Land North-East of Jn10 M42 Motorway, North Warwickshire

784-B033920

Vision-Based Travel Plan

Hodgetts Estates

December 2023

Tetra Tech Newcastle, 4th Floor, Rotterdam House, 116 Quayside, Newcastle upon Tyne, United Kingdom, NE1 3DY

Tetra Tech Environment Planning Transport Limited. Registered in England number: 03050297
Registered Office: 3 Sovereign Square, Sovereign Street, Leeds, United Kingdom, LS1 4ER

DOCUMENT CONTROL

Document:	Vision-Based Travel Plan
Project:	Land North-East of Jn10 M42 Motorway, North Warwickshire
Client:	Hodgetts Estates
Project Number:	784-B033920
File Origin:	\\lds-dc-vm-101\Data\Projects\784-B033920 Land NE of M42 Jn10\60 Project Output\61 Work in Progress\Draft Documents\Vision Led Travel Plan

Revision:	0	**Prepared by:**	Gareth Wakenshaw
Date:	15.09.2023	**Checked by:**	Nick Bunn
Status:	Draft	**Approved By:**	Nick Bunn
Description of Revision:			

Revision:	1	**Prepared by:**	Gareth Wakenshaw
Date:	18.09.2023	**Checked by:**	Nick Bunn
Status:	Final	**Approved By:**	Nick Bunn
Description of Revision:	Updated following client review		

Revision:	2	**Prepared by:**	Gareth Wakenshaw
Date:	7.12.2023	**Checked by:**	Nick Bunn
Status:		**Approved By:**	Nick Bunn
Description of Revision:	Updated following National Highway Comments		

Revision:		**Prepared by:**	
Date:		**Checked by:**	
Status:		**Approved By:**	
Description of Revision:			

TABLE OF CONTENTS

1.0 INTRODUCTION 4
2.0 VISION 6
3.0 ACCESSIBILITY 13
4.0 CURRENT MODE SHARE 23
5.0 TRAVEL PLAN ADMINISTRATION 26
6.0 COMMITTED MEASURES TO REDUCE CAR USE 27
7.0 TARGET MODE SHARE 32
8.0 RESIDUAL TRIPS 34
9.0 MONITORING OF SUCCESS 37
10.0 POLICY REQUIREMENTS 38
11.0 ACTION PLAN 40

APPENDICES

Appendix A1: Figures
Appendix A2: Drawings
Appendix B: TT Report – how far do people walk?
Appendix C: TAG Unit M5.2 Modelling Smarter Choices
Appendix D: Drawings by others
Appendix E: TT connectivity plans

1.0 INTRODUCTION

1.1 Tetra Tech have been engaged by Hodgetts Estates to produce a Vision-Based Travel Plan (TP) in support of a major development consisting of 100,000sqm of employment uses and a 150-space overnight lorry park with 400sqm amenity block, located off the A5 Watling Street, north-east of the M42 Junction 10 (M42 Jn10) interchange, in Warwickshire. Figure 1 at Appendix A1 shows the site location.

1.2 An outline planning application for the development site was submitted to North Warwickshire Borough Council (NWBC). The application (ref: PAP/2021/0663) was validated on 2 December 2021. The application was initially supported by a TA and FTP produced by Bancroft Consulting.

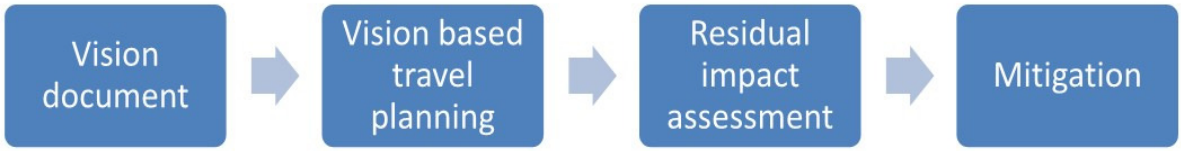
1.3 Tetra Tech (TT) was engaged by Hodgetts Estates in January 2022 to assess the impact of the proposed development on the highway network and provide additional information requested by National Highways (NH). The revised TA produced by TT also explored the opportunities to provide sustainable transport access to and though the site. A Walking Cycling and Horse-riding Assessment was undertaken by specialist subconsultants Drummond Black in accordance with GG142, and a Public Transport Strategy (PTS) was prepared in consultation with the bus operator Stagecoach and Warwickshire County Council (WCC) Public Transport team.

1.4 At the meeting held on 23rd May 2023 with WCC, NWBC and SCC, NH confirmed that although the planning application was submitted in December 2021, the polices set out in DfT circular 01/2022 Strategic Road Network and the Delivery of Sustainable Development would apply because the local road network was to be remodelled using new traffic survey data.

1.5 The circular advises that:

- new developments should give priority to walking, wheeling and cycle movements and facilitate access to high-quality public transport where possible (para 42).
- enable a reduction in the need to travel by private car and prioritise sustainable transport opportunities ahead of capacity enhancements and new connections on the SRN (para 43).
- [in travel plans] development promoters must put forward clear targets and commitments to manage down the traffic impact of development and maximise the accessibility of and within sites by walking, wheeling, cycling, public transport and shared travel. Targets for achieving a modal shift to sustainable transport will need to be subject to sustained monitoring and management by an appointed travel plan coordinator (para 44)
- [a transport assessment] should start with a vision of what the development is seeking to achieve and then test a set of scenarios to determine the optimum design and transport infrastructure to realise this vision (para 48)

1.6 In discussions with NH elsewhere an iterative process is suggested in line with national planning policy which comprised the flow chart shown below, but noting that the first two blocks can be combined.



1.7 NH have suggested that the vision-based travel plan will need to show how the vision can be achieved, and should include suitable multi-modal (person) trip rates, clear targets and commitments to manage down the traffic impact of development and maximise the accessibility of the site by walking, wheeling, cycling, public transport and shared travel.

1.8 This TP has been produced having due regard for the advice contained in:

- National Planning Policy Framework (NPPF) published by the Department for Communities & Local Government (DCLG).
- MHCLG's Transport Assessment and Travel Plan guidelines set out in Planning Practice Guidance.
- North Warwickshire Borough Council Local Plan.
- Department for Transport Circular 01/2022 Strategic Road Network and the Delivery of Sustainable Development

1.9 The applicant is committed to the principle of sustainable development, and is seeking to influence the travel choices of employees and visitors to the site with the implementation of a Full TP. This TP provides the approach to encourage the use of sustainable modes which will inform the Full Travel Plan.

1.10 In accordance with local and national policies to protect and enhance the environment, and to encourage sustainable development and travel patterns, this report reviews the current situation in the vicinity of the development site and proposes measures to encourage accessibility via a choice of transport modes. This report also includes the proposals for public transport improvements as outlined in the Public Transport Strategy.

2.0 VISION

2.1 The vision for Land North-East of Jn10 M42 is set out in www.landne-j10m42.co.uk to create:

The Greenest Business Park in the West Midlands

2.2 It is derived from Hodgetts Estates' commitment to achieving the highest possible level of sustainability and design and to mitigate possible climate change impacts. The vision will be achieved through:

- Sustainability Strategy
- Sustainable Transport & Highways

Sustainability Strategy

2.3 Hodgetts Estates is committed to sustainability and has set a very high target to achieve its vision, the proposals incorporate, inter alia, the following features and building standards:

- Targeting a BREEAM 'Excellent' Rating for all buildings;
- Energy Performance Certificate 'A' Rating for all buildings;
- Speculative buildings to be built to UK Green Building Council's 'Net Zero Carbon Ready' standard for construction;
- At least 10% of energy generated from on-site renewable or low carbon sources, electricity to sitewide infrastructure to be 100% renewable and ensuring all buildings can be adapted to accommodate existing and future technologies, e.g., solar panels and battery storage;
- Air and ground source heat pumps to provide heating to all offices;
- Recyclable structure and cladding system;
- Use of low environmental impact and bio-based materials that also provide good insulation;
- Rainwater harvesting to reduce water consumption, for measures such as flushing toilets, landscape watering and vehicle/interior cleaning;
- Minimise construction waste;
- Substantial biodiversity net gains of +26.5% for habitats and +298% for linear features – far in excess of the 10% policy requirement;
- At least 10,000 trees to be planted in on and offsite locations;
- **Up to 100% of electric vehicle charging from on-site renewable energy sources**;
- **Electric vehicle charging points and 'rapid' charging points**, with ducting provided to all parking spaces to future proof the development;
- **Electric vehicle charging points and 'rapid' charging points to HGV and LGV parking**

spaces and loading docks for battery electric and hybrid electric commercial vehicles;

- **Ducting provided to all remaining lorry parking spaces**, to future proof all service yards and the overnight lorry parking facility;
- Channels to be left clear throughout the site to provide **future hydrogen mains supply to all premises and the overnight lorry park**, to future proof the proposals;
- **Hydrogen tanking (bunkers) to be provided to all buildings**, subject to occupier requirements, to allow re-fuelling of HGVs onsite;
- Develop **a Sustainable Travel Plan** to minimise single occupancy vehicle trips to and from the site;
- **Cycle parking provided to all units at in excess of the North Warwickshire Borough standard**;
- Cycle parking to comprise **a range of parking facilities, including indoor/ outdoor parking, secure parking, covered parking and electric bike charge points**, all located at or close to pedestrian entrances;
- **Showers and changing facilities provided to all buildings**;
- **Communal cycle parking, showers and changing facilities at ancillary Hub Office**, available to the general public including employees of neighbouring employment sites; and
- **Extensive new and existing public footpaths, public bridleways, footway/ cycleways and pavements**, all designed to be the Equalities Act 2010 compliant to provide **"Access for All"** (e.g. mobility impaired, mothers with prams, etc).

Sustainable Transport & Highways

2.4 From the outset, the transport strategy is to take holistic and inclusive approach to minimise trips to and from the site by single occupancy private vehicles, promotion of sustainable forms of transport and reducing the volume of freight arriving solely by road. This will be achieved by:

Proximity to the SRN

2.5 Proximity to the SRN is important for SRN dependent sectors such as logistics and manufacturing, which are the primary uses at this site, and such proximity is supported by Circular 01/2022.

2.6 The development includes a 150 space lorry park. Circular 01/2022 is also supportive of providing such facilities, especially where there is an identified need for such[1].

Walking & Cycling Connectivity

2.7 Throughout the site, 3m wide shared foot/cycleways will be provided. Fully-signalised pedestrian/cycle crossings will be provided across the mouth of the proposed access junction with the A5 and a fully-signalised pedestrian crossing of the A5 carriageway is to be introduced.

2.8 Externally, enhancements will be made to the pedestrian/ cycle path on the A5 eastbound carriageway together with improving the pedestrian and cycle facilities on the northern part of the M42 Jn10. Signalised crossings will replace uncontrolled crossings on the north facing slips and

[1] HGV Parking Facility Need Assessment, November 2021, MDS Transmodal.

also on Green Lane. From Green Lane to the A5/ Pennine Way north roundabout the existing narrow footway/ cycleway will be widened and improved providing a key link into Stoneydelph and onwards to Tamworth.

2.9 The site will provide connections onto the existing Bridleways and Footpaths adjacent to the site (AE45, AE46 and AE48) whilst these paths will also be upgraded to make them wider and higher quality, providing excellent connectivity from the site to/ from Birchmoor (with connections to Tamworth, and to/ from Polesworth and Dordon. Footpath AE46 will be upgraded and diverted to provide a more direct route between Birchmoor / Polesworth / Tamworth and the A5 opposite the entrance to Birch Coppice Business Park. There will also be new footpaths/ cycleways (new Public Rights of Way), running parallel with the A5 between the site (at Footpath AE46) and Dordon and between Footpath AE46 and the A5 opposite the entrance to Core 42 Business Park. All of these will significantly enhance the sustainable routes available to both local residents in the area and also employees of both the development site and surrounding employment centres as shown on the Chetwoods drawings 00801/P3, 00802/P3 and 00803/P6 attached in Appendix D.

2.10 All of the new and improved existing public Footpaths, Bridleways, cycleways and pavements will be designed to be the Equalities Act 2010 compliant, to provide access to all (subject to the agreement of WCC Rights of Way Team).

2.11 To encourage walking and cycling uptake, showers and changing facilities will be provided to all employment units. In addition, communal cycle parking, showers and changing facilities will also be provided at the ancillary Hub Office, available to the employees of all site occupiers and the general public including staff from neighbouring business parks.

Public Transport Connectivity

2.12 As part of the site access works, the A5 eastbound bus stop has to be relocated approx. 130m further east. The layby is lengthened to meet current standards, and a bus shelter with seating, associated street furniture and segregated footway/ cycleway is to be provided. The potential for a green bus shelter (i.e., made from recycled materials with green roof and solar panels to power digital information board) is to be explored, subject to agreement from the highway authority(s).

2.13 The extension of the Stagecoach 766/ 767 Tamworth and Nuneaton services from the A5 into the proposed development has been agreed with Stagecoach and WCC. The 766/ 767 bus service provides connections to a number of residential areas which draw employees by both car and bus to the area in which the application site lies. The whole of the application site would be within a 400m walk of the proposed on-site bus stop and shelter.

Rail-Served Site

2.14 MDS Transmodal were appointed by Hodgetts Estates to assess the potential for linkage with the Birmingham Intermodal Freight Terminal (BIFT) at Birch Coppice. A copy of their report is available on the planning file, and relevant extracts are attached at Appendix B. In their report, MDS estimated that around 10% of loaded inbound and outbound traffic from the site could be expected to move by rail freight via the Terminal. The effect would be to reduce the volume of HGVs travelling from the site along the SRN – the A5 and M42, and typically these are long distance trips. There would be an increase in very short distance HGV movements between the site and the terminal at Birch Coppice, although this means the route has potential for the implementation

highly sustainable battery electric vehicles (E.V.) as opposed to traditional HGVs. Overall, there are significant vehicle mileage and emissions savings.

Car Sharing

2.15 Employees who live close to one another can potentially share cars for their journey to the proposed development.

Electrical Vehicles

2.16 E.V. charging will be provided at 10% of all car and motorcycle spaces across the site and all parking spaces will be ducted for E.V. for future conversion.

2.17 A proportion of electric vehicle charging points and 'rapid' charging points are also proposed for HGV and LGV parking spaces and/or loading docks for battery electric and hybrid electric vehicles. Ducting would also be provided to all remaining HGV/LGV lorry parking spaces, to future proof all service yards and the overnight lorry parking facility.

2.18 Cycle parking facilities to incorporate electric bike charging points.

Publicity and Promotion via the Site Travel Plan

2.19 The accessibility of the site is to be actively promoted to prospective employees alongside suggestions to encourage walking, wheeling, cycling or use of public transport.

2.20 So that employees are fully aware of the transport options available to them, a website will be set up and a Sustainable Travel Pack will be provided to all employees. Also, employees can benefit from personalised journey planning sessions which will be provided by the TP Co-ordinator on request.

2.21 The Sustainable Travel Pack will comprise the following:

- Information on the TP, its targets, and the health, financial and environmental benefits.
- Information about the local area, e.g., location, distance and directions to local shops and destinations for staff on their meal breaks, Banks and other local amenities.
- Public transport details, including stop locations and routes, up-to-date timetables for bus services, fares, information on discounted tickets, how to access the Journey Planner online and links to live timetable information, e.g., www.stagecoach.com.
- Cycle maps showing the key surrounding routes in relation to local facilities, as well as local bike shops and where cycle maintenance training can be obtained.
- Walk maps showing the key surrounding routes to local facilities and services.
- Details on how to gain access to local car share websites/databases.
- Details of discounted bus taster tickets for employees of site occupiers.
- Details of emergency lift home scheme, e.g., provision of alternative means of transport for staff of site occupiers that travel to site by foot, wheel or bicycle.
- Name of the TP Co-ordinator, along with contact details by telephone, email or in person.

2.22 Any major changes to travels services, such as bus routes/services, rail routes will be circulated by the TP Co-ordinator via e-mail or a mail drop.

Policy Compliance

2.23 The vision for the site accords with the following key policies in relation to sustainability:

1. NPPF:
    - Para 105, the proposed development is significant in scale and is located adjacent to the SRN which is suitable for the anticipated type of development. Sustainable access to the site is improved with the provision of foot/cycle and public transport connections to nearby settlements including Tamworth, Polesworth, Dordon, Atherstone and Nuneaton.
    - para 110, a) appropriate opportunities to promote sustainable transport modes have been taken up with an appropriate mix of uses, and a choice of sustainable transport modes with high quality networks supporting pedestrians, cyclists and public transport users is provided and b) safe and suitable access to the site can be achieved for all users including people with disabilities and reduced mobility (e.g., wheelchair users and mothers with prams).
    - para 112, a) priority is given to pedestrian and cycle movements with a network of routes providing connections within the site and to external areas, including access to public transport, c) the site creates a place and routes that are safe, secure and attractive; e) the site enables charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations.
    - para 113, a travel plan is provided which sets out a series of measures, targets and a monitoring procedure.
2. DfT Circular 01/2022:
    - para 12, the site is in a sustainable location for the uses proposed and its transport sustainability will be improved with a choice of sustainable transport modes with high quality networks supporting pedestrians, those wheeling, cyclists and public transport users.
    - para 15, the developer recognises the need to move away from transport planning based on predicting future demand to provide capacity ('predict and provide') to planning that sets an outcome communities want to achieve and provides the transport solutions to deliver those outcomes (vision-led approaches including 'vision and validate,' 'decide and provide' or 'monitor and manage').
    - para 16, the site creates high-quality sustainable buildings and sustainable transport networks.
    - para 17, the site provides a movement network that makes connections within and beyond the site with a network of routes providing connections within the site and to external areas, including access to bus and freight rail services.
    - para 28 is supportive of new accesses onto the Strategic Road Network (SRN) for roadside facilities or SRN-dependent sectors (such as logistics and manufacturing).
    - para 30 states that in order to operate efficiently, the freight and logistics sector requires land for distribution and consolidation centres at multiple stages within supply chains including the need for welfare facilities for the drivers of commercial vehicles. The proposals respond directly to this.

- para 42, priority is given to walking, wheeling, cycling and high quality public transport with high quality networks supporting pedestrians, people with disabilities / reduced mobility, cyclists and public transport users.
- para 43, to minimise the number and length of journeys, the site has an appropriate mix of uses. Businesses will be provided with high-speed broadband. A clear movement network is provided with sustainable transport choices. Secure cycle parking is provided, both at workplaces and communal facilities. Electric vehicle charging points and "rapid" charging points with ducting to all parking spaces, including for commercial vehicle parking spaces, service yards and the overnight lorry parking facility.
- para 44, a travel plan will be provided which sets out a series of measures, targets and a monitoring procedure.
- paras 49-51, a transport assessment will be provided.
- para 79, the roadside facilities proposed are critical to ensure drivers of heavy goods vehicles have easy access to facilities.
- para 80, the new facility is located immediately off the M42, providing essential daytime and overnight parking facilities for HGV drivers.
- para 82, the proposed overnight lorry park addresses an identified unmet need for HGV parking.

3. North Warwickshire Borough Council Local Plan:

2.24 Policy LP23 of the North Warwickshire Borough Council (NWBC) Local Plan sets out the requirements for Travel Plans:

> The Assessments should assess the impact on level crossings in the vicinity of the development.
>
> Travel Plans will be required to be submitted alongside these Assessments.
>
> ***Travel Plan***
> Development will be expected to link with existing road, cycle and footpath networks. Developments that are likely to generate significant amounts of traffic and particularly larger developments will be expected to focus on the longer-term management of new trips; encourage the use of public and shared transport as well as appropriate cycle and pedestrian links. Increasing the opportunity to access these developments for all sections of the community should be addressed. This will be secured through a Travel Plan and/or financial contributions which will be secured either through planning conditions or the provisions of Section 106.

2.25 Policy LP34 of the NWBC Local Plan sets out the requirement for Parking and E.V. Charging points:

> **LP34 Parking**
>
> Adequate vehicle parking provision commensurate to a proposed development will be expected, as guided by the standards in the Document "Parking Standards". Greater emphasis will be placed on parking provision in areas not served by public transport whilst lower provision within the main towns may be appropriate.

Electric Vehicle Charging points

Electric charging points will be provided as part of all relevant developments to an agreed specification and location dependent on the scheme proposed and applicable technical guidance. Rapid charging points will be provided on sites when located in the public realm. On housing sites homes with on- site parking will provide an electric charging point in an accessible location close to the parking space(s). On commercial sites there will be employee and visitor rapid charging points.

Lorry Parking

Proposals which reduce lorry parking (either informal or formal parking areas) should be accompanied by evidence to support its loss and explore opportunities for alternative provision. In recognition of the Borough's strategic location and demand for lorry parking, the Council will give weight to lorry parking provision and facilities, and opportunities for alternative provision and for improved management in decision-taking.

3.0 ACCESSIBILITY

3.1 NPPF was updated and revised in September 2023, replacing the July 2021 version of the Framework. At Paragraph 104 c) NPPF identifies "opportunities to promote walking, cycling and public transport use are identified and pursued" for development proposals and at Paragraph 105 it indicates "opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making". The accessibility of the proposed development has been considered based on the policies in the NPPF.

3.2 Some details for this section, including photos, have been taken from the Bancroft TA.

Walking

3.3 In the vicinity of the site, a narrow 1.2m – 1.5m wide footway extends along the southern edge of the A5 carriageway. This may also be a shared unsegregated cycleway, although the signing is somewhat ambiguous. Along the northern edge of the carriageway, a typically 2m wide shared unsegregated footway / cycleway exists, although this is reduced to c.1m by street furniture at the entrance to Birch Coppice.

3.4 To the west, these facilities extend to Jn10 interchange where, the M42 slip road and the Green Lane arms include unsignalized dropped kerbs and tactile paving crossings. There are no pedestrian crossings over the A5 approaches to Jn10. Photos showing the above are provided below.

Existing crossing facilities at M42 Junction 10: Green Lane (left), Sbd Off-Slip (right)

Existing footways at site frontage on A5 (left) and at northern overbridge of M42 Junction 10 (right)

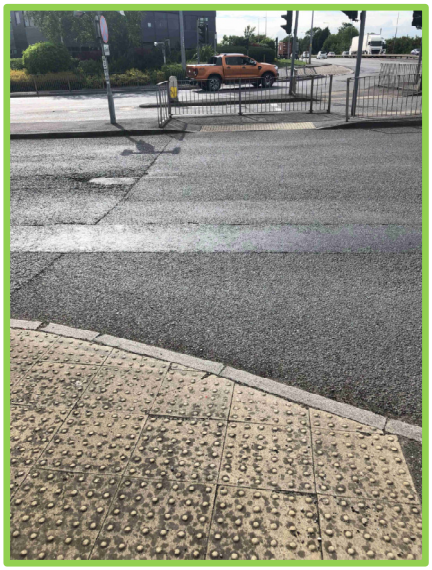
3.5 Figure 2, Appendix A1, identifies opportunities for pedestrian travel to the site, based on a 1.95km walking distance. This was based on research using NTS data of walking distances and published in Local Transport Today in October 2017. This is a 24-minute walk at a typical walking speed of 1.3m per second. The catchment area extends to the B5000 to the north, encompassing Birchmoor and the southwestern part of Polesworth which includes a significant amount of allocated residential development, approximately a 16-17 minute walk from the centre of the proposed site using the new footpath from the site entering Birchmoor through Cockspur Street, before heading east along Birchmoor Road, then south on Dordon Road.

3.6 The eastern edge of the catchment drops down from the B5000/Common Lane junction to the west of Common Lane. It then extends further to the east encompassing most of Dordon, including Browns Lane and the southern end of Long Street. This includes local shops and restaurants at the designated Browns Lane & New Street Shopping parade 'Neighbourhood Centre' along with further residential development. For example, Spar, Happy Dinner, FOCHA Turkish Kitchen and Dordon Fish Bar can all be accessed within a 22-23 minute walk from the centre of the site. This would involve exiting the site to the south and heading eastbound on the proposed foot/ cycleway alongside the A5 and the public footpath link to Browns Lane in Dordon. It is also important to note that many of the local roads within Polesworth and Dordon are traffic calmed, helping to keep speeds low and thereby improving conditions for pedestrian movement. Photos showing the above are provided below. A new Co-operative Food store at the corner of Whitehouse Road and Roman Way would also be within a 20-21 minute walk from the centre of the site, via the proposed new Public Right of Way (PROW) connecting Footpath AE46 and Barn Close.

Local shops at Browns Lane (left) and traffic calming on Whitehouse Road (right)

3.7 South of the site, the majority of the Birch Coppice and whole of Core 42 business park sites are within a reasonable walking distance. The two bus stops located within Birch Coppice can be accessed by a 16-17 minute walk from the centre of the proposed site whilst the entrance to Core 42 can be accessed within a 17-18 minute walk from the proposed site. Access to these areas requires crossing of the A5, which can be done via controlled crossing at the Birch Coppice or Core 42 junctions, or the uncontrolled crossing of the A5 dual carriageway opposite the existing bus stop layby. The proposed new site access would provide a further controlled crossing across the A5.

3.8 Each of these sites has comprehensive internal pedestrian and cyclist infrastructure to facilitate movement. Photos showing examples of these existing crossing facilities are provided below.



Crossing facilities at the Birch Coppice access (left) and Core 42 access (right)

3.9 The catchment then extends further west via Watling Street to include part of the adjacent residential area.

3.10 The area covered by the catchment north of the A5, west of Jn10 M42, comprises a mixture of residential and employment uses. It is connected to the site via Birchmoor using Cockspur Street and Green Lane, with footways along the entire length of the route and some sections with a footway on both sides of the carriageway. At the western end of Green Lane, the speed limit changes from 30 mph to national speed limit restrictions as the road splits to the north and south. The existing footway facilities at Green Lane are shown below.

Footways on Green Lane (bridge over M42 motorway)

3.11 Continuing south from this junction the route is via a Permissive Footpath that extends through to the northern edge of the Tamworth Moto service area as a traffic free route, where shops and restaurants including M&S Food, WHSmith, Greggs, Pret a Manger, Burger King, Costa Coffee and KFC can be found. From this, the catchment extends west to include additional residential development within Tamworth including the wards of Stonydelph, Glascote and Wilnecote. Photos showing parts of the pedestrian route to the south are provided below.

Pedestrian facilities on route south from Green Lane

3.12 Turning right and heading north from the Green Lane junction there is a foot/cycleway which provides various opportunities to cut into the adjacent residential areas and access the Tamworth

foot/cycle network, including the wards of Stonydelph, Glascote and Amington. The first of these is a segregated footpath/cycle path which extends through to the eastern edge of the residential estate and then offers convenient access to Pennine Way (B5080).

Pedestrian facilities on route north from Green Lane

3.13 There are a number of PROW within the surrounding area. Bancroft TA Figure 23, reproduced in Figure 3 Appendix A1, shows the designated PROWs in the area.

3.14 Bridleway 166/AE45/1 runs though the site parallel to the eastern site boundary in a north / south direction between Birchmoor and the A5, which will be diverted at the southern end to accommodate the new site access as shown in Figure 3 at Appendix A1. In addition, Figure 3 in Appendix A1 also shows how an existing Public Footpath (166/AE46/1) which extends east from the site and arches around to the south will be slightly diverted so as to provide a more direct route to the entrance to Birch Coppice Business Park. The footpath presently connects onto the A5, between the Birch Coppice and Core 42 accesses. In addition, the existing farm track which connects public footpath 166/AE46/1 with the A5 adjacent the Core 42 access junction will be upgraded as a new PROW (footway / cycleway). Continuing further east, the northern side of the A5 leads to another Footpath 166/AE48/2 that connects north-east into Browns Lane, Dordon.

3.15 A number of foot/ cycle improvements are proposed for the A5 are proposed.

3.16 The existing shared unsegregated pedestrian/ cycle path on the A5 eastbound carriageway is substandard and will be improved to comply with CD143 “Designing for Walking, Cycling and Horse-riding”. This entails widening the path to 3.0m and providing a 2.0m separation strip. As the cycleway approaches the M42 Jn10 interchange, the improvement requires alterations to the highway embankment, as shown at TT Drawings 784-B033920-TTE-00-ZZ-PL-H-0003-P02, 784-B033920-TTE-00-ZZ-PL-H-0004-P01 and 784-B033920-TTE-00-ZZ-PL-H-0005-P01 attached in Appendix A2. The drawings also show the eastbound connectivity enhancement with a 3m shared foot/ cycleway connecting to the existing A5 opposite Core 42, near Dordon.

3.17 To provide continuity and connectively for both pedestrians and cyclists it is also proposed to improve pedestrian and cycle facilities at Jn10 to comply with CD143. Signalised crossing of the north facing M42 slip roads (northbound on-slip and southbound off-slip) and of the Green Lane

arm will be provided to replace the current uncontrolled crossing points. There is no space on the north overbridge to improve pedestrian and cycle facilities, but between Green Lane and the A5/ Pennine Way north roundabout the existing narrow footway/ cycleway is to be widened to 2.0m with a 1.5m separation strip where achievable. There is a short pinch point section (circa 33m) on the A5 westbound approach to Jn10 where, owing to land constraints, a maximum 1.0m separation strip and 1.8m foot/ cycleway is achievable, refer to TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0001-P04 attached in Appendix A2, which shows the complete set of improvement works.

3.18 In addition to the improvements discussed above, Bridleway 166/AE45/1 will be upgraded and a new PROW (footpath / bridleway) introduced between Birchmoor and Dordon, significantly enhancing the sustainable routes available to local residents in the area. The new and upgraded bridleways and footpaths are shown at Figure 3 in Appendix A1 and the connectivity plans attached at Appendix D, and are also listed below for completeness:

- Bridleway AE45;
- Footpath AE46, part diverted;
- Footpath AE48.

3.19 With the above new infrastructure and enhancements to existing routes in place, not only do they benefit potential users of the proposed development, but they also offer an enhancement for existing residents and people travelling to work in the area as discussed below.

Birchmoor to Dordon

3.20 A community integration route plan showing the connectivity between Birchmoor and Dordon is attached at Appendix E. Without the proposed development it would take an 11 minute cycle ride or 27½ min walk to get from Birchmoor to Dordon and vice versa via Polesworth. With the Bridleway, and Footpath improvements the journey time for cyclists is reduced to 10 minutes and walkers to 25 minutes.

Dordon to Relay Park

3.21 A commuter point to point plan showing the available route choices between Dordon and Relay Park is attached at Appendix E. There are two existing route choices to get to Relay Park, one via Polesworth and Birchmoor and the other via the A5 and M42 Jn10. The latter provides the most direct route, taking a cyclists 15 minutes, although they would have to cross the busy M42 Jn10 at 4 uncontrolled crossings. With the proposed development enhancements, cyclists could use the new cycle path, separated from the A5 carriageway and it would also provide 4 signal controlled crossings at the M42 Jn10. The improvements would also reduce the journey time by 1 minute.

Stoneydelph to Core 42

3.22 A commuter point to point plan showing the available tarmacked route choices between Stoneydelph and Core 42 is attached at Appendix E. There are two existing route choices to get to Core 42, one via Birchmoor, Polesworth and Dordon and the other via the Tamworth Services, M42 Jn10 and the A5. The latter provides the most direct route, taking a cyclists 20 minutes, although they would have to cross the busy M42 Jn10 at 4 uncontrolled crossings. With the proposed development enhancements, cyclists could use the new cycle path, separated from the A5 carriageway and it would also provide 4 signal controlled crossings at the M42 Jn10, or the

upgraded Bridleways. Although the improvements wouldn't reduce the journey time for cyclists, they would offer safer and more pleasant routes.

Polesworth to St Modwen Park

3.23 A commuter point to point plan showing the available tarmacked route choices between Polesworth to St Modwen Park is attached at Appendix E. There are two existing route choices to get to Relay Park, one via Birchmoor, Relay Park and M42 Jn10 and the other via Dordon & the A5. The latter provides the most direct route, taking cyclists 23½ minutes, although they would have to cross the A5 at two uncontrolled crossing points. With the proposed development enhancements, cyclists could use the new cycle path running through the centre of the development and the signal controlled crossing points on the A5 (dismounted) at the site access junction. The improvements would make a substantial journey time saving for cyclists to 16½ mins.

Cycle Travel

3.24 Figure 4, Appendix A1, shows a 7.2km cycle catchment area centred on the site. It demonstrates how a large number of the surrounding residential areas would be within a reasonable cycling distance. This includes the densely populated residential areas of eastern Tamworth, such as Kettlebrook, Glascote, Glascote Heath, Belgrave, Wilnecote, and Stoneydelph, as well as the majority of Tamworth other than the residential areas on its western edge. To the northeast and east, residential areas within Polesworth, Dordon, Grendon, Baddesley Ensor, and the western residential areas of Atherstone would also be well within a comfortable cycling distance of the site. The four largest housing allocations in the NWBC Local Plan are also within a comfortable cycling distance of the site; namely, site allocations H1 (620 dwellings) and H2 (1,282 dwellings) at Atherstone, H4 (1,675 dwellings) at Polesworth and Dordon and H5 (1,270 dwellings) at Tamworth, refer to Figure 4.

3.25 Figure 5, Appendix A1, shows an extract from 'Cycling in Lichfield' map published online by Staffordshire County Council. It shows how the site is surrounded by a network of cycle facilities, ranging from traffic-free cycle paths through to advisory cycle routes along quiet roads. In the immediate vicinity of the site these facilities include advisory cycle routes at Birchmoor Road and Trinity Road, shared footway/cycleway at the northern edge of the A5 (including a Toucan crossing at the Birch Coppice access), and further cycle paths routing through the residential areas of Stoneydelph and Glascote Heath. This demonstrates how the proposed development would be well connected to the surrounding local cycle network, ensuring that cycling trips to and from the surrounding site area are within a comfortable distance and with suitable facilities.

Cyclists using existing facilities at A5 passing the site frontage

3.26 There are a number of cycle improvements proposed for the A5 which are outlined in paragraph 3.15 onwards above and illustrated by the connectivity plans at Appendix E.

Bus Travel

3.27 The closest bus stop is located at the northern edge of the A5, approximately 200m to the east of the proposed site access, and 650m from the centre of the site. This comprises a bus layby with no flag and pole (photo below refers) and serves eastbound services for Routes 766 and 767. To access westbound services, the closest existing bus stop is located within the Birch Coppice Business Park, a further 400m east.

Existing bus stop facilities at A5 eastbound

3.28 Table 3.1 below lists the services which call at the A5 Watling Street eastbound bus stop.

Table 3.1: Bus Routes – A5 Watling Street

Route No.	Route Description	Monday to Friday		Saturday Daytime	Sunday
		Daytime	Evening		
Stagecoach 766/ 767	**Tamworth to Nuneaton** Via Birch Coppice, Dordon, Baddesley Ensor, Grendon, Atherstone, Mancetter, Hartshill	**Every 1-2 hours**	**No Service**	**Every 1-2 hours**	**Every 1-2 hours**

3.29 The 766/ 767 provide direct journey opportunities to a range of large residential areas, where employees may live including Tamworth, Atherstone and Nuneaton.

3.30 There are a pair of bus stops served by the 766 and 767 services at Birch Coppice Business Park, which are approximately 1,300m from the centre of the application site (well within walking distance). These stops can be reached by footway along the northside of Watling Street, the controlled pedestrian crossing facility on the A5 and footway through the business park.

3.31 There are two bus stops on Birchmoor Road to the north of the application site which can be reached within an approximate 800m walk from the centre of the application site. The stops can be reached via a proposed footway connection to Cockspur Street / public bridleway AE45 and then continuous footway on Cockspur Street and Birchmoor Road. The eastbound stop provides a flag/ pole arrangement, and the westbound stop provides a flag/ pole arrangement and timetable information. Table 3.2 below lists the services which call at the Birchmoor Road stops.

Table 3.2: Bus Routes – Birchmoor Road

Route No.	Route Description	Monday to Friday		Saturday Daytime	Sunday
		Daytime	Evening		
Arriva 785/ 786	**Tamworth to Austrey** Via Arrington, Shuttington, Newton Regis, Wartyon, Polesworth	5 morning services then every 2 hours approx	No Service	5 morning services then every 2 hours approx	7 services

3.32 The 785/ 786 services provide direct journey opportunities to Tamworth and other residential areas where employees may live, including Polesworth and Shuttington. The proposed improvements to bus services, bus stop facilities and integration into the site are discussed in more detail at paras 6.18 to 6.27.

Rail Travel

3.33 Polesworth Station is located approximately 2.8km to the north of the site and has an extremely limited train service with only one train, early morning, per day (Monday to Saturday), and only in one direction (northbound) because the southbound platform is inaccessible.

3.34 Wilnecote Train Station is approximately 3.5km to the west of the site and could be cycled to as part of a shared journey, a route which would benefit from the proposed offsite infrastructure enhancements. Tamworth Station is approximately 7km northwest and is at the limit of a reasonable cycle ride, but could be used as part of a shared journey. Both Tamworth and Wilnecote Train Stations operate regular services to key surrounding towns that could fit with conventional working times for employees at the site.

3.35 For freight activities, the site is also close to the Birmingham Intermodal Freight Terminal (BIFT) at Birch Coppice Business Park. This is operated by Maritime Transport and provides a 24/7 operation with capacity for holding 3,000 containers. On a typical weekday, the terminal receives three trains a day from the Port of Felixstowe and two trains a day from the Port of Southampton. This provides a clear opportunity for goods associated with the proposed development to be delivered by rail rather than road, thereby reducing highway impact and increasing accessibility by sustainable modes. Maritime Transport (September 2022) has confirmed that, based on existing infrastructure, BIFT could accommodate eight trains per day meaning there is significant capacity for growth in throughput of freight at the facility.

Summary

3.36 The proposed development has good levels of accessibility on foot and by cycling to a range of useful local destinations. With the proposed bus service diversions, the majority of the site will be within an accessible walk distance to bus services that provide regular journey opportunities to a number of useful destinations. The nearby BIFT rail terminal provides an excellent opportunity for rail-road intermodal freight, which could replace 10% of HGV movements thereby reducing both HGV milage and CO2 emissions.

3.37 Overall, the accessibility of the site, taking into account the proposed connectivity improvements outlined elsewhere in this report is considered to be very good.

4.0 CURRENT MODE SHARE

4.1 The vehicle trip rates have been previously agreed by Bancroft Consulting with WCC and NH. The agreed trip rates focused on vehicles (light vehicles and HGVs) and there was no discussion regarding the trip rates for other modes of travel (i.e., via foot, wheel, bicycle, motorcycle or public transport).

4.2 The light vehicle and HGV flows predicted to be generated from the 90,000sqm B8 development and 10,000sqm E (g)(iii)/ B2/ B8 development using the agreed trip rates are shown below at Table 4.1, extracted from the Bancroft Consulting TA Rev C, dated November 2021. It was also agreed with NH and WCC that the trips associated with the proposed Truck Stop are all pass-by trips and it does not generate additional vehicles on the surrounding road network.

Table 4.1: Total Vehicle & HGV Trip Generation, 100,000sqm Employment

Time Period		Arrivals	Departures
Weekday AM Peak Hour 08:00 to 09:00	Lights	126	34
	HGV	50	52
	Total	**176**	**86**
Weekday PM Peak Hour 17:00 to 18:00	Lights	40	150
	HGV	52	28
	Total	**92**	**178**

4.3 In order to predict the arrivals and departures at the 100,000sqm employment of other modes of travel during the peak hours, data extracted from the 2011 Census for journeys from home to work has been analysed, excluding working from home. The Middle Super Output Area (MSOA) North Warwickshire 002 (which includes the development) was used to estimate the current mode share among employees who work in the area. This level of detail has been released for the 2021 Census but is affected by Covid travel restrictions and so the 2011 Census is viewed as the most reliable published data. The Census-derived employment mode shares are shown at Table 4.2 below.

Table 4.2: Mode of Travel to Work to MSOA North Warwickshire 002

Mode of Travel	Percentage Split
Car Driver	78%
Car Passenger	11%
Light rail/ Tram	0%
Train	0%
Bus	2%
Taxi	0%
Motorcycle	1%
Cycle	3%
Walk	5%
Other	0%

4.4 To predict the quantum of people likely to use the other modes of travel during the peak hours, the numbers of light vehicles from Table 4.1 have been assumed to make up 78% of the employees at the proposed development (Table 4.2). So, for example, as there are 126 light vehicle arrivals in the AM peak (representing 78% of the whole), therefore (100%/78%) x 126 = 162 total people arrivals. The 36 employees not arriving by light vehicles have been split between the other modes of travel based on the respective mode shares set out at Table 4.2.

4.5 It should be noted that the above calculations have not included the HGV trips each peak hour as they are vehicles associated with the development operations rather than journeys to work by the employees. Table 4.3 below shows the derived multi modal trip generations among employees at the 100,000sqm employment floorspace at the proposed development.

Table 4.3: Multi-Modal Trips, Combined Employment

Time Period	Arrivals	Departures
Car Driver/ Light Vehicles		
Weekday AM Peak Hour 08:00 to 09:00	126	34
Weekday PM Peak Hour 17:00 to 18:00	40	150
Car Passenger		
Weekday AM Peak Hour 08:00 to 09:00	18	5
Weekday PM Peak Hour 17:00 to 18:00	6	21
Bus		
Weekday AM Peak Hour 08:00 to 09:00	3	1
Weekday PM Peak Hour 17:00 to 18:00	1	4
Motorcycle		
Weekday AM Peak Hour 08:00 to 09:00	2	0
Weekday PM Peak Hour 17:00 to 18:00	1	2
Cycle		
Weekday AM Peak Hour 08:00 to 09:00	5	1
Weekday PM Peak Hour 17:00 to 18:00	2	6
Walk		
Weekday AM Peak Hour 08:00 to 09:00	8	2

Weekday PM Peak Hour 17:00 to 18:00	3	10
HGV		
Weekday AM Peak Hour 08:00 to 09:00	50	52
Weekday PM Peak Hour 17:00 to 18:00	52	28

5.0 TRAVEL PLAN ADMINISTRATION

5.1 Experience has shown there are certain key elements to the successful implementation of a Travel Plan:

- Commitment and involvement of the developers.
- Regular audit of travel patterns to monitor travel behaviours.
- Active promotion of the TP from the outset.
- A named TP Co-ordinator responsible for its management day to day site wide. It is envisaged some of the larger occupiers might have their own TP Co-ordinator who would report to the Site TP Co-ordinator.
- Co-operation of and communication with employees at all stages of the TP.

5.2 David Groves will be appointed TP Co-ordinator for the proposed development and his contact details are set out below.

David Groves, Principal Transport Planner, Tetra Tech, 4th Floor, Rotterdam House, 116 Quayside, Newcastle upon Tyne, NE1 3DY

T: 07966298053; email: david.groves@tetratech.com

5.3 The Site Co-ordinator will:

- Support, oversee and implement the requirements of the Travel Plan upon the users first occupation;
- Provide travel advice and guidance to employees in the early stages of occupation and throughout the development process;
- Organise the distribution of the work place Sustainable Travel Packs to employees upon first occupation;
- Ensure the travel information made available is current and up to date;
- Ensure cycle storage, showers and changing facilities are functional upon first occupation and promote use throughout the life of the development;
- Assist the end occupiers to deliver the stated TP commitments;
- Monitoring usage of the car parking and cycle parking facilities on site;
- Organise Travel Surveys, analyse these and submit regular Monitoring Reports summarising the results to Warwickshire County Council transport planning officers, together with an assessment of the success of the Travel Plan in reducing the number of trips by private car and details of any additional measures necessary to achieve the targets set within the Travel Plan.

5.4 The developer will commit to providing a budget for the Travel Plan (TP) Co-ordinator to implement measures and initiatives to encourage sustainable travel at the site.

5.5 If David Groves were to leave his post, then the LPA will be informed within 10 days with the details of the new TP Co-ordinator.

6.0 COMMITTED MEASURES TO REDUCE CAR USE

6.1 The prime objective of the TP is to reduce the number of single occupancy car trips generated by the development. A series of measures are proposed below to address this objective by encouraging greater use of public transport, car-share, walking, wheeling and cycling. Specific measures can be designed with the Full TP, when the end occupiers are better known, and can build on the below measures.

Infrastructure Improvements

6.2 There are a number of infrastructure improvement being implemented through the delivery of the development site which are outlined below:

- Between the B5080 Pennine Way (north) roundabout and M42 J10 a 2.0m wide foot/cycle way with a 1.5m separation strip will be provided.
- On M42 Jn10 a 2.0m wide foot/cycleway with a 1.5m separation strip is provided between the A5 (west) arm and the M42 northbound on-slip as well as controlled pedestrian/ cycle crossings of the two north facing M42 slip roads and at the Green Lane arm.
- Between the M42 southbound off slip and the site access the existing foot/cycleway will be widened to 3.0m and a 2.0m separation strip will be provided, as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0003-P02, 784-B033920-TTE-00-ZZ-PL-H-0004-P01 and 784-B033920-TTE-00-ZZ-PL-H-0005-P01.
- Between the site access and the A5 at Browns Lane an off-carriageway 3.0m foot/cycleway will be provided as shown at TT Drawings 784-B033920-TTE-00-ZZ-PL-H-0003-P02, 784-B033920-TTE-00-ZZ-PL-H-0004-P01 and 784-B033920-TTE-00-ZZ-PL-H-0005-P01.

Publicity and Promotion

6.3 The accessibility of the site is to be actively promoted to prospective employees alongside suggestions to encourage walking, wheeling, cycling or use of public transport.

6.4 So that employees are fully aware of the transport options available to them, a website will be set up and a Sustainable Travel Pack will be provided to all employees. Also, employees can benefit from personalised journey planning sessions for all types of journey purposes, e.g., travelling to/from work and will be provided by the TP Co-ordinator on request subject to GDPR.

6.5 The Sustainable Travel Pack will comprise the following:

- Information on the TP, its targets, and the health, financial and environmental benefits.
- Information about the local area, e.g., location, distance and directions to local shops and destinations for staff on their meal breaks, Banks and other local amenities.
- Public transport details, including stop locations and routes, up-to-date timetables for bus services, fares, information on discounted tickets, how to access the Journey Planner online and links to live timetable information, e.g., www.stagecoach.com.
- Cycle maps showing the key surrounding routes in relation to local facilities, as well as local bike shops and where cycle maintenance training can be obtained.
- Walk maps showing the key surrounding routes to local facilities and services.

- Details on how to gain access to local car share websites/databases.
- Details of discounted bus taster tickets for employees of site occupiers.
- Details of emergency lift home scheme, e.g., provision of alternative means of transport for staff of site occupiers that travel to site by foot, wheel or bicycle.
- Name of the TP Co-ordinator, along with contact details by telephone, email or in person.

6.6 Any major changes to travel services, such as bus routes/services, rail routes will be circulated by the TP Co-ordinator via e-mail or a mail drop.

Measures to Improve Walking

6.7 In addition to the proposed foot/cycleways within the development site, linking to the existing footway on the network, walking is to be encouraged by the information within the Sustainable Travel Pack advising of recommended routes to destinations on meal breaks and bus stops and rail stations. The health benefits associated with walking will be promoted by the TP Co-ordinator.

6.8 In line with Manual for Streets, the internal layout will be designed to encourage safe routes within the development to provide clear, coherent, and attractive routes for pedestrians to encourage walking to destinations within a short walk which may replace short car journeys.

6.9 There are a number of infrastructure improvements being delivered through the development which are outlined in Chapter 2.0 and 3.0 above and Chapter 6 below, and illustrated at the plans attached at Appendix D.

6.10 With the above new infrastructure and enhancements to existing routes in place, not only do they benefit potential users of the proposed development, but they also offer an enhancement for existing residents and people travelling to work in the area as discussed below.

Measures to Improve Cycling

6.11 Cycle parking will be provided at all units at an excess of the North Warwickshire Borough Council standard, incorporating a range of parking facilities to include indoor/ outdoor parking, secure parking and covered parking, and electric bicycle charging points, all located at or close to pedestrian entrances.

6.12 Showers and changing facilities will be provided at all units and in the ancillary Hub Office which would also be available to members of the public to encourage walking, wheeling and cycling to work at neighbouring business parks.

6.13 In addition to the proposed shared foot/cycleways within the site, and improvements to and connections to the wider footway network, cycling is to be encouraged by the information within the Sustainable Travel Packs including local cycle maps showing recommended routes. The health benefits associated with cycling will be promoted by the TP Co-ordinator.

6.14 In line with Manual for Streets, the internal layout will be designed to encourage safe routes within the development to provide clear, coherent and attractive routes for cyclists to encourage cycling.

6.15 The TP Co-ordinator will make endeavours on behalf of staff to agree discounts at local cycle shops and investigate and publicise cycle training courses and cycle check services. The TP Co-ordinator

will explore setting up a Bicycle User Group (BUG) for the development and encourage regular meetings to discuss issues and problems.

6.16 At the request of Staffordshire County Council, any staff members who have walked, wheeled or cycled into work are entitled to a taxi fare if an emergency visit is required.

6.17 The TP Co-ordinator will liaise with individual operators to encourage staff to participate in the 'Cycle to Work' scheme, which will allow employees of companies to purchase bikes and cycle equipment tax-free through their employer.

Measures to Improve Public Transport

6.18 The development proposals include improvements to bus provision. As part of the site access works, the A5 eastbound bus stop has to be relocated approx. 130m further east to comply with CD169 as shown at TT Drawing 784-B033920-TTE-00-ZZ-PL-H-0002-P02 attached in Appendix A2. The layby is lengthened, and facilities are improved, including the provision of a modern shelter with seating, associated street furniture and a separated cycle bypass behind the waiting area. The potential for a green bus shelter (i.e., made from recycled materials with green roof and solar panels to power digital information board) is to be explored, subject to agreement from the relevant highway authority(s).

6.19 The existing pedestrian connection and informal crossing over the A5 that serves the bus layby is extended to the new location.

6.20 A Public Transport Strategy (PTS) has been prepared and has been agreed by WCC and Stagecoach.

6.21 The Public Transport Strategy for the site is predicated on the extension of the Stagecoach 766/ 767 Tamworth – Nuneaton services into the proposed development. The 766/ 767 bus service provides connections to a number of residential areas which draw employees by both car and bus to the area in which the application site lies. These areas include Tamworth, Dordon, Atherstone and Nuneaton. The 766/767 already serves Birch Coppice Business Park as a diversion from the A5 and clearly is considered to provide a suitable level of service to this large employment site.

6.22 A bus turning area is proposed within the proposed development site, which would be located approximately 200m from the A5/ Site Access junction. The proposed bus turning area would be deliberately located close to the site access junction to reduce the length of the diversion and thereby reduce the impact on existing passengers. The length of the diversion from the site access junction and out onto the A5 would be approximately 400m.

6.23 The whole of the application site would be within a 400m walk of the proposed bus stop at the bus turning area, which accords with local policy requirements for new developments. The bus extension and proposed bus turning area has been agreed in principle with WCC's Transport Operations team and with Stagecoach. The proposals for the site at M42 Jn10 comply with local and national standards and, if approved, would provide attractive sustainable public transport travel options for employees travelling to and from the site.

6.24 There are also two bus stops on Birchmoor Road to the north of the application site which can be reached within an approximate 800m walk from the centre of the application site via a proposed footway connection to Cockspur Street / public bridleway AE45 and then continuous footway on Cockspur Street and Birchmoor Road.

6.25 Any service changes will be circulated by the TP Co-ordinator via e-mail or mail drop. Awareness is to be raised among residents and workers of the public transport options available to them by making easy-to-understand timetables and maps for operators supplied by the TP Co-ordinator.

6.26 A map showing the nearest bus stops, walk distances to each, and times by bus to the most common destinations near to the proposed development will be distributed by the TP Co-ordinator.

6.27 The TP Co-ordinator will also liaise with Stagecoach to determine whether discounted bus tickets can be provided to employees as taster tickets, which could help to encourage bus use to/ from the site.

Car Sharing

6.28 Employees who live close to one another can potentially share cars for their journey to the proposed development.

6.29 Car sharing will be encouraged with information provided by the TP Co-ordinator on how to gain access to local car share websites/databases, e.g., www.liftshare.com.

6.30 The financial and social benefits associated with car sharing are to be promoted by the TP Co-Coordinator.

Electrical Vehicles

6.31 In terms of electronic vehicle (E.V.) charging spaces, these are proposed to be provided for 10% of all car and motorcycle spaces across the site with ducting installed so that all spaces are capable of being converted to E.V. charging spaces if required in the future.

6.32 A proportion of electric vehicle charging points and 'rapid' charging points are also proposed for HGV and LGV parking spaces and/or loading docks for battery electric and hybrid electric vehicles. Ducting would also be provided to all remaining HGV/LGV lorry parking spaces, to future proof all service yards and the overnight lorry parking facility.

6.33 Finally, electric bike charging points would be provided to all units.

6.34 Full details of the E.V. charging provision would be set out in any final scheme layout, in full compliance with these levels of provision.

New Recruits

6.35 When people move jobs, they often reconsider their travel behaviour. Consequently, when taking on new recruits, there is an opportunity to encourage them to consider travelling by more environmentally friendly modes than they usually do.

6.36 The Site TP Co-ordinator would arrange personalised journey planning, if requested, and provide Welcome Packs to the end occupiers for them to distribute among new recruits prior to their first day. Details of pedestrian, wheel, cycle links and bus routes, including their associated timetables, would be made available to employees as part of the packs.

Heavy Goods Vehicles

6.37 Research undertaken has forecast that around 10% of loaded inbound and outbound traffic from the site could be expected to move by rail freight via BIFT. The use of rail freight will be promoted to minimise the volume of HGV movements.

6.38 As noted above, the proposals would incorporate a proportion of E.V. charging points and 'rapid' charging points for HGV and LGV parking spaces and/or loading docks, with ducting to all remaining HGV/LGV lorry parking spaces to future proof the development.

6.39 The application scheme has also been assessed against its preparedness for the transition to zero-emission goods vehicles and a series of design measure incorporated to ensure the scheme is 'net-zero ready'. The report concludes that the scheme would make a significant contribution to the process of decarbonising the road transport sector along a section of the Strategic Road Network (the A5) identified as being deficient at the present time.

7.0 TARGET MODE SHARE

7.1 This Travel Plan proposes a variety of methods to reduce the mode share of car driver trips while increasing the mode share of sustainable modes, such as public transport, walking, wheeling and cycling. As described above, these include extensive infrastructure provision for pedestrians and cyclists, improvements to the existing PROW network, and the extension of bus routes into the site.

7.2 The good accessibility of the site when complete can be expected to produce a shift in mode choice for journeys to work for all purposes, over and above what would be expected without any sustainable transport interventions together with the publicity and promotion of the Travel Plan.

7.3 Ultra-low and zero emission vehicles are considered to be sustainable modes of transport in the NPPF and the proportion of such vehicle in the national fleet is expected to rise in the coming years.

7.4 Recent research by the UK's Society of Motor Manufacturers and Traders, shows electric vehicles accounted for 16% of new car sales in 2022. By 2030 it is estimated that 30% of the second-hand car market will be electric vehicles. Taken alongside the Government's Decarbonisation plan which prohibits the manufacture of fossil fuel cars after 2030, this trend is only going to increase.

7.5 Targets are measurable goals which are set in order to assess whether the objectives of the plan have been achieved. They need to be realistic and consider the particular circumstances and location of the development.

7.6 The prime objective of the TP is to reduce the number car trips by employees to work. Several of the TP measures are implemented before, or as the first employees move to site, therefore the Census mode share for home to work shown at Table 4.2 is considered a good initial base.

7.7 For the proposed employment element of the scheme, a target of 18% car driver reduction is suggested based on guidance in TAG Unit M5.2[2]. Relevant extracts from M5.2 are attached at Appendix C. An 18% reduction in the mode share for Car Driver recorded in the Baseline Survey is proposed as an Initial Target. This is not considered unreasonable to seek to achieve that over the first 5-year period of the TP. An 18% reduction on 78% is a 14-percentage point reduction, so the car driver mode share target is 64%.

7.8 The modal shift of 14-percentage points are therefore anticipated to be attributed wholly to bus, walking, wheeling, cycling and car passenger. With the measures discussed in Chapter 6 to increase these modes of travel, the shift to any of these modes is immaterial so long as the reduction in car driver is reduced by 14-percentage points. Nevertheless, a target of the mode shares is provided in Table 7.1 below.

[2] TAG Unit M5.2 Modelling Smarter Choices, January 2014 Department for Transport

Table 7.1: Current and Target Mode Share, Employment

Mode of Travel	Residential	
	Current	Target
Car Driver	78%	64%
Car Passenger	11%	16% (+5%)
Bus	2%	7% (+5%)
Cycle	3%	5% (+2%)
Walk (inc. Wheeling)	5%	7% (+2%)
Motorcycle	1%	1%

7.9 The TP will endeavour to achieve the modal shift targets shown in Table 7.1 among staff journeys to work over 5 years.

7.10 It will be at the discretion of the TP Co-ordinator to identify where measures should be focussed year on year and amend the table accordingly. However, the focus must always be to reduce single occupancy private car use which must always have a Target which represents year on year reduction.

7.11 These Targets will not be omitted or changed without prior consultation with NH and WCC's Travel Plan Officers.

HGV

7.12 As previously discussed, research undertaken by MDS Transmodal in November 2021 has forecast that around 10% of loaded inbound and outbound traffic from the site could be expected to move by rail freight via BIFT. It is therefore a target to reduce the longer distance HGV movements by 10%. However, there would be corresponding increase in movements between the site and Birch Coppice.

8.0 RESIDUAL TRIPS

8.1 The residual employment trip rates for each mode of travel have been calculated by applying the TP target mode shares at Table 7.1 (i.e., after travel planning measures have had an impact) to the initial trips as shown at Table 4.3.

8.2 Likewise, the residual HGV trips can be calculated by applying the TP target reduction of 10% to the initial trips as shown at Table 4.3.

Residual Multi-Modal Trips

8.3 Table 8.1 below shows the volume of trips generated by the proposed development, by mode, for the weekday AM and PM peak hours, after the TP measures have been taken into account. It also shows the comparison between the initial generated trips and proposed generated trips, by mode.

Table 8.1: Current and Target Multi Modal Trips

	Arrivals			Departures		
Time Period	**Current**	**Target**	**Difference**	**Current**	**Target**	**Difference**
Car Driver/ Light Vehicles						
Weekday AM Peak 08:00 to 09:00	126	104	**-22**	34	28	**-6**
Weekday PM Peak 17:00 to 18:00	40	33	**-7**	150	122	**-28**
Car Passenger						
Weekday AM Peak 08:00 to 09:00	18	26	**+8**	5	7	**+2**
Weekday PM Peak 17:00 to 18:00	6	8	**+2**	21	31	**+10**
Bus						
Weekday AM Peak 08:00 to 09:00	3	11	**+8**	1	3	**+2**
Weekday PM Peak 17:00 to 18:00	1	4	**+3**	4	14	**+10**
Motorcycle						
Weekday AM Peak 08:00 to 09:00	2	2	**0**	0	0	**0**
Weekday PM Peak 17:00 to 18:00	1	1	**0**	2	2	**0**
Cycle						
Weekday AM Peak 08:00 to 09:00	5	8	**+3**	1	2	**+1**
Weekday PM Peak 17:00 to 18:00	2	3	**+1**	6	10	**+4**
Walk						

Weekday AM Peak 08:00 to 09:00	8	11	**+3**	2	3	**+1**
Weekday PM Peak 17:00 to 18:00	3	4	**+1**	10	14	**+4**
HGV						
Weekday AM Peak 08:00 to 09:00	50	45	**-5**	52	47	**-5**
Weekday PM Peak 17:00 to 18:00	52	47	**-5**	28	25	**-3**

Note: No change in total HGV movement at the site access, the reduction of trips on the wider network go to/ from the Freight Rail at Birch Coppice.

8.4 The TP measures and the subsequent reduction in car driver trips results in 28 fewer vehicle trips in the AM peak hour and 35 fewer in the PM peak hour, whilst there is a reduction of 10 HGV trips in the AM and 8 in the PM peak hour.

Flow Diagrams

8.5 To understand the effect of the Travel Plan measures and resultant vehicle reductions on the local road network, this section discusses in more detail.

Current Traffic Flows (Prior to Travel Plan Effects)

8.6 Figure 6 attached in Appendix A1 shows the AM peak development generated traffic flows for light vehicles and Figure 7 shows the PM Peak equivalent. Figure 8 shows the AM Peak development generated HGV flows and Figure 9 shows the PM peak equivalent. The traffic flows have been extracted from WCC's A5 Atherstone Paramics model, provided by Vectos.

Car Passenger Effect (Light Vehicles)

8.7 Table 8.1 shows the predicted increase in the car passenger share and this has been applied to the light vehicles traffic flows. The reductions in light vehicle trips on the network have been broadly based on the distribution and assignment shown at Figures 6 and 7. Figure 10 shows the predicted reductions in light vehicles in the AM peak as a result of the increase in car passenger trips. Figure 11 shows the PM peak equivalent.

Bus Effect (Light Vehicles)

8.8 Table 8.1 shows the predicted increase in the bus share and this has been applied to the light vehicles traffic flows. The Stagecoach 766/ 767 which will serve the development site serves Tamworth City Centre and Atherstone, therefore the light vehicle trips have been reduced on these routes, broadly based on the distribution and assignment shown at Figures 6 and 7. Figure 12 shows the predicted reductions in light vehicles in the AM peak as a result of the increase in bus trips. Figure 13 shows the PM peak equivalent.

Walk/ Cycle Effect (Light Vehicles)

8.9 Table 8.1 shows the predicted increase in the walk/ cycle share and this has been applied to the light vehicles traffic flows. The improvement to foot/ cycleways connecting the development site to the east, north and west have been considered and how it will translate to a reduction in car trips. Upon review of Figures 6 and 7 it is clear that car trips to/ from residential areas within walking/

cycling distance are Tamworth and Wilnecote to the west of the M42/ Junction 10. There are no arrival car trips from the Grendon area (via Long Street). Therefore, all of the walk/ cycle trips are expected to be from these areas, therefore the light vehicle trips have been reduced on these routes. Figure 14 shows the predicted reductions in light vehicles in the AM peak as a result of the increase in walk/ cycle trips. Figure 15 shows the PM peak equivalent.

Total Effect (Light Vehicles)

8.10 Figure 16 attached in Appendix A1 shows the total AM peak reductions in light vehicles as a result of the Travel Plan measures, and Figure 17 shows the PM peak equivalent. Figure 18 shows the total AM peak light vehicle traffic flows with the effects of the Travel Plan and Figure 19 shows the PM peak equivalent.

Birmingham Intermodal Fright Terminal Effect (HGV's)

8.11 Table 8.1 shows the predicted decrease in the HGV's. The 10% reduction in HGV trips on the network have been applied based on the distribution and assignment shown at Figures 8 and 9. It is also necessary to assign the HGV trips from the fright terminal (within Birch Coppice) to the development site and so the reductions in HGV's on the wider network have been transferred to this Terminal. Figure 20 shows the AM peak reductions (and increase) in HGV movements and Figure 21 shows the PM peak equivalent.

8.12 Figure 22 shows the total AM peak HGV traffic flows with the effects of the Freight Terminal and Figure 23 shows the PM peak equivalent.

Total Residual Traffic Flows (PCU)

8.13 The total residual traffic flows for modelling purposes have been derived by converting the traffic flows into passenger car units (pcu). The light vehicles represent 1pcu and a HGV represents 2pcu, therefore the HGV flows have been multiplied by 2 and added to the light vehicles. Figure 24 attached in Appendix A1 shows the total AM peak development generated traffic flows in pcu and Figure 25 shows the PM peak equivalent.

9.0 MONITORING OF SUCCESS

9.1 The most effective way of monitoring the progress of a TP is to regularly survey employees to identify their travel behaviours over time.

9.2 The Travel Plan measures discussed at Chapter 6 will be implemented prior to occupation, therefore when employees start working on site most if not all of the Travel Plan measures are in place, therefore the 1st survey to establish mode of travel should not be taken as the baseline for which to achieve the targets identified at Chapter 7. The 2011 Census mode share to work provides a good estimate of the likely mode of travel, prior to the effect of Travel Plan measures.

9.3 The 1st travel surveys of employees can be undertaken during a neutral month on a date post-occupation agreed with NH and WCC to determine revealed travel patterns during the AM and PM peaks (7:30am-9:30am and 4:00pm-6:00pm, respectively). The surveys can be undertaken by mail drop of leaflets with QR codes and/or paper questionnaires with pre-paid envelopes. Traffic surveys would also be undertaken at the site access and the separate pedestrian/ cycle access points. The data will provide the trip generation of the site, and will allow a direct comparison to the residual trip rates outlined in Chapter 8.

9.4 If the survey results reveal the mode share for car driver exceeds 64%, then the TP Co-ordinator can consult with NH, WCC and site developer to discuss remedial options that may be deemed necessary and viable to reduce single occupancy car drivers.

9.5 These surveys would seek to identify any changes in travel behaviours and would also be a means of identifying areas in which the efforts of the Site TP Co-ordinator should be best directed. The survey results and TP outcomes would be shared with the NH and WCC within 1 month of the data being received.

9.6 Subsequent surveys are to follow on an annual basis thereafter until 5 years following occupation of the whole site. After 5 years a thorough review of the plan will be carried out and revised targets set if necessary.

10.0 POLICY REQUIREMENTS

10.1 As discussed in Chapter 2.0 above the NWBC Local Plan sets out the requirements for Travel Plans:

> The Assessments should assess the impact on level crossings in the vicinity of the development.
>
> Travel Plans will be required to be submitted alongside these Assessments.
>
> ***Travel Plan***
> Development will be expected to link with existing road, cycle and footpath networks. Developments that are likely to generate significant amounts of traffic and particularly larger developments will be expected to focus on the longer-term management of new trips; encourage the use of public and shared transport as well as appropriate cycle and pedestrian links. Increasing the opportunity to access these developments for all sections of the community should be addressed. This will be secured through a Travel Plan and/or financial contributions which will be secured either through planning conditions or the provisions of Section 106.

10.2 Table 10.1 below summarises how the Local Plan requirements have been met by this Travel Plan:

Table 10.1: Travel Plan Compliance with NWBC Local Plan Requirements

Local Plan - Travel Plan Requirement	Travel Plan Compliance
Development linking with existing road, cycle and footpath networks	Fully-signalised pedestrian/ cycle crossings at site access junction. Fully signalised crossing of the A5 carriageway. Pedestrian/ cycle connections to Cockspur Street to the north and the A5 to the south. Pedestrian/ cycle connections to Bridleway 166/AE45/1 and Public Footpath 166/AE46/1 to the east.
Longer term management of new trips	Five-year targets for the Travel Plan have been set.
Encourage the use of public transport	Diversion of Stagecoach 766/ 767 service into the development site providing connections to surrounding residential areas. Provision of shelter with seating and information within the site. Provision of replacement bus stop on the A5, upgraded to comply with design standards.
Appropriate cycle and pedestrian links	Enhanced pedestrian/ cycle connections along the north side of the A5. Enhanced pedestrian/ cycle connections across the north side of M42 Jn10. Upgraded bridleways and footpaths and new footway / cycleways in the vicinity of the site – see Proposed Connectivity Plan (ref. 00803/P3) attached at Appendix D
Access for all sections of the community	Mobility impaired car parking spaces will be provided at the site and located close to the entrances. Tactile paving and dropped kerbs will be provided at all proposed crossing facilities.

	Routes through the site and other land under the control of the applicant will be improved to facilities walking, wheeling and cycling through the site to nearby employment areas such as Brich Coppice. All new and existing public footpaths, public bridleways, footway/ cycleways and pavements to be designed to be Equalities Act 2010 compliant.

10.3 As discussed in Chapter 2.0 above, the Department for Transport sets out requirements for Travel Plans in its Policy paper; 'Strategic road network and the delivery of sustainable development'.

10.4 Table 10.2 below summarises how the DfT Policy paper requirements have been met by this Travel Plan:

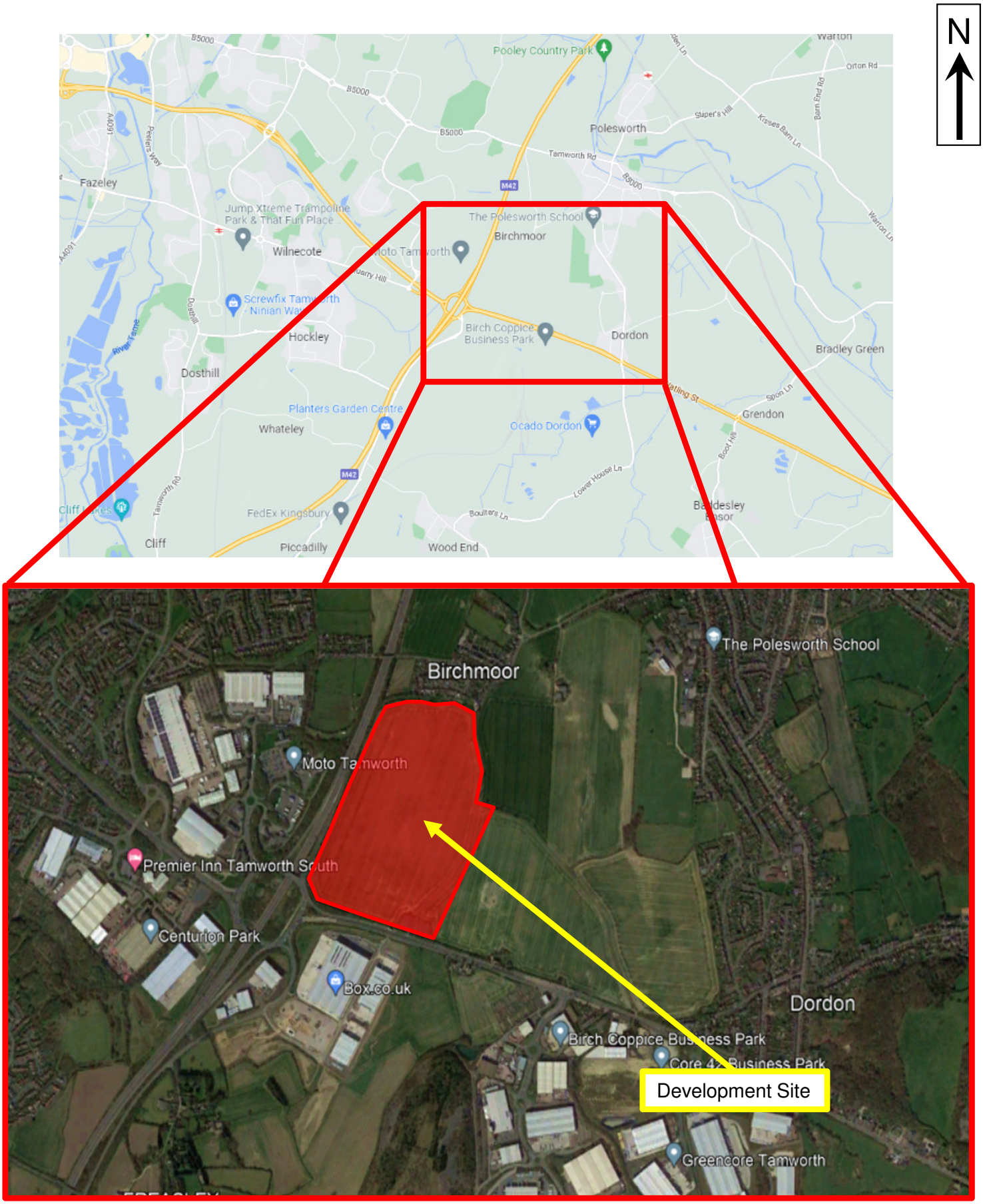
Table 10.2: Travel Plan Compliance with DfT Policy Paper Requirements

Local Plan - Travel Plan Requirement	Travel Plan Compliance
Clear targets to manage down the traffic impacts of the scheme	Five-year targets for the site wide Travel Plan have been set.
Maximise the sustainability of and within the site by walking, wheeling, cycling, public transport and shared travel	A series of measures are to be introduced to encourage walking, wheeling, cycling, public transport and shared travel. Enhanced pedestrian/ cycle connections along the north side of the A5. Enhanced pedestrian/ cycle connections across the north side of the M42 Jn10. Upgraded bridleways and footpaths and new footway / cycleways across the site, and surrounding area. Diversion of Stagecoach 766/ 767 service into the development site providing connections to surrounding residential areas. Provision of shelter with seating and information within the site.
Sustained monitoring	Monitoring surveys and reports will be produced annually for the duration of the travel plan
Appointment of a Travel Plan Co-ordinator	A Travel Plan Co-ordinator will be appointed prior to first occupation.

11.0 ACTION PLAN

Measure	Objective	Responsibility	Deadline
Produce Full TP to be agreed with Local Planning Authority	Refine TP to site conditions	TT	Post planning permission
Provide on-site pedestrian and cyclist facilities	Promote walking and cycling	The developer	During construction
Appoint Travel Plan Co-ordinator	Provide person responsible for plan	The developer	Prior to first occupation
Issue employees with Sustainable Travel Pack	Promotion of sustainable travel	Travel Plan Co-ordinator	At first occupation
Set up sustainable travel website	Promotion of sustainable travel	Travel Plan Co-ordinator	At first occupation
Offer personalised journey planning to employees	Promotion of sustainable travel	Travel Plan Co-ordinator	At first occupation
Investigate car sharing	Promotion of sustainable travel	Travel Plan Co-ordinator	From first occupation
Investigate BUG groups	Promotion of sustainable travel	Travel Plan Co-ordinator	From first occupation
Carry out Baseline Survey and Report to NH, WCC and the LPA	Determine baseline travel patterns	Travel Plan Co-ordinator	Date agreed with NH, WCC and the LPA after first occupation
Carry out Follow Up Surveys and Reports to NH, WCC and the LPA	Monitor plan progress towards targets	Travel Plan Co-ordinator	12 months after Baseline Survey and then on annual basis thereafter
Produce TP Review Report and agree TP for next 5 years with NH, WCC and the LPA	Tailor TP to site conditions and progress for targets	Travel Plan Co-ordinator	5 years after first occupation and thereafter every 5 years until targets met.

APPENDIX A1: FIGURES



M42 Junction 10, Tamworth

Site Location Plan

Figure 1

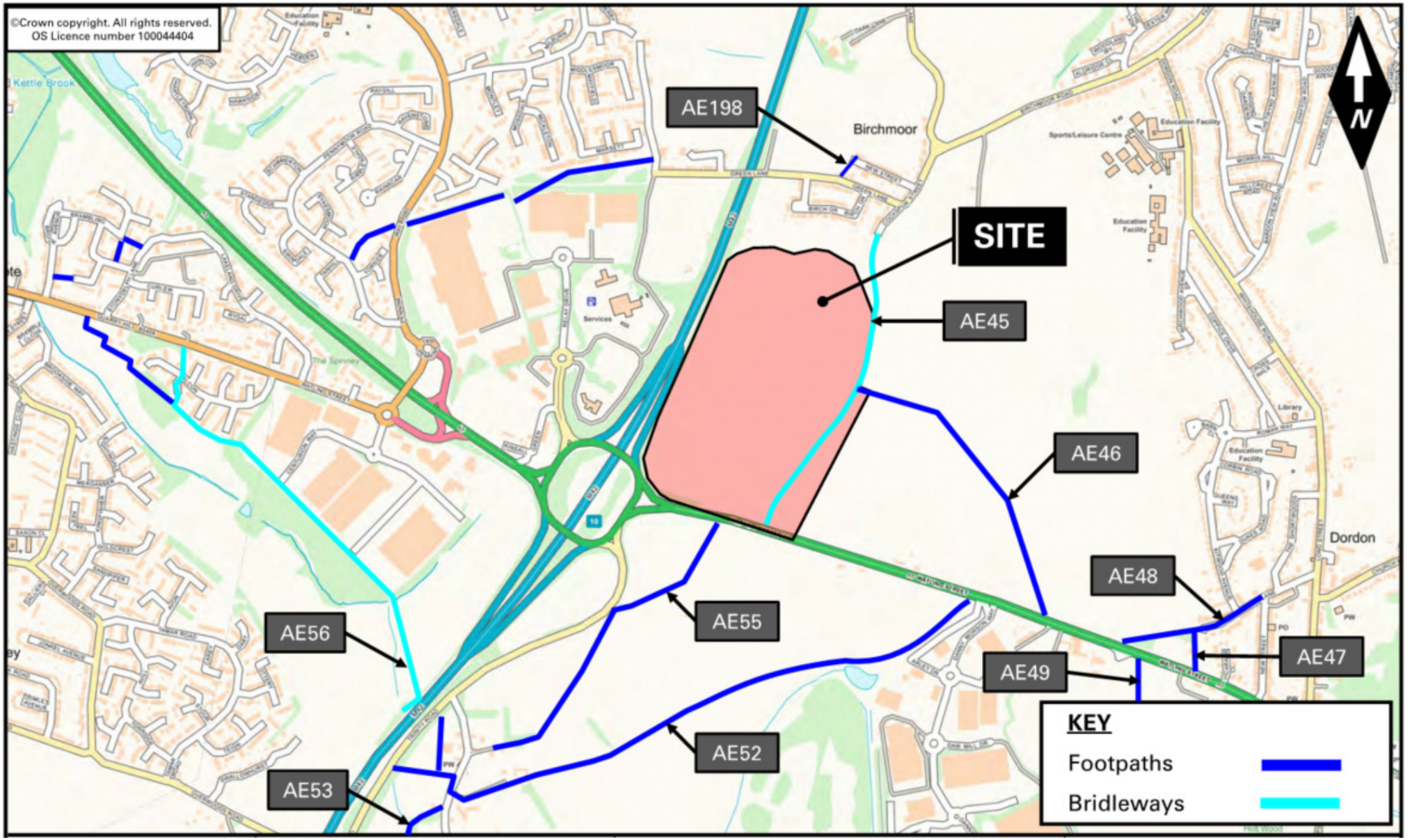
TETRA TECH

Proposed Employment Land NE of J10 M42

Walk Accessibility Plan

Figure 2

TETRA TECH



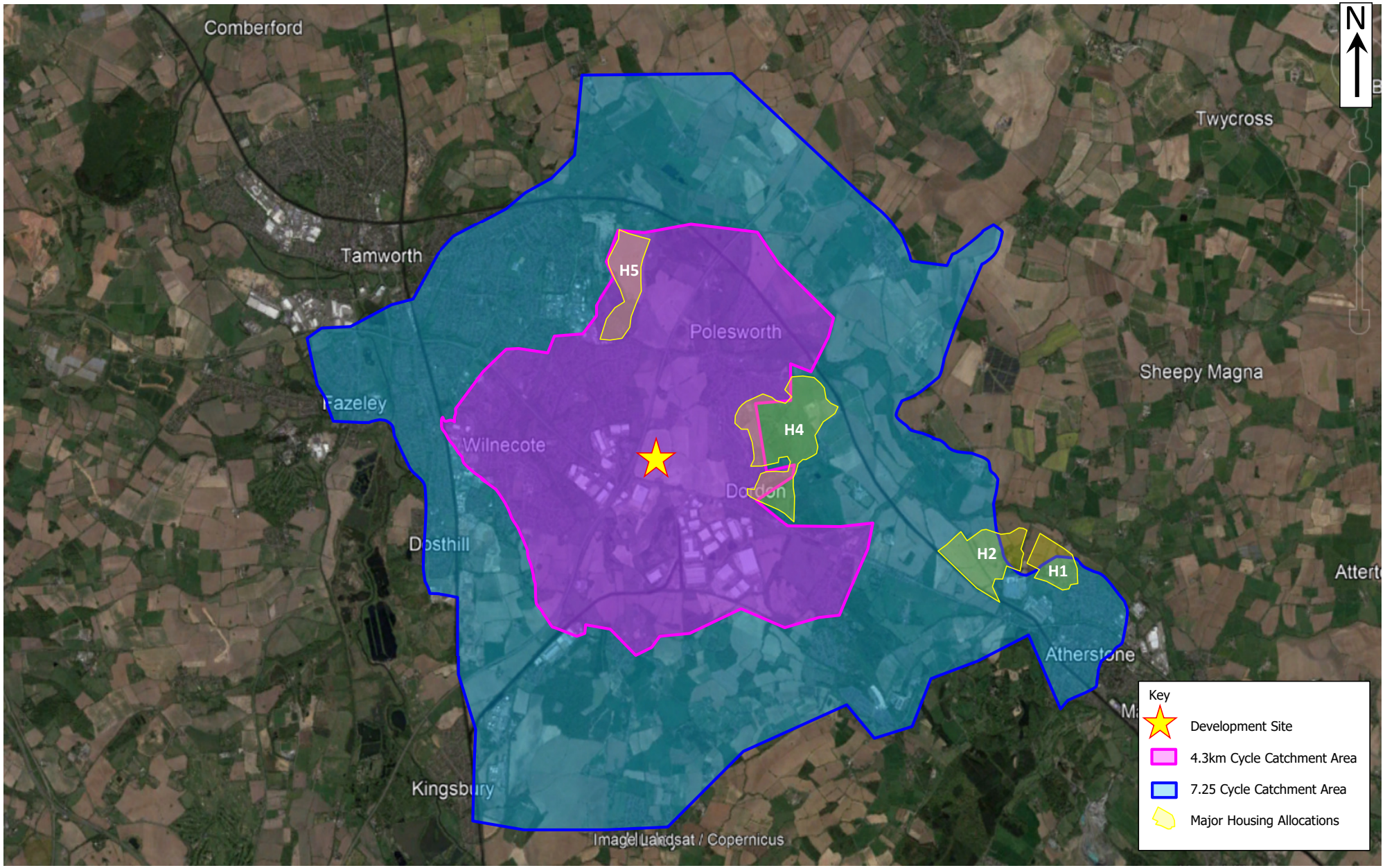
Source: Bancroft Figure 23

M42 Junction 10, Tamworth

Local Public Rights of Way

Figure 3

TETRA TECH



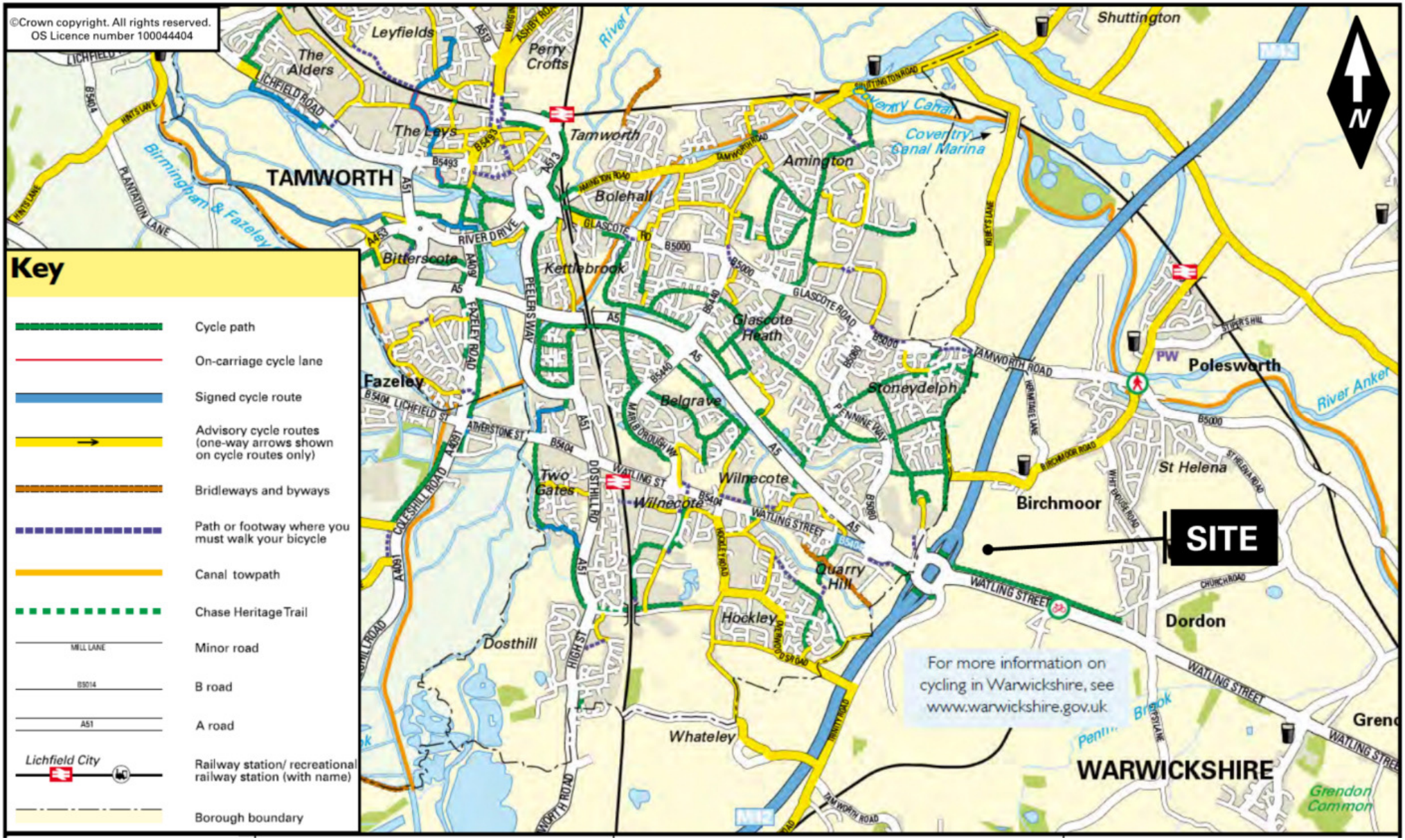
Source: Google Earth

M42 Junction 10, Tamworth

Cycling Accessibility Plan

Figure 4

TETRA TECH



Source: Bancroft Figure 25

M42 Junction 10, Tamworth

Cycling in Lichfield Map

Figure 5

TETRA TECH

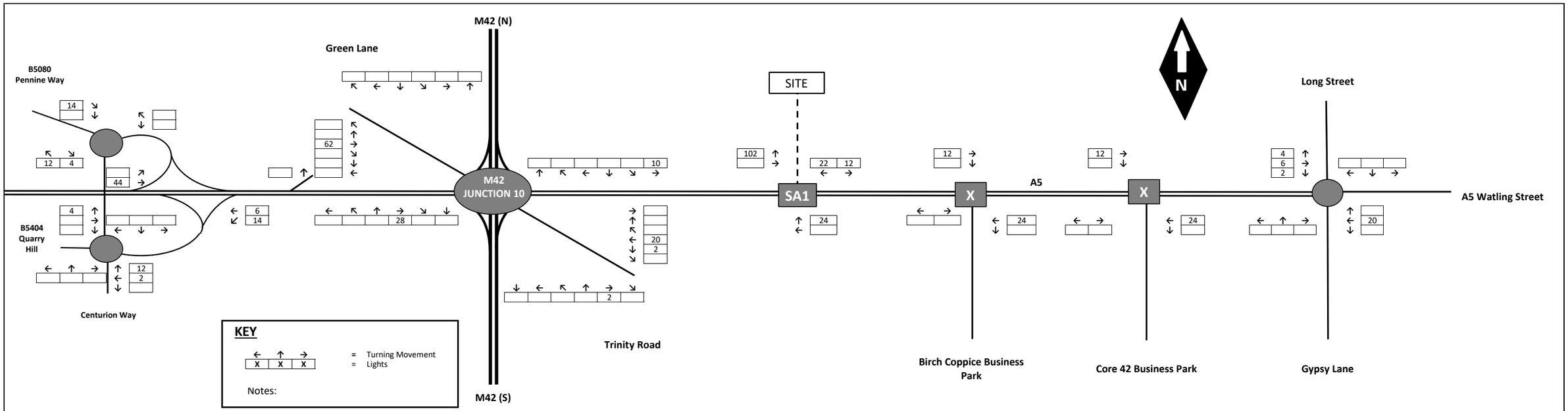


FIGURE 6

AM Peak Development Generated Traffic Flows (Lights)

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

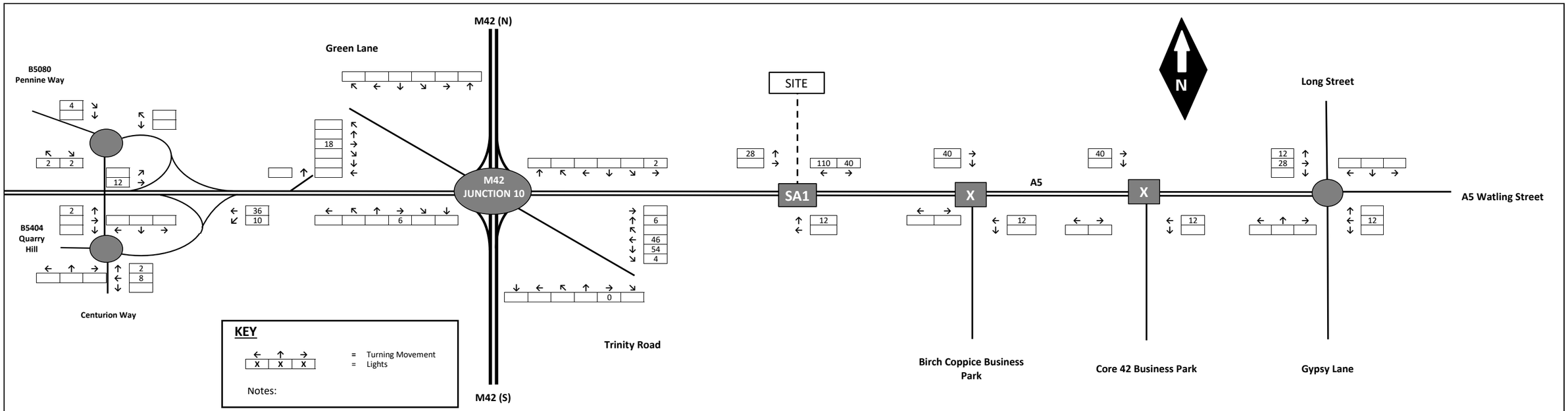


FIGURE 7

PM Peak Development Generated Traffic Flows (Lights)

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

TETRA TECH

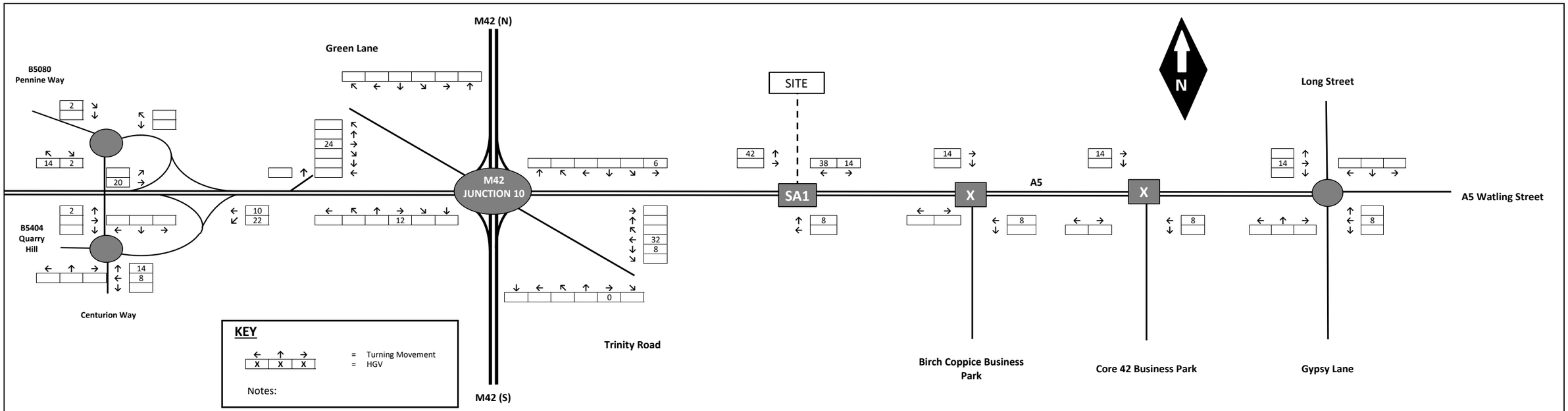


FIGURE 8

AM Peak Development Generated Traffic Flows (HGV)

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

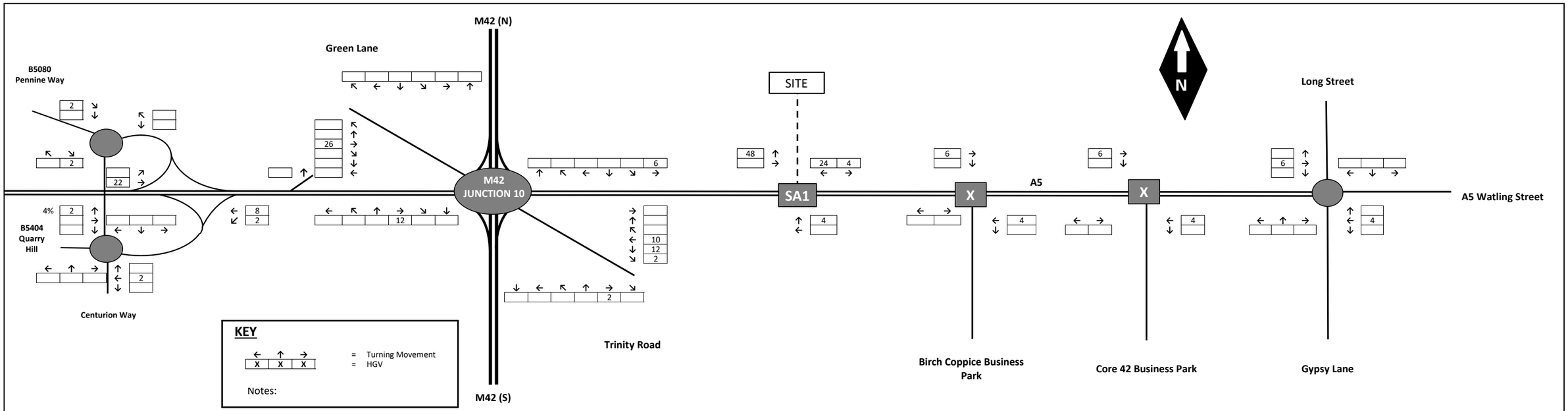


FIGURE 9

PM Peak Development Generated Traffic Flows (HGV)

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

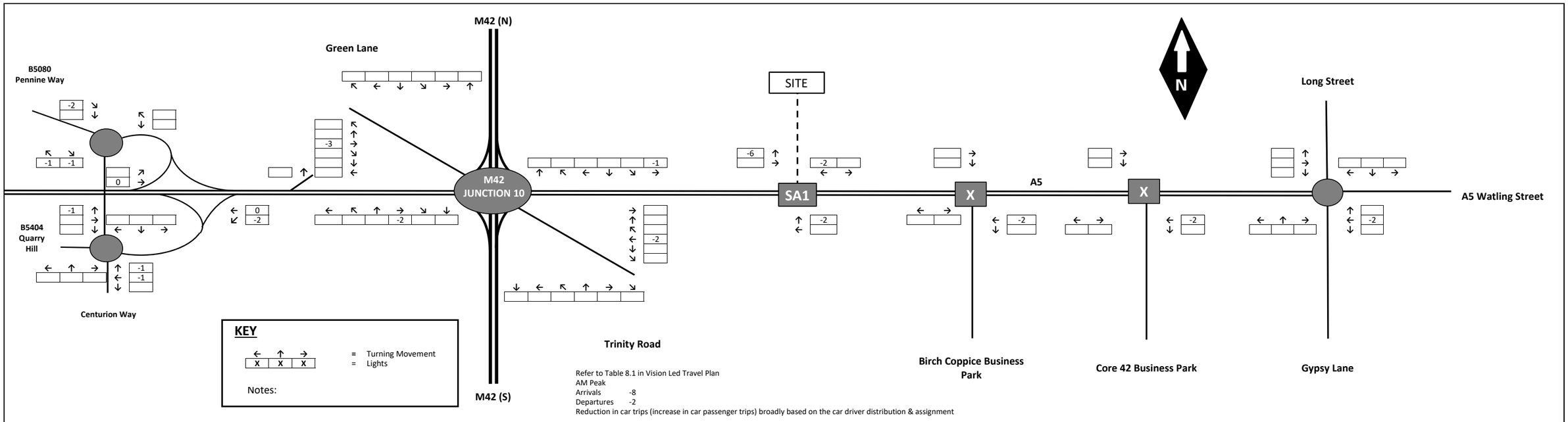


FIGURE 10

AM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Car Passenger

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

TETRA TECH

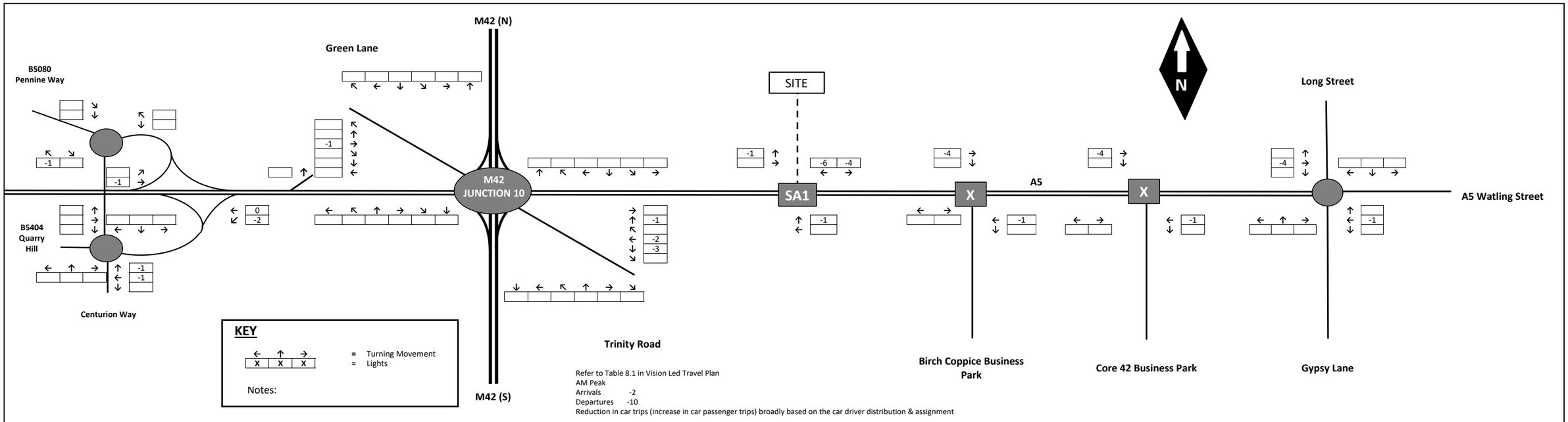


FIGURE 11

PM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Car Passenger

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

TETRA TECH

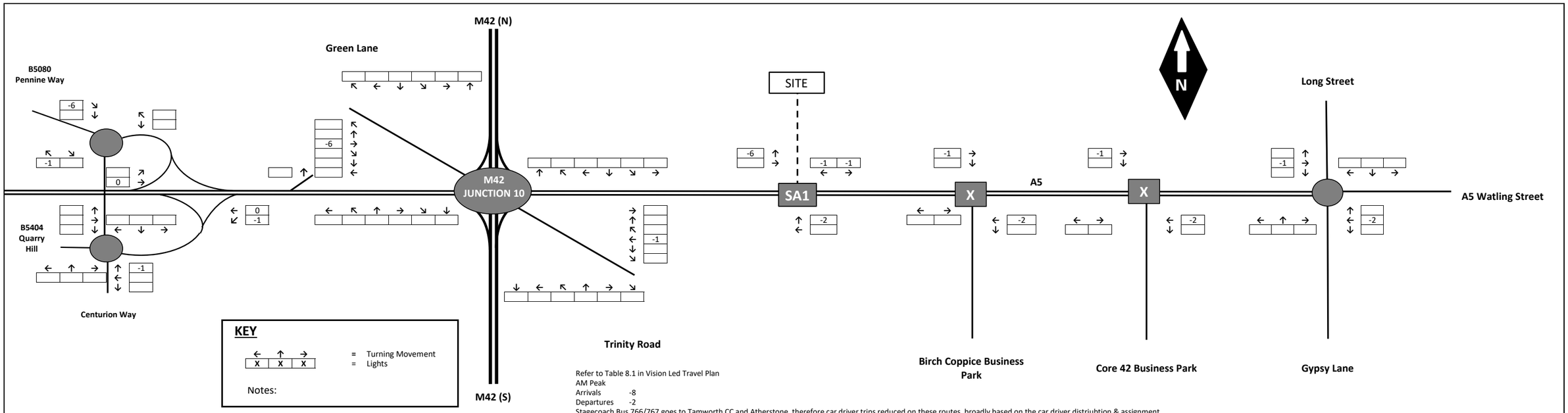


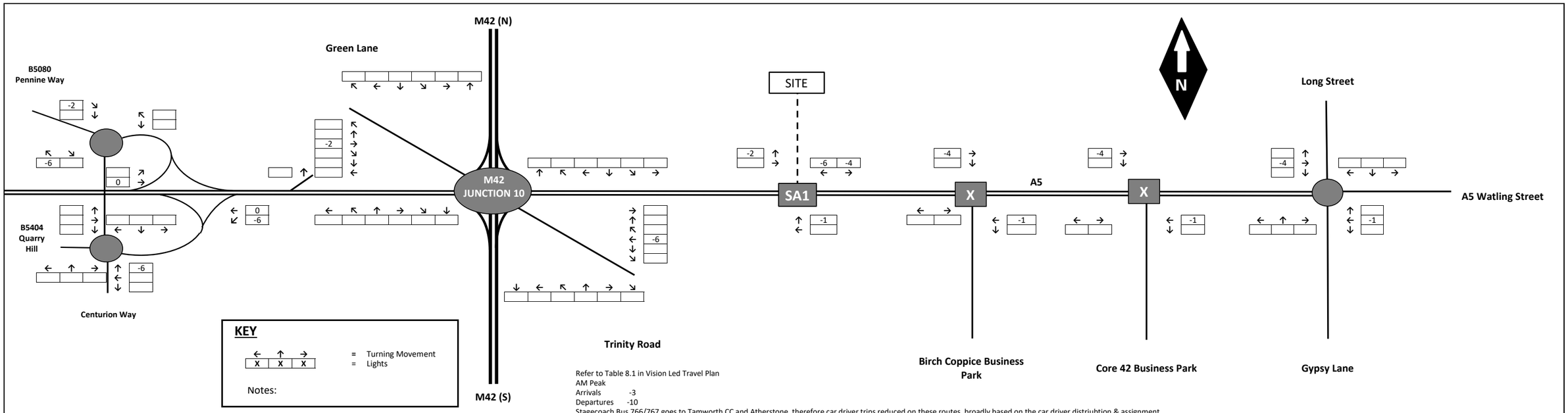
FIGURE 12

AM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Bus

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

TETRA TECH



TETRA TECH

FIGURE 13

PM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Bus

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

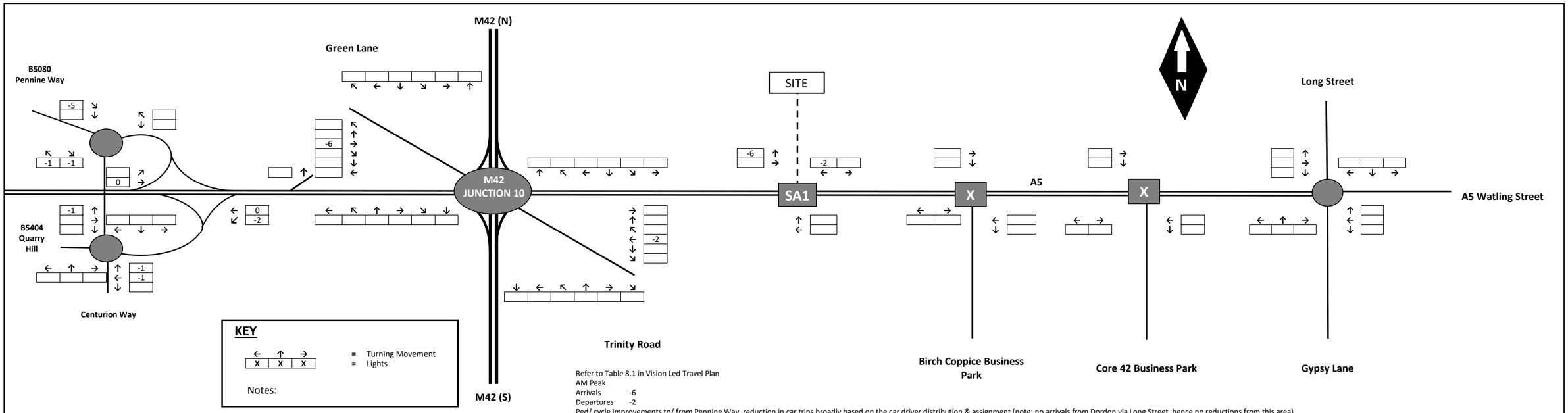


FIGURE 14

AM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Walk/ Cycle

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

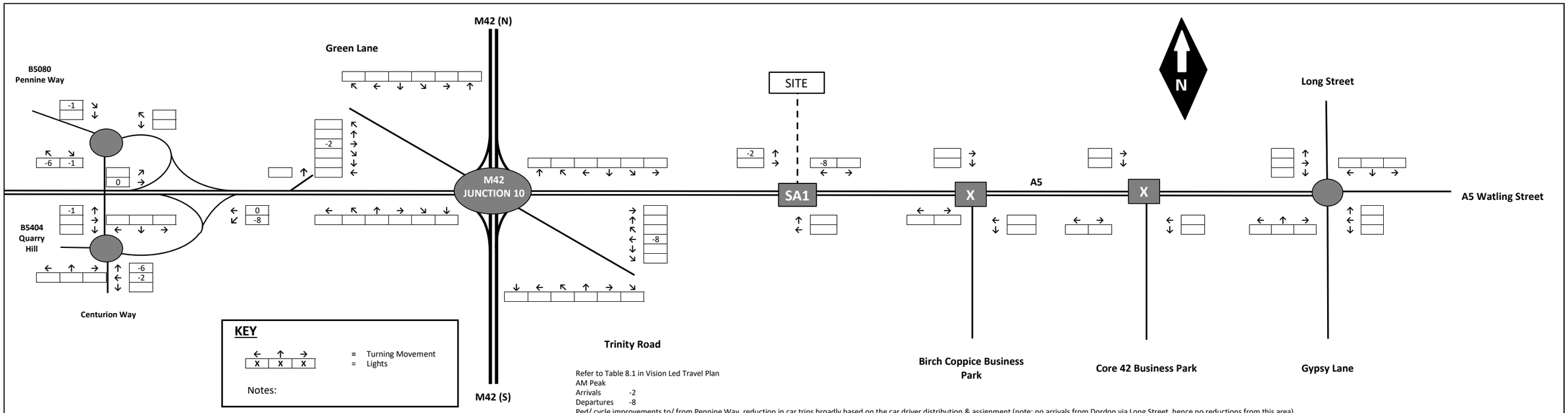


FIGURE 15

PM Peak Development Generated Traffic Flows (Lights) - Residual Effect from Transfer of Trips to Walk/ Cycle

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

TETRA TECH

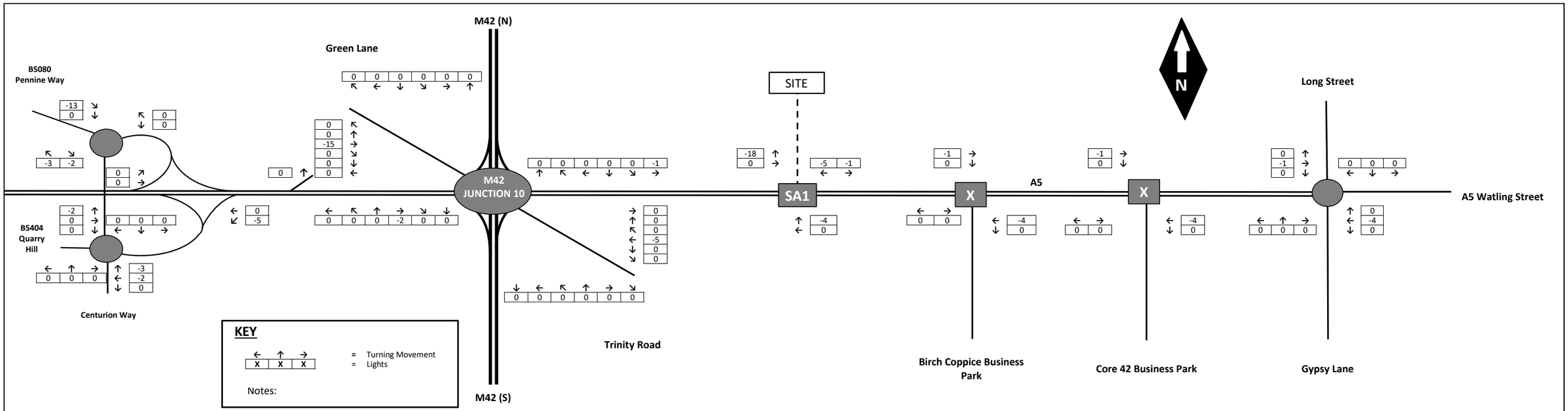


FIGURE 16

AM Peak Development Generated Traffic Flows (Lights) - Overall Reductions in Light Vehicles

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

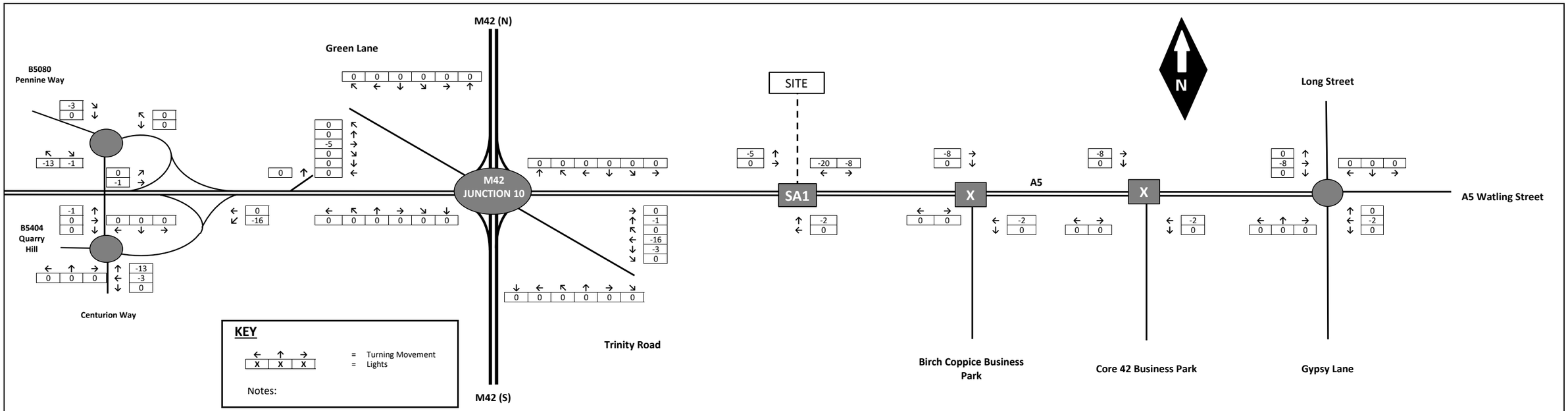


FIGURE 17

PM Peak Development Generated Traffic Flows (Lights) - Overall Reductions in Light Vehicles

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

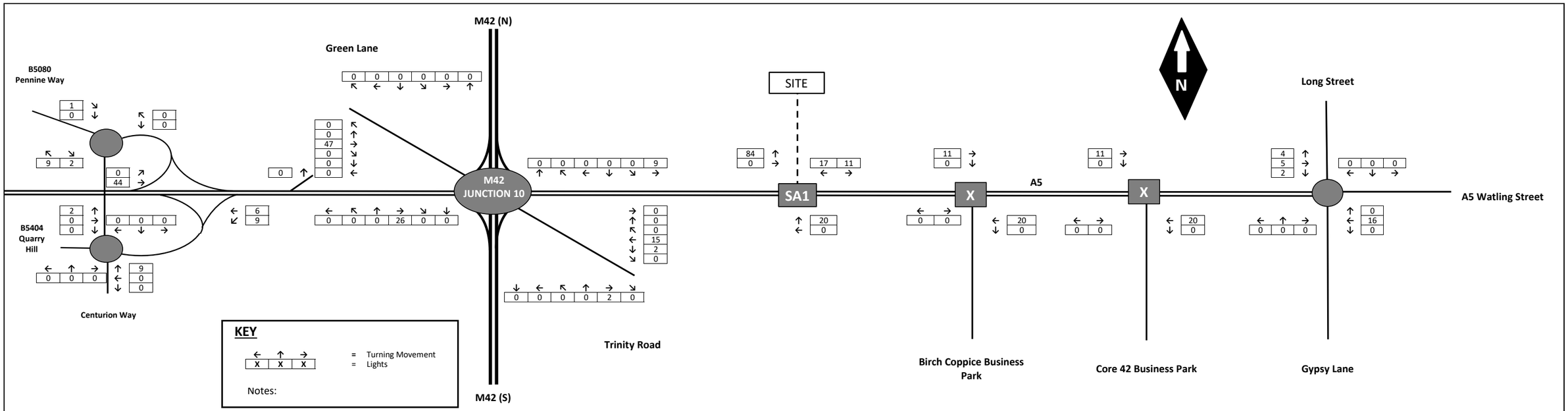


FIGURE 18

AM Peak Development Generated Traffic Flows (Lights) with Travel Plan Effect

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

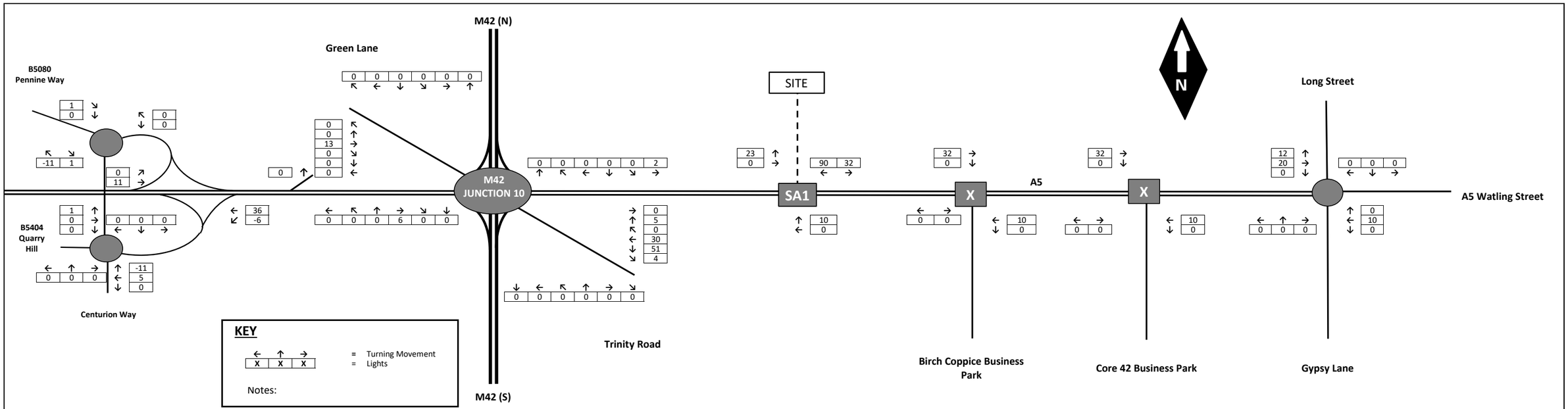
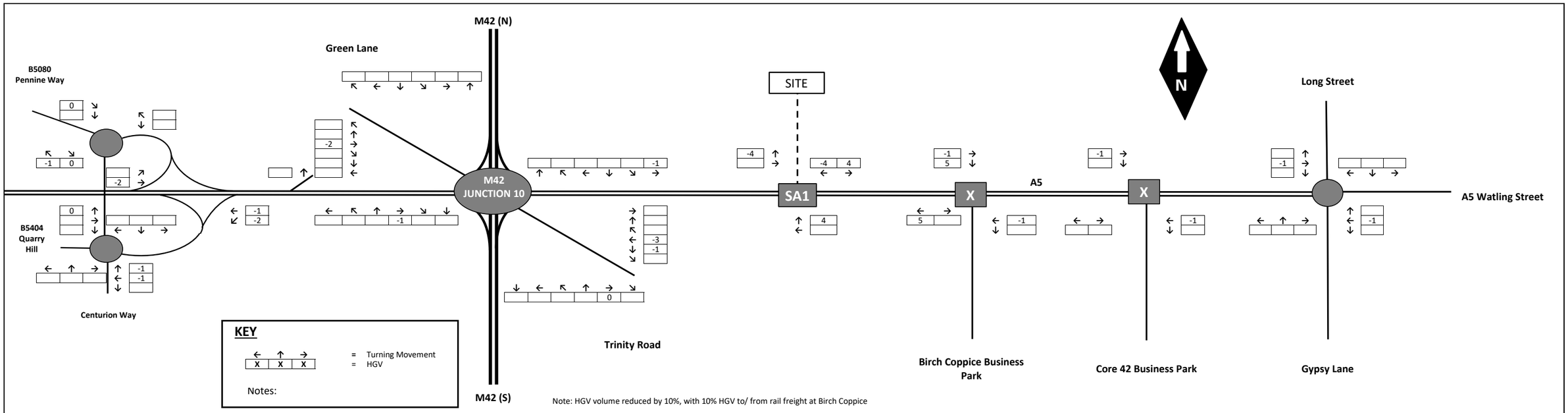


FIGURE 19

PM Peak Development Generated Traffic Flows (Lights) with Travel Plan Effect

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920



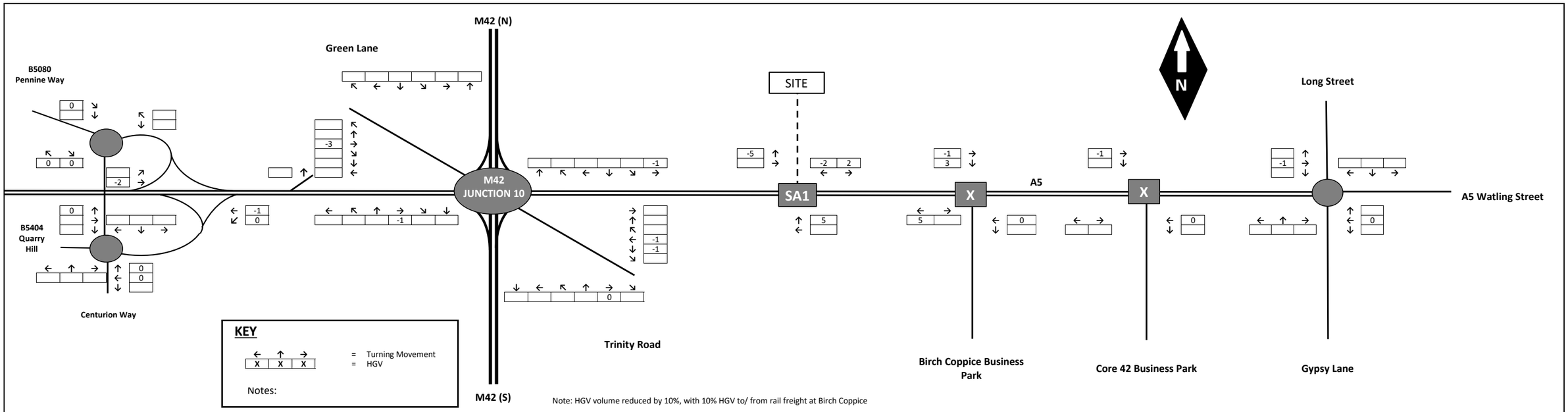
TETRA TECH

FIGURE 20

AM Peak Development Generated Traffic Flows (HGV) Reduction with Travel Plan Effect

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920



Note: HGV volume reduced by 10%, with 10% HGV to/ from rail freight at Birch Coppice

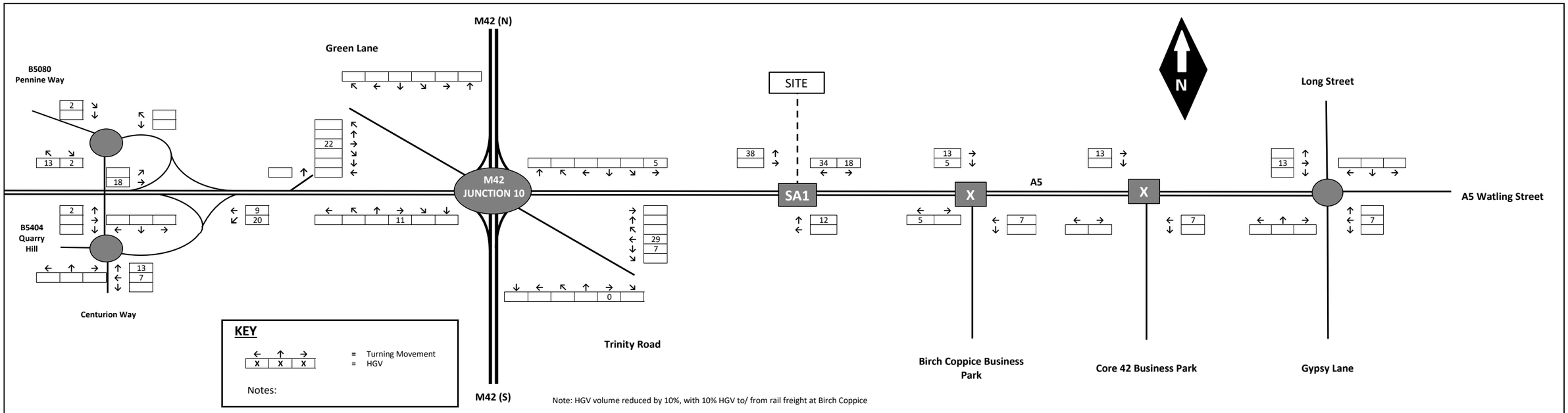
TETRA TECH

FIGURE 21

PM Peak Development Generated Traffic Flows (HGV) Reduction with Travel Plan Effect

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920



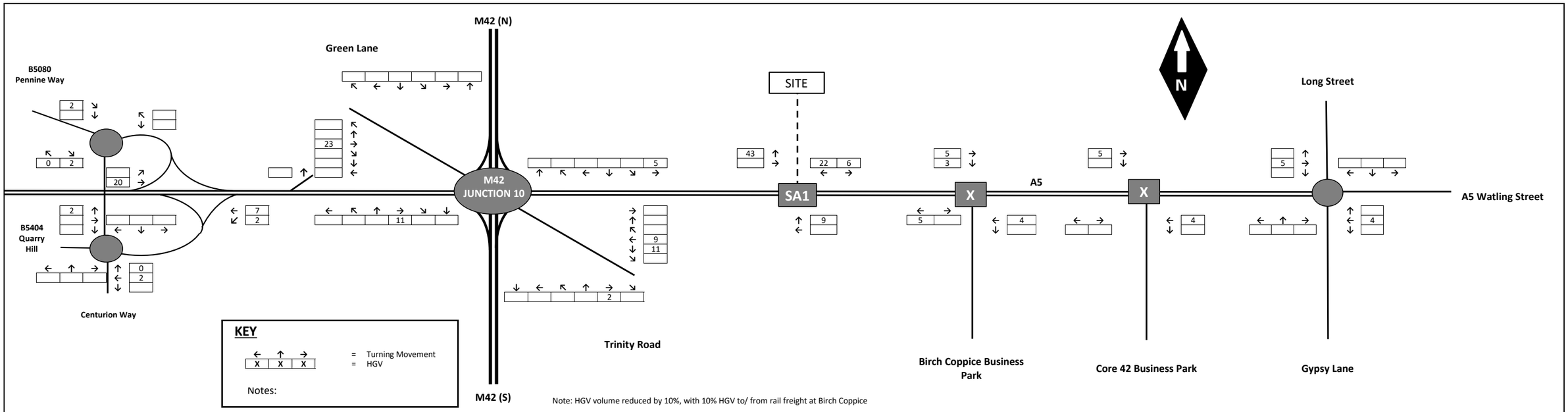
TETRA TECH

FIGURE 22

AM Peak Development Generated Traffic Flows (HGV) with Travel Plan Effect

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920



TETRA TECH

FIGURE 23

PM Peak Development Generated Traffic Flows (HGV) with Travel Plan Effect

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

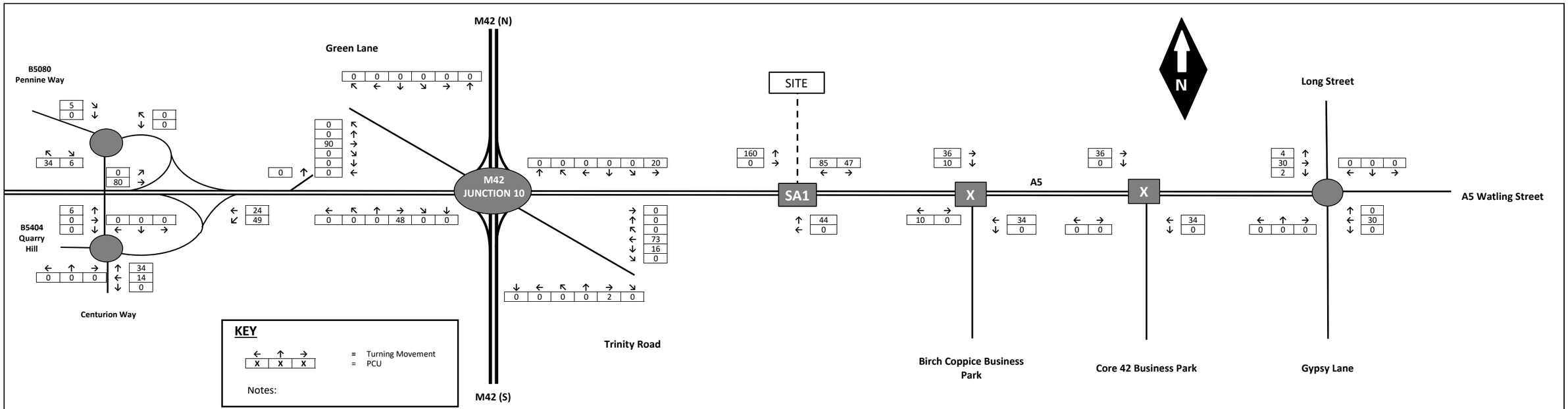


FIGURE 24

AM Peak Development Generated Traffic Flows (PCU) with Travel Plan Effect

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

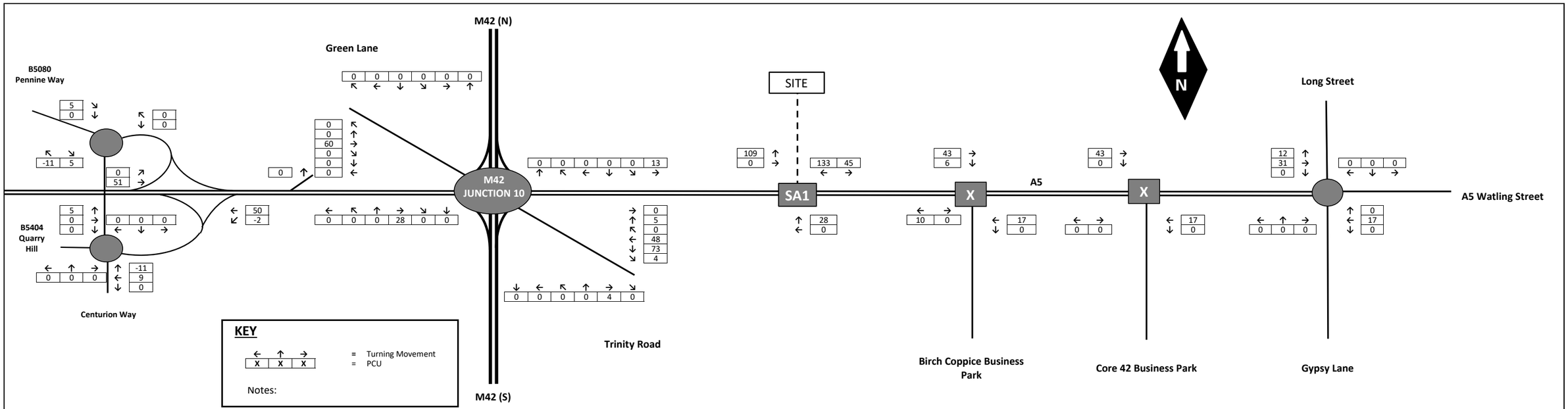


FIGURE 25

PM Peak Development Generated Traffic Flows (PCU) with Travel Plan Effect

Land North East of M42 Junction 10

JOB NUMBER: 784-B033920

APPENDIX A2: DRAWINGS

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.

N

VRS SYSTEM OMITTED FROM THE DRAWING AT THIS STAGE. EVERY SHARED USED CYCLEWAY DEVELOPED ON THE ROUNDABOUT WILL REQUIRE NEW VRS INSTALLATION ONCE LAYOUT AGREED.

DRAWING BASED ON OS MAPPING, TOPOGRAPHICAL SURVEY REQUIRED TO OMIT ANY DISCREPANCIES

FOR FURTHER DETAILS REFER TO INSERT A.

EXISTING HEDGES/VEGETATION TO BE TRIMMED BACK TO ACCOMMODATE PROPOSED 2.5m SHARED USE ARRANGEMENT

SHARED USE CYCLEWAY TIES IN TO PROPOSED 2.5m SHARED USE ARRANGEMENT AND A CROSSING POINT IS PROVIDED ON THE OTHER SIDE OF THE ROUNDABOUT AT PENNINE WAY.

FOR FURTHER INFORMATION REGARDING THE SPEED LIMIT CHANGE TO 50MPH. PLEASE REFER TO INSERT B

CUTLINE INSERT B

EXISTING 1m HARDSTRIP

PROPOSED SHARED USE CYCLEWAY

PENNINE WAY MERGE TO A5:
1m HARDSTRIP RETAINED WITH A 0.5m SEPARATION STRIP WHICH DELINEATES THE PROPOSED 2m SHARED USE CYCLEWAY/FOOTWAY

PLEASE REFER TO INSERT C FOR FURTHER INFORMATION AT PINCH POINT

TIES INTO KINSALL GREEN PROPOSALS

GREEN LANE;
ROUNDABOUT EXIT REDUCED TO 1 LANE APPROACHING NEW TOUCAN CROSSING FOR SHARED USE ROUTE IN CENTRAL RESERVE. EXISTING FOOTWAY ROUTE TO BE UPGRADED.

TO ENSURE THE ROUNDABOUT IS CD143 COMPLIANT THE SHARED USE ROUTE REQUIRES WIDENING. ADDITIONAL WORK WILL BE REQUIRED REGARDING THE EXISTING NATIONAL HIGHWAYS EMBANKMENTS/SLOPES.

PROPOSED SHARED USE CYCLEWAY

PROPOSED CONTROLLED CROSSING

RESTRICTED TO 2.74m ON THIS SIDE DUE TO THE BRIDGE DECK.

PROPOSED SHARED USE CYCLEWAY

PROPOSED CONTROLLED CROSSING

PROPOSED UNCONTROLLED CROSSING

WIDENING TO FOUR LANES OPPOSITE GREEN LANE. SHARED USE ROUTE IMPROVED FROM A5 TO GREEN LANE WITH NEW TOUCAN CROSSINGS. REVISED ROAD MARKINGS, SIGNING AND SIGNALS.

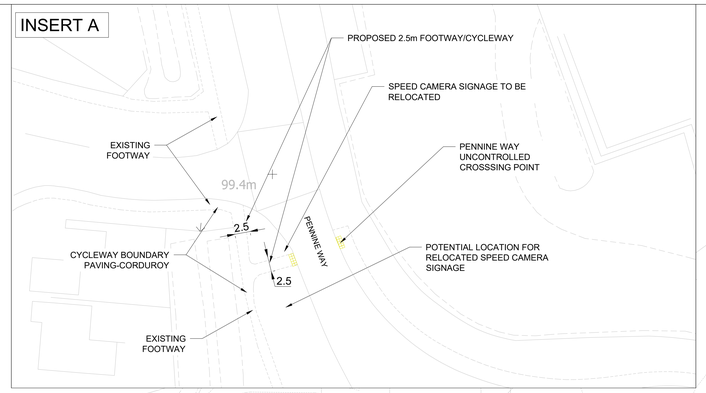
PROPOSED SHARED USE ROUTE DEVELOPED AS PART OF THE A5 EAST IMPROVEMENT

A5 WEST APPROACH:
LANE GAIN FROM PENNINE WAY MERGE, WIDENING TO FOUR LANES AT J10 STOP LINE. REVISED KINSALL GREEN ACCESS. WIDENED SHARED USE ROUTE . CONSIDERATIONS OF SIGNAGE AND LIGHTING ADJUSTMENTS WOULD NEED TO BE UNDERTAKEN AT A LATER STAGE.

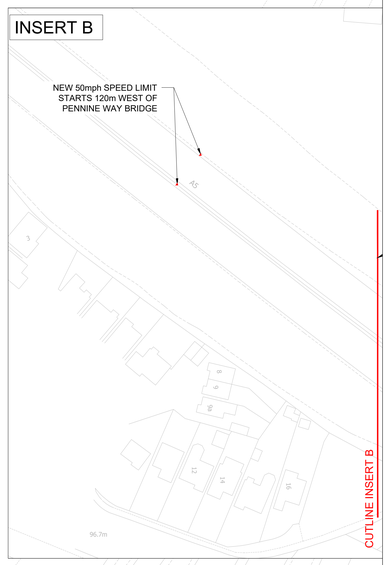
TO ENSURE THE ROUNDABOUT IS CD143 COMPLIANT THE SHARED USE ROUTE REQUIRES WIDENING. ADDITIONAL WORK WILL BE REQUIRED REGARDING THE EXISTING NATIONAL HIGHWAYS EMBANKMENTS/SLOPES.

CUTLINE INSERT B

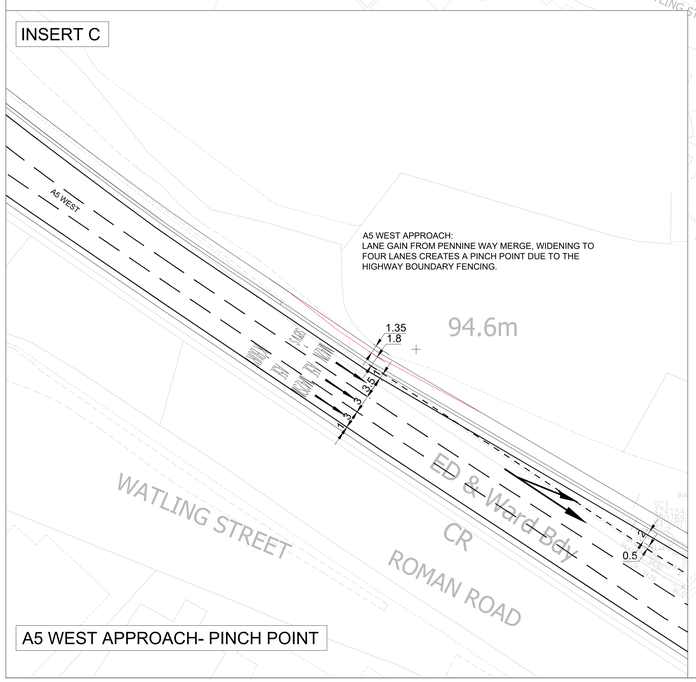
INSERT A



INSERT B



INSERT C



A5 WEST APPROACH- PINCH POINT

0 10 20 30 40 50m
SCALE 1:1000

PRELIMINARY ISSUE

Rev	Description	Date	Drn	Chk	App
P04	AMENDMENTS TO ROAD MARKINGS	04.12.2023	JG	GW	NB
P03	MINOR AMENDMENTS	25.10.2023	LJB	LB	NB
P02	MINOR AMENDMENTS	14.08.2023	LJB	LB	NB
P01	PRELIMINARY FIRST ISSUE	21.10.2022	LJB	LB	NB

Document Control

Issuing Office

Tetra Tech Manchester

Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223

www.tetratecheurope.com

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
ROUNDABOUT IMPROVEMENT

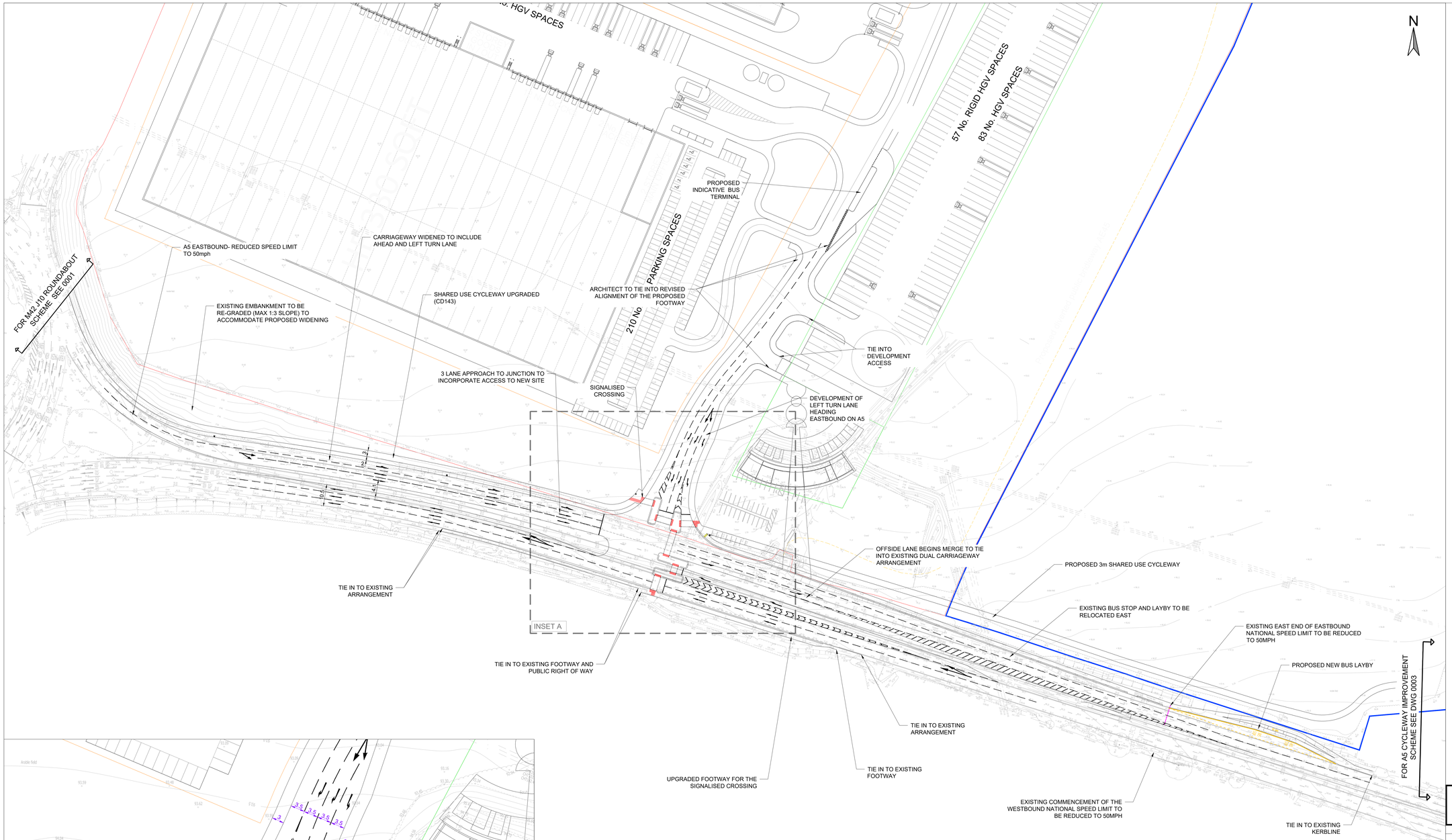
Sheet Title

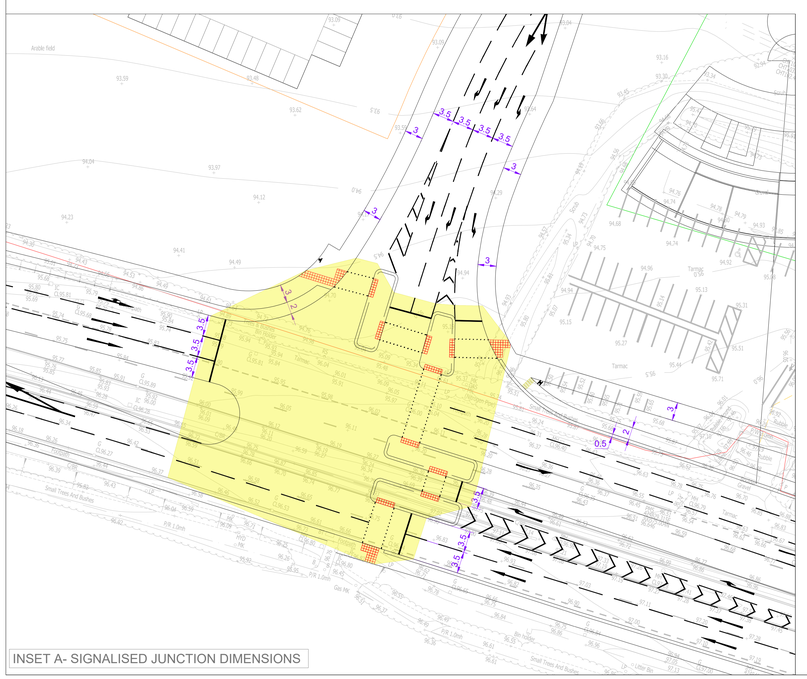
PROPOSED LAYOUT

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	LJB	Sep'22	LB	Sep '22	NB	Sep '22	1:1000	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	SK	H	0001	P04

TTE_MT_v1





NOTES -

1. ALL DIMENSIONS IN METRES UNLESS STATED OTHERWISE.
2. THE INFORMATION SHOWN ON THIS DRAWING IS INTENDED TO PROVIDE A GENERAL OUTLINE OF THE HIGHWAY IMPROVEMENT WORKS.

KEY:

- SITE BOUNDARY 1
- SITE BOUNDARY 2
- INTERVISIBILITY ZONE

PRELIMINARY ISSUE

Rev	Description	Date	Drn / Chk / App
P02	ADJUSTMENT TO SPEED LIMIT SIGNS & INTERVISIBILITY ZONE ADDED	04.12.2023	JG / GW / NB
P01	PRELIMINARY FIRST ISSUE	04.11.2022	LJB / LB / NB

Document Control

Issuing Office

Tetra Tech Manchester

Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223

www.tetratecheurope.com

TETRA TECH

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title

PROPOSED LAYOUT FOR A5 AND NEW SITE ACCESS

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	LJB	Oct"22	LB	Oct '22	NB	Oct '22	1:1000	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0002	P02

TTE_MT_v1

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

PROPOSED 2m VERGE

PROPOSED 3m WIDE SHARED USE CYCLEWAY

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

HEDGEROW ALONG A5 TO BE MAINTAINED AND KEPT TO SUITABLE LEVELS

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

PROPOSED 3m WIDE SHARED USE CYCLEWAY

PROPOSED 2m VERGE

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

ABSOLUTE MINIMUM CROSSING WIDTH AS 3m. REVIEWED AT DETAILED DESIGN STAGE.

INDICATIVE SITE ACCESS CROSSING POINT.
SIGNALISED CROSSING TO BE REVIEWED AT DETAILED DESIGN STAGE.

SHARED USE FACILITY TO CONTINUE INTO THE SITE DEVELOPMENT. PROPOSAL TO BE FINALISED AT A LATER STAGE.

CYCLISTS DISMOUNT

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY AND SIGN TO DIAG 966 CYCLIST DISMOUNT

FOR CONTINUATION SEE VIEWPORT 2

VIEWPORT 1

0 5 10 15 20 25m
SCALE 1:500

FOR CONTINUATION SEE VIEWPORT 1

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

INDICATIVE BRIDLE-WAY ROUTE. WAY MARKER TO BE IMPLEMENTED TO INFORM USERS OF THE START OF THE BRIDLEWAY ROUTE

PROPOSED 3m WIDE SHARED USE CYCLEWAY

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

PROPOSED SIGN TO DIAG 956 TO INDICATED SHARED USE CYCLEWAY

FOR CONTINUATION SEE VIEWPORT 3

R25

VIEWPORT 2

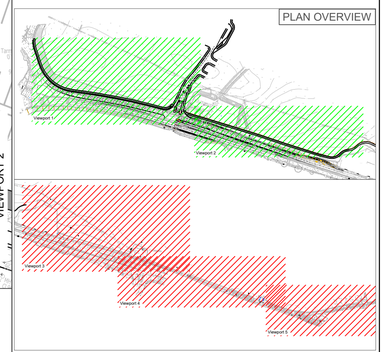
0 5 10 15 20 25m
SCALE 1:500

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
3. PROPOSALS FOR THE SHARED USE CYCLEWAY HAVE BEEN DESIGNED IN ACCORDANCE WITH LTN1/20. DUE TO THE LOW VOLUME OF PEDESTRIANS SHARED USE CYCLEWAY HAS BEEN UTILISED COINCIDING WITH POINTS 6.5.2 AND 6.5.6 OF THE LTN 1/20 DESIGN GUIDANCE.

KEY:

- SITE BOUNDARY 1
- SITE BOUNDARY 2
- PROPOSED 5m SHARED USE CYCLEWAY
- INDICATIVE SITE ACCESS LAYOUT
- PROTECTIVE TIMBER FENCE OR SIMILAR APPROVED
- EXISTING BRIDLEWAY ROUTE (166/AE45/1)
- PROPOSED DIVERSION OF BRIDLEWAY ROUTE

PLAN OVERVIEW



PRELIMINARY ISSUE

Rev	Description	Date	Drn	Chk	App
P02	INITIAL COMMENTS INCORPORATED	11.08.2022	LJB	JG	LB
P01	PRELIMINARY FIRST ISSUE	25.05.2022	LJB	JG	LB

Document Control

Issuing Office

Tetra Tech Manchester

Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223

www.tetratecheurope.com

TETRA TECH

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

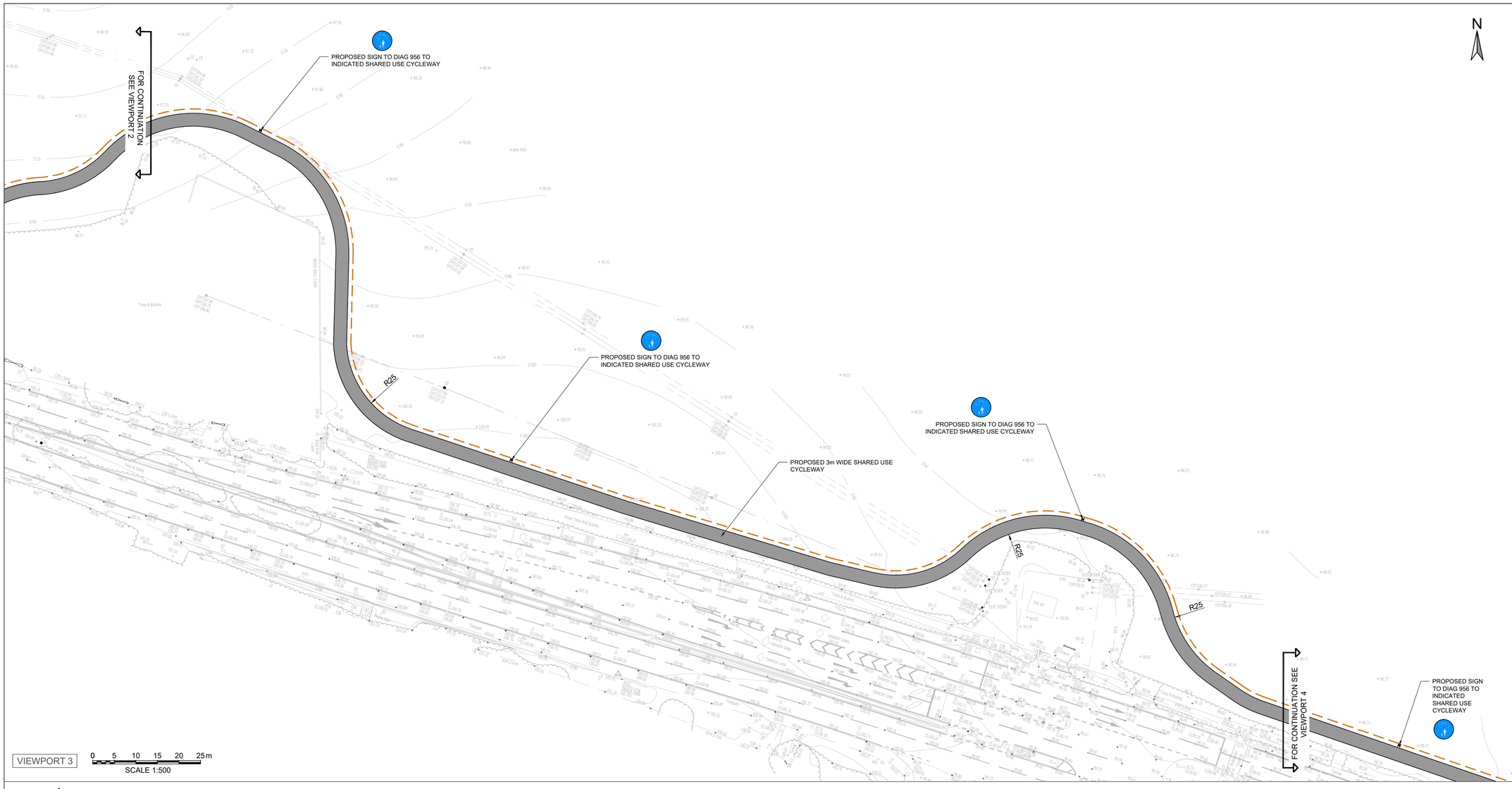
Sheet Title

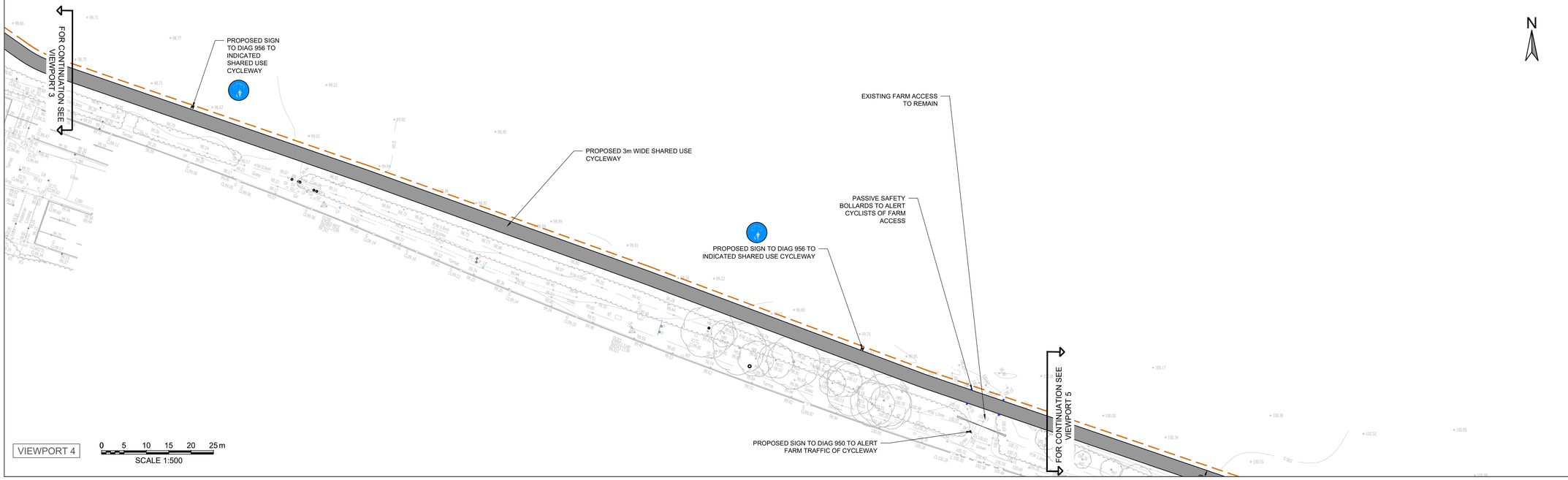
PROPOSED LAYOUT
SHEET 1

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	LJB	May '22	JG	May '22	LB	May '22	1:500	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0003	P02

TTE_MT_v1

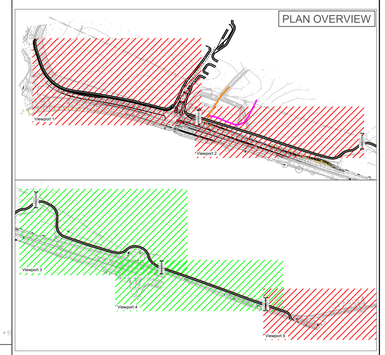




1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
3. PROPOSALS FOR THE SHARED USE CYCLEWAY HAVE BEEN DESIGNED IN ACCORDANCE WITH LTN1/20. DUE TO THE LOW VOLUME OF PEDESTRIANS SHARED USE CYCLEWAY HAS BEEN UTILISED COINCIDING WITH POINTS 6.5.2 AND 6.5.6 OF THE LTN 1/20 DESIGN GUIDANCE.

KEY:

- SITE BOUNDARY 2
- PROPOSED 5m SHARED USE CYCLEWAY
- PROTECTIVE TIMBER FENCE OR SIMILAR APPROVED
- PASSIVE SAFETY BOLLARDS



PRELIMINARY ISSUE

Rev	Description	Date	Drn / Chk / App
P02	INITIAL COMMENTS INCORPORATED	11.08.2022	LJB / LB / NB
P01	PRELIMINARY FIRST ISSUE	25.05.2022	LJB / JG / LB

Document Control

Issuing Office

Tetra Tech Manchester

Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223
www.tetratecheurope.com

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

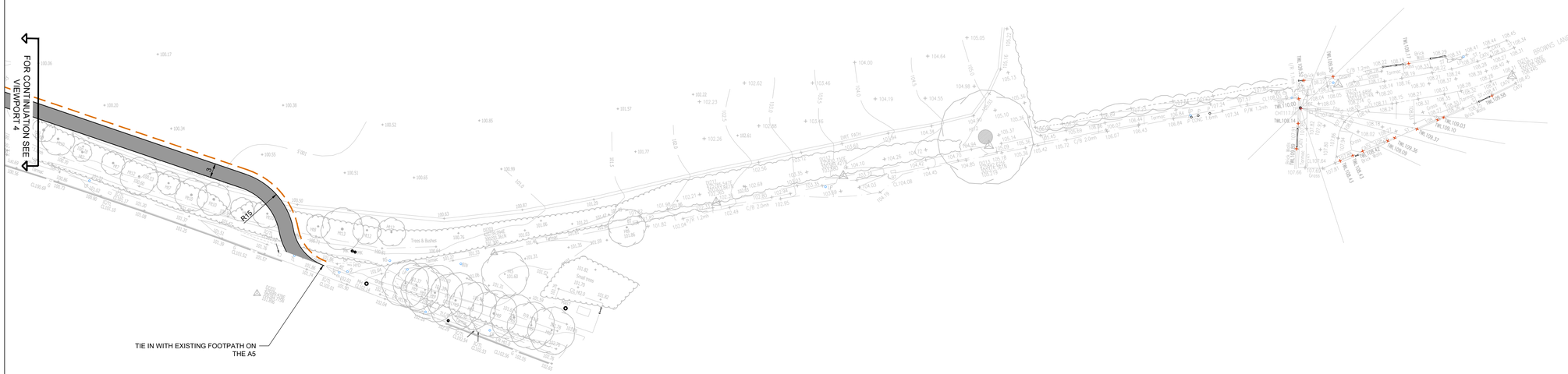
Sheet Title

PROPOSED LAYOUT
SHEET 2

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	LJB	May '22	JG	May '22	LB	May '22	1:500	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	TTE	00	ZZ	PL	H	0004	P02

TTE_MT_v1



N

VIEWPORT 5

0 5 10 15 20 25m

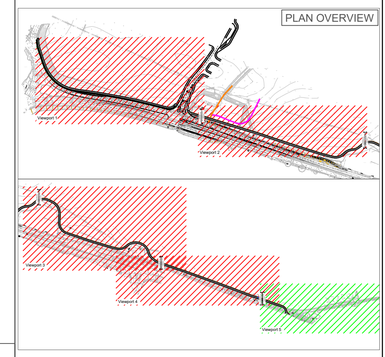
SCALE 1:500

1. THIS DRAWING SHOULD BE READ IN RELATION TO THE SUBJECT OF THE TITLE ONLY. OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY. REFERENCE SHOULD BE MADE TO APPROPRIATE DRAWING SERIES/SPECIFICATIONS FOR OTHER INFORMATION.
2. ALL DIMENSIONS ARE IN METRES UNLESS SPECIFIED OTHERWISE.
3. PROPOSALS FOR THE SHARED USE CYCLEWAY HAVE BEEN DESIGNED IN ACCORDANCE WITH LTN1/20. DUE TO THE LOW VOLUME OF PEDESTRIANS SHARED USE CYCLEWAY HAS BEEN UTILISED COINCIDING WITH POINTS 6.5.2 AND 6.5.6 OF THE LTN 1/20 DESIGN GUIDANCE.

KEY:

- SITE BOUNDARY 2
- PROPOSED 5m SHARED USE CYCLEWAY
- PROTECTIVE TIMBER FENCE OR SIMILAR APPROVED

PLAN OVERVIEW



PRELIMINARY ISSUE

Rev	Description	Date	Drn	Chk	App
P02	INITIAL COMMENTS INCORPORATED	11.08.2022	LJB	LB	NB
P01	PRELIMINARY FIRST ISSUE	25.05.2022	LJB	JG	LB

Document Control

Issuing Office

Tetra Tech Manchester

Quay West at Media City UK,
Trafford Wharf Road, Trafford Park,
Manchester, M17 1HH
Tel: +44 (0)161 872 3223

www.tetratecheurope.com

TETRA TECH

Client

HODGETTS ESTATES

Project Name

M42 JUNCTION 10
A5 CYCLEWAY IMPROVEMENT

Sheet Title

PROPOSED LAYOUT
SHEET 3

TTE Project Number	Drawn By	Date	Checked By	Date	Approved By	Date	Scale @ A1	Suitability
784-B033920	LJB	May '22	JG	May '22	LB	May '22	1:500	S3

Client Project Number	Originator	Volume/System	Level/Location	Type/Code	Role	Number	Revision
B033920	- TTE	- 00	- ZZ	- SK	- H	- 0005	P02

TTE_MT_v1

APPENDIX B: TT REPORT – HOW FAR DO PEOPLE WALK?

VIEWPOINT

Distance guidelines not fair reflection on how far people are willing to cycle and walk

Gareth Wakenshaw and Nick Bunn
WYG

Is current guidance on walking and cycling distances in need of an overhaul? And, if so, why does this matter? These distances form the basis of many decisions about where we live and work. Distances are used as criteria in assessing land allocations in Local Plans and in determining planning applications. They are also used in decision-making around transport infrastructure, including bus stops.

We decided, firstly, to investigate the distances on which existing guidance is based and then, secondly, to research the National Travel Survey (NTS) data to find out how far people actually walk and cycle.

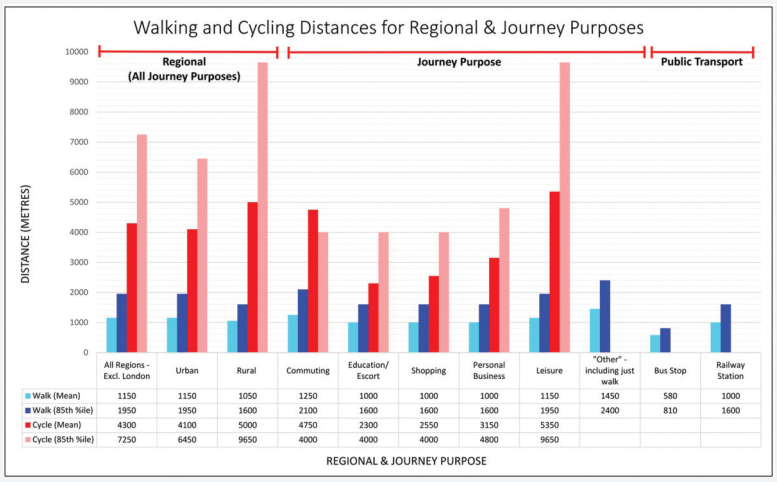
The old *Planning Policy Guidance 13*: Transport advised that walking and cycling could replace short car trips of 2km and 5km respectively. In 2012, PPG13 was withdrawn and replaced with the *National Planning Policy Framework*, which does not provide any specific guidance on walking or cycling distances.

The Institute of Highways & Transportation 2000 Guidelines for Providing for Journeys on Foot provided 'suggested acceptable' walking distances but gave no evidence in support.

The Chartered Institute of Highways & Transportation (CIHT's) current 2015, *Planning for Walking* offers no firm guidance either other than: "Most people will only walk if their destination is less than a mile away". But it does recognise the lack of supporting evidence and that more work is needed.

CIHT's 2014 *Planning for Cycling* guidance also provides limited guidance. So, it is clear that existing guidance is limited for walking, missing for cycling, and backed by out of date evidence.

The NTS is a UK-wide survey of around 15,000 households and around half fully co-operate. This is around 18,000 individuals (Department for Transport, 2010, 2011 and 2012). We used the 2010 to 2012 NTS dataset, which provides more than 30,000 records for walking and over 15,000 records for cycling from home for a range of journey purposes.



	All Regions - Excl. London	Urban	Rural	Commuting	Education/ Escort	Shopping	Personal Business	Leisure	"Other" - including just walk	Bus Stop	Railway Station
Walk (Mean)	1150	1150	1050	1250	1000	1000	1000	1150	1450	580	1000
Walk (85th %ile)	1950	1950	1600	2100	1600	1600	1600	1950	2400	810	1600
Cycle (Mean)	4300	4100	5000	4750	2300	2550	3150	5350			
Cycle (85th %ile)	7250	6450	9650	4000	4000	4000	4800	9650			

We then reported the mean and 85th percentile walking and cycling distances. The mean establishes the average distance people walk and cycle, whilst the 85th percentile can be taken as the distance people are prepared to walk or cycle and beyond which they are less likely to do so.

We first explored the walking and cycling distances for regional variation and then for journey purpose.

The graph above summarises the reported walking and cycling distances in different regions and different journey purposes. Perhaps surprisingly, it shows that people walk further in urban areas compared to rural areas, particularly at the 85th percentile level.

There is variation in the mean and 85th percentile walk distance for different journey purposes, with commuting and 'other', including just walk purposes having the longest walking distances.

Walking is mainly used for leisure and 'other' purposes, which together account for 40% of all walking journeys. Education and shopping each account for just under 20% of walking trips, with mean and 85th percentile walking distances of 1,000m and 1,600m respectively. The walking distance for commuting is longer, with an 85th percentile of 2,100m, but only 7% of walking journeys are for commuting.

People cycle much further in rural areas compared with urban areas, particularly at the 85th percentile level. There is variation in the distances cycled at the average and 85th percentile distances for all journey purposes. Cycling is mainly used for commuting and leisure, accounting for 68.3% of all trips, and the longest distances of 8,050m and 9,650m respectively at the 85th percentile.

Shopping and education account for 11.6% and 10.6% of all trips and have the lowest cycled distances of 4,000m at the 85th percentile.

What does this mean, particularly for the accessibility of development sites? Based on our research, the catchment for accessibility to a range of facilities should be based on the 85th percentile for the relevant journey purpose, e.g. an employment development should use the commuter distance of 2,100m, a new school should use 1,600m (education/escort education), whilst a residential development should use 1,950m (all journey purposes). Likewise for cycling, an employment development should use a catchment of 9,150m; a new school should use 4,000m; whilst a residential development should use 7,250m.

Our other research on walking distances to public transport stops has shown the mean walking distance to a bus stop is 580m and 810m at the 85th percentile, notably longer than CIHT's 400m maximum distance. The average walk distance to a railway station is 1,000m and 1,600m is the 85th percentile, again notably longer than CIHT's guidance of 800m.

From our research, it is clear that current guidance distances do not reflect those which people are prepared to walk and cycle to different facilities. That is why we believe there should be new distances, taking into account journey purpose using up-to-date information. LTT

Nick Bunn and Gareth Wakenshaw are transport planners at professional services firm WYG

In Passing

LTT This month marks the 50th anniversary of the introduction of the maximum legal blood alcohol drink-driving limit in the UK (80mg of alcohol per 100ml of blood, then and now) and official statistics on alcohol-related road deaths, which began in 1979, indicate that the number of fatalities caused by drink-driving has fallen from 1,640 in that year to 200 in 2015 – a drop of 88%. It hardly feels like a cause for celebration when more than 1,800 people are still being killed on or roads each year. Nevertheless, it would seem churlish not to raise a small glass in honour of the DfT's 50-year plus THINK! campaign to drastically reduce the amount of drink-driving, given its manifest success. But please give us your car keys first.

LTT The phrase 'replacement bus service' is one that will chill the blood of any regular user of our nation's railways but *The Daily Mail*, which never knowingly passes up an opportunity to terrify its readers, recently warned said readers that, due to the recent shenanigans at Ryanair, the phrase could soon become all too familiar to airline passengers. "Ryanair could replace flights with buses as it offers 'comparable transport' in order to limit its £1bn compensation bill," the paper warned. "The airline has promised to ensure refunds to 750,000 passengers after cancelling 20,000 flights, which means that customers stranded after their flights were cancelled can fly for free with rivals if there are no Ryanair seats available. However, rules dictate that if this is impossible then they could also offer to pay for trains, car hire or even buses." Oh, the horror.

LTT News that a city of close to a million people is planning to start handing out free public transport passes to every city centre worker, regardless of income or intent to actually use the things, in order to reduce road traffic congestion and pressure on inner city parking spaces, might cause some readers to speculate on where this city might me. Sweden, perhaps? Or maybe the Netherlands? Nope – the city in question is Columbus, Ohio, in the good ol' car-loving US of A. So is this move a game changer for car use across the Atlantic? We'll have to wait and see, unfortunately, as a two-year trial of the scheme isn't due to begin until the summer of 2018. So watch this (parking) space.

LTT When is a bus not a bus? When it's art, at least according to Reading Buses, which is supporting a local artist's plans to turn one of its double-deckers into a mobile art gallery. Local artists are being invited to contribute ideas exploring the theme of public mobility and how it relates to the sense of place and community by October 16, which is next Monday, so any Reading residents who fancy getting involved had better get their skates on. Once galleried up, the bus in question will be operational on regular routes operated by Reading Buses, according to the company, although it doesn't say where the passengers are going to go to make room for the art.

APPENDIX C: TAG UNIT M5.2 MODELLING SMARTER CHOICES

Department for Transport

TAG UNIT M5.2

Modelling Smarter Choices

January 2014

Department for Transport

Transport Analysis Guidance (TAG)

https://www.gov.uk/transport-analysis-guidance-tag

This TAG Unit is guidance for the **MODELLING PRACTITIONER**

This TAG Unit is part of the family **M5 – ADVANCED MODELLING TECHNIQUES**

Technical queries and comments on this TAG Unit should be referred to:

Transport Appraisal and Strategic Modelling (TASM) Division
Department for Transport
Zone 2/25 Great Minster House
33 Horseferry Road
London
SW1P 4DR
tasm@dft.gov.uk

Contents

1 Modelling Smarter Choices 1

1.1 Introduction 1
1.2 Classification of Smarter Choice Initiatives 2
1.3 General Approach to Modelling Smarter Choice Initiatives 3
1.4 Benchmarking Expected Impacts of Smarter Choice Initiatives 4
1.5 Modelling the 'Hard' Components of Smarter Choice Packages 5
1.6 Modelling 'Soft' Components of Smarter Choice Packages 6
1.7 Modelling Specific Smarter Choice Measures 9
1.8 Reporting Requirements 11
1.9 Considerations when Appraising Smarter Choices 12

2 Document Provenance 12

Appendix A References and Sources of Evidence 13

Appendix B Overview of Möser and Bamberg Meta Analysis 15

B1.6 Although the Möser and Bamberg analysis shows that Smarter Choice measures may be successful in reducing travel by car, there are some important caveats that need to be borne in mind. These include all the issues noted earlier, along with the following:

- The indicator of modal shift used in this work is the modal share expressed in terms of trips made by people directly targeted by the Smarter Choice measures, and there is no indication of changes in either trip-km or the vehicle-km of road traffic;
- The average non-car mode shares before application of Smarter Choices measures in the meta-analysis may differ from the existing non-car mode shares in the model study area. This would need to be borne in mind when extrapolating the results to the wider population. It should be noted that the base non-car mode share for targeted marketing measures is similar to the average Great Britain level for all trips; and
- It is well known that meta-analysis is likely to overstate the effects because studies with no significant or negative effects are much less likely to be published or to become accessible for retrieval. The effects revealed by Möser and Bamberg are therefore likely to be close to the upper limit in the possible range of impacts.

B1.7 However, even bearing in mind the above caveats, the results still give some idea about the average levels of impact.

- For **workplace travel plans**, the effects are the combined effects of both 'soft' and associated 'hard' measures (e.g. public transport improvements and parking measures). The analysis suggests that workplace travel plans would increase the overall non-car mode share by 12 percentage points. Given the base mode share, this implies an increase in the number of non-car trips by 34%, or a reduction in the number of car trips by 18% on the assumption that the total number of trips stays unchanged.
- For **school travel plans**, the sample reviewed by Möser and Bamberg could be divided into a small group of six best-practice schools where a lot had been achieved, and the rest, where the impacts were marginal, perhaps due to the lack of intensity of application or coordination with the 'hard' measures involved (in those cases the 'hard' measures were 'Yellow' buses). This means that the average increase in the number of non-car trips of 7% (as suggested in Table B1), or the implied reduction in the number of car trips of 10%, would have under-estimated the best-practice examples, but over-estimated the others in the school travel sample.
- For **targeted marketing**, the analysis suggests that predominantly information and promotional campaigns would increase the overall non-car mode share by 5 percentage points. Given the base mode share, this implies an increase in the number of non-car trips by 14%, or a reduction in the number of car trips by 8%.

B1.8 The Möser and Bamberg paper does not provide any information about effects on traffic or induced traffic. Indeed, it has been a common feature of the Smarter Choice studies to examine the impacts on a limited group of the targeted travellers, rather than the road network as a whole.

APPENDIX D: DRAWINGS BY OTHERS

BIRCHMOOR

NOTES:

Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be scaled. Use figured dimensions only.

Subject to statutory approvals and survey.

Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments.

Please note the information contained within this drawing is solely for the benefit of the employer and should not be relied upon by third parties.

The CDM hazard management procedures for the Chetwoods aspects of the design of this project are to be found on the "Chetwoods - Hazard Analysis and Design Risk Assessment" and/or drawings. The full project design teams comprehensive set of hazard management procedures are available from the Principle Designer appointed for the project.

North

SITE BOUNDARY
79.97 acres / 32.36 Ha

OTHER LAND UNDER THE CONTROL OF THE APPLICANT
102.94 acres / 41.66 Ha

PUBLIC BRIDLEWAY AE45

PAVEMENT / CYCLEWAY ALONG A5

PUBLIC FOOTPATH AE46

PUBLIC FOOTPATH AE48

BUS STOP - ONE WAY

BUS STOP - TWO WAYS

KEY UNCONTROLLED CROSSING POINT

KEY CONTROLLED CROSSING POINT

M42

A5

ACE 135

Tamworth Services

CYCLISTS DISMOUNT

WATLING STREET

ST MODWEN'S PARK

Track

Birchmoor Farm

The Polesworth School

Birchwood Primary School

Polesworth Children's Centre

Recreation Ground

Dordon Community Primary School

Hall End

Allotment Gardens

CORE 42

Rev	Revision Description	Date	Author/ Reviewer
[redacted]			

32 Frederick Street,
Birmingham, B1 3HH

+44 (0)121 234 7500
www.chetwoods.com

Project
LAND NORTH EAST OF J10 M42, DORDON

Client
HODGETTS ESTATES

Drawing Title
EXISTING CONNECTIVITY PLAN
ROUTE TYPE

Scale	Size	Drawn	Checked	Date
1:3000	A1	mb	NH	27.07.2022

Project	Originator	Zone	Level	Type	Role	Number	Rev.
4263	CA	00	00	DR	A	00801	P3

Access / egress from Cockspur Street, Birchmoor (Public Bridleway AE45)

Access / egress from Cockspur Street, Birchmoor (Public Bridleway AE45)

Gravel / dirt farm track (Public Bridleway AE45)

Gravel / dirt farm track (Public Footpath AE46)

Route Through Arable Field - View South (Public Footpath AE46)

Route Through Arable Field - View North (Public Footpath AE46)

Existing Uncontrolled Staggered Pedestrian A5 Crossing - View East

Existing Pinch Point on A5 Pavement / Cycleway at Bus Stop North of A5

Existing Uncontrolled Staggered Pedestrian A5 Crossing - View West

Existing Pinch Point on A5 Pavement / Cycleway at Birch Coppice Junction

NOTES:
Copyright Chetwoods (Birmingham) Limited. No implied licence exists.

Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be scaled. Use figured dimensions only.

Subject to statutory approvals and survey.

Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments.

Please note the information contained within this drawing is solely for the benefit of the employer and should not be relied upon by third parties.

The CDM hazard management procedures for the Chetwoods aspects of the design of this project are to be found on the "Chetwoods - Hazard Analysis and Design Risk Assessment" and/or drawings. The full project design teams comprehensive set of hazard management procedures are available from the Principle Designer appointed for the project.

North

N.B.
- **EXISTING PAVEMENT/CYCLEWAY ALONG THE A5 DOES NOT MEET THE RELEVANT DESIGN STANDARD AND IS THEREFORE DANGEROUS AND UNAPPEALING TO PROSPECTIVE USERS**

- SITE BOUNDARY
  79.97 acres / 32.36 Ha
- OTHER LAND UNDER THE CONTROL OF THE APPLICANT
  102.94 acres / 41.66 Ha
- GRAVEL / DIRT FARM TRACK
- TARMAC PAVEMENT / CYCLEWAY ALONG THE A5 - NOT COMPLIANT WITH DESIGN STANDARDS
- ROUTE THROUGH ARABLE FIELD
- TARMAC PUBLIC FOOTPATH
- BUS STOP - ONE WAY
- BUS STOP - TWO WAYS
- KEY UNCONTROLLED CROSSING POINT
- KEY CONTROLLED CROSSING POINT

Rev	Revision Description	Date	Author/ Reviewer

32 Frederick Street,
Birmingham, B1 3HH

+44 (0)121 234 7500
www.chetwoods.com

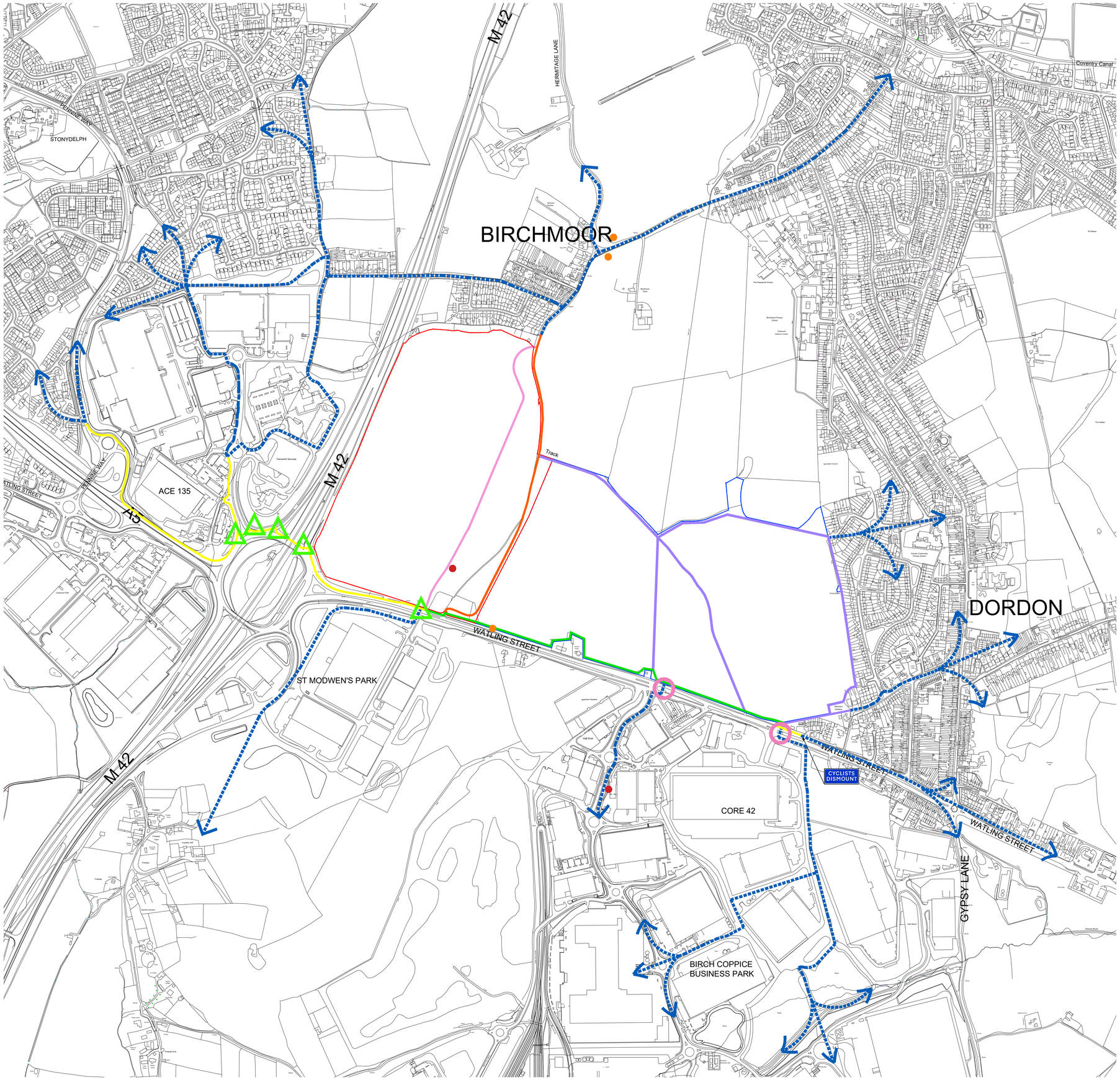
Project
LAND NORTH EAST OF J10 M42, DORDON

Client
HODGETTS ESTATES

Drawing Title
EXISTING CONNECTIVITY PLAN
ROUTE SURFACE

Scale	Size	Drawn	Checked	Date
1:4000	A1	mb	NH	27.07.2022

Project	Originator	Zone	Level	Type	Role	Number	Rev.
4263	CA	00	00	DR	A	00802	P3



Dual 3m wide tarmacked footway/cycleways for the new pedestrian/ cycle routes

Part Tarmac, Part Grass/Sand Public Bridleway

Tarmac Public Footpath

All Routes to Be Lined With Trees / Hedgerows to Enhance Rural Quality, Biodiversity and Wayfinding

Tarmac cycling route

NOTES:

Contractors must verify all dimensions on site before commencing any work or shop drawings. This drawing is not to be scaled. Use figured dimensions only.

Subject to statutory approvals and survey.

Building areas are liable to adjustment over the course of the design process due to the ongoing construction detailing developments.

Please note the information contained within this drawing is solely for the benefit of the employer and should not be relied upon by third parties.

The CDM hazard management procedures for the Chetwoods aspects of the design of this project are to be found on the "Chetwoods - Hazard Analysis and Design Risk Assessment" and/or drawings. The full project design teams comprehensive set of hazard management procedures are available from the Principle Designer appointed for the project.

0m 50m 100m 200m

North

- SITE BOUNDARY 79.97 acres / 32.36 Ha
- OTHER LAND UNDER THE CONTROL OF THE APPLICANT 102.94 acres / 41.66 Ha
- 3M WIDE TARMAC SHARED PAVEMENT / CYCLEWAY ALONG SITE ROAD AND NORTH TO BIRCHMOOR
- PART TARMAC, PART GRASS/SAND PUBLIC BRIDLEWAY (AE45)
- 3M WIDE TARMAC OFFLINE SHARED FOOT / CYCLEWAY
- 3M WIDE TARMAC SHARED FOOT / CYCLEWAY ALONG ROUTE OF EXISITING AND PROPOSED PUBLIC RIGHTS OF WAY NETWORK
- ENHANCED TARMAC PAVEMENT / CYCLEWAY ALONG A5
- POSSIBLE INBOUND / ONWARD JOURNEY ROUTE OPTIONS
- BUS STOP - ONE WAY
- BUS STOP - TWO WAYS
- KEY CROSSING POINT UPGRADED TO SIGNAL CONTROLLED
- KEY CONTROLLED CROSSING POINT

Rev	Revision Description	Date	Author/ Reviewer

32 Frederick Street,
Birmingham, B1 3HH

+44 (0)121 234 7500
www.chetwoods.com

Project

LAND NORTH EAST OF J10 M42, DORDON

Client

HODGETTS ESTATES

Drawing Title

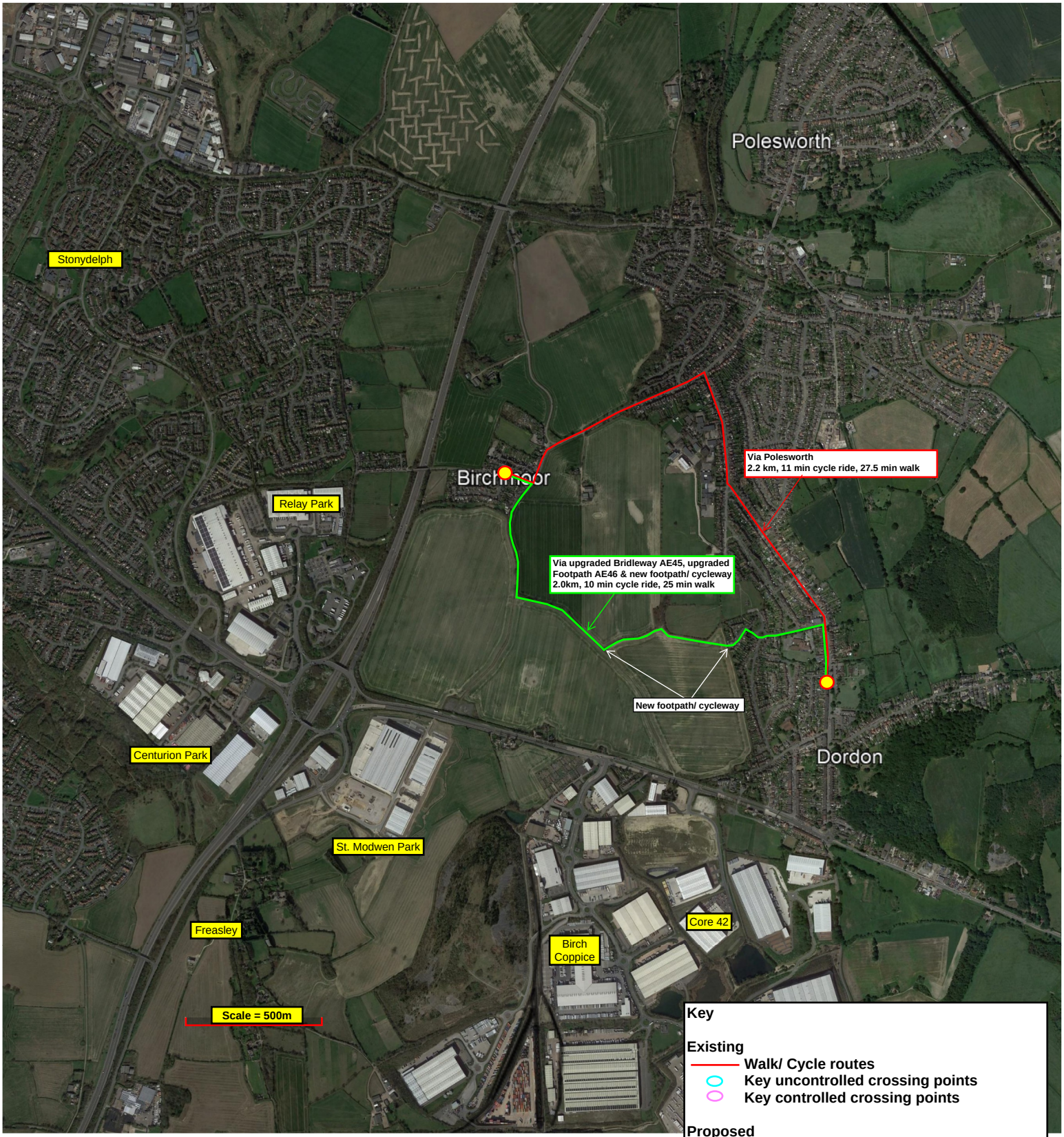
PROPOSED CONNECTIVITY PLAN - ROUTE TYPE & SURFACE

Scale	Size	Drawn	Checked	Date
1:5000	A1	mb	NH	27.07.2022

Project	Originator	Zone	Level	Type	Role	Number	Rev.
4263	CA	00	00	DR	A	00803	P6

APPENDIX E: TT CONNECTIVITY PLANS

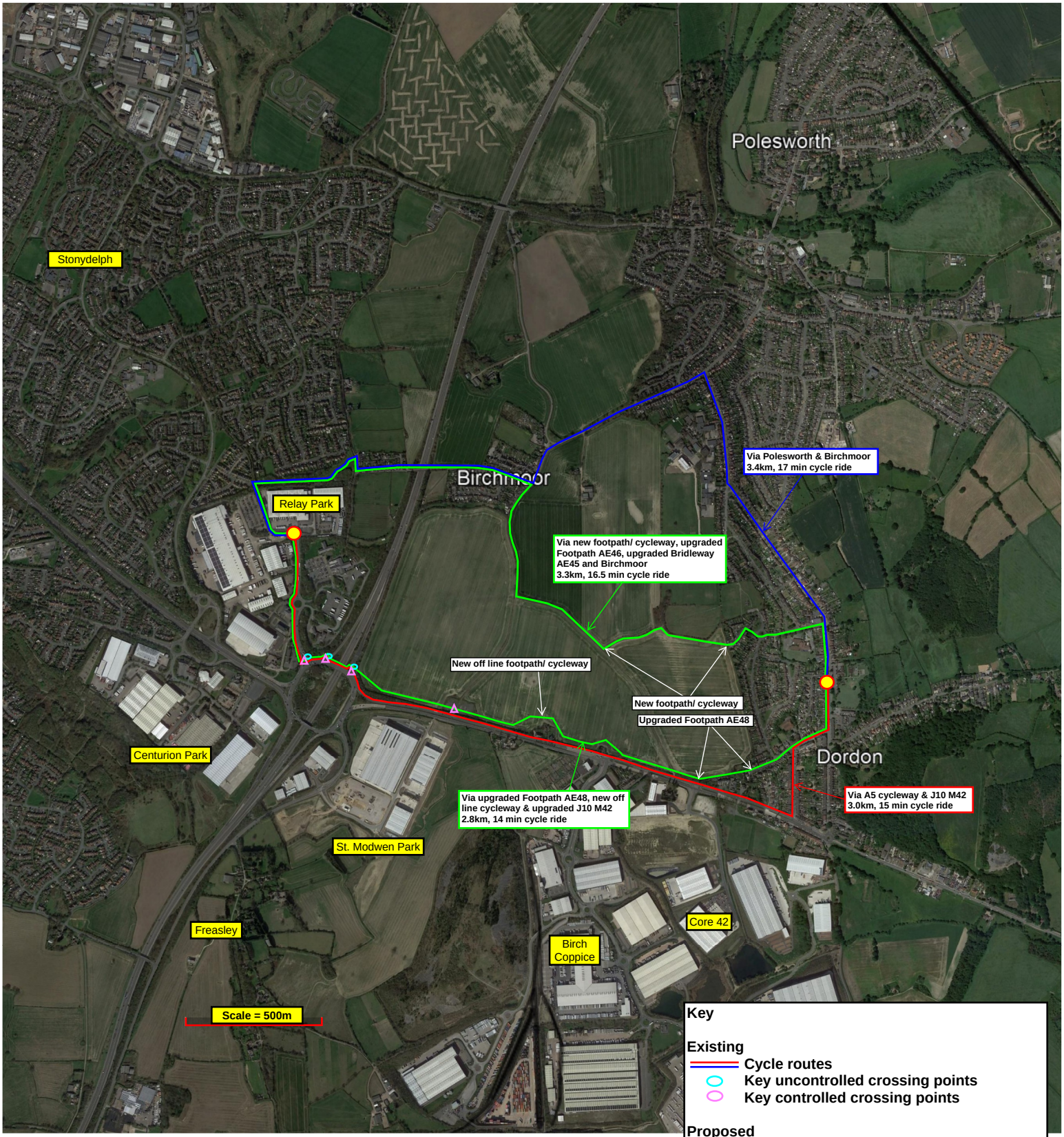
Community Integration Route Plan: Birchmoor to Dordon



Note:
Plan showing existing and proposed tarmac surfaced route options accessible by a typical road bike and Equalities Act 2010 compliant, therefore suitable for all residents/ visitors. It should be noted that with the benefit of specialist equipment, such as an off-road bike, other existing route options would be open to some (but not all). However, the use of these existing routes is not practicable for all residents/ visitors (such as those with physical and mobility impairments).

TETRA TECH

Commuter Point-to-Point Plan: Dordon to Relay Park

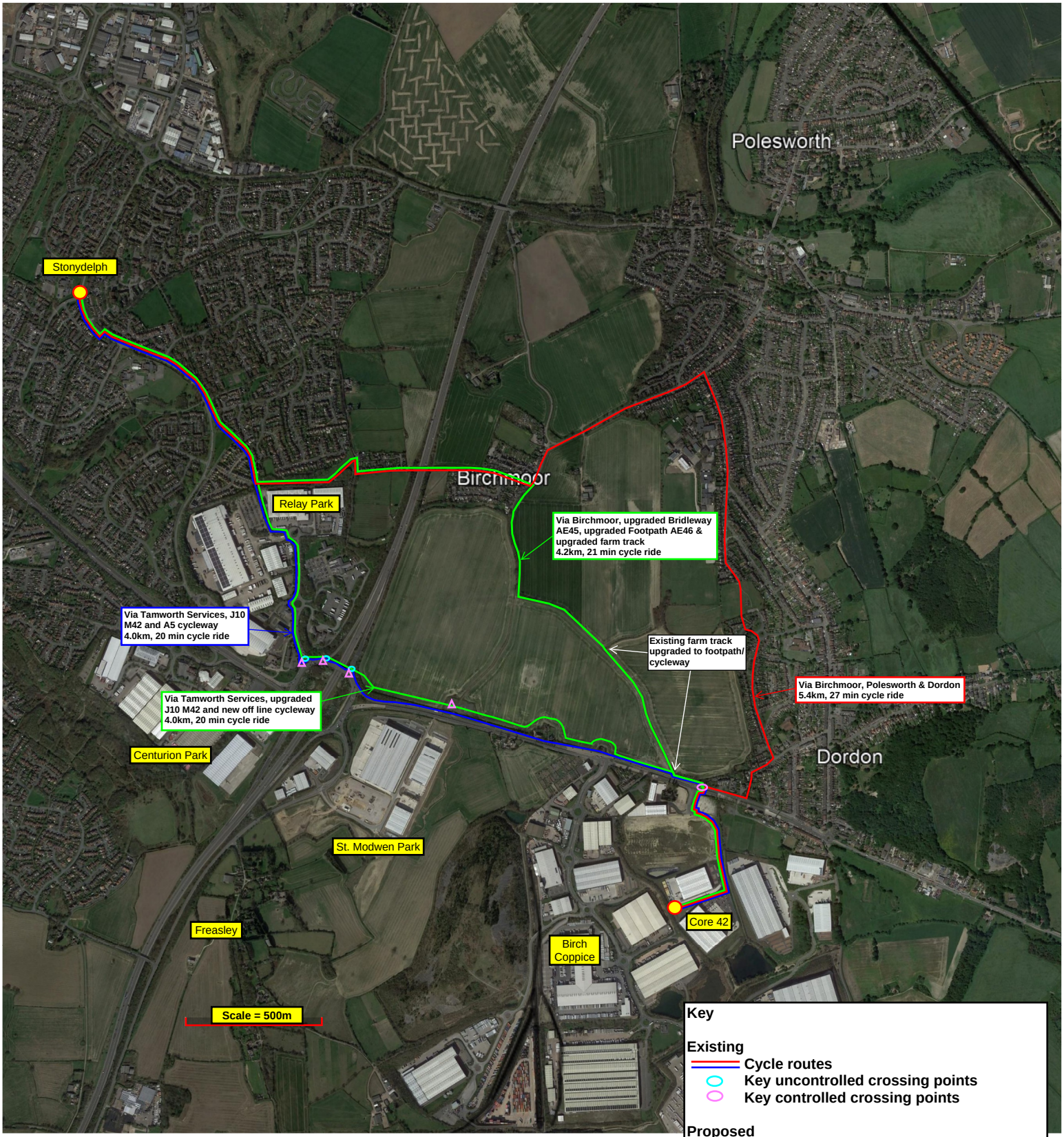


Note:
Plan showing existing and proposed tarmac surfaced route options accessible by a typical road bike and Equalities Act 2010 compliant, therefore suitable for all commuters. It should be noted that with the benefit of specialist equipment, such as an off-road bike, other existing route options would be open to some (but not all) commuters. However, the use of these existing routes is not practicable for all commuters (such as those with physical and mobility impairments) or certain jobs/positions where there is an imperative to arrive clean and/or shower facilities are not readily available.

The existing and proposed routes shown are in excess of the typical 2km maximum walking distance for commuters, so possible walking routes are therefore not shown on this plan.

TETRA TECH

Commuter Point-to-Point Plan: Stonydelph to Core 42

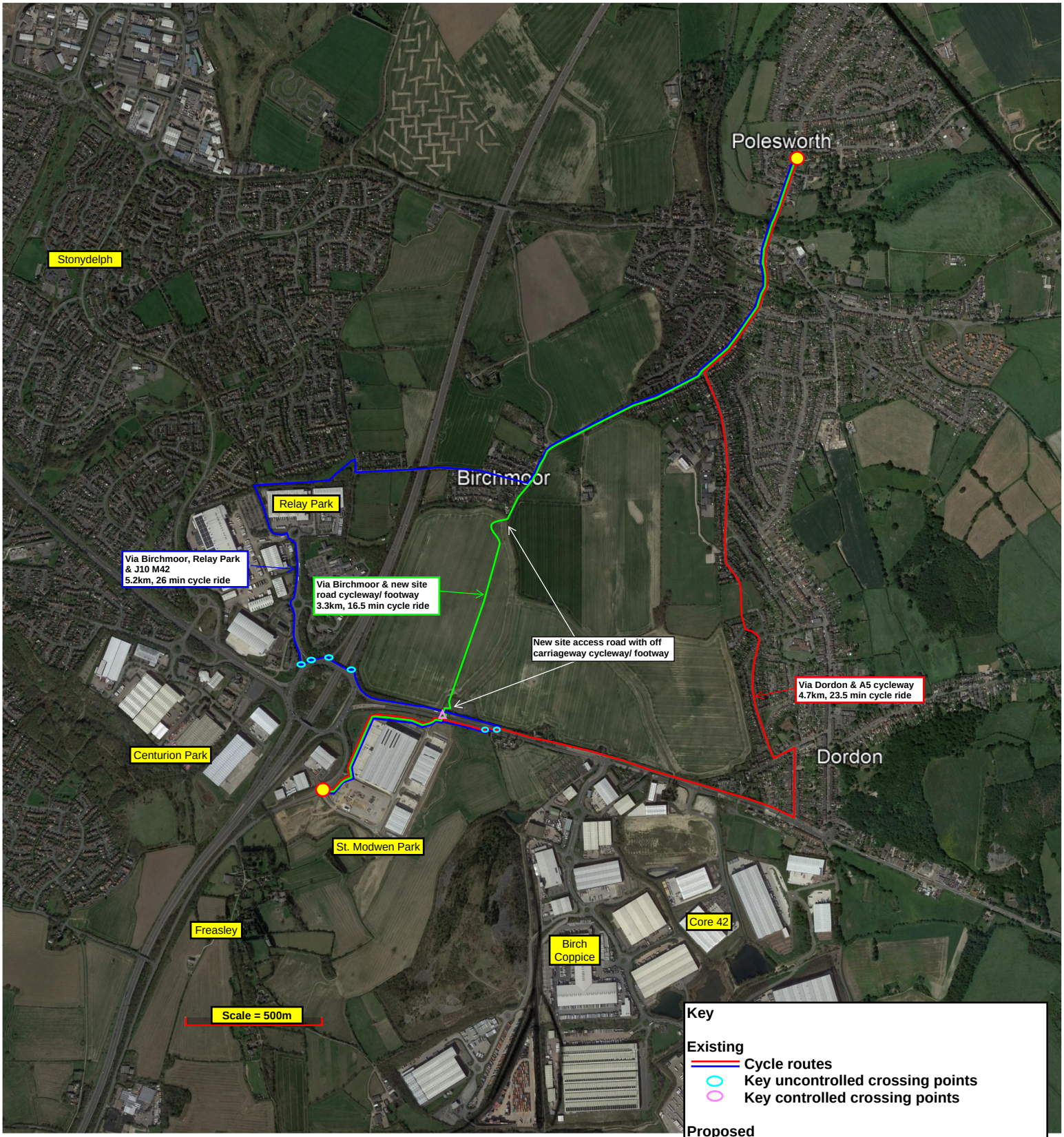


Note:
Plan showing existing and proposed tarmac surfaced route options accessible by a typical road bike and Equalities Act 2010 compliant, therefore suitable for all commuters. It should be noted that with the benefit of specialist equipment, such as an off-road bike, other existing route options would be open to some (but not all) commuters. However, the use of these existing routes is not practicable for all commuters (such as those with physical and mobility impairments) or certain jobs/positions where there is an imperative to arrive clean and/or shower facilities are not readily available.

The existing and proposed routes shown are in excess of the typical 2km maximum walking distance for commuters, so possible walking routes are therefore not shown on this plan.

TETRA TECH

Commuter Point-to-Point Plan: Polesworth to St. Modwen Park



Note:
Plan showing existing and proposed tarmac surfaced route options accessible by a typical road bike and Equalities Act 2010 compliant, therefore suitable for all commuters. It should be noted that with the benefit of specialist equipment, such as an off-road bike, other existing route options would be open to some (but not all) commuters. However, the use of these existing routes is not practicable for all commuters (such as those with physical and mobility impairments) or certain jobs/positions where there is an imperative to arrive clean and/or shower facilities are not readily available.

The existing and proposed routes shown are in excess of the typical 2km maximum walking distance for commuters, so possible walking routes are therefore not shown on this plan.

TETRA TECH