LAND OFF KIDNAPPERS LANE, LECKHAMPTON

TRANSPORT STATEMENT

ROBERT HITCHINS LIMITED

DECEMBER 2018

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APPENDICES

1. INTRODUCTION

1.1. This Transport Statement (TS) has been prepared by PFA Consulting on behalf of Robert Hitchins Limited and their successors in title to the land in support of a planning application for a residential development of up to 25 dwellings on land off Kidnappers Lane, Leckhampton, to the south of Cheltenham. The application is to be in outline with all matters reserved.

1.2. A copy of the Illustrative Masterplan, which shows how the development could be accommodated, is reproduced at **Appendix A**.

1.3. The location and boundary of the application site is shown in **Figure 1**. The application site is on land occupied by a former plant nursery, located approximately 700m to the south of the A46 Shurdington Road.

Planning Background

1.4. The application site formed part of land allocated for strategic development at Leckhampton within the Submission Version (November 2017) of the Joint Core Strategy (JCS) prepared by Gloucester City, Cheltenham and Tewkesbury Borough Councils. However, the JCS authorities removed the Leckhampton strategic site allocation in the Adopted JCS (December 2017).

1.5. An outline planning application (Reference: 16/00202/OUT) was previously submitted to Cheltenham Borough Council (CBC) on 4 February 2016 for a residential development of up to 45 dwellings on the site. The application was refused by CBC on 20 April 2017. The application went to appeal in February 2018 (Reference: APP/B1605/W/17/3178952) and was dismissed on 4 April 2018.

1.6. With respect to transport and the impact of the proposed development on the surrounding local highway network, the Planning Inspector at Paragraph 37 of the Appeal Decision stated:

> **"I am satisfied that any increase in traffic from the proposed development would not result in severe harm to highway safety. Moreover, this is consistent with the Highways Authority who raised no objection in relation to capacity or highway safety."**

1.7. The current planning application seeks permission for up to 25 dwellings on the site, a reduction of 20 dwellings from the planning application submitted in 2016.

1.8. The emerging Cheltenham Plan has allocated land north of the application site for mixed-use development comprising 250 dwellings and a secondary school.

1.9. **Figure 2** provides the planning context showing historic and emerging Local Plan allocations and planning applications which have been submitted in the locality.

Scope of Assessment

1.10. The National Planning Policy Framework (NPPF), published in July 2018, states that all developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment.

1.11. The Government's planning practice guidance to the NPPF was launched as a web-based resource by the Department for Communities and Local Government (DCLG) in March 2014. The category dealing with Transport Assessments is contained in 'Travel plans, transport assessments and statements in decision-taking' (Reference ID: 42, Updated 06.03.2014). Reference has been made to the planning practice guidance throughout the preparation of this TS.

1.12. The importance of early pre-application discussions, in relation to establishing the level and scope of assessment required, is emphasised by the planning practice guidance. In producing the TS to support the earlier planning application for 45 dwellings on the site a scoping study was produced and issued to GCC. Comments received from GCC to this earlier scoping exercise have also been taken into account within this TS report.

1.13. The TS is structured as follows:

- Planning Policy Context – Chapter 2 considers the development in the context of relevant national and local transport policies.
- Existing Conditions – Chapter 3 examines the local transport conditions in the vicinity of the application site.
- Proposed Development – Chapter 4 provides a description of the development proposals and proposed means of access.
- Transport Sustainability and Accessibility – Chapter 5 examines the application site's accessibility to non-car modes of travel.
- Trip Generation – Chapter 6 sets out the predicted trip generation for all modes of travel.
- Summary and Conclusions are set out in Chapter 7.

2. PLANNING POLICY CONTEXT

National Planning Policy Framework

2.1. National guidance on planning is set out in the latest version of the National Planning Policy Framework (NPPF) published in July 2018 by the Ministry of Housing, Communities and Local Government. It sets out the Government's planning policies for England and how these should be applied. At the heart of the NPPF is a presumption in favour of sustainable development.

2.2. Chapter 9 of the NPPF deals with 'Promoting sustainable transport' and states at Paragraph 102 that:

> **"Transport issues should be considered from the earliest stages of plan-making and development proposals, so that:**
>
> **a) the potential impacts of development on transport networks can be addressed;**
>
> **b) opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised …**
>
> **c) opportunities to promote walking, cycling and public transport use are identified and pursued;**
>
> **d) the environmental impacts of traffic and transport infrastructure can be identified, assessed and taken into account …**
>
> **e) patterns of movement, streets, parking and other transport considerations are integral to the design of schemes, and contribute to making high quality places."**

2.3. In considering development proposals the NPPF at paragraph 108 identifies three main elements that the assessment of sites for plans or specific applications for development should take into account, which are whether:

> **a) "appropriate opportunities to promote sustainable transport modes can be – or have been - taken up, given the type of development and its location;**
>
> **b) safe and suitable access to the site can be achieved for all users; and**
>
> **c) any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."**

2.4. Paragraph 109 states that:

> **"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe."**

Gloucester, Cheltenham and Tewskesbury Joint Core Strategy

2.5. The Gloucester, Cheltenham and Tewskesbury JCS was adopted in December 2017. The JCS sets out the amount of new homes, jobs and supporting infrastructure that is needed to 2031 and details the strategy for how this development is to be delivered in a managed and resilient way whilst protecting the natural and built environment.

2.6. The JCS is an overarching strategic plan for the wider area covered by the three councils, setting out strategic objectives and site allocations for the respective local authority areas. It deals with key strategic issues including the Green Belt, flooding, transport, housing and employment, and the direction, timing and location of growth.

2.7. With regard to transport, Policy INF1 'Transport Network' states:

> **"Developers should provide safe and accessible connections to the transport network to enable travel choice for residents and commuters."**

2.8. Policy INF1 also states:

> **"Planning permission will be granted only where the impact of development is not considered to be severe. Where severe impacts that are attributable to the development are considered likely, including as a consequence of cumulative impacts, they must be mitigated to the satisfaction of the local Planning Authority in consultation with the Highway Authorities and in line with the Local Transport Plan."**

Third Gloucestershire Local Transport Plan 2011-2026

2.9. GCC adopted its third Local Transport Plan (LTP3) in March 2011. It covers the 15-year period from April 2011 to March 2026.

2.10. The overall vision of LTP3 is:

> **"Providing a safe and sustainable transport network within Gloucestershire where safe means a transport network that people feel safe and secure using, and sustainable means a transport network that is both environmentally and financially sustainable."**

2.11. LTP3 has to address national transport priorities at the local level, and GCC has aligned these four main themes, which are:

- **a greener, healthier Gloucestershire;**
- **sustainable economic growth;**
- **a safer, securer transport system; and**
- **good access to services.**

2.12. In relation to the location of new development, Policy P6d in LTP3 states that new developments should be located where sustainable modes of transport are, or can be made realistic alternatives for journeys to settlements with services and facilities and that new developments should be designed in a manner that will encourage travel by walking, cycling, and public transport.

2.13. LTP3 sets out 'area transport strategies' for five areas within Gloucestershire. Leckhampton falls under the Central Severn Vale Transport Strategy (CSVTS) area. Headline transport issues identified for this area include traffic congestion at peak times, road maintenance, access to rail services, and the variable quality of bus services. The CSVTS preferred strategy lists a number of schemes relevant to the proposed development. These include a new Park and Ride site at Shurdington or Brockworth, and improvements to cycling routes on a number of corridors including between Gloucester and Cheltenham on the A46.

Adopted Cheltenham Borough Local Plan (June 2006)

2.14. The 'Cheltenham Borough Local Plan: Second Review' was adopted on 29 June 2006 and sets out the policies and proposals to guide development in the Cheltenham Borough up to 2011.

2.15. The key transport objectives as set out in the Local Plan are:

- **Objective 32 – to promote sustainable transport**
- **Objective 33 – to safeguard the potential for the future provision of transport infrastructure**
- **Objective 34 – to ensure infrastructure in development is provided to a satisfactory standard**
- **Objective 35 – to safeguard or improve personal safety in the transport system**
- **Objective 36 – to contribute to road traffic reduction and improve traffic flow**

2.16. Policy CP5 'Sustainable Transport' relates to objectives 32, 35 and 36. It states:

> **"Development will be permitted only where it is located and designed so as to:**
>
> **(a) minimise the need to travel; and**
> **(b) provide adequate accessibility to the site for vehicles, including public transport, pedestrians, cyclists and people with disabilities; and**
> **(c) meet travel demands in safe and energy efficient ways; and**
> **(d) provide a level of parking space that will encourage walking, cycling and public transport and discourage use of the private car; and**
> **(e) meet Local Transport Plan targets for the proportion of trips to the site by each mode of transport."**

2.17. Policy TP1 'Development and Highway Safety' relates to objective 35. It states:

> **"Development will not be permitted where it would endanger highway safety, directly or indirectly, by:**
>
> **(a) creating a new access, altering an access or increasing the use of an existing access on to the main highway network, or at other points where it would be hazardous to highway users, unless a satisfactory improvement has been carried out; or**
> **(b) generating high turnover on-street parking."**

2.18. The application site was identified as white land on the Proposals Map. The Local Plan states that use of the land for development was to be addressed via the Regional Spatial Strategy and in preparing the Local Development Framework via cross boundary working (paragraph 7.42).

2.19. The transport section recognises that there is existing congestion but that the character of Cheltenham means that this needs to be addressed by demand management, not additional road capacity or car parking (paragraph 14.12). Development is to be guided to the most accessible locations (paragraphs 14.13 and 14.14).

2.20. Plan 12 shows the location of the existing and proposed cycle routes in Cheltenham. This plan shows cycle routes along Moorend Park Road and The Park to the northeast. A proposed traffic free route is also indicated between The Park and Woodlands Road.

Cheltenham Plan

2.21. A new Cheltenham Borough Local Plan is currently in its final stages of production. On 3 October 2018 CBC sent the Cheltenham Plan and its supporting documents to the Secretary of State for independent inspection. Once adopted, the Cheltenham Plan will alongside the JCS comprise the statutory Development Plan for Cheltenham up to 2031 and will supersede the current Adopted Cheltenham Borough Local Plan (June 2006).

2.22. In order to achieve new and improved facilities for the community and provide additional housing and employment opportunities, CBC has identified under Policy H2 the potential to deliver mixed-use development schemes on several sites within the urban area. Combining residential and other uses is considered to make better use of land to help address the requirement for development to be more sustainable.

2.23. Land allocated for mixed-use development under Policy H2 includes Site MD5 at Leckhampton located north of the application site. A plan showing the Leckhampton allocation (MD5) in the context of the application site is shown on **Figure 2**.

2.24. Policy MD5 specifies the site to deliver approximately 250 dwellings along with a secondary school with six forms of entry. The policy also states that development at this location will need to ensure that the JCS examinations' consideration and findings are fully taken in account. An extract from the Cheltenham Plan (October 2018) relating to the Leckhampton site (MD5) is included at **Appendix B**.

New Cheltenham Secondary School

2.25. On the 5th October 2018 GCC announced plans for a new secondary school in Leckhampton providing 900 new school places for students between 11-16 years old. A formal planning application is expected to be submitted next year.

2.26. The new school building is expected to be located within the emerging Cheltenham Plan mixed-use allocation at Leckhampton (MD5) as illustrated in **Figure 2**. It is anticipated that additional land owned by GCC south of Kidnappers Lane to the east of Farm Lane will also be required to provide the playing fields for the new school, as recommended in the 'New Cheltenham School Sequential Test Report', produced by SF Planning on behalf of GCC in November 2017.

2.27. GCC has confirmed that measures will be taken to address traffic issues from the new school with proposals looking to encourage a range of transport options to enable pupils to get to school without having to rely on private car travel. Traffic surveys around the Leckhampton and surrounding areas were undertaken in 2018. The data is currently being analysed regarding potential future impact on traffic and a report to GCC Highways is expected later this year.

3. EXISTING CONDITIONS

Local Highway Network

3.1. The application site is on land occupied by a former plant nursery, which is accessed from Kidnappers Lane. Kidnappers Lane is a single carriageway road approximately 1.3km in length that routes between the A46 Shurdington Road at its northern end and Church Road at its southern end. The existing access to the application site is shown in **Photograph 3.1** below.

Photograph 3.1: Existing access to the application site

3.2. Kidnappers Lane is characterised by two distinct sections. The northern section, between its junctions with the A46 Shurdington Road and Farm Lane, is approximately 280m in length. It has a 6m wide carriageway, is street lit, is subject to a 30mph speed limit, and is bordered by verges and hedgerows to the east and dwellings to the west. There is a footway on the east side of the carriageway. The northern section of Kidnappers Lane is shown in **Photograph 3.2** below.

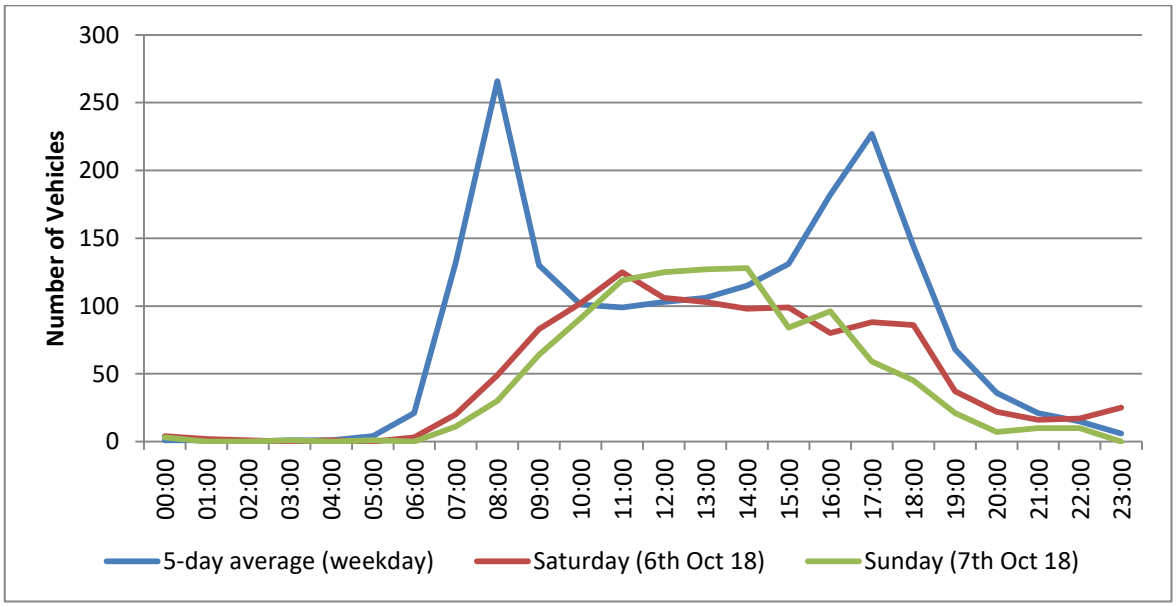
Photograph 3.2: Looking north along Kidnappers Lane between Farm Lane and A46

3.3. The southern section, between its junctions with Farm Lane and Church Road (and passing the application site), is approximately 1km in length. It has a 4-4.5m wide carriageway, is bordered by verges and hedgerows, and is subject to a 30mph speed limit. Footway provision is limited to the section between Church Road and to the north of Vineries Close (a length of approximately 160m). Street lighting is limited to the approaches to the junctions with Farm Lane and Church Road, and at the access to the application site. The southern section of Kidnappers Lane is shown in **Photograph 3.3** below.

Photograph 3.3: Looking north along Kidnappers Lane between Church Road and Farm Lane

3.4. In order to ascertain existing traffic conditions on Kidnappers Lane, an independent traffic survey specialist was commissioned to carry out an Automatic Traffic Count (ATC) survey. The ATC was undertaken from Tuesday 2 October 2018 to Monday 8 October 2018, located approximately 350m northeast of the Church Road/Kidnappers Lane junction. **Graph 3.1** shows the two way traffic flows comparing the 5-day weekday average with the Saturday and Sunday.

Graph 3.1: Hourly Two-Way Traffic Flows on Kidnappers Lane



3.5. The weekday AM peak hour was found to be 08:00-09:00 and the PM peak hour was found to be 17:00-18:00 during which Kidnappers Lane carried approximately 266 and 227 vehicles respectively. Two-way traffic flows are typically 1,800-2,000 a day (24-hours) on weekdays, and approximately 1,100 and 1,000 on Saturdays and Sundays. A summary of the ATC data is provided at **Appendix C**.

Public Rights of Way

3.6. There are a number of public rights of way (PROW) accessed from Kidnappers Lane in the vicinity of the application site. These provide connections to Farm Lane to the west, Church Road to the south, and the A46 Shurdington Road to the north, and are shown on **Figure 3**. No formal PROW's cross the application site.

3.7. Whilst no formal cycling facilities exist in the immediate vicinity of the application site, the majority of roads in the area are of level or shallow gradient, and, in many cases, lightly trafficked, and are therefore suitable for cycling. The 'Cheltenham and Tewkesbury Cycling Campaign', in partnership with GCC and CBC, has prepared the 'Cheltenham Cycle Map', which is reproduced at **Appendix D**. This shows Kidnappers Lane and Farm Lane as fairly quiet roads, where only a lower level of cycling experience is required, while Church Road, Leckhampton Lane and Leckhampton Road are considered to require a medium level of experience. Destinations within Cheltenham can be accessed via quieter roads where a lower level of experience is required. For destinations further afield, National Cycle Route (NCR) 41 passes through Cheltenham as shown on **Figure 4**.

Road Safety

3.8. From a review of GCC's online collision map it has been identified that no collisions resulting in personal injury have been recorded on Kidnappers Lane in the vicinity of the application site and at its junctions with Farm Lane and Church Road during the 5-year period from 1 January 2012 to 31 December 2017. GCC has also confirmed that no collisions have been recorded within this 5-

year period. It can therefore be concluded that there are no critical locations with poor collision records within the vicinity of the site. An extract from GCC's online collision map and the correspondence with GCC is reproduced at **Appendix E**.

Public Transport

Bus Services

3.9. The nearest bus stops to the application site are the 'Kidnappers Lane' and 'Farmfield Road' bus stops located on the A46 Shurdington Road. They are approximately 880m (a 10½ minute walk at 1.4m/s) and 1.1km (a 13 minute walk at 1.4m/s) from the centre of the application site respectively.

3.10. Alternative bus stops are available at 'Pilley Lane' and 'The Coop' on Leckhampton Road. These bus stops are located approximately 1.1km (a 13 minute walk at 1.4m/s) to the east of the application site.

3.11. **Table 3.1** provides a summary of the regular bus services operating from the nearby bus stops. Service 10 operated by Stagecoach and is one of their flagship 'Gold' luxury bus services providing a 10 minute weekday frequency between Gloucester and Cheltenham.

Table 3.1: Summary of Regular Bus Services Operating from Nearby Bus Stops

Bus Stop	Service	Route	Days	Approximate Frequency		
				First Service	Frequency (Daytime)	Last Service
Kidnappers Lane/ Farmfield Road	10	Lower Tuffley - Gloucester - Cheltenham	Mon-Fri	06:16	10 minutes	23:33
			Sat	07:05	12 minutes	23:33
			Sun	07:48	20 minutes	23:13
		Cheltenham - Gloucester - Lower Tuffley	Mon-Fri	06:23	10 minutes	23:52
			Sat	07:28	12 minutes	23:52
			Sun	08:08	20 minutes	23:32
	66	Cheltenham - Stroud - Stonehouse – Kingsway - Gloucester	Mon-Fri	07:18	60 minutes	18:56
			Sat	07:46	60 minutes	18:46
			Sun	10:48	120 minutes	18:48
		Gloucester - Kingsway - Stonehouse - Stroud - Cheltenham	Mon-Fri	06:58	60 minutes	18:28
			Sat	07:18	60 minutes	18:18
			Sun	10:15	120 minutes	18:15
Pilley Lane/ The Coop	F	Leckhampton - Pilley - Cheltenham - Rowanfield - St Mark's - Hester's Way	Mon- Fri	07:08	30 minutes	18:48
			Sat	07:38	30 minutes	18:48
			Sun	09:59	60 minutes	16:59

Notes:
Services 10, 66 and F are operated by Stagecoach; timetable information has been obtained from the Stagecoach Website (29.11.2018).

3.12. In addition to the bus services included in **Table 3.1**, the 'Kidnappers Lane' and 'Farmfield Road' bus stops also provide access to various local school services. These include Service DR8 (operated by Bennetts), which serves Sir Thomas Rich's School and High School for Girls, both located in Gloucester; and Service RC2 (operated by Bennetts), which serves The Crypt School and Ribston Hall High School, both located in Gloucester.

3.13. The routes of the bus services accessed from the bus stops on the A46 Shurdington Road and from Leckhampton Road, are shown on **Figure 5**.

Rail Services

3.14. The nearest railway station to the proposed development is Cheltenham Spa, situated approximately 2.4km to the north of the proposed development. It is managed by First Great Western and is situated on the Bristol-Birmingham railway line.

3.15. **Table 3.2** provides a summary of the facilities available at Cheltenham Spa.

Table 3.2: Summary of Facilities at Cheltenham Spa

Facility	Details
Car Parking	178 spaces (24hr Mon-Sun)
Disabled Car Parking	Yes
Taxi Rank	Yes
Cycle Storage	134 spaces (Sheltered and Unsheltered)
Staffing Times	Mon-Fri 08:00-19:00, Sat 09:00-17:00, Sun 10:00-16:30
Ticket Office Times	Mon-Fri 05:45-20:15, Sat 05:45-19:15, Sun 09:00-20:15
Self Service Ticket Machines	Yes

Note: Information from www.nationalrail.co.uk (26.09.2018).

3.16. **Table 3.3** provides a summary of the main weekday rail services available from Cheltenham Spa.

Table 3.3: Summary of Rail Services from Cheltenham Spa

Train Operator	Route	Weekday Frequency		
		Morning Peak (07:00-10:00)	Daytime	Evening Peak (16:00-19:00)
Cross Country Trains	Birmingham New Street - Cheltenham Spa - Gloucester - Bristol Temple Meads	10-30 minutes	10-30 minutes	10-30 minutes
	Bristol Temple Meads - Gloucester - Cheltenham Spa - Birmingham New Street	10-30 minutes	10-30 minutes	10-30 minutes
Cross Country Trains / First Great Western	Worcester - Cheltenham Spa - Gloucester - Bristol Temple Meads	5-20 minutes	5-20 minutes	5-20 minutes
	Gloucester - Cheltenham Spa - Worcester - Birmingham New Street	5-30 minutes	5-30 minutes	5-30 minutes
First Great Western	London Paddington - Reading - Swindon - Gloucester - Cheltenham Spa	60 minutes	60 minutes	60 minutes
	Cheltenham Spa - Gloucester - Swindon - Reading - London Paddington	60 minutes	60 minutes	60 minutes

Note: Timetable information obtained from National Rail Timetable (26.09.2018).

3.17. Approximate rail journey travel times to key destinations are as follows:

- Gloucester 10 minutes
- Worcester 30 minutes
- Birmingham New Street 50 minutes
- Swindon 1 hour 5 minutes
- Bristol Temple Meads 1 hour 10 minutes
- Reading 1 hour 40 minutes
- London Paddington 2 hours 5 minutes

3.18. The Cheltenham Spa rail network map is shown in **Figure 6.**

Local Facilities

3.19. **Figure 7** shows the existing facilities in the vicinity of the application site. The walking and cycling distances to key facilities from the proposed development are provided in **Chapter 5** of this report.

4. PROPOSED DEVELOPMENT

4.1. The development proposal is for up to 25 dwellings. The application is in outline with all matters reserved. A copy of the Illustrative Masterplan, which shows how the development could be accommodated, is reproduced at **Appendix A**.

4.2. The proposed development would be accessed from Kidnappers Lane, at the location of the existing access to the former plant nursery. While the detail of the access is a reserved matter, approval is sought by means of a condition for Robert Hitchins Limited drawing no. LE.KL.SA.01 Rev A which is reproduced at **Appendix F**. It will likely take the form of a simple priority junction, having consideration for traffic flows along Kidnappers Lane and traffic from the proposed housing. Forward visibility and junction visibility commensurate with the 'deemed to satisfy' visibility standards set out by GCC in its 'Standing Advice' document contained in Appendix C of *Manual for Gloucestershire Streets* (MfGS) are achievable.

4.3. To address the existing deficiency and, in accordance with Policy CP5 of the Adopted Cheltenham Borough Local Plan, it is proposed to provide a new footway and enhancements to street lighting on Kidnappers Lane as part of the proposed development. This would be along the section between the site and the existing footway that terminates to the north of Vineries Close (a length of approximately 260m), therefore ensuring appropriate pedestrian provision for residents of the proposed development travelling to/from Church Road.

4.4. The extent of the proposed improvements is shown on **Figure 8** with further details of the footway link shown in PFA drawing no. H561/2 reproduced at **Appendix G.** These improvements are considered to be commensurate with the scale of the proposed development, and would cost effectively mitigate the impact of the proposed development, in accordance with Paragraph 108 of the NPPF.

4.5. The Planning Inspector in his Appeal Decision relating to the earlier planning application for 45 dwellings on the site highlighted, at Paragraph 40, the benefits associated with the proposed improvements to street lighting and footpaths along Kidnappers Lane.

5. TRANSPORT SUSTAINABILITY AND ACCESSIBILITY

5.1. The NPPF requires new development to be sustainable, with the emphasis placed on encouraging walking, cycling and public transport modes of transport. The provision of alternative modes of sustainable transport, the encouragement of opportunities for walking and cycling and the close proximity of day-to-day destinations to residential areas are the basic elements of achieving transport sustainability.

Local Facilities

5.2. **Figure 7** shows the existing local facilities in the vicinity of the application site. For the purposes of this assessment, the key destinations that residents of the proposed development would be likely to travel to day-to-day are:

- Education
- Employment
- Food Retail

5.3. The accessibility of these key destinations to residents of the proposed development has been dealt with in turn below. Where relevant, distances to facilities have been discussed in the context of the suggested acceptable distances set out by the Institution of Highways and Transportation (IHT) in its *Guidelines for Providing for Journeys on Foot*, published in 2000.

Education

5.4. Leckhampton Primary School is located approximately 950m walk to the east of the application site (approximately 11½ minutes at 1.4m/s) and Warden Hill Primary School is located approximately 1.6km walk to the north of the application site (approximately 19 minutes at 1.4m/s). Cheltenham Bournside School & Sixth Form Centre is located approximately 2.5km walk to the north of the application site (approximately 30 minutes at 1.4m/s).

5.5. For School, *Guidelines for Providing for Journeys on Foot* suggests that 500m is the 'Desirable' walking distance, 1km is 'Acceptable' and 2km is the 'Preferred maximum'. Judged against these distances, Leckhampton Primary School is within the 'Acceptable' and Warden Hill Primary School is within the 'Preferred maximum'.

5.6. A new secondary school is included in the emerging Cheltenham Plan as part the Leckhampton (MD5) mixed-use development allocation, situated approximately 400m to the northwest of the application site, as shown in **Figure 2,** which would be within the 'Desirable' walking distance.

5.7. The distance to Cheltenham Bournside School & Sixth Form Centre exceeds the 'Preferred maximum' by 500m. It is considered that this additional distance will not be a barrier to pupils travelling from the proposed development.

Employment

5.8. Employment opportunities within the immediate vicinity of the application site are limited, however, regular bus services provide the opportunity to access employment in Cheltenham, Gloucester and Stroud, while Cheltenham itself is within cycling distance of the application site.

Food Retail

5.9. For weekly food shopping, it is likely that the majority of new residents would travel to Morrisons supermarket, located approximately 2km walk northwest of the application site (approximately 24 minutes at 1.4m/s). While this is beyond the 'Preferred maximum', the weekly shopping trip

would prove difficult on foot or by bicycle in any event and is generally undertaken by car, sometimes as part of another journey.

5.10. The daily 'top up' food shopping trip offers greater potential for travel on foot or by bicycle. Opportunities for daily 'top up' food shopping include The Co-operative, located approximately 1.1km walk east of the application site (approximately 13 minutes at 1.4m/s).

Routes to Local Facilities

5.11. Routes to local facilities would include the use of Kidnappers Lane, between its junctions with Farm Lane and Church Road. It has been identified that this has no footway provision along much of its length and limited street lighting.

5.12. To address the existing deficiency, it is proposed to provide a new footway and enhancements to street lighting on Kidnappers Lane as part of the proposed development. This would be along the section between the site and the existing footway that terminates to the north of Vineries Close (a length of approximately 260m), therefore ensuring appropriate pedestrian provision for residents of the proposed development travelling to/from Church Road. The extent of the proposed improvements is shown on **Figure 8**.

5.13. As part of the emerging Cheltenham Plan mixed-use allocation at Leckhampton (MD5), which includes a new secondary school, the provision of safe, easy and convenient pedestrian and cycle links, both within the site and to key destinations, are required. When considering the catchment of the proposed secondary school it is anticipated that footways and cycleways would be provided along the full length of Kidnappers Lane, complementing the footway link proposed to be delivered as part of this planning application.

Public Transport

5.14. The provision of attractive public transport services allow opportunities for sustainable travel over longer distances complementing the provision of walk and cycle links for shorter journeys.

5.15. Existing public transport services operating in the vicinity of the application site have been identified in **Chapter 3**. These include bus service 10, operating on a 10 minute frequency to Cheltenham and Gloucester, bus service 66, operating on an hourly frequency to Cheltenham and Stroud and bus service F, operating on a 30 minute frequency between Leckhampton and Cheltenham.

5.16. Bus service 10 and 66 are accessed from the 'Kidnappers Lane' and 'Farmfield Road' bus stops located on the A46 Shurdington Road, and are approximately 880m (a 10½ minute walk at 1.4m/s) and 1.1km (a 13 minute walk at 1.4m/s) from the centre of the application site respectively. While this exceeds the acceptable walking distance to a bus stop set out in the IHT's *Guidelines for Planning for Public Transport in Developments*, it is considered that residents of the proposed development would be willing to walk the additional distance to these bus stops given the regular frequency of bus services.

5.17. Bus service F is available from 'Pilley Lane' and 'The Coop' bus stops on Leckhampton Road, approximately 1.1km (a 13 minute walk at 1.4m/s) from the centre of the application site. These stops could be accessed by future residents via the proposed footway along Kidnappers Lane which would connect to the network of footways within Leckhampton.

5.18. Regular rail services are accessible from Cheltenham Spa railway station, which is within cycling distance of the application site and provides cycle storage facilities.

Summary

5.19. In summary, the application site is in a location where, in travel terms, an accessible and sustainable development can be achieved by way of upgrades and enhancements to existing infrastructure and new infrastructure in accordance with the NPPF.

6. TRIP GENERATION

Introduction

6.1. This chapter of the TS deals with the trip generation of the proposed 25 residential dwellings for the weekday AM and PM peak hour time periods.

Trip Generation

6.2. Trip generation, in terms of both person and vehicle trips, has been estimated for the proposed development using trip rates obtained from an interrogation of the Trip Rate Information Computer System (TRICS 2014c). The trip rates are consistent with those agreed by GCC for the previous planning application on the site.

6.3. Sites from the 'Houses Privately Owned' with the following characteristics were selected:

- Sites in England, Wales and Scotland, excluding Greater London;
- Located on the 'Edge of Town' and 'Suburban Area'; and
- More than 100 dwellings (Houses Privately Owned).

6.4. **Table 6.1** sets out person trip rates for privately owned housing, derived from TRICS, for both the weekday AM peak hour (08:00-09:00) and weekday PM peak hour (17:00-18:00) with the TRICS outputs reproduced at **Appendix H**.

Table 6.1: TRICS Trip Rates – Privately Owned Housing (trips per dwelling)

Time Period	Walk		Cycle		Public Transport		Vehicle Passenger		Vehicle Driver		Total	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
AM Peak (08:00-09:00)	0.041	0.182	0.004	0.014	0.003	0.020	0.044	0.241	0.163	0.461	0.255	0.918
PM Peak (17:00-18:00)	0.063	0.050	0.012	0.010	0.017	0.004	0.140	0.093	0.435	0.255	0.667	0.412

6.5. Applying the above trip rates to the proposed development provides an estimate of person trip generation of the proposed development during the weekday AM and PM peak hours, as shown in **Table 6.2**.

Table 6.2: Person Trip Generation of Proposed Development (25 dwellings)

Time Period	Walk		Cycle		Public Transport		Vehicle Passenger		Vehicle Driver		Total	
	In	Out	In	Out	In	Out	In	Out	In	Out	In	Out
Privately Owned Housing (25 dwellings)												
AM Peak (08:00-09:00)	1	5	0	0	0	1	1	6	4	12	6	23
PM Peak (17:00-18:00)	2	1	0	0	0	0	4	2	11	6	17	10

Note: Summation errors due to rounding.

6.6. **Tables 6.3** and **6.4** show the estimated two-way person trips by mode for both the weekday AM and PM peak hours for the proposed development and corresponding mode share. The percentage mode share for each of the peak period shows the Vehicle Driver mode of travel to be the highest, representing 53.2% of all person trips in the AM peak and 63.9% in the PM peak.

Table 6.3: Two-Way Trips by Mode and Mode Share – AM Peak Hour

	Walk	Cycle	Public Transport	Vehicle Passenger	Vehicle Driver	Total
Mode Share	19.0%	1.5%	2.0%	24.3%	53.2%	100.0%

Note: Summation errors due to rounding.

Table 6.4: Two-Way Trips by Mode and Mode Share – PM Peak Hour

	Walk	Cycle	Public Transport	Vehicle Passenger	Vehicle Driver	Total
Modal Share	10.5%	2.0%	1.9%	21.6%	63.9%	100.0%

Note: Summation errors due to rounding.

Vehicular Trip Generation

6.7. Based on the development assumptions and the trip rates set out above, the proposed development would generate the following vehicular trips during the weekday AM and PM peak hours, as set out in **Table 6.5**.

Table 6.5: Proposed Development Vehicular Trips

Time Period	Arrivals	Departures	Two-Way
AM Peak (08:00-09:00)	4	12	16
PM Peak (17:00-18:00)	11	6	17

Note: Summation errors due to rounding.

6.8. **Table 6.5** shows that the proposed development would generate 16 and 17 vehicular trips during the AM and PM peak hours respectively. These trips would be spread across the local highway network. It is therefore considered that the traffic generated by the proposed development will not materially change the existing conditions on the local highway network.

7. SUMMARY AND CONCLUSIONS

7.1. This TS has been prepared by PFA Consulting on behalf of Robert Hitchins Limited and their successors in title to the land in support of a planning application for a residential development of up to 25 dwellings on land off Kidnappers Lane, Leckhampton, to the south of Cheltenham. The application is to be in outline with all matters reserved.

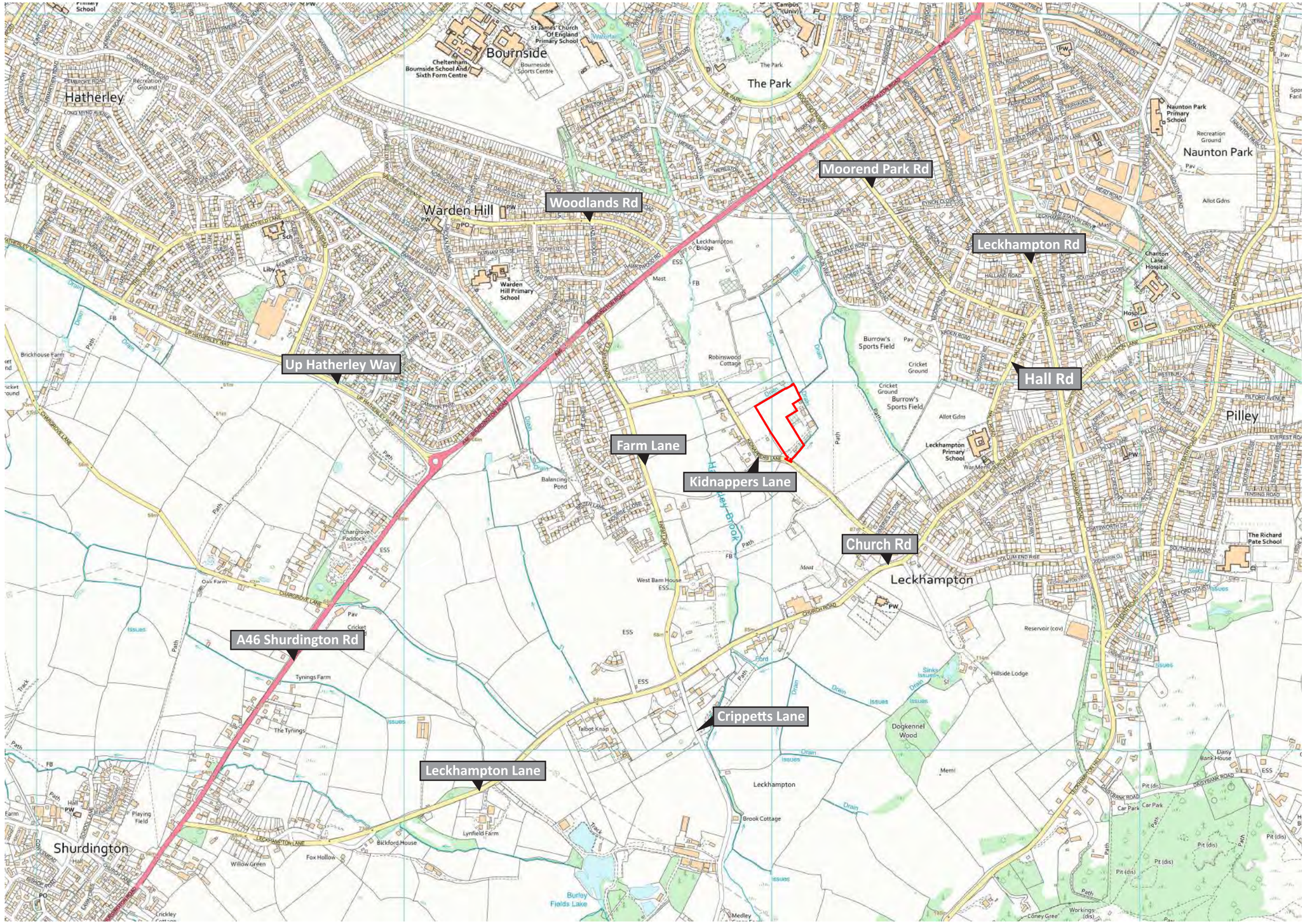
7.2. The application site is on land occupied by a former plant nursery, located approximately 700m to the south of the A46 Shurdington Road. Access to the proposed development would be from Kidnappers Lane, at the location of the existing access to the former plant nursery. Access in this location would not prejudice the delivery of development on land to the north which has been allocated in the emerging Cheltenham Plan for housing and a new secondary school.

7.3. It is proposed to provide a new footway and enhancements to street lighting on Kidnappers Lane as part of the proposed development. This would be along the section between the site and the existing footway that terminates to the north of Vineries Close. These improvements are considered to be commensurate with the scale of the proposed development, and would cost effectively mitigate the impact of the proposed development, in accordance with Paragraph 108 of the NPPF. Further improvements to pedestrian and cycle links along Kidnappers Lane and the surrounding areas will be provided as part of the development proposals for the proposed new secondary school on land to the north of the application site.

7.4. The proposed development is estimated to generate 29 person trips during the AM peak hour, of which 16 are predicted to be vehicular trips. During the PM peak hour, the proposed development is estimated to generate 27 person trips, of which 17 are predicted to be vehicular trips. These trips would be spread across the local highway network. It is therefore considered that the traffic generated by the proposed development will not materially change the existing conditions on the local highway network.

7.5. Overall, the TS has addressed the transport impacts of the proposed development. It has demonstrated that opportunities for sustainable travel have been taken up, safe and suitable access to the site can be achieved, and improvements can be undertaken within the transport network that effectively mitigates the impacts of the development in accordance with the NPPF, and Local Planning Policy. The additional traffic from the proposed development would not have a 'severe' impact on the operation of the surrounding local highway network in the context of paragraph 109 of the NPPF.

Figures



0 500m

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Application Site Boundary (indicative only)

Client

Robert Hitchins Limited

Project

Land off Kidnappers Lane, Leckhampton

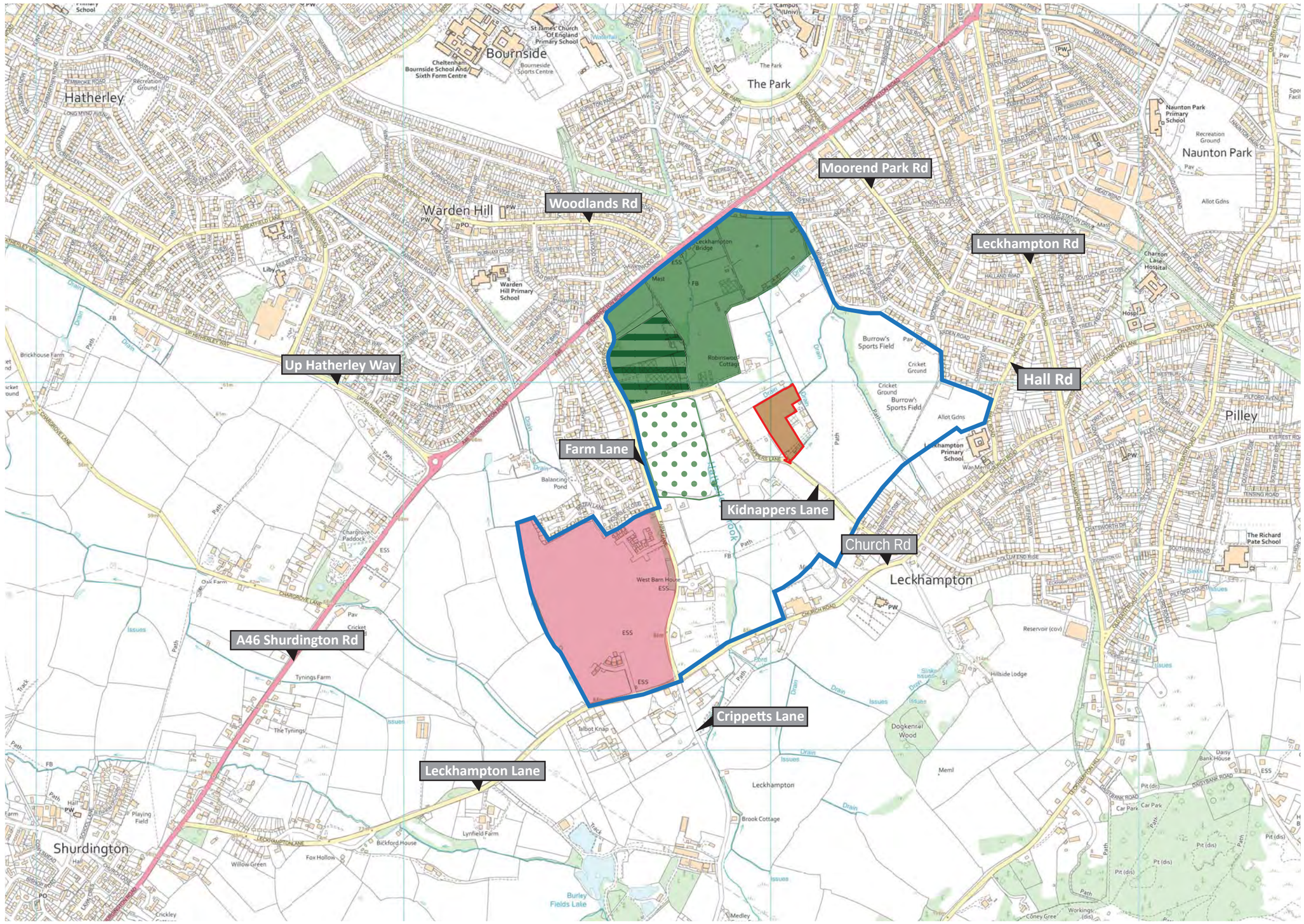
Figure Title

Location Plan

Figure No

Figure 1

Date	October 2018
Drawn By	EN
Checked By	AM
Scale	See Scale Bar
File Ref	H561/Figures/Fig1.ai
Doc Ref	H561



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- Application Site Boundary (indicative only)
- Former Leckhampton JCS Strategic Allocation
- Redrow Planning Application (Approved) - 377 dwellings (Ref:14/00838/FUL)
- Robert Hitchins Limited Planning Application (Refused) - 45 dwellings (Ref:16/00202/OUT)
- Emerging Cheltenham Plan Policy H2 - Leckhampton (MD5) - 250 dwellings + Secondary School
- Indicative Secondary School Location
- Land Proposed for Secondary School Playing Fields

Client

Robert Hitchins Limited

Project

Land off Kidnappers Lane, Leckhampton

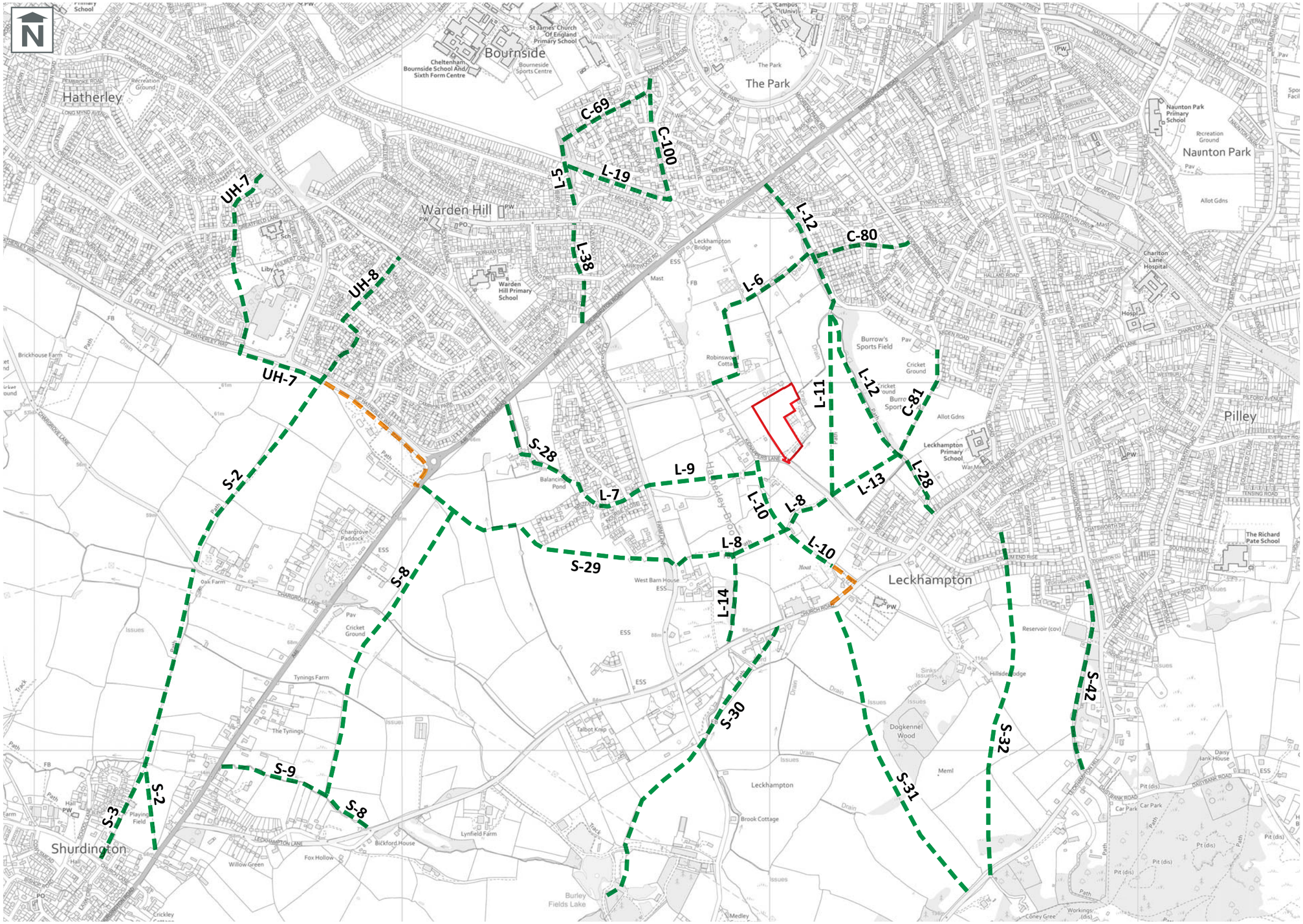
Figure Title

Planning Context Plan

Figure No

Figure 2

Date	November 2018
Drawn By	EN
Checked By	JA
Scale	See Scale Bar
File Ref	H561/Figures/Fig2.ai
Doc Ref	H561



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Application Site Boundary (indicative only)

Public Footpath

Promoted Routes

Footpath Key:
L = Leckhampton
UH = Up Hatherley
S = Shurdington
C = Cheltenham

Client

Robert Hitchins Limited

Project

Land off Kidnappers Lane, Leckhampton

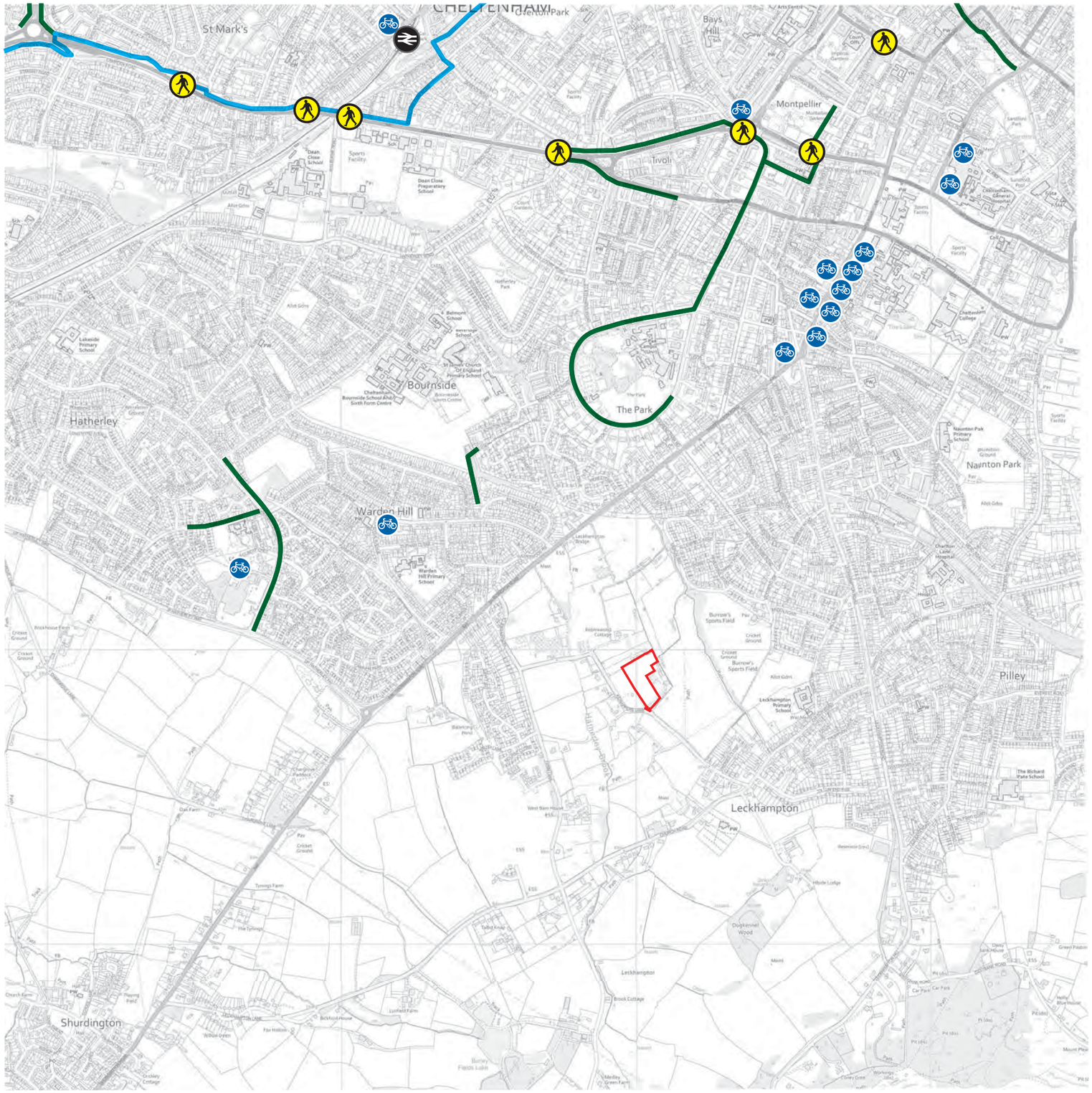
Figure Title

Public Rights of Way in the Vicinity of the Application Site

Figure No

Figure 3

Date	October 2018
Drawn By	EN
Checked By	MJD
Scale	See Scale Bar
File Ref	H561/Figures/Fig3.ai
Doc Ref	H561



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Application Site Boundary (indicative only)

National Cycle Route 41

Local Cycle Routes (identified by Sustrans)

Cycle Parking

Toucan Crossing

Client

Robert Hitchins Limited

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Land off Kidnappers Lane, Leckhampton

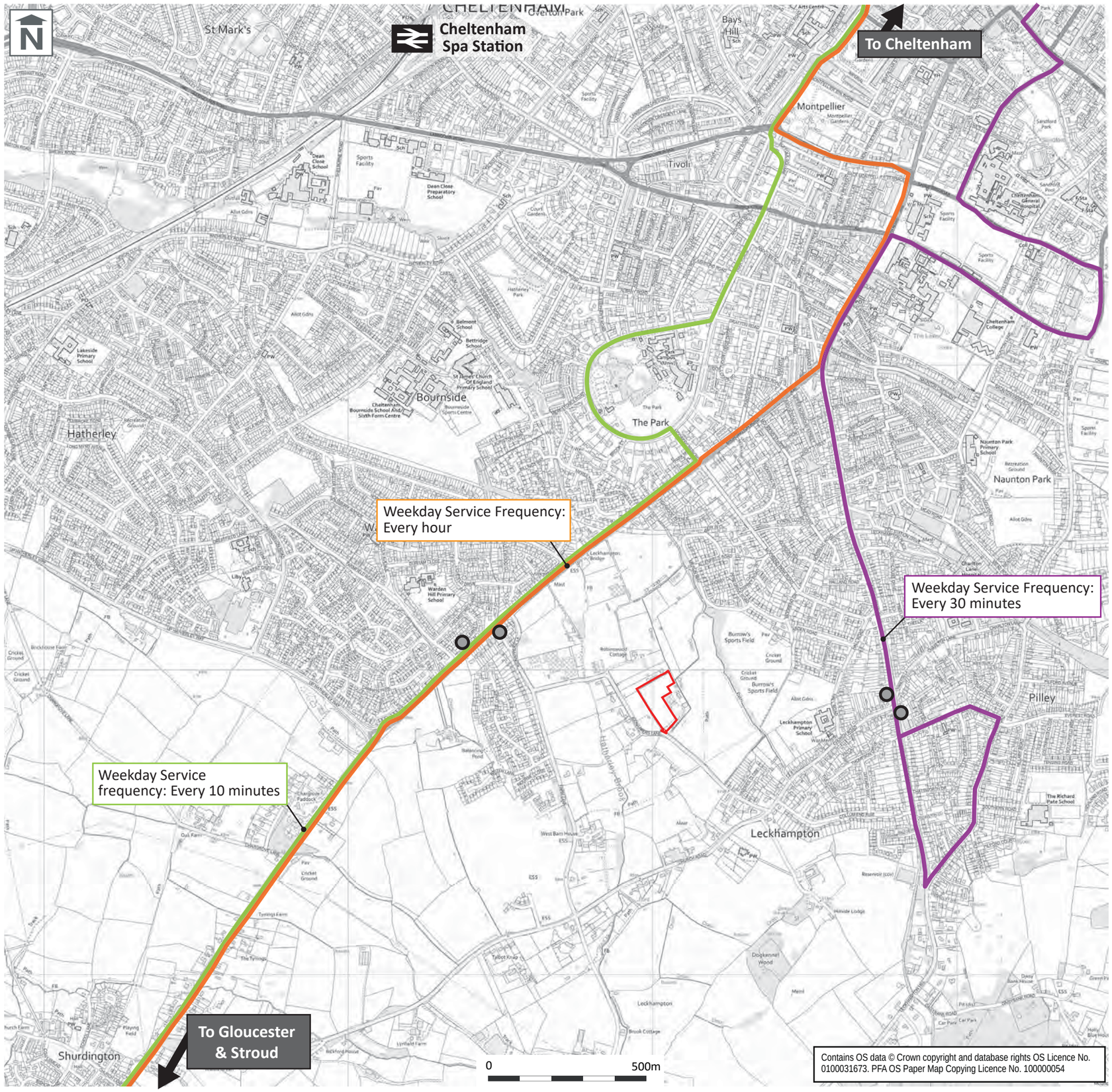
Figure Title

Existing Cycle Routes Plan

Figure No

Figure 4

Date	November 2018
Drawn By	EN
Checked By	JA
Scale	See Scale Bar
File Ref	H561/Figures/Fig4.ai
Doc Ref	H561



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Application Site Boundary (indicative only)

Bus Routes

- Stagecoach Gold Service 10
- Service 66
- Service F
- Nearest Bus Stops
- Railway Station

Client

Robert Hitchins Limited

Project

Land off Kidnappers Lane, Leckhampton

Figure Title

Existing Bus Routes Plan

Figure No

Figure 5

Date	November 2018
Drawn By	EN
Checked By	JA
Scale	See Scale Bar
File Ref	H561/Figures/Fig5.ai
Doc Ref	H561

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Note: Extract based on First Great Western Rail Network Map

Client

Robert Hitchins Limited

Project

Land off Kidnappers Lane, Leckhampton

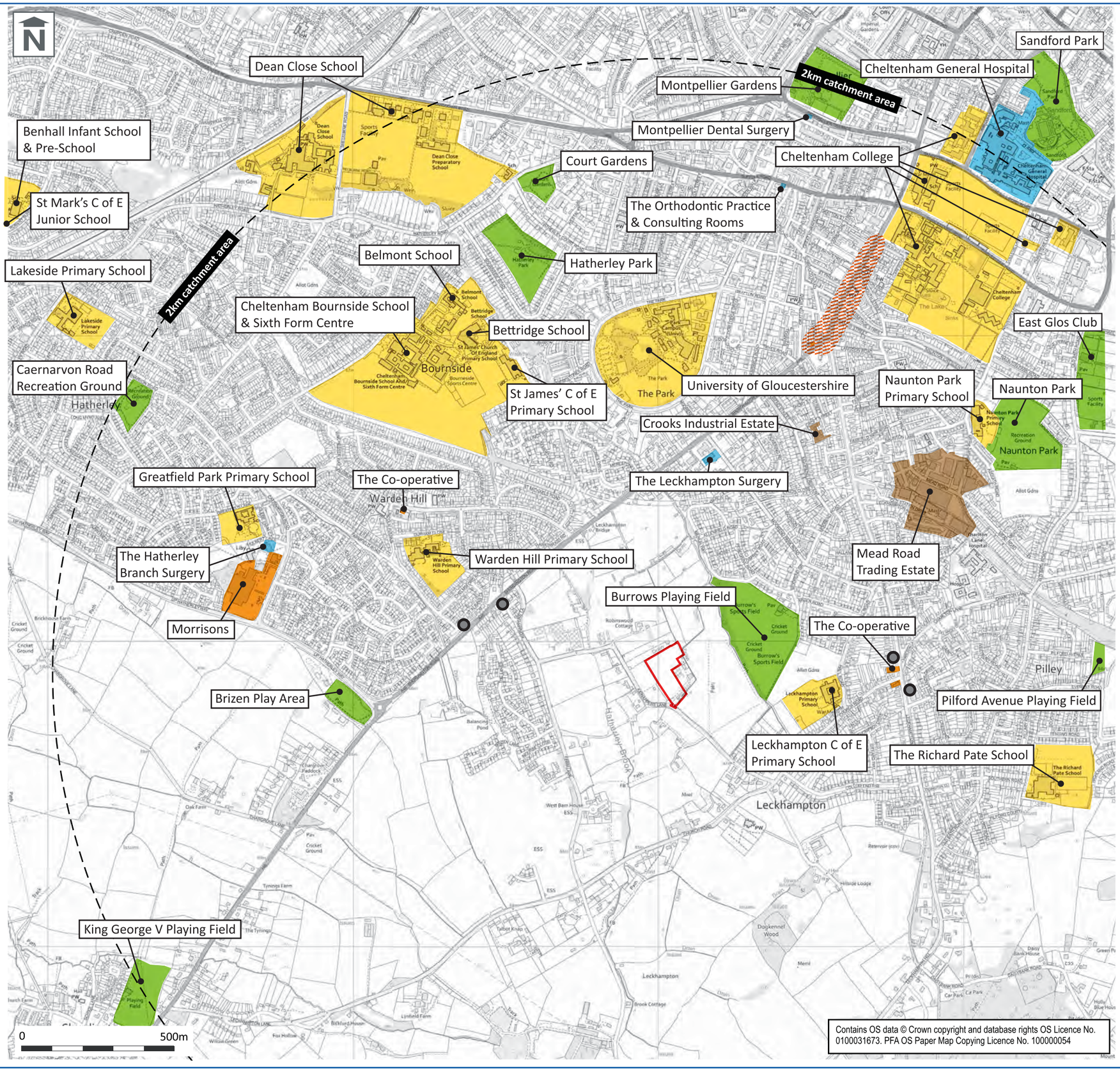
Figure Title

Cheltenham Spa Rail Network Map

Figure No

Figure 6

Date	November 2018
Drawn By	EN
Checked By	JA
Scale	See Scale Bar
File Ref	H561/Figures/Fig6.ai
Doc Ref	H561



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- Application Site Boundary (indicative only)
- Education
- Employment
- Health
- Leisure
- Retail
- Local Centre
- Local Bus Stops

Client

Robert Hitchins Limited

Project

Land off Kidnappers Lane, Leckhampton

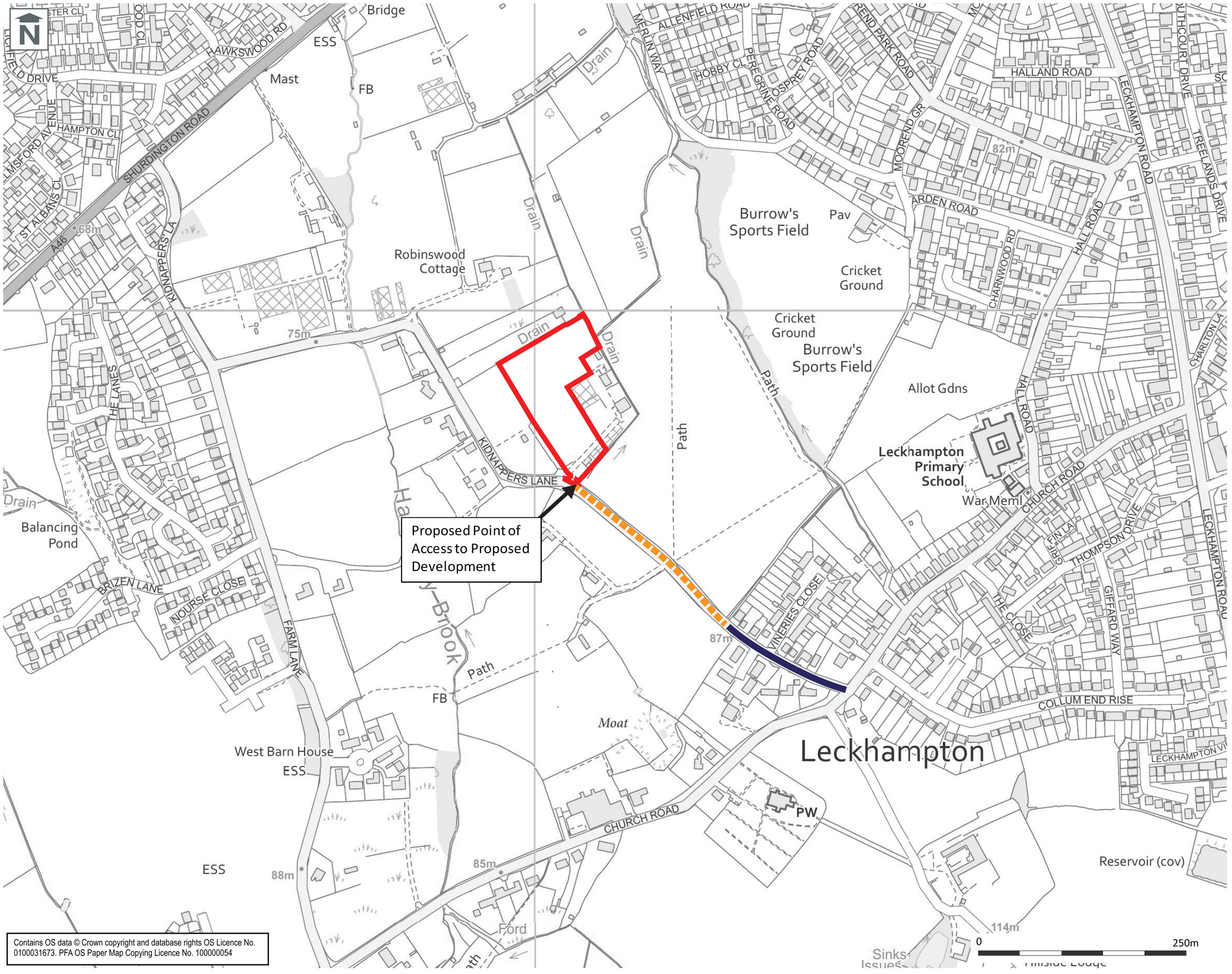
Figure Title

Local Facilities Plan

Figure No

Figure 7

Date	November 2018
Drawn By	EN
Checked By	JA
Scale	See Scale Bar
File Ref	H561/Figures/Fig7.ai
Doc Ref	H561



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Application Site Boundary (indicative only)

Existing Footway Provision

Proposed Footway & Street Lighting

Client

Robert Hitchins Limited

Project

Land off Kidnappers Lane, Leckhampton

Figure Title

Proposed Improvements on Kidnappers Lane

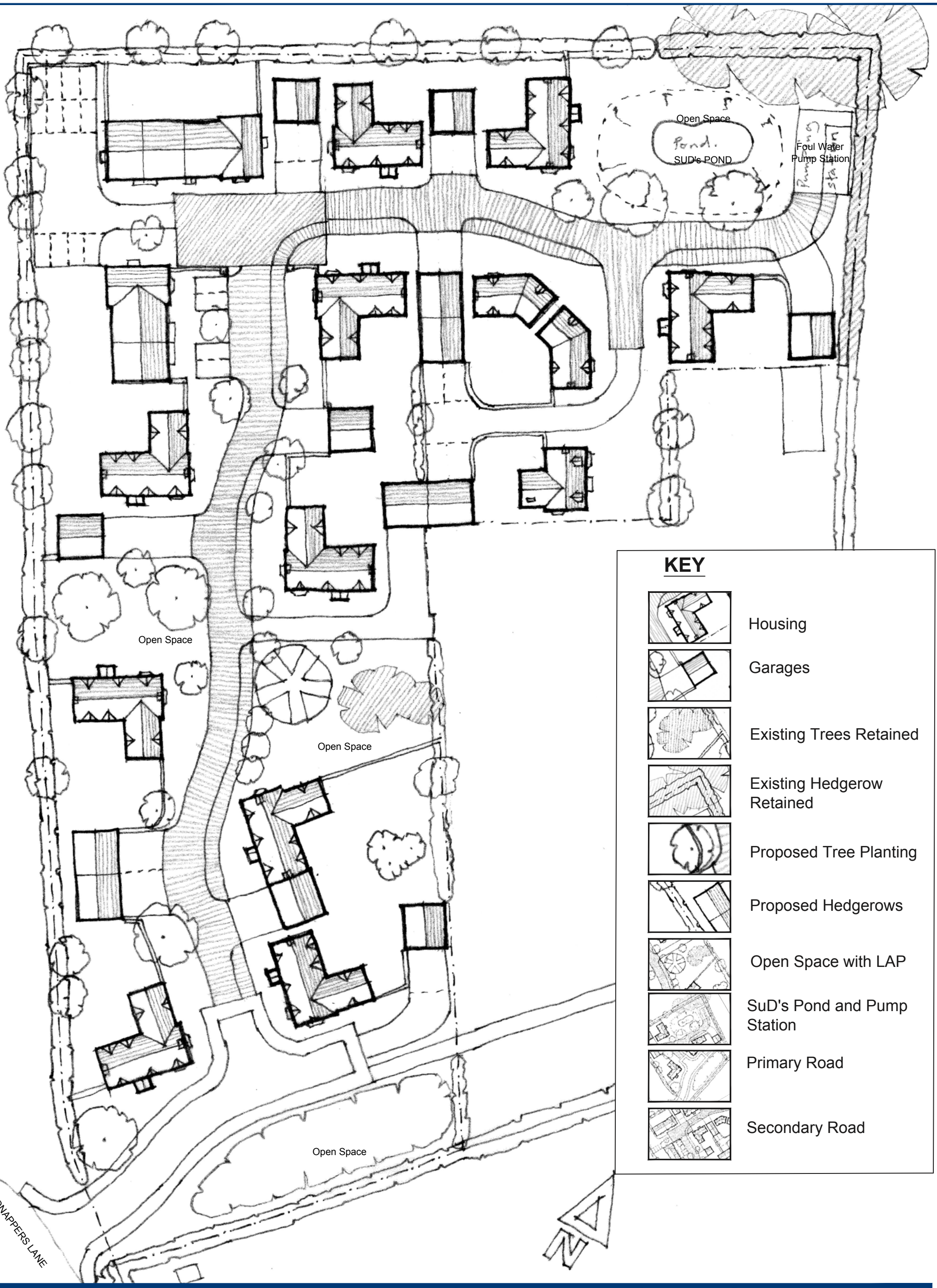
Figure No

Figure 8

Date	November 2018
Drawn By	EN
Checked By	JA
Scale	See Scale Bar
File Ref	H561/Figures/Fig8.ai
Doc Ref	H561

Appendices

Appendix A



KEY

- Housing
- Garages
- Existing Trees Retained
- Existing Hedgerow Retained
- Proposed Tree Planting
- Proposed Hedgerows
- Open Space with LAP
- SuD's Pond and Pump Station
- Primary Road
- Secondary Road

Site Name: Land off Kidnappers Lane, Leckhampton	Drawing Number: 300.P.3		Revision: K
Drawing Title: Illustrative Masterplan	Drawn By: POK	Date: 20.08.18	Scale: 1:500@A3

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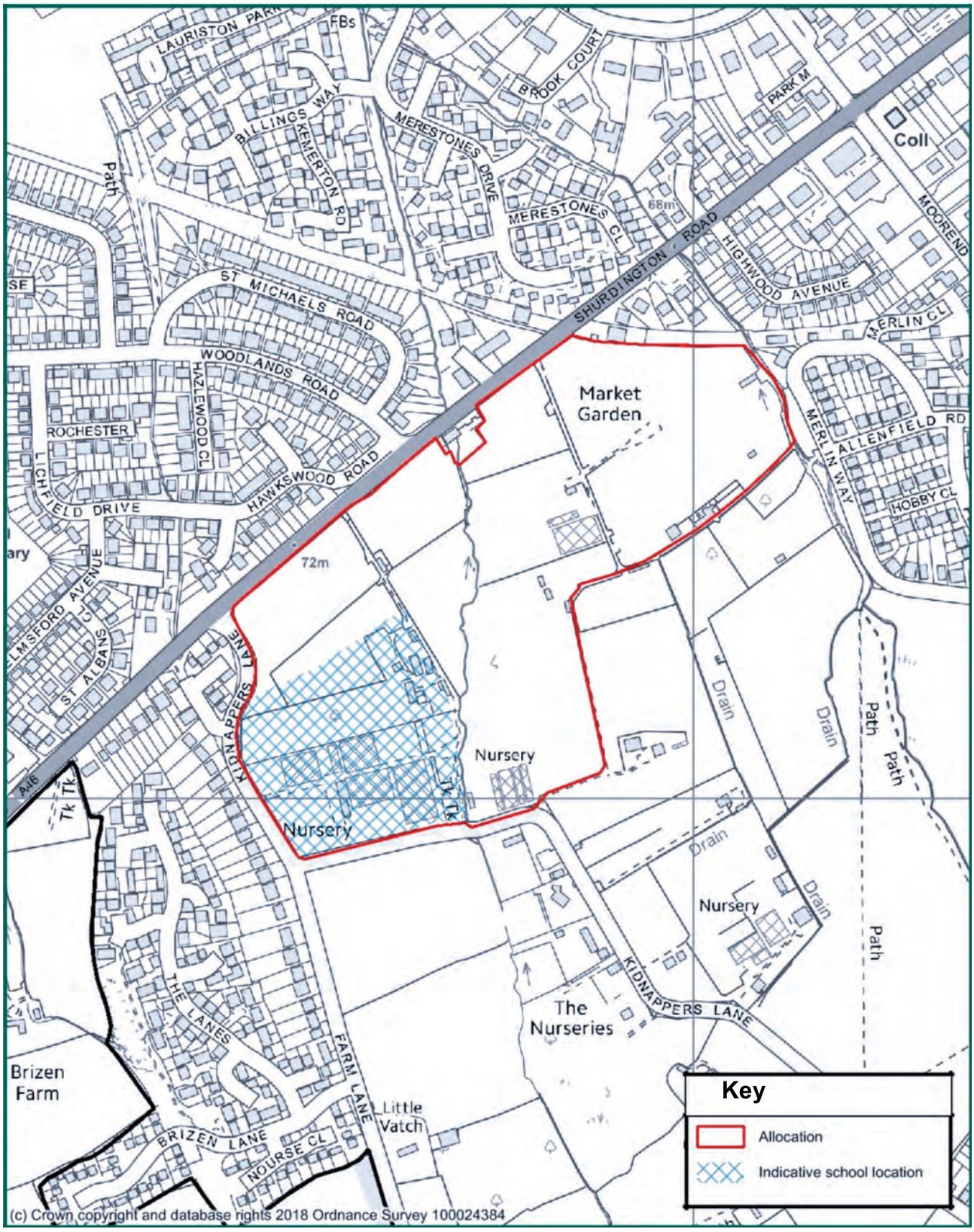
Appendix B

POLICY MD5: LECKHAMPTON

Site description	Originally a JCS site, development at this location will need to take into account landscape impacts, highways issues and green space. Site boundaries are based on the JCS Inspector's comments in her Note of Recommendations from 21 July 2016. Development at this location will need to ensure that the JCS examination's consideration and findings related to this site are fully taken into account. Along with this, the site has an extensive planning history related to the earlier, larger proposal (13/01605/OUT); the Inspector's and Secretary of State's findings in this appeal should also be reflected in any future scheme.
Site area	15ha
Constraints	• Local Green Space • Impact on AONB • Flood Risk mitigation • Highways • Heritage assets
Site specific requirements	• Approximately 250 dwellings • Provision of a secondary of school with six forms of entry • Provision of playing fields for the school on land within the designated LGS • Safe, easy and convenient pedestrian and cycle links within the site and to key centres • A layout and form that respects the existing urban and rural characteristics of the vicinity • A layout and form of development that respects the character, significance and setting of heritage assets that may be affected by the development • A layout and form of development that respects the visual sensitivity and landscape character of the site as part of the setting for the AONB



Policy H2: Leckhampton (MD5)

1:5000

CHELTENHAM BOROUGH COUNCIL

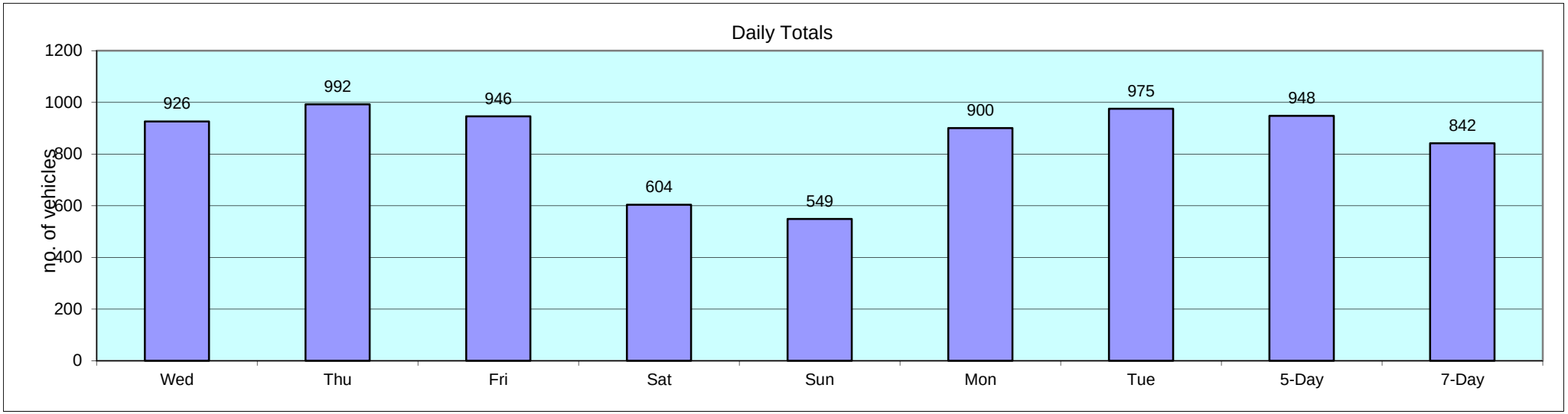
Appendix C

23546		LECKHAMPTON								
		OCTOBER 2018								
Site	**Location**	**Direction**	**Start Date**	**End Date**	**Posted Speed Limit (PSL)**	**Total Vehicles**	**5 Day Ave.**	**7 Day Ave.**	**Average 85%ile Speed**	**Average Mean Speed**
Site No: 23543001	Kidnappers Lane, Leckhampton (TG Pole) SO 94118 19735	Channel: Northwestbound	Wed 03-Oct-18	Tue 09-Oct-18	30	5892	948	842	35.7	30.8
		Channel: Southeastbound	Wed 03-Oct-18	Tue 09-Oct-18		5869	965	838	35.0	29.9

23546		LECKHAMPTON		Site No: 23543001 Channel: Northwestbound		Location	Kidnappers Lane, Leckhampton (TG Pole)		
TIME PERIOD	Wed 03/10/18	Thu 04/10/18	Fri 05/10/18	Sat 06/10/18	Sun 07/10/18	Mon 08/10/18	Tue 09/10/18	5-Day Av	7-Day Av
Week Begin: 03-Oct-18									
00:00	**2**	0	2	1	2	0	0	1	1
01:00	**0**	0	0	1	0	1	0	0	0
02:00	**0**	1	1	1	0	0	0	0	0
03:00	**3**	1	0	0	0	1	0	1	1
04:00	**1**	1	1	1	0	0	0	1	1
05:00	**1**	1	2	0	0	3	2	2	1
06:00	**12**	17	13	0	0	11	10	13	9
07:00	**78**	72	58	9	4	72	69	70	52
08:00	**108**	117	135	30	16	112	107	116	89
09:00	**57**	78	49	53	34	58	81	65	59
10:00	**62**	51	61	63	53	46	53	55	56
11:00	**43**	55	47	67	71	56	58	52	57
12:00	**45**	50	47	50	71	38	51	46	50
13:00	**54**	51	52	39	48	54	71	56	53
14:00	**56**	64	57	44	68	55	49	56	56
15:00	**62**	61	76	45	47	64	59	64	59
16:00	**91**	111	109	42	47	103	92	101	85
17:00	**125**	114	118	39	33	111	124	118	95
18:00	**64**	66	54	49	25	52	68	61	54
19:00	**29**	34	28	24	14	33	39	33	29
20:00	**14**	23	12	12	4	15	22	17	15
21:00	**5**	10	11	10	7	9	10	9	9
22:00	**13**	10	4	12	5	5	10	8	8
23:00	**1**	4	9	12	0	1	0	3	4
12H,7-19	**845**	**890**	**863**	**530**	**517**	**821**	**882**	**860**	**764**
16H,6-22	**905**	**974**	**927**	**576**	**542**	**889**	**963**	**932**	**825**
18H,6-24	**919**	**988**	**940**	**600**	**547**	**895**	**973**	**943**	**837**
24H,0-24	**926**	**992**	**946**	**604**	**549**	**900**	**975**	**948**	**842**
Am	**08:00**	**08:00**	**08:00**	**11:00**	**11:00**	**08:00**	**08:00**	**-**	**-**
Peak	**108**	**117**	**135**	**67**	**71**	**112**	**107**	**116**	**102**
Pm	**17:00**	**17:00**	**17:00**	**12:00**	**12:00**	**17:00**	**17:00**	**-**	**-**
Peak	**125**	**114**	**118**	**50**	**71**	**111**	**124**	**118**	**102**

23546	LECKHAMPTON	Site No: 23543001	Location	Kidnappers Lane, Leckhampton (TG Pole)
		Channel: Northwestbound		

TIME PERIOD	Wed 03/10/18	Thu 04/10/18	Fri 05/10/18	Sat 06/10/18	Sun 07/10/18	Mon 08/10/18	Tue 09/10/18	5-Day Av	7-Day Av

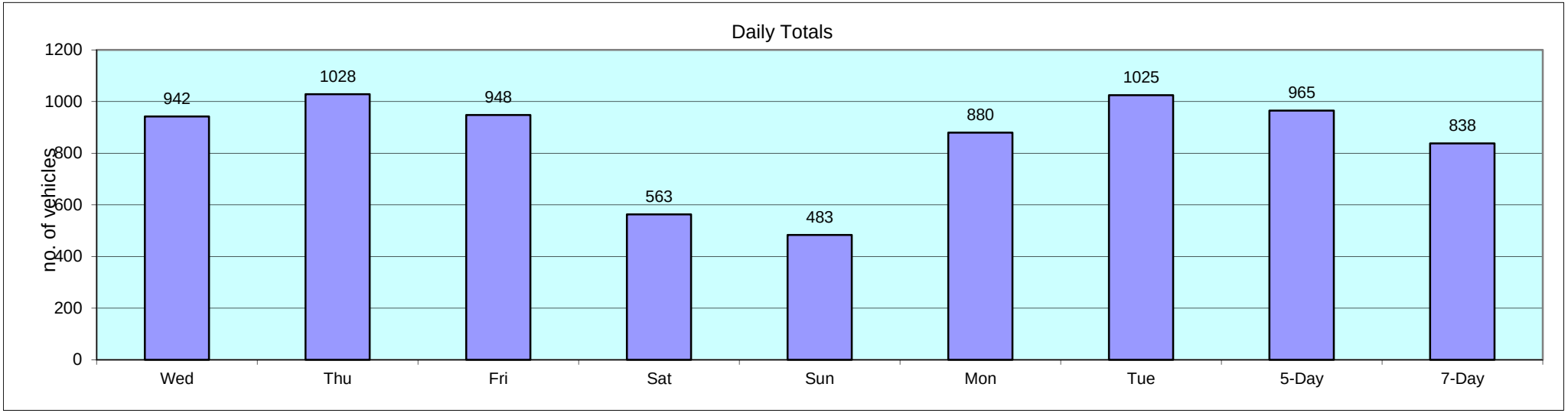


Data produced by
Axiom Traffic Ltd

23546		LECKHAMPTON		Site No: 23543001 Channel: Southeastbound		Location	Kidnappers Lane, Leckhampton (TG Pole)		
TIME PERIOD	Wed 03/10/18	Thu 04/10/18	Fri 05/10/18	Sat 06/10/18	Sun 07/10/18	Mon 08/10/18	Tue 09/10/18	5-Day Av	7-Day Av
Week Begin: 03-Oct-18									
00:00	**0**	1	0	3	1	0	0	0	1
01:00	**2**	0	0	1	0	1	0	1	1
02:00	**0**	0	0	0	0	1	0	0	0
03:00	**0**	1	1	0	1	0	0	0	0
04:00	**0**	0	1	0	0	1	0	0	0
05:00	**3**	2	1	0	1	2	2	2	2
06:00	**9**	8	6	3	0	7	12	8	6
07:00	**64**	79	46	11	7	60	60	62	47
08:00	**150**	163	146	19	14	142	151	150	112
09:00	**59**	71	60	30	30	56	78	65	55
10:00	**37**	51	55	39	38	44	42	46	44
11:00	**41**	35	54	58	48	40	66	47	49
12:00	**55**	61	54	56	54	54	59	57	56
13:00	**50**	60	48	64	79	50	40	50	56
14:00	**57**	49	75	54	60	51	61	59	58
15:00	**66**	65	84	54	37	62	57	67	61
16:00	**83**	74	89	38	49	81	80	81	71
17:00	**117**	109	95	49	26	105	118	109	88
18:00	**70**	104	60	37	20	62	121	83	68
19:00	**33**	39	32	13	7	30	43	35	28
20:00	**23**	26	19	10	3	15	14	19	16
21:00	**10**	15	10	6	3	11	13	12	10
22:00	**9**	11	8	5	5	3	6	7	7
23:00	**4**	4	4	13	0	2	2	3	4
12H,7-19	**849**	**921**	**866**	**509**	**462**	**807**	**933**	**875**	**764**
16H,6-22	**924**	**1009**	**933**	**541**	**475**	**870**	**1015**	**950**	**824**
18H,6-24	**937**	**1024**	**945**	**559**	**480**	**875**	**1023**	**961**	**835**
24H,0-24	**942**	**1028**	**948**	**563**	**483**	**880**	**1025**	**965**	**838**
Am	**08:00**	**08:00**	**08:00**	**11:00**	**11:00**	**08:00**	**08:00**	**-**	**-**
Peak	**150**	**163**	**146**	**58**	**48**	**142**	**151**	**150**	**123**
Pm	**17:00**	**17:00**	**17:00**	**13:00**	**13:00**	**17:00**	**18:00**	**-**	**-**
Peak	**117**	**109**	**95**	**64**	**79**	**105**	**121**	**109**	**99**

23546	LECKHAMPTON	Site No: 23543001	Location	Kidnappers Lane, Leckhampton (TG Pole)
		Channel: Southeastbound		

TIME PERIOD	Wed 03/10/18	Thu 04/10/18	Fri 05/10/18	Sat 06/10/18	Sun 07/10/18	Mon 08/10/18	Tue 09/10/18	5-Day Av	7-Day Av



Data produced by
Axiom Traffic Ltd

Appendix D

Cheltenham is a great town for cyclists;
nowhere is too far, steep hills are rare,
and there are few fast roads to bar your way.

Cycling in Cheltenham

The road network on the map overleaf is graded according to the degree of skill and experience needed to cycle each route. If you are a beginner or haven't cycled for some time, you should build up your confidence and basic skills on the yellow roads where traffic is lighter and speeds are low. As your cycling skills increase, so you can explore the green roads. Only when you are able to deal with heavier and faster traffic should you venture onto the blue and pink routes.

However, although Cheltenham has provided a growing number of useful routes for the cyclist, these should not be thought of as necessarily *safe* routes. Pavement cycle paths, in particular, still require caution and a low speed, especially at junctions. Wherever paths are shared with pedestrians, please be considerate; make sure that others are aware of you, and pass slowly leaving as much room as possible.

The best way to keep yourself safe - as well as to make cycling more enjoyable - is to learn how to share the roads with other traffic. This is not as difficult as it might at first seem and is well within the capabilities of most people. Cycling tuition is available for adults and teenagers as well as younger children, and the Cheltenham & Tewkesbury Cycle Campaign can advise you who best to contact.

Cheltenham – at the heart of the countryside

There are many interesting and attractive places within a ten mile radius of the town that can be reached easily by bike.

How long to cycle a mile?
10 minutes at leisure
5 minutes at moderate pace
3 minutes at speed


Jubilee Bridge

Cycle for health

People who cycle regularly not only enjoy the fitness levels of non-cyclists ten years their junior, but, on average, live several years longer too. They also suffer less from ill health and illness. In fact, research has shown cycling to be the most effective way to increase longevity!

Cycling for as little as 15 to 20 minutes a day will significantly reduce your risk of heart disease, many cancers, stroke, obesity, stress and other common disorders.

And remember, cycling is fun - it's guaranteed to add enjoyment to your everyday life!

Cycle parking and security

Whenever you leave your bike in a public place, always lock it by securing the frame of the bike to a permanent fixture, such as a solid cycle stand. It is best to use a D lock, though even these can vary in quality, so choose a sturdy one. And remember, take care not to cause an obstruction to pedestrians.

Taking your bike by train

You can range further afield by taking your bike with you on the train. Most trains take at least two bikes but a reservation is necessary on Cross Country and London services. Alternatively, you can cycle to the station - an easy ride from most parts of Cheltenham - and leave your bike locked up at the available cycle stands. If you need to use the train frequently, why not buy a folding bike? These can be taken on any train without a reservation.

Choosing and maintaining your bicycle

For safe riding, there must be a good fit between you and your bicycle. It is important to make sure that the saddle is properly adjusted and that the brakes work correctly.

Moving parts benefit from regular lubrication and cleaning, resulting in a better performing bike that is easier to cycle.

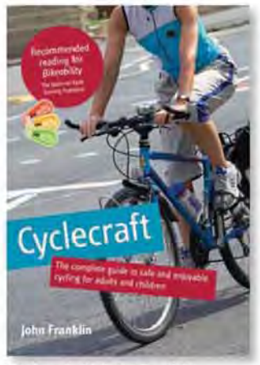
It is also important to check your tyres - worn tyres will puncture easily and can be slippery in the wet. Most people under-inflate their tyres making cycling more difficult.

Cycle Training

Many people, particularly those new to cycling or those who feel less confident on the road, benefit from training.

Local trainers are available. Contact Cheltenham & Tewkesbury Cycle Campaign for more information.

Training is usually one to one and gives people the necessary knowledge, skills and, crucially, the confidence to take to the roads and enjoy all the benefits of cycling. Tuition is in accordance with the National Cycle Training Standard. Lessons are designed for the specific needs of the individual. People are matched with their own personal cycling instructor and the trainee chooses the time and place. Trainees learn how to get comfortable on their bikes, control them properly, how to anticipate other road users' behaviour, and how to perform a range of manoeuvres safely and confidently.



Cyclecraft by John Franklin
(Publisher: The Stationery Office ISBN 978-0-11-703740-3)
is the definitive guide to cycling for adults and children and recommended reading for the National Cycle Training Standard.

Cheltenham & Tewkesbury Cycling Campaign

Cheltenham & Tewkesbury Cycling Campaign

The Cheltenham & Tewkesbury Cycle Campaign exists to promote the interests of town cyclists in Cheltenham. It is affiliated to the Cyclenation, a federation of cycle campaigns throughout the country.

In common with other cycle campaign groups in Britain and across Europe, the CCC recognises four crucial factors in the development of cycling: Encouragement, Education, Engineering and Enforcement.

The campaign maintains regular contact with County and Borough Councils, as well as other agencies in Gloucestershire, in an effort to improve conditions for cyclists and to encourage others to use cycles more widely as part of their daily life.

Cheltenham & Tewkesbury Cycle Campaign
G Ricketts on 01242 513534
email: secretary@cyclecheltenham.org.uk
web site at www.cyclecheltenham.org.uk


Broadway

Other useful contacts

Cyclists' Touring Club
The largest membership cycle organisation promoting travel by bicycle and defending cyclists rights with many services for its members
0870 873 0061
www.ctc.org.uk

Cheltenham and County Cycling Club
Mike Dunsby 01242 255080
www.cc-cc.co.uk

Vision 21 & Cheltenham Centre for Change
Promotes sustainable developments for Gloucestershire
30 St Georges Place, Cheltenham
01242 224321 / 070111

Travelwise
01452 425557
The Gloucestershire County Council Campaign to encourage drivers to reduce their use of the car.

Cycle Shops

1 **Roylan Cycles** 01242 235948
2 Suffolk Parade
www.roylancycles.co.uk

2 **Williams Cycles** 0800 0182453
82 - 96 Albion Street
www.williams-cycles.com

3 **Cheltenham Cycles** 01242 255414
61 Winchcombe Street
www.cheltenhamcycles.co.uk

Potholes? Bad surfaces?
Report all defects to Gloucestershire Highways on **08000 514514.**
Also consider logging faults on CTC's national **Fill That Hole!** website at **www.fillthathole.org.uk.**
Reports can provide a valuable record to assist future claims for compensation.

CHELTENHAM

CYCLE

MAP

A guide to cycling in Cheltenham with useful information and a comprehensive map

3nd edition 2010
Supported by
GCHQ,
UNIVERSITY OF GLOUCESTERSHIRE
Gloucestershire Hospitals NHS NHS Trust
spirax sarco

If you would like to support us, please contact
Cheltenham & Tewkesbury Cycle Campaign
www.cyclecheltenham.org.uk

We would welcome comments from users of this map to help us update and improve future editions

Gloucestershire COUNTY COUNCIL
IN PARTNERSHIP WITH CHELTENHAM BOROUGH COUNCIL

£1 WHERE SOLD

0 Miles 0.5 1
0 Kilometres 0.5 1 1.5
Key
Quiet Roads
Busy Roads
Increasing experience required
Fast Traffic
Cycle Shop
Signalled crossing
Cycle parking
Cycle contraflow in one way street
Exemption for cycles to traffic restriction
Access to off-road cycle routes and other cycle access points
Shared use footway
Signed cycle route
Off-road cycle route through open spaces
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(c) Crown copyright and database rights 2013 Ordnance Survey 100024384
Cartography FourPoint Mapping. www.fourpointmapping.co.uk
Town Centre
Uckington
Swindon
Kingsditch
Maud's Elm
St. Peters
Arle
Springbank
Sandfields
Hester's Way
Fiddler's Green
Rowanfield
Alstone
The Vineyards
Golden Valley
St. Mark's
Overton Park
Bays Hill
Benhall
Lansdown
Montpellier
Marle Hill
St. Paul's
Pittville
Prestbury
Lynworth
Whaddon
Fairview
Battledown
Coltham Fields
Charlton Park
Ryeworth
Cudnell
Spring Bottom
Ham
East End
Crab End
Bafford
Little Herbert's
Up End
Moor End
Charlton Kings
Pilley
Leckhampton
The Park
Tivoli
Hatherley
The Reddings
Warden Hill
Up Hatherley
Chargrove
Noverton
BISHOP CLEEVE
WINCHCOMBE
CHURCHDOWN
WITHINGTON
BIRDLIP
CHELTENHAM BOROUGH COUNCIL
N
E
S
W

Appendix E

Andrew Miles

To: NEININGER, Jordan
Subject: RE: H561 - Collision Records Request - kidnappers Lane, Leckhampton

From: NEININGER, Jordan [mailto:Jordan.Neininger@gloucestershire.gov.uk]
Sent: 17 September 2018 10:57
To: 'Andrew Miles'
Subject: RE: H561 - Collision Records Request - kidnappers Lane, Leckhampton

Hi Andy,

I've had a look at the area requested and I can confirm that there are no reported injury collisions in the latest five years up to the end of December 2017.

I hope this his of use to you and your work.

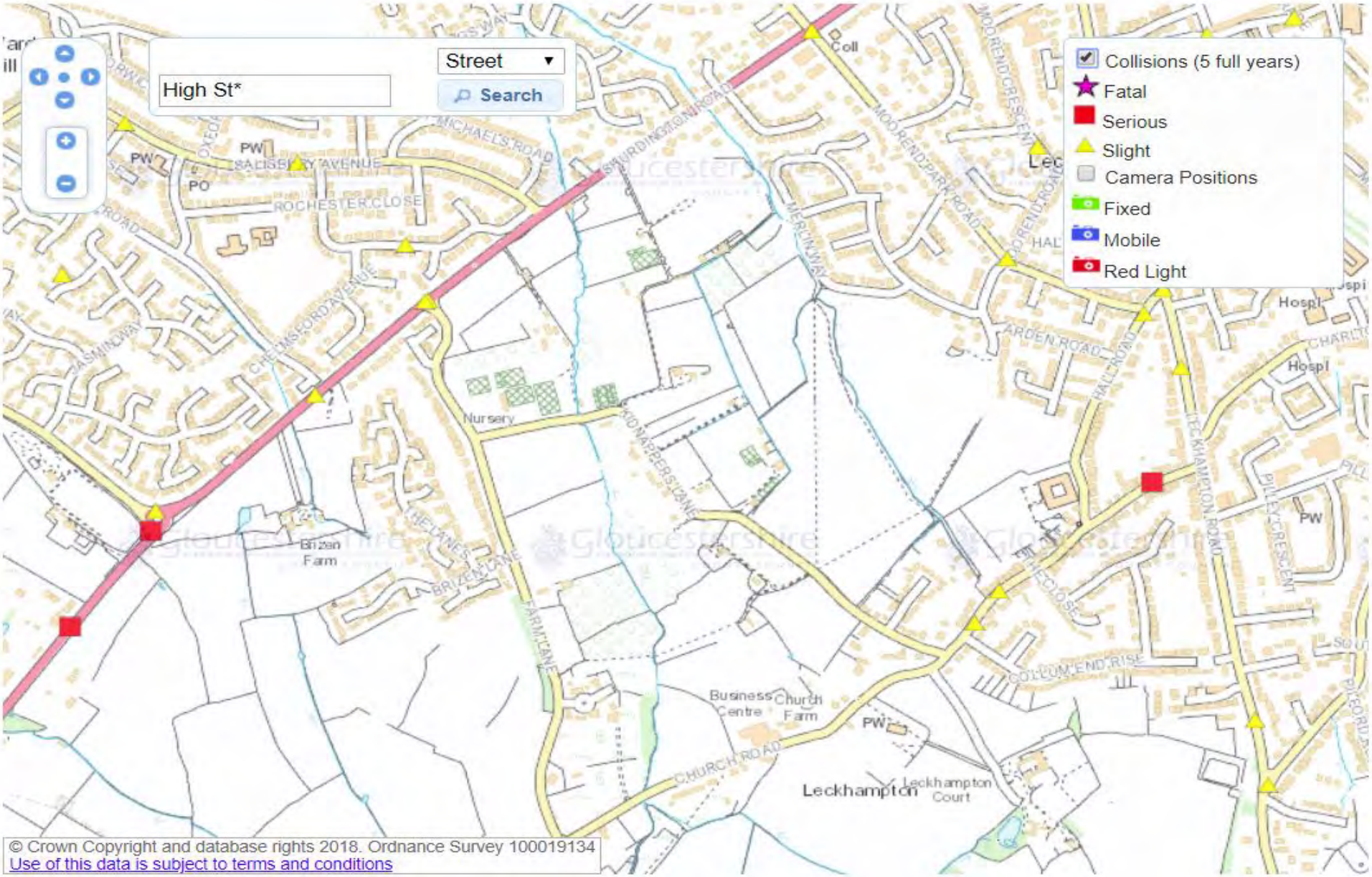
Regards,

Jordan

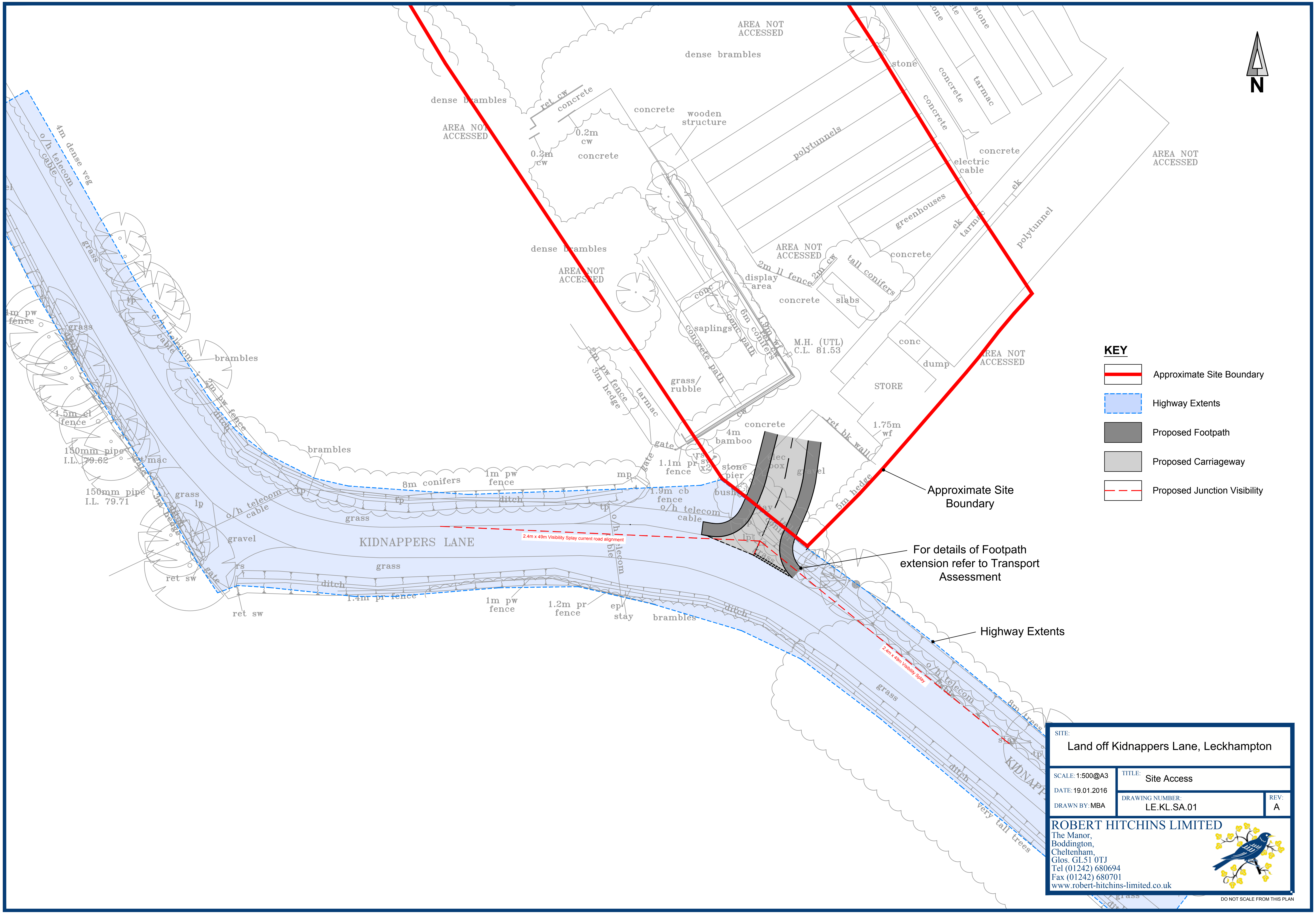
Jordan Neininger
Road Safety Data and Website Support Officer
Road Safety and Transport Data team
Tel: 01452 425225

Email: jordan.neininger@gloucestershire.gov.uk

Gloucestershire County Council - Collision and Camera Map

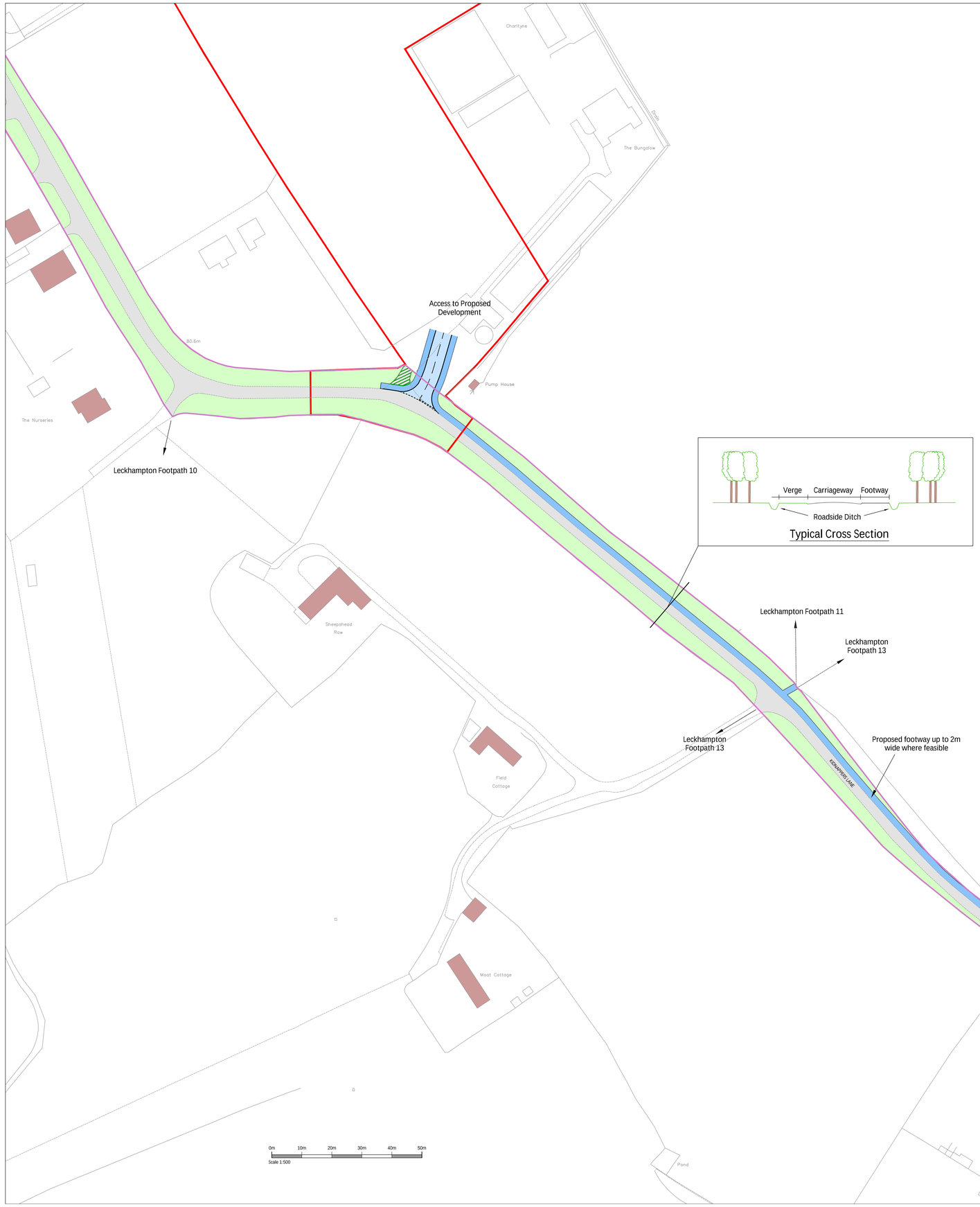


Appendix F



N
KIDNAPPERS LANE
2.4m x 49m Visibility Splay current road alignment
2.4m x 49m Visibility Splay
KEY
Approximate Site Boundary
Highway Extents
Proposed Footpath
Proposed Carriageway
Proposed Junction Visibility
Approximate Site Boundary
For details of Footpath extension refer to Transport Assessment
Highway Extents
SITE:
Land off Kidnappers Lane, Leckhampton
SCALE: 1:500@A3
DATE: 19.01.2016
DRAWN BY: MBA
TITLE: Site Access
DRAWING NUMBER: LE.KL.SA.01
REV: A
ROBERT HITCHINS LIMITED
The Manor,
Boddington,
Cheltenham,
Glos. GL51 0TJ
Tel (01242) 680694
Fax (01242) 680701
www.robert-hitchins-limited.co.uk
DO NOT SCALE FROM THIS PLAN

Appendix G



N

PFA consulting

Stratton Park House, Wanborough Road
Swindon, SN3 4HG

Telephone
01793 828000

Facsimile
01793 835500

Email
admin@pfaplc.com

Website
www.pfaplc.com

Preliminary
These drawings are produced for initial discussion and illustrative purposes only, and should not be relied upon for tender or pricing purposes.

NOTES

1. Based on Ordnance Survey mapping © Crown copyright. All rights reserved PFA Consulting License No. 100000054

2. Access to Proposed Development based on Robert Hitchins Limited Drawing Number: 300.P.3 Rev C.

3. Access to 'Land Adjacent to Sycamore House' based on R.J. Durrell Architects Drawing Number: 865/003/B.

KEY

- Extent of Public Highway (based on Gloucestershire County Council's highway records
- Application Site Boundary (Proposed Development)
- Existing Carriageway
- Existing Footway
- Existing Verge
- Existing access to be broken out and replaced by verge
- New Carriageway (as part of Land Adjacent to Sycamore House)
- New Footway (as part of Land Adjacent to Sycamore House)
- Proposed Carriageway (as part of Proposed Development)
- Proposed Footway (as part of Proposed Development)
- Proposed Tactile Paving (as part of Proposed Development)
- DK Proposed Dropped Kerb (as part of Proposed Development)

Rev	Date	Description	Initials	Check

Status
PRELIMINARY

Client
Robert Hitchins Limited

Project
Land off Kidnappers Lane, Leckhampton

Drawing Title
Proposed Footway Link

Drawing No.
H561/2

Date	09/05/16		
Scale	1:500 @ A0		
Drawn By	THP	Checked By	JA
E-Mail	jalexander@pfaplc.com		
File Ref.	H561_2.dwg		

Appendix H

Calculation Reference: AUDIT-712101-151023-1032

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES

Selected regions and areas:

02	SOUTH EAST		
	BD	BEDFORDSHIRE	1 days
	EX	ESSEX	1 days
04	EAST ANGLIA		
	SF	SUFFOLK	1 days
05	EAST MIDLANDS		
	LN	LINCOLNSHIRE	2 days
	NT	NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS		
	SH	SHROPSHIRE	1 days
	WO	WORCESTERSHIRE	2 days
08	NORTH WEST		
	CH	CHESHIRE	1 days
	LC	LANCASHIRE	1 days
09	NORTH		
	TV	TEES VALLEY	1 days
10	WALES		
	CF	CARDIFF	1 days
11	SCOTLAND		
	FI	FIFE	1 days
	SR	STIRLING	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
Actual Range: 108 to 237 (units:)
Range Selected by User: 100 to 491 (units:)

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/04 to 14/10/11

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	3 days
Tuesday	3 days
Wednesday	1 days
Thursday	6 days
Friday	2 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	15 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaking using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	7
Edge of Town	8

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	11
No Sub Category	4

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C3	15 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

10,001 to 15,000	2 days
15,001 to 20,000	9 days
20,001 to 25,000	2 days
25,001 to 50,000	2 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

50,001 to 75,000	1 days
75,001 to 100,000	5 days
100,001 to 125,000	3 days
125,001 to 250,000	6 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	6 days
1.1 to 1.5	9 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	15 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1 BD-03-A-01 SEMI DETACHED BEDFORDSHIRE
NEW BEDFORD ROAD

LUTON
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 131
Survey date: THURSDAY 08/07/04 Survey Type: MANUAL

2 CF-03-A-02 MIXED HOUSES CARDIFF
DROPE ROAD

CARDIFF
Edge of Town
Residential Zone
Total Number of dwellings: 196
Survey date: FRIDAY 05/10/07 Survey Type: MANUAL

3 CH-03-A-06 SEMI-DET./BUNGALOWS CHESHIRE
CREWE ROAD

CREWE
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 129
Survey date: TUESDAY 14/10/08 Survey Type: MANUAL

4 EX-03-A-01 SEMI-DET. ESSEX
MILTON ROAD
CORRINGHAM
STANFORD-LE-HOPE
Edge of Town
Residential Zone
Total Number of dwellings: 237
Survey date: TUESDAY 13/05/08 Survey Type: MANUAL

5 FI-03-A-03 MIXED HOUSES FIFE
WOODMILL ROAD

DUNFERMLINE
Edge of Town
Residential Zone
Total Number of dwellings: 155
Survey date: MONDAY 30/04/07 Survey Type: MANUAL

6 LC-03-A-29 DETACHED/SEMI D. LANCASHIRE
REVIDGE ROAD
FOUR LANE ENDS
BLACKBURN
Edge of Town
Residential Zone
Total Number of dwellings: 185
Survey date: THURSDAY 10/06/04 Survey Type: MANUAL

7 LN-03-A-01 MIXED HOUSES LINCOLNSHIRE
BRANT ROAD
BRACEBRIDGE
LINCOLN
Edge of Town
Residential Zone
Total Number of dwellings: 150
Survey date: TUESDAY 15/05/07 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

8 LN-03-A-02 MIXED HOUSES LINCOLNSHIRE
HYKEHAM ROAD

LINCOLN
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 186
Survey date: MONDAY 14/05/07 Survey Type: MANUAL

9 NT-03-A-03 SEMI DETACHED NOTTINGHAMSHIRE
B6018 SUTTON ROAD

KIRKBY-IN-ASHFIELD
Edge of Town
Residential Zone
Total Number of dwellings: 166
Survey date: WEDNESDAY 28/06/06 Survey Type: MANUAL

10 SF-03-A-02 SEMI DET./TERRACED SUFFOLK
STOKE PARK DRIVE
MAIDENHALL
IPSWICH
Edge of Town
Residential Zone
Total Number of dwellings: 230
Survey date: THURSDAY 24/05/07 Survey Type: MANUAL

11 SH-03-A-04 TERRACED SHROPSHIRE
ST MICHAEL'S STREET

SHREWSBURY
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 108
Survey date: THURSDAY 11/06/09 Survey Type: MANUAL

12 SR-03-A-01 DETACHED STIRLING
BENVIEW

STIRLING
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 115
Survey date: MONDAY 23/04/07 Survey Type: MANUAL

13 TV-03-A-01 HOUSES & FLATS TEES VALLEY
POWLETT ROAD

HARTLEPOOL
Suburban Area (PPS6 Out of Centre)
No Sub Category
Total Number of dwellings: 225
Survey date: THURSDAY 14/04/05 Survey Type: MANUAL

14 WO-03-A-03 DETACHED WORCESTERSHIRE
BLAKEBROOK
BLAKEBROOK
KIDDERMINSTER
Suburban Area (PPS6 Out of Centre)
Residential Zone
Total Number of dwellings: 138
Survey date: FRIDAY 05/05/06 Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

15 WO-03-A-06 DET./TERRACED WORCESTERSHIRE
ST GODWALDS ROAD
ASTON FIELDS
BROMSGROVE
Edge of Town
No Sub Category
Total Number of dwellings: 232
Survey date: THURSDAY 30/06/05 Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	172	0.084	15	172	0.314	15	172	0.398
08:00 - 09:00	15	172	0.163	15	172	0.461	15	172	0.624
09:00 - 10:00	15	172	0.172	15	172	0.226	15	172	0.398
10:00 - 11:00	15	172	0.151	15	172	0.190	15	172	0.341
11:00 - 12:00	15	172	0.190	15	172	0.180	15	172	0.370
12:00 - 13:00	15	172	0.200	15	172	0.197	15	172	0.397
13:00 - 14:00	15	172	0.196	15	172	0.182	15	172	0.378
14:00 - 15:00	15	172	0.187	15	172	0.183	15	172	0.370
15:00 - 16:00	15	172	0.309	15	172	0.219	15	172	0.528
16:00 - 17:00	15	172	0.353	15	172	0.216	15	172	0.569
17:00 - 18:00	15	172	0.435	15	172	0.255	15	172	0.690
18:00 - 19:00	15	172	0.304	15	172	0.249	15	172	0.553
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.744			2.872			5.616

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	108 - 237 (units:)
Survey date date range:	01/01/04 - 14/10/11
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL OGVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	172	0.003	15	172	0.002	15	172	0.005
08:00 - 09:00	15	172	0.003	15	172	0.003	15	172	0.006
09:00 - 10:00	15	172	0.004	15	172	0.002	15	172	0.006
10:00 - 11:00	15	172	0.002	15	172	0.003	15	172	0.005
11:00 - 12:00	15	172	0.001	15	172	0.002	15	172	0.003
12:00 - 13:00	15	172	0.006	15	172	0.005	15	172	0.011
13:00 - 14:00	15	172	0.003	15	172	0.005	15	172	0.008
14:00 - 15:00	15	172	0.002	15	172	0.002	15	172	0.004
15:00 - 16:00	15	172	0.002	15	172	0.001	15	172	0.003
16:00 - 17:00	15	172	0.001	15	172	0.001	15	172	0.002
17:00 - 18:00	15	172	0.000	15	172	0.001	15	172	0.001
18:00 - 19:00	15	172	0.000	15	172	0.000	15	172	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.027			0.027			0.054

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	108 - 237 (units:)
Survey date date range:	01/01/04 - 14/10/11
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PSVS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	172	0.000	15	172	0.000	15	172	0.000
08:00 - 09:00	15	172	0.002	15	172	0.002	15	172	0.004
09:00 - 10:00	15	172	0.000	15	172	0.000	15	172	0.000
10:00 - 11:00	15	172	0.000	15	172	0.000	15	172	0.000
11:00 - 12:00	15	172	0.000	15	172	0.000	15	172	0.000
12:00 - 13:00	15	172	0.000	15	172	0.000	15	172	0.000
13:00 - 14:00	15	172	0.000	15	172	0.000	15	172	0.000
14:00 - 15:00	15	172	0.000	15	172	0.000	15	172	0.000
15:00 - 16:00	15	172	0.001	15	172	0.001	15	172	0.002
16:00 - 17:00	15	172	0.000	15	172	0.000	15	172	0.000
17:00 - 18:00	15	172	0.000	15	172	0.000	15	172	0.000
18:00 - 19:00	15	172	0.000	15	172	0.000	15	172	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.003			0.003			0.006

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	108 - 237 (units:)
Survey date date range:	01/01/04 - 14/10/11
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL CYCLISTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	172	0.006	15	172	0.009	15	172	0.015
08:00 - 09:00	15	172	0.004	15	172	0.014	15	172	0.018
09:00 - 10:00	15	172	0.004	15	172	0.003	15	172	0.007
10:00 - 11:00	15	172	0.000	15	172	0.003	15	172	0.003
11:00 - 12:00	15	172	0.004	15	172	0.003	15	172	0.007
12:00 - 13:00	15	172	0.004	15	172	0.004	15	172	0.008
13:00 - 14:00	15	172	0.003	15	172	0.003	15	172	0.006
14:00 - 15:00	15	172	0.003	15	172	0.003	15	172	0.006
15:00 - 16:00	15	172	0.015	15	172	0.011	15	172	0.026
16:00 - 17:00	15	172	0.011	15	172	0.006	15	172	0.017
17:00 - 18:00	15	172	0.012	15	172	0.010	15	172	0.022
18:00 - 19:00	15	172	0.010	15	172	0.007	15	172	0.017
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.076			0.076			0.152

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	108 - 237 (units:)
Survey date date range:	01/01/04 - 14/10/11
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLE OCCUPANTS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	172	0.093	15	172	0.370	15	172	0.463
08:00 - 09:00	15	172	0.207	15	172	0.702	15	172	0.909
09:00 - 10:00	15	172	0.201	15	172	0.292	15	172	0.493
10:00 - 11:00	15	172	0.187	15	172	0.248	15	172	0.435
11:00 - 12:00	15	172	0.236	15	172	0.227	15	172	0.463
12:00 - 13:00	15	172	0.249	15	172	0.256	15	172	0.505
13:00 - 14:00	15	172	0.251	15	172	0.234	15	172	0.485
14:00 - 15:00	15	172	0.239	15	172	0.235	15	172	0.474
15:00 - 16:00	15	172	0.486	15	172	0.305	15	172	0.791
16:00 - 17:00	15	172	0.489	15	172	0.312	15	172	0.801
17:00 - 18:00	15	172	0.575	15	172	0.348	15	172	0.923
18:00 - 19:00	15	172	0.410	15	172	0.371	15	172	0.781
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.623			3.900			7.523

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	108 - 237 (units:)
Survey date date range:	01/01/04 - 14/10/11
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PEDESTRIANS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	172	0.027	15	172	0.048	15	172	0.075
08:00 - 09:00	15	172	0.041	15	172	0.182	15	172	0.223
09:00 - 10:00	15	172	0.043	15	172	0.052	15	172	0.095
10:00 - 11:00	15	172	0.031	15	172	0.039	15	172	0.070
11:00 - 12:00	15	172	0.038	15	172	0.038	15	172	0.076
12:00 - 13:00	15	172	0.038	15	172	0.029	15	172	0.067
13:00 - 14:00	15	172	0.032	15	172	0.037	15	172	0.069
14:00 - 15:00	15	172	0.034	15	172	0.031	15	172	0.065
15:00 - 16:00	15	172	0.179	15	172	0.061	15	172	0.240
16:00 - 17:00	15	172	0.075	15	172	0.054	15	172	0.129
17:00 - 18:00	15	172	0.063	15	172	0.050	15	172	0.113
18:00 - 19:00	15	172	0.060	15	172	0.059	15	172	0.119
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.661			0.680			1.341

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	108 - 237 (units:)
Survey date date range:	01/01/04 - 14/10/11
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL PUBLIC TRANSPORT USERS
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	172	0.000	15	172	0.013	15	172	0.013
08:00 - 09:00	15	172	0.003	15	172	0.020	15	172	0.023
09:00 - 10:00	15	172	0.002	15	172	0.008	15	172	0.010
10:00 - 11:00	15	172	0.004	15	172	0.006	15	172	0.010
11:00 - 12:00	15	172	0.004	15	172	0.008	15	172	0.012
12:00 - 13:00	15	172	0.008	15	172	0.009	15	172	0.017
13:00 - 14:00	15	172	0.009	15	172	0.003	15	172	0.012
14:00 - 15:00	15	172	0.005	15	172	0.003	15	172	0.008
15:00 - 16:00	15	172	0.011	15	172	0.006	15	172	0.017
16:00 - 17:00	15	172	0.014	15	172	0.003	15	172	0.017
17:00 - 18:00	15	172	0.017	15	172	0.004	15	172	0.021
18:00 - 19:00	15	172	0.010	15	172	0.003	15	172	0.013
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.087			0.086			0.173

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	108 - 237 (units:)
Survey date date range:	01/01/04 - 14/10/11
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED
MULTI-MODAL TOTAL PEOPLE
Calculation factor: 1 DWELLS
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	15	172	0.126	15	172	0.439	15	172	0.565
08:00 - 09:00	15	172	0.254	15	172	0.917	15	172	1.171
09:00 - 10:00	15	172	0.250	15	172	0.355	15	172	0.605
10:00 - 11:00	15	172	0.222	15	172	0.297	15	172	0.519
11:00 - 12:00	15	172	0.283	15	172	0.276	15	172	0.559
12:00 - 13:00	15	172	0.298	15	172	0.297	15	172	0.595
13:00 - 14:00	15	172	0.295	15	172	0.278	15	172	0.573
14:00 - 15:00	15	172	0.281	15	172	0.273	15	172	0.554
15:00 - 16:00	15	172	0.691	15	172	0.384	15	172	1.075
16:00 - 17:00	15	172	0.590	15	172	0.374	15	172	0.964
17:00 - 18:00	15	172	0.667	15	172	0.413	15	172	1.080
18:00 - 19:00	15	172	0.491	15	172	0.441	15	172	0.932
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.448			4.744			9.192

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	108 - 237 (units:)
Survey date date range:	01/01/04 - 14/10/11
Number of weekdays (Monday-Friday):	15
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.