Milton Keynes Council

Bletchley - Fixing the Links

Final Report

September 2014

integrated transport planning

Bletchley – Fixing the Links

Final Report
September 2014

Produced by:

Integrated Transport Planning Ltd
50 North Thirteenth Street
Milton Keynes
MK9 3BP

Tel: 01908 259718

Contact: David Hampton
Email: hampton@itpworld.net
Web: www.itpworld.net

Document Control Sheet

Project Name	**Bletchley – Fixing the Links**
Client	Milton Keynes Council
Project Code	1385
Project Manager	David Hampton
Project Director	Jamie Wheway
Quality Manager	Jamie Wheway
Start Date	1st April 2014
Project Folder	I:\1385\
Team Members	David Hampton, Jamie Wheway, Lucy Baker, Arsalan Khalid
Sub Consultants	

Ver	**File name**	**Description**	**Prepared**	**Reviewed**	**Approved**	**Date**
2.2	Bletchley FtL Final Report 300914 v2-4	Updated Final Report	DH	JW	JW	01/10/14
2.1	Bletchley FtL Final Report 120914 v2-3	Updated Final Report	DH	JW	JW	12/09/14
2.0	Bletchley FtL Final Report 080914 v2-2	Final Report	DH	JW	JW	08/09/14
1.1	Bletchley Ft: Draft Report 080814 v1-1	Draft for client comment	DH			08/08/14
1.0	Bletchley Ft: Draft Report 080814 v1-0	Draft for internal review	DH	JW		08/08/14

Notice

CONTENTS

LIST OF FIGURES

APPENDICES

1 INTRODUCTION

1.1 This Report has been prepared in response to emerging opportunities arising from the proposed East-West Rail link which is routed through Bletchley. Milton Keynes Council (MKC) commissioned Integrated Transport Planning (ITP) to conduct a study to identify opportunities for:

- Improving the quality of pedestrian / cycle links between Bletchley Railway Station and Bletchley Town Centre; and
- Creating an effective transport interchange to better serve the environs of Bletchley Railway Station and Bletchley Town Centre.

1.2 This study has been prepared with input from a range of stakeholders, alongside researching opportunities and constraints, and movement surveys conducted locally. The work has sought to take account of the emerging proposals for East-West Rail, the aspirations of the local community and planned initiatives within the area. Wherever possible, the recommendations have sought to dovetail with other MKC strategies as appropriate.

1.3 One of the underpinning opportunities for this study is Growth Area Funding provided through the South East Midlands Local Enterprise Partnership (SEMLEP). The recent Growth Deal Funding announcement from Government indicates £1.5m investment from central Government (£1m in 2015/16), alongside an expected £2m 'local contribution' and potential funding through a National Stations Improvement Programme (NSIP) bid. Whilst clarification is being sought on the scope of, and conditions attached to, funding allocations, the potential £3.5m fund for the railway station will provide an important starting point for improvements and a catalyst for further investment.

1.4 This study has sought to identify a range of potential interventions to improve links between the Station, Town Centre and other key destinations that can be easily reached from Bletchley Station. These have been assessed and prioritised according to a range of agreed criteria, and form the basis of our recommendations.

1.5 The study area is as shown on Figure 1-1, although we have considered movement towards major destinations beyond this, principally MK Stadium, MK College and Bletchley Park.

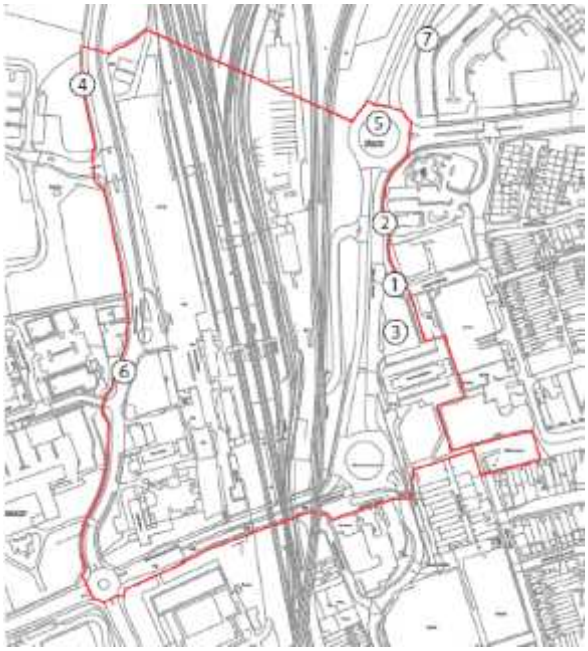


Figure 1-1: Study Area

2 BACKGROUND AND POLICY CONTEXT

Policy Context

2.1 The following section summarises the relevant policy context that supports investment at Bletchley. Further information is to be found by following links to source documents.

2.2 The MK **Local Investment Plan** sets out the vision and aspirations for the Milton Keynes area as it continues to grow with the aim of delivering a further 28,000 new homes and over 40,000 new jobs by 2026. The Local Investment Plan outlines the investment requirements and funding mechanisms to support the delivery of growth. The Plan is currently undergoing a refresh which is due for completion in spring 2015.

2.3 The current Plan identifies a requirement to fund around £980m of infrastructure to deliver the planned growth of Milton Keynes to 2026, a figure which is likely to increase over time as additional needs are identified. Funding identified to date stands at around £625m leaving a significant funding gap. An important area of focus is the £60m shortfall in funding for those items which are identified as critical infrastructure items to support the delivery of growth, and a £140m shortfall in necessary infrastructure.

2.4 The Local Investment Plan supports the councils **Corporate Plan** and its' vision for Milton Keynes. As far as access is concerned, the plan states that *'the creation of Milton Keynes as a visitor destination with good transport access means that the consequences of future growth on the transport infrastructure must be carefully planned with sufficient investment in enhancement and improvement to ensure that Milton Keynes continues to be attractive'.*

2.5 The MK **Local Transport Plan 3** (LTP) covers the period 2011 to 2031 and sets out the transport vision and strategy over the next twenty years. The Vision for 2031 is stated as '*Milton Keynes will have the most sustainable transport system in the country, increasing its attractiveness as a place to live, work, visit, and do business. There will be a real transport choice to satisfy individual preferences and encourage more sustainable travel behaviour. The transport system will provide fast and efficient movement of people and goods, and will be accessible for all. Everyone will have access to key services and amenities, including employment, health, education, retail and leisure.'*

2.6 'Transport networks, including the unique grid road and Redway networks, will be expanded and fully integrated into new developments and regeneration areas to support more sustainable communities. Connectivity to local towns, major cities, and international transport gateways and networks will be first class. The council will work in partnership with all sectors and the wider community to deliver the transport vision and strategy.'

2.7 The LTP recognises the need for improved interchange facilities at Milton Keynes Central Rail Station, Bletchley rail and bus stations, Wolverton rail station, in Central Milton Keynes, and at Milton Keynes General Hospital. The document identifies that the main exit of Bletchley rail station faces away from the town centre; facilities, information and signage are poor; and buses do not serve the main forecourt of the rail station. It also states that the bus station provides a poor urban environment for encouraging bus travel; physical access from bus bays onto and off buses is poor; and information provision and other facilities are also poor. Some of these issues have since been addressed by the recent £600,000 investment in the refurbishment of and improvements to the bus station commissioned by MKC.

2.8 The LTP Strategy also includes aspirations for improved Real Time Information (RTPI), accessibility improvements, pedestrian and cycle connections including Redway extensions, and measures to improve safety and security, such as better lighting and cycle parking.

2.9 The **Bletchley Transport Strategy** is a supporting document to the LTP. Its' Vision is for *"a Sustainable Transport System that makes Bletchley an attractive, connected and convenient* place *to live, work and shop".* The Transport Vision is supported by a number of strategic transport objectives specific to Bletchley:

- Economy - Enabling economic development and regeneration;
- Safety - Giving Bletchley safe and legible streets;
- Accessibility - Improving accessibility by improving sustainable connections;
- Environment - Managing the environmental impacts of transport choices;
- Growth - Effectively managing the transport impacts of growth.

2.10 The document proposes a number of transport interventions for implementation throughout the term of the strategy to year 2031. These include (inter alia):

- Bletchley to stadium:MK / IKEA pedestrian / cycle route;
- Improvements to Saxon Street / Princes Way junction;
- Improved pedestrian crossings on Saxon Street;
- Bus Priority on Saxon Street;
- Improvements to Saxon Street / Buckingham Road Junction;
- Downgrading Saxon Street (south of Princes Way) to a single carriageway;
- Improved Bus Station (current site);
- New Bus Station Site;
- New Rail Station overbridge;
- Extension of pedestrian route on Princes Way to junction with Saxon Street;
- New Pedestrian crossing on Sherwood Drive;
- Mini interchange for taxi / bus on western frontage of rail station;
- Introduce parking restrictions on Sherwood Drive; and
- Improvements to Buckingham Road / Sherwood Drive junction.

2.11 **SEMLEP** submitted a Strategic Economic Plan in April 2014 to capture a share of the Local Growth Fund (LGF). Improvements at Bletchley Station formed part of the prioritised bid package. As indicated earlier the Growth Deal Announcement in July 2014 has confirmed £1.5m of LGF investment at Bletchley Station alongside an anticipated 'local contribution' of £2.0m.

2.12 The Central Bletchley Regeneration Framework was prepared by EDAW in 2004 and was subsequently adopted as Supplementary Planning Guidance. It is referred herein as the EDAW Report and provides a strong backdrop and source of information for this study.

The study proposed a range of ambitious interventions in Bletchley, particularly around the station, to support economic growth objectives. Since the study was published, only one of the proposed projects (Leisure Centre) has been implemented.

2.13 The EDAW Report introduced the idea of re-opening the eastern access to Bletchley Station onto Saxon Street. This was originally closed in the 1950's when the high-level railway viaduct was constructed. Since then the station entrance has faced west, away from the town centre, creating an illegible connection between station and town centre. These issues are discussed further in Chapter 3. The delivery of an eastern entrance to the station remains a long term ambition in the context of East West Rail (EWR) proposals, outlined below, but is currently outside the funding envelope of EWR promoters and Network Rail. As such, this study has acknowledged that the proposal remains valid, but is likely to be a long term ambition subject to funding beyond that currently available for EWR and SEMLEP contributions. This study has focused on alternative means of improving access to the station, without precluding the potential future creation of an eastern access should the above obstacles become resolved.

East West Rail

2.14 East West Rail (EWR) is a major project to establish a strategic railway connecting East Anglia with Central, Southern and Western England. The 'Western Section' is now a committed, funded scheme to re-introduce passenger and freight services between Bedford and Oxford, Milton Keynes and Aylesbury. It involves upgrading and reconstructing sections of existing and 'mothballed' rail track, which is to be delivered by Network Rail. Services are currently scheduled to be operational by 2019, with a service pattern currently proposed as shown in Figure 2-1.

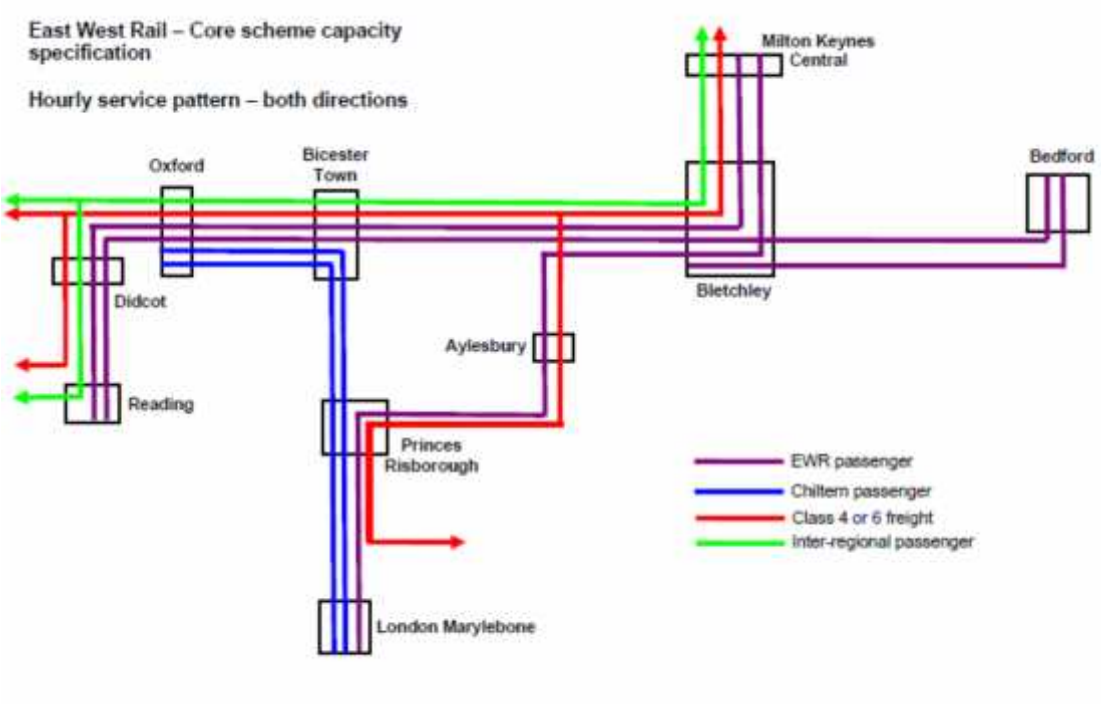


Figure 2-1: East West Rail Core Scheme Service Pattern (Source: Network Rail)

2.15 Bletchley is an important station for EWR services, providing interchange between several key routes and access to West Coast Mainline services at MK Central. As part of the improvements at Bletchley, high-level platforms are to be provided for EWR services. These are currently at Options (Grip 2) stage. EWR officers have confirmed that there are no plans within EWR's scope to make improvements to Bletchley Station, or its environs, other than the high-level platforms. There is no funding available through EWR for an east-facing station entrance. However, existing platforms at Bletchley are currently being refurbished at a cost of £2.5m, funded through Network Rail.

Bletchley Town Centre Benchmarking

2.16 A market town benchmarking exercise was undertaken by Action for Market Towns (AMT) in 2012 to compare town centre performance against small south east towns and nationally. The report concluded that overall Bletchley is performing on average the same, if not better, than the national average for small towns. As far as transport issues are concerned, the following facts emerged:

- The town centre has 1120 car parking spaces available, 86% of which are short-stay;
- Occupancy is approximately 72% on busy market days, approximately 65% on non-market days. This is consistent with average south east small towns;
- Approximately 50% of town centre users stay between 1 and 2 hours; and
- Arrival mode is as shown in Figure 2-2.

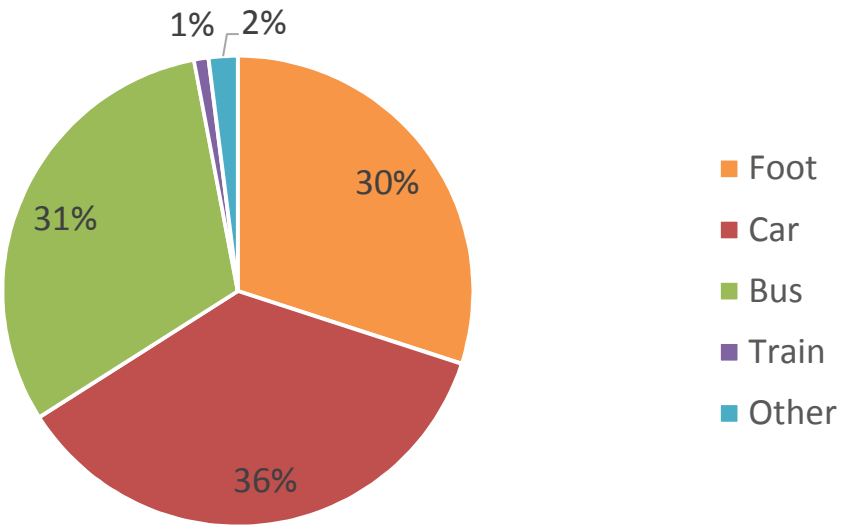


Figure 2-2: Arrival Mode Bletchley Town Centre

2.17 This compares favourably with other south east towns. Car mode share at other small towns (south east and nationally) is at 51%, compared to 36% in Bletchley, and bus mode share in other small towns is at 8% compared to 31% in Bletchley. Walking mode share at 30% is slightly below the small town average of 36%.

2.18 Businesses identified the following issues:

- **Positive –** Retail mix, Local Customers, Car Parking*
- **Negative –** Town prosperity, Car Parking*, Competition (other towns / online shopping)

2.19 Customers identified the following issues when asked:

- **Positive –** Range of shops, Transport, Walking access
- **Negative –** Lack of restaurants, physical appearance (Co-op site), shops

2.20 Car parking featured as both a negative and positive aspect in response to business attitudes. This reflects a divergence of views amongst businesses / retailers which may be dependent upon the location of individual business and their specific needs. Some businesses wanted more or better located parking, whilst others cited the availability of parking as an attractive element of the town centre.

Bus & Rail Services

2.21 Bletchley Rail Station enjoys direct connections to London, the Midlands and further north. Train service frequencies, provided by London Midland, can be summarised as follows:

- Bletchley to Euston = 4 trains per hour (tph);
- Bletchley to Clapham Junction = 2 tph;
- Bletchley to Milton Keynes = 4 tph;
- Bletchley to Bedford = 1 tph; and
- Bletchley to Northampton = 1 tph;

2.22 As described earlier, the introduction of East West Rail services will enhance the frequency and range of destinations further.

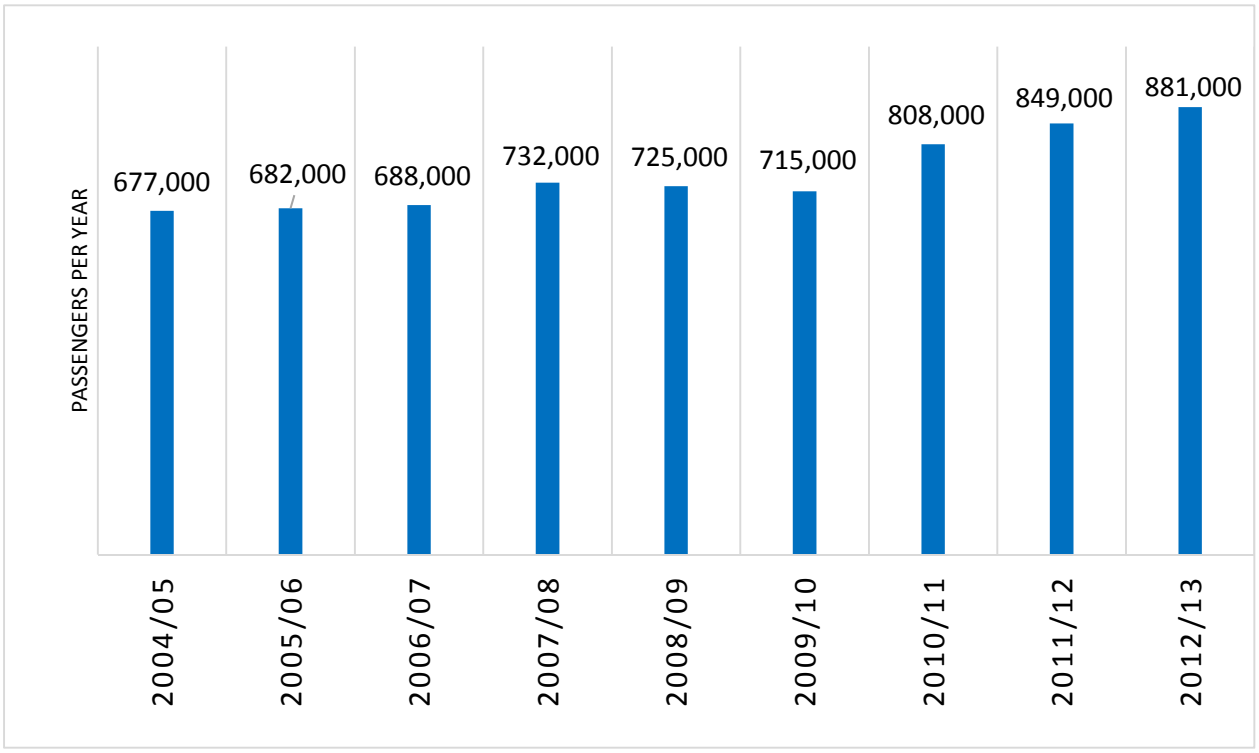


Figure 2-3: Rail Passengers through Bletchley Station

2.23 Figure 2-3 shows annual rail passengers flows through Bletchley Station showing a steady year-on-year increase in most years. Passenger numbers have increased by approximately 30% over the last decade.

2.24 Bus services are available from stops at Sherwood Drive, Buckingham Road and Bletchley Bus Station.

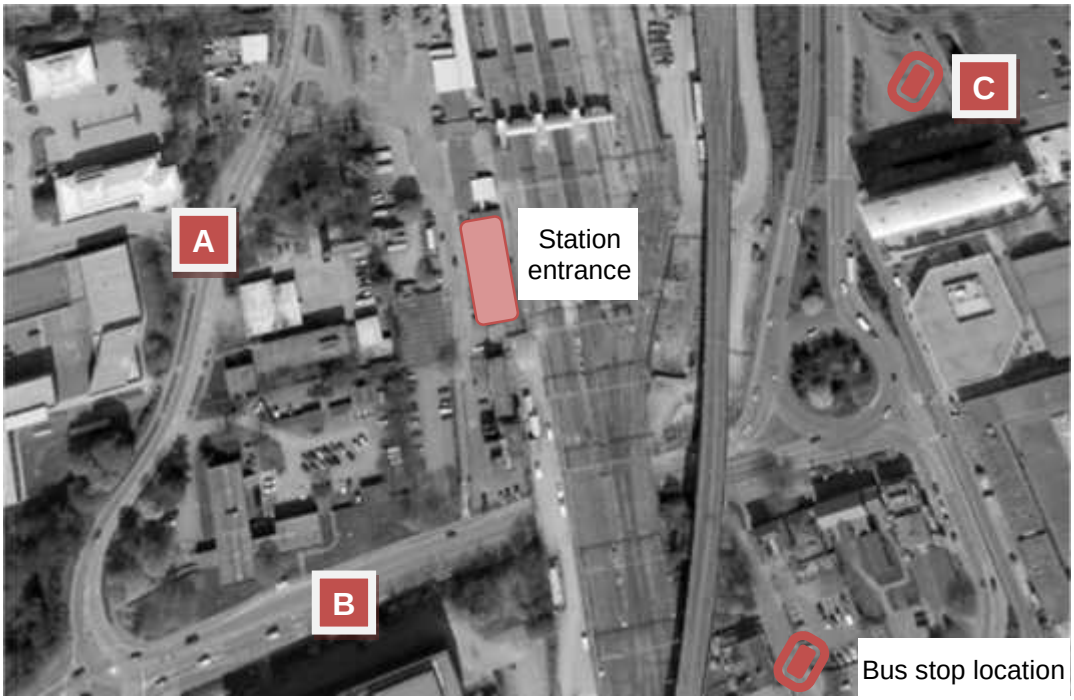


Figure 2-4: Bus Stops near Bletchley Rail Station

2.25 Services from Stops A on Sherwood Drive are provided by Vale Travel, nos 24 & 25, and operate on an hourly basis on a circular route between Bletchley, Milton Keynes and Newport Pagnell.

2.26 Services from Stops B on Buckingham Road are operated by Arriva, nos 4 & 7. Service frequencies are up to 6 buses per hour operating to Wolverton via central Milton Keynes.

2.27 MK College also operate a service (free to students) between MK Central Station and each of their campuses throughout the day. In addition MK Stadium operate a bus service between Bletchley Station, MK Station and the Stadium on match days.

2.28 All services use Bletchley Bus Station (C).

3 SITE INVESTIGATION

Land Ownership

3.1 A key aspect of future development aspirations at Bletchley Station is the ability for scheme promoters to engage effectively with land owners. Figure 3-1 below shows approximate land ownership boundaries in the vicinity of the station. For definitive boundary plans, refer to the land owner in question or Land Registry.

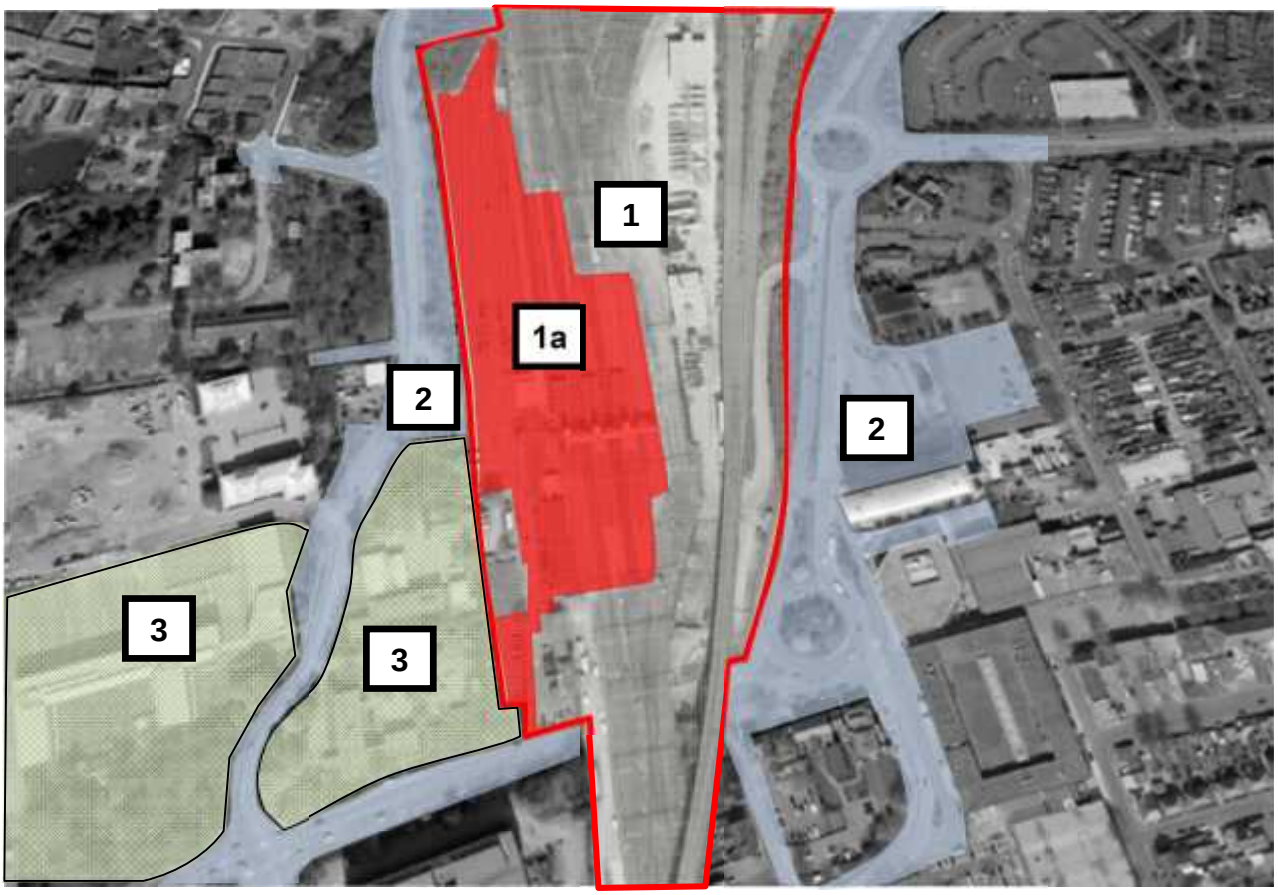


Figure 3-1: Land Ownership

1	Network Rail (NR)
1a	NR Land leased to Train Operating Company (TOC – London Midland)
2	MK Council and Highway Land
3	Public Sector Land (Police, Fire and MK College)

3.2 It can be seen that Network Rail (NR) control large swathes of land at and around the station that will be affected by emerging proposals from this study. Early discussions are necessary with Network Rail Estates personnel to establish the extent to which proposals arising from this study can be delivered in a timely manner on NR land.

3.3 The local authority control highway land and some neighbouring parcels of land which offers the opportunity for reconfiguration of space to improve access. Other public sector land is controlled by the Police and Fire Services, and by MK College.

Committed Development and Opportunities

3.4 A search of recent planning applications submitted and under consideration reveals two residential proposals in proximity to the study area:

- 12/00916/FUL – application for 56 dwellings at the former BT site, Bletchley Park – approved; and
- 14/01550/OUT – application for 57 dwellings at former Council Depot, Sherwood Drive – under consideration.

3.5 Neither application has a material impact on this study in terms of changes to land ownership or access arrangements in the vicinity of the station. However, both developments require pedestrian access to the station and town centre and will therefore benefit from proposals emerging from this study.

3.6 Further development opportunities are available within Bletchley Town Centre that are not yet current planning applications as shown in Figure 3-2.

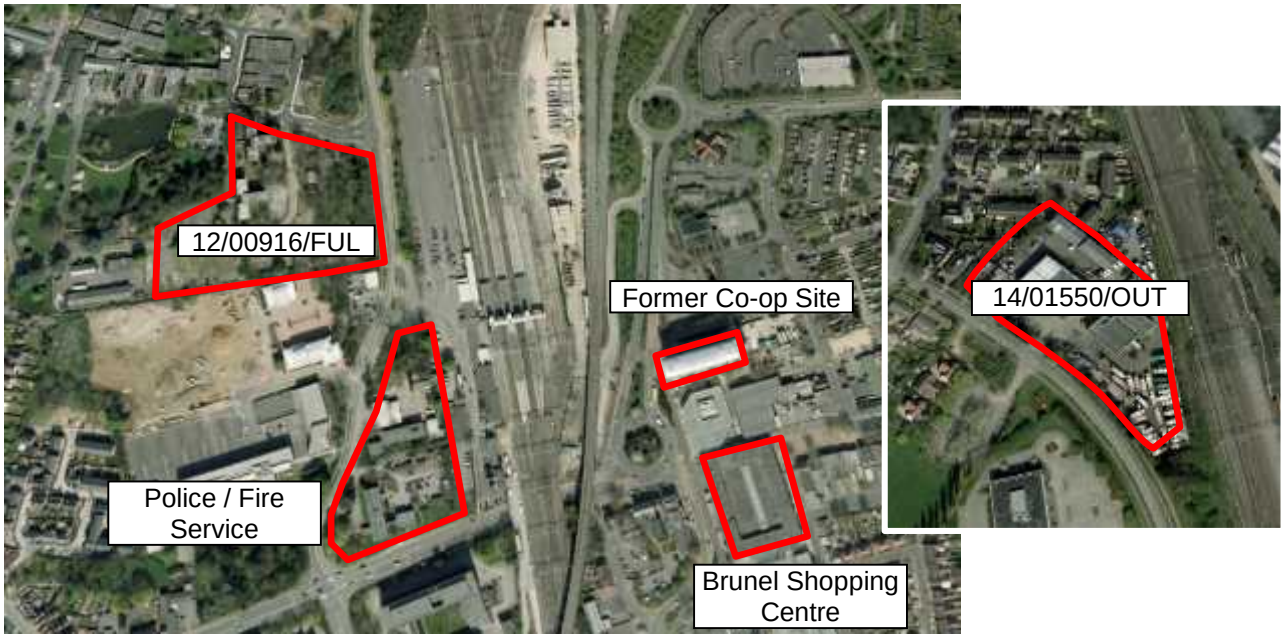


Figure 3-2: Current Planning Applications & Potential Development Sites

3.7 The Police / Fire service site is currently occupied but has the potential for future development if the services consolidate to an alternative location as identified in the EDAW report.

3.8 The former Co-op site has been empty for several years and has significant development potential as a retail, office and / or residential block.

3.9 Redevelopment of the Brunel Shopping Centre has been discussed for several years but no formal plans are currently in the public domain

Data Collection

3.10 Traffic and pedestrian survey data has been received from MK Council to provide some background information and context. This has been supplemented by new surveys undertaken to fill-in information gaps. The combined weekday peak period traffic flow data is displayed in Figure 3-3.

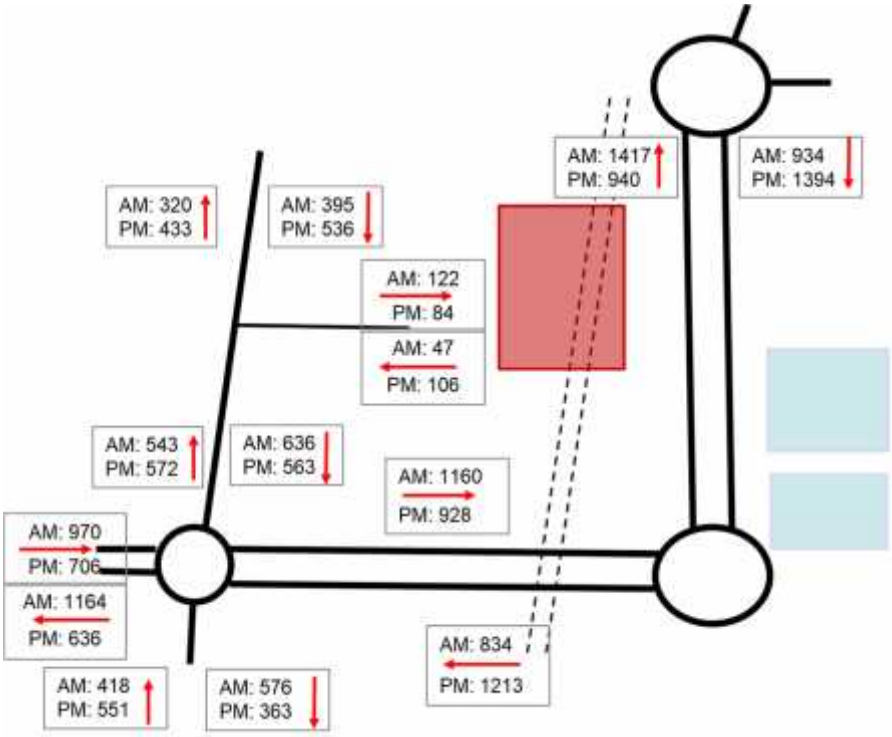


Figure 3-3: Traffic Survey Results

3.11 Data shows that Buckingham Road and Saxon Street accommodate the highest flows of traffic during peak periods, as would be expected. There is a tidal flow towards central Milton Keynes in the AM peak, with the reverse true for the PM peak. The data also shows the arrival and departures at the railway station car park / drop-off during peak periods – in the morning peak, the data suggests that approximately two-thirds of vehicles arriving at the railway station use the car park confirming the importance of Bletchley as a rail-head. In the evening peak, almost 80% of traffic leaving the station arrives in the same hour, indicating a strong element of passenger collection within the data.

3.12 Pedestrian flow data for weekday peak periods has also been sourced from MKC and supplemented by new surveys as shown on Figure 3-4. The data also indicates a strong peak period tidal flow to and from the railway station. There is less of a correlation with bus station usage, but buses are more likely to be used for accessing retail functions in Bletchley Town Centre rather than commuting, as indicated by the Town Centre Benchmarking report.

3.13 Data on traffic speeds has been collected previously by MKC at 3 locations – Sherwood Drive, Buckingham Road near Brunel Roundabout and Saxon Street. Data was collected over a 24 hour period in each direction. The average bi-directional 85th percentile speed is shown at each location in Figure 3-5. The 85th percentile speed is a common measure of traffic speed for evaluation purposes and is defined as 'the speed at or below which 85% of all vehicles are observed to travel under free flow conditions, past a given point'.

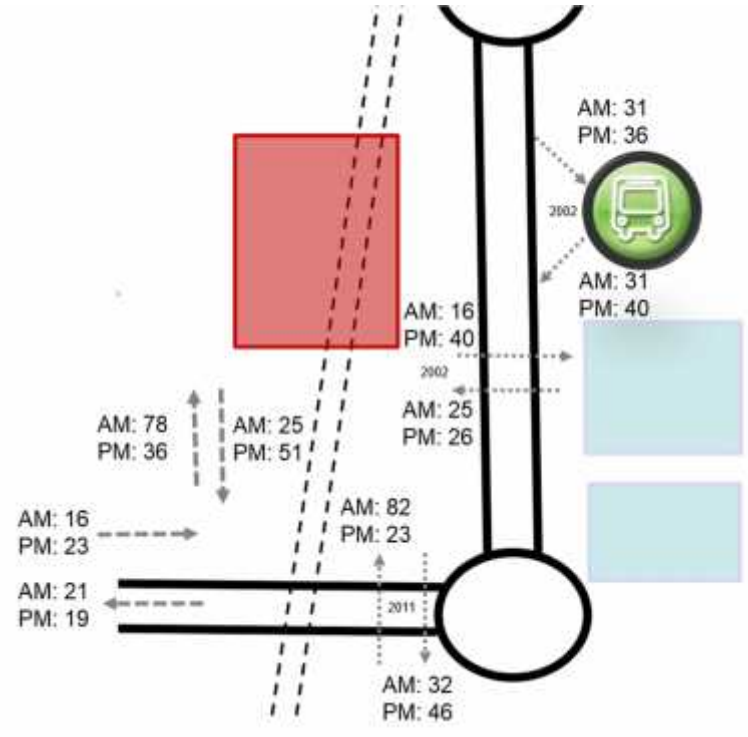


Figure 3-4: Pedestrian Survey Results

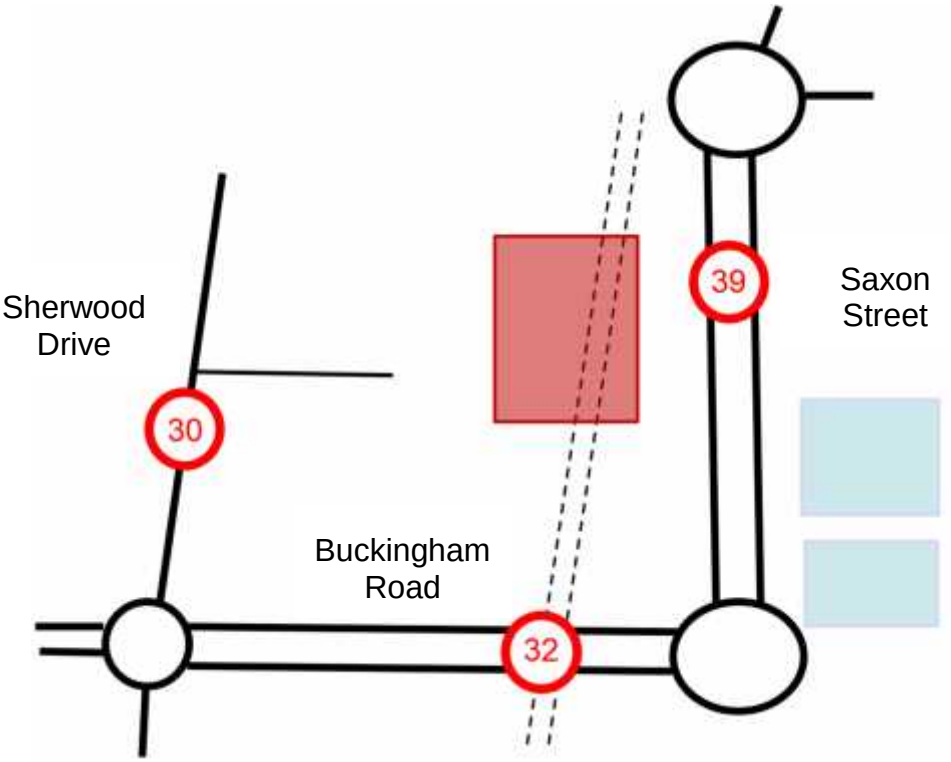


Figure 3-5: 85th Percentile Traffic Speeds

3.14 The speed limit of each of these streets is 30mph. Recorded speed data shows that the limits are met or exceeded in every location. Of particular concern is recorded speed on Saxon Street where the 85th percentile is 39mph (15% of vehicles are recorded exceeding even this speed). The straight alignment and dual carriageway status of Saxon Street and Buckingham Drive almost certainly contribute to high recorded speeds.

3.15 Sherwood Drive has different characteristics to the other streets, in that the alignment is less straight and it is single carriageway. However, it is adjacent to MK College Bletchley Campus with a high flow of students observed to be crossing the street; traffic speeds along Sherwood Drive therefore require effective management for safety reasons.

3.16 Traffic collision data has been extracted from Crashmap for the 5 years to end 2013, as indicated on Figure 3-6.

Figure 3-6: Collisions Involving Injuries 2008-2013 (Source. Crashmap.co.uk)

3.17 Clusters of collisions are clearly identifiable at the Sherwood Drive / Buckingham Road roundabout, and at Brunel Roundabout close to the zebra crossing. Closer inspection of the accident data indicates that:

- Pedestrians and cyclists are involved in some, but not all, collisions near the Brunel Rounabout crossing;
- A large majority of the collisions at Sherwood Drive roundabout are 'shunt' and 'side-swipe' type accidents which are typical of small to medium size roundabout junctions. It is understood that changes to the roundabout layout were made within the 5 year period under investigation;
- Collisions close to the railway station entrance involve pedestrians crossing Sherwood Drive; and
- One of the collisions on Saxon Street involved injury to a pedestrian on the pelican crossing opposite the bus station.

3.18 The collision data indicates particular accident hotspots close to 2 junctions and shows some vulnerability for pedestrians and cyclists when crossing roads even on formal

crossings. These patterns need to be taken into account when considering improvements to links within Bletchley.

Pedestrian Audit

3.19 A pedestrian audit was completed in May 2014 across the study area to assess the quality of pedestrian links and crossings on an objective basis. The Pedestrian Environment Review System (PERS) is a systematic walking audit tool that assesses the level of service and quality provided for pedestrians across a range of pedestrian environments. PERS allows an understanding of the physical characteristics of the study area, with the results helping to identify opportunities and constraints for improvements.

3.20 A Technical Note outlining the methodology, scope and results is shown in Appendix A. The results are summarised below.

3.21 A total of 10 routes, 14 links, 6 crossings facilities (both formal and informal), 4 bus stops and 2 interchanges were identified as making up the network of pedestrian accessibility within the site linking Bletchley Rail Station to Bletchley Bus Station and other key generators within the study area – the Town Centre, Bletchley College and Bletchley Park. Each identifier was then assessed in relation to its relevant set of pre-determined criteria and given a score ranging from +3 (very good) to -3 (very poor). A score of 0 represents an average score, but also N was used where a particular criteria could not be assessed. Figure 3-7 shows the routes assessed.

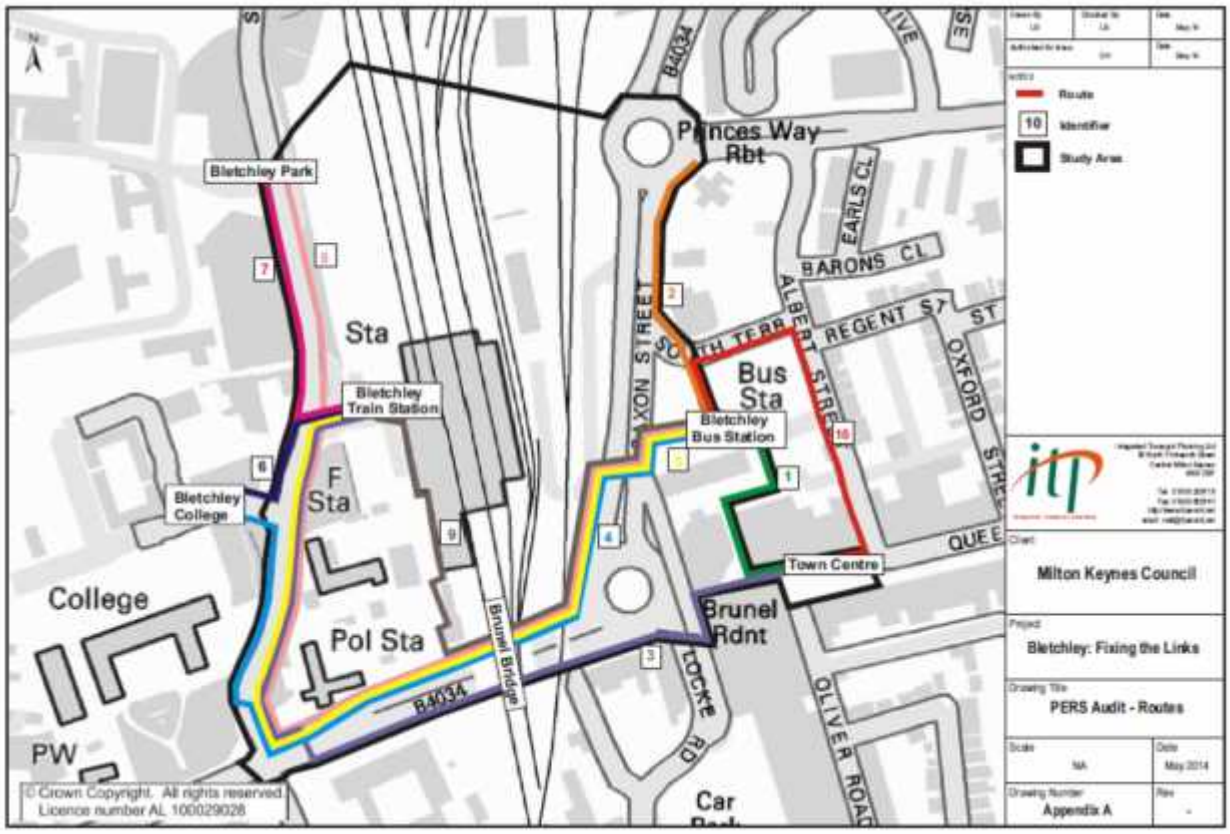


Figure 3-7: PERS Audit Routes

3.22 The audit highlighted a number of areas which give cause for concern in terms of the quality of the pedestrian environment, as shown in Figure 3-8. This indicates that, of the 10 routes, only 1 (Route 7) is 'satisfactory' (green), 4 routes show 'cause for concern' (yellow) and 5 routes have 'serious deficiencies' (red)

Route Criteria	Route 1	Route 2	Route 3	Route 4	Route 5	Route 6	Route 7	Route 8	Route 9	Route 10
Directness	-2	2	2	2	1	3	3	-1	3	-2
Permeability	-1	2	1	0	0	-3	2	-1	-2	-1
Road Safety	N	2	-1	-1	-1	-3	2	-1	-1	-1
Personal Security	-1	1	0	-1	-1	-2	2	-1	-2	-1
Legibility	-1	0	-1	-1	-1	0	2	0	-1	-1
Rest Points	1	-3	-3	-3	-3	-3	-3	-3	-3	-3
Quality of the environment	0	1	0	0	-2	-2	1	0	-3	-1
Total	-4	5	-2	-4	-7	-10	9	-7	-9	-10

Figure 3-8: PERS Audit Results Summary

3.23 The highest performing route 7 is between Bletchley Railway station and Bletchley Park. It is worth noting that some of the infrastructure along this route is relatively new due to the current and ongoing improvements at Bletchley Park.

3.24 The two lowest performing routes, 6 and 10, are between the railway station and MK College (6) and within the town centre (10). These routes scored poorly in nearly all the criteria, but most severely in permeability, quality of the environment, personal security, road safety and rest points.

3.25 Route 6 was noted as having very poor road safety as no crossing facility is currently provided for pedestrians directly between the College and the Rail Station, were many pedestrians were witnessed running across the road to access the other side, close to the bus stops on Sherwood Drive.

3.26 Route 10 also scored particularly poorly and is not a route considered as particularly attractive to pedestrians. This route connects the Town Centre to the Bus Station via Albert Street and South Terrace. The directness of this route was very poor with little signage to aid wayfinding. There was also an issue with a lack of dropped kerbs along South Terrace near the Bus Station and generally Albert Street closest to the Town Centre felt cluttered and unsafe due to the car parks located to the west of this street. Further north towards South Terrace the pedestrian environment improved with wide pathways and dropped down kerbs with tactile paving.

3.27 The results of the audit are taken into consideration in the development and consideration of options to improve pedestrian amenity, safety and legibility within Bletchley.

4 OPPORTUNITIES AND OBJECTIVES

Opportunities and Constraints

4.1 The preceding chapters identify a wide range of issues that have influenced the character of Bletchley over recent years. The policy priorities are to support economic regeneration within Bletchley and maximise the opportunities arising from East West Rail. More locally, development opportunities around Bletchley Station point to the potential for inward investment to support further growth and transformation in the town, of which the railway station is a key aspect.

4.2 In summary, we suggest the following opportunities and constraints are present when considering improving links between the Station and surrounding area.

Opportunities

- **Demand generated by East West Rail**

Demand forecasts produced for the EWR Outline Business Case indicate that between 1.8m and 2.6m passengers per year could use the Western Section service four years after opening. No specific information is available regarding future demand at Bletchley Station arising from EWR.

- **Growth at Milton Keynes College, Bletchley Campus**

MK College is one of the fastest growing further education Colleges in the UK, with a population of over 20,000 students. It continues to invest in its' infrastructure and has recently updated facilities at Bletchley campus. Courses taught here range from Art to Sports to Motor Vehicle maintenance.

- **Regeneration of Bletchley Park**

Bletchley Park has received significant Heritage Lottery Funds and is currently restoring key war-time buildings to open as a new visitor centre in summer 2014. Further investment is planned to restore other buildings and resources to create a world-class education and heritage site by 2020. It aims to attract 250,000 visitors per year.

- **Development Opportunities in central Bletchley**

As indicated in previous chapters, a number of development opportunities exist in the station environs. These include the former BT site adjacent to Bletchley Park where development is underway and current proposals at the former Council Depot at Sherwood Drive. There are future opportunities within the retail core of Bletchley, principally at the Brunel Centre and Co-op site to regenerate these plots, and the potential for the fire and police station site to be redeveloped as a higher density site should existing users decide to relocate. In combination, these opportunities have the potential to generate a significant amount of new demand for the rail station.

- **Rising Demand for Public Transport Services**

In the previous chapter, passenger growth trends for bus and rail services are shown over recent years – see Figure 2-3. Even without investment in the opportunities described above, it can be expected that passenger demand at Bletchley Station will continue to grow based on current trends.

- **Confirmed Funding from various sources**

The Local Growth Fund announcement plus further contributions has confirmed up to £3.5m of investment into improvements around Bletchley Station over coming years. Current investment by Network Rail of £2.5m is upgrading the station platforms.

- **Consensus on Existing Problems**

Previous studies and consultation conducted for this study indicate that the problems of access, legibility and poor arrival are well understood by all stakeholders. There is general support for investment and delivery of projects to improve station access across politicians, businesses and transport operators.

Constraints

- **Land Ownership**

As stated previously, land within and around the station is owned by a variety of landowners, not least Network Rail. Achieving improvements in the immediate vicinity of the station requires approval and support from Network Rail and other land owners. The benefits of investing in the strategy, whether through firm financial commitment or support in kind, need to be clearly set out to and understood by interested landowners.

- **Level Differences and Engineering Constraints**

The existing fabric around Bletchley station and town centre is highly engineered and results in significant level differences and physical blockages at various locations. From an engineering perspective, we believe that an acceptable range of interventions is possible, but dealing with some of the engineering challenges is likely to require larger budgets and longer timescales.

- **Funding Availability**

Although the recent Growth Funding announcement is a welcome investment, the scale of interventions required for material change is potentially significant, and beyond the initial c£3.5m funding envelope. Further sources of funding are required to deliver the emerging strategy.

Strategic Approach

4.3 It is clear from this analysis that Bletchley Station forms a pivotal role in the emerging shape of Bletchley. Existing retail functions to the east of the station will continue to provide the economic foundation of the town, whilst growth and development to the west of the town centre, focused around leisure, education and residential uses generates new activity to and through the station. MK Stadium and surrounding development will continue as a destination for leisure and sporting activity.

4.4 There are potentially at least two roles that Bletchley Station can take in the future.

- Transport hub providing connections to MK, the Midlands, London and via East West Rail;
- Transition and retail / cafe hub, providing a transition point between the town centre, education, leisure and retail activity via significantly improved connectivity. *This role would not seek to compete with the town centre retail function.*

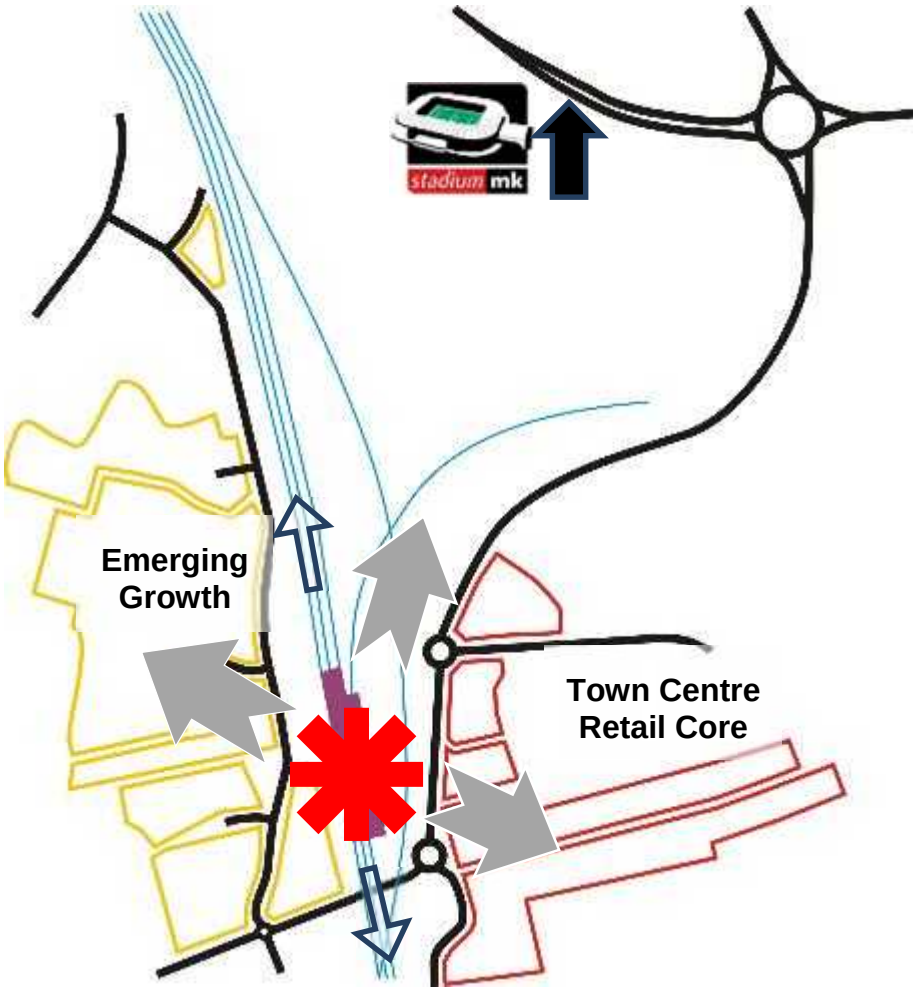


Figure 4-1: Strategic Approach

4.5 The proposed strategic approach aims to take advantage of the station being at the fulcrum of current and future economic activity within Bletchley as shown on Figure 4-1. This supports the objectives outlined below which have been tested through stakeholder consultation as outlined in Chapter 5.

- Improve journeys within Bletchley:
  - To remove physical and perceived barriers between Station, town centre and main destinations;
- Enhance Arrival:
  - To provide a welcoming arrival point at Bletchley Railway Station;
- Enable Future Development:

- To co-ordinate development and funding opportunities;
- To deliver improvements that take advantage of East-West Rail services commencing in 2019;

- Facilitate Economic Regeneration in Bletchley:
  - To facilitate convenient onwards journeys to the town centre and key destinations by all modes, to encourage commercial, retail and leisure activity.

5 CONSULTATION

5.1 Two separate rounds of consultation have taken place through this study to inform the strategy and options. These have sought to engage key stakeholders and decision makers in the optioneering process and gain initial support for an approach. Further consultation will be required as more detailed measures emerge to keep local stakeholders engaged and supportive through the delivery process.

Initial Options

5.2 An Initial Options meeting was held with MKC Officers on 16th May 2014 to test developing ideas and discuss an emerging approach. This focus of the discussion was the relationship between the Station and Town Centre – links to destinations west of Sherwood Drive and MK Stadium were not covered in detail. The meeting identified three key components of that relationship:

- **Station Arrival**, in terms of
  - Wayfinding;
  - Legibility and welcome;
  - Onward journey options;
  - Bus connections;
  - Public Realm;
- **Links to Buckingham Rd / Queensway**, in terms of
  - Wayfinding;
  - Security / surveillance;
  - Lighting;
  - Accessibility and steps;
  - Surfacing and public realm;
- **Brunel Roundabout**, in terms of
  - Removal of barriers to pedestrian / cycle movement;
  - Achieving a better balance between traffic capacity and road space allocation;
  - Improving the Gateway and creating direct connections to the town centre;
  - 'Greening' the 'Brutalist'-esque elements of design to soften the town centre welcome;

5.3 A number of emerging options and opportunities were discussed at that meeting including:

- Reducing capacity of Buckingham Road and Saxon Street to allow public realm and development opportunities;
- As part of the above, replace Brunel Roundabout with Brunel Square, a new public square at the entrance to the town centre;

- Divert bus services into the station forecourt to reduce the interchange distance between bus and rail services;
- Potential for relocating Bletchley Bus Station to Brunel Roundabout;
- Introduction of real time information, wayfinding and timetable integration between bus and rail services; and
- A general upgrade and improvement in public realm, signposting, public art, street lighting and security measure between the station and town centre.

5.4 In general, all emerging ideas were viewed favourably, although it was accepted that more detailed thinking was required to develop ideas further. It was considered that attracting buses into the station forecourt would be problematic for the bus companies for operational / timetable reasons, and that improved links to bus stops / station and information would be preferable.

Stakeholder Workshop

5.5 A Workshop involving a wide range of stakeholders was held on 3rd July 2014 at Bletchley Park. 48 people were invited from a broad spectrum of private and public sector bodies. 28 participants attended the event from organisations including MK Council, Bletchley Park, MK College, Network Rail, Arriva Buses, Thames Valley Police, Buckinghamshire Fire Authority and the 2 town councils (Bletchley & Fenny Stratford and West Bletchley). The Disability User Group was also represented. A list of attendees is attached at Appendix B. We understand that some of the participants have been involved in previous studies associated with Bletchley Station.

5.6 The objectives of the Workshop were to:

- Provide background on potential improvements at the Station;
- Present an Emerging Strategy for improving links between Station and key destinations;
- Engage discussion on priorities and benefits of the approach;

5.7 The presentation given at the Workshop, and circulated to participants, is included at Appendix C. The emerging objectives put forward at the Workshop are to:

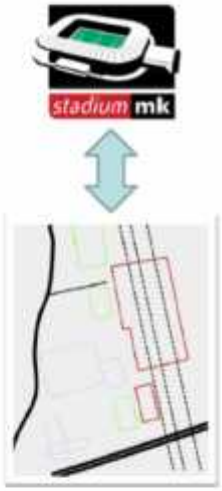
- Improve journeys within Bletchley;
- Enhance Arrival;
- Enable Future Development; and
- Facilitate Economic Regeneration in Bletchley;

5.8 Five packages were presented at the Workshop for discussion, each capturing a specific area or theme relevant to the study. These are summarised below, and expanded in detail in the presentation pack in Appendix C.

Package 3 – Sherwood Drive

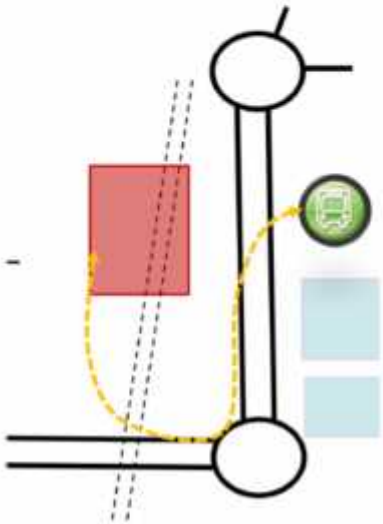
- Pedestrian crossing points
- Improve bus stops
- Speed management measures – road humps or narrowings
- Speed cameras

Package 4 – Wider Access



- Wayfinding to MK Stadium
- Enhanced bus link to Stadium
- Improved and / or new walking links to Stadium

Package 5 - Integration



- Real-time and timetable information for 'other' mode
- Themed path & wayfinding between stations
- Integrated timetables between bus & rail
- Relocation of bus station

5.9 At the end of the Workshop, participants were invited to prioritise potential interventions from a list of 23 ideas across the 5 Packages. Participants were asked to rank the top 5 priorities on prepared response sheets. Results are as shown in Figure 5-1 on the following page.

5.10 The top 3 interventions (by number of responses, regardless of rank) are Wayfinding and Markers, Paint / Landscaping / Lighting under Brunel Bridge and Removing Steps between the railway station and Buckingham Road. The first two can be delivered relatively inexpensively; the removal of steps and replacement with an alternative ramp requires a more significant level of investment and is likely to involve multiple landowners. Access to MK Stadium and dealing with speeding issues on Sherwood Drive were of much lower priority to participants.

5.11 These priorities have been included in the overall prioritisation exercise described in Chapter 8.

	Rank 1	Rank 2	Rank 3	Rank 4	Rank 5	Total Votes
Station Forecourt / Surrounds						
Wayfinding signs & markers	4	3	1	3	1	**12**
Bus stops closer to station entrance			1			**1**
Public realm across forecourt	1				3	**4**
Improvements / Lighting on footpath to Queensway / Buckingham Rd	1	1	2	2	1	**7**
Instatllation of Ramp or Lift at Buckingham Rd steps	1	4	3			**8**
Grand Staircase at Buckingham Rd steps	4	3				**7**
Café on Signal Box Site						**0**
Town Centre Environs						
Reduce Buckingham Rd Saxon St to single carriageway	3		1			**4**
Remove Brunel Roundabout. Replace with Brunel Square	1		4			**5**
Elevated footway on Buckingham Road		1		3	1	**5**
Paint / landscape / lighting under Brunel Bridge		2	1	3	3	**9**
Remove retaining wall adj to service road						**0**
Regrade Brunel Rab / Square to provide level surface to Queensway						**0**
Green wall on Saxon Street adj to Cemex / NR site			1		1	**2**
Sherwood Drive Corridor						
Pedestrian crossing points nr College					3	**3**
Speed management measures						**0**
Speed cameras / enforcement						**0**
Wider Access						
Wayfinding to MK Stadium						**0**
Footbridge between Sherwood Dr & Third Ave					1	**1**
Public Transport Integration						
Real-time and timetable info for 'other' mode			2	1	2	**5**
Relocation of bus station to Brunel Roundabout	1	1			1	**3**
Themed path & wayfinding between stations			1			**1**
Improved timetable integration between modes		1				**1**
Better maps & timetable information				3		**3**

Figure 5-1: Stakeholder Workshop Priority Responses

6 OPTION DEVELOPMENT

6.1 As outlined in the previous Chapter, options have been developed across 5 Packages, each reflecting a theme and geographic location. The recommended approach takes relevant priorities from each package to create an holistic scheme that can be delivered in the short to medium term, and provide opportunities for more significant investment in the longer term.

6.2 This Chapter sets out the rationale underpinning each Package and discusses the potential advantages, disadvantages and dependencies of their component parts.

Package 1- Railway Station Forecourt & Surrounds

Component:	Railway Station Forecourt - Arrival
Existing Environment	The railway station forecourt contains car parking and set down / pick up facilities. Pedestrian signs to the town centre are present, but are not highly visible. Pedestrian signs to other destinations are not present. There are no visual clues as to the location of the town centre on leaving the station building.  
Description	The primary objective is to create an attractive arrival point at the station for rail passengers. This could include: ❑ Wayfinding and signposting from station to main destinations. Limited signing is currently in place; ❑ Public realm improvements creating more and better quality pedestrian space. The precedents below show how this has been achieved at other stations; and / or ❑ Reconfiguration of vehicle and pedestrian space to ease congestion at peak drop-off / arrival periods and create a safety pedestrian environment;
Precedents / Visualisation	 1  2 1. Brighton 2. Swindon 3. Kings Cross 4. Didcot Parkway  3  4

Pros / Cons	Creating an improved arrival point immediately outside the station will aid legibility for all passengers regardless of onwards destination. Importantly it provides opportunities for signposting to the town centre which is not currently visible from the station entrance. In combination with proposals outlined below, an improved arrival point makes a significant contribution to the station becoming a key gateway to the town for visitors.
Dependencies	The proposals are exclusively on Network Rail land and require their approval. Proposals for forecourt improvements are not currently programmed by Network Rail or East West Rail.

Component:	Railway Station Forecourt - Interchange
Description	Improvements to the interchange function of Bletchley Railway Station would facilitate onward travel by other modes, particularly to destinations that are beyond convenient walking distance for some, such as MK Stadium. Proposals could include: ❑ Bringing bus stops / services within the station forecourt ❑ Improved cycle parking at the station including secure lockers and potentially maintenance facilities (e.g. Nottingham Cycle Hub et al) ❑ Introduction of Brompton Dock facilities, folding cycle hire is now available at an increasing number of rail stations. The info-graphic below indicates some of the current partners. Facilities are shortly to be introduced at Swindon and Didcot Parkway, two of the precedents used above. (http://www.bromptondock.co.uk/)
Precedents / Visualisation	  
Pros / Cons	Relocating bus stops and services into the forecourt may prove problematic for bus operators. Services immediately outside the station on Sherwood Drive are only hourly. More frequent services currently stop at Buckingham Road. Diverting these services into the station would incur a time penalty that existing passengers may find off-putting. In addition, at peak times, congestion occurs leaving the station car park, which buses may also get caught in unless other priorities measures are introduced. However, the proposal brings bus and rail services closer together without the need to relocate the bus station or provide an eastern entrance to the rail station. Improved cycle facilities at the station are required. Approximately 55 cycle

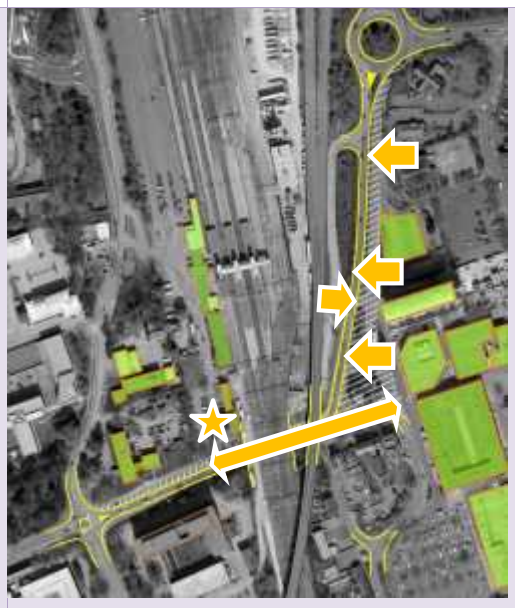
	spaces are provided close to the railway station entrance which appear to be well used. Improved capacity, lighting and shelter would encourage greater use. The potential addition of cycle hire facilities through Brompton Dock enables onward travel from Bletchley Station to be undertaken conveniently by non-residents.
Dependencies	The proposals are exclusively on Network Rail land and require their approval. Proposals for forecourt improvements are not currently programmed by Network Rail or East West Rail. Cycle facility improvements, including liaison with Brompton Dock, require support from the TOC.

Component:	Access to Buckingham Road
Existing Environment	 Steps to Buckingham Rd  Footpath / NR car park access  Footpath to station forecourt
Description	The existing pedestrian route between the railway station and Buckingham Road is characterised by lack of signing, poor quality public realm, lack of legibility and a 3-tier set of steps leading onto Buckingham Road dual carriageway. Options comprise: ❑ Improvements to the footpath from station entrance to Buckingham Road, in terms of lighting, paving material, passive surveillance and reduced interaction with vehicles; ❑ Replacement of the Buckingham Road steps with a lift and / or ramp meeting DDA requirements; or ❑ Replacement of the steps with a Grand Staircase (including lift or ramp) to create a focal point on Buckingham Road and create a more attractive level change between station and town centre
Precedents / Visualisation	  Grand Staircase  Lift  Ramp  Step / ramp combination

Pros / Cons	The current arrangements at Buckingham Road steps do not meet legal requirements set out in the Disability Discrimination Act (DDA). The existing steps between the railway station and Buckingham Road form the pivot point between the station and town centre and are a key landmark in that journey. The existing poor quality footpath and steps do not provide an attractive pedestrian route between the town centre and station and, as the pedestrian audit shows, scores poorly in terms of quality and accessibility indicators. An alternative that is both DDA compliant and provides a step change in quality is required. Improving the quality of the footpath link is key and relatively easily achieved through improved surfacing, lighting and potentially level surfacing to reflect the low volume of traffic accessing the NR staff car park. Replacing the steps could be achieved through either a lift (within NR land) or a ramp (probably requiring NR and Fire Station land). Both would achieve DDA compliance but have differing challenges in terms of land take, engineering, cost and maintenance. A further option would be to introduce a Grand Staircase in place of the existing steps. This would maximise the 'pivot point' of changes in level and direction at this location and create a dramatic gateway for drivers along Buckingham Road. It would create a broad staircase utilising some land currently used by NR for parking, and would be designed on a shallower rake than the existing steps, again potentially encroaching on NR car parks. This could be delivered in conjunction with a reduction in carriageway space on Buckingham Road, discussed later, reducing the amount of NR land required. The level route via Sherwood Drive is approximately double the walking distance between the railway station entrance and Brunel Roundabout and adds up to 5 minutes walking time to the station / town centre journey. Although the route currently lacks active frontage, some improvements could be made to make this more attractive in terms of footway improvements, signing and surfacing. This option may offer short term / interim improvements whilst staircase options are investigated, but does not offer the step change in quality necessary to significantly improve links between the railway station and town centre in the longer term.
Dependencies	Network Rail land features in all options including land currently used for staff parking. It is likely that alternative parking locations will need to be identified. In addition, re-profiling of land immediately adjacent to Buckingham Road may be required, subject to more detailed engineering studies. In the ramp option, land owned by the Fire Service is likely to be required, although this currently forms a highway embankment. The cost and engineering implications of all options need to be fully assessed and compared with the cost and benefits of improving the existing level-access route via Sherwood Drive, all of which can be achieved within highway land.

Component:	Active Frontage / Café Uses
Existing Environment	 
Description	The railway station frontage between the ticket hall entrance and Buckingham Road steps is largely inactive, with offices or administration functions behind. In addition, the Bletchley Signal Box is now de-commissioned, and there are initial proposals to relocate the Box away from Bletchley, subject to further discussion. The opportunity is to introduce aspects of active frontage along this route in the form of cafes or light retail to make this route more appealing as part of the journey between, say, Bletchley Park and the town centre. It also facilitates the role of the railway station as an interchange point, and would complement / enlarge existing café facilities within the station. In terms of design, this could be provided in the form of semi-permanent cabins sitting alongside existing buildings, conversion of parts of the existing station or re-use of the ground floor of the decommissioned signal box, assuming it is not relocated. In the event of its' relocation, the site would become available for a new café facility that could be designed in conjunction with proposals for improvements to the Buckingham Road steps discussed earlier.
Precedents / Visualisation	**Forecourt café / retail**  **Re-Use of Signalbox Site** 
Pros / Cons	There are existing café facilities within Bletchley Station targeted at rail passengers. We have no information on the success of that operation. However, the operation is not externally facing and provides no visible service to passing pedestrians. Any new café or retail functions would be required to gain planning consent, and in so doing pass sequential tests for policy compliance. It is not anticipated that any new outlets would compete either with retail / cafe functions in the town centre, or elsewhere.
Dependencies	As with previous proposals at the station, Network Rail and the TOC are key stakeholders and early discussions are necessary to gain their support.

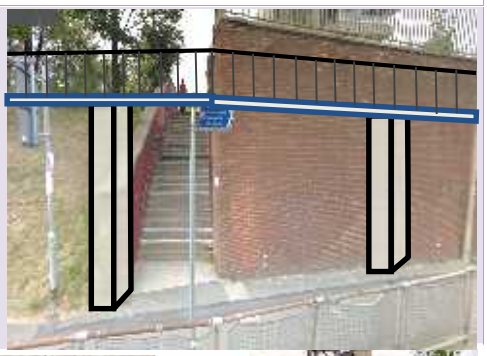
Package 2: Town Centre Environs

Component:	Re-allocate Carriageway Space
Existing Environment	 
Description	The highway infrastructure between the station and town centre is dual carriageway and highly engineered. As data shows, the wide straight road alignments encourage high traffic speeds, and pedestrians are further intimidated by excessive guardrailing, poor lighting, poorly located crossing points and narrow footways. An option to reduce carriageway space on Buckingham Road and Saxon Street has been identified, and has previously been suggested in the EDAW report and Bletchley Transport Strategy. In this latest iteration, this could involve: ❑ Removing the southbound (eastern) carriageway of Saxon Street, with two way traffic on the western carriageway; and ❑ Removing the eastbound (northern) carriageway of Buckingham Road between Brunel Roundabout and Sherwood Avenue roundabout, with two-way traffic on the westbound (southern) carriageway. Options to reconfigure the layout at Brunel roundabout also exist.
Precedents / Visualisation	

Pros / Cons	This option would create significant space for re-use on the western edge of the town centre, for commercial / retail use and / or public realm and allow the creation of an active frontage along Saxon Street. Additional cycle facilities should also feature, extending Redways where possible. For the purposes of this option, the bus station is assumed to stay in its current location. On Buckingham Road, the additional space can largely be re-allocated to improve pedestrian / cycle space and public realm particularly under the railway bridge which suffers from poor lighting and narrow footways.
Dependencies	At this stage, no testing has been completed to understand the capacity impacts of removing this carriageway space. It is necessary to understand the impacts on congestion and journey time of local traffic, and on response times of emergency vehicles given the current proximity of the fire and police services. All land required for this proposal is within the gift of the highway authority so, subject to meeting the above capacity requirements and identification of appropriate funds, the proposal could be delivered relatively quickly.

Component:	Brunel Roundabout / Square
Existing Environment	 
Description	Brunel Roundabout is a large roundabout providing a junction between Saxon Street, Buckingham Road and Locke Road; the latter provides access to a large Sainsbury store / car park. The roundabout appears to be significantly larger than that required for the volume of traffic it currently accommodates. Surface level crossing points now provide pedestrian access, replacing an earlier, closed, subway. Accident data shows clusters of collisions close to the crossings – a combination of shunt accidents and pedestrian collisions. In addition, the level difference between the roundabout and town centre is dealt with poorly, with a concrete retaining wall blocking direct access and a narrow ramp providing pedestrian access. The proposal is to remove the roundabout, leaving sufficient highway space to allow two-way movement between Saxon Street and Buckingham Drive with an all-movements junction with Locke Road. The resulting space could be reconfigured: ❑ as a public square including landscaping, public art and seating to provide an attractive visual gateway to the town centre for pedestrians and motorists; ❑ re-engineering to remove / reduce the level differences between road and retail level at Queensway; and ❑ enhancing pedestrian crossing points, including the potential for areas of shared space subject to further investigation.
Pros / Cons	The current purpose of Brunel Roundabout as a traffic management tool is unclear, so its' removal would appear to be uncontroversial. Re-using the space effectively then becomes the challenge, to avoid create a large open space that also has little function other than aesthetic and, over time, becomes poorly maintained and unattractive. Lack of seating was one of the aspects picked up in the pedestrian audit and this proposal offers the opportunity to provide seating en-route between the railway station and town centre.

Precedents / Visualisation	   
Dependencies	All land required for this proposals is within the gift of the highway authority so, subject to identification of appropriate funds, the proposal could be delivered relatively quickly.

Component:	Managing Level Change
Existing Environment	  **Above Left:** Steps to Buckingham Rd from station. **Above Right:** Construction of road / rail underpass c1961. *Source: mkheritage.co.uk*
Description	As discussed previously, there are significant level differences between the station land and Buckingham Road. Much of this level difference is man-made as indicated on the construction image above. As an alternative to previous options for ramps / steps, this option proposes to elevate the footway along Buckingham Road to reduce the level difference with the station land. The elevated footway would be gently ramped to meet Brunel Roundabout at grade. The proposal has similar characteristics to the New York High-Line in that it is an elevated path providing direct connections for pedestrians away from traffic. There are opportunities for landscaping, seating and art depending on design parameters.
Precedents / Visualisation	    
Pros / Cons	One of the main advantages of this option over others involving steps / ramps is that it can largely be completed within highway land, therefore removing a key complication and cost element. Co-operation with NR land is required to ensure that an elevated footway ties in at station – land level.

	Aesthetically, the proposal may add to the over-engineered aspects of this part of Bletchley creating a further piece of segregated transport infrastructure.
Dependencies	Network Rail land is required to tie-in at station-land level.

Component:	Landscaping & Lighting
Existing Environment	  **Left:** Buckingham Road pedestrian route under railway bridge. **Below**: Concrete wall adjacent to Cemex cement works site 
Description	The over-engineering and concrete environment around the station creates a dark and intimidating setting for pedestrian activity, and does not encourage pedestrian movement, lingering or enjoyment. The proposal is for simple works to improve the visual backdrop in terms of: ❑ Painting the walls of the Buckingham Rd underpass, including on central reservation to create a lighter backdrop; ❑ Encouraging mural painting, possibly through a local school or local artists, in some of this space to create animation and interest; ❑ Installing lighting under the bridge; ❑ Introducing landscape elements along the central reservation, replacing the guardrailing; and / or ❑ Introducing a 'green wall'* to the large concrete retaining wall adjacent to the Cemex concrete plant at Brunel Roundabout.
Pros / Cons	These works can be completed relatively inexpensively and regardless of any of the other options discussed being implemented. They should be regarded as a 'quick win' to signify the start of wider change within Bletchley town centre / station.
Dependencies	Consent is required from Network Rail and Cemex to undertake these works.

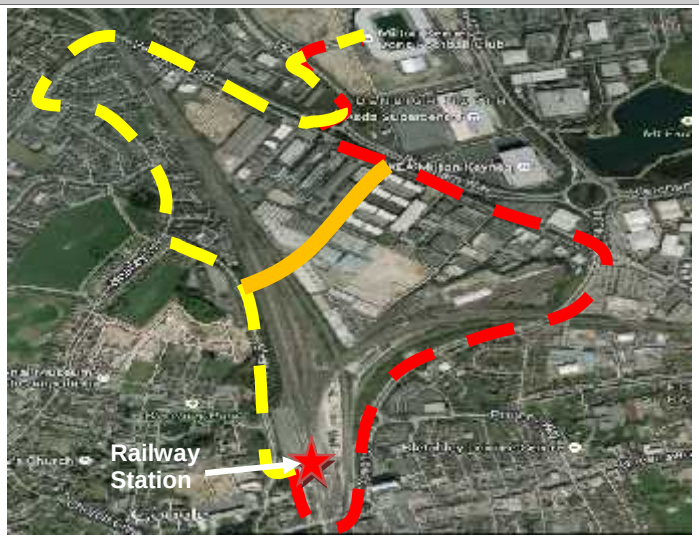
Precedents / Visualisation	   
***Note on Green Walls**	*A green wall is a wall partially or completely covered with vegetation that includes a growing medium, such as soil or are hydroponic. Most green walls also feature an integrated water delivery system. Green walls are also known as living walls, BIOboards, biowalls, ecowalls, or vertical gardens. Such walls may be indoors or outside, freestanding or attached to an existing wall, and come in a great variety of sizes.* *A number of proprietary systems are available each with specific requirements, fixings and maintenance regimes. We recommend that further advice is sought from landscape specialists with regard to systems potentially appropriate for application in Bletchley.*

Package 3: Sherwood Drive

Component:	Pedestrian Access
Description	Sherwood Drive carries reasonable levels of traffic and has a number of key developments completed or underway along the western side. Observations indicate that pedestrian accessibility and safety is relatively poor along Sherwood Drive. There are no formal crossing points with the exception of a pedestrian phase incorporated into the traffic signals at Bletchley Park junction. We understand that proposals for a Redway extension to Sherwood Drive are well advanced. This option could introduce up to 3 new pedestrian crossing locations along Sherwood Drive, one of which is specifically located to facilitate crossing to MK College. These could take the form of pedestrian refuges, zebra or pelican crossings subject to further testing. This would support enhanced cycle facilities from the Redway proposals.
Precedents / Visualisation	 
Pros / Cons	The proposal aims to reduce the severance caused by high traffic volume and speed and create a more balanced environment between traffic and pedestrians.
Dependencies	The proposal is entirely within highway land.

Component:	Speed Management
Description	As discussed previously, traffic speeds along Sherwood Drive are high with some recorded above the 30mph speed limit - the 85th percentile speed* is 30mph. Encouraging pedestrian movement across Sherwood Drive, to the station and town centre is a key part of the overall strategy. In combination with, or separately to, the previous proposal for improved crossings, this option specifically targets measures to manage and / or enforce speed. This could be achieved through: ❑ Pinch points, road narrowings or priority working at selected locations; or ❑ Speed reminder signs. Speed camera enforcement is not proposed due to funding limitations and lack of police and political support. Vertical speed measures, i.e. road humps / cushions, are not proposed as this is a bus route and a fast response route for police and fire service vehicles.
Precedents / Visualisation	 
Pros / Cons	In combination with the previous proposal for improved pedestrian crossings, this option would create a more pleasant and safer environment for pedestrians and would encourage more pedestrian activity into the town centre / station.
Dependencies	This proposal can be undertaken entirely within the public highway. Consultation with bus operators, police and fire service representatives is required at design stage to ensure that proposals for physical measures do not have undue impact on operations.
Note*	*The 85th percentile speed is the speed which 85% of the vehicles are not exceeding.*

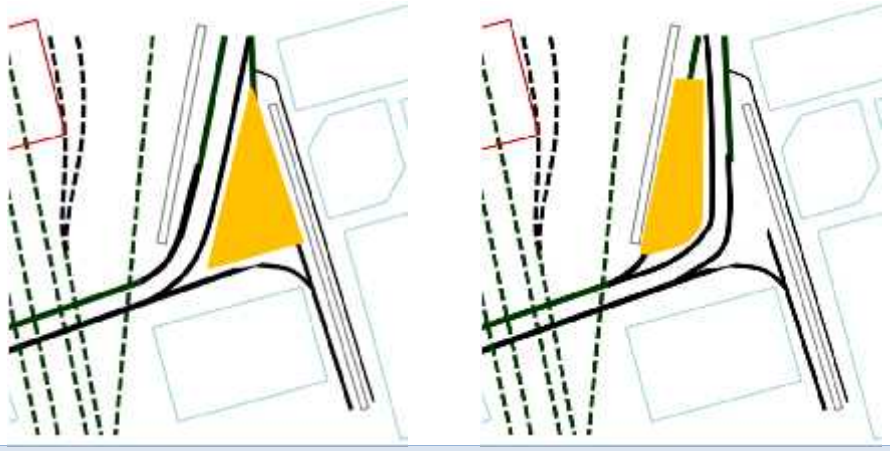
Package 4: Wider Access

Component:	Links to MK Stadium
Description	The existing walking route between the station and MK Stadium is shown on the image below as red or yellow dotted routes. The journey time is approximately 30 minutes. Wayfinding and signposting is currently very poor, with intermittment and inconsistent signing. The proposal is to introduce improved signing, particularly along the red route as this intersects the town centre bringing retailers closer to MK Stadium users. The introduction of a new footbridge spanning the railway between Sherwood Drive (just south of the former Council depot) and Third Avenue would create a more direct route to MK Stadium and reduce pedestrian journey times by approximately one third (from 30 to 20 minutes).
Precedents / Visualisation	 
Pros / Cons	Improvements to signing are easy and inexpensive to deliver within highway land, and should be prioritised.

	A new footbridge across the railway would create a more direct route and also link the existing employment area immediately east of the rail line to new housing developments off Sherwood Drive. Any new crossing of the railway would require approval from Network Rail and, as it crosses operational tracks including the West Coast Mainline, would require full technical approval and track possessions to install. The new crossing may divert pedestrians away from the town centre, limiting retail spend by those travelling to MK Stadium.
Dependencies	As stated above, Network Rail approval is required for a new footbridge crossing.

Package 5: Integration

Component:	Information & Co-ordination
Description	Co-ordinated information between bus and rail services at Bletchley is currently poor. This is exacerbated by the physical distance between bus and rail stations. Proposals could include: ❑ Real-time information displays at bus and rail stations of 'other' mode, configured to allow for time delay in reaching the other facility; ❑ Co-ordinated timetables between bus and rail services; ❑ 'Where to Board Your Bus' maps at regular locations; and / or ❑ Themed wayfinding markers between bus and rail stations.
Precedents / Visualisation	1   2 1. Real Time Information 2. 'Where to Board Your Bus' map 3. Themed wayfinding 3  
Pros / Cons	Information on the number of passengers interchanging between bus and rail services at Bletchley is not available, but is thought to be low. However, that might, in part, be associated with deficiencies in interchange information. Relatively simple initiatives, such as boarding maps and wayfinding would be of general benefit to all passengers, as well as those interchanging, and are inexpensive. Similar initiatives are currently being introduced elsewhere in Milton Keynes as part of the Better Bus Area project. Co-ordinated timetables between bus and rail services have historically been difficult for a variety of reasons but success has been achieved in some locations where operators have co-ordinated activity.
Dependencies	Co-operation between bus operators, Network Rail and TOC is necessary to achieve all of the above objectives. Simple information displays (e.g. bus boarding maps) can be delivered by the highway authority in conjunction with bus operators.

Component:	Bus Station
Description	Previous proposals have indicated the potential relocation of the bus station to Brunel Roundabout, in two alternative configurations as shown below.
Precedents / Visualisation	
Pros / Cons	The proposal would bring bus services closer to the station whilst having only modest impacts on current bus operations, and also reduce the distance between bus services and Bletchley retail core. However, the existing bus station, approximately 200m north on Saxon Street, is currently undergoing refurbishment in terms of layout, shelters, lighting and passenger information. Relocating the bus station in the short term would negate the benefits of the investment in current facilities. Moreover, the option to relocate the bus station on the east side of Saxon St interrupts views and pedestrian movement between the rail station and town centre. The alternative option of locating the bus station west of Saxon Street retains the severance effect and does not integrate well with the retail core. In addition, it may impact on the potential eastern access to the railway station, although the location of this entrance has not been confirmed. The locational benefits of this option, compared to its current location, are marginal.

7 PRIORITIES

7.1 The options described in the previous chapter have been evaluated against an agreed set of criteria to inform emerging priorities for investment in the short, medium and longer term, having consideration of the current funding envelope and potential future funding opportunities.

7.2 Each option has been assessed against the criteria shown in Table 7-1 and given a score between 0 & 3 for each category.

Criteria	Description	3	2	1	0
Deliverability	Ease of delivery in short / medium / long term	Short	Medium	Long	Uncertain
Funding Availability	Potential alignment with current funding streams	Funds available now or approved for future year	Strong chance of funding	Potential funding from identified source	Little chance of funding
Technical Achievability	Technical or engineering constraints	No known significant technical / engineering constraints	Identified constraints can be effectively overcome	Identified constraints have potential to limit delivery	Contraints pose significant risk / prevent delivery
Political Acceptability	Account taken of expressed views and likely level of political support	Strong / cross-party support	Support from at least 1 political group	Limited political support from main party(ies)	Political opposition from main party(ies)
Contribution to Local Objectives	Extent to which emerging priorities and policies are aligned with	Strong alignment with main policies / priorities	Partial alignment with priorities	Limited alignment	Contrary to policy objectives
Consultation Feedback	Level of support from consultation exercise	Majority support	Support from most parties	Limited / conditional support	Significant objections / no apparent support
Cost	Indicative cost band at pre-feasibility stage	Low <£100K	Med £100-£250k	High >£250k	n/a
BFtL Relevance	Compliance with objectives of project brief	Full	Partial	Limited	None

Figure 7-1: Assessment Criteria

7.3 Scores from the first seven categories (Deliverability to Cost) are then summed to give a subtotal. This is multiplied by the Relevance score to give a final priority score for comparison. This approach weights the importance of the project objectives to each option, and is important in this case due to the range of potential options discussed, and due to the fact that a number of the options have been put forward (in some vein) through previous studies but have not been progressed.

7.4 Scores for each category have been derived from:

- Professional and informed judgement from the consultant and client team;
- Feedback from client team on issues such as political support, funding alignment and compatibility of initiatives with other programmes;
- Consultation feedback from the client and stakeholder workshop sessions. Specifically, the priorities emerging from the stakeholder workshop have influenced the 'consultation feedback' scores directly.

7.5 Taking all matters into account, we have prioritised options into three categories – high, medium and low. Options with a score greater than 40 have been categorised as 'high'; those with scores between 20 & 40, 'medium'; and those less than 20 as 'low'. The following tables show options in each category.

	Deliverability	Funding Availability	Technical Achievability	Political Acceptablity	Contribution to Local Objectives	Consultation Feedback		Cost	Priority Score [Sum cols D-K]	Relevance to BFtL	Total Score [Priorty Score X
Wayfinding signs & markers	3	2	3	3	3	3		3	20	3	60
Paint / landscape under Brunel Bridge (carriageway remains as existing)	3	2	3	3	3	3		3	20	3	60
Better maps & timetable information	3	2	3	3	3	2		3	19	3	57
Pedestrian crossing points nr College	3	2	2	3	3	1		3	17	3	51
Wayfinding to MK Stadium	3	2	3	3	3	0		3	17	3	51
Improvements / Lighting on footpath to Queensway / Buckingham Rd	2	1	2	2	3	3		3	16	3	48
Improved timetable integration between modes	2	3	1	3	3	1		3	16	3	48
Speed management measures	3	2	2	3	3	0		2	15	3	45
Public realm across forecourt	2	1	3	2	2	2		2	14	3	42
Remove Brunel Roundabout	2	2	2	2	3	2		1	14	3	42
Remove retaining wall adj to service road	2	2	2	3	3			2	14	3	42

Figure 7-2: High Priority Options (Score >40)

	Deliverability	Funding Availability	Technical Achievability	Political Acceptablity	Contribution to Local Objectives	Consultation Feedback		Cost	Priority Score [Sum cols D-K]	Relevance to BFtL	Total Score [Priorty Score X
Bus stops within forecourt	2	2	1	2	2	1		3	13	3	39
Replacement of steps to Buckingham Rd- Ramp	2	2	1	2	3	2		1	13	3	39
Reduce Buckingham Rd to single carriageway	2	2	2	2	3	1		1	13	3	39
Reduce Saxon St to single carriageway	2	2	2	2	3	1		1	13	3	39
Relocation of bus station to Brunel Roundabout	2	2	2	0	2	2		3	13	3	39
Replacement of steps to Buckingham Rd - Lift	2	2	1	2	2	2		1	12	3	36
Grand Staircase	2	2	1	2	2	2		1	12	3	36
Relocate / remove service road	1	1	2	2	3			2	11	3	33
Elevated footway on Buckingham Road	1	0	1	2	3	2		1	10	3	30
Bus link to MK Stadium (enhanced frequency)	2	1	1	2	2	0		2	10	3	30
Create Brunel Square	2	2	2	2	2	2		1	13	2	26
Themed path & wayfinding between stations	2	1	1	2	2	1		1	10	2	20

Figure 7-3: Medium Priority Options (Score>20<40)

	Deliverability	Funding Availability	Technical Achievability	Political Acceptablity	Contribution to Local Objectives	Consultation Feedback		Cost	Priority Score [Sum cols D:K]	Relevance to BFtL	Total Score [Priorty Score X
Regrade Brunel Rab / Square to provide level surface to Queensway	1	1	2	2	2			1	9	2	18
Speed cameras	2	0	2	1	2	0		2	9	2	18
Footbridge between Sherwood Dr & Third Ave	1	1	1	2	2	1		1	9	2	18
Green wall on Saxon Street adj to Cemex / NR site	3	2	2	1	2	1		2	13	1	13
Real-time and timetable info for 'other' mode	2	1	2	2	2	2		2	13	1	13
Café on Signal Box Site	1	0	2	2	1	0		1	7	1	7

Figure 7-4: Low Priority Options (Score <20)

7.6 It is interesting to note that a number of initiatives have scored relatively high overall despite not gaining much apparent support through consultation, such as improved wayfinding to MK Stadium and speed management measures on Sherwood Drive. The overall scores balance the seven main themes (deliverability to cost) equally. Initiatives that are easily deliverable and are aligned with available funding sources have scored well, despite some not receiving support through consultation. These factors have been taken into account when considering the recommended strategy, described in Chapter 8.

7.7 There are also a number of Priority 2 measures with scores only just under the '40' High Priority threshold, including changes to road space at Buckingham Road / Saxon Street and replacements of the Buckingham Road steps. These particular projects are expensive to deliver, as reflected in the scoring matrix, but will demonstrate a significant positive impact on Bletchley in terms of the pedestrian environment between the station and town centre.

7.8 It is also apparent that some Priority 1 schemes, e.g. removal of Brunel Roundabout, are not possible without also implementing changes to Buckingham Road and Saxon Street.

7.9 In summary, the prioritisation process does not (and is not intended to) identify a coherent strategy for implementation, as it scores each option on its own merits. Factors such as the combined benefits of options are rightly considered outside of this process and would be overly-complex to include within it. Furthermore, it is necessary to dovetail emerging options with other planned MKC interventions to ensure alignment in the overall delivery programme.

7.10 The process has also considered funding availability, including current Local Growth and SEMLEP funding. Table 7-5 below has identified potential funding sources for each option. This is subject to ongoing review as public sector funding continues to evolve and opportunities for grants or partnership funding arise.

7.11 The Local Growth / SEMLEP funding has provisionally identified approximately £1m spend in 2015/16.

7.12 It is understood that MK Council are considering the potential of an NSIP proposal (National Station Improvement Programme) to Network Rail to deliver further improvements at Bletchley Station beyond those that might be achieved through the Local Growth funding. Such a bid would need to be led to by the TOC, currently London Midland. The total funding availability for improvements around the station is currently considered to be £3.5m in the short term. Whilst this is a sum capable of releasing tangible change if targeted appropriately, it is not sufficient to fully deliver the step change in quality within the study area that fully meets the project objectives. Further funding opportunities, including from the sources identified below, should be pursued to deliver a comprehensive package at Bletchley Station that fully meets policy objectives and aspirations of stakeholders.

	Potential Funding Source					
	LSTF	MK LTP	SEMLEP	Developer / S106 / CIL	Other	
Priority 1						
Wayfinding signs & markers	x	x	x			
Paint / landscape under Brunel Bridge (carriageway remains as existing)	x		x		x	NR
Better maps & timetable information	x	x			x	Arriva
Pedestrian crossing points nr College	x	x	x			
Wayfinding to MK Stadium	x				x	MK Dons
Improvements / Lighting on footpath to Queensway / Buckingham Rd			x		x	Network Rail
Improved timetable integration between modes					x	Arriva / NR
Speed management measures	x	x	x			
Public realm across forecourt	x		x		x	Network Rail
Remove Brunel Roundabout	x	x	x			
Remove retaining wall adj to service road	x		x			
Priority 2						
Bus stops within forecourt		x			x	
Replacement of steps to Buckingham Rd- Ramp			x	x	x	NR
Reduce Buckingham Rd to single carriageway	x	x	x			
Reduce Saxon St to single carriageway	x	x	x			
Relocation of bus station to Brunel Roundabout	x	x	x			
Replacement of steps to Buckingham Rd - Lift			x		x	NR
Grand Staircase			x		x	NR
Relocate / remove service road			x			
Elevated footway on Buckingham Road			x			
Bus link to MK Stadium (enhanced frequency)	x	x	x		x	MK Dons
Create Brunel Square			x	x		
Themed path & wayfinding between stations			x	x		
Priority 3						
Regrade Brunel Rab / Square to provide level surface to Queensway			x			
Speed cameras					x	
Footbridge between Sherwood Dr & Third Ave			x			
Green wall on Saxon Street adj to Cemex / NR site			x		x	Cemex / NR
Real-time and timetable info for 'other' mode	x		x			
Café on Signal Box Site				x	x	NR / Dev opportunity

Figure 7-5: Potential Funding Sources / Opportunities

8 RECOMMENDED STRATEGY

8.1 The recommended approach takes a combination of prioritised options and seeks to build discrete packages that can be delivered in the short medium and longer term. Where options are alternatives, we have indicated which alternative fits best with the overall strategy given priority scores and strategic fit.

8.2 For clarity, we have reworked the packages from geographic to thematic packages, as this reflects a more coherent approach for the purposes of strategy and delivery. Some proposals occur in more than one theme. Table 8-1 indicates options by theme. Table 8-2 sets out the proposed strategy.

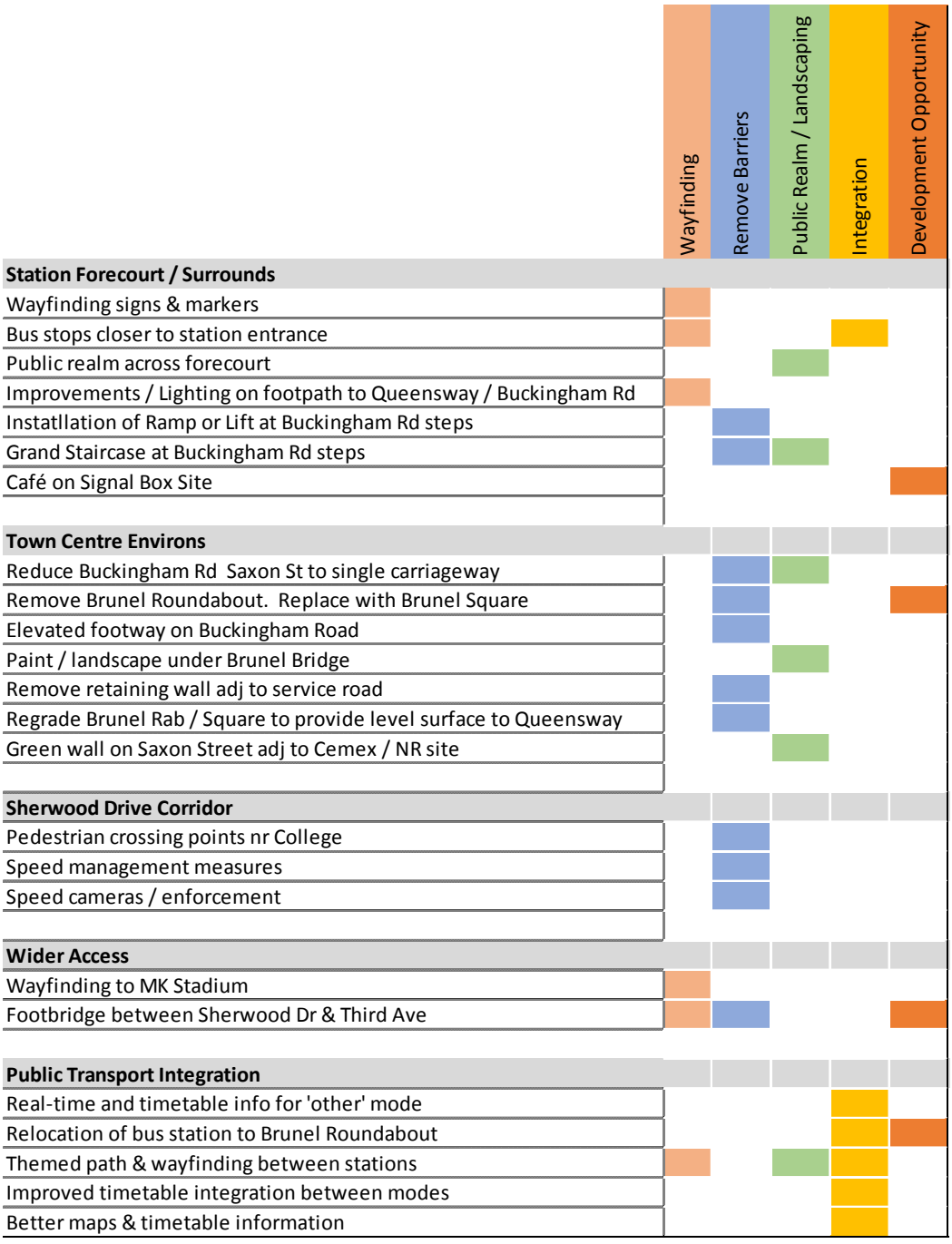


Figure 8-1: Option by Theme

Timescale	No.	Theme	Proposal	Priority Score	Priority Rank
Short Term	S1		Wayfinding signs & markers to town centre	60	High
	S2		Improvements / Lighting on footpath to Buckingham Rd (including review of pedestrian guardrailing)	48	High
	S3		Themed path & wayfinding between stations	20	Medium
	S4		Paint / landscape / Lighting under Brunel Bridge	60	High
	S5		Better maps & timetable information	57	High
	S6		Remove concrete retaining wall adj to service road - note 1	42	High
	S7		Pedestrian crossing points nr College	51	High
Medium Term	M1		Wayfinding to MK Stadium	51	High
	M2		Bus stops within forecourt	39	Medium
	M3		Improved timetable integration between modes	48	High
	M4		Speed management Sherwood Dr	45	High
	M5		Reduce Buckingham Rd to single carriageway	39	Medium
	M6		Reduce Saxon St to single carriageway	39	Medium
	M7		Remove Brunel Roundabout	42	High
	M8		Create Brunel Square	26	Medium
	M9		Replacement of steps to Buckingham Rd with Ramp - note 2	39	Medium
	M10		Public realm across forecourt	42	High
	M11		Green wall on Saxon Street adj to Cemex / NR site	13	Low
Long Term	L1		Grand Staircase - note 3	36	Medium
	L2		Café on Signal Box Site / station forecourt - note 4	7	Low
	L3		Real-time and timetable info for 'other' mode	13	Low

Notes:

1 – Replace with guardrailing or similar transparent fencing

2 – Install lift as alternative

3 – Alternative if M9 is not delivered

4 – If opportunity arises

Figure 8-2: Recommended Strategy

8.3 In refining the proposed strategy, it became clear that a small number of options do not fit with the overall approach and should be dropped from further consideration at this stage. These options are:

- **Elevated Footway on Buckingham Road** – although this option meets an identified need in terms of managing level change, there are three alternative approaches to deal with this matter, prioritised as medium and long term initiatives (M9 & L1). It is noted that all 3 alternatives require support from Network Rail and it will require time to reach agreement on an acceptable approach. In the event that agreement with Network Rail is not achievable on the alternative approaches, it is suggested that this option is revisited, but we see little value in pursuing it at this stage;
- **Speed Cameras / Enforcement** – Feedback through the stakeholder workshop, particularly from Thames Valley Police, was negative on this option. Funding for this form of speed enforcement is scarce. Alternative speed management measures are proposed as options M4, M5 & M6;
- **Footbridge between Sherwood Drive & Third Avenue** – The physical and landowner issues associated with the proposal, in particular its' need to cross the West Coast Main Line, make this proposal difficult to gain consent and funding for, and to deliver due to the track possessions. In addition, the proposal offers journey time benefits for pedestrians but it is not considered at this stage that these will outweigh the costs of delivery.

Next Steps

8.4 A number of the high priority / short term proposals have appeared in previous studies for delivery, e.g. the EDAW report and Bletchley Transport Strategy. Their appearance in this document indicates that delivery remains outstanding. It appears that the main barrier to previous delivery has been availability of funding.

8.5 The Local Growth Fund / SEMLEP funding has made £1.0m available in 2015/16 and up to £3.5m available for improvements around the station, including an NSIP bid. In addition, we understand that political support is strong for improvements within Bletchley.

8.6 The short term measures (S1 to S7) identified in Table 8.2 are deliverable within a £1.0m funding envelope subject to detailed design considerations.

8.7 **It is recommended** that initial focus is given to designing and delivering the short term measures within 2015/16. This will:

- Show commitment to delivery of improvements at Bletchley to stakeholders and funding partners;
- Build momentum for the development of schemes in the medium term category; and
- Meet funding commitments given under the LGF allocation.

8.8 Simultaneously, **we recommend** that initial investigation work is undertaken in medium term measures so that momentum is developed around these schemes in order that they are delivered in a timely matter, building on the success of the short term measures. We suggest that initial focus is given to:

- **M1: Wayfinding to MK Stadium** – building on S1 and S3 wayfinding proposals;

- **M5 / M6: Reduce Buckingham Rd / Saxon St to single carriageway –** undertake initial capacity analysis to test the feasibility and constraints of this proposal; and
- **M9: Replacement of Buckingham Rd steps** – initiate discussions with Network Rail and other land owners as necessary to understand the timescales, constraints and opportunities associated with this proposal.

8.9 A coherent programme of work to deliver the priorities identified in this report should be developed to build momentum around delivery, funding allocations and stakeholder support.

In Conclusion

8.10 This report has set out an evidence-based strategy for improvements at Bletchley Station including its environs towards the town centre, new growth areas and MK Stadium. The measures proposed will, we believe, take advantage of the opportunities presented by the arrival of EWR services in 2019 by creating a more legible, attractive and accessible arrival point to Bletchley that seeks to support retail and leisure activity and economic growth for the town.

APPENDIX A

PERS Audit Technical Note

Title:	**Bletchley: Fixing the Links**
Number:	Pedestrian Environment Review System - Bletchley
Date:	15th May 2014
Author:	Lucy Baker
Project Code:	1385
Rev:	A

integrated transport planning

1 INTRODUCTION

1.1 This technical note has been produced by Integrated Transport Planning Ltd (ITP) to support the Bletchley: Fixing the Links project commissioned by Milton Keynes Council. The scope of this current commission is to:

- Improve the quality of pedestrian / cycle links between Bletchley Rail Station and the Town Centre; and
- Create an effective transport interchange to better serve the environments of the station and town centre.

1.2 A Pedestrian Environment Review System (PERS) was carried out in the study area on 14th May 2014 in daytime hours along a network of links and routes identified as the main pedestrian connections within and around the site. PERS is a walking audit tool that assesses the level of service and quality provided for pedestrians across a range of pedestrian environments. PERS allows an understanding of the physical characteristics of the study area, with the results helping to identify opportunities and constraints for improvements as the project progresses, alongside policy review and survey data analysis.

2 METHOD

2.1 A total of 10 routes, 14 links, 6 crossings facilities (both formal and informal), 4 bus stops and 2 interchanges were identified as making up the network of pedestrian accessibility within the site linking Bletchley Rail Station to Bletchley Bus Station and other key generators within the study area – the Town Centre, Bletchley College and Bletchley Park. The assessment area and the routes, links, crossings, bus stops and interchanges identified are shown in Annex A1. Each route, link, crossing, bus stop and interchange was given an identifier during the audit which is again shown in Annex A1. Each identifier was then assessed in relation to its relevant set of criteria as shown in Table 2-1 and given a score ranging from +3 (very good) to -3 (very poor). A score of 0 represents an average score, but also N was used where a particular criteria could not be assessed. The full results are included in Annex A2, however a headline analysis of key criteria is included in the body of this note to help create a better understanding of the pedestrian environment and areas and opportunities where pedestrian connections could seek improvement.

Table 2-1: PERS Assessment Criteria

Links	Routes	Crossings	Public Transport Waiting Areas
▪ Effective width ▪ Dropped kerbs ▪ Gradient ▪ Obstructions ▪ Permeability ▪ Legibility ▪ Lighting ▪ Tactile information ▪ Colour contrast ▪ Personal security ▪ Surface quality ▪ User conflict ▪ Quality of environment ▪ Maintenance	▪ Directness ▪ Permeability ▪ Road safety ▪ Personal security ▪ Legibility ▪ Rest points ▪ Quality of the environment	▪ Crossing provision ▪ Deviation from the desire line ▪ Performance ▪ Crossing capacity ▪ Delay ▪ Legibility ▪ Legibility for sensory impaired people ▪ Dropped kerbs ▪ Gradient ▪ Obstructions ▪ Surface quality ▪ Maintenance	▪ Information to the waiting area ▪ Infrastructure to the waiting area ▪ Boarding public transport ▪ Information at the waiting area ▪ Safety perceptions ▪ Security measures ▪ Lighting ▪ Quality of the environment ▪ Maintenance and cleanliness ▪ Waiting area comfort

3 RESULTS

Routes

3.1 10 routes were identified within the study area, and they all differ in terms of standard and quality. The routes that were identified and audited are mapped in Annex A2.

3.2 Table 3-1 shows the results of the total scores given to each route. 8 out of the total 10 routes scored below average (below 0). Route 6 connecting Bletchley College to Bletchley Rail Station, Route 10 connecting the Town Centre to Bletchley Bus Station via Albert Street and South Terrace, and Route 9 connecting Bletchley Rail Station to Bletchley Bus Station via the step link onto Buckingham Road were amongst the poorest routes. These routes scored poorly in nearly all the criteria, but most severely in permeability, quality of the environment, personal security, road safety and rest points. Route 6 was noted as having very poor road safety as no crossing facility is currently provided for pedestrians directly between the College and the Rail Station, where many pedestrians were witnessed running across the road to access the other side, close to bus stops 3 and 4.

Table 3-1: Routes by Total Scores

Route Name	Total Score
Route 1	-4
Route 2	11
Route 3	-2
Route 4	-4
Route 5	-7
Route 6	-10
Route 7	9

Route 8	-7
Route 9	-9
Route 10	-10

3.3 Route 9 scored particularly poorly on the quality of the environment, but also on personal security as the step link down to Buckingham Road is closed in with little lighting infrastructure present for night hours. Safety may also be an issue here during periods of severe weather which would either make this step connection inaccessible or hazardous to pedestrians. This is also a route where wheelchair access is restricted. This is not just apparent by the lack of ramp but also by the lack of dropped kerbs and smooth surfaces upon approach to the step link. There is however a step free route onto Buckingham Road via Sherwood Drive.

Link K Step Link from above

Link K lack of dropped kerbs

3.4 Route 10 also scored particularly poorly and is not a route considered as particularly attractive to pedestrians. This route connects the Town Centre to the Bus Station via Albert Street and South Terrace. The directness of this route was very poor with little signage to aid wayfinding. There was also an issue with a lack of dropped kerbs along South Terrace near the Bus Station and generally Albert Street closest to the Town Centre felt cluttered and unsafe due to the car parks located on the west side of the street. Further north towards South Terrace the pedestrian environment improved with wide pathways and dropped down kerbs with tactile paving. Although outside the study area, this route was assessed as it lies parallel to Route 1 connecting the Town Centre to the Bus Station through a pedestrian only link under Stephenson House.

Tactile paving and dropped kerb

Albert Street to the North

Albert Street North

3.5 This route links together Bletchley Park and the Rail Station (via Sherwood Drive) in the north west of the study area (Route 7), was a very direct route for pedestrians where the Rail Station was visible from the start of the route, with good legibility. The pedestrian environment was very good, feeling open yet safe along this single carriageway. Personal security for pedestrians scored well as there was adequate lighting along this route and a grass verge adjacent to the road, with a wide pathway along the path closest to the Rail Station (Link Gb). The pathway along the adjacent side however scored below average as it was narrow and surface quality is poor. This route would have scored higher had this pathway mirrored the standard and quality of the parallel walkway.

Route 7 Link Gb

Route 7 Link Ga

3.6 Route 2 along Saxon Street to the north east of the study area also scored well. This was a wide route running parallel to the dual carriageway on the eastern side. This route scored particularly well on permeability and directness, but also on road safety as railing was in place separating the footway from the dual carriageway. Wayfinding was also good along this route, with adequate signage to nearby attractions. The footway itself was also of good quality and dropped kerbs and tactile paving were apparent where the route links into the Bus Station.

Route 2 Wayfinding

Route 2 Quality Footway

Route 2 Railing

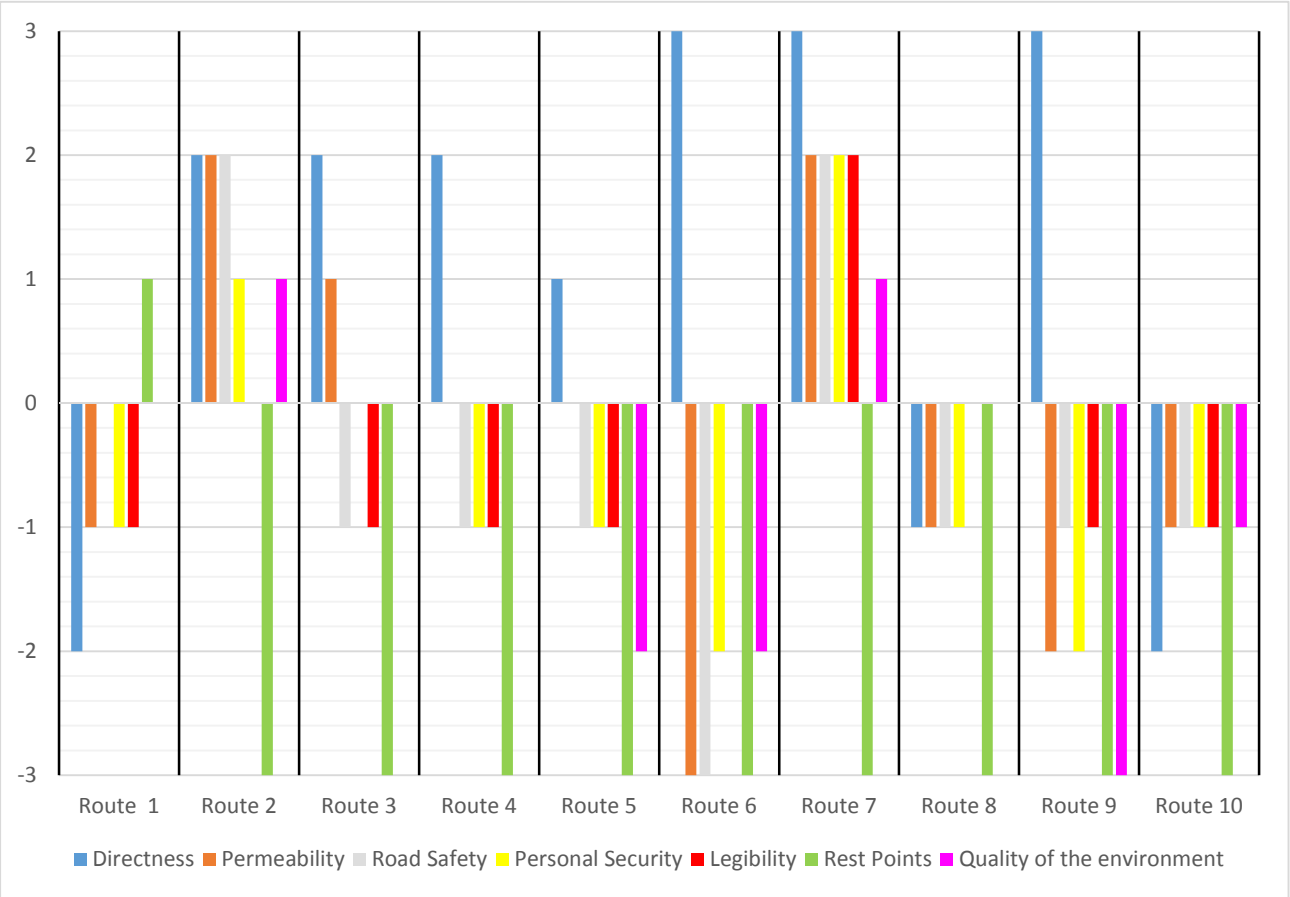
3.7 Routes along Buckingham Road, under the Brunel Bridge onto Queensway all scored poorly in terms of road safety and personal security, as the Brunel Bridge restricts natural light which creates a sense of personal insecurity.

Brunel Bridge routes lack of lighting and security

3.8 When analysing the totals for each route criteria shown in Figure 3-1 rest points scored the poorest (-26) as there was a distinct lack of benches across the whole study area. This was

followed by personal security (-6), quality of the environment (-6) and road safety (-5). Directness was the highest scoring (+11) as generally routes were direct and walking distances were moderately short, taking into account the railway line which prohibits short cuts across the study area. Table 3-1 shows the total route scores.

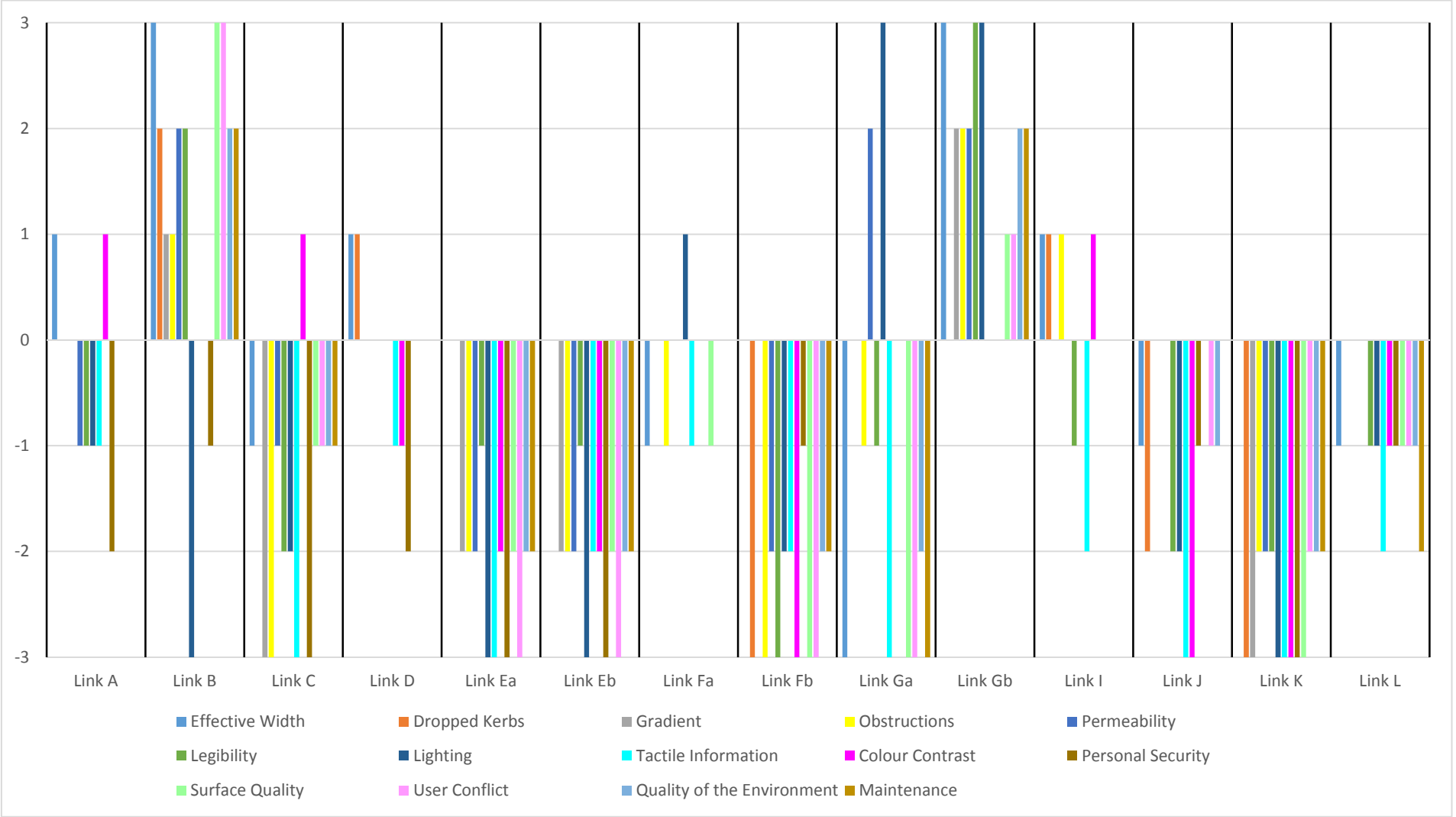
Figure 3-1: Routes by Total Scores



Links

3.9 The 14 links selected for the PERS audit scored relatively poorly against the criteria. The total link scores are presented in Table 3-2. 3 out of the 14 links scored a total above 0. Most notably the links that scored highly are representative of routes that also scored highly – routes from the north of the site from Sherwood Drive in the West and Saxon Street in the east. The links in the south however show inadequacies in a variety of criteria. The links that scored the worst were links K, Fb and Eb. Link K which is the step link from the Train Station to Buckingham Road scored the worst. This link along with link Fb scored the lowest on dropped kerbs, colour contrast and personal security. Personal security was an issue on both of these links due to inadequate lighting, and along link Fb the entrances to the police and fire stations. Figure 3-2 shows the scores of each link against the criteria.

Figure 3-2: Links by Total Scores



Link Fb on routes 8, 5 and 3 Sherwood Drive Fire Station Entrance

Table 3-2: Links by Total Scores

Link Name	Total Score
Link A	-4
Link B	17
Link C	-21
Link D	-2
Link Ea	-27
Link Eb	-26
Link Fa	-3
Link Fb	-29
Link Ga	-14
Link Gb	21
Link I	1
Link J	-16
Link K	-33
Link L	-12

Crossings

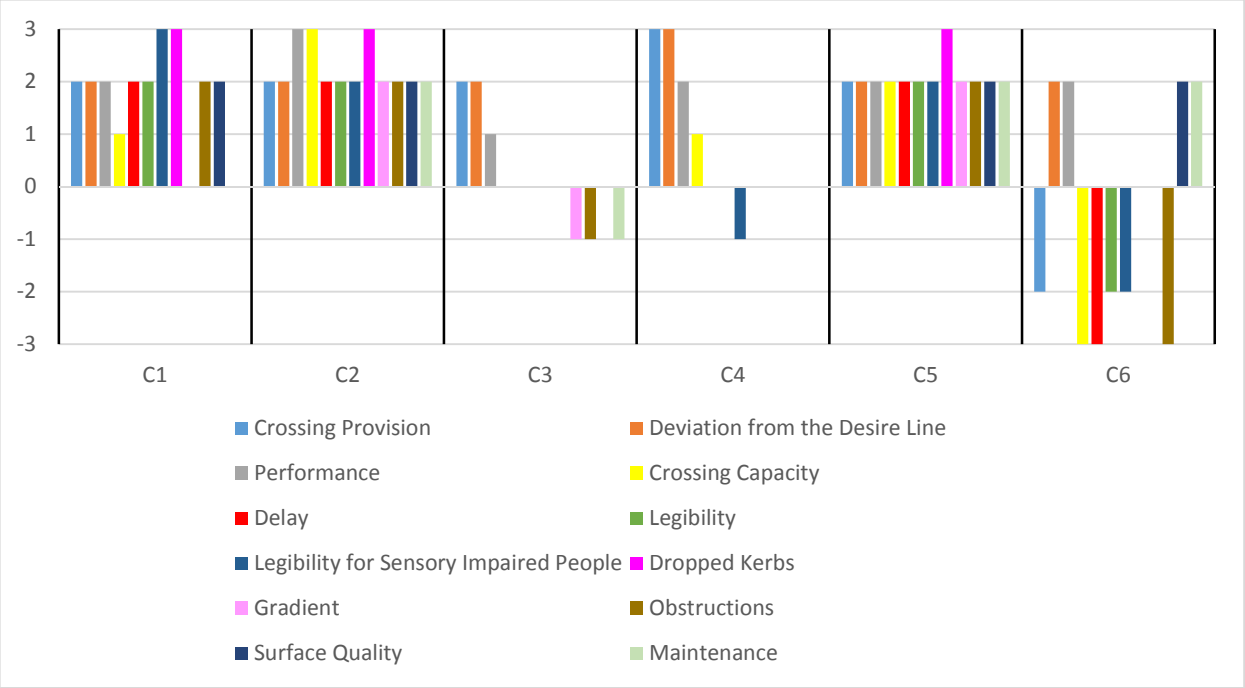
3.10 Within the study area, all six crossings (5 formal and 1 informal) scored relatively well and are generally fit for purpose within the study area. The crossings that scored particularly well were crossings 1, 2 and 5. These crossings scored particularly well on performance, legibility for sensory impaired people and dropped kerbs. Both crossings 1 and 2 are along Sherwood Drive and help to improve pedestrian access to Bletchley College and Bletchley Park, however the distinct lack of crossing from the Train Station to the College is noticeable with many students crossing the road here. The poorest crossing which scored below average was the informal crossing (C6). Although this crossing is fit for purpose and does provide a link across Buckingham Road, crossing capacity is an issue, particularly at peak times (i.e. when college students break for lunch). The criteria results for each crossing is shown in Figure 3-3.

Crossing 1 – A good quality crossing connecting Bletchley Park onto Sherwood Drive

Table 3-3: Crossings by Total Scores

Crossing Name	Total Score
C1	21
C2	27
C3	2
C4	8
C5	25
C6	-7

Figure 3-3: Crossings by Total Scores



Public Transport Stops and Interchanges

3.11 There is a stark contrast between the standard and quality of the public transport stops located within the study area. PT3 and PT4 stops outside the Rail Station were of very poor quality. PT3 had a flagpole providing some information and a small dropped kerb for wheelchairs and buggies however no further infrastructure was present. PT4 had no infrastructure at all as the flag pole was covered by vegetation. This bus stop received very poor scores on almost every criteria. By contrast the bus stops located on Buckingham Road were average (PT2) or above average (PT1), with sufficient infrastructure in place and were deemed to be fit for purpose. There was good information at these bus stops compared to their counterparts on Sherwood Drive. Across all PT stops two of the main issues which arose were the comfort of the waiting areas as well as the security measures in place, a lack of surveillance particularly along Sherwood Drive was an issue.

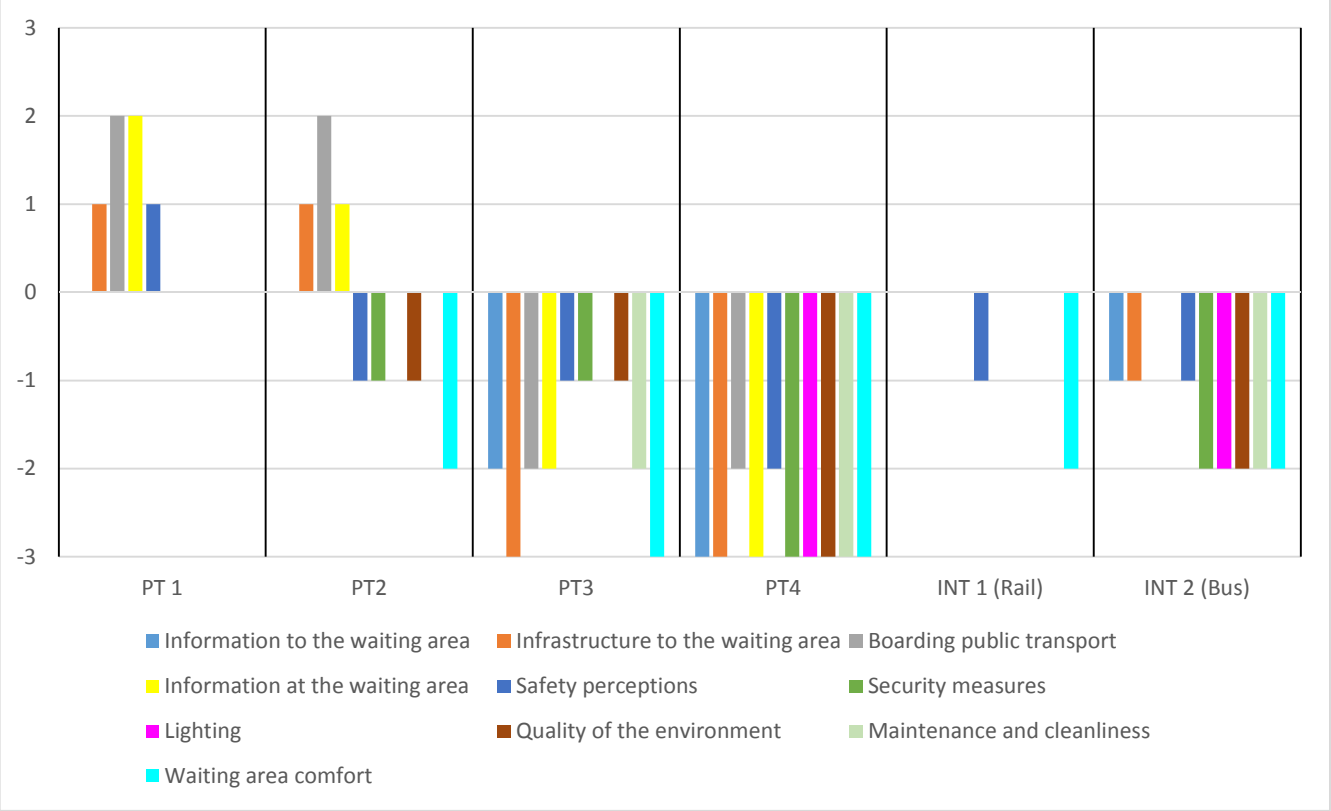
PT2 Buckingham Road

3.12 Total scores for each public transport stop are presented in Table 3-4 below. The scores from each stop against the PERS criteria are also shown in Figure 3-4.

Table 3-4: Public Transport Stops and Interchanges by Total Scores

PT Stop / Interchange Name	Total Score
PT1	6
PT2	-1
PT3	-17
PT4	-28

Figure 3-4: Public Transport Stops and Interchanges by Total Scores



4 INTERCHANGES

4.1 Two interchanges within the study area were identified – Interchange 1 (Train Station) and Interchange 2 (Bus Station). Both interchanges scored below average. Both interchanges scored poorly on waiting area comfort and safety perceptions, due to a lack of surveillance and lighting particularly at the bus station. Information as well as infrastructure to the waiting areas also scored poorly as there was a lack of signage present at both the interchanges to direct pedestrians to the town centre. Generally the quality of the environment was below average as both interchanges were not appealing or welcoming to pedestrians upon arrival - this is reflected in the maintenance and cleanliness scores.

INT2 Bletchley Bus Station

INT1 Entrance to Bletchley Rail Station

5 CONCLUSIONS

5.1 It can be concluded from the results that the majority of routes and links scored poorly within the study area. There is however a clear division in pedestrian quality and standards between the north and south of the study area. Links and routes along Sherwood Drive and Saxon Street scored average or above average scores, in comparison to Buckingham Road and Queensway links which were generally below average. Queensway and the quality of the environment under Brunel Bridge are of poor pedestrian quality.

5.2 From the perspective of the crossings, all crossings scored well, with general issues only concerning the informal crossing and its capacity for pedestrians crossing Buckingham Road. Legibility for sensory impaired people was also an issue at the Queensway / Brunel Bridge crossing.

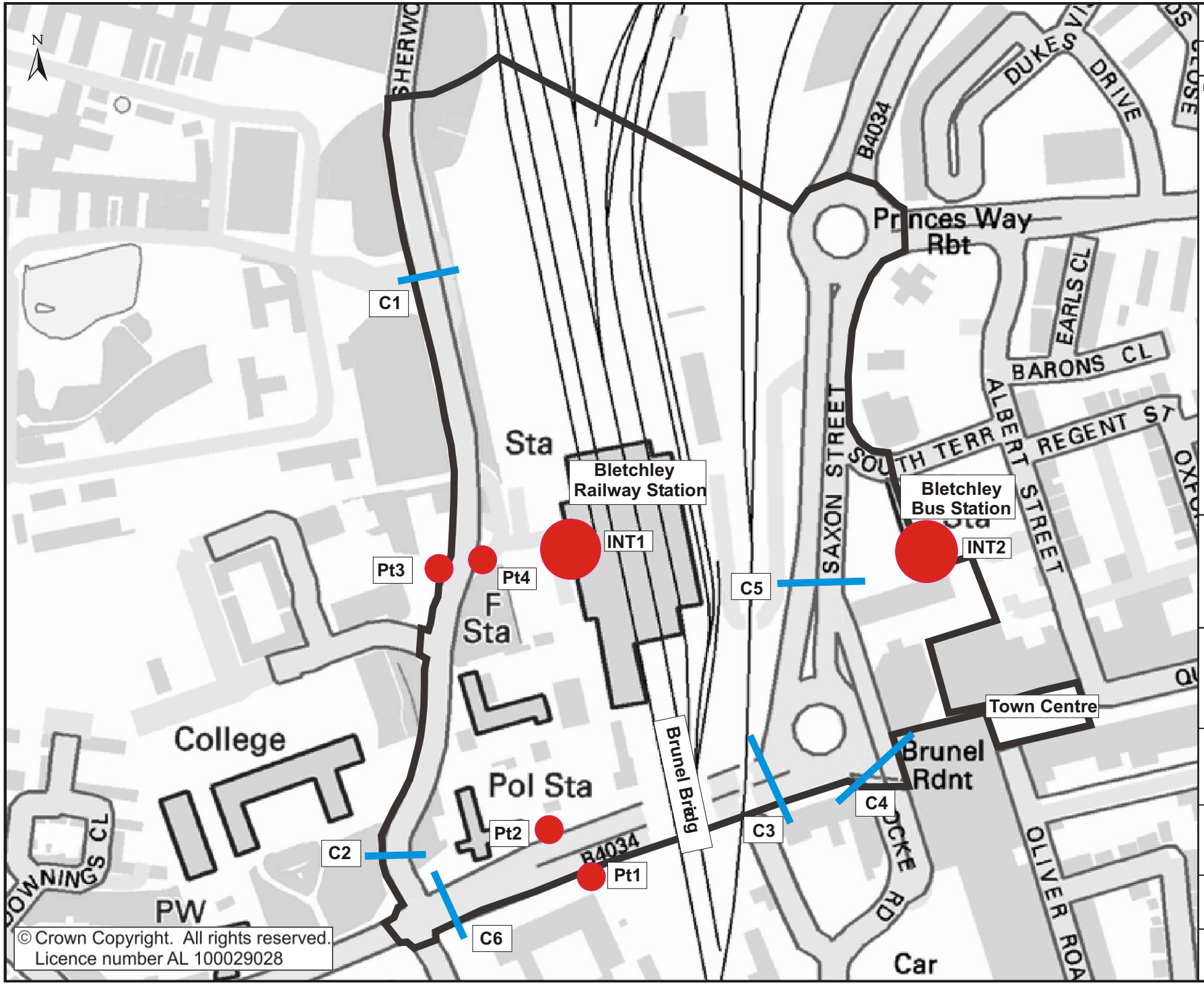
5.3 There is a significant contrast in the scores between the bus stops located on Sherwood Drive and Buckingham Road. The stops located along Buckingham Road are fit for purpose and are of adequate to good quality. The bus stops along Sherwood Drive need substantial improvement and scored average to very poor on all criteria.

5.4 In respect to the interchanges, improvements to the quality of the pedestrian environment around the Train Station needs to be made. In particular issues of safety and waiting area comfort need to be improved as well as information at the station and on approach to the station. There was also no dropped kerb upon entering the station from Link Gb. Wayfinding also needs to be improved, in particular signs to the Town Centre via the step link onto Buckingham Road. The bus station is currently undergoing improvements however before this the bus station was uninviting with issues of lighting, safety and personal security during

night time hours (the audit was conducted whilst improvements were underway so was based upon previous site visit experience).

ANNEX A1

Route, Link, Crossing, Public Transport, Interchange Maps



Drawn By	Checked By	Date
LB	LB	MAY 14
Authorised for Issue	DH	Date MAY 14

NOTES

- Public Transport Stop
- Interchange
- Crossing
- C1 Identifier
- Study Area

Integrated Transport Planning Ltd
50 North Thirteenth Street
Central Milton Keynes
MK9 3BP

Tel: 01908 259718
Fax: 01908 605747
http://www.itpworld.net
email: mail@itpworld.net

Client

Milton Keynes Council

Project

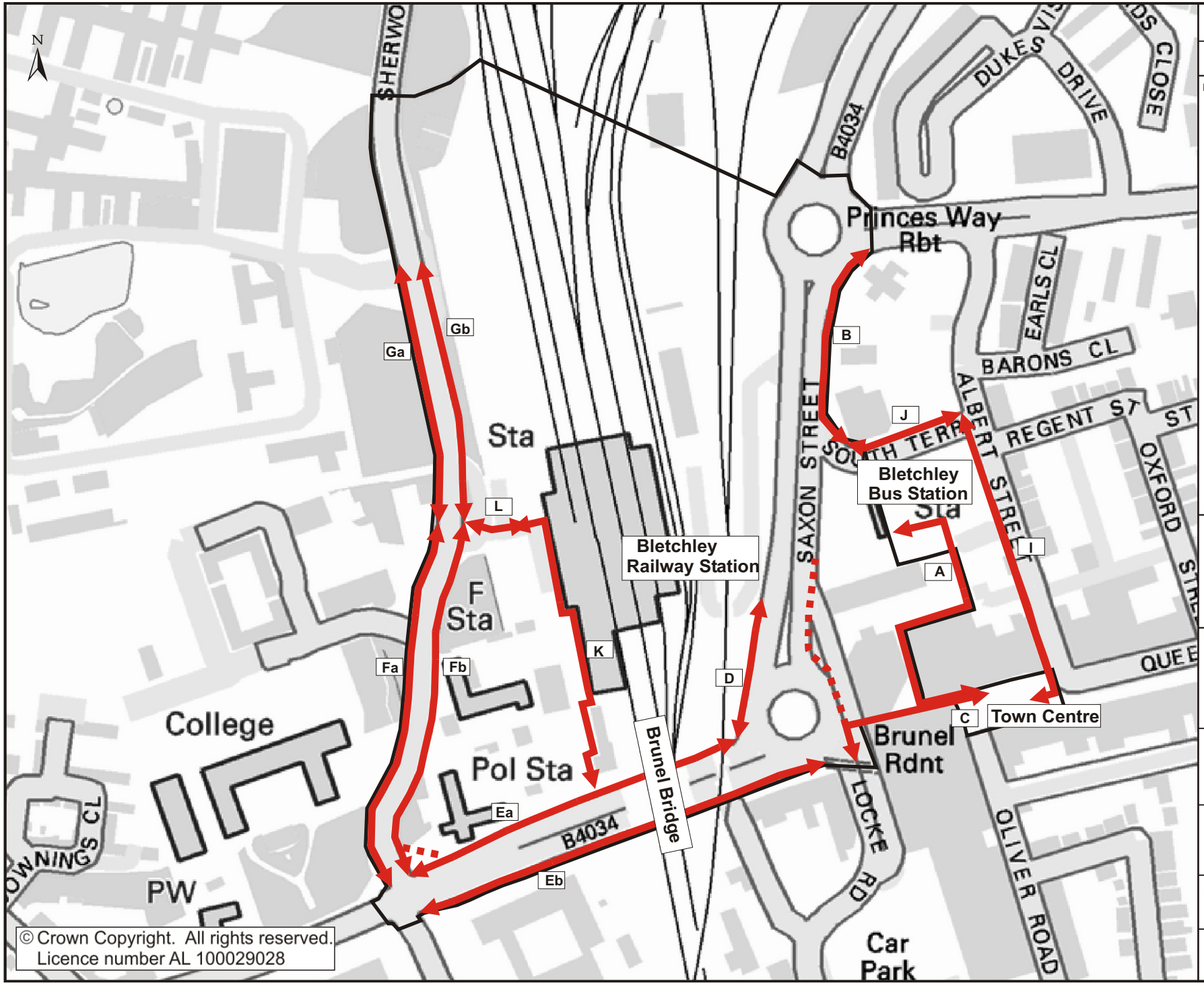
Bletchley: Fixing the Links

Drawing Title

PERS Audit - Crossings, PT Stops and Interchanges

Scale	Date
NA	MAY 14

Drawing Number	Rev
APPENDIX A	-



Drawn By	Checked By	Date
LB	LB	MAY 14
Authorised for Issue	DH	Date MAY 14

NOTES

Link

Desire Line

A — Identifier

Study Area

Integrated Transport Planning Ltd
50 North Thirteenth Street
Central Milton Keynes
MK9 3BP

Tel: 01908 259718
Fax: 01908 605747
http://www.itpworld.net
email: mail@itpworld.net

Client

Milton Keynes Council

Project

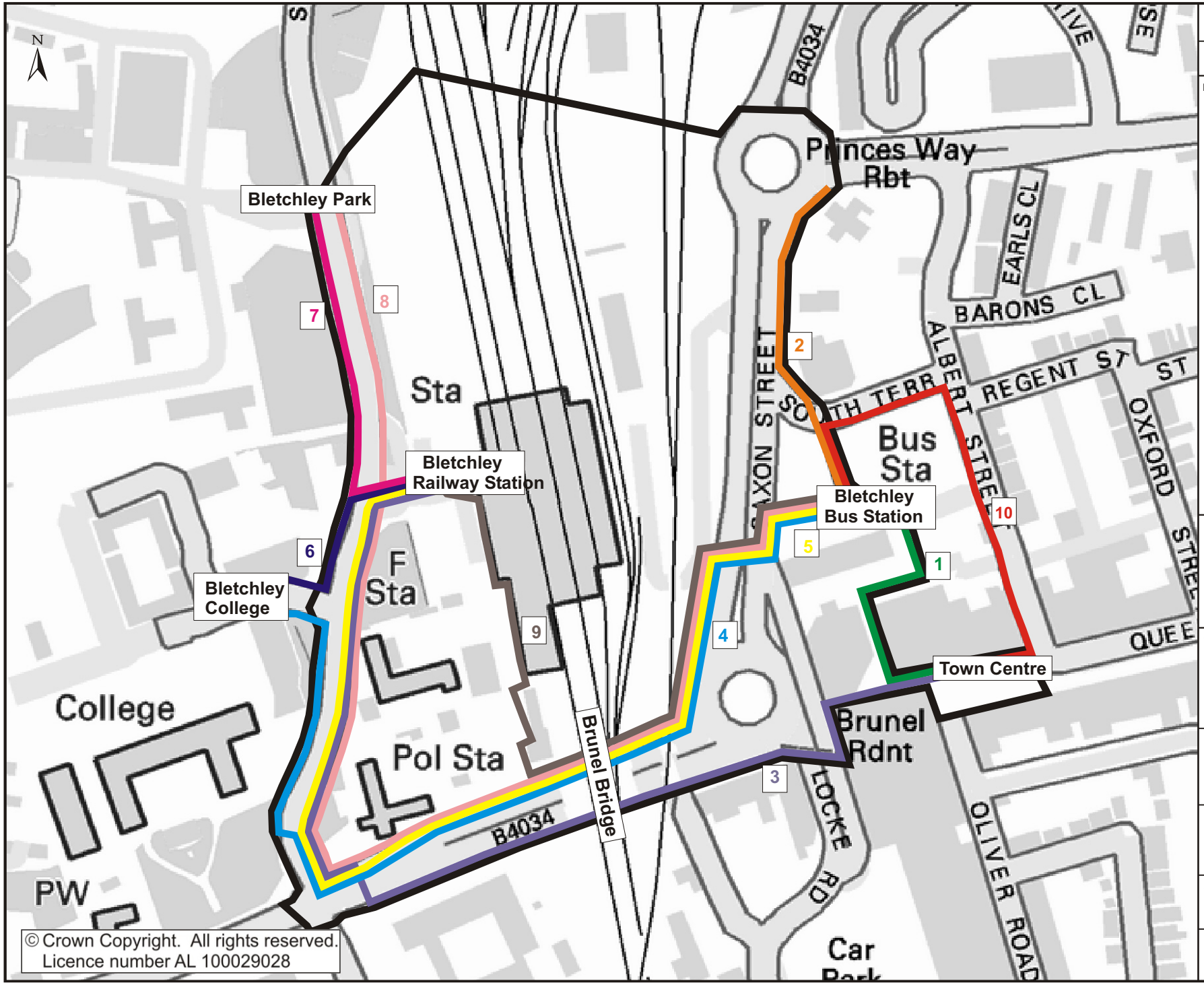
Bletchley: Fixing the Links

Drawing Title

PERS Audit - Links

Scale	Date
NA	May 14

Drawing Number	Rev
APPENDIX A	-



Drawn By	Checked By	Date
LB	LB	May 14
Authorised for Issue	DH	Date May 14

NOTES

Route

10 Identifier

Study Area

Integrated Transport Planning Ltd
50 North Thirteenth Street
Central Milton Keynes
MK9 3BP

Tel: 01908 259718
Fax: 01908 605747
http://www.itpworld.net
email: mail@itpworld.net

Client

Milton Keynes Council

Project

Bletchley: Fixing the Links

Drawing Title

PERS Audit - Routes

Scale	Date
NA	May 2014

Drawing Number	Rev
APPENDIX A	-

ANNEX A2

PERS Audit Full Results

Route Criteria	Route 1	Route 2	Route 3	Route 4	Route 5	Route 6	Route 7	Route 8	Route 9	Route 10	Total
Directness	-2	2	2	2	1	3	3	-1	3	-2	**11**
Permeability	-1	2	1	0	0	-3	2	-1	-2	-1	**-3**
Road Safety	N	2	-1	-1	-1	-3	2	-1	-1	-1	**-5**
Personal Security	-1	1	0	-1	-1	-2	2	-1	-2	-1	**-6**
Legibility	-1	0	-1	-1	-1	0	2	0	-1	-1	**-4**
Rest Points	1	-3	-3	-3	-3	-3	-3	-3	-3	-3	**-26**
Quality of the environment	0	1	0	0	-2	-2	1	0	-3	-1	**-6**
Total	**-4**	**5**	**-2**	**-4**	**-7**	**-10**	**9**	**-7**	**-9**	**-10**	

Link Criteria	Link A	Link B	Link C	Link D	Link Ea	Link Eb	Link Fa	Link Fb	Link Ga	Link Gb	Link I	Link J	Link K	Link L	Total
Effective Width	1	3	-1	1	0	0	-1	0	-3	3	1	-1	0	-1	**2**
Dropped Kerbs	N	2	0	1	0	0	0	-3	0	0	1	-2	-3	0	**-4**
Gradient	0	1	-3	0	-2	-2	0	0	0	2	0	0	-3	0	**-7**
Obstructions	0	1	-3	0	-2	-2	-1	-3	-1	2	1	0	-2	0	**-10**
Permeability	-1	2	-1	0	-2	-2	0	-2	2	2	0	0	-2	0	**-4**
Legibility	-1	2	-2	0	-1	-1	0	-3	-1	3	-1	-2	-2	-1	**-10**
Lighting	-1	-3	-2	0	-3	-3	1	-2	3	3	0	-2	-3	-1	**-13**
Tactile Information	-1	0	-3	-1	-3	-2	-1	-2	-3	0	-2	-3	-3	-2	**-26**
Colour Contrast	1	0	1	-1	-2	-2	0	-3	0	0	1	-3	-3	-1	**-12**
Personal Security	-2	-1	-3	-2	-3	-3	0	-1	0	0	0	-1	-3	-1	**-20**
Surface Quality	0	3	-1	0	-2	-2	-1	-3	-3	1	0	0	-3	-1	**-12**
User Conflict	0	3	-1	0	-3	-3	0	-3	-3	1	0	-1	-2	-1	**-13**
Quality of the Environment	0	2	-1	0	-2	-2	0	-2	-2	2	0	-1	-2	-1	**-9**
Maintenance	0	2	-1	0	-2	-2	0	-2	-3	2	0	0	-2	-2	**-10**
Total	**-4**	**17**	**-21**	**-2**	**-27**	**-26**	**-3**	**-29**	**-14**	**21**	**1**	**-16**	**-33**	**-12**	

Crossing Criteria	C1	C2	C3	C4	C5	C6	Total
Crossing Provision	2	2	2	3	2	-2	**9**
Deviation from the Desire Line	2	2	2	3	2	2	**13**
Performance	2	3	1	2	2	2	**12**
Crossing Capacity	1	3	0	1	2	-3	**4**
Delay	2	2	0	0	2	-3	**3**
Legibility	2	2	0	0	2	-2	**4**
Legibility for Sensory Impaired People	3	2	0	-1	2	-2	**4**
Dropped Kerbs	3	3	0	0	3	0	**9**
Gradient	0	2	-1	0	2	0	**3**
Obstructions	2	2	-1	0	2	-3	**2**
Surface Quality	2	2	0	0	2	2	**8**
Maintenance	0	2	-1	0	2	2	**5**
Total	**21**	**27**	**2**	**8**	**25**	**-7**	

PT Waiting Areas	PT 1	PT2	PT3	PT4	INT 1 (Rail)	INT 2 (Bus)	Total
Information to the waiting area	N	N	-2	-3	0	-1	**-6**
Infrastructure to the waiting area	1	1	-3	-3	0	-1	**-5**
Boarding public transport	2	2	-2	-2	N	0	**0**
Information at the waiting area	2	1	-2	-3	0	0	**-2**
Safety perceptions	1	-1	-1	-2	-1	-1	**-5**
Security measures	0	-1	-1	-3	0	-2	**-7**
Lighting	0	0	0	-3	0	-2	**-5**
Quality of the environment	0	-1	-1	-3	0	-2	**-7**
Maintenance and cleanliness	0	0	-2	-3	0	-2	**-7**
Waiting area comfort	0	-2	-3	-3	-2	-2	**-12**
Total	**6**	**-1**	**-17**	**-28**	**-3**	**-13**	

APPENDIX B

Stakeholder Workshop Attendees

		Workshop Attendance			
Name	**Organisation**	**Invited**	**Accepted**	**Nominee**	**Attended**
Paul Hammond	MK Council	y	y		y
Steve Brewer	MK Council	y	y		y
Neil Sainsbury	MK Council	y	y		y
Andrew Coleman	MK Council	y	y		y
Adrian Carden	MK Council	y	y		y
David Lawson	MK Council	y	y		y
Nicola Wheatcroft	MK Council	y	y		y
Luciana Smart	MK Council	y	y		y
Marek Mackowiak	MK Council	y	y		y
Colin Wilderspin	MK Council		y		y
Charles Hurst	Network Rail	y	y	Lucy Druce	y
Iain Standen	Bletchley Park	y	y		y
David Sutherland	Bucks & MK Fire Authority	y	y		y
Anna Henderson	MK College	y	y		y
Simon Dackombe	Thames Valley Police	y	y		y
Cllr Ann Clancy	MK Council	y	y		y
Paul Morgan	Arriva	y	y		y
Peter Ballantyne	Bus User Group	y	y		y
Alan Nall	Bletchley & Fenny Stratford Business Association	y	y		y
Barbara O'Sullivan	Bletchley & FS Town Council	y	y		y
Cllr Eamon O'Rourke	Bletchley & FS Town Council	y	y		y
Clr Emma Rynne	Bletchley & FS Town Council	y	y		y
Cllr Veronica Belcher	West Bletchley TC	y	y		y
Cllr David Gibb	West Bletchley TC	y	y		y
Cllr Tony Mabbott	West Bletchley TC	y	y		
Jeremy Beake [MKC] / Padma	Cheriyan [DAG]	y			
Paula Suchy	Guide Mail	y	y		y
Padma Cheriyan	Disability user group		y		y
Jamie Wheway	Integrated Transport Planning		y		y
David Hampton	Integrated Transport Planning		y		y
		48	**31**		**28**
		Invited	**Acceptances**		**Attendees**

APPENDIX C

Stakeholder Workshop Presentation

Bletchley – Fixing the Links

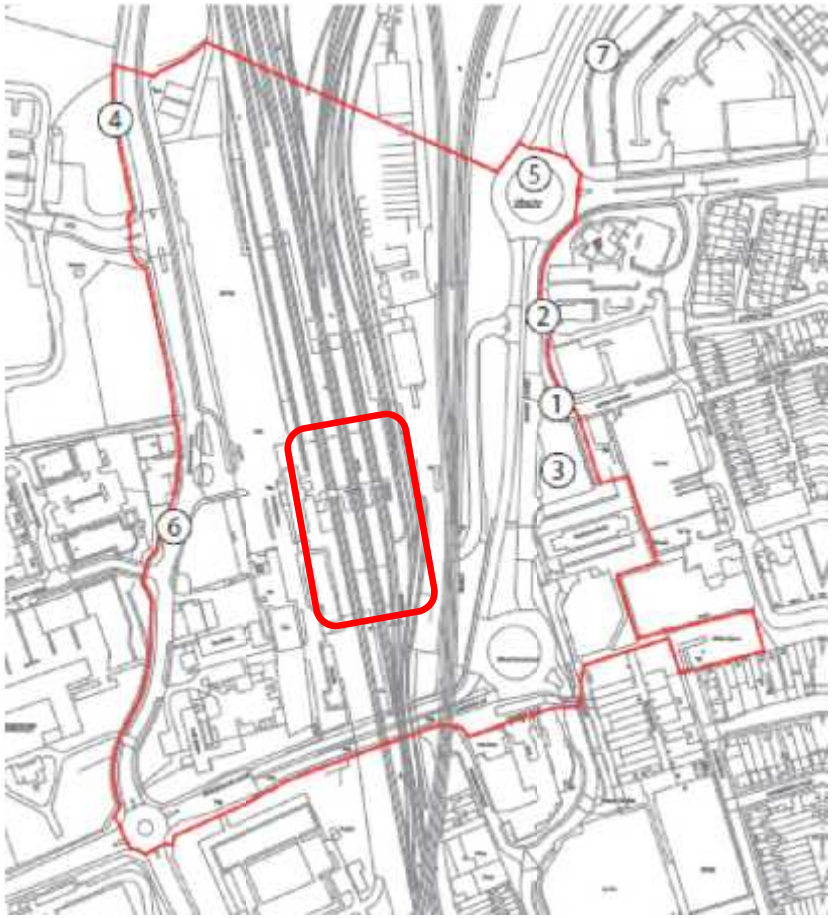
Stakeholder Workshop

3rd July 2014

itp
integrated transport planning

Introduction

- Study Area focused on Bletchley Station
- Building on East-West Rail Opportunities
- Tapping into forthcoming funding streams
- Supporting Stakeholder Aspirations
- Building on existing policy approach



itp
integrated transport planning

Todays Workshop

- Background Information on existing situation
- Potential Strategy
- Outline Ideas for Improvements

- Discussion on
  - Approach
  - Priorities
  - Benefits

itp
integrated transport planning

BACKGROUND & CONTEXT

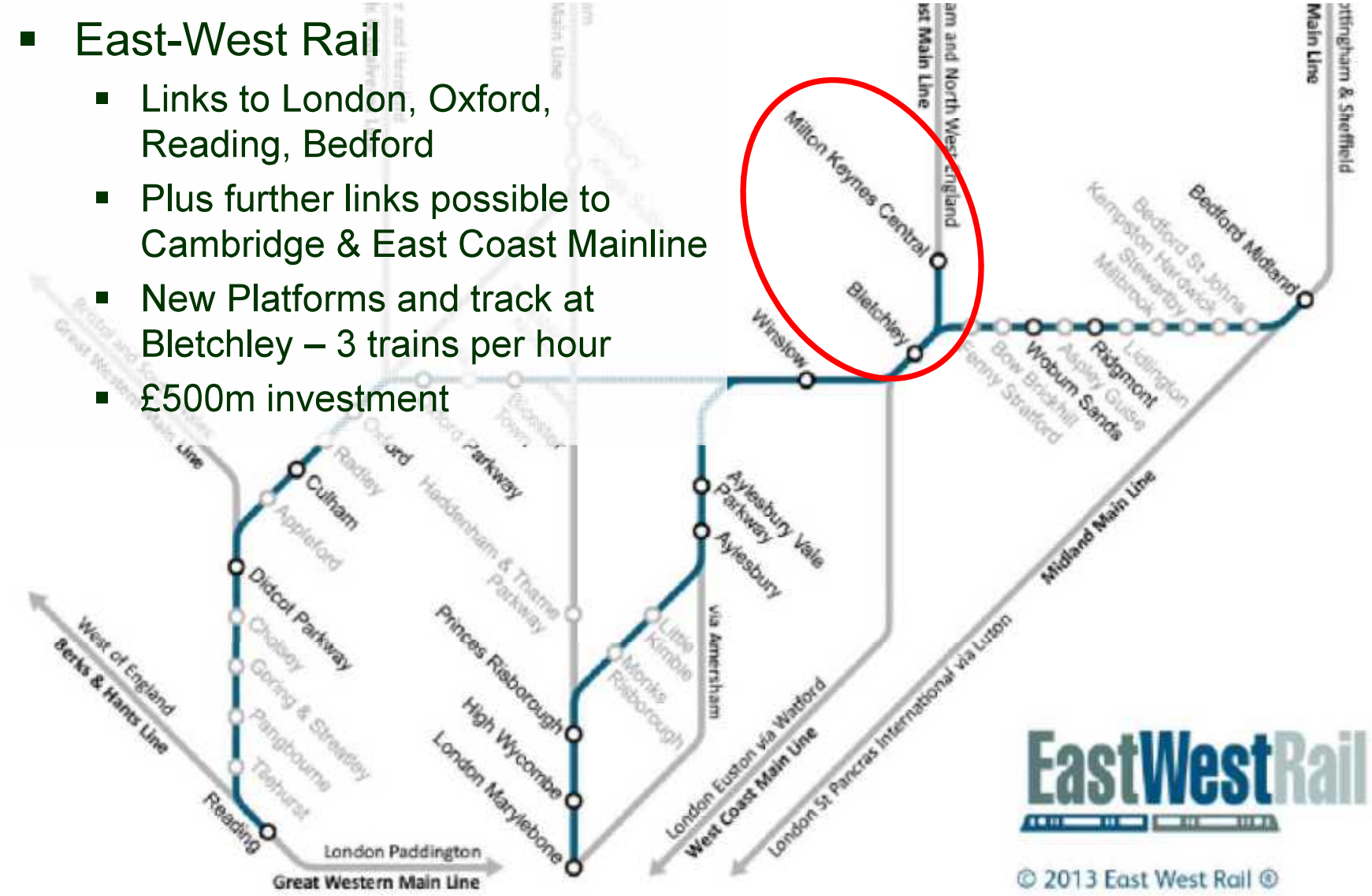
Improving Connections

- Improvements to Links between Bletchley Station and key destinations
  - Town Centre
  - Bletchley Park
  - College
  - MK Stadium

itp
integrated transport planning

Background & Context

- East-West Rail
  - Links to London, Oxford, Reading, Bedford
  - Plus further links possible to Cambridge & East Coast Mainline
  - New Platforms and track at Bletchley – 3 trains per hour
  - £500m investment

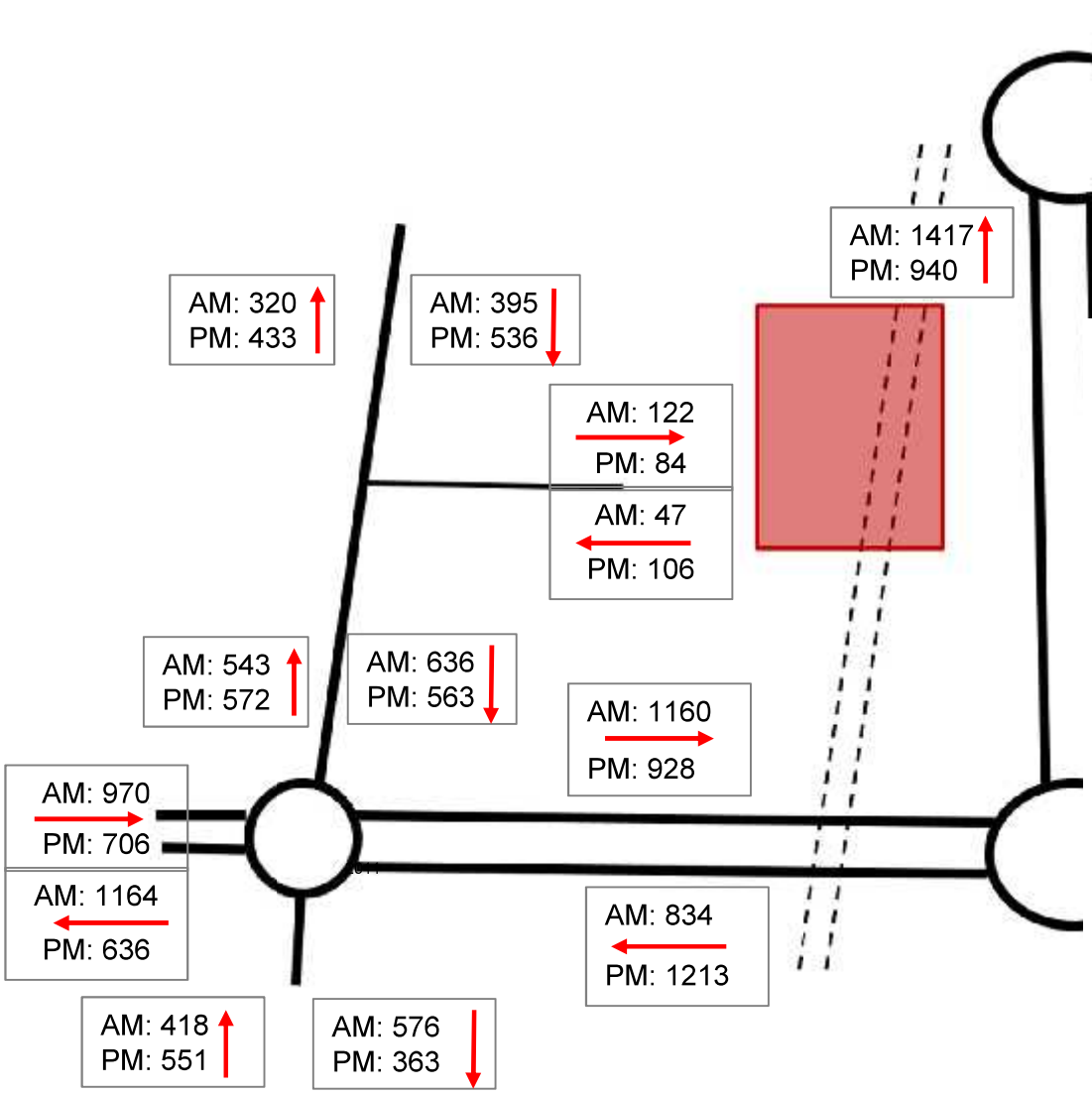


Background & Context

- SEMLEP
  - Strategic Investment Plan
  - E-W Rail support
- MK Local Transport Plan
  - Connectivity & access to local services
  - Bletchley Rail & Bus station improvements
  - Improved walking & cycling networks
  - Safety, security and supporting healthy lifestyles
- Bletchley Transport Plan
  - Economy, Safety, Accessibility, Environment, Growth
  - Downgrading of key streets, including Saxon St & Buckingham Road
  - Improved connections to & between bus & rail stations
  - Improvements to walking & cycling networks

itp
integrated transport planning

Traffic Data Extracts



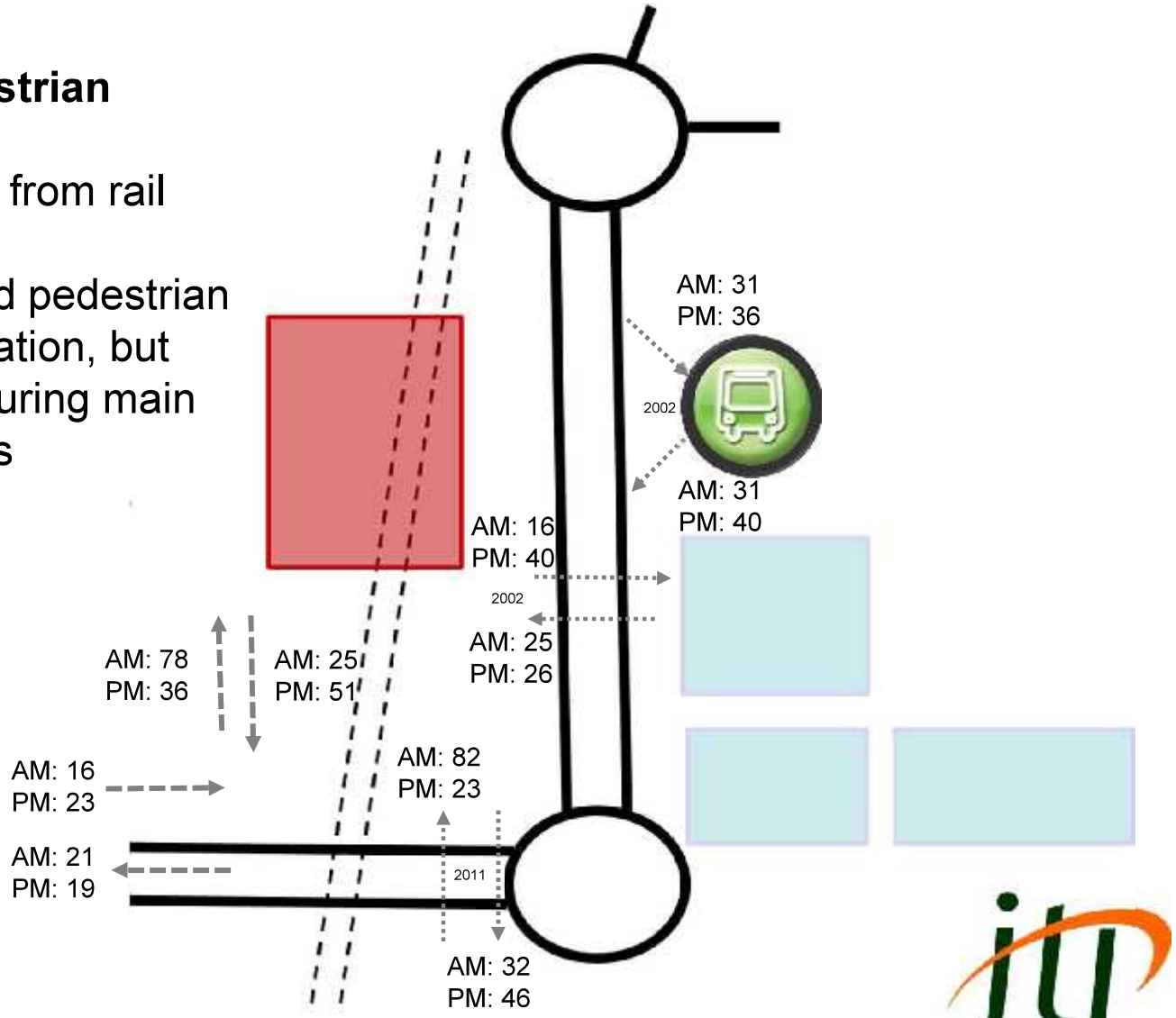
Traffic Flow near Bletchley Station

- Bletchley Station used as railhead and drop-off
- Tidal flow towards (AM) and away (PM) from central MK
- Saxon St & Buckingham Rd carry largest amounts of traffic but are mainly within 'theoretical' capacity

Traffic Data Extracts

Peak Period Pedestrian Movements

- Tidal flow to and from rail station
- Less pronounced pedestrian activity at bus station, but may be higher during main shopping periods

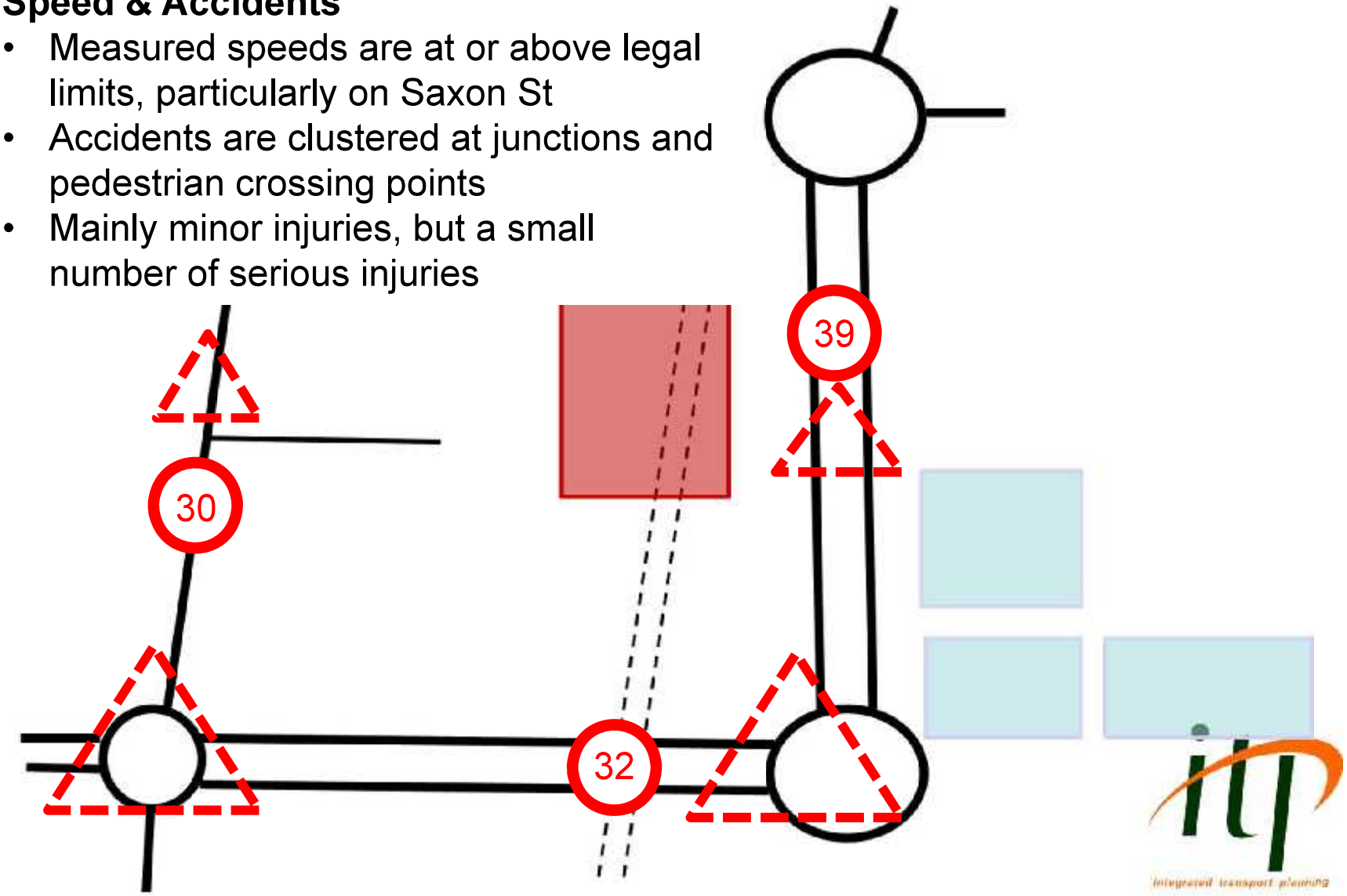


integrated transport planning

Traffic Data Extracts

Speed & Accidents

- Measured speeds are at or above legal limits, particularly on Saxon St
- Accidents are clustered at junctions and pedestrian crossing points
- Mainly minor injuries, but a small number of serious injuries



Town Centre Benchmarking 2012

Footfall:

219 people per 10 mins

(c1300 people/hr)

Parking:

Spaces available = 1120

Short stay = 826 (74%)

Occupancy = c72% market day

Arrival Mode:

Foot = 30%

Car = 36%

Bus = 31%

Train = 1%

Cycle / Other = 2%

Business Issues

- **Positive –** Retail mix, Local Customers, Car Parking
- **Negative –** Town prosperity, Car Parking, Competition (other towns / web)

Customer Issues

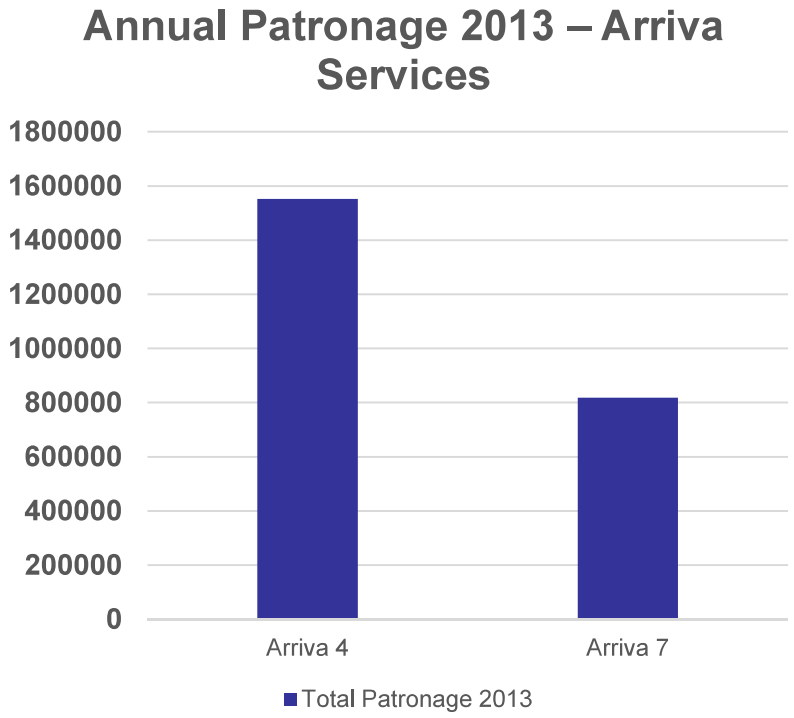
- **Positive –** Range of shops, Transport, Walking access
- **Negative –** Lack of restaurants, physical appearance (Co-op site), shops

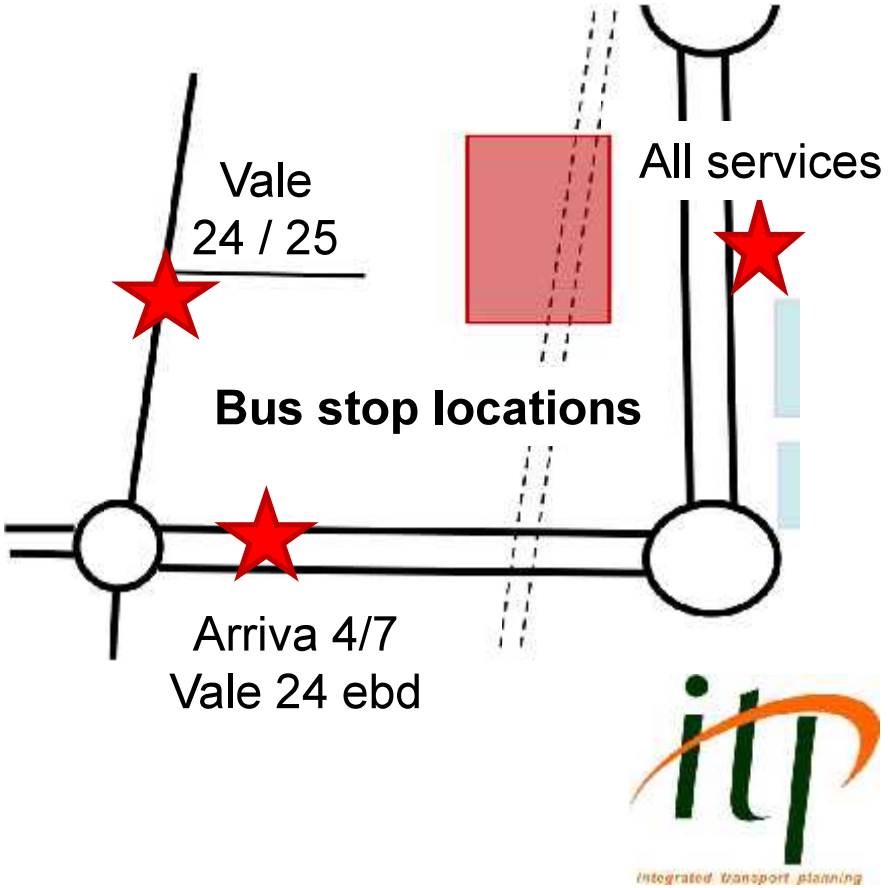
itp

integrated transport planning

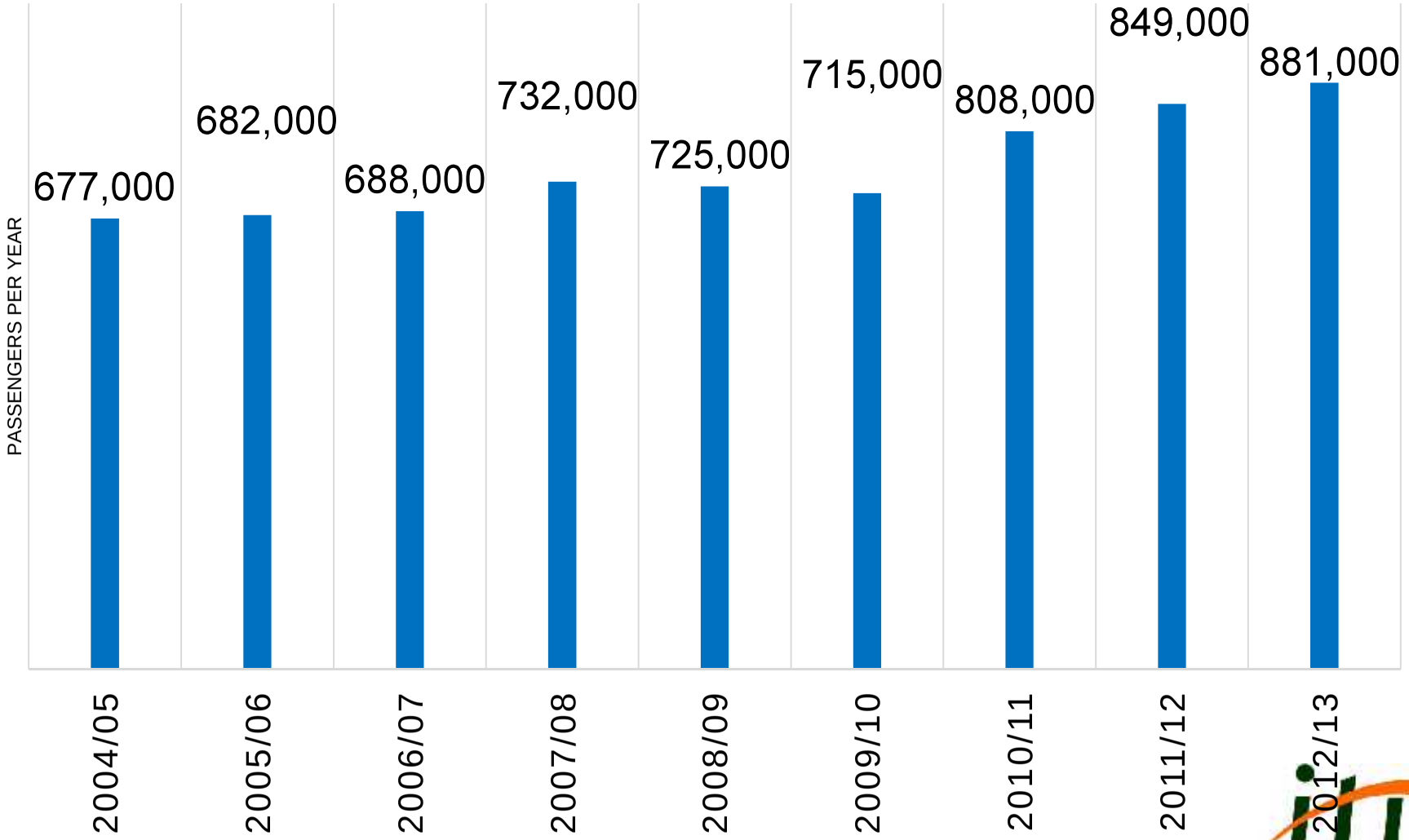
Bus Usage

- **Vale Travel outside station – hourly**
- **Arriva Bucks Rd – up to 6 per hour**
- **Arriva services 4 & 7 carried approx. 2.3m passengers in 2013.** No data available for Bletchley section

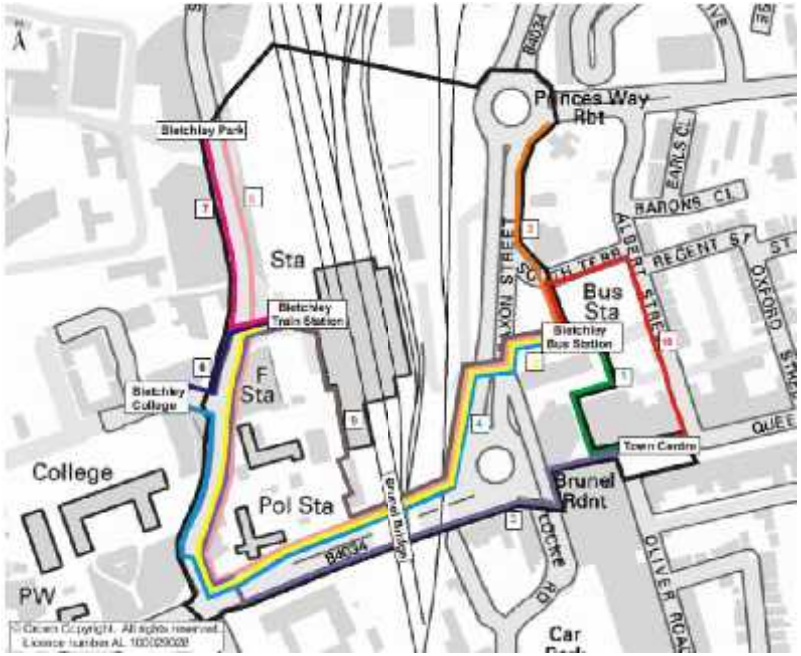




Rail Station Usage



Pedestrian Accessibility



Positive Aspects

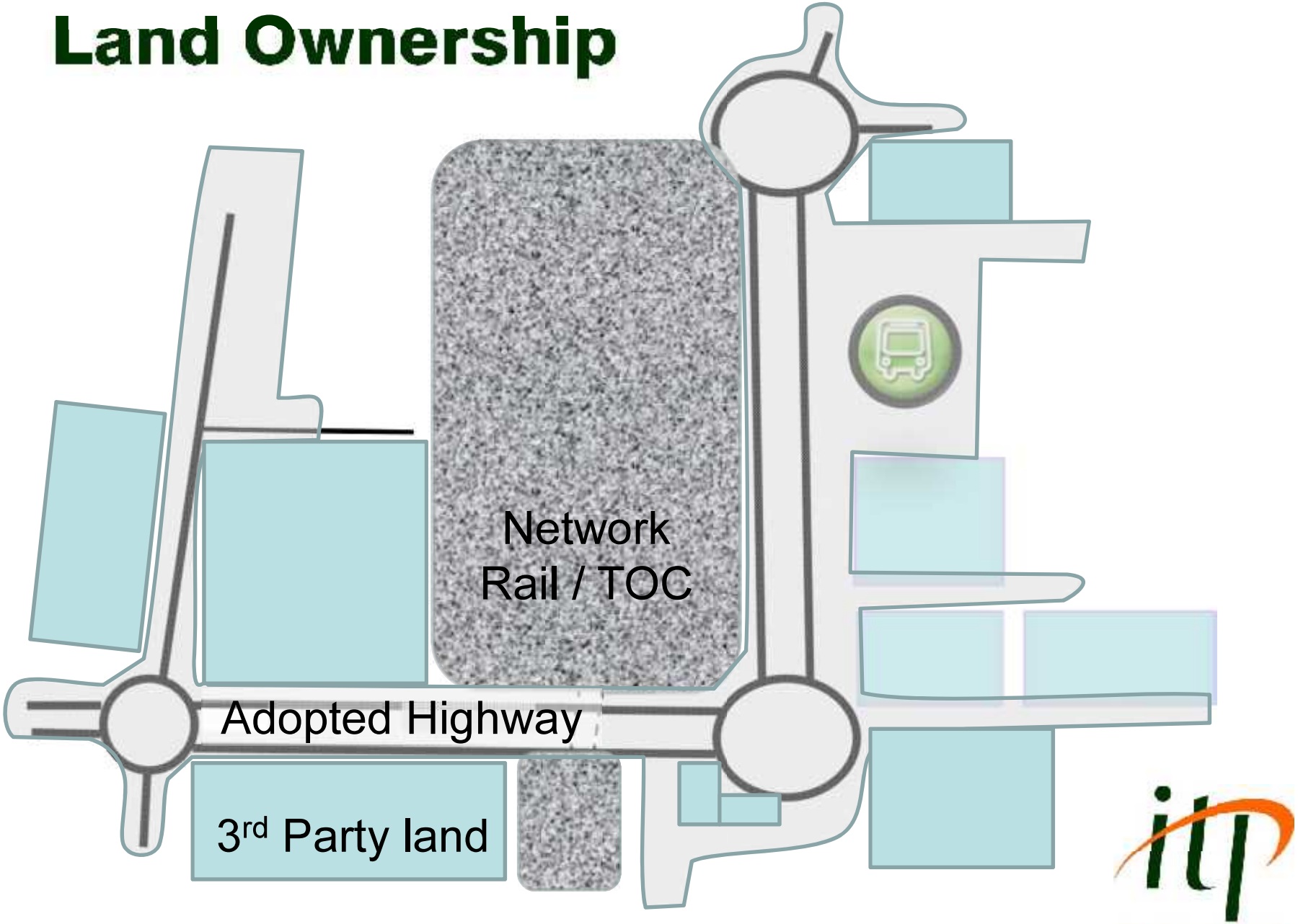
- Pedestrian crossings, where provided, are of good quality
- Area around Bletchley Park and College had a better quality pedestrian environment than towards the town centre

Negative Aspects

- The link between the rail station and the bus station is of very poor quality
- No dropped kerbs and poor lighting particularly under the Brunel Bridge and the step link from the rail station onto Buckingham Rd
- Poor quality bus stops

itp
integrated transport planning

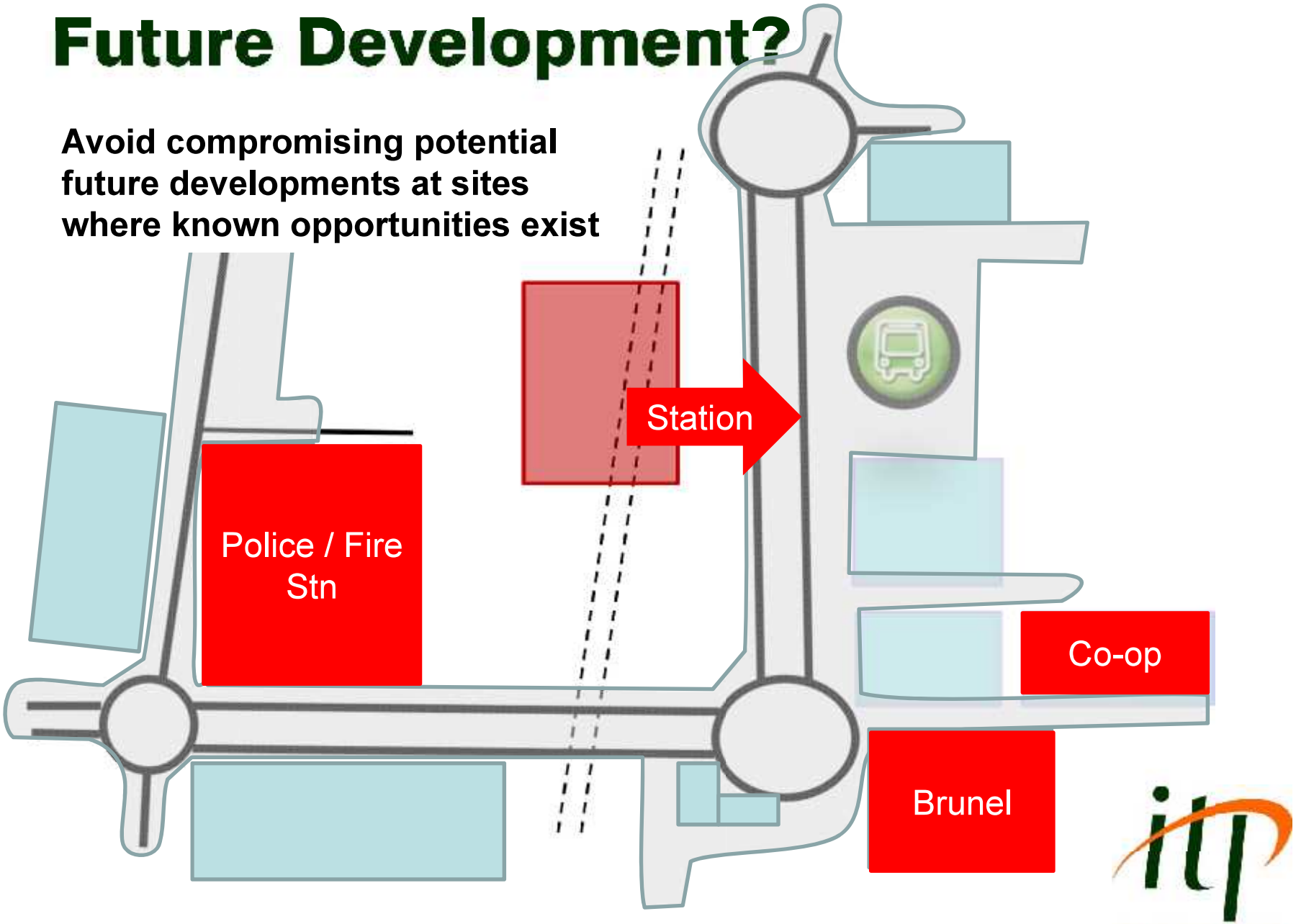
Land Ownership



integrated transport planning

Future Development?

Avoid compromising potential future developments at sites where known opportunities exist



integrated transport planning

EMERGING STRATEGY

Opportunities and Constraints

Opportunities

- Demand generated by E-W Rail, Bletchley College & Park
- Rising demand for public transport services
- Growth funding from various sources
- Evidence of existing problems

Constraints

- Land ownership
- Existing disconnection between station and Town Centre
- Level differences
- Need to consider future developments
- Funding availability

itp
integrated transport planning

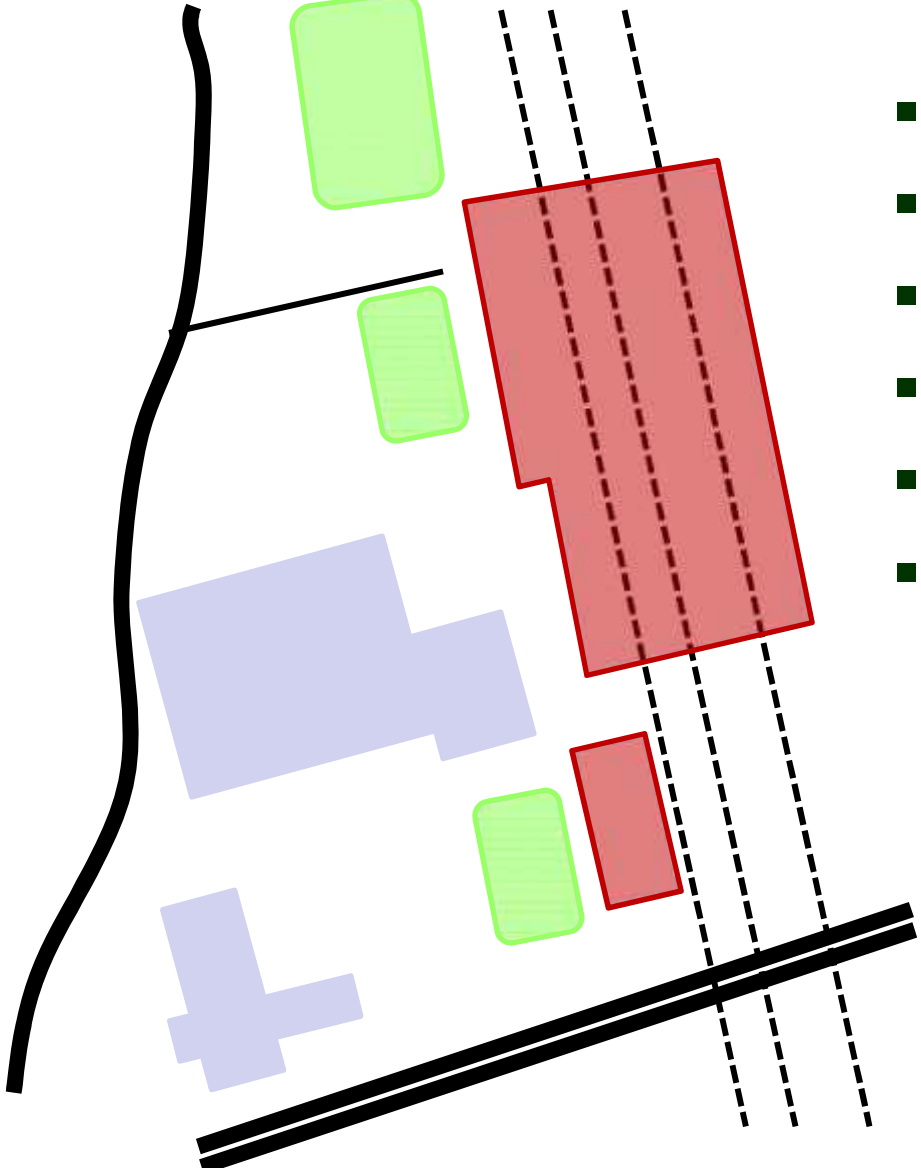
Strategy Proposition

1. Improve Journeys within Bletchley
   - To remove physical and perceived barriers between Station, town centre and main destinations
2. Enhance Arrival
   - To provide a welcoming arrival point at the Station
3. Enable Future Development
   - To co-ordinate development and funding opportunities
   - To deliver improvements that take advantage of EW Rail in 2019
4. Facilitate economic regeneration of Bletchley
   - To facilitate convenient onward journeys to the town centre and key destinations by all modes

itp
integrated transport planning

OPTIONS AND PACKAGES

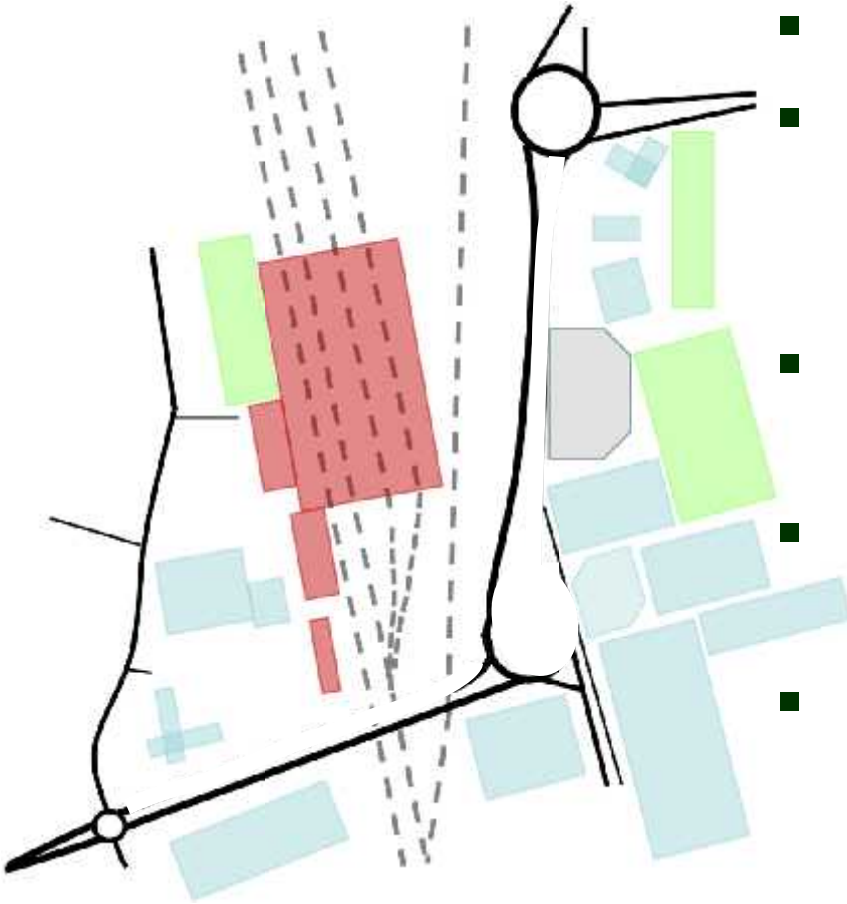
Package 1 – Station Forecourt & Surrounds



- Wayfinding & Signs
- Bus services
- Security / surveillance
- Lighting
- Surfacing & public realm
- Steps & Access to Buckingham Rd

itp
integrated transport planning

Package 2 – Town Centre Environs



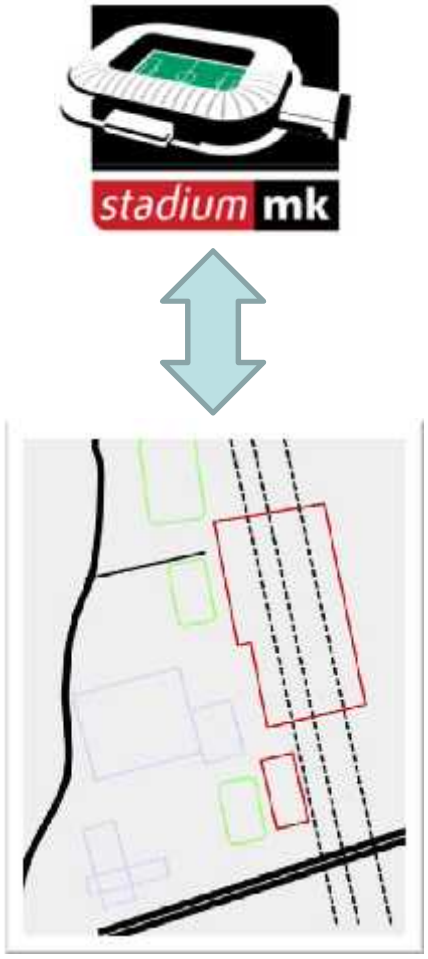
- Reduce carriageway space
- Remove Brunel Roundabout – create public Square & improve access to town centre
- Elevated footways to manage level changes
- Painting / lighting / landscaping
- ‘Green’ walls to reduce ‘concrete wall’ feel

itp
integrated transport planning

Package 3 – Sherwood Drive

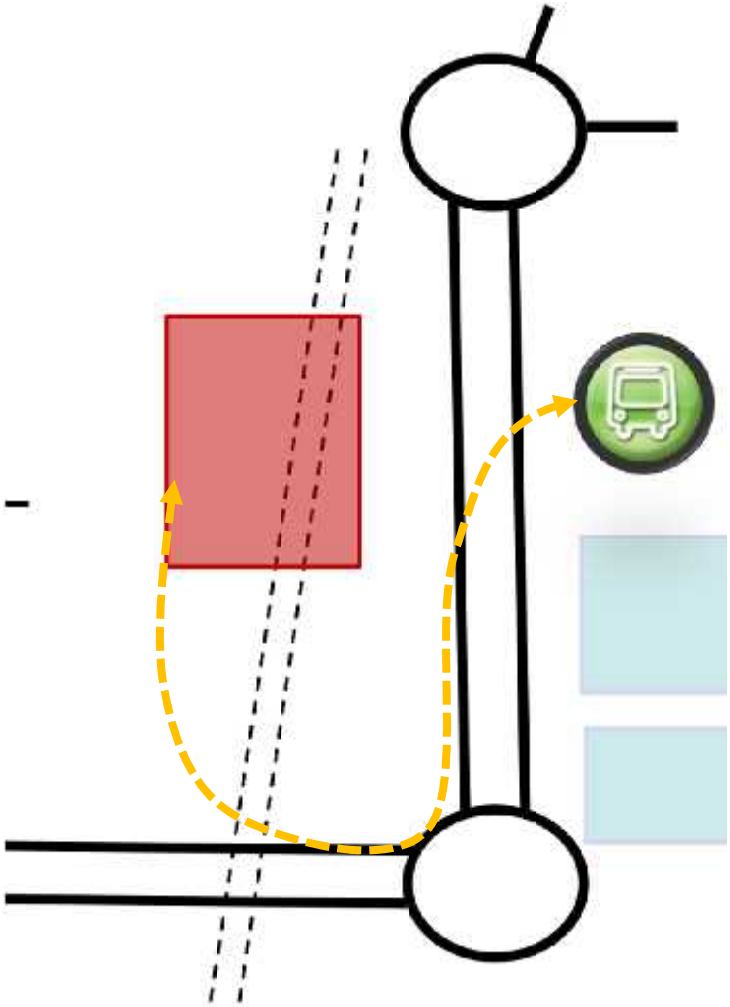
- Pedestrian crossing points
- Improve bus stops
- Speed management measures – road humps or narrowings
- Speed cameras

Package 4 – Wider Access



- Wayfinding to MK Stadium
- Enhanced bus link to Stadium
- Improved and / or new walking links to Stadium

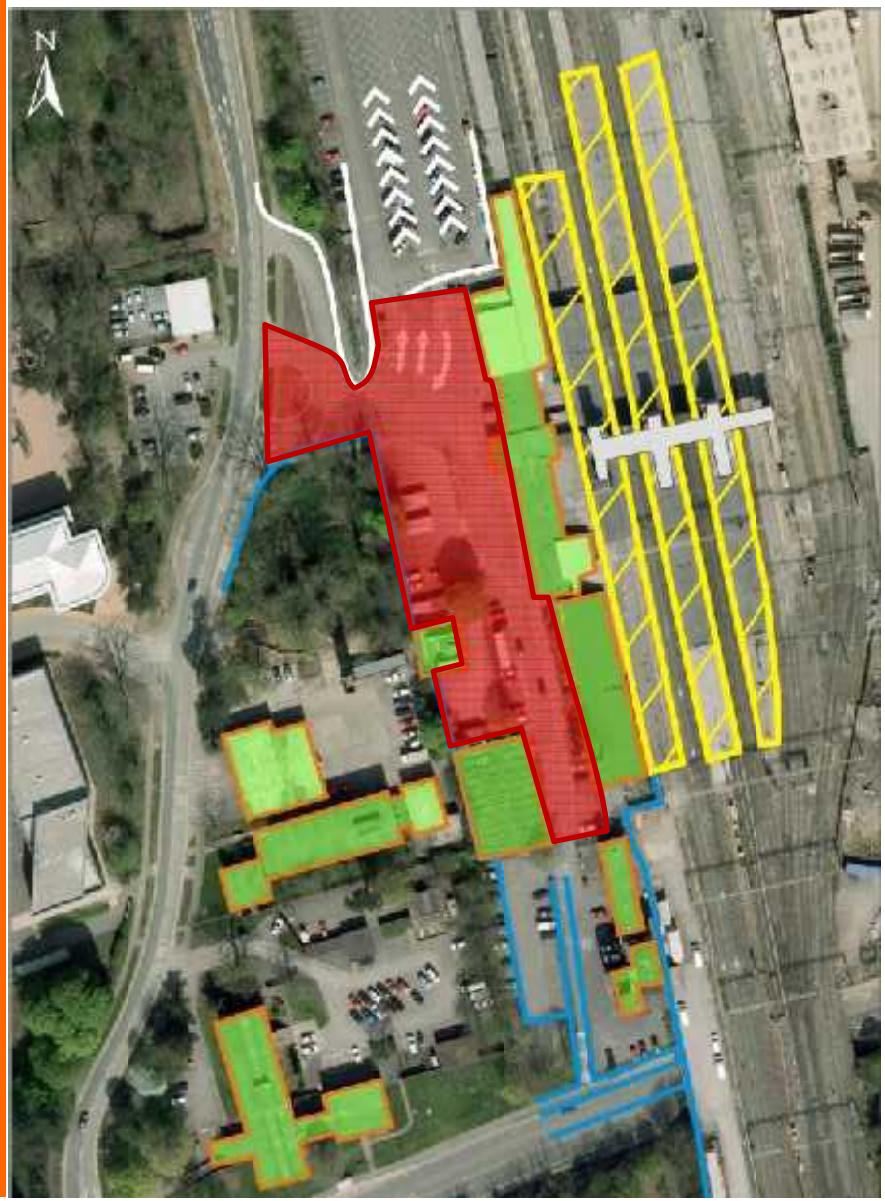
Package 5 - Integration



- Real-time and timetable information for ‘other’ mode
- Themed path & wayfinding between stations
- Integrated timetables between bus & rail
- Relocation of bus station

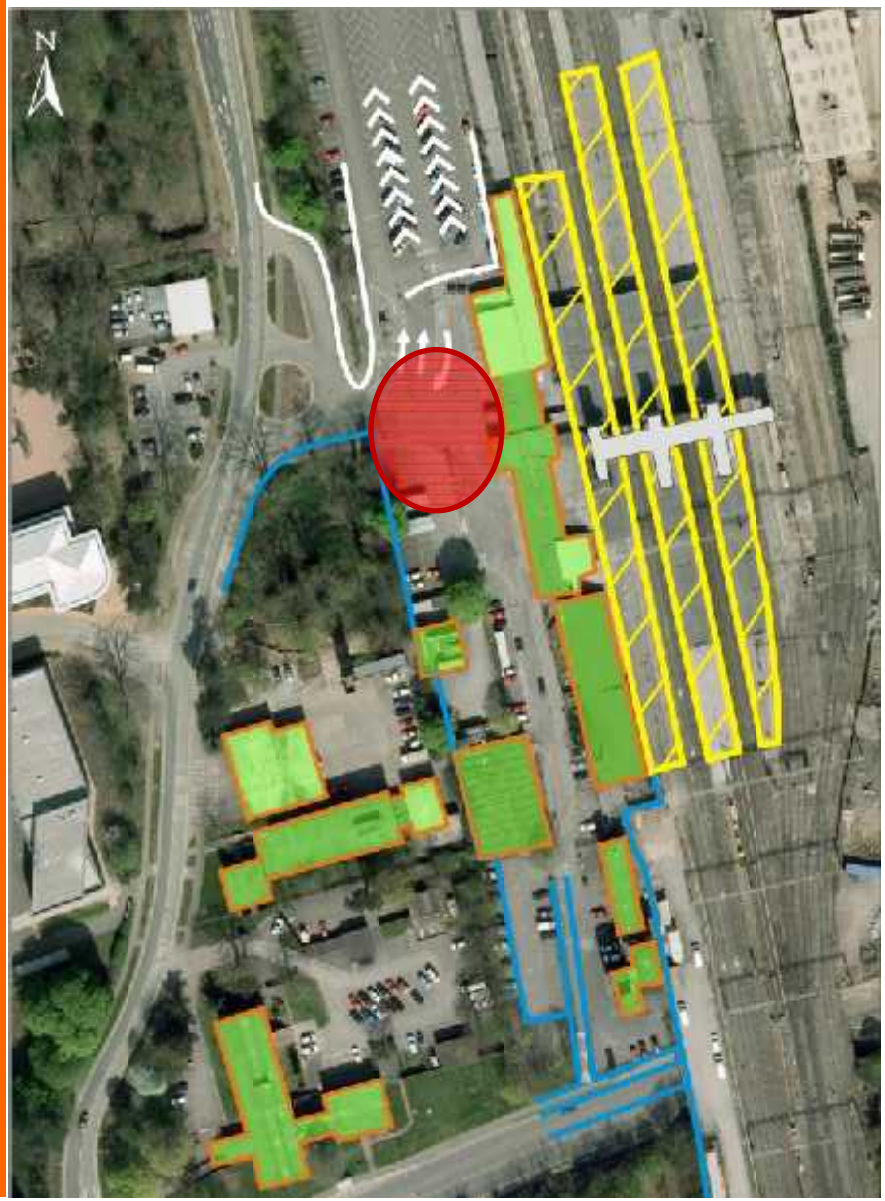
PACKAGE 1: STATION FORECOURT

Station Forecourt – Arrival Point



1. Swindon
2. Brighton
3. Kings Cross
4. Didcot Parkway

Station Forecourt - Interchange



Access to Buckingham Road

Main route between station and town centre

- 3 flights of steep steps from station to Buckingham Road
- Level access only via Sherwood Drive
- Poor lighting on steps
- No CCTV or casual surveillance
- Narrow footway adjacent busy dual carriageway

itp
integrated transport planning

Access to Buckingham Road

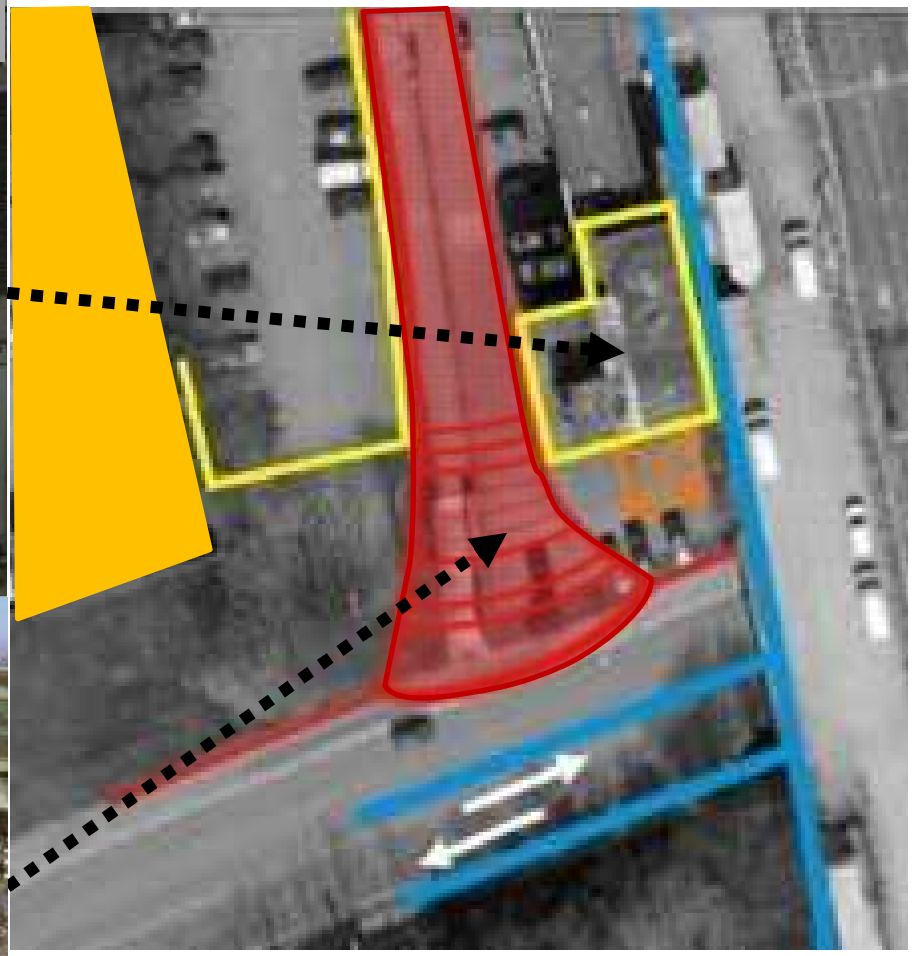
Objectives

- Meet DDA and access requirements
- Provide a more pleasant and welcoming experience for all users
- More direct connection between station and town centre

Access to Buckingham Road

Re-Use of Signalbox Site

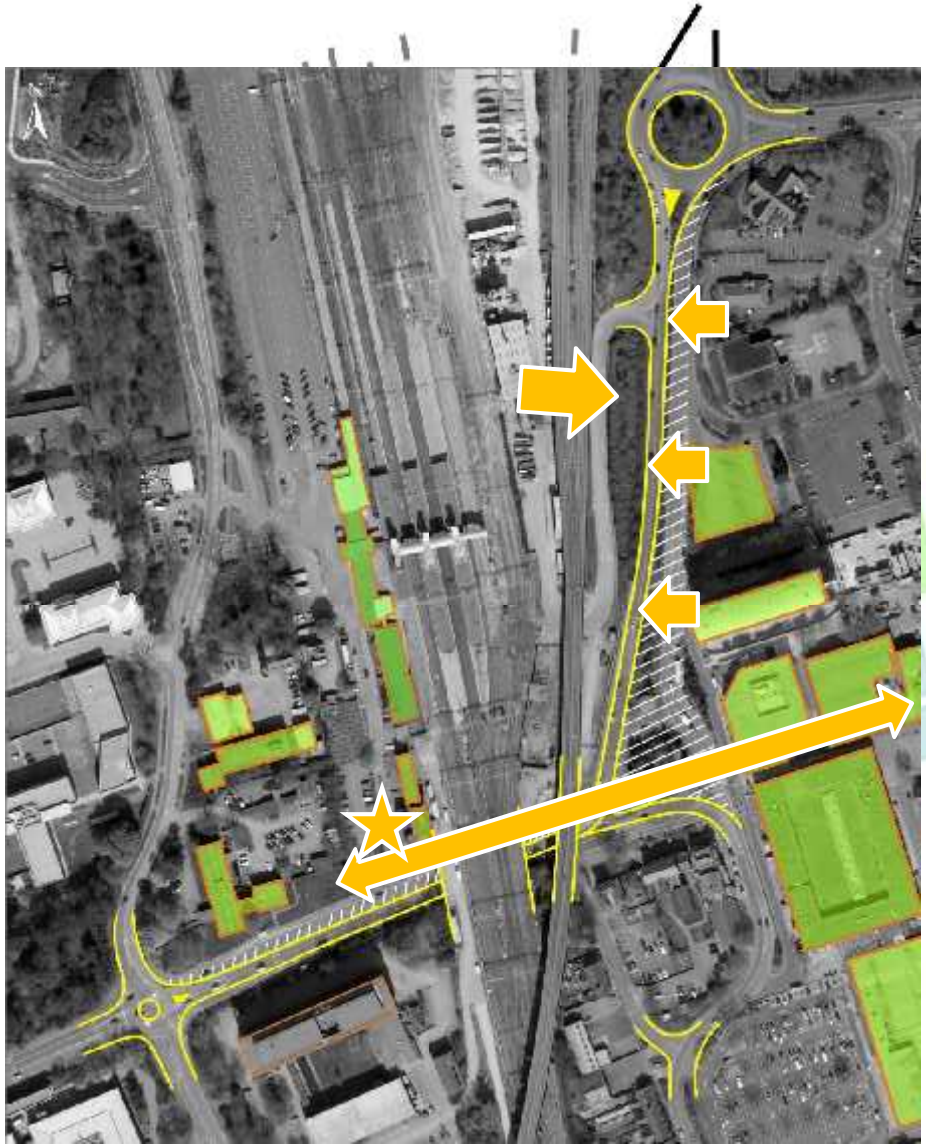
Grand Staircase



integrated transport planning

PACKAGE 2: TOWN CENTRE ENVIRONS

Reallocate Carriageway Space



- Remove 1 carriageway from each road section
- Remove Brunel Roundabout

Opportunities

- Brunel Square
- Expanded Town Centre
- Improved Links to Station
- Landscaping
- Link to Station Eastern Access

itp
integrated transport planning

Brunel Roundabout / Square

- New public square
  - Event space
  - Bletchley Gateway
  - Seating
- Remove retaining wall adjacent to service road
- Remove / reduce level differences between Queensway and Brunel Square

Elevated Footway – Managing Level Change

- Connect Station Forecourt level with Brunel Square through elevated walkway.
- Similar to New York High Line concept

Cosmetic Changes & Landscaping

PACKAGE 3 & 4: SHERWOOD DRIVE / WIDER ACCESS

Sherwood Drive

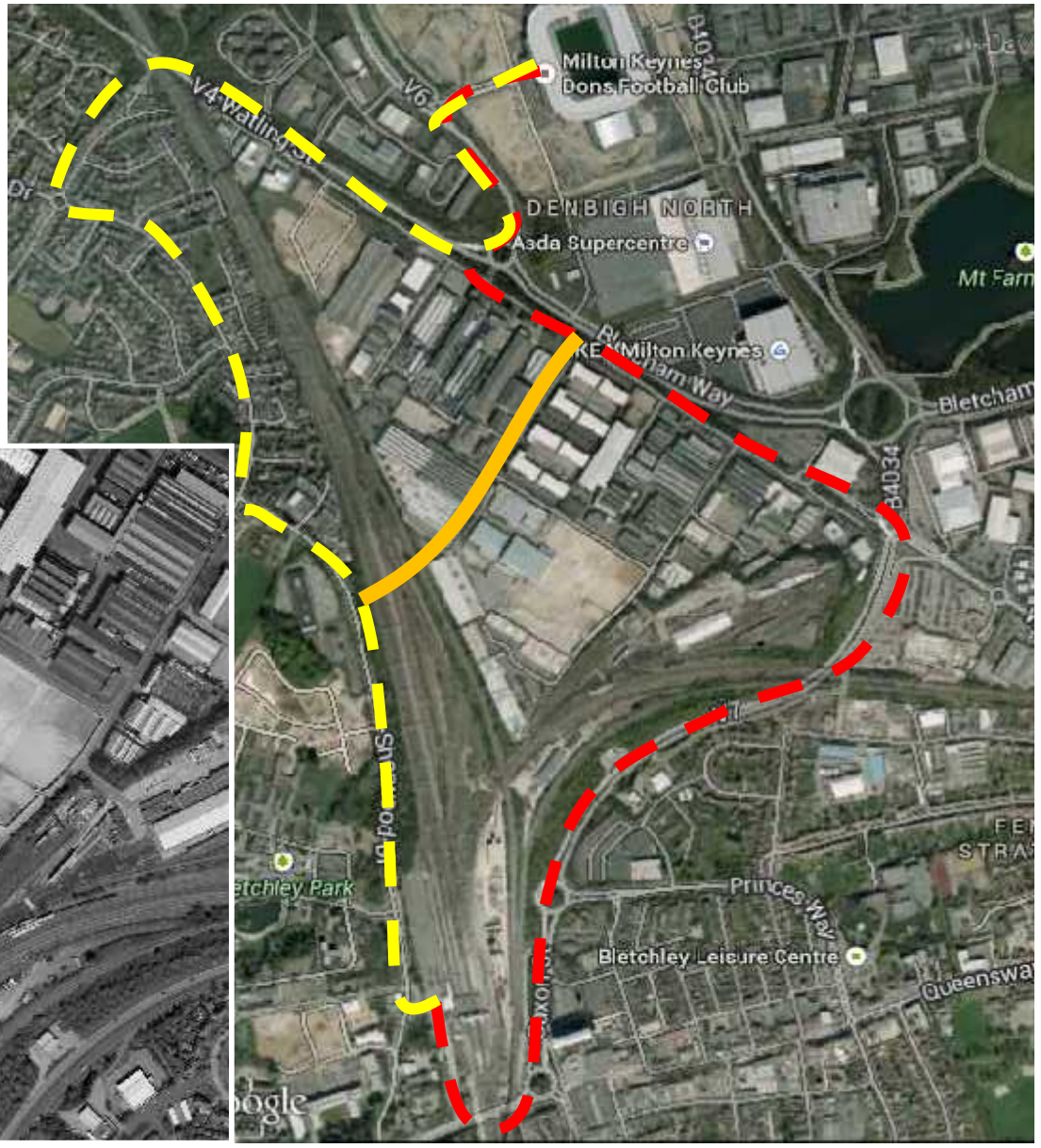
- Pedestrian Access

- Speed Management

integrated transport planning

Wider Access

- Wayfinding & Signs
  - Approx 30 mins walk
- Footbridge from Sherwood Dr to Third Ave
  - Approx 20 mins walk



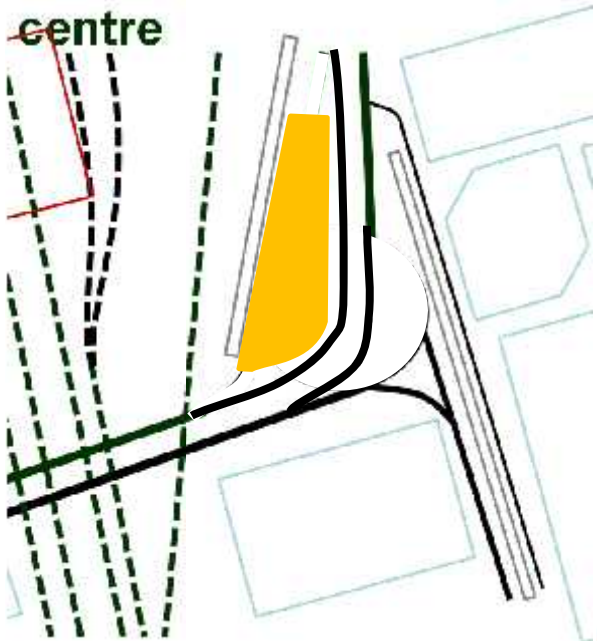
PACKAGE 5: INTEGRATION

Relocated Bus Station

- Relocate Bus Station to Brunel Roundabout (Square)
- Improved integration between town centre and bus services
- Better visibility between rail station and bus services

Constraints

- Bus station currently being upgraded in existing position
- Revised location would interrupt pedestrian flow between rail station and town centre



itp
integrated transport planning

Improved Information & Co-ordination

- Real-time Information Displays at bus & rail stations
- Co-ordinated Timetables
- ‘Where to Board Your Bus’ maps
- Themed wayfinding between stations

integrated transport planning

PRIORITIES

Key Questions

- Have we identified the main issues?
- Is anything missing?
- **What are the overall priorities for change?**
- Are there any ‘Red Herrings’?
- Who will be the main beneficiaries?
- Who else needs to be engaged?
- Potential funding sources?

integrated transport planning

Station Forecourt Area

- Wayfinding and Signs
- Public Realm Improvements
- Interchange
- Improved links to Buckingham Road
- Steps to Buckingham Road
  - Ramp
  - Lift
  - Grand Staircase
- Café on signalbox site

itp
integrated transport planning

Town Centre Environs

- Reduce capacity on Buckingham Rd & Saxon St
- Remove Brunel Roundabout – replace with Brunel Square
- Elevated footway on Buckingham Rd
- Painting / Landscaping
  - Under railway bridge
  - Green wall adjacent to Cemex site

itp
integrated transport planning

Sherwood Drive & beyond

- Pedestrian Crossings
- Speed Management
- Improved pedestrian links to MK Stadium
- Sherwood Dr footbridge to Third Ave

integrated transport planning

Integration

- Re-located bus station
- Real-time information
- Co-ordinated Timetables
- ‘Where to Board Your Bus’ maps
- Themed wayfinding between stations

itp
integrated transport planning

NEXT STEPS

Evaluate Priorities

Funding Sources

- SEMLEP
- Local Transport Plan
- Local Sustainable Transport Fund
- Developers / MK Tariff

Reporting

- Refine Strategy
- Reflect Priorities and Funding Availability
- Identify Short, Medium, Long Term
- Make Recommendations

itp
integrated transport planning

Thank you

Integrated Transport Planning Ltd
43 Temple Row
Birmingham
B2 5LS
T 0121 230 1700
F 0121 237 6100

Integrated Transport Planning Ltd
Millbank Tower, First Floor,
21-24 Millbank
London
SW1P 4QP
T +44 (0)203 642 1586

Integrated Transport Planning Ltd
50 North Thirteenth Street
Milton Keynes
MK9 3BP
T 01908 259 718
F 01908 605 747

Integrated Transport Planning Ltd
32a Stoney Street
Nottingham
NG1 1LL
T 0115 988 6905
F 0115 924 7101

www.itpworld.net

itp
integrated transport planning