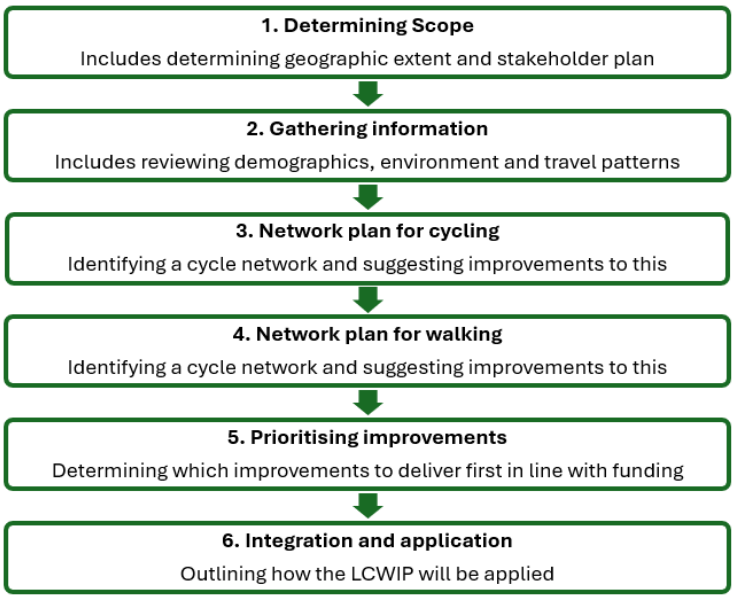


Figure 1: DfT LCWIP development guidance

[1] Department for Transport, Local Cycling and Walking Infrastructure Plans Technical Guidance for Local Authorities, 2017

1.1.2. Outputs

The primary outputs produced in an LCWIP are[2]:

- **Network Map for Cycling** – identifies and maps key cycling routes in an area based on analysis of where people would like to travel; infrastructure improvements are then focused on these routes
- **Network Map for Walking** – identifies and maps key destinations and the walking routes to and between these then; infrastructure improvements are then focused on these routes
- **Table of prioritised infrastructure improvements** – based on standardised criteria

These outputs provide a strategic foundation for Local Authorities to improve conditions for cycling and walking by systematically identifying and prioritising improvements that will aid in the delivery of active travel infrastructure and enable increases in cycling and walking.

1.2. Developing the Carterton and surrounding area LCWIP

This LCWIP has been developed in collaboration with Carterton Town Council and other key stakeholders, in line with the DfT guidance. Local and national strategies, including OCC's Local Transport and Connectivity Plan (LTCP) (2022) and West Oxfordshire District Council's Climate Strategy 2021 – 2025 have been considered throughout the development of this LCWIP to ensure alignment with best practice and policies to tackle key challenges including the climate emergency.[3] [4]

1.2.1. Governance

The Carterton and the surrounding area LCWIP was produced by officers at OCC with support from consultants Pell Frischmann. Pell Frischmann led on stage 3 – network planning for cycling, stage 4 – network planning for walking, and stage 5 – prioritisation.

1.2.2. Stakeholder engagement

Carterton and the surrounding area LCWIP was produced in collaboration with local stakeholders, including:

- Carterton South and West County Councillor
- West Oxfordshire District Council (WODC) officers
- Carterton Town Council councillors
- Coalition of Healthy Streets and Active Travel

[2] https://assets.publishing.service.gov.uk/media/5f622fade90e072bb68d5c74/cycling-walking-investment-strategy.pdf

[3] Oxfordshire County Council Local Transport and Connectivity Plan 2022 – 2050, 2022

[4] West Oxfordshire District Council Climate Strategy 2021 - 2025

A steering group was formed with local stakeholders and meetings took place approximately every four weeks. Key aspects of the project, such as the geographic scope and network mapping were discussed. The purpose of the steering group was to capture local concerns and ideas in the LCWIP.

1.2.3. Public engagement

An online public engagement activity took place between December 2024 – February 2025. This asked people to identify the location and types of improvements needed in Carterton and the surrounding area to make cycling and walking safer and more accessible. Respondents could mark their thoughts on a map and leave comments. Responses were analysed and included in the network auditing and improvements stages. Details of the analysis can be found in **Appendix A.**

1.2.4. Document structure

This LCWIP report is organised into six different sections, in line with DfT guidance:

1. Introduction
2. Background and Scope
3. Network Planning for Cycling
4. Network Planning for Walking
5. Prioritisation and Packaging of Improvements
6. Integration and Application

Various appendices have been included for additional background and information. The Key Outputs of this LCWIP – The Network Map for Cycling, Network map for walking, and table of prioritised infrastructure improvements – can be found in sections 3, 4, and 5, respectively.

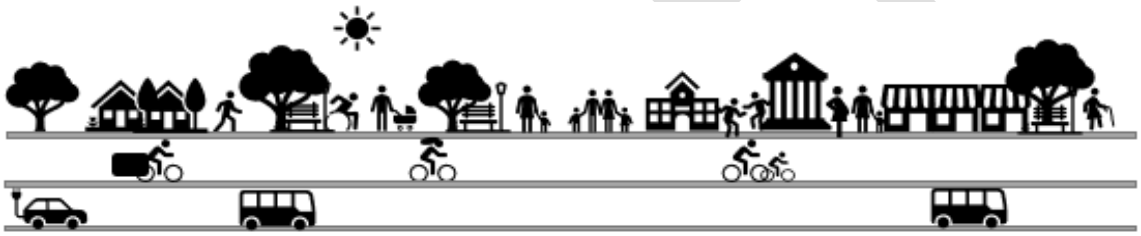
1.3. Vision and Targets

1.3.1. Vision

The vision for cycling and walking in Carterton and the surrounding area (which the LCWIP will help to deliver), was developed in collaboration with stakeholders to reflect local aspirations for Carterton and the surrounding area.

Vision for cycling and walking in Carterton

Carterton is a thriving and sustainable town. Walking, cycling, public and shared transport are the natural choice for journeys within and beyond Carterton due to safe, coherent and connected routes between neighbourhoods, the town centre, green spaces, leisure facilities, educational facilities and employment. All growth supports and is supported by sustainable connectivity.



1.3.2. Targets

To support the delivery of the vision, the following targets have been set:

1. Zero deaths/ injuries to people cycling and walking in Carterton and the surrounding area and routes between surrounding towns and villages by 2050
2. Create a fully connected safe walking network in Carterton and the surrounding area by 2050

2. Background and scope

Chapter Overview: This chapter presents the geographic scope of Carterton and the surrounding area LCWIP, which includes Alvescot, Bampton, Black Bourton, Brize Norton, Broadwell, Burford, Clanfield, Curbridge, Kencot, Langford, Minster Lovell, Shilton, and Witney. This chapter also explores how the LCWIP links to national and local policies, including Oxfordshire's Local Transport and Connectivity Plan. Finally, the background information that has informed the development of the LCIWP is summarised. This includes understanding Carterton's location in rural West Oxfordshire and service centre role for surrounding villages, as well as connections to these villages and other settlements by existing cycling and walking networks and varying quality bus services. To support this, trip generators in Carterton and the surrounding area are presented, including RAF Brize Norton. Local demographics, environment and travel and transport challenges and opportunities are also presented. Full details can be found in **Appendix A.**

2.1. Geographic scope

The geographic scope of Carterton and the surrounding area LCWIP was determined in consultation with local stakeholders. Key factors that were considered in determining scope include important trip generators such as shopping centres, employment locations, schools, leisure attractions and large residential areas. Trip generators were considered within a 10km catchment area of the Brize Norton Road, Alvescot Road, Burford Road, Black Bourton Road junction and include routes to surrounding settlements. This encompasses the (up to) 2km distance people will reasonably walk for local trips and (up to) 10km distance people will reasonably cycle for local trips. The list of trip generators is not exhaustive. Future iterations of Carterton and surrounding area LCWIP will consider whether additional connections should be included in the geographic scope. The geographic scope of the Carterton and surrounding area LCWIP includes:

- **Carterton town** - including the existing built-up area
- **New and planned developments in Brize Norton Parish**
- **Key cycle connections beyond Carterton** including:
    - **School trips** - villages within the catchment area of Carterton Community College including Kencot, Broadwell, Langford and Alvescot
    - **Carterton to Brize Norton/Witney** – supporting everyday trips and commutes to RAF Brize Norton

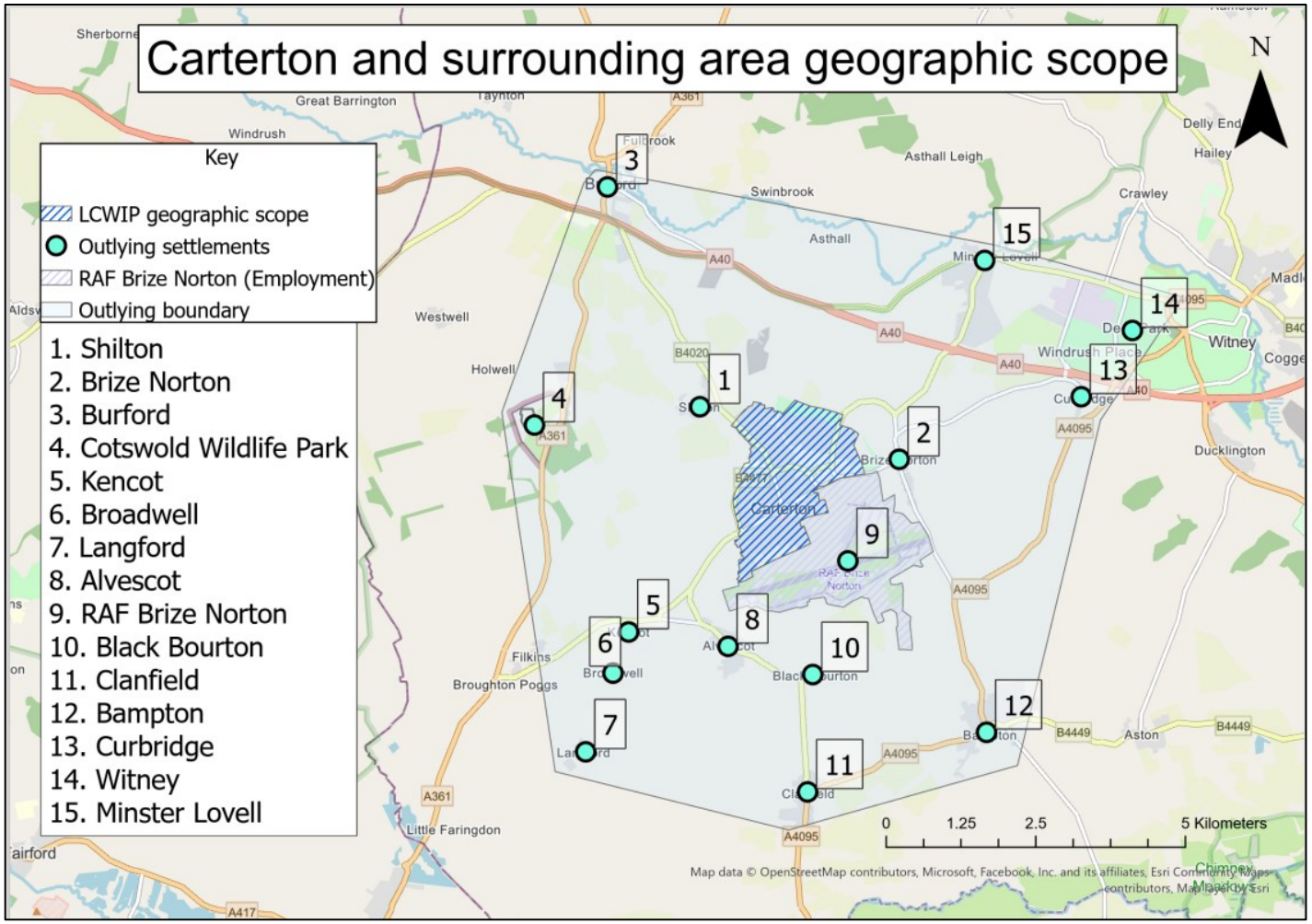


Figure 2: Carterton LCWIP geographic scope

2.1.1. Carterton and surrounding area trip generators

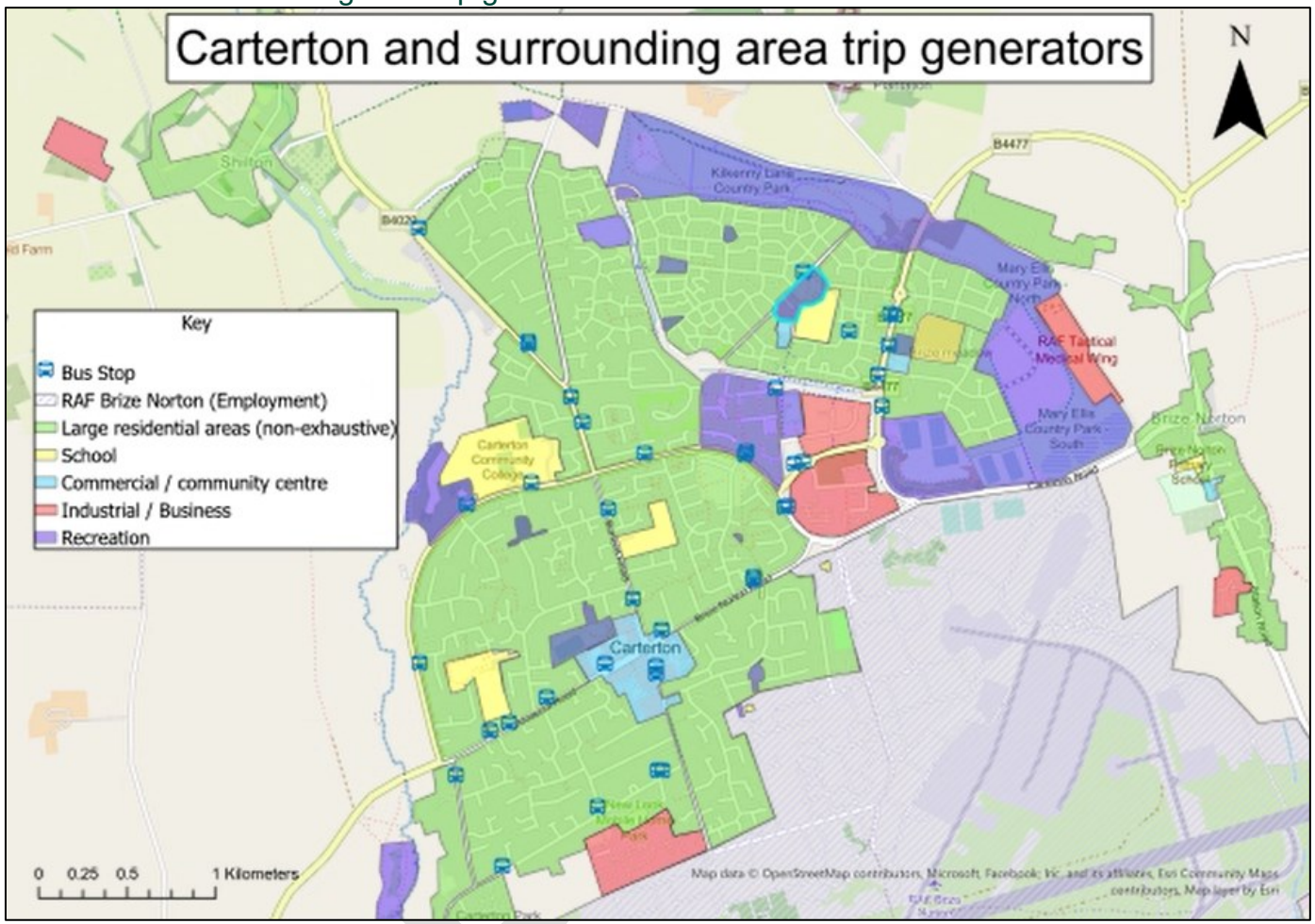


Figure 3: Trip generators Carterton and surrounding area

2.1.2. Links to existing and planned LCWIPs and Oxfordshire's Strategic Active Travel Network (SATN)

LCWIPs are developed or in development across West Oxfordshire at large settlements including Witney, Woodstock, Chipping Norton and Charlbury. These LCWIPs, along with Carterton and the surrounding area LCWIP, sit within the wider Strategic Active Travel Network (SATN) developed by OCC. Inter-settlement connectivity by walking and cycling is considered as part of Oxfordshire's SATN.[5] Routes identified in the SATN will connect Carterton to surrounding settlements, including those with developed and emerging LCWIPs. As discussed in section 2.1, some connections beyond Carterton have been included in the geographic scope of Carterton and the surrounding area LCWIP due to their significance to Carterton. However, these routes have not been thoroughly assessed as this work falls within the SATN project, although aspirations for these routes have been stated in this LCWIP.

2.2. Policy context

Policy informs decision making by presenting evidence based best practice and setting targets. There are national and local policies that apply to the LCWIP. A summary of key policies relevant to Carterton and the surrounding area LCWIP is provided below.

Table 1: Key policies, strategies, and guidance

Policy/ Strategy/ Guidance	Content and relevance to Carterton and the surrounding area LCWIP
National	
Local Cycling and Walking Infrastructure Plans – Technical Guidance for Local Authorities, DfT, 2017	**Content:** Establishes the technical framework (i.e., content, structure, and implementation) to guide local authorities in the development of LCWIPs. The guidance outlines a step-by-step approach for planning and developing cycling and walking networks at the local level, emphasising the importance of evidence-based decision-making and community engagement. **Relevance to LCWIP:** ensures that LCWIPs are consistent, well-planned, and effective in improving local cycling and walking environments to meet the national policies such as the Cycling and Walking Investment Strategy (CWIS) and Gear Change.

Cycling Infrastructure Design, Local Transport Note 1/20, DfT, 2020	**Content:** The document outlines how to deliver coherent, direct, safe, comfortable and attractive cycling infrastructure that is inclusive of all abilities and will support more people to cycle and making existing journeys safer and more pleasant. Infrastructure recommendations are influenced by local environment. **Relevance to LCWIP:** provides recommendations of infrastructure that can be implemented to address the issues identified through the route auditing. All infrastructure suggested in the LCWIP is assessed against LTN 1/20 criteria.
Local	
Oxfordshire's Local Transport and Connectivity Plan (LTCP) 2022 –2050, OCC, 2022	**Context:** Sets the long-term ambition for transport in Oxfordshire, including a 'safe, net-zero Oxfordshire transport system' - cycling and walking is a key component of this. LTCP will be supported by area travel plans, which LCWIPs will inform, and additional studies covering transport hubs and public transport. **Relevance to LCWIP:** aims to create a sustainable net zero transport system. There is a big focus on active travel in the document, the LCWIP can help transform these goals into reality.
West Oxfordshire Local Plan 2031, West Oxfordshire District Council, 2018	**Context:** Sets a vision for economic and housing growth in West Oxfordshire from 2011 – 2031. **Relevance to LCWIP**: identifies development sites and policies related to travel sustainability, this includes alleviating traffic congestion and improving air quality and journey times by reducing the reliance on private vehicles and encouraging walking, cycling and public transport use – the LCWIP can support this. The Carterton and surrounding area LCWIP will be used to inform the update to this plan - West Oxfordshire Local Plan 2041, which is currently in production.
Oxfordshire Cycling Design Standards, OCC, 2017	**Context:** "Guidance on the design of inclusive cycling infrastructure." **Relevance to LCWIP:** Outlines the cycling design standards that must be met in LCWIP projects.
Oxfordshire Walking Design Standards, OCC, 2017	**Context:** "Guidance on the design of inclusive walking infrastructure

	Relevance to LCWIP: Outlines the walking design standards that must be met in LCWIP projects.
Oxfordshire County Council Strategic Active Travel Network, 2024	**Context:** The Strategic Active Travel Network (SATN) is a proposal for a countywide Active Travel network of walking and cycling routes, forming a county wide LCWIP. **Relevance to LCWIP:** SATN is a county wide LCWIP, it must be explained how the LCWIP network will link to the SATN network.
Climate Action Framework, OCC, 2020	**Context:** A plan that sets out how Oxfordshire will tackle the climate crisis. Objectives include: • normalising active travel and making this accessible to all; • reducing emissions by 50% by 2030; and • achieving net zero by 2050. **Relevance to LCWIP:** outlines OCC objectives that the LCWIP is contributing to and needs to take account of.
Climate Change Strategy for West Oxfordshire 2021 - 2025, WODC	**Context:** A plan that sets out how West Oxfordshire District Council will take climate action. One key theme identified to support Climate Action and deliver on the Council's vision, is 'low carbon transport and active travel'. **Relevance to LCWIP:** outlines WODC objectives that the LCWIP is contributing to and needs to take account of.

2.3. Introducing Carterton and the surrounding area

2.3.1. Local geography

Carterton and the surrounding area local geography

- Carterton and the surrounding area are situated in rural West Oxfordshire
- Carterton town is compact with services and amenities close to one another meaning distance is less of a barrier to cycling and walking for local trips
- Carterton and the surrounding area have a several green spaces, most notable is Kilkenny Country Park, these areas are popular trip attractors
- Kilkenny Country Park and sub area villages Shilton and Alvescot are designated as conservation areas, which limits changes that can be made
- Carterton and the surrounding area are relatively flat
- Carterton has no direct connection to the primary route network - the B4477 Brize Norton Road connects Carterton to the A40 primary route
- Key roads in Carterton are wide and straight, whereas in the surrounding area the road network can be narrow and winding

2.3.2. Environment

Carterton and the surrounding area environment

- Carterton town centre is at risk of surface water flooding risk, which needs to be considered when developing walking and cycling improvements, so it is not a barrier
- There is no air quality concern in Carterton
- The surrounding area includes farmland, semi-natural grassland, and watercourses, contributing to the region's ecological diversity, which must be protected when delivering walking and cycling improvements

2.3.3. Demographics[6]

Carterton and the surrounding area demographics

- Carterton and the Carterton Sub Area, which includes the villages of Shilton, Alvescot, Aston, Bampton, Brize Norton, Clanfield, Filkins, and Langford have a combined population of 25,000 (ONS, 2021)[1]
- Carterton itself has the second largest population in West Oxfordshire after Witney
- Carterton and the surrounding area have a growing population due to new housing developments being built and significantly more anticipated, bringing opportunities for cycling and walking infrastructure improvements
- Carterton is abutted to the east and south by RAF Brize Norton, which has over 7,000 Service Personnel, civilian staff and contractors, many of whom live in Carterton and the sub area and is therefore an important trip generator
- Carterton has a young population relative to the West Oxfordshire and Oxfordshire average, which creates opportunities to promote walking and cycling for local trips
- Areas of deprivation in the wards of Carterton Northeast, Carterton Northwest and Carterton South, which walking and cycling infrastructure should help to address
- Carterton has high levels of physical activity and average levels of child obesity, which creates opportunities to promote walking and cycling for local trips

[6] Oxfordshire Health and Wellbeing Joint Strategic Needs Assessment, 2021

2.3.4. Current travel and transport patterns

Carterton and the surrounding area current travel and transport patterns

- Carterton has a walking network of varying quality often severed due to lack of safe crossing points
- Shared cycling and walking routes are present on some roads in Carterton including Burford Road and Black Bourton Road, although continuous and connected provision for people cycling is often lacking
- Car is the most common mode of travel for commutes for people living in Carterton
- Almost 50% of internal commuting trips in Carterton are completed by walking and cycling
- Witney, Oxford and Swindon are the most common commuting origins and destinations for commuting trips starting and ending in Carterton
- Collision hotspots for people walking and cycling in Carterton and the surrounding area are Carterton Road (between the Brize Norton Rd / Upavon Way / Carterton Road roundabout and the Norton Way / Carterton Road roundabout), Burford Road and Black Bourton Road (between the junctions with Arkell Avenue and Wycombe Way) and Burford/ Shilton Road (between the Upavon Way junction and the Brizewood junction)
- The highest flows of traffic in Carterton are on Carterton Road/ Barwood Avenue and Brize Norton Road, demonstrating the role of RAF Brize Norton and the town centre as key trip attractors/ traffic generators
- Carterton town centre and Upavon Way are congestion hotspots
- Carterton is a service centre meaning people from neighbouring villages/ parishes travel there
- There is good bus connectivity between Carterton and Witney, Oxford and Swindon, although limited provision in the surrounding area

3. Network Planning for Cycling

Chapter Overview: This chapter outlines the methodology followed to develop the cycle network for Carterton and the surrounding area and proposed improvements to this. This includes identifying where people would like to travel (trip generators e.g. shops, schools, employment areas, medical facilities) and the most direct route to these places (desire lines). These desire lines are converted into potential routes that form a cycle network, which are then audited following standardised assessment criteria. Following this, improvements are identified including new crossings and segregated cycle lanes to create a direct, gradient-friendly, connected, comfortable, and safe cycle network where possible. Improvements are proposals and further work beyond the LCWIP is needed to develop these into deliverable schemes. The audit report is available in **Appendix B**.

The development of the cycle network as part of this LCWIP has been an iterative process and has combined the use of Active Travel England's recommended tools including the Propensity to Cycle Tool (PCT), as well as local input and knowledge from key stakeholders including officers from OCC, and councillors from West Oxfordshire District Council (WODC) and Carterton Town Council.

This chapter explains the methodology undertaken to develop the network plan for cycling, provides a summary of key findings from the site audit and presents the identified improvements for cycling in Carterton and the surrounding areas.

3.1. Methodology

3.1.1. Identifying trip generators

Trip attractors and trip generators have been identified and mapped to understand where people want to cycle to and from. Trip generators largely relate to main residential areas, and trip attractors are usually associated with places such as town centres, supermarkets, leisure centres, and areas of employment or education. These trip attractors and trip generators have been mapped to help identify the main desire lines. **Figure 3** shows the trip attractors and trip generators in Carterton and the surrounding area.

3.1.2. Identifying cycle desire lines

A catchment area of 5km and 10km has been calculated to show a reasonable distance most people will choose to cycle for local trips. However, it is noted that some people will choose to cycle further distances. An isochrone map showing the 5km and 10km catchments can be found in **Figure 4**.

The 5km catchment is shown in purple, and the 10km catchment in orange. The selected central point for both catchments is the Burford Road/ Alvescot Road/ Brize Norton Road/ Black Bourton Road crossroads in the centre of Carterton to cover both leisure trips as well as ones that may be made for commuting. Shilton, Brize Norton and Alvescot fall within the 5km catchment, with Burford, Witney, Bampton, and Clanfield within the 10km catchment of Carterton town centre.

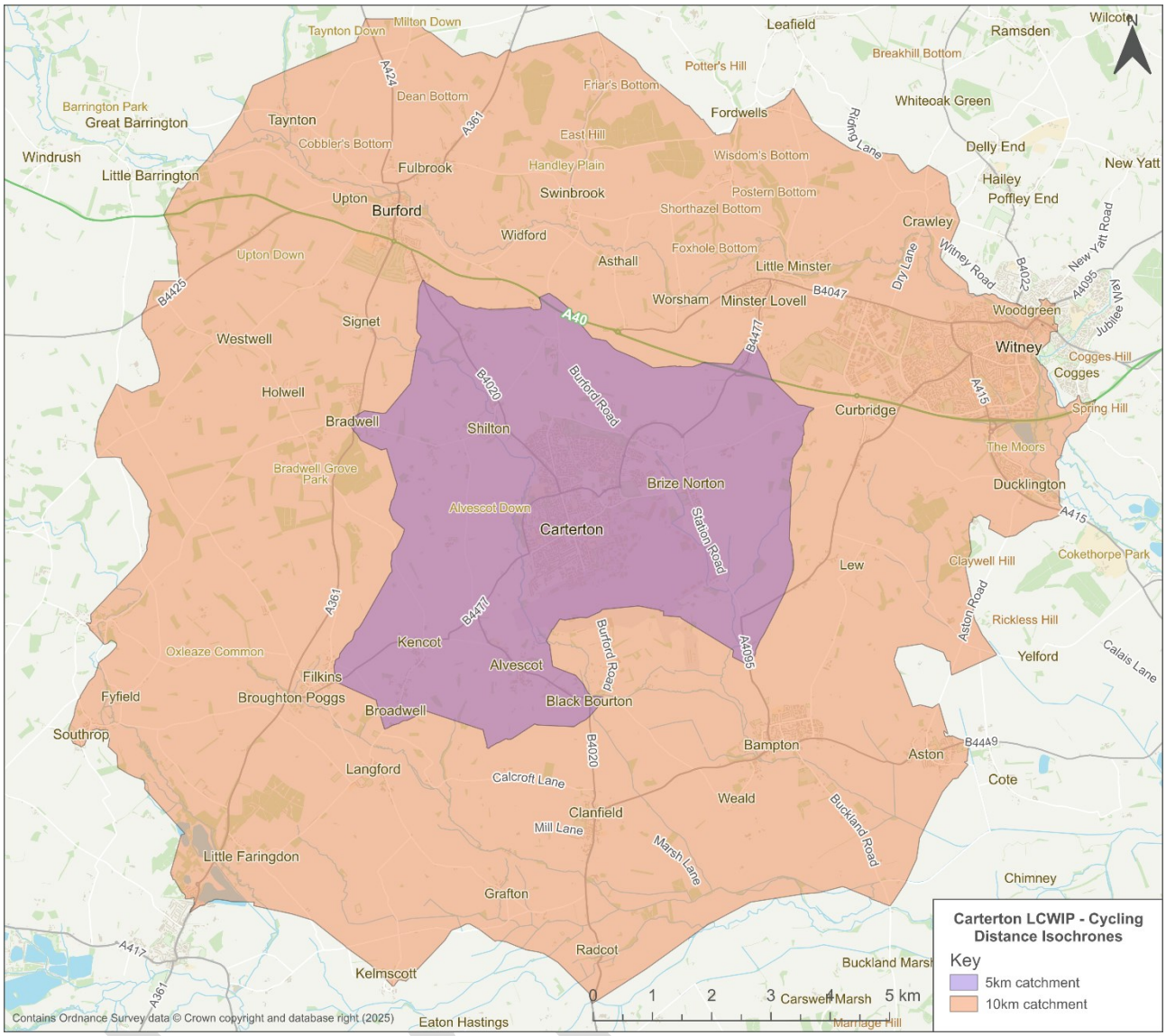


Figure 4: Cycling 5km and 10km Isochrones

Following this, and the identification of the cycle desire lines using the PCT outlined in **Appendix A,** the cycle network in Carterton has been categorised into the following classifications, defined by the DfT, and mapped in **Figure 5**:

- **Primary:** High flows of people cycling are forecast along desire lines that link large residential areas to trip attractors such as a town centre. Additionally, primary routes can connect smaller towns and villages with larger towns, where high demand is less likely.
- **Secondary:** Medium flows of people cycling are forecast along desire lines that link to trip attractors such as schools, colleges and employment sites.
- **Local:** Lower flows of people cycling are forecast along desire lines that cater for local cycle trips, often providing links to primary or secondary desire lines.
- **RAF Brize Norton:** The roads within the main RAF Brize Norton base are highlighted to show roads that are not open for normal traffic.

The desire line classification shows that the primary arterial routes connect Carterton with Witney, Minster Lovell, and Burford to the north, and Alvescot, Clanfield and Bampton to the south. The Brize Norton Road/ Burford Road crossroads in the centre of Carterton, and Upavon Way are both classed as primary routes for people cycling. Most primary routes are on major roads within town centres or connect smaller towns and villages. Most secondary routes connect local roads with primary schools and large housing developments.

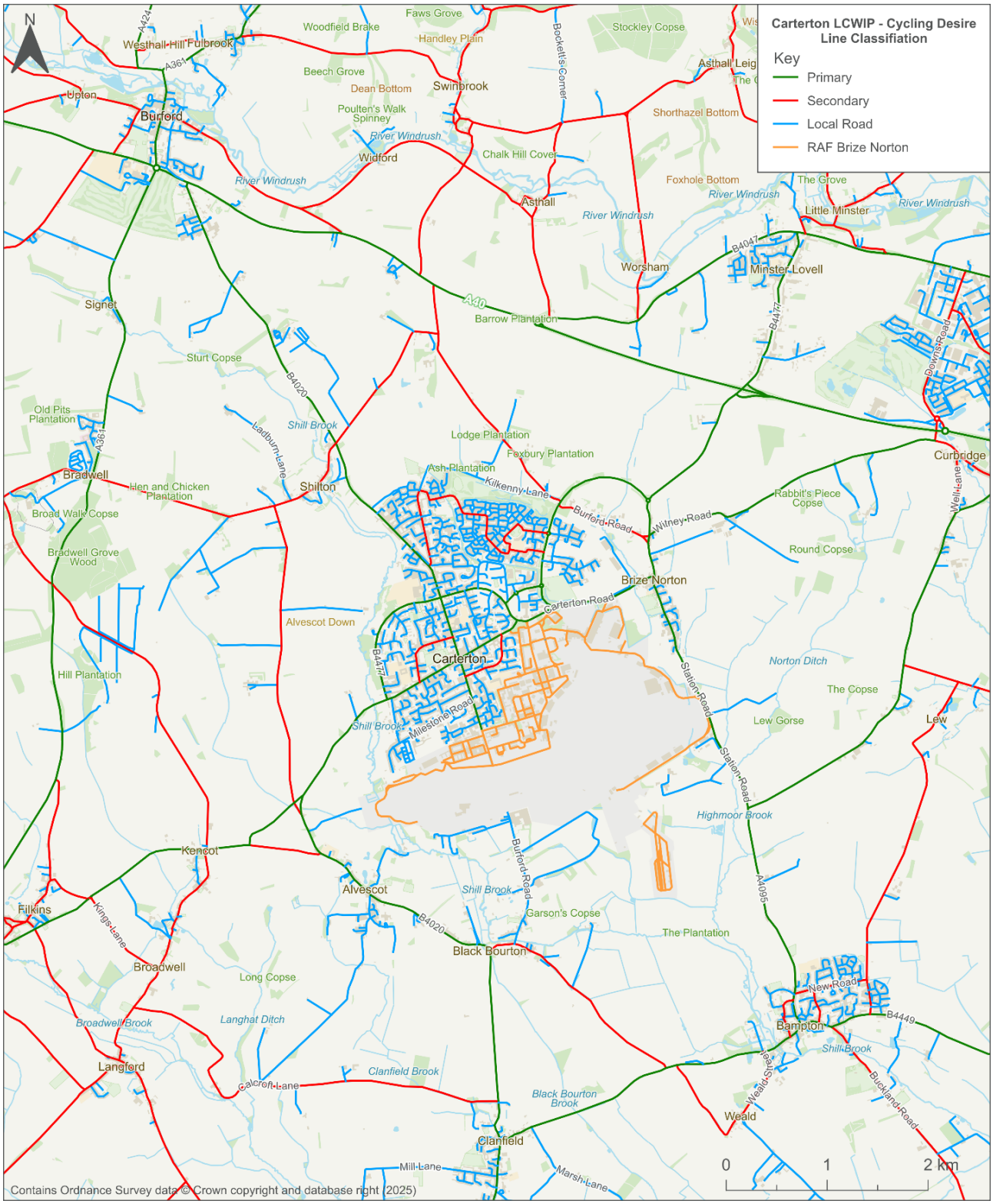


Figure 5: Cycle Desire Line Classification

3.2. Carterton Cycle Network

The existing cycle infrastructure within Carterton and the surrounding areas has been identified and mapped in **Figure 6**.

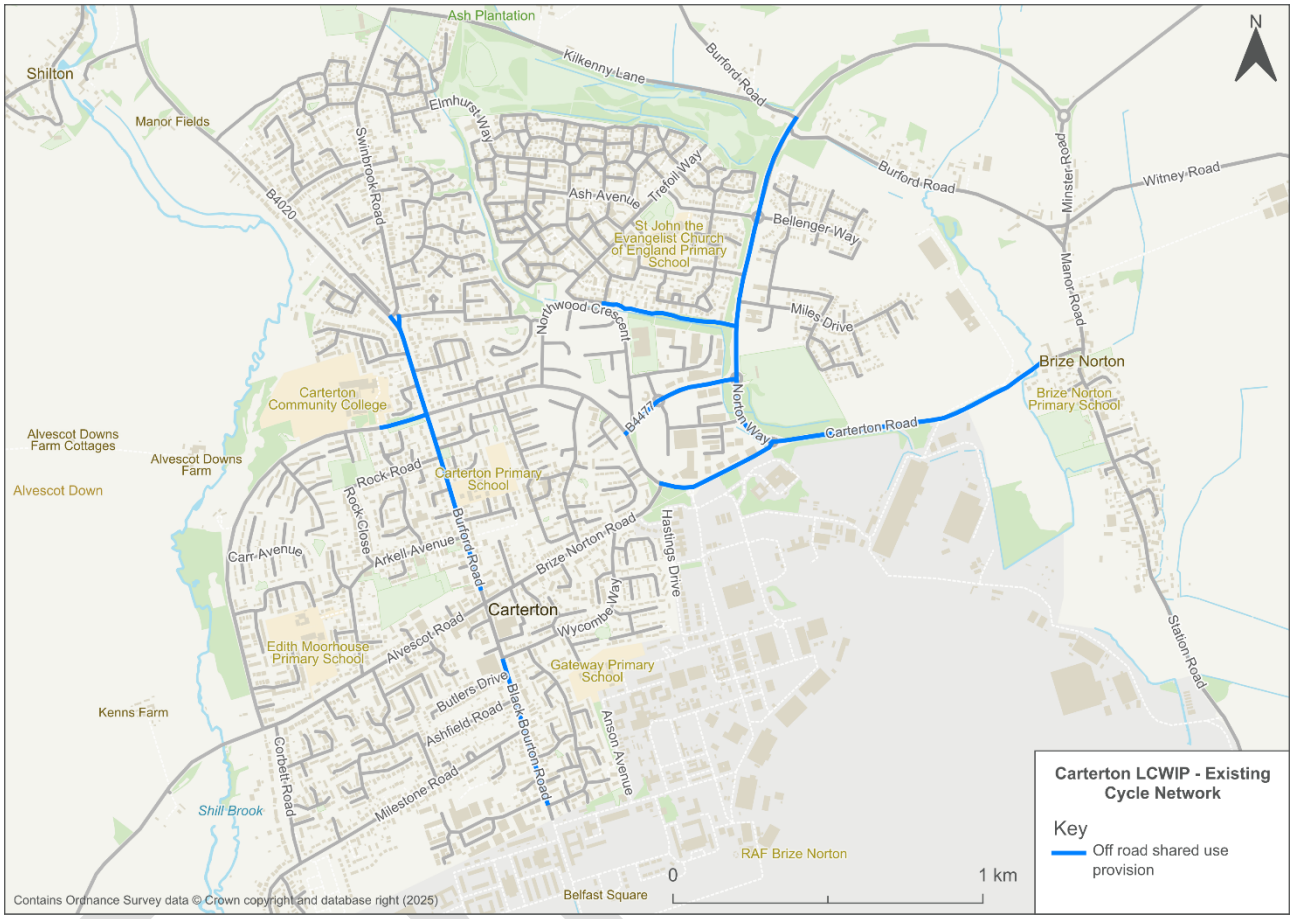


Figure 6: Existing Carterton Cycle Network

During the site visit in February 2025, the existing cycle facilities were audited, with comments recorded and categorised into the following classes:

- **Barriers –** Physical barriers or gates block a route or access
- **Gradient –** A significant change in gradient up or down hill that may impact someone cycling
- **Missing/ inconsistent or substandard infrastructure –** Missing or incorrect infrastructure such as incorrect tactile paving causing a safety concern for people cycling. Infrastructure is not LTN 1/20 compliant
- **Maintenance issue –** Unclear road markings, or substandard surface conditions effecting people cycling
- **Narrow cycleway/ pinch point –** Cycleway or carriageway narrows, either due to physical constraints, or due to overgrown vegetation
- **Parking issue –** Poorly parked vehicles causing an inconvenience to people cycling
- **Unattractive for people cycling –** Safety concern, such as a high maximum speed limit, which may deter people cycling from using that route

- **Signage/ wayfinding incorrect/ missing or redundant –** A route that is missing an obvious sign, or the signage that is in place is wrong
- **Other –** Any other issue or comment noted that effects people cycling

These categories capture the underlying themes of the five core design outcomes aligned with LTN 1/20 for cycling routes, which have been considered during the further stages of suggesting network improvements in **Section 0**.

The five core design outcomes for cycling routes can be found in **Figure 7**.

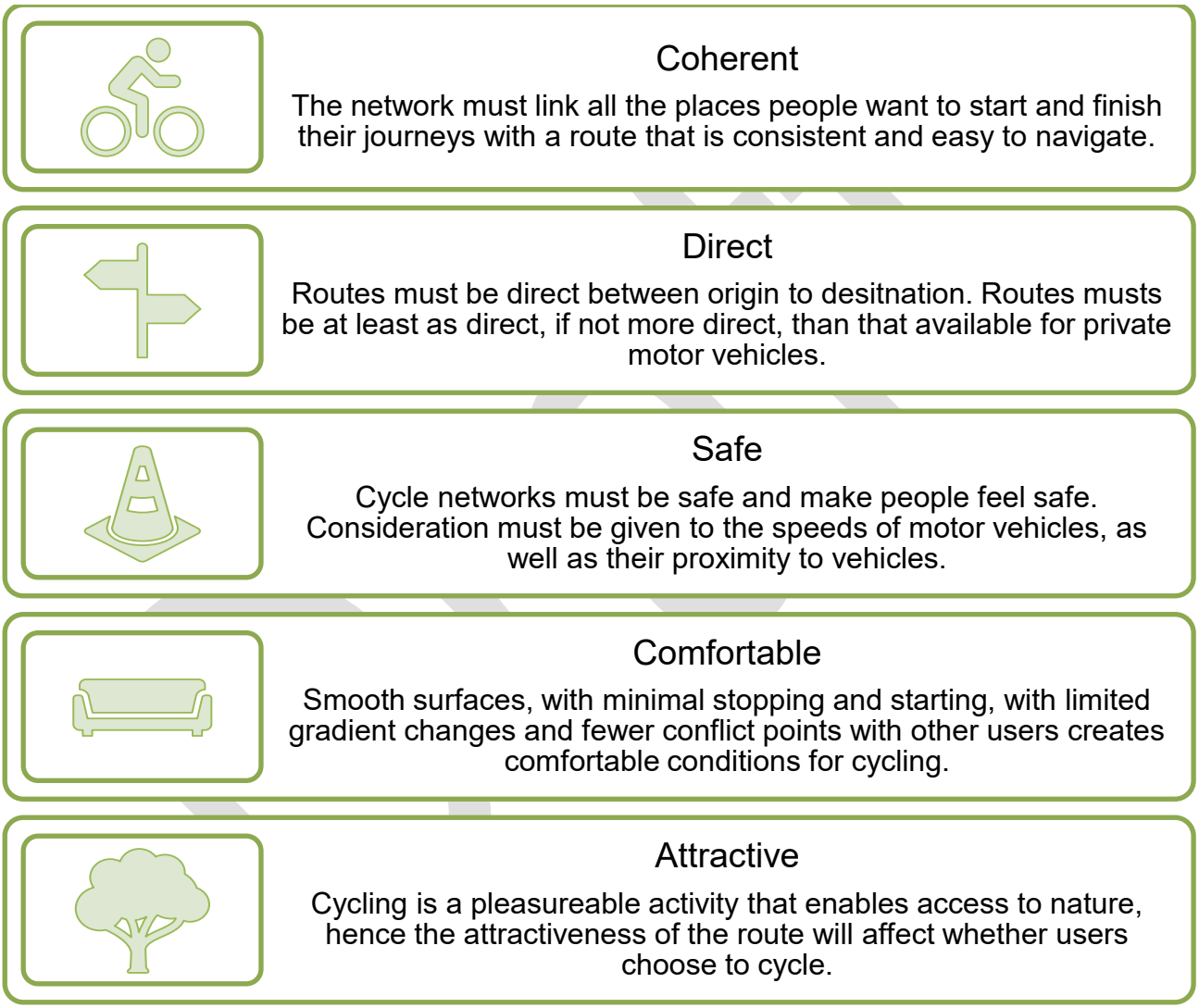


Figure 7: Core Design Outcomes for Cycling

The DfT's Route Selection Tool (RST) was used to assess the impact of implementing segregated cycle provision on certain routes in Carterton. The RST scores a route by splitting routes into multiple links, and giving each a score on the scale of 0 – 5 (5 being the highest) against the core design outcomes for cycling outlined in **Figure 7**. In this case, attractiveness is measured by assessing the gradient of the routes chosen to be analysed.

- **Proposal 1.1 – Upavon Way**
  Figure 8 compares existing and proposed infrastructure on Upavon Way. Large improvements have been made in all criteria due to proposed improvements.

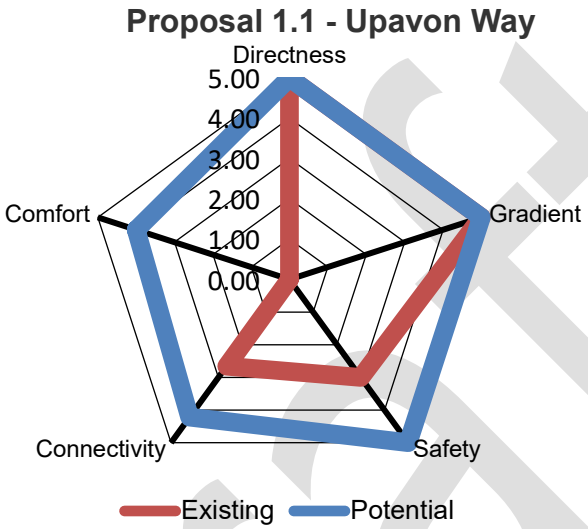


Figure 8: RST - Proposal 1.1 (Upavon Way)

- **Proposal 5.1 – Burford Road**
  Figure 9 compares existing and proposed infrastructure on Burford Road. Due to the road already having a shared use footway/ cycleway on the eastern side, the existing scores are higher compared with routes that have no facilities. However, increases in comfort and connectivity are made if improvements are implemented.

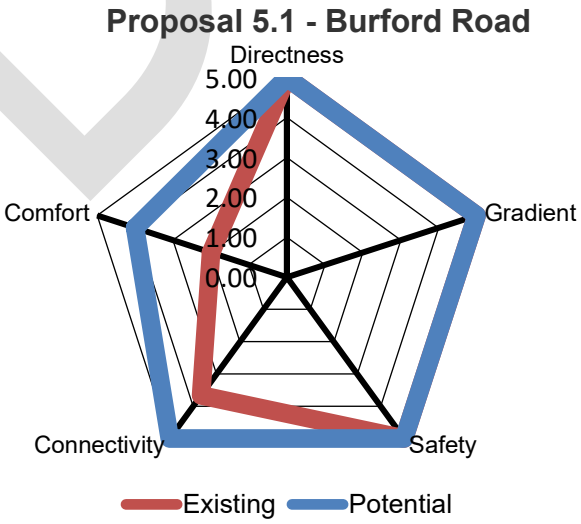


Figure 9: RST - Proposal 5.1 (Burford Road)

- **Proposal 8.1 – Alvescot Road**
  Figure 10 compares the existing and the proposed infrastructure on Alvescot Road. Large increases can be seen in the safety, connectivity, and comfort categories due to the proposed improvement of installing a two-way segregated cycleway, where currently people cycling share the carriageway with motor vehicles.

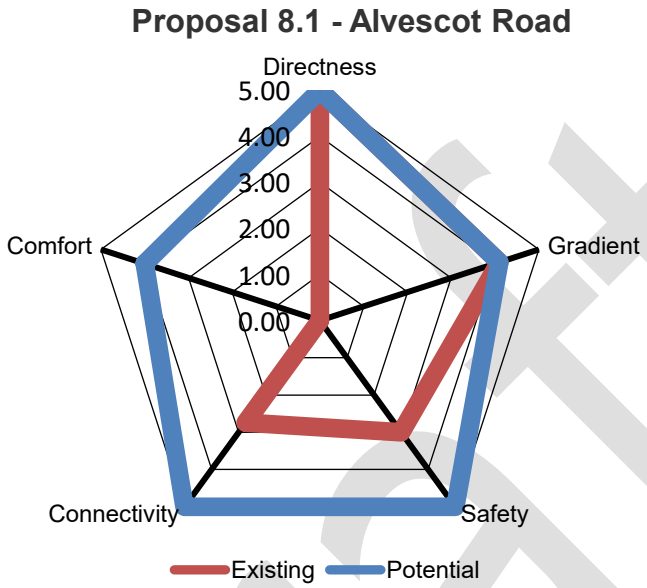


Figure 10: RST - Proposal 8.1 (Alvescot Road)

3.3. Proposed cycling improvements

Following the site visit and a review of comments collated on site, proposals have been developed to address the issues that were identified and develop a future cycling network. As part of this process, an intervention toolkit was developed, giving examples of the different types of infrastructure that have been proposed; this is illustrated in **Table 2**. This table should be read in conjunction with **Table 4**, which details the measures that benefit walking additionally.

Table 2: Cycling Improvements Toolkit

Types of Improvements	
 (Source: Pell Frischmann)	**Cycle parking** – There are many different types of cycle parking. The most common form of cycle parking is 'Sheffield' stands, which are inverted 'U' shapes and support the whole bike. Other types of cycle parking include two-tier cycle racks, and cycle-hubs. All cycle parking installed should be covered, and include repair stands with tyre pumps.
 (Source: Pell Frischmann)	**Toucan crossing** – A signal-controlled crossing that allows people cycling and walking to cross together. Toucan crossings are usually wider than standard pedestrian crossings to accommodate people cycling safely, however both users are in the same shared space.
 (Source: Bournemouth University)	**Tiger crossing** (Parallel crossing) – A tiger crossing consists of a priority-controlled (zebra) crossing with a parallel priority space for people cycling to cross, keeping pedestrians segregated from cyclists. A parallel crossing would be preferred over a toucan or sparrow crossing on a road with lower traffic flows where people cycling and walking need to be kept segregated.
 (Source: Stockport Metropolitan Borough Council)	**Sparrow crossing** – A sparrow crossing brings together the signal-controlled element from the toucan crossing, and the priority for cycling and walking from the tiger crossing. This creates a fully segregated space for people cycling and walking to cross over a road where traffic speeds are higher, or where there is more than one lane of traffic per direction.
 (Source: Pell Frischmann)	**Shared use cycleway/ footway** – Shared use paths allow people cycling and walking to share the space, although pedestrians have priority. These paths are identified by a blue circle with a white symbol of a people cycling and walking. Although shared use is not recommended in LTN 1/20 for streets with high people cycling or walking flows, it can be considered appropriate and acceptable to connect smaller, rural towns and villages.

(Source: Google Maps)

Lightly segregated shared use cycleway/ footway – A shared use path, where people cycling and walking are separated by a white line, with cycling and walking symbols painted on the surface. Although shared use is not recommended in LTN 1/20 for streets with high people cycling and walking flows, it can be used in cases where available width and space is limited.


(Source: Pell Frischmann)

Segregated cycleway (one or two way) – People cycling and walking are fully separated from each other and from general motor traffic. Separation can consist of a stepped kerb between road level and cycleway, with a further level raise to the footway to distinguish a clear segregation.


(Source: Pell Frischmann)

Uphill only cycleways – One-directional cycleway that is separated from general traffic to allow people cycling space to travel uphill. Where there is only space to provide cycle priority in one direction, uphill is preferred as cyclists are more likely to travel slower and weave.


(Source: Google Maps)

Quiet mixed traffic street – A road where both motor vehicles and people cycling share the same space; however, the volume and speed of traffic are low. People cycling will use the carriageway, with design considerations such as traffic calming and management used to help reduce motor vehicle speeds further and make the space more cycle friendly.


(Source: Pell Frischmann)

Junction improvements – A variety of improvements that are made to both major and minor road junctions, including narrowing the junction mouth radius, optimising traffic signal timings, and replacing mini-roundabout junctions with more cycle friendly junctions. For further detail of each specific proposal, please see **Table 3**.

(Source: Pell Frischmann)

Wayfinding – Signage to support people cycling and walking navigate their way around a place. Signage and wayfinding are important to support active travel users navigate Carterton using strategic, comprehensive and consistent methods.


(Source: Hedgehog Cycling)

Traffic calming (cycle bypasses at chicanes) – Where chicanes are used as a traffic calming measure, integrating cycle bypass lanes provides people cycling to have a safe route through without having to move out in front of motor vehicles to navigate the chicane.

(Source: Cycling Embassy of Great Britain)

Modal filter – A feature used to limit through-journeys along a road for certain modes of travel. An element of permeability is installed, limiting access to just cycling and walking.

(Source: School Streets)

School street – A road with a temporary restriction on access for motor vehicles, aligning with school drop-off and pick-up times. This measure provides a safer and more pleasant environment for school communities.

(Source: VeeLite)

Lighting – Installing new or upgraded lighting can provide greater encouragement for cycling after-dark. It can improve the visibility of hazards, as well as increasing reassurance and reducing fear of crime.

The cycling improvements proposed for Carterton and the surrounding area are shown in **Figure 11.** A more detailed overview for the proposed improvements in Carterton town centre can also be seen in **Figure 13**. For the ease of readers, **Figure 11** has also been split into two maps covering the north of Carterton in **Figure 12** and the south of Carterton in **Figure 14**. The reference numbers shown on the maps refer to the measures described in Error! Reference source not found..

The improvements identified are high-level proposals but are considered feasible based on initial observations and desktop measurements and can be delivered in line with LTN 1/20 and LCWIP guidance. Any route identified will require further feasibility and design work, along with public consultation, before being implemented. All existing committed proposals have also been taken into consideration when proposing the improvements.

As part of the overall proposed improvements detailed in **Table 3**, a series of design principles have been identified to help deliver consistency and high-quality infrastructure when undertaking future feasibility design. These principles include:

- **Narrow junction mouth radius, with side-road treatment and Dutch kerbs (entrance kerbs) at segregated cycleways** – side road crossing treatments are designed to minimise conflicts between people cycling, walking and motor vehicles. They enable segregated cycleways to run at a continuous, raised, flat level across minor side roads. The steep gradient to transition from road level to cycleway level forces motor vehicles to slow, increasing safety for people cycling using the segregated cycleway. These measures should be considered where junction improvements are being made, and where segregated cycleways have been proposed.
- **Wayfinding and signage** – updated wayfinding and signage throughout a town makes active travel more accessible and attractive for all users. Signage should include information about distances, destinations and direction, with a consistent

branding to maintain an easy navigation throughout. Cycleway markings can also be used to clarify routings.

- **Cycle parking** – in addition to the proposals that identify new cycle parking locations, major destinations from cycle routes should be considered to have new cycle parking installed. Cycle parking should in an open, highly visible area with good natural surveillance. It should be convenient and easy to use, whilst being secure and covered by a shelter. Pump and repair tools located next to the cycle parking will make it more attractive for active travel users.
- **Removal of staggered crossings** – pedestrian and cycle refuges at staggered crossings on some smaller junctions are unnecessary and therefore, these should be removed wherever deemed appropriate, to allow people cycling and walking to cross straight across the junction in one movement. This will improve consistency and make active travel more attractive.

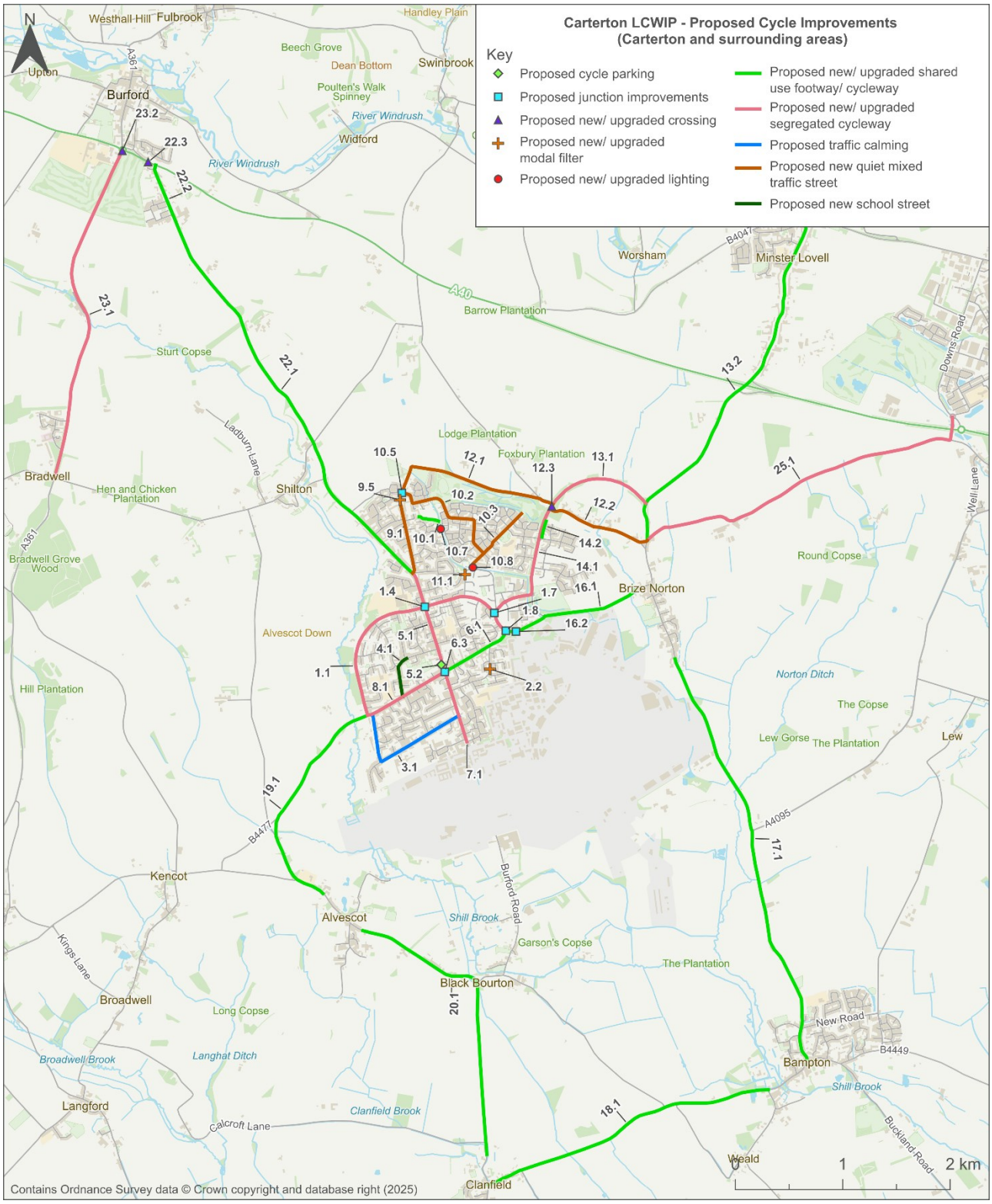


Figure 11: Proposed cycle improvements for Carterton and surrounding areas

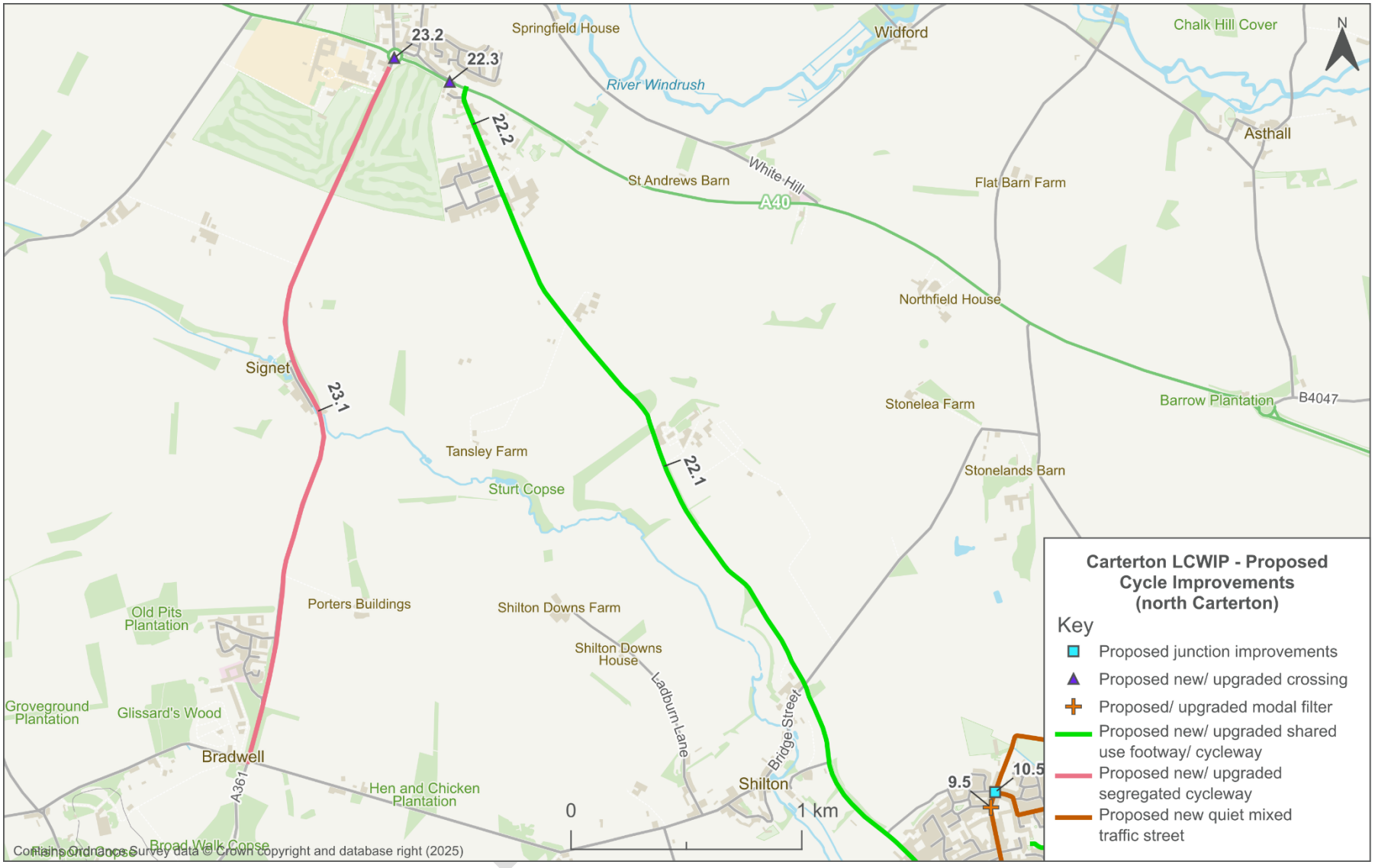


Figure 12: Proposed cycle improvements for Carterton and areas to the north

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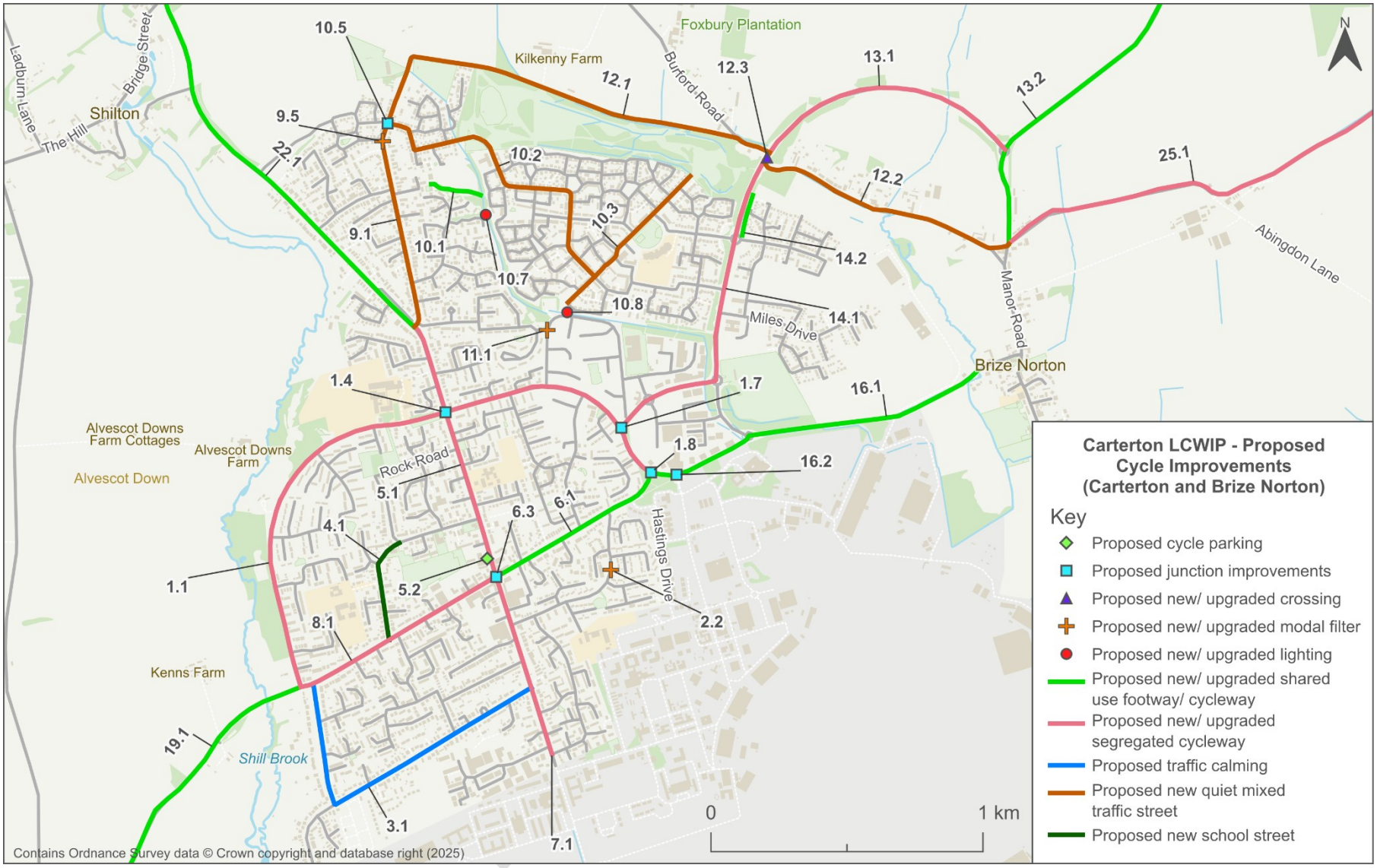

Figure 13: Proposed cycle improvements for Carterton and Brize Norton

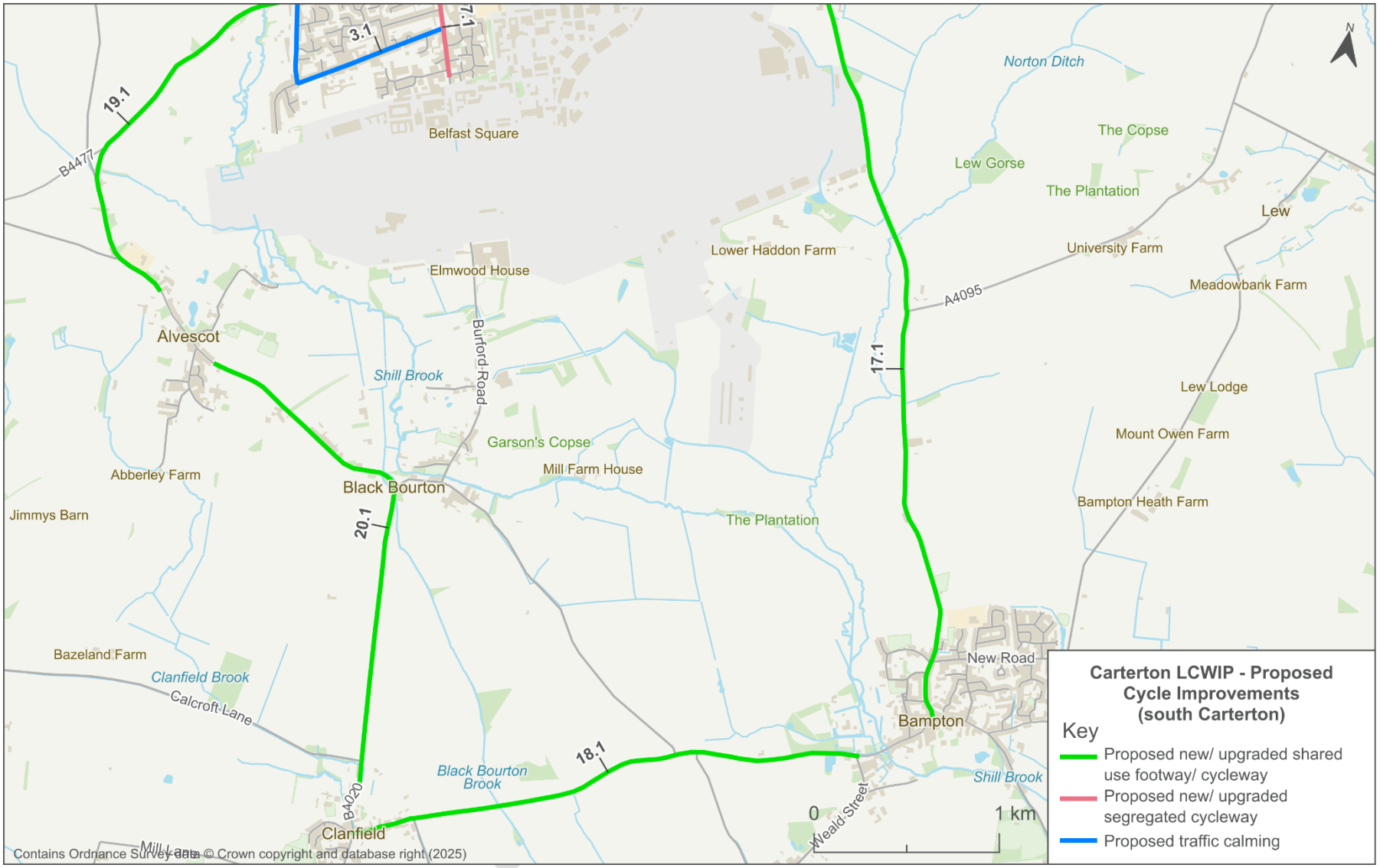

Figure 14: Proposed cycle improvements for Carterton and areas to the south

Table 3 outlines each of the improvements proposed – those that benefit cycling only (shaded red), and both walking and cycling (shaded green). These proposals should be viewed in conjunction with **Figures 11 - 14** to understand the exact location of the proposal. Some proposals contain multiple options within the description – this offers a selection of measures to consider at later design stages.

Measures that benefit walking only are shown in **Section 0**, and a map of all walking and cycling proposals can be found in **Appendix C**

Table 3: List of all cycling proposed improvements

Ref no.	Benefit to	Location	Description
1.1	Cycling	Upavon Way	Two-way segregated cycleway on the western/ northern side of Upavon Way.
1.4	Cycling	Upavon Way and Burford Road junction	Junction improvements to narrow junction bell mouths and improve cycle priority, to tie in with the segregated cycleways (Proposals 1.1 and 5.1).
1.7	Walking & Cycling	Upavon Way and Monahan Way junction	Tighten the mouth of the junction on Upavon Way and Monahan Way. Remove refuge islands at the junction and provide a pedestrian and cycle-controlled crossing.
1.8	Walking & Cycling	Upavon Way and Brize Norton Road junction	Option A: Replace mini-roundabout with a signalised T-junction with a dedicated stage for pedestrians and cyclists (to tie into cycleway proposals of 6.1 and 16.1) to cross. Option B: Install pedestrian and cycle crossings set-back from mini-roundabout junction.
2.2	Walking & Cycling	Wycombe Way, between Cranwell Avenue and Halton Road	Explore preventing rat-running between Cranwell Avenue and Halton Road whilst still allowing freight to access the Southern Industrial Estate and Morrisons.
3.1	Walking & Cycling	Milestone Road and Corbett Road	Traffic calming measures, including chicanes and kerb build outs, ensuring people cycling can navigate the infrastructure smoothly, either via a Dutch kerb or chicane bypass.
4.1*	Walking & Cycling	Lawton Avenue between Alvescot Road and Rock Close	Introduce walking and cycling accessibility measures consistent with a school street environment.
5.1	Walking & Cycling	Burford Road	Upgrade existing shared use facility on Burford Road between Alvescot Road and Swinbrook Road to be LTN 1/20 compliant by widening to the back of the footway and providing a segregated cycleway.
5.2	Cycling	Burford Road	New cycle parking outside the retail outlets on Burford Road e.g. Costa, Pharmacy.
6.1	Walking & Cycling	Brize Norton Road	Lightly segregated shared use footway/ cycleway proposed between Church View and Upavon Way, as part of development delivered by Bloor Homes. This is expected to be delivered in summer 2025. Extend and realign footway on southern side along the desire line adjacent to the carriageway up to the junction of Brize Norton Road and Upavon Way.
6.3	Walking & Cycling	Burford Road, Alvescot Road, Brize Norton Road crossroads	Upgrade the traffic signals to MOVA to improve and optimise the flow of traffic through the junction.

Ref no.	Benefit to	Location	Description
7.1	Walking & Cycling	Black Bourton Road	Upgrade existing shared use facility on Black Bourton Road between Wycombe Way and Queens Road to be LTN 1/20 compliant by widening to the back of the footway and providing a segregated cycleway.
8.1	Cycling	Alvescot Road	Two-way segregated cycleway adjacent to Alvescot Road between Burford Road and Upavon Way.
9.1	Cycling	Swinbrook Road, between Manor Road and Empire Drive	Proposed quiet mixed traffic street along the length of Swinbrook Road, marked using signage and cycle symbols on the road surface.
9.5	Cycling	Swinbrook Road, between Manor Road and Empire Drive	Parking restrictions in the form of double yellow lines in close proximity to the existing modal filter to enforce cycle access.
10.1	Walking & Cycling	Between Baldwin Mews and Harvest Bank bridge	Shared use footway/ cycleway along the southern boundary of the playing fields to connect with the existing bridge to the east by Flax Crescent.
10.2	Cycling	Elmhurst Way	Proposed quiet mixed traffic street, connecting Swinbrook Road and Sorrel Way, marked using signage and cycle symbols on the road surface.
10.3	Cycling	Sorrel Way	Proposed quiet mixed traffic street, connecting Bluebell Way and Kilkenny Lane Country Park, marked using signage and cycle symbols on the road surface.
10.5	Walking & Cycling	Swinbrook Road and Tumbler Way junction	Improve clarity of priority at crossroads by adding road markings to improve safety of all users.
10.7	Walking & Cycling	Between Boundary Lane and Strathmore Close	Install new lighting on paths leading to bridges over the small brook.
10.8	Walking & Cycling	Between Lilac Way and Northwood Crescent	Install new lighting on paths leading to bridges over the small brook.
11.1	Walking & Cycling	Northwood Crescent and York Road junction	Modal filter on the Northwood Crescent and York Road junction to prevent rat-running (note: subject to discussions with the MOD regarding land ownership).
12.1	Cycling	Kilkenny Lane	Proposed quiet mixed traffic street, connecting Swinbrook Road and Monahan Way, marked using signage and cycle symbols on the road surface.
12.2	Cycling	Burford Road	Proposed quiet mixed traffic street, connecting Manor Road and Monahan Way, marked using signage and cycle symbols on the road surface.
12.3	Walking & Cycling	Monahan Way and Burford Road junction	Replace existing uncontrolled crossing over Monahan Way to be a controlled pedestrian and cycle crossing.
13.1	Cycling	Monahan Way	Extend one-directional segregated cycleway along Monahan Way between Burford Road and Brize Norton Road (B4477) on both sides of the carriageway.
13.2	Walking & Cycling	B4477	New 3m shared use footway/ cycleway connecting Minster Lovell and Carterton via the B4477 – potential land take required. Reduce the speed limit from 50mph to 40mph along Monahan Way and B4477 between Burford Road/ Monahan Way and the entrance to Minster Lovell on Brize Norton Road.
14.1	Walking & Cycling	Monahan Way	Upgrade existing shared use facility to include a one-directional segregated cycleway on both sides of the carriageway.

Ref no.	Benefit to	Location	Description
14.2	Walking & Cycling	Monahan Way, between Burford Road and Bellenger Way	New footway to connect existing shared use between Burford Road and Bellenger Way on the eastern side of Monahan Way.
16.1	Walking & Cycling	Carterton Road	Widen existing shared use footway/ cycleway to be LTN 1/20 compliant along Carterton Road – land take may be required on northern side of carriageway on approach to Brize Norton.
16.2	Walking & Cycling	Carterton Road and RAF Brize Norton junction	Narrow junction mouth to reduce crossing width for people cycling and walking.
17.1	Walking & Cycling	Station Road (joining A4095)	New 3m shared use footway/ cycleway connecting Brize Norton and Bampton. Reduce the speed limit from 60mph to 40mph along Station Road. Some pinch points identified near the runway lights and old farm bridge - this will need to be assessed at the feasibility stage to understand potential options e.g. land take.
18.1	Walking & Cycling	Clanfield Road and Bampton Road (A4095)	New 3m shared use footway/ cycleway connecting Bampton and Clanfield. Reduce the speed limit from 60mph to 40mph along A4095.
19.1	Walking & Cycling	B4477 and B4020	New 3m shared use footway/ cycleway between B4477/ Willow Meadows entrance and B4020/ Alvescot village. Pinch point on the bridge on B4020/ Ford Road junction to be considered. Reduce the speed limit from 60mph to 40mph along B4477 and B4020.
20.1	Walking & Cycling	Station Road (B4020)	New 3m shared use footway/ cycleway between B4020/ exit of Alvescot and B4020/ Calcroft Lane junction. Reduce the speed limit from 60mph to 40mph along B4020, between Calcroft Lane/ B4020 and Yellow Gate Farm.
22.1	Walking & Cycling	Shilton Road (B4020)	New 3m shared use footway/ cycleway between Burford Road/ Swinbrook Road junction and A40/ B4020 junction. Reduce the speed limit from 60mph to 40mph along B4020 (Shilton Road), between Bridge Street and Burford Garden Centre.
22.2	Walking & Cycling	Shilton Road (B4020)	Narrow the carriageway width and widen the footway to provide a 3m shared use footway/ cycleway connecting Cotswold Gate housing development with the A40/ B4020 junction.
22.3	Walking & Cycling	A40 and Shilton Road junction	Option A: Move the existing pedestrian crossing over the A40 to the east to Shilton Road, and upgrade to include pedestrians and cyclists.
			Option B: New pedestrian and cycle-controlled crossing over the A40 to tie in with proposed shared use footway/ cycleway at the end of B4020 (Shilton Road).
			Option C: Signalise A40/ B4020 (Shilton Road) junction with crossing facilities on each arm for people cycling and walking.
			Option D: Reduce right turn pocket length on the A40, widen the footway to be shared use between Shilton Road and the existing crossing, and upgrade to a pedestrian and cycle-controlled crossing.
23.1	Cycling	A361	One-way segregated uphill cycle lanes on steep sections. Reduce the speed limit from 60mph to

Ref no.	Benefit to	Location	Description
			40mph along A361, between A40 roundabout and the A361/ Sunblad Avenue junction.
23.2	Walking & Cycling	A40/ The Hill roundabout	Upgrade uncontrolled crossings to be controlled crossings on each arm of the A40/ The Hill roundabout.
25.1	Cycling	Witney Road	Option A: Two-way segregated cycleway running adjacent to the carriageway on Witney Road between Manor Road/ Burford Road, Brize Norton and Downs Road/ Centenary Way junction, Curbridge. Reduce the speed limit from 60mph to 40mph along Witney Road, between Downs Road and Elm Grove.
	Walking & Cycling		Option B: Shared use footway/ cycleway or similar reasonable alternatives, which would deliver cycle provision away from motorised vehicles, running adjacent to the carriageway on Witney Road between Manor Road/ Burford Road, Brize Norton and Downs Road/ Centenary Way junction, Curbridge. Reduce the speed limit from 60mph to 40mph along Witney Road, between Downs Road and Elm Grove.
*denotes proposals that relate directly to improving connections to schools			

Figure 15 has been produced to detail the future expected cycle network in Carterton, if all the cycling proposals were to be installed. Dashed lines signify future routes, whereas the solid line signify existing provision, whether that be on or off road.

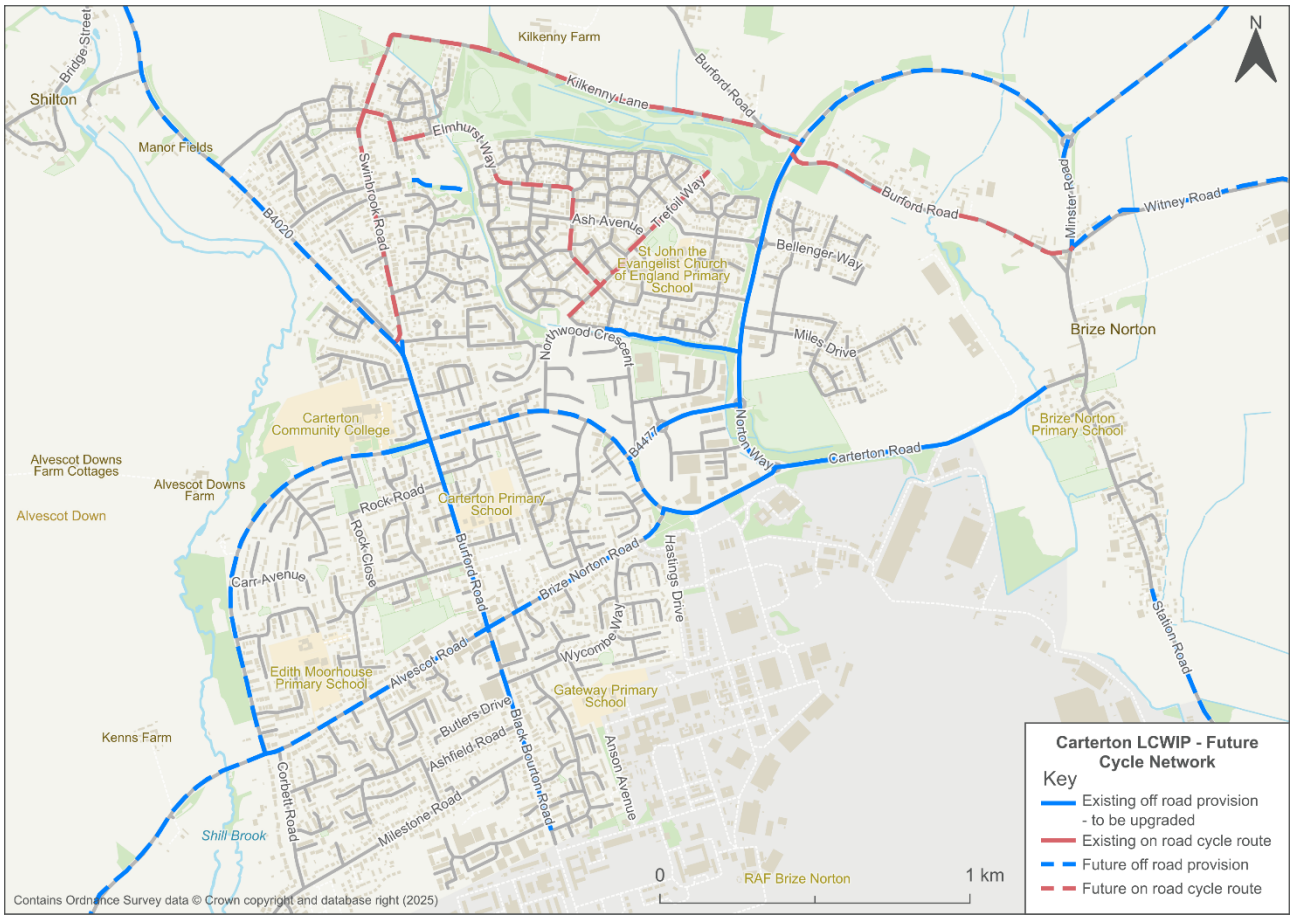

Figure 15: Carterton Future Cycle Network

4. Network Planning for Walking

Chapter Overview: This chapter outlines the methodology for developing the walking network for Carterton and the surrounding area and proposed improvements to this. This includes identifying where people would like to travel (trip generators e.g. shops, schools, employment areas, medical facilities). These places are then grouped into core walking zones depending on proximity, and walking routes between core walking zones are identified to form a walking network for Carterton and the surrounding area. Following this, walking routes within core walking zones and the connections between these are audited using standardised criteria that assesses quality, and improvements are suggested including more crossings, wider footpaths and more footpaths. Improvements are proposals and further work beyond the LCWIP is needed to develop these into deliverable schemes.

4.1. Methodology

4.1.1. Identifying core walking zones

Due to the rural nature and large extent of the study area, the walking network of this LCWIP primarily focusses on Carterton town centre, as well as connections to Brize Norton village. The development of the walking network as part of this LCWIP has combined the recommended use of Active Travel England's Walking Route Assessment Tool (WRAT), as well as local input and knowledge from key stakeholders including officers from OCC, and councillors from WODC and Carterton Town Council.

Using the trip generators identified as part of the generation of the cycle network, a walking network has been established. A core walking zone (CWZ), consisting of (supermarkets and other named amenities) with a 400m radius has been identified.

The key walking routes within a 2km radius, or a 30-minute walk, of the CWZ are also identified and mapped. On average, most people choose to walk up to 2km for a local trip; however, it is known that some people will choose to walk further.

The core walking zone, and associated further 2km radius, has been mapped in **Figure 16**. The large majority of Carterton is encompassed within the 2km catchment, with only a section of the Shilton Park housing development not included. Carterton Road, the connection to Brize Norton village, is included within the further 2km catchment.

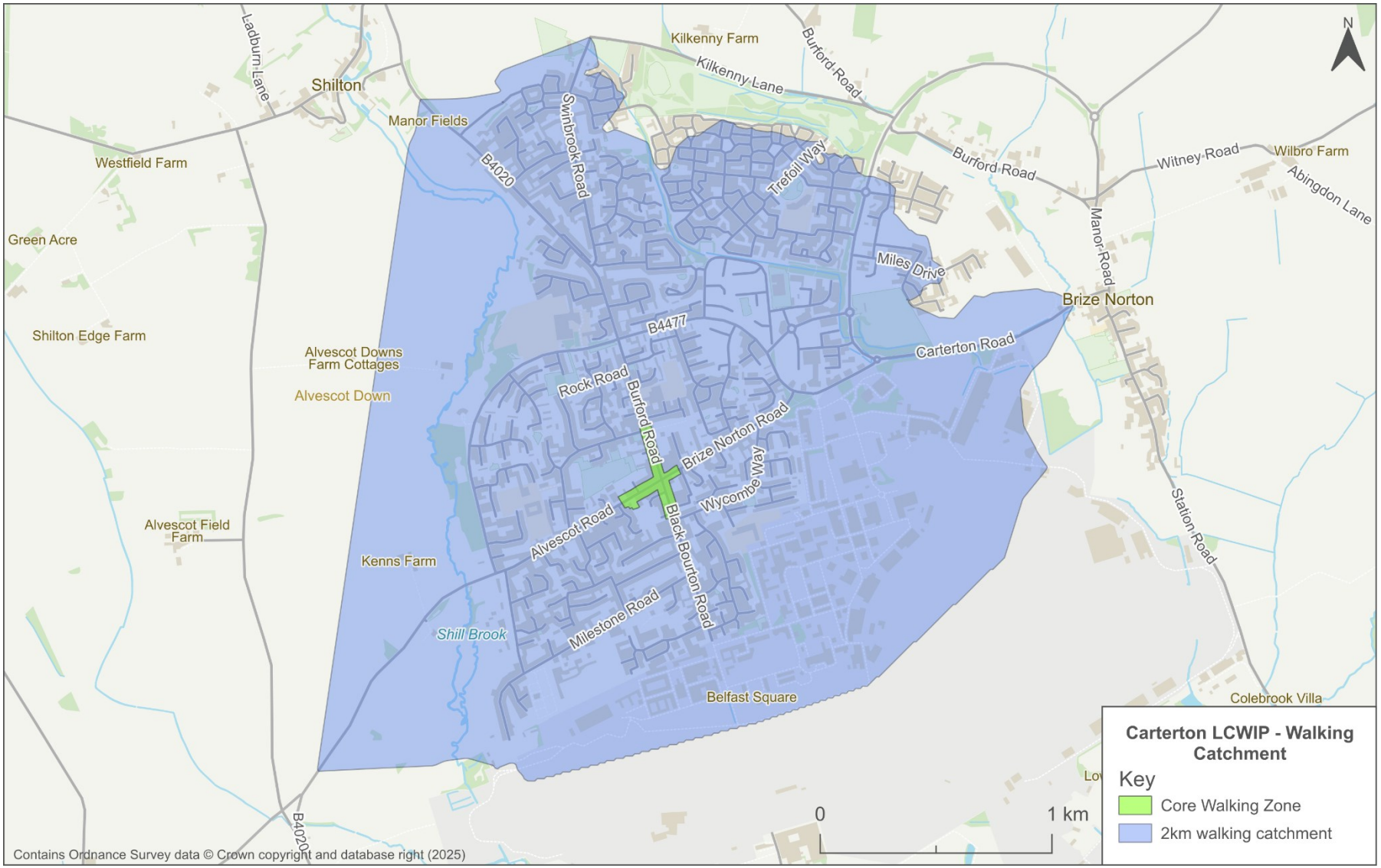

Figure 16: Carterton Core Walking Zone and 2km Walking Catchment

4.1.2. Identifying a hierarchy of walking routes

Following the identification of the CWZ and the 2km radius, the key pedestrian routes that serve the CWZ have been located and mapped. The walking hierarchy map is used to illustrate the different roles that each road has with regards to walking preference. The routes are mapped in **Figure 17**, with the routes defined in four main categories which include:

- **Prestige/ Primary Walking Routes** – very busy areas of town, with high public space and street scene contribution and main walking routes;
- **Secondary Walking Routes** – medium, usage routes through local areas feeding into primary routes, local shopping centres, etc;
- **Link Footways** – linking local access footways through urban areas and busy rural footways; and
- **Local Access Footways** – footways associated with low usage, short estate roads to the main roads and cul-de-sacs.

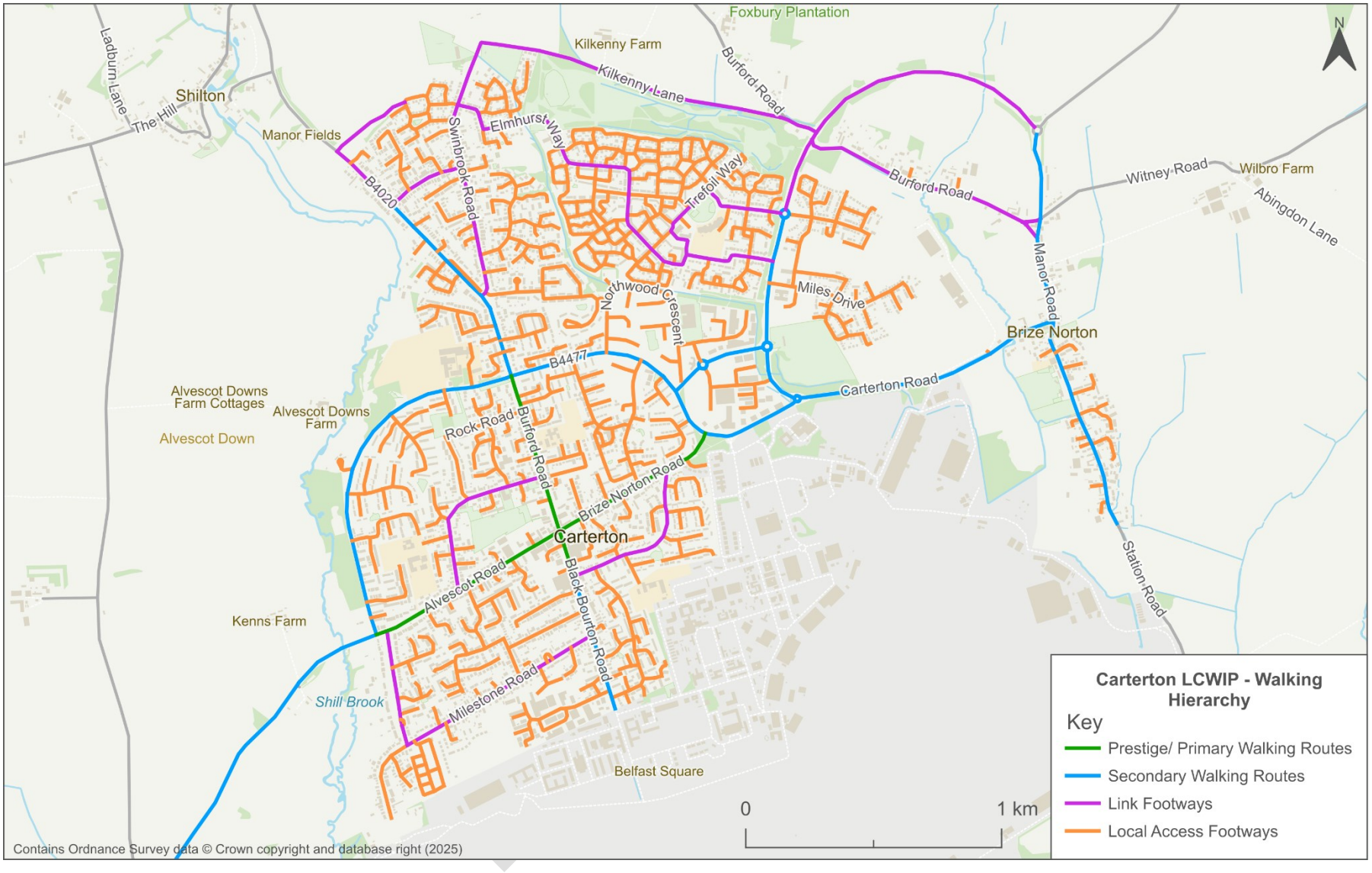

Figure 17: Carterton Existing Walking Network Hierarchy Map

4.2. Carterton walking network

The same trip attractors and generators used as part of the generation of the cycle network have also been used for the walking network.

During the site visit in February, the existing walking facilities were audited, with comments recorded and categorised into the following classes:

- **Barriers** – Physical barriers or gates block a route or access
- **Gradient** – A significant change in gradient up or down hill which may impact an people walking
- **Missing/ inconsistent or substandard infrastructure** – Missing infrastructure such as dropped kerbs or tactile paving causing a safety concern for people walking. Infrastructure is not LTN 1/20 compliant
- **Maintenance issue** – Substandard surface conditions on footways and crossings effecting people walking
- **Narrow footway** – Footway narrows, either due to physical constraints, or due to overgrown vegetation
- **Parking issue** – Poorly parked vehicles causing an inconvenience to people walking
- **Unattractive for people walking** – Safety concern, such as a high maximum speed limit, which may deter people walking from using that route
- **Signage/ wayfinding incorrect/ missing or redundant** – A route that is missing an obvious sign, or the signage that is in place is wrong
- **Other** – Any other issue or comment noted that effects people walking

These categories capture the underlying themes of the five core design outcomes for walking routes used when completing the WRAT for each route. These five design outcomes closely align with the core design outcomes for cycling and are defined for walking purposes in **Figure 18**. These core outcomes have been considered during the further stages of suggesting network improvements in **Section 4.3**.

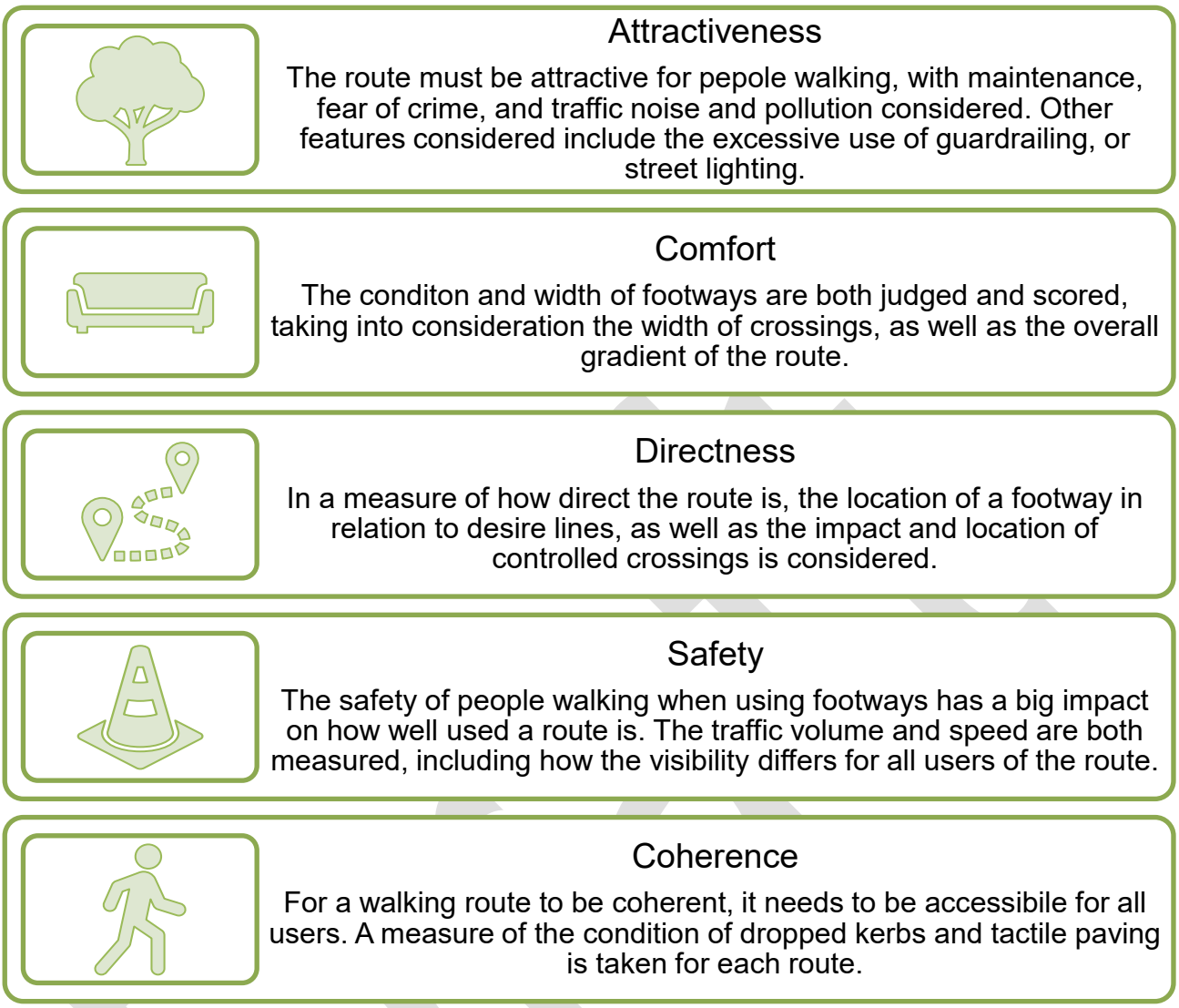

Figure 18: Core Design Outcomes for Walking

4.3. Proposed Walking Network Improvements

Following the site visit in February, and the review of comments collated on site and completed WRAT forms, proposals have been developed to address the issues that were identified. As part of this process, an intervention toolkit was developed, giving examples of the different types of infrastructure that have been proposed; this is illustrated in **Table 4**. This table should be read in conjunction with **Table 2**, which details the measures that also benefit cycling.

Table 4: Walking Improvements Toolkit

Types of Improvements	
 (Source: Pell Frischmann)	**Dropped kerbs** – Features to facilitate non-stepped access to allow wheelchair users and people with pushchairs to cross the road unimpeded
 (Source: Pell Frischmann)	**Tactile paving** – There are different types of tactile paving with the purpose providing a warning to visually impaired people who would otherwise find it difficult to differentiate between where the footway ends, and the carriageway begins.
 (Source: Pell Frischmann)	**Controlled pedestrian crossings** – There are three types of controlled pedestrian crossings (in addition to those described in **Table 2**): Zebra, Pelican and Puffin. **Zebra** – These crossings are marked out by black and white stripes across the road with flashing beacons and zig zag markings. **Pelican** – These require people walking to press the button and wait for the green man to appear before crossing the road. **Puffin** – These are like Pelican crossings in that they require the pedestrian to press the button. However, they are more advanced than Pelican crossings as they can detect pedestrians in the waiting area and whilst they are crossing the road.
 (Source: Pell Frischmann)	**Uncontrolled pedestrian crossings** – These crossings commonly assist pedestrians in crossing side roads along a main route. These may include dropped kerbs, tactile paving and a refuge island if the road width suffices. These may be used in areas with lower traffic flows, where a controlled crossing would be unsuitable.

(Source: Pell Frischmann)

Raised table – A raised table is a form of traffic calming which aims to slow the speed of vehicles and to emphasise features such as crossing points. They are sometimes used at the entry of a side road to help pedestrians cross the road without the need for dropped kerbs, or at full junctions.

(Source: Pell Frischmann)

New footway – A new footway to be built adjacent to the carriageway, with a desired width of 2m to be fully accessible.

Footway widening – Widening of footways that run beside a carriageway to provide greater space for people to walk to wait, to reduce the crossing distances or to improve the visibility between pedestrians and other road users.

(Source: Google Maps)

Continuous footway/ side-road entry treatment – Junctions with side road treatment are continuous sections of footway across a side road, where the material differs from the carriageway material to provide people walking with a greater sense of priority, in line with the Highway Code.

(Source: Google Maps)

Narrow junction mouth – Narrowing the junction bell mouth involves reducing the width of a road to reduce crossing distances for people walking. It can be used to enhance safety of people crossing the road by minimising the distance people need to cross, reducing their exposure to vehicles. This can be done by building out the kerb.

(Source: Pell Frischmann)

Segregated cycleway – Whilst mainly benefiting a people cycling, by creating a fully segregated cycleway, where an existing shared use footway/ cycleway is being upgraded, benefits can be seen by pedestrians too, as they now have a dedicated space away from cyclists.

(Source: VeeLite)

Lighting – Installing new or upgraded lighting can provide greater encouragement for walking after-dark. It can improve the visibility of hazards, as well as increasing reassurance and reducing fear of crime.

The walking improvements proposed for Carterton and the surrounding area are shown in **Figure 19**. A more detailed overview of the proposed improvements in Carterton town centre can also be seen in **Figure 21**. For the ease of readers, **Figure 19** has also been split into two maps covering the north of Carterton town centre in **Figure 20** and the south of

Carterton in **Figure 22**. The reference numbers shown on the maps refer to the measures described in Error! Reference source not found..

The improvements identified are high-level proposals but are considered feasible based on initial observations and desktop measurements and are in line with LTN 1/20 and LCWIP guidance. Any route or improvement identified will require further feasibility and design work, along with public consultation, before being implemented. All existing committed proposals have also been taken into consideration when proposing the improvements.

As part of the overall proposed improvements detailed in **Table 5**, a series of design principles have been identified to help deliver consistency and high-quality infrastructure when undertaking future feasibility design. These principles include:

- **Narrow junction mouth radius, with side-road treatment and Dutch kerbs (entrance kerbs) at segregated cycleways** – side road crossing treatments are designed to minimise conflicts between people walking, cycling and motor vehicles. They enable footways to run at a continuous, raised, flat level across minor side roads, clearly maintaining the legal priority of people walking over motor vehicles turning into or out of a minor side road. The steep gradient to transition from road level to footway level forces motor vehicles to slow, increasing safety for people walking. These measures should be considered where junction improvements are being made.
- **Wayfinding and signage** – updated wayfinding and signage throughout a town makes active travel more accessible and attractive for all users. Signage should include information about distances, destinations and direction, with a consistent branding to maintain an easy navigation throughout. Cycleway markings can also be used to clarify routings.
- **Removal of staggered crossings** –refuges for people cycling and walking at staggered crossings on some smaller junctions are unnecessary and therefore, these should be removed wherever deemed appropriate, to allow people cycling and walking to cross straight across the junction in one movement. This will improve consistency and make cycling and walking more attractive.

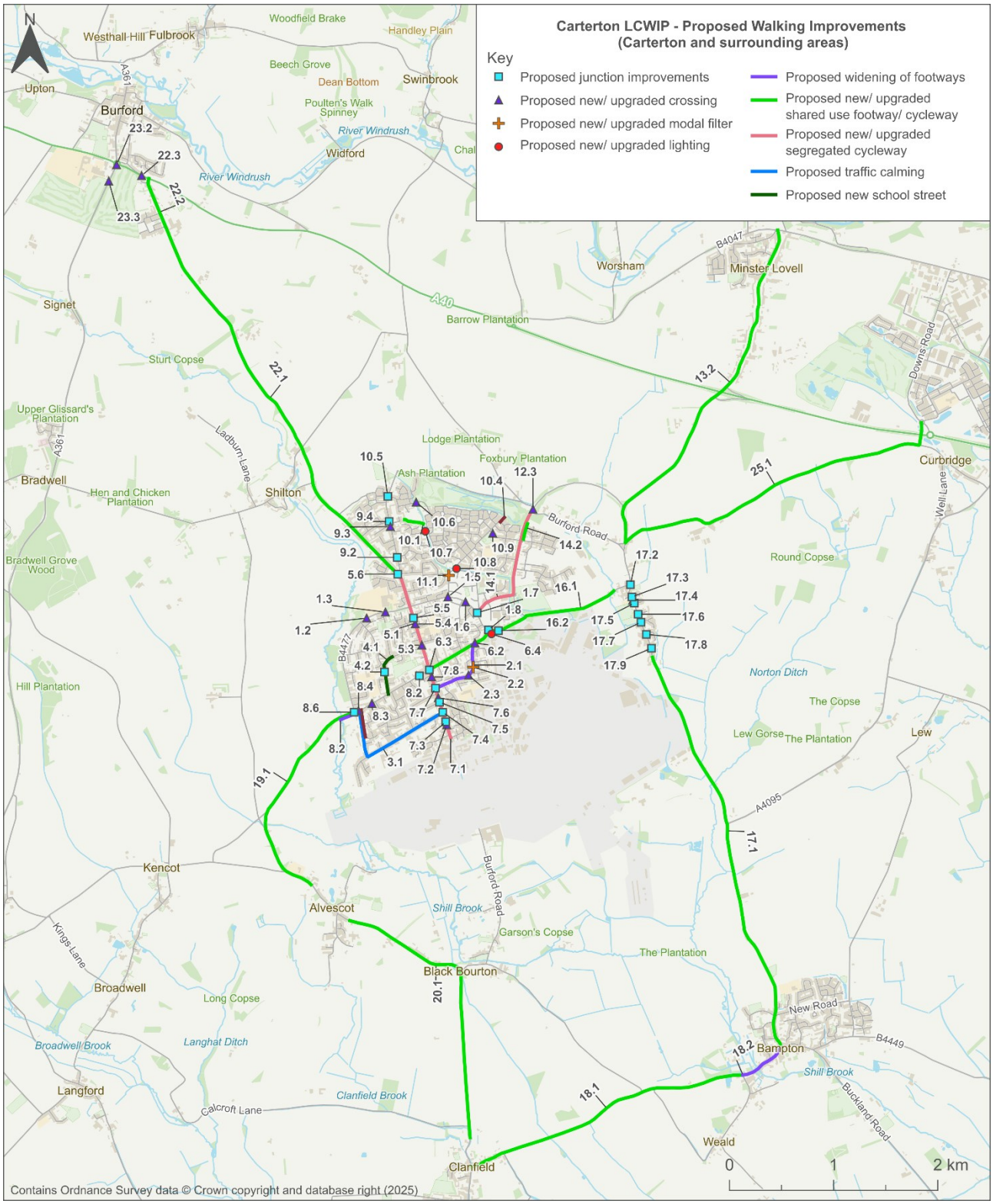

Figure 19: Proposed walking improvements for Carterton and surrounding areas

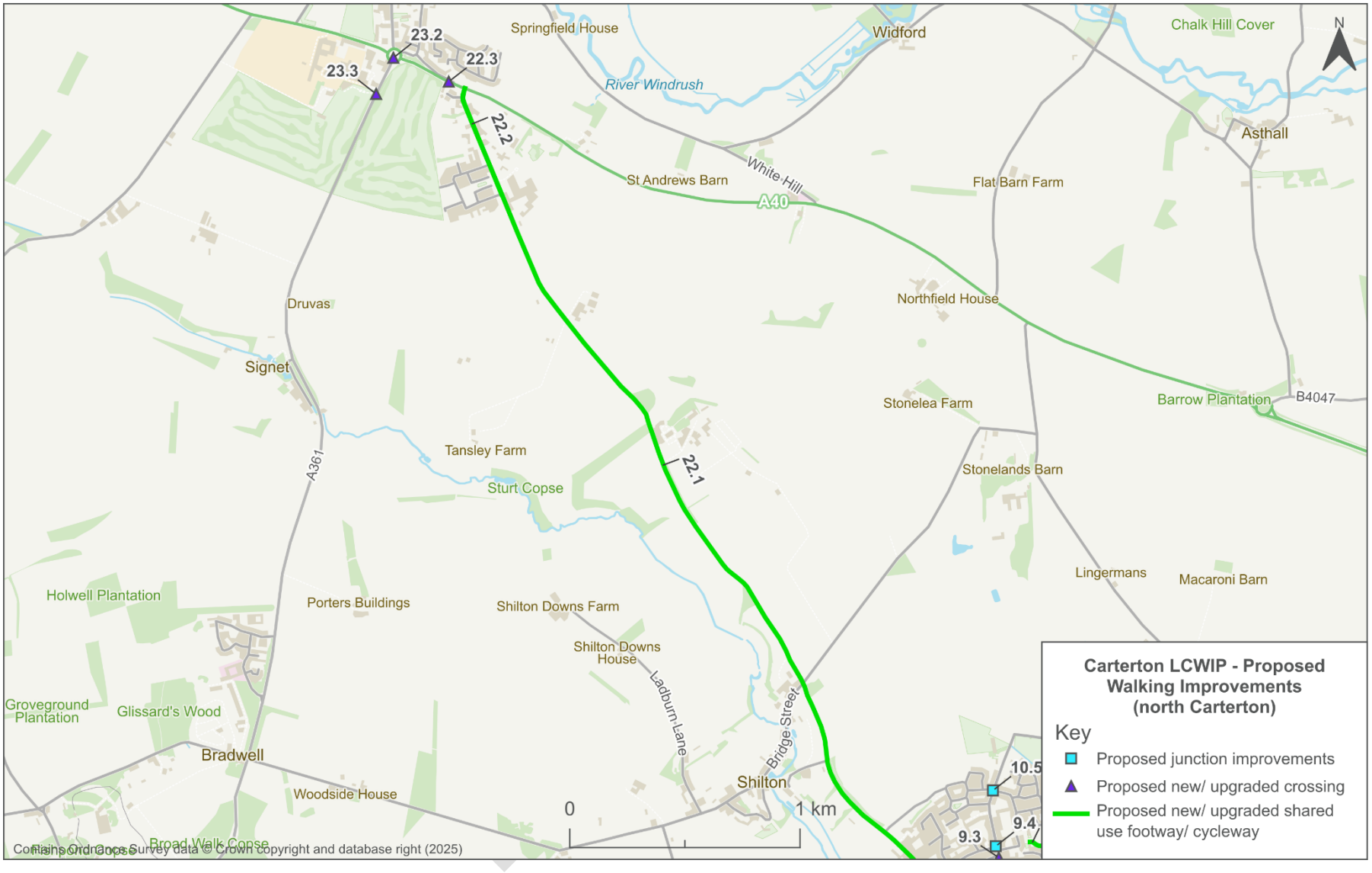

Figure 20: Proposed walking improvements for north Carterton

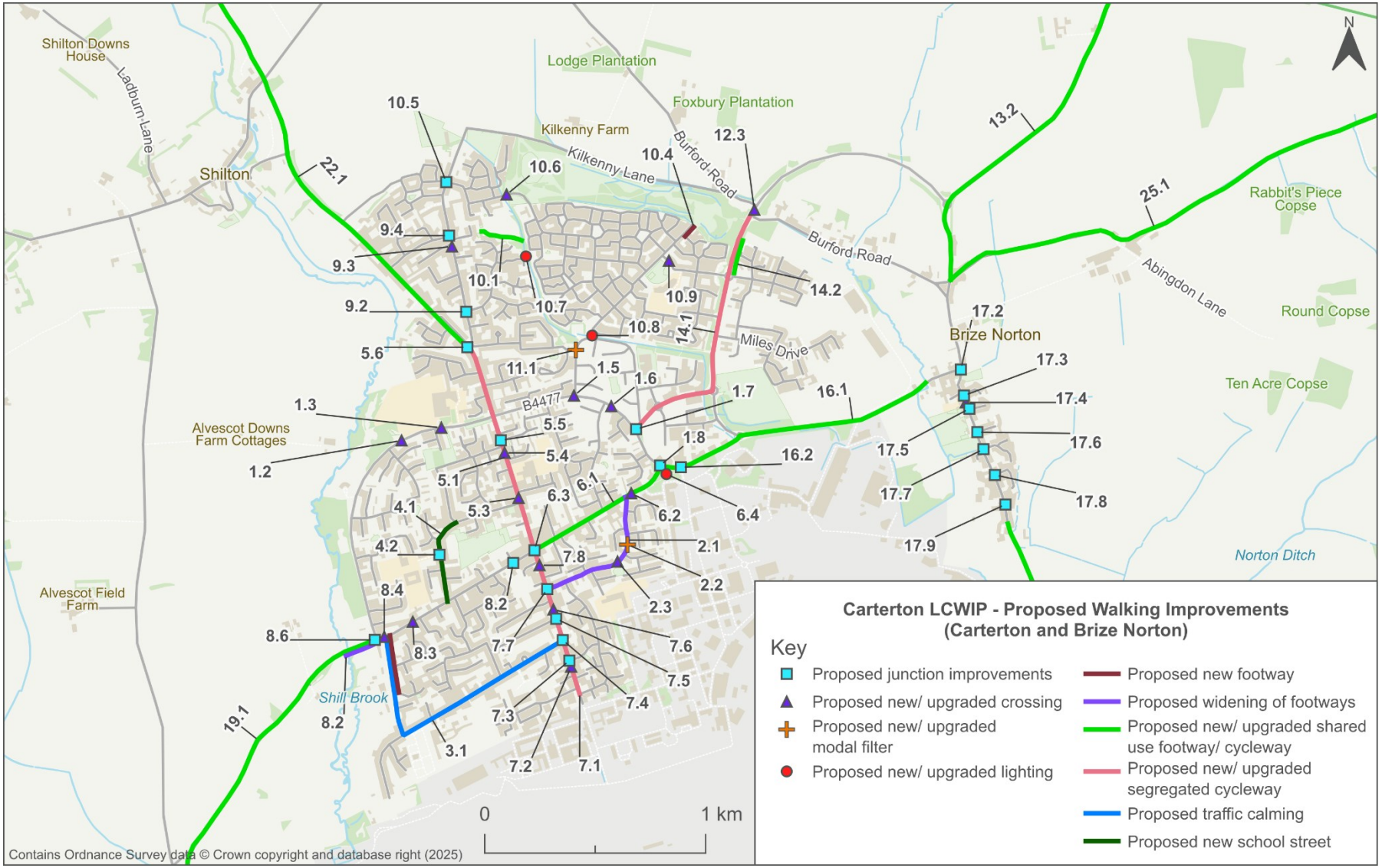

Figure 21: Proposed walking improvements for Carterton and Brize Norton

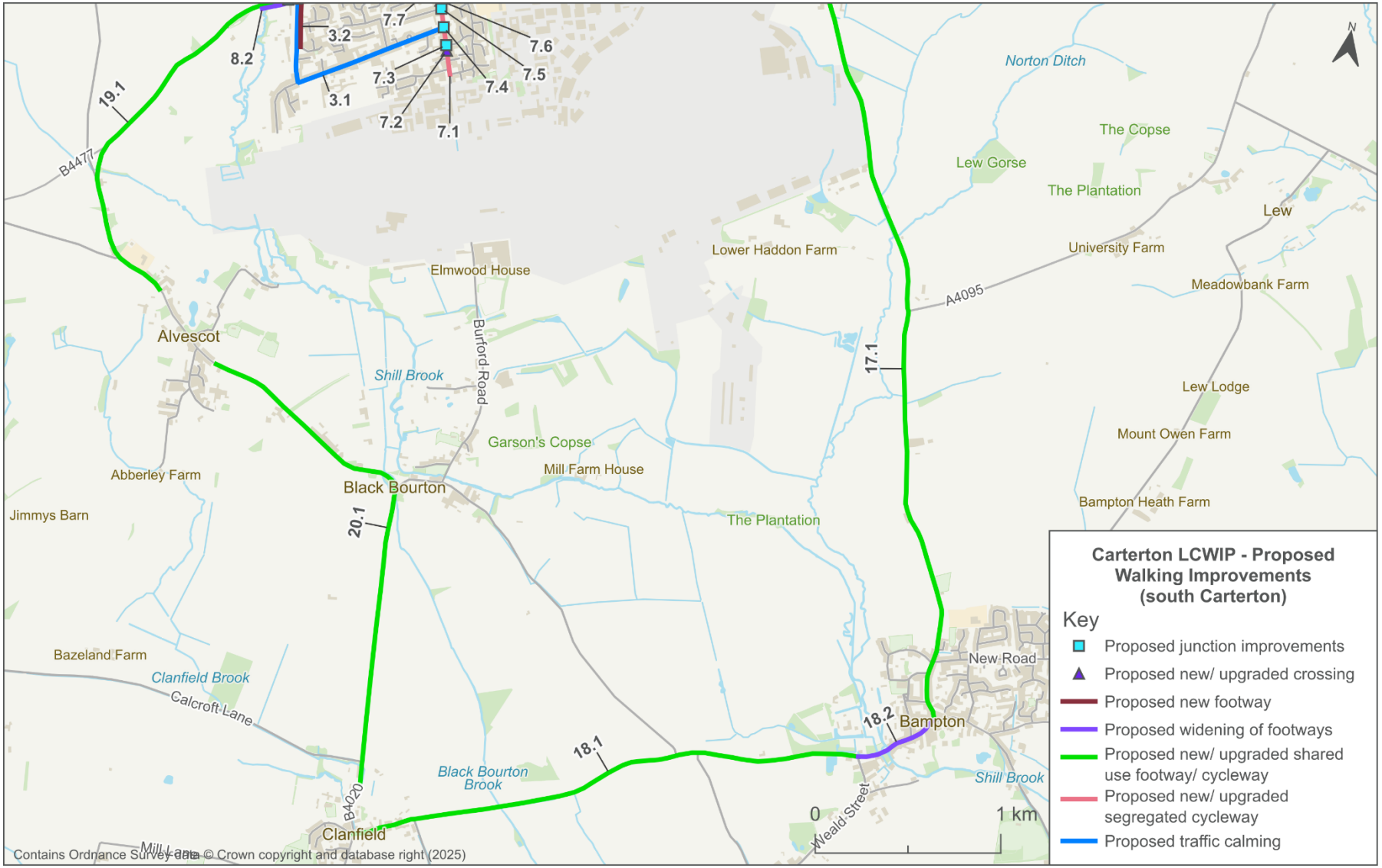

Figure 22: Proposed walking improvements for south Carterton

Table 5 describes each of the measures proposed – including those that benefit walking only (shaded purple), and both walking and cycling (shaded green). These proposals should be viewed in conjunction with **Figure 19** replicating those walking and cycling improvements outlined in **Section 0**. Proposals marked with an asterisk symbol (*) denotes those that relate directly to improving connections to schools.

A map of all cycling and walking proposals can be found in **Appendix C** respectively.

Table 5: List of all walking proposed improvements

Ref no.	Benefit to	Location	Description
1.2	Walking	Upavon Way, between Faulder Avenue and Lord Close	New controlled pedestrian crossing over Upavon Way to access the Skate Park.
1.3*	Walking	Upavon Way, between Lord Close and Burford Road	Relocate uncontrolled pedestrian crossing over Upavon Way to access Carterton Community College to be out of the bus stop cage. Reduce gradient to access the crossing from the footway. Introduce accessible bus waiting facilities.
1.5	Walking	Upavon Way, between Mason Close and Northwood Crescent	New at-grade controlled pedestrian crossing over Upavon Way close to the junction of Northwood Crescent.
1.6	Walking	Upavon Way, between Stanmore Crescent and Colerne Road	New controlled pedestrian crossing over Upavon Way to provide an alternative to the existing subway.
1.7	Walking & Cycling	Upavon Way and Monahan Way junction	Tighten the mouth of the junction on Upavon Way and Monahan Way. Remove refuge islands at the junction and provide a pedestrian and cycle-controlled crossing.
1.8	Walking & Cycling	Upavon Way and Brize Norton Road junction	Option A: Replace mini-roundabout with a signalised T-junction with a dedicated stage for pedestrians and cyclists (to tie into cycleway proposals of 6.1 and 16.1) to cross.
			Option B: Install convenient pedestrian and cycle crossings set-back from mini-roundabout junction.
2.1	Walking	Wycombe Way	Widen footways to increase safety of pedestrians along the length of Wycombe Way.
2.2	Walking & Cycling	Wycombe Way, between Cranwell Avenue and Halton Road	Explore preventing rat-running between Cranwell Avenue and Halton Road whilst still allowing freight to access the Southern Industrial Estate and Morrisons.
2.3*	Walking	Wycombe Way	Upgrade the signalised crossing over Wycombe Way to have a raised table.
3.1	Walking & Cycling	Milestone Road and Corbett Road	Traffic calming measures, including chicanes and kerb build outs, ensuring cyclists can navigate the infrastructure smoothly, either via a Dutch kerb or chicane bypass.
3.2	Walking	Corbett Road between The Maples and Alvescot Road	New footway on the eastern side of Corbett Road, with side-road treatments over Mayfield Close.
4.1*	Walking & Cycling	Lawton Avenue between Alvescot Road and Rock Close	Introduce walking and cycling accessibility measures consistent with a school street environment.
4.2*	Walking	Lawton Avenue and the school entrances junction	Tighten junction mouth and widen footways on the junction of Lawton Avenue and the school entrances.

Ref no.	Benefit to	Location	Description
5.1	Walking & Cycling	Burford Road	Upgrade existing shared use facility on Burford Road between Alvescot Road and Swinbrook Road to be LTN 1/20 compliant by widening to the back of the footway and providing a segregated cycleway.
5.3*	Walking	Burford Road, between Arkell Avenue and Sellwood Drive	Controlled pedestrian crossing over Burford Road between Arkell Avenue and Sellwood Drive.
5.4*	Walking	Burford Road, between St John's Drive and Rock Road	Controlled pedestrian crossing over Burford Road between St John's Drive and Rock Road.
5.5	Walking	Burford Road and Northolt Road junction	Replace mini-roundabout with a T-junction, and narrow the width of the junction mouth, providing a continuous footway over Northolt Road.
5.6	Walking	Burford Road and Swinbrook Road junction	Replace mini-roundabout with a T-junction, and narrow the width of the junction mouth, providing a continuous footway over Swinbrook Road.
6.1	Walking & Cycling	Brize Norton Road	Lightly segregated facility proposed between Church View and Upavon Way, delivered by Bloor Homes. This is expected to be delivered in summer 2025. Extend and realign footway on southern side along the desire line adjacent to the carriageway up to the junction of Brize Norton Road and Upavon Way.
6.2	Walking	Brize Norton Road, east of Wycombe Way	Controlled pedestrian crossing delivered by Bloor Homes on Brize Norton Road between Wycombe Way and Upavon Way.
6.3	Walking & Cycling	Burford Road, Alvescot Road, Brize Norton Road crossroads	Upgrade the traffic signals to MOVA to improve and optimise the flow of traffic through the junction.
6.4	Walking	Link between Carterton Road and Brize Norton Road	Improve lighting on footway set-back from carriageway linking RAF Brize Norton entrance and Brize Norton Road.
7.1	Walking & Cycling	Black Bourton Road	Upgrade existing shared use facility on Black Bourton Road between Wycombe Way and Queens Road to be LTN 1/20 compliant by widening to the back of the footway and providing a segregated cycleway.
7.2	Walking	Black Bourton Road, between Pampas Close and Lancaster Place	Controlled pedestrian crossing over Black Bourton Road between Pampas Close and Lancaster Place.
7.3	Walking	Black Bourton Road and Pampas Close junction	Replace the mini-roundabout with a T-junction, providing a continuous footway over Pampas Close.
7.4	Walking	Black Bourton Road and Milestone Road junction	Replace the mini-roundabout with a T-junction, providing a continuous footway over Milestone Road.
7.5	Walking	Black Bourton Road and Ashfield Road junction	Replace the mini-roundabout with a T-junction, providing a continuous footway over Ashfield Road.
7.6	Walking	Black Bourton Road, between Butler's Drive and Ashfield Road	Upgrade existing uncontrolled crossing to a controlled pedestrian crossing over Black Bourton Road.
7.7	Walking	Black Bourton Road and Wycombe Way junction	Replace the mini-roundabout with a T-junction, providing a continuous footway over Wycombe Way.
7.8	Walking	Black Bourton Road south of Asda mini-roundabout	New controlled pedestrian crossing over Black Bourton Road south of the Asda supermarket.

Ref no.	Benefit to	Location	Description
8.2	Walking	B4477, between Upavon Way and Willow Meadows entrance	Widen footways on the southern side of Alvescot Road to access Willow Meadow.
8.3	Walking	Alvescot Road and Carterton Library junction	Replace the mini-roundabout with a T-junction, providing a continuous footway over the side-road adjacent to Carterton Library.
8.4*	Walking	Alvescot Road, between Alderley Close and Hammett Place	New controlled pedestrian crossing over Alvescot Road at the end of Edith Moorhouse Primary School alleyway.
8.5	Walking	Alvescot Road, between Corbett Road and Upavon Way	New controlled pedestrian crossing over Alvescot Road.
8.6	Walking	Alvescot Road and Upavon Way junction	Replace mini-roundabout with a T-junction, with a raised table to slow drivers entering Carterton.
9.2	Walking	Swinbrook Road and Glenmore Road junction	Narrow the junction mouth width, providing a continuous footway across the junction.
9.3	Walking	Swinbrook Road, south of Wychwood Close	New uncontrolled crossing over the carriageway on Swinbrook Road to access footway on western side of carriageway.
9.4	Walking	Swinbrook Road and Shillbrook Avenue junction	Narrow the junction mouth width, providing a continuous footway across the junction.
10.1	Walking & Cycling	Between Baldwin Mews and Harvest Bank bridge	Shared use footway/ cycleway along the southern boundary of the playing fields to connect with the existing bridge to the east by Flax Crescent.
10.4	Walking	Adjacent to Trefoil Way between Meadow Way and Kilkenny Lane Country Park	New footway adjacent to Trefoil Way, extending the existing footway connection to Kilkenny Lane Country Park.
10.5	Walking & Cycling	Swinbrook Road and Tumbler Way junction	Improve clarity of priority at crossroads by adding road markings to improve safety of all users.
10.6	Walking	Elmhurst Way, next to the car park for Kilkenny Lane Country Park	Controlled pedestrian crossing over Elmhurst Way to access Kilkenny Lane Country Park.
10.7	Walking & Cycling	Strathmore Close to Boundary Lane bridge	Improved lighting on the routes leading to the bridges over the brook along Brome Way.
10.8	Walking & Cycling	Lilac Way to Northwood Crescent bridge	Improved lighting on the routes leading to the bridges over the brook along Brome Way.
10.9*	Walking	Teasel Way	Controlled pedestrian crossing over Teasel Way for access from northern side of carriageway to play area and St John's Primary school to the south.
11.1	Walking & Cycling	Northwood Crescent and York Road junction	Modal filter on the Northwood Crescent and York Road junction to prevent rat-running (note: subject to discussions with the MOD regarding land ownership).
12.3	Walking & Cycling	Monahan Way and Burford Road junction	Replace existing uncontrolled crossing over Monahan Way to be a controlled pedestrian and cycle crossing.
13.2	Walking & Cycling	B4477	New 3m shared use footway/ cycleway connecting Minster Lovell and Carterton via the B4477 – potential land take required. Reduce the speed limit from 50mph to 40mph along Monahan Way and B4477 between Burford Road/ Monahan Way and the entrance to Minster Lovell on Brize Norton Road.

Ref no.	Benefit to	Location	Description
14.1	Walking & Cycling	Monahan Way	Upgrade existing shared use facility to include a one-directional segregated cycleway on both sides of the carriageway.
14.2	Walking & Cycling	Monahan Way, between Burford Road and Bellenger Way	New footway to connect existing shared use between Burford Road and Bellenger Way on the eastern side of Monahan Way.
16.1	Walking & Cycling	Carterton Road	Widen existing shared use footway/ cycleway to be LTN 1/20 compliant along Carterton Road – land take may be required on northern side of carriageway on approach to Brize Norton.
16.2	Walking & Cycling	Carterton Road and RAF Brize Norton junction	Narrow junction mouth to reduce crossing width for pedestrians and cyclists.
17.1	Walking & Cycling	Station Road (joining A4095)	New 3m shared use footway/ cycleway connecting Brize Norton and Bampton. Reduce the speed limit from 60mph to 40mph along Station Road. Some pinch points identified near the runway lights and old farm bridge - this will need to be assessed at the feasibility stage to understand potential options e.g. land take.
17.2*	Walking	Carterton Road, Manor Road and Station Road junction	Replace the mini-roundabout with a T-junction, providing a pedestrian crossing over Manor Road.
17.3	Walking	Station Road and Daubigny Mead junction	Narrow junction mouth to reduce crossing width, and provide a continuous footway to emphasise pedestrian priority in line with highway code.
17.4*	Walking	Station Road, between Daubigny Mead and Squires Close	New controlled pedestrian crossing over Station Road outside of current Brize Norton Primary School.
17.5	Walking	Station Road and Squires Close junction	Narrow junction mouth to reduce crossing width, and provide a continuous footway to emphasise pedestrian priority in line with highway code.
17.6	Walking	Station Road and The Fosseway junction	Narrow junction mouth to reduce crossing width, and provide a continuous footway to emphasise pedestrian priority in line with highway code.
17.7	Walking	Station Road and Chichester Place junction	Narrow junction mouth to reduce crossing width, and provide a continuous footway to emphasise pedestrian priority in line with highway code.
17.8	Walking	Station Road and Chestnut Close junction	Narrow junction mouth to reduce crossing width, and provide a continuous footway to emphasise pedestrian priority in line with highway code.
17.9	Walking	Station Road and Honeyham Close	Narrow junction mouth to reduce crossing width, and provide a continuous footway to emphasise pedestrian priority in line with highway code.
18.1	Walking & Cycling	Clanfield Road and Bampton Road (A4095)	New 3m shared use footway/ cycleway connecting Bampton and Clanfield. Reduce the speed limit from 60mph to 40mph along A4095.
18.2	Walking	Bridge Street	Widen footways on southern side of carriageway along Bridge Street.
19.1	Walking & Cycling	B4477 and B4020	New 3m shared use footway/ cycleway between B4477/ Willow Meadows entrance and B4020/ Alvescot village. Pinch point on the bridge on B4020/ Ford Road junction to be considered. Reduce the speed limit from 60mph to 40mph along B4477 and B4020.
20.1	Walking & Cycling	Station Road (B4020)	New 3m shared use footway/ cycleway between B4020/ exit of Alvescot and B4020/ Calcroft Lane

Ref no.	Benefit to	Location	Description
			junction. Reduce the speed limit from 60mph to 40mph along B4020, between Calcroft Lane/ B4020 and Yellow Gate Farm.
22.1	Walking & Cycling	Shilton Road (B4020)	New 3m shared use footway/ cycleway between Burford Road/ Swinbrook Road junction and A40/ B4020 junction. Reduce the speed limit from 60mph to 40mph along B4020 (Shilton Road), between Bridge Street and Burford Garden Centre.
22.2	Walking & Cycling	Shilton Road (B4020)	Narrow the carriageway width and widen the footway to provide a 3m shared use footway/ cycleway connecting Cotswold Gate housing development with the A40/ B4020 junction.
22.3	Walking & Cycling	A40 and Shilton Road junction	Option A: Move the existing pedestrian crossing over the A40 to the east to Shilton Road, and upgrade to include pedestrians and cyclists.
			Option B: New pedestrian and cycle-controlled crossing over the A40 to tie in with proposed shared use footway/ cycleway at the end of B4020 (Shilton Road).
			Option C: Signalise A40/ B4020 (Shilton Road) junction with crossing facilities on each arm for pedestrians and cyclists.
			Option D: Reduce right turn pocket length on the A40, widen the footway to be shared use between Shilton Road and the existing crossing, and upgrade to a pedestrian and cycle-controlled crossing.
23.2	Walking & Cycling	A40/ The Hill roundabout	Upgrade uncontrolled crossings to controlled crossings on each arm of the A40/ The Hill roundabout.
23.3	Walking	A361, opposite entrance to Burford Golf Club	New controlled pedestrian crossing over A361 for Golf Club users.
25.1	Walking & Cycling	Witney Road	Option B: Shared use footway/ cycleway or similar reasonable alternatives, which would deliver cycle provision away from motorised traffic, running adjacent to the carriageway on Witney Road between Manor Road/ Burford Road, Brize Norton and Downs Road/ Centenary Way junction, Curbridge. Reduce the speed limit from 60mph to 40mph along Witney Road, between Downs Road and Elm Grove.
*denotes proposals that relate directly to improving connections to schools			

5. Prioritisation of improvements and Packaging of improvements

Chapter Overview: This chapter outlines the fifth stage of the LCWIP process – prioritising cycling and walking improvements. This process involves: identifying timescales for delivery over short, medium and long term; high-level scheme appraisal and costing; prioritising improvements considering effectiveness.

The key output for this stage is a joint prioritised programme of cycling and walking infrastructure improvements.

It is noted that whilst individual improvements are prioritised, the delivery of joined up routes (formed of different improvements) is the goal. Funding allocation, including from developers, will also determine (to an extent) when improvements are delivered.

5.1. Prioritisation Criteria and Methodology

A bespoke prioritisation criteria was developed based on recommendations from the LCWIP guidance and with inputs from OCC. Each route was assessed against the criteria and scored on a scale of 0 to 2. The prioritisation criteria can be seen in **Figure 23**.

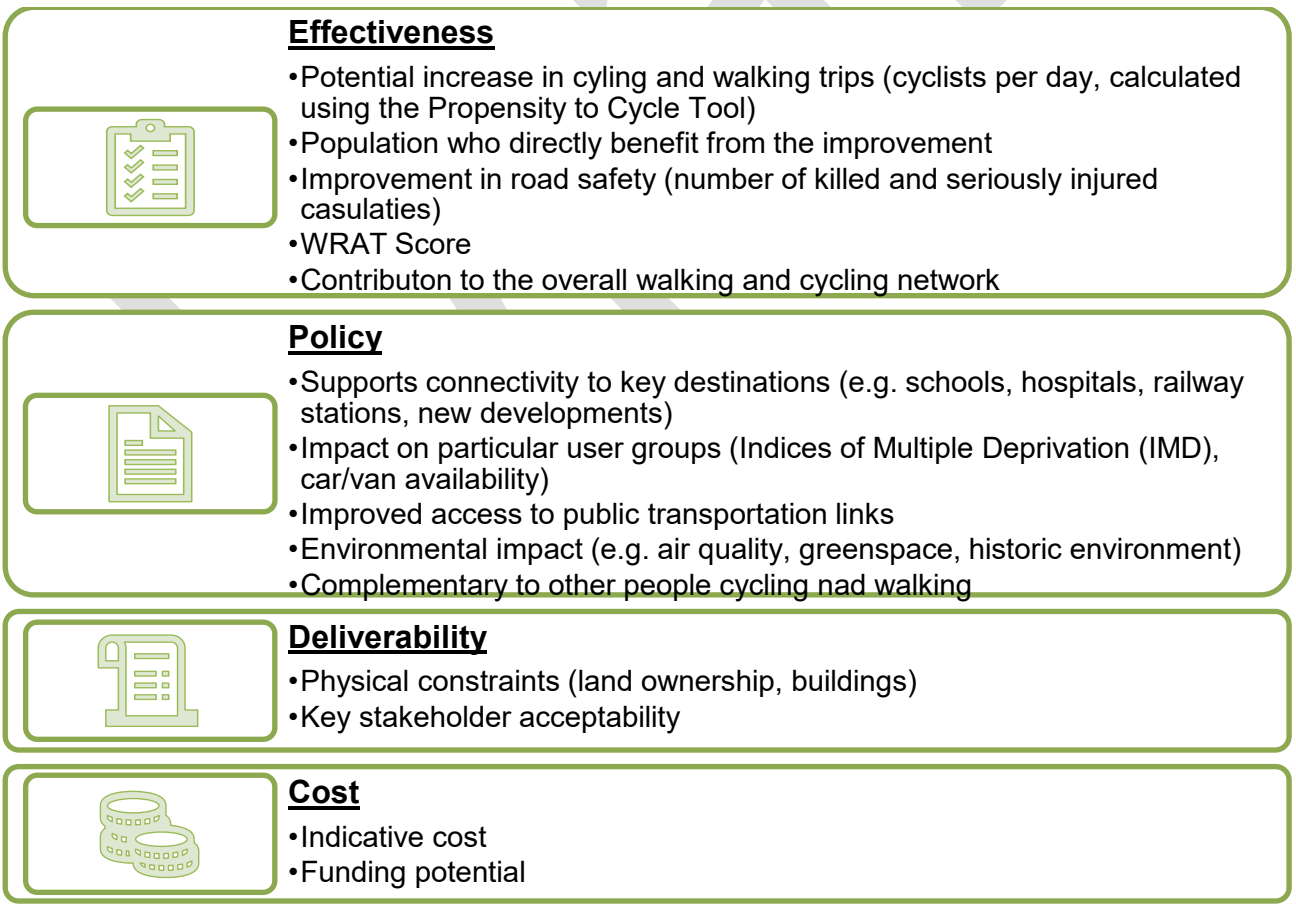

Figure 23: Prioritisation Criteria

Each criterion was given a weighting based on its importance, which helped to develop a prioritised list of schemes. Each route has been scored against the criteria above on a scale of 0-2, with a total score of 28 available. **Table 6** outlines the scoring requirements of each criterion.

Table 6: Prioritisation Criteria

Effectiveness				
Criteria	**% Weighting**	**0**	**1**	**2**
Potential increase in walking and cycling trips (cyclists per day comparing the Propensity to Cycle Tool for 2011 census against the Government Target (Equality) 2051)	13%	<10	10 - 25	>25
Population who directly benefit from the improvement.	13%	<500	500 - 1500	>1500
Improvement in road safety (active travel user KSI's on the route between 2016-2024 likely to see reduction as a result of the improvements)	2%	No pedestrian or cyclist KSI's along route	Pedestrian or cyclist KSI's along route = 1	Pedestrian or cyclist KSI's along route ≥2
WRAT Scoring	7%	>80%	70 to 80%	<70%
Contribution to overall continuity of the network	4%	Scheme delivers only route segment with no additional connectivity	Scheme delivers continuity between route segments on secondary route	Scheme delivers continuity between route segments on primary route
		Policy		
Criteria	**% Weighting**	**0**	**1**	**2**
Supports connectivity to key destinations (e.g. schools, leisure centres, new developments)	5%	Key destinations >100m buffer from the route	Key destinations within a 100m buffer of the route	Key destinations located on the route
Impact on particular user groups (Indices of Multiple Deprivation (IMD), car/ van availability)	5%	IMD decile is between 1-7 (1 being most deprived) and car/van availability is ≥92%	IMD decile is between 1-7 (1 being most deprived) or car/van availability is <92%	Positively contributes to deprived/ low car ownership areas. IMD decile is between 1-7 (1 being most deprived) and car/van availability is <92%
Improved access to public transportation links	5%	Negative impact on public transport (e.g. increases congestion for buses)	No impact on public transport	Improves access to bus stop, rail station, mobility hub

Environmental impact (e.g. air quality, greenspace, historic environment)	5%	Negative impact on air quality, loss of green space, or impact on historical environment	No impact on air quality, green space, or historical environment	Positive impact on air quality, green space, or historical environment
Complementary to other active travel users	5%	Negative impact to other active travel users	No impact to other active travel users	Strongly complements other active travel users
Deliverability				
Criteria	**% Weighting**	**0**	**1**	**2**
Physical constraints (land ownership, buildings)	10%	Significant constraints (bridges, land take etc)	Some minor constraints (likely to be able to overcome e.g. pinch points)	No physical constraints (no bridges, land take etc)
Key stakeholder acceptability	10%	Not supported by stakeholders	Partial support by stakeholders	Strongly supported by stakeholders
Cost				
Criteria	**% Weighting**	**0**	**1**	**2**
Indicative cost	8%	High cost (>£6.5m)	Medium cost (£1.5m-£6.5m)	Low cost (<£1.5m)
Funding potential	8%	Funding very unlikely	Medium likelihood of funding	High likelihood of funding

5.2. Prioritisation of improvements

In total the 84 proposals detailed in **Section 3.3** and **Section 4.3** have been grouped together with other proposed improvements along the same route of similar characteristics. In total, 22 overall routes were developed for the prioritisation exercise to be undertaken.

In addition to the prioritisation exercise that has been completed for each route in line with the criteria in **Table 6**, each route has been prioritised into three categories in accordance with the LCWIP guidance:

- **Short term** (typically <3 years) – improvements that can be implemented quickly or are under development.
- **Medium term** (typically between 3 and 5 years) – improvements where there is a clear intention to act, but delivery is dependent on further funding availability or other issues (e.g. detailed design, securing planning permission, land acquisition).
- **Long term** (typically >5 years) – more aspirational improvements or those awaiting a defined solution.

Following the initial prioritisation, a timeframe was assigned to each of the routes. Three factors have influenced the delivery timescale assessment. Firstly, the prioritisation score. Low scoring routes were prioritised for long term delivery while improvements that scored highly, which offer greater benefits, were prioritised for short term delivery. Secondly,

consideration of whether a high scoring measure can practicably be delivered in the short term given the level of complexity of the scheme. Estimated construction cost has been used as proxy for complexity. **Figure 24** sets out the approach to determining the appropriate timescale.

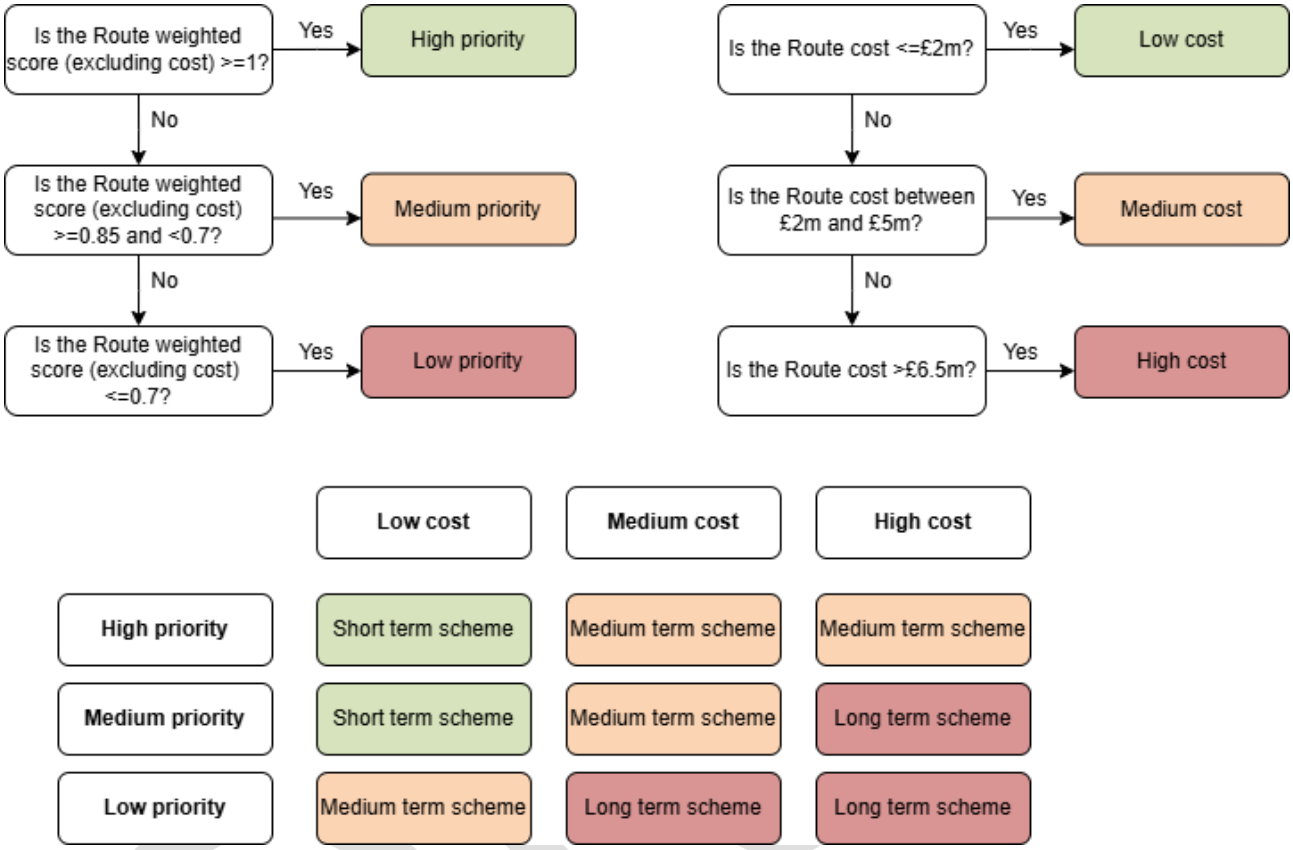

Figure 24: Route Proposal Timescale Approach

Table 7 outlines the routes' rankings, their overall score, and their associated timescale. The complete prioritisation table showing the scores for each prioritisation criteria can be found in **Appendix D**.

The routes ranking higher in

Table 7 have score highly as they are likely to impact the greatest number of people, contribute to a high-quality walking and cycling network and provide improved connectivity to key destinations.

Table 7: Prioritisation – Ranking of proposed routes

Route No.	Proposal Ref No.	Location	Total Score	Rank	Timescale
2*	2.1 – 2.3	Wycombe Way (Brize Norton Road - Black Bourton Road)	1.58	1	Short
6	6.1 – 6.4	Brize Norton Road (Burford Road - Upavon Way)	1.47	2	Short
14	14.1 – 14.2	Monahan Way (Burford Road - Upavon Way)	1.42	3	Medium
1*	1.1 – 1.8	Upavon Way (Alvescot Road - Brize Norton Road)	1.39	4	Medium
16	16.1 – 16.2	Carterton Road (Norton Way - Station Road)	1.32	5	Medium
8	8.1 – 8.6	Alvescot Road (Brize Norton Road - B4477/ Willow Meadow)	1.26	6	Medium
7	7.1 – 7.8	Black Bourton Road (Alvescot Road - Queens Road)	1.22	7	Medium
4*	4.1 – 4.2	Lawton Avenue/ Arkell Avenue (Alvescot Road - Burford Road)	1.15	8	Short
12	12.1 – 12.3	Kilkenny Lane/ Burford Road (Swinbrook Road - Manor Road)	1.11	9	Short
25	25.1	Witney Road (Manor Road - Downs Road)	1.10	10	Medium
5*	5.1 – 5.6	Burford Road (Alvescot Road - Swinbrook Road)	1.04	11	Medium
19	19.1	Alvescot Road (Upavon Way, Carterton - Mill Lane, Alvescot)	0.97	12	Long
22	22.1 – 22.3	Burford Road/ Shilton Road (Swinbrook Road - The Hill, Burford)	0.94	13	Long
11	11.1	Northwood Crescent (Lilac Way - Upavon Way)	0.93	14	Medium
10*	10.1 – 10.9	Brome Way (Baldwin Mews - Monahan Way)	0.91	15	Medium
3	3.1 – 3.2	Milestone Road/ Corbett Road (Black Bourton Road - Alvescot Road)	0.88	16	Medium
20	20.1	B4020 (Mill Lane, Alvescot - Bampton Road, Clanfield)	0.83	17	Long
17*	17.1 – 17.10	Station Road (Station Road, Brize Norton - Clanfield Road, Bampton)	0.76	18	Long
18	18.1 – 18.2	Clanfield Road/ Bampton Road (Station Road, Bampton - Bourton Road, Clanfield)	0.72	=19	Long
23	23.1 – 23.3	A361 (The Hill, Burford - Hen 'n' Chick Lane)	0.72	=19	Long
13	13.1 – 13.2	Monahan Way (Burford Road - Manor Road)	0.69	21	Long
9	9.1 – 9.5	Swinbrook Road (Burford Road - Empire Drive)	0.67	22	Medium
* denotes proposals that relate directly to improving connections to schools					

5.3. Costs

Initial high-level costings have been undertaken to estimate to capital cost of each of the 22 routes. To develop the cost estimates, a range of standard unit costs for different types of interventions was applied. These costs are based on 2025 Q1 prices.

Costs for the proposed interventions have been included:

- Cycle superhighway (two-way physically segregated)
- Mixed strategic cycle route (shared-use footway/ cycleway with junction alignment with cycle route)
- Remodelled major junction (cycling piggybacking on traffic measures)
- 20mph zone (without traffic calming measures)
- 20mph zone (with traffic calming measures)
- One-way cycle route
- Major road puffin crossing (including toucan, sparrow and parallel crossing)
- Estate road puffin crossing (including toucan, sparrow and parallel crossing)
- Uncontrolled footway crossing (both sides of carriageway)
- Street lighting
- Footway widening into existing carriageway (1m widening)
- New footway (2m wide)
- Cycle parking (estimated five Sheffield stands)
- Modal filter
- Traffic Regulation Orders (TROs – parking restrictions/ school street)

The following assumptions have been made when calculating these costs estimates:

- Various sources of cost estimates have been used but all have been scaled to Q1 2025 prices using the Bank of England's inflation calculator.
- Where a 'Cycle Superhighway' (two-way physically segregated) is proposed, the cost of side road treatment and priority for pedestrians and cyclists is included within the unit rate per km.
- Where proposing shared use, the costs would be covered by either introducing new footways or widening existing as opposed to the higher cost of a 'Mixed Strategic Cycle Route'. However, where more extensive works e.g. raising of parapets, earthworks or the removal of vegetation are required the 'Mixed Strategic Cycle Route' costs have been used.
- A 44% risk allowance has been included within each route cost in line with the stage of development of these proposals.
- All costs are exclusive of VAT.
- All costs are exclusive of maintenance and renewal costs.

The total estimated costs for each proposed route are shown below in

Table 8.

Table 8: High-level cost estimates for each route

Route Number	Location	Total Cost (£000's) (Q1 2025, rounded to the nearest £10k)
1a*	Upavon Way (Alvescot Road - Brize Norton Road) – Proposal 1.8, Option A	£ 8,230
1b	Upavon Way (Alvescot Road - Brize Norton Road) – Proposal 1.8, Option B	£ 8,380
2	Wycombe Way (Brize Norton Road - Black Bourton Road)	£ 270
3	Milestone Road/ Corbett Road (Black Bourton Road - Alvescot Road)	£ 130
4	Lawton Avenue/ Arkell Avenue (Alvescot Road - Burford Road)	£ 70
5	Burford Road (Alvescot Road - Swinbrook Road)	£ 3,850
6	Brize Norton Road (Burford Road - Upavon Way)	£ 1,670
7	Black Bourton Road (Alvescot Road - Queens Road)	£ 4,250
8	Alvescot Road (Brize Norton Road - B4477/ Willow Meadow)	£ 3,490
9	Swinbrook Road (Burford Road - Empire Drive)	£ 1,000
10	Brome Way (Baldwin Mews - Monahan Way)	£ 1,180
11	Northwood Crescent (Lilac Way - Upavon Way)	£ 30
12	Kilkenny Lane/ Burford Road (Swinbrook Road - Manor Road)	£ 230
13	Monahan Way (Burford Road - Manor Road)	£ 7,560
14	Monahan Way (Teasel Way - Upavon Way)	£ 3,370
16	Carterton Road (Norton Way - Station Road)	£ 2,250
17	Station Road (Station Road, Brize Norton - Clanfield Road, Bampton)	£ 7,990
18	Clanfield Road/ Bampton Road (Station Road, Bampton - Bourton Road, Clanfield)	£ 3,910
19	Alvescot Road (Upavon Way, Carterton - Mill Lane, Alvescot)	£ 3,030
20	B4020 (Mill Lane, Alvescot - Bampton Road, Clanfield)	£ 3,850
22a*	Burford Road/ Shilton Road (Swinbrook Road - The Hill, Burford) – Proposal 22.3, Option A	£ 6,570
22b	Burford Road/ Shilton Road (Swinbrook Road - The Hill, Burford) – Proposal 22.3, Option B	£ 6,710
22c	Burford Road/ Shilton Road (Swinbrook Road - The Hill, Burford) – Proposal 22.3, Option C	£ 6,840
22d	Burford Road/ Shilton Road (Swinbrook Road - The Hill, Burford) – Proposal 22.3, Option D	£ 6,710
23	A361 (The Hill, Burford - Hen 'n' Chick Lane)	£ 6,170
25a*	Witney Road (Manor Road - Downs Road) – Proposal 25.1, Option A	£ 8,340
25b	Witney Road (Manor Road - Downs Road) – Proposal 25.1, Option B	£ 4,490
*denotes the option that was used in the prioritisation exercise when multiple options have been drafted for a particular proposal		

6. Integration and Application

Chapter Overview: This chapter outlines how the LCWIP will be applied going forward, including helping to deliver policies in Oxfordshire's Local Transport and Connectivity Plan. The LCWIP will be used to inform funding requests, both from future developments and funding bids (including those from central government). Infrastructure delivery (as set out in the LCWIP) alone will not contribute to more people cycling and walking – joining up infrastructure improvement schemes with initiatives to empower the community is required. The LCWIP will be monitored and reviewed every 2 years to ensure it remains relevant.

6.1. Embedding the Carterton and the surrounding area LCWIP

6.1.1. Policy

The Oxfordshire Local Transport and Connectivity Plan (LTCP)

All improvements set out in the LCWIP help to deliver Oxfordshire's LTCP, including policies relating to healthy place shaping and the climate emergency. As improvements are developed into schemes to be delivered, alignment of the improvements with LTCP will be reviewed and schemes adjusted if no longer meeting LTCP policies.

West Oxfordshire Local Plan update

The Carterton LCWIP will be used to inform the update to the current West Oxfordshire Local Plan. This update will cover the period up to 2041.

6.1.2. Future developments

The improvements identified in this LCWIP are required to facilitate sustainable travel in Carterton and the surrounding area. It is important to embed sustainable travel choices from first occupation/ use of new developments (residential and commercial). Contributions from developers will be sought and/ or developers will be requested to provide the improvements identified in this LCWIP where they relate to their development e.g., a connection between residential areas and key trip generators, or employment areas and residential areas. The contribution from developments will be proportionate to the impact the development will have on the transport network, environment, and community without improvements. Additional improvements may be identified as this LCWIP is reviewed or through the individual planning application processes.

6.1.3. Funding bids

The prioritised improvements list in this LCWIP will support future funding bids, by guiding what funding should be sought and where it should be spent. This LCWIP provides an evidence-based justification for the improvements proposed, which gives weight to the need for funding. Funding opportunities can arise from a variety of sources, including central government, planning obligations from development and internal OCC funds.

6.1.4. Initiatives to support infrastructure improvements

To support the implementation of infrastructure improvements, initiatives will be needed that engage and empower the community to choose cycling and walking for journeys, as per Policy 7 of LTCP. These initiatives can include cycle hire schemes, cycle training, wayfinding and safe cycle storage. We will work with colleagues, such as those in public health, and local stakeholders to bring forward improvements, outside of, and in addition, to this LCWIP. This will also involve working with the local community to ensure that additional barriers to cycling and walking are addressed and thus solutions are locally based.

6.2. Monitoring and reviewing the Carterton and the surrounding area LCWIP

This LCWIP will be regularly reviewed to ensure that progress is being made in achieving the vision for cycling and walking in Carterton and the surrounding area, and that the improvements reflect the needs of the community.

To inform any updates to Carterton and the surrounding area LCWIP, a public consultation will be held alongside engagement with stakeholders. In the meantime, any suggestions for improvements to cycling and walking in Carterton and the surrounding area can be made by contacting placeplanningnorth@oxfordshire.gov.uk. These suggestions will be added to the list of additional schemes for evaluation. Depending on the outcome of this evaluation, they will be added to further iterations of Carterton and the surrounding area LCWIP.

Understanding changes in the number of people cycling and walking in association with the implementation of improvements, will be important in showing whether this LCWIP is effective and whether further changes need to be made. There are a range of methods for counting the number of people walking. These are often ad hoc surveys that are commissioned over a specified period e.g., one week, and make use of CCTV cameras. Surveys will take place on key routes where cycling and walking can be expected, and locations where improvements have been implemented.

Stages of monitoring and review

1. A baseline level of the current number of people cycling and walking will be established by using the ad hoc surveys described previously.

2. The Carterton and the surrounding area LCWIP will be reviewed every 2 years or earlier if deemed necessary. A supplementary document will be produced. This will include a review of progress against the LCWIP targets and local monitoring data for levels of cycling and walking in Carterton and the level of change recorded in association with implemented improvements.

3. The Carterton and the surrounding area LCWIP will be updated and re-issued, if necessary, to reflect the current situation and aspirations.

7. Glossary

Active travel	'Making journeys in physically active ways – like walking, wheeling (using a wheelchair or mobility aid), cycling, or scooting'.[7]
All bike types	Refers to all forms of bicycle including standard bikes, cargo bikes, tandem bikes, and tricycles etc.
Appraisal	An assessment
Areas of deprivation	Areas that do not have something that is essential for day-to-day life and where there are less opportunities compared to other areas
At-grade controlled crossing	A signalised (traffic light) crossing across a road
Audit	The examination of something against set criteria
Bridleway	A path or track where horse riders have right of way which can also be used for walking and cycling
Department for Transport (DfT)	The government department responsible for the English transport network
Desire lines	The most direct route for people cycling or walking to travel; this may not be a formal path
Dropped kerbs	Features to facilitate non-stepped access to allow wheelchair/mobility aid users and people with pushchairs to cross the road unimpeded.
Feasibility	How easy something is to do
Footway buildout	Widenings of footways that run beside a carriageway to provide greater space for people walking to wait, to reduce the crossing distances or to improve the visibility between people walking and other road users.
Formal pedestrian crossing	A signal-controlled crossing for people walking across a road
Highway boundary	The extent of the highway and land owned, managed or controlled by the highway authority
Isochrone	A line on a map or diagram that connects places that take the same time to travel to from a specified point

[7] Paths for all, *About Active Travel*, https://www.pathsforall.org.uk/about-active-travel

Killed or seriously injured (KSI)	Standard metric used to measure road safety
Link footway	Linking local access footways through urban areas and busy rural footways
Local access footways	Footways associated with low usage, short estate roads to the main roads and cul-de-sacs
Local cycling and walking infrastructure plan (LCWIP)	Strategic policy documents that identify improvements to active travel infrastructure at the local level
Local cycle connection	Cycle route where lower flows of people cycling are forecast along desire lines that cater for local cycle trips, often providing links to primary or secondary desire lines
Local Transport and Connectivity Plan (LTCP)	Oxfordshire County Council's new Local Transport Plan (2022)
Long term	Typically more than 5 years – more aspirational improvements or those awaiting a defined solution
Lower Super Output Area (LSOA)	A geographic area that has a population of approximately 1,500 and is based on Census data
Medium term	Typically less than 5 years – improvements where there is a clear intention to act, but delivery is dependent on further funding availability or other issues.
Network plan	A map showing routes for cycling and walking and how these connect together between origins and destinations
Pegasus crossing	A type of controlled crossing that caters to people riding horses as well as people walking and cycling.
Pelican crossing	A type of controlled pedestrian crossing. These are signalised (traffic light) crossings and require people walking to press the button and wait for the green man to appear before crossing the road.
Permanent cycle counters	OCC owned counters on roads that continuously count how many people are cycling at that location. This data is projected onto an online platform that can then be analysed.
Place shaping	Multi-faceted approach to creating public places that support health, well-being and happiness and increase people's connection to the place, thereby maximising the shared value of public places.
Prestige/primary walking route	Very busy areas of town, with high public space and street scene contribution and main walking routes

Primary cycle connection	High flows of people cycling are forecast along desire lines that link large residential areas to trip attractors such as town centre
Propensity to Cycle Tool (PCT)	A tool that shows routes where cycling is currently common and routes where there is the potential for cycling to increase
Public Rights of Way (PRoW)	Network of routes where public use is legally protected
Public transport	Transport that is available to the public for a set fare and includes buses and trains
Puffin crossing	A type of controlled pedestrian crossing. These are signalised (traffic light) crossings similar to Pelican crossings in that they require people walking to press the button. However, they are more advanced than Pelican crossings as they can detect people walking in the waiting area and also whilst they are crossing the road.
Raised table	A raised table is a form of traffic calming which aims to slow the speed of vehicles and to emphasise features such as crossing points. They are sometimes used at the entry of a side road to provide a level surface for people walking to cross the road without the need for dropped kerbs.
Refuge island	A small area of footway in the centre of the road to allow people walking to cross in two stages. Refuge islands are usually found on roads with higher speeds and greater numbers of vehicles where crossing in a single movement is more difficult.
Route Selection Tool (RST)	A tool for assessing the suitability of a route in its existing condition against the core design outcomes to identify where improvements need to be made
Rural hinterland	The rural area surrounding a town or city
Secondary cycle connection	Medium flows of people cycling are forecast along desire lines that link to trip attractors such as schools, colleges and employment sites
Secondary walking route	Medium, usage routes through local areas feeding into primary routes, local shopping centres, etc
Service centre	A place that provides a range of everyday services such as shops, schooling and medical to many people living both in the immediate area and further afield who lack services where they live
Segregated cycle track	A cycle facility physically segregated from vehicles and people walking

Segregated shared footway/cycleway	A footway that legally allows cycling, with separate spaces for people walking and cycling. Segregation is usually light and consists of signage and markings.
Shared use footway/cycleway	Shared use paths allow people cycling and walking to share the space, although people walking have priority. These paths are identified by a blue circle with a white symbol of people walking and a bike.[8]
Short term	Typically less than 3 years – improvements which can be implemented quickly or are under development
Sparrow crossing	A sparrow crossing is the same as a tiger crossing; however, it is at a signal-controlled (traffic light) junction[9]
Steering group	A group of local stakeholders and council officers, which gathers to discuss progress and ideas and ensures that local views are represented
Strategic Development Areas (SDA)	A large-scale site that has been allocated for development of houses and/or employment. This is included within the local plan.
Tactile paving	There are different types of tactile paving with the purpose providing a warning to visually impaired people who would otherwise find it difficult to differentiate between where the footway ends, and the carriageway begins.
Tiger crossing	(Parallel crossing) – A tiger crossing consists of a zebra crossing with a parallel priority space for people cycling to cross.
Topography	The natural form and features of an area
Toucan crossing	A signal-controlled (traffic light) crossing that allows people walking and cycling to cross together. Toucan crossings are usually wider than standard pedestrian crossings to accommodate people cycling safely.
Trip generator	An area or place people travel from and to
Uncontrolled pedestrian crossing	Unlike controlled crossings, people walking must wait for traffic to stop or for a suitable gap in order to cross the road. These crossings may include dropped kerbs, tactile paving and a refuge island.

[8] Photo credit: TSRGD 2016, Diagram 956

[9] Photo credit: https://www.stockport.gov.uk/news/stockports-first-bee-network-scheme-which-will-be-part-of-greater

Walking Route Audit Tool (WRAT)	A tool developed to assess the condition and suitability of walking routes. This requires evaluation of features along the route including crossings and dropped kerbs.
Wayfinding	Signage to support people walking and cycling navigate their way around a place
Wheeled users	People who use a mobility scooter or wheelchair instead of walking. Also includes people with pushchairs and who travel by small, self-propelled wheeled modes such as skateboards, rollerblades and scooters.
Zebra crossing	A type of controlled pedestrian crossing. These crossings are marked out by black and white stripes across the road with flashing beacons and zig zag markings.