local transport projects

traffic engineering and transport planning

Arcadis LLP

Proposed School Expansion
Warrender Primary School
Old Hatch Manor, Ruislip

Travel Plan

November 2016

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Client Commission			
Client:	Arcadis LLP		
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LTP Quality Control						
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LTP PROJECT TEAM

As part of our commitment to quality the following team of transport professionals was assembled specifically for the delivery of this project. Relevant qualifications are shown and CV's are available upon request to demonstrate our experience and credentials.

Team Member	LTP Designation	Qualifications
Andy Mayo	*Director (Project Manager)*	*BA(Hons) MSc FIHE MCIHT CMILT*
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PROPOSED SCHOOL EXPANSION
WARRENDER PRIMARY SCHOOL
OLD HATCH MANOR, RUISLIP
TRAVEL PLAN

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1.0   INTRODUCTION

1.1   Background

1.1.1   Local Transport Projects Ltd has been commissioned by Arcadis LLP to produce a Travel Plan (TP) in support of proposals to extend Warrender Primary School, located to the north of Old Hatch Manor, Ruislip in the London Borough of Hillingdon. The proposals are expected to increase pupil numbers at the school from 250 to 460.

1.1.2   This TP provides a strategy for encouraging all users of the site including pupils, staff and visitors to travel by sustainable modes of transport. This document provides a strategy to allow the school to implement a working School Travel Plan, tailoring the content of this TP to reflect the operation of the school.

1.1.1   A Transport Assessment (TA) (LTP, 2016) that provides a detailed appraisal of all transport aspects associated with the proposed development has been produced alongside this Travel Plan. Reference has been made to the associated TA when preparing this document, with specific information and traffic projections taken directly from the TA.

1.2   Scope

1.2.1   The scope of this Travel Plan is based upon Planning Practice Guidance (DCLG, 2014), as outlined below:

- *Background:*
  - o   Introduction to the Travel Plan, the proposals and the relevant planning history;
  - o   Outline of the Travel Plan scope;
  - o   Determine the benefits that a successful Travel Plan can achieve, relative to staff, pupils and the local community;
  - o   Outline the relevant travel planning policy context, including the latest local and national travel planning guidance.
- Definition of the overall *aim and objectives* of the Travel Plan.
- Establish the expected *baseline travel situation*.
- Set appropriate *target(s)* to minimise car journeys to/from the site, based on the expected baseline situation.
- Assess *accessibility* of the site by sustainable modes, including:
  - o   Walking;
  - o   Cycling;
  - o   Public Transport – Bus and rail services;
  - o   Car Sharing.
- Establish *roles and responsibilities* for implementing the Travel Plan, including the role of the Travel Plan Co-ordinator and the overall responsibility for funding;
- Outline the Travel Plan Strategy and *Action Plan*, which would include a range of measures for achieving the objectives, under the following headings:
  - o   Walking and cycling;
  - o   Public transport;
  - o   Car share initiatives and car parking measures;

o   Transport and travel information;

o   Promotion and marketing.

- The Action Plan would also contain details on the **funding and timescales** for each of the proposed schemes.

- Outline the **monitoring and evaluation strategy** of the Travel Plan, to include annual surveying and other indicators.

- Establish **intervention measures** to be implemented if the review process identifies that the Travel Plan target is not being achieved.

1.3   Site Location

1.3.1   Warrender Primary School is located within the Ruislip area of the London Borough of Hillingdon. It currently provides primary school education to pupils aged between 3 and 11 years and has a total of 250 pupils on roll, employing 20 full-time equivalent (FTE) staff (DfE, 2016a). The school is located approximately 400m north-east of Ruislip Manor district centre. It is bound by dense residential development on all sides with properties served from Eastcote Road to the north, The Ridgeway to the east, Old Hatch Manor to the south and Windmill Hill to the west. The approximate boundary of the site is shown in Figure 1:

Figure 1: Site Location

Source Imagery: Copyright Google Earth Pro (License Key-JCPMR5M58LXF2GE)

1.4   Development Proposals

1.4.1   This Travel Plan is based upon the proposals outlined on the site plan attached as Appendix 1. The proposals involve the provision of a two-storey extension to the eastern side of the school to accommodate pupils within year groups 3-6, a new community/parents room to the south and an extension to the south-west to accommodate a new nursery. New hard and soft play areas are to be provided within the northern part of the site, with associated landscaping.

1.4.2   Upon completion of the proposed redevelopment, the school is expected to be able to accommodate a total of 460 pupils, which is an increase of 210 pupils (approximately 84%) on the current roll. The school currently employs a total of 20 FTE staff and based upon the projected increase in pupils, it is expected that the school will employ up to an additional 20 FTE staff, resulting in a total of 40 FTE staff.

1.4.3   The school opening hours are expected to remain as existing under the proposals, with the main school day commencing at 08:40 and ending at 15:10 for infants and at 15:15 for juniors. The nursery will run sessions from 08:30-11:30 and 12:30-15:30. The school will continue to run extra-curricular activities both before and after school, with before school clubs generally operating from 07:45 and after school clubs operating until 16:20. The out-of-hours use of the school will continue, with some adult fitness sessions operating in the early evening.

1.5   Proposed Access Arrangements

1.5.1   The existing vehicular access to the site from Old Hatch Manor will be retained under the proposals and will continue to provide access to a staff car park. The existing footway on the western side of the access road will be retained to facilitate pedestrian access from Old Hatch Manor.

1.5.2   A total of 20 car parking spaces will be provided at the site, which is considered to be suitable to accommodate the expected demand generated by the 40 FTE staff and represents an increase of 8 spaces on the existing provision. Appropriate turning heads will be provided within the parking areas to allow vehicles to enter, manoeuvre and exit the site in a forward gear.

1.5.3   Covered and secure cycle parking will be provided in a conspicuous location at the site for use by staff, pupils and visitors.

2.0   TRAVEL PLANNING BACKGROUND

2.1   What is a School Travel Plan?

2.1.1   A key element of a School Travel Plan (STP) is a strategy for promoting and encouraging sustainable travel choices. This can be achieved through a variety of both incentives and restrictions. A contribution can be made through on-site infrastructure improvements such as cycling facilities, secure cycle storage, lockers, showers, dedicated car parking for multi-occupancy vehicles and providing good pedestrian access. Raising awareness and educational activities, including curriculum based projects, are crucial to the effective promotion of sustainable transport choices.

2.2   Policy Context

2.2.1   Best practice has been identified within the appropriate national guidance and has informed the development of this STP. *'The Essential Guide to Travel Planning'* (DfT, 2008) offers an informative overview of what is required to prepare a School Travel Plan through a series of case studies. The guide also offers advice on setting and monitoring School Travel Plan targets.

2.2.2   The *'Home-to-School Travel and Transport Statutory Guidance'* (DfE, 2014) came into force in July 2014 and places a general duty on local authorities to promote the use of sustainable travel and transport. There are five main elements to this duty:

- An assessment of the travel and transport needs of children, and young people within the authority's area;
- An audit of the sustainable travel and transport infrastructure within the authority's area that may be used when travelling to and from, or between, schools/institutions;
- A strategy to develop sustainable travel and transport infrastructure within the authority so that the travel and transport needs of children and young people are best catered for;
- The promotion of sustainable travel and transport modes on the journey to, from, and between schools and other institutions; and
- The publication of Sustainable Modes of Travel strategy.

2.2.3   As wider national policy has changed to incorporate a greater emphasis on sustainability, so too has the policy context surrounding travel to school. The national sustainable travel context is set within the following key policy documents:

- Department for Communities and Local Government (DCLG) '*Planning Practice Guidance'* (DCLG, 2014);
- BREEAM (BRE) *'UK New Construction, Non-Domestic Buildings (England), Technical Manual'* (SD5076: 3.0 – 2014) (BRE, 2014);
- Department for Children, Schools and Families (DCSF) *'Sustainable Modes of Travel Strategy. A Practitioner's Guide'* (DCSF, 2009);
- DfT *'The Essential Guide to Travel Planning'* (DfT, 2008);

- DfT *'Making Smarter Choices Work'* (DfT, 2005); and

- Department for Transport (DfT) *'Using the Planning Process to Secure Travel Plans. Best Practice Guide'* (DfT, 2002a).

2.2.4 Local and regional policy also provides guidance on sustainable travel within the following documents:

- Transport for London (TfL) *'Travel Plan Guidance'* (TfL, 2014a);

- TfL *'West London Sub-Regional Transport Plan'* (TfL, 2014b); and

- Greater London Authority (GLA) *'Mayor's Transport Strategy'* (GLA, 2010).

2.2.5 The '*Mayor's Transport Strategy'* (GLA, 2010) outlines a number of wider targets for travel by more sustainable modes in London and puts forward a number of actions for achieving them. Targets include:

- Achieve a 5% modal share for cycling;

- Significantly increase walking mode share above the current 24%;

- Reduce private motorised transport by 4% from a base of 43%; and

- Achieve a 60% reduction in London's CO_2 by 2025.

2.2.6 The targets set within this Travel Plan are consistent with the mayor's overall aims of reducing dependency on private car travel and increasing the walking and cycling modal share.

3.0   ACCESSIBILITY BY SUSTAINABLE MODES

3.1   Walking

3.1.1   Guidance from Chartered Institution of Highways & Transportation (CIHT) suggests a preferred maximum walking distance of 2km for a number of trips, including commuting and school trips (IHT, 2000). The site is located within a 2km walking distance of the residential areas of Ruislip, West Ruislip, Ruislip Manor and Eastcote.

3.1.2   The pedestrian infrastructure within the vicinity of the site appears to be well-developed, with footways of adequate width (at least 2.0m) provided on both sides of the carriageway on most local streets, including Old Hatch Manor, The Ridgeway and Windmill Hill. Two zebra crossings are provided across Windmill Hill, which facilitate pedestrian access between Old Hatch Manor and West Hatch Manor.

Photo 1: Zebra Crossing on Windmill Hill

3.1.3   Crossing points with dropped kerbs and tactile paving are provided at most local junctions, including at the school access, the Old Hatch Manor and West Hatch Manor junctions with Windmill Hill and across all arms of the Windmill Hill/Eastcote Road/Kings College Road mini-roundabout where pedestrian refuges are also provided.

3.1.4   Pedestrian phases with central refuges are also provided across all arms of the Windmill Hill/Park Way signal junction near to Ruislip Manor Underground Station (see Photo 2).

Photo 2: Pedestrian Phase at the Windmill Hill/Park Way Signal Junction

3.1.5   Measures to promote and encourage walking trips to the site are outlined within Section 7.3 of this Travel Plan and will be implemented at various stages by the Travel Plan Co-ordinator.

3.2   Cycling

3.2.1   Cycling is a low cost and healthy alternative to car use, which can substitute for short car trips, or can form part of a longer journey by public transport. The DfT state that "in common with other modes, many utility cycle journeys are under three miles (5km), although, for commuter journeys, a trip distance of over five miles (8km) is not uncommon" (DfT, 2008). The proposed development site is located within a reasonable cycle ride, up to 5km (approximately 15 minutes at the average cycling speed of 12mph), of a large residential area, including Ruislip, Eastcote, Ickenham, Pinner, Northwood and Rayners Lane.

3.2.2   Most roads within the vicinity of the site are subject to a 30mph speed limit and are therefore considered to be generally conducive to encouraging cycle trips. Advanced Stop Lines (ASLs) for cyclists are provided on all approach arms to the Windmill Hill/Park Way/Victoria Road/Pembroke Road signal junction.

3.2.3   As shown on the plan in Figure 2, a number of roads within the vicinity of the site (indicated by the star) including Westholme Gardens, Manor Way and Park Avenue have been identified as 'quieter road recommended by other cyclists' and as such are generally conducive to encouraging cycle trips. To the north of the site, Evelyn Avenue forms part of a signed cycle route that connects Eastcote, Ruislip, West Ruislip and Ickenham.

Figure 2: Local Cycle Routes
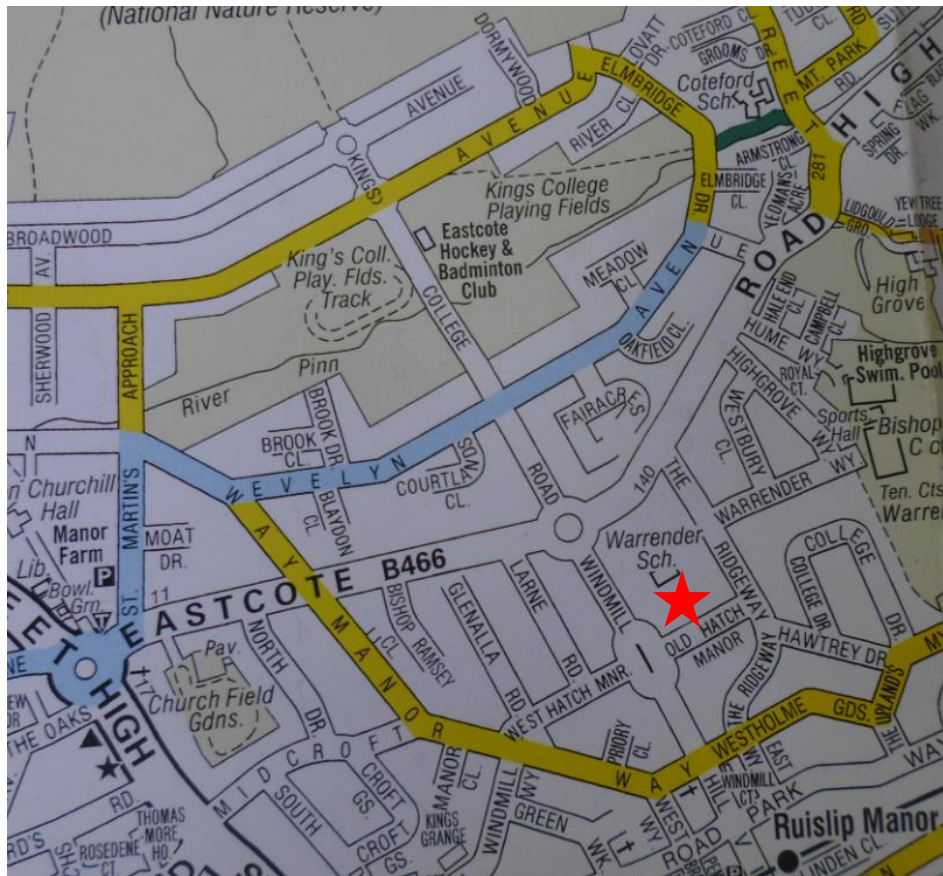
Ref: London Cycling Guide 3 (TfL, 2013)

3.2.4   Measures to promote and encourage cycling trips to and from the site are outlined within Section 7.4 of this Travel Plan.

3.3   Public Transport Accessibility Level (PTAL)

3.3.1   An assessment of the site has been undertaken using the TfL PTAL database (www.webptals.org.uk). PTAL measures the accessibility of public transport services by measuring walking distances along footways. The generally acceptable walking distance to a bus stop under the assessment is 640m (8 minutes) and to an underground/rail station is 960m (12 minutes).

3.3.2   The Warrender Primary School site was found to have a PTAL rating of 3 (moderate), with 0 rated the worst and 6b rated the best, see the full report attached as Appendix 2. Walking distances have been measured from the main access point to the site on Old Hatch Manor.

3.3.3   The options for travel by public transport within the vicinity of the site are outlined within the sections below.

3.4   Travel by Bus

3.4.1   The PTAL assessment outlines that bus stops within 640m of a development site are considered to be within a suitable walking distance. There are bus stops on both sides of Windmill Hill, located approximately 270m walk from the site access to the west of the site (see Photo 3). Additional services are available from stops adjacent to Ruislip Manor Underground Station, approximately 520m walk to the south of the site.

Photo 3: Bus Stops on Windmill Hill

3.4.2   A summary of the bus services available from the local stops is provided within Table 1 and a copy of the Ruislip Manor bus route map is included as Appendix 3.

Table 1: Local Bus Services

Route No.	Route	Mon-Fri Frequency*
Bus Services from Windmill Hill (within 270m walk of the site)		
H13	Ruislip Lido – Ruislip **Ruislip Manor - Windmill Hill** – Eastcote – Pinner – Pinner Green - Northwood Hills	Every 20 Minutes
Bus Services from Ruislip Manor Station (within 520m walk of the site)		
114	Ruislip – **Ruislip Manor –** South Ruislip – Eastcote Lane – South Harrow – Harrow Bus Station – Kenton Station – Kenton Library – Queensbury – Burnt Oak – Mill Hill Broadway	Every 10 Minutes
398	Ruislip – **Ruislip Manor –** Eastcote – Rayners Lane – South Harrow – Northolt Park – Wood End	Every 30 Minutes

* Relates to general frequency of services between 08:00 and 19:00

3.4.3   Table 1 shows that frequent services are available from the local bus stops, which provide access to a number of local residential areas including Ruislip, Eastcote, Pinner and Harrow. It is noted that many of these bus services provide the opportunity to connect with other TfL bus routes, as well as London Underground (LU) and National Rail services.

3.4.4   All 5-10 year olds are able to travel free on TfL buses, LU and National Rail services with a 5-10 Zip Oyster Photocard. Children aged 11-15 are able to travel free on TfL buses with an 11-15 Zip Oyster Photocard and are eligible for child fares on LU and National Rail services. Children that live in a London Borough can apply for their Zip Oyster Photocards online or at a Post Office.

3.5   Travel by London Underground/National Rail

3.5.1   The site is located approximately 450m (6 minute walk) from Ruislip Manor London Underground Station, which is located on Victoria Road. Ruislip Station is also located approximately 1km walk from the site. Both stations are on both the Metropolitan and Piccadilly Lines and a summary of the services available is provided within Table 2:

Table 2: London Underground Services from Ruislip/Ruislip Manor

Line	Route(s)	Mon-Fri Daytime Frequency*
Metropolitan Line	Uxbridge to Aldgate	6-8 trains per hour
	Uxbridge to Baker Street	1-2 trains per hour
Piccadilly Line	Uxbridge to Cockfosters	3-4 trains per hour Up to 6 trains per hour at peaks

* Relates to general frequency of services between 08:00 and 19:00

3.5.2   As detailed within Table 2, frequent LU services are available from both Ruislip Manor and Ruislip, with up to 8 trains per hour on the Metropolitan Line, including some fast services to central London during the morning peak period. Up to 4 trains per hour are provided on the Piccadilly Line in both directions, with extra services at peak times.

3.5.3   The nearest access point for National Rail services is West Ruislip, approximately 2km west of the site. This station accommodates Chiltern Railways services on the London Marylebone to High Wycombe Line, with services operating at approximately hourly intervals in each direction. The station is also the western terminus point for Central Line LU services with up to 9 trains per hour towards Epping/Hainault via central London.

3.6   Car Sharing

3.6.1   Car sharing is a sustainable mode of travel that can reduce the number of single-occupant vehicle trips generated by a site. As well as the environmental benefits, people that car share can save money by reducing fuel and other travel costs. It is felt that car sharing could be encouraged by some users of the site, notably staff and visitors. Any siblings travelling to school by car are likely to car share and there is also likely to be an element of car sharing taking place between friends.

3.6.2   Car sharing can be encouraged by:

- Providing preferential car parking for those people who car share;
- Establishing and maintaining a car share database; and
- Promoting the use of any existing local car share initiatives and clubs.

3.6.3   Car sharing websites that may be useful to staff include www.liftshare.com, and www.blablacar.co.uk.

4.0   AIM & OBJECTIVES

4.1   Overall Aim

4.1.1   In order to minimise the environmental impact of traffic generated by the site, the overall aim of producing and implementing this TP is:

> **To minimise the number of vehicle trips generated by Warrender Primary School, particularly single occupant car trips, in favour of more sustainable travel.**

4.2   Objectives

4.2.1   In order to achieve the overall aim, there are a number of objectives of producing and implementing this TP:

Figure 3: Travel Plan Objectives

1. To encourage staff, pupils, parents and visitors to evaluate their travel patterns and consider options for more sustainable travel

2. To increase awareness and actively promote travel by sustainable modes of transport, including the health and environmental benefits

3. To monitor the travel patterns and performance against the Travel Plan targets

4. To provide a long term commitment to meeting the overall aim of this Travel Plan

5. To contribute towards achieving the wider targets set within the Mayor's Transport Strategy for increasing travel by sustainable modes and reducing CO2 emissions in Greater London

4.2.2   This TP sets out the strategy for meeting these objectives through a variety of mechanisms and measures.

5.0 BASELINE TRAVEL SCENARIO & INITIAL TARGET

5.1 Baseline Travel Scenario – Pupil Travel

5.1.1 The existing travel patterns of pupils at the school were most recently established as part of the 2012/2013 School Travel Plan, with hands-up surveys undertaken in September 2012. The survey received a total of 161 responses, a response rate of 68%. The modal split associated with the existing site is felt to provide a reasonable indication of the likely travel behaviour of the additional pupils attending the school. The modal split has therefore been used to calculate the projected number of pupil trips by each mode should the school operate at its proposed capacity of 460 pupils, as shown in Table 3:

Table 3: Projected Pupil Modal Trip Generation

Mode of Travel	Survey Split	Projected No. Pupils
Walk	62%	285
Car	32%	147
Cycle	5%	23
Public Transport	1%	5
TOTAL	**100%**	**460**

*Totals may not represent the sum of their parts due to rounding

5.1.2 Table 3 identifies that 68% of pupils currently travel by sustainable modes (walk/cycle/public transport) with 32% travelling by car. The car modal split does not differentiate between single pupil car occupant trips and car sharing trips, with some car sharing expected to occur between siblings, relatives and friends. There is therefore expected to be a number of vehicles that will drop-off/pick-up more than one pupil.

5.1.3 Should the school operate at full capacity, up to 147 pupils could be expected to travel by car, with the remainder travelling by sustainable modes. The existing baseline for pupil travel at Warrender Primary School, based upon the modal split data and relative to the overall aim of this Travel Plan is expected to be:

32% of pupil trips are made by vehicle trip generating modes (Car)

5.1.4 In order to provide a more accurate baseline, site specific travel data will be collected within 12 months of first occupation of the redeveloped school. Details of the baseline travel survey methodology are provided within Section 8.2.

5.2   Baseline Travel Scenario – Staff Travel

5.2.1   The estimated travel to work modal split at the school has been calculated using method of travel to work data for the workday population obtained from the 2011 Census (dataset: WP703EW). The application site is located within Middle-Layer Super Output Area (MSOA) *'Hillingdon 007'* and it is considered reasonable to assume that the staff journey to work modal split at the site will be comparable with that of the existing workday population within this local MSOA. The modal split data is summarised within Table 4, along with the projected number of FTE staff expected to travel by each mode:

Table 4: Projected Staff Modal Trip Generation

Mode of Travel	Survey Split	Projected No. Staff
Car/Taxi/PTW	62.3%	24
Public Transport	19.8%	8
Car Passenger	3.8%	2
Pedestrian	12.0%	5
Pedal Cycle	1.7%	1
Other	0.3%	0
TOTAL	**100%**	**40**

*Totals may not represent the sum of their parts due to rounding

5.2.2   Table 4 indicates that approximately two thirds of all travel to work journeys in *'Hillingdon 007'* are made by a vehicle trip generating mode. It is therefore considered reasonable to assume that 24 FTE staff would travel to work by a vehicle trip generating mode (an additional 12 staff vehicle trips) when the school is at full capacity.

5.2.3   The baseline staff travel situation for Warrender Primary School, based upon the modal split data and relative to the overall aim of this Travel Plan is expected to be:

62.3% of staff trips are made by vehicle trip generating modes (Car/Taxi/PTW)

5.2.4   In order to provide an accurate baseline for the school following redevelopment, site specific travel data will be collected within 12 months of the first occupation of the redeveloped school. Details of the baseline travel survey methodology are provided within Section 8.2.

5.3   Initial Target Setting

5.3.1   The key emphasis of Travel Plans is to minimise the number of vehicle trips generated by a development, particularly those made by single occupant car journeys. This is most commonly done by setting appropriate targets. In setting TP targets it is important to highlight that targets need to be responsive as situations change. It is recognised that the targets of this TP should be SMART:

Figure 3: SMART Travel Plan Components

5.3.2 Travel Plan targets have been set for a five-year period and are a means of monitoring progress and aim to be challenging, but achievable. The targets are based on the assumed baseline situation and are to be achieved within the timeframes set out within Table 5.

Table 5: Staff & Pupil Five-Year Targets

Year	Target (Single Vehicle Occupants)	
	Pupils	**Staff**
1	31%	61%
2	30%	60%
3	29%	59%
4	28%	58%
5	27%	57%

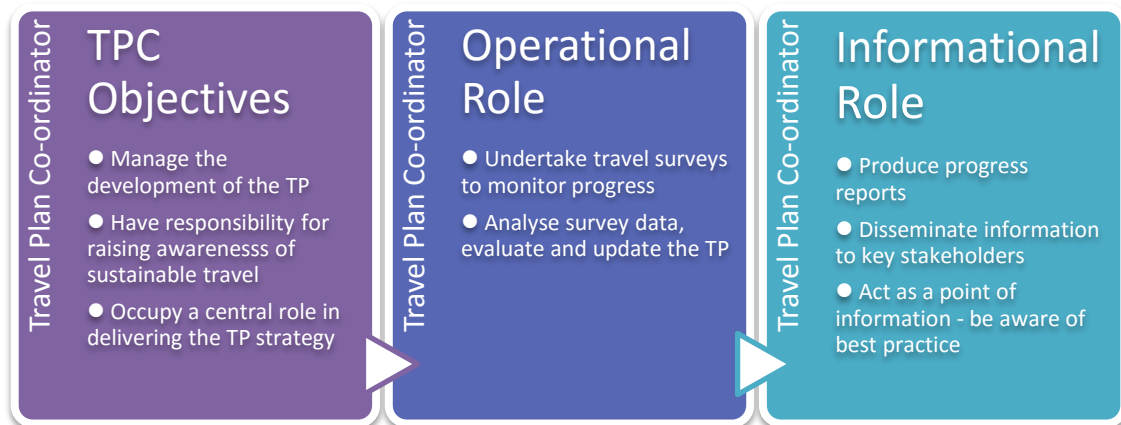5.3.3 The performance of Warrender Primary School against the Travel Plan targets is to be monitored via annual travel surveys as detailed within Section 8.2. The first travel survey should be undertaken within 12 months of occupation of the redeveloped school and should the results reveal a vastly different modal split from that assumed within Section 5.1 and 5.2, then the above targets should be revised as appropriate.

6.0   ROLES & RESPONSIBILITIES

6.1   Travel Plan Co-ordinator (TPC)

6.1.1   A fundamental part of a successful Travel Plan is the appointment of a Travel Plan Co-ordinator (TPC) and the clear delineation of their roles and responsibilities. The role of the TPC is wide ranging, incorporating key actions which will provide a focus for Travel Plan development over the duration of the appointment. The TPC will also be responsible for the monitoring and evaluation of the Travel Plan. The school will ensure the provision of adequate resources and funds to develop and implement the Travel Plan, including the appointment of the TPC if one is not already in place. The objectives and roles of the TPC are illustrated in the diagram below:

Figure 4: TPC Objectives & Roles

Travel Plan Co-ordinator	Travel Plan Co-ordinator	Travel Plan Co-ordinator
TPC Objectives ● Manage the development of the TP ● Have responsibility for raising awarenesss of sustainable travel ● Occupy a central role in delivering the TP strategy	**Operational Role** ● Undertake travel surveys to monitor progress ● Analyse survey data, evaluate and update the TP	**Informational Role** ● Produce progress reports ● Disseminate information to key stakeholders ● Act as a point of information - be aware of best practice

6.2   Key Stakeholders

6.2.1   For the Travel Plan to be successful it is essential that partnership working between key stakeholders takes place. As well as pupils, staff, parents and the TPC, other key stakeholders include local residents, the Local Planning & Highway Authority (London Borough of Hillingdon Council - LBHC) and Transport for London (TfL).

6.2.2   It is essential that all stakeholders work together to help make sure that the greatest Travel Plan benefits possible are achieved. An example of this is providing TPC support for the production of the 'Welcome Travel Pack' which is to be issued to all parents/pupils and staff members upon enrolment or occupation of the redeveloped site (see Section 7.8 for further details on the WTP).

6.2.3   To ensure that key stakeholders buy-in and provide continued support to the Travel Plan it is recommended that LBHC/TfL provide details of the relevant Officers to contact in relation to the Travel Plan. Once all contact details are provided, the Travel Plan can be updated accordingly with all points of contact clearly outlined. The provision of contact details will also ensure that all monitoring and evaluation data is sent to the correct Officers in a timely manner.

6.2.4   It is important that stakeholders work together to ensure that Travel Plan benefits can be realised. An example of this is the provision of cycling and public transport maps by TfL which will not only help the school to achieve its own targets, but also contribute to wider London targets for increasing travel by sustainable modes.
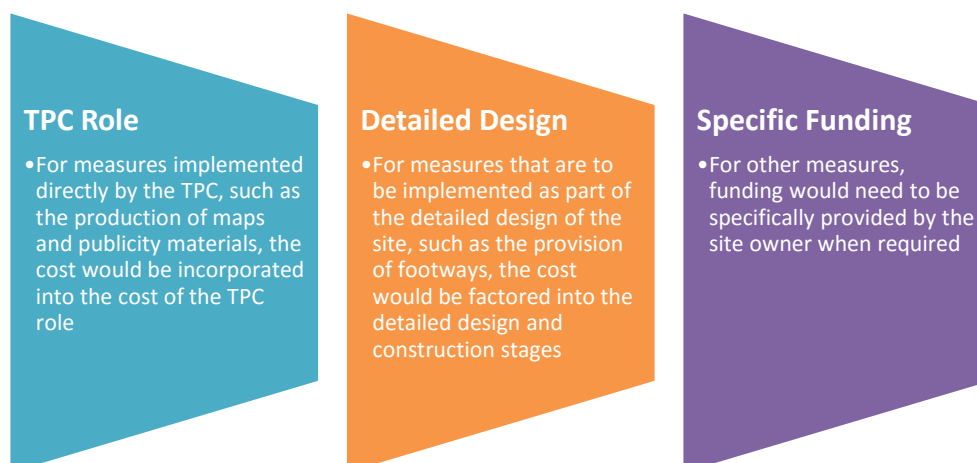
7.0   TRAVEL PLAN MEASURES

7.1   Introduction

7.1.1   This section outlines the Travel Plan measures that are to be implemented with respect to each mode of transport. An audit of existing transport infrastructure in the vicinity of the site was carried out to help inform the development of sustainable travel initiatives. The Travel Plan contains both physical and behavioural measures to increase travel choices and reduce reliance on single occupancy car travel.

7.1.2   The monitoring of the Travel Plan will allow travel patterns to be determined and the modal split to be identified. This will enable measures to be determined and specifically targeted to parents/pupils, staff and visitors to facilitate the production of a more efficient and relevant Travel Plan. Awareness and involvement of pupils in sustainable transport and travel issues in general can be maximised by incorporating the process, review, and implementation of the TP within the classroom and extra-curricular activities.

7.1.3   The key measures as currently identified will be implemented and then following monitoring will be refined and developed to meet the specific needs of the users of the site.

7.1.4   The early stages of the Travel Plan development and implementation covers the initial occupation of the redeveloped site, and the first monitoring and review periods of the plan. This period is crucial in terms of ensuring that the outlined measures are actively implemented. As a result, the majority of measures detailed herein in this Travel Plan are to be implemented prior to, or within the first year of plan implementation.

7.2   Funding Stream

7.2.1   The measures outlined within this Travel Plan are to be funded by the school, with the TPC responsible for implementing the measures. However, not all Travel Plan measures would require separate funding; the fees associated with implementing a number of the measures would be absorbed in to other funded activities. The potential ways in which the Travel Plan measures can be funded are outlined below:

Figure 5: Funding Streams for Measures

TPC Role
•For measures implemented directly by the TPC, such as the production of maps and publicity materials, the cost would be incorporated into the cost of the TPC role

Detailed Design
•For measures that are to be implemented as part of the detailed design of the site, such as the provision of footways, the cost would be factored into detailed design and construction stages

Specific Funding
•For other measures, funding would need to be specifically provided by the site owner when required

7.3   Walking

7.3.1   Practically all journeys, regardless of the main mode used, start and end by walking, which is the most sustainable mode of all. Given the location of the site, situated in a predominantly residential area it is considered that there is potential for travel to be made to and from the site on foot. Table 6 outlines the measures to be employed to actively promote travel to/from the site on foot:

Table 6: Measures to Encourage Walking

Measures	Timescale	Funding
Undertake a review to ensure that pedestrian routes to/from the site, as well as pedestrian access points and internal routes, are safe, convenient, accessible and well-lit.	During detailed site design	**Detailed Design**
Produce and distribute a map showing key pedestrian features within the local network, such as local bus stops, retail opportunities etc., and giving directions to the site by foot.	Upon each pupil/staff members' site occupation	**TPC Role**
Publicity materials regarding the health and financial benefits of walking to be made available to parents/pupils and staff.	Upon each pupil/staff members' site occupation	**TPC Role**
Actively promote local and national initiatives such as Walk Once a Week and Walk to School Week.	Upon each pupil/staff member's site occupation and ongoing	**TPC Role**

7.4   Cycling

7.4.1   Cycling is a sustainable mode of travel and is an excellent way of introducing physical activity into the everyday lives of people. Table 7 outlines the measures that will be implemented to help promote cycling to/from the site:

Table 7: Measures to Encourage Cycling

Measures	Timescale	Funding
Ensure that adequate covered and secure cycle parking is provided at the site, in a conspicuous location.	During detailed site design	**Detailed Design**
Distribute copies of relevant cycle maps to all parents and staff. Related information with regard to local cycle shops and local cycle groups should also be distributed. This information should be reviewed and updated periodically.	Upon each pupil/staff members' site occupation	**TPC Role**
Publicity materials regarding the health and financial benefits of cycling to be made available to parents/staff.	Upon each pupil/staff members' site occupation	**TPC Role**
Inform parents and staff of local LBHC and national initiatives aimed at increasing cycling levels, such as free cycle training, cycle skills coaching, bikeability and the cycle loan scheme.	Upon each pupil/staff members' site occupation	**TPC Role**
Conduct periodic audits of on-site cycle/scooter parking storage and provide additional cycle/scooter parking (covered and secure) if found to be required.	At suitable intervals following redevelopment	**TPC Role**
Investigate the possibility of establishing a Bicycle User Group (BUG) and implement if there is sufficient interest.	0-12 months following redevelopment	**TPC Role**

7.5   Public Transport

7.5.1   Measures that will be implemented to encourage increased public transport use are shown in Table 8:

Table 8: Measures to Encourage Public Transport Use

Measures	Timescale	Funding
Disseminate public transport information to all parents and staff. To encourage public transport use it is essential that information is readily available. Bus maps, timetable information, taxi firm numbers and wider publicity should be displayed in communal areas and should also be readily available from the TPC. Provide a link to the TfL Journey Planner and real time journey information system which can help plan trips using public transport. This information should be regularly reviewed and updated when required.	Upon each pupil/staff members' site occupation and ongoing	**TPC Role**
Make parents and staff aware of the 5-10 and 11-15 Oyster Zip Photocards which allow free or reduced travel on public transport.	Upon each pupil/staff members' site occupation	**TPC Role**

7.6   Car Sharing

7.6.1   The TPC should encourage site users (particularly staff) to consider car sharing as an alternative to travelling as a single car occupant. Information on local and national car sharing schemes should be distributed. The national 'Liftshare' website (www.liftshare.com) estimates that a typical car sharer will save themselves around £1,000 and 1 tonne of CO_2 per year by sharing their daily journey. There is the facility to calculate tailored potential CO_2 and cost savings.

Table 9: Measures to Encourage Car Sharing

Measures	Timescale	Funding
Promote the use of on-line car share databases such as www.liftshare.com and www.blablacar.co.uk, aimed at assisting people in finding car share partners for commuting journeys.	Upon each staff members' site occupation and ongoing	**TPC Role**
Make staff aware of the environmental (and financial) benefits of car sharing.	Upon each staff members' site occupation	**TPC Role**
Contact parents via newsletter to promote the benefits of car sharing for the school run.	0-3 months following redevelopment	**TPC Role**
Dedicate a section of staff notice boards for informal car-share requests.	0-12 months following redevelopment	**TPC Role**

7.7 Information & Marketing

7.7.1 Having an effective information and marketing strategy helps to improve awareness of the Travel Plan and increase progress towards achieving the objectives and targets, thus contributing to its success. The following information and marketing measures are to be implemented at the site:

Table 10: Information & Marketing Measures

Measures	Timescale	Funding
Produce a Travel Policy for parents and staff to accept and sign as part of the induction process.	Upon each staff member's/pupil site occupation	**TPC Role**
State commitment to encouraging sustainable travel modes in school prospectus, on website, within promotional literature, etc.	Upon each pupil/staff members' site occupation and ongoing	**TPC Role**
Ensure a copy of the Travel Plan, its aims, objectives and targets is available from the TPC and on the school website.	0-12 months following redevelopment	**TPC Role**
Hold a school assembly to talk about the health benefits of active travel.	0-12 months following redevelopment	**TPC Role**
Encourage curriculum based projects to raise awareness of transport issues and promote sustainable travel choices.	0-12 months following redevelopment	**TPC Role**
Include sustainable travel information and any updates to the Travel Plan activities in staff briefings.	0-12 months following redevelopment	**TPC Role**
Investigate setting up a Sustainable Travel Group, including the TPC, staff members, parents, transport providers and other stakeholders.	12-24 months following redevelopment	**TPC Role**
Achieve TfL STARS (School Travel: Active, Responsible, Safe) accreditation.	12-24 months following redevelopment	**TPC Role**

7.8 Welcome Travel Pack

7.8.1 Raising awareness of the existing sustainable transport options available to parent/pupils, staff and visitors to the site would allow them to make informed travel choices. The provision of information on a variety of transport options for travelling to and from the site will ensure all users of the site are fully aware of the choices available to them.

7.8.2 An effective time to change an individual's travel behaviour is at a transition point in their lives, such as when starting at a new job or school. Therefore it is proposed that all parents/pupils and staff would receive a 'Welcome Travel Pack' (WTP) prior to starting at the school. Existing pupils and staff will also be provided within a copy upon occupation of the redeveloped site. The WTP should also be placed on display within communal areas and should contain details of:

- Local walking and cycling routes in the area;

- Public transport information details (location of bus stops, timetables and fare details etc.);

- Local car sharing opportunities;

- The benefits of smart working practices such as telephone conferencing and effective diary management; and

- The Travel Plan, its aims, objectives, targets and measures.

7.8.3   The pack is to be prepared and disseminated by the TPC with assistance from LBHC and TfL (in terms of producing walking, cycling maps and public transport information). The proposed contents of the WTP are outlined within Figure 6.

Figure 6: Proposed Welcome Travel Pack Contents

7.9   Action Plan: Quick Links

- Bike Week: www.bikeweek.org.uk
- London Borough of Hillingdon Council: www.hillingdon.gov.uk/cycling
- Hillingdon Schools Travel Plan: https://www.hillingdonstp.org/
- Living Streets (Walk Once a Week, Walk to School Week): https://www.livingstreets.org.uk/what-we-do/projects/wow
- TfL STARS: www.stars.tfl.gov.uk

8.0   MONITORING & EVALUATION STRATEGY

8.1   Introduction

8.1.1   It is important to recognise that Travel Plans are a continuous process, and in order to measure their success, it is essential that an appropriate monitoring and evaluation strategy is employed. This plan is intended to provide a flexible working strategy that will be regularly reviewed and updated based upon experience of occupants of the site. It is anticipated that as part of an annual evaluation certain aspects, such as the Travel Plan targets, will be reviewed, and modified if required. The Travel Plan monitoring and evaluation process is shown graphically in Figure 7 below:

Figure 7: Monitoring and Evaluation Process
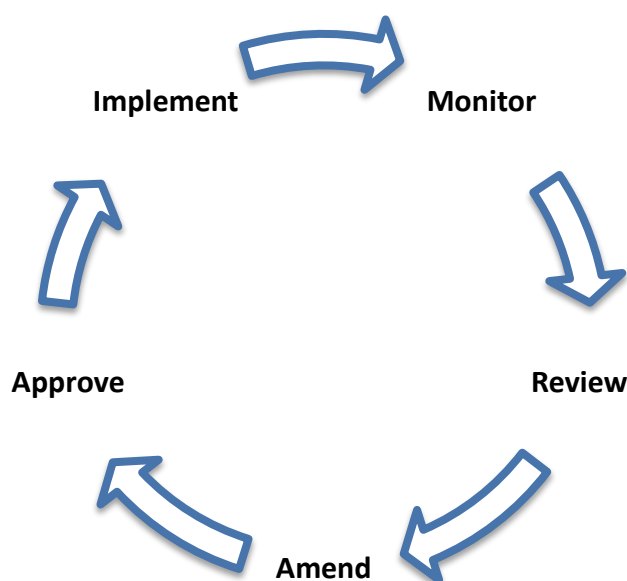
8.1.2   The monitoring and evaluation process of this Travel Plan is to remain in place throughout the lifetime of the plan, however formal monitoring and assessment is to be undertaken annually, starting 12 months from the adoption of this Travel Plan. The Travel Plan monitoring is to be undertaken in conjunction with LBHC, with agreement over elements such as the proposed surveying methodology, amendments to the Travel Plan target, and intervention measures.

8.1.3   The review process provides the opportunity for occupier and key stakeholders to consider the performance of the Travel Plan and determine whether the targets have been achieved. All stakeholders should come together to consider the outcomes of the review process and decide, if any amendments are required to the Travel Plan. Any intervention measures should be approved by all key stakeholders and implemented as appropriate.

8.2 Travel Surveys

8.2.1 In order to review and evaluate the effectiveness of this Travel Plan, the travel patterns of both pupils and staff need to be regularly established and monitored. As part of the strategy and action plan of this Travel Plan, this could be achieved by undertaking annual parent/pupil and staff surveys. The questionnaires can be modified appropriately in light of experience from previous years' surveys. This will ascertain details of site-specific circumstances, behaviours, existing and preferred travel patterns. The surveys can also enhance support for the Travel Plan and increase awareness of sustainable travel issues.

8.2.2 It is recommended that the first parent/pupil and staff travel surveys following redevelopment are undertaken 12 months after adoption of this Travel Plan. These surveys need to establish travel data for the site that can be compared against the Travel Plan targets (see Section 5.3).

8.2.3 This can be done by a series of questions which assess why pupils and staff are using their chosen mode and may outline likely barriers in achieving modal shift. There are a number of things that the travel surveys can establish, such as:

- Usual mode of travel, with differentiation between those who travel by car and those who travel as a car sharer;

- Alternative modes of travel;

- Reasons for current mode choice;

- Distance travelled;

- Number of times per week (on average) staff travel to/from the school;

- Receptiveness to a modal switch towards sustainable travel;

- Receptiveness to Travel Plan measures;

- Awareness of Travel Plan, initiatives, measures and travel options;

- General opinions and views on site travel issues; and

- Any special travel circumstances (e.g. mobility issues).

8.2.4 It is recommended that a short covering letter/email is provided with a Travel Survey questionnaire to explain the purpose and aims of the survey. To encourage rapid responses an appropriate prize could be offered if responses are received by a stipulated date.

8.3 Visitor Travel

8.3.1 It is recommended that visitor travel choice be monitored by including a 'How Did You Travel Here Today?' question in the signing-in process at reception. Information provided on the website or via correspondence should support journeys to the site by sustainable travel.

8.4 Travel Plan Progress Report

8.4.1 The results of the surveys will culminate in the production of an annual Travel Plan Progress Report that can be used to assess the progress achieved, raise awareness of travel initiatives and identify possible future actions. This report would be produced by the TPC and submitted to key stakeholders, such as LBHC.

8.5 Intervention Strategy

8.5.1 If the review process identifies that the Travel Plan targets are being missed by a significant margin, then potential additional measures/initiatives may be required at the site. Discussions should take place between the TPC/School, LBHC and any other relevant parties to determine which, if any, additional Travel Plan measures need to be implemented. Potential additional measures include:

- Area-wide (potentially local authority-wide) initiatives, working with neighbouring developments and the local authority;

- Establishing a formal car share database for staff;

- Providing dedicated car sharing bays within the site car park;

- Reviewing incentives for encouraging more sustainable travel choices;

- Increasing provision of on-site cycle parking facilities if the audit process highlights that more is required;

- More active marketing, incorporating a shift of focus; and

- Offer personalised journey planning services.

8.5.2 Any intervention measures would need to be funded either through the TPC role or implemented with specific funding from the school. The impact of the intervention measures will be monitored as part of future annual reviews.

9.0 REFERENCES

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local transport projects

Appendix 1 – Proposed Site Layout Plan

KINGS COLLEGE ROAD

EASTCOTE ROAD

THE RIDGEWAY

WINDMILL HILL

OLD HATCH MANOR

WARREN

El Sub Sta

SL

47.2m

48.5m

48.5m

GP

Junior playground & Shared PE Courts

Mini SOCCER

KS2 Class
KS2 Class
KS2 Class
KS2 Class

Year 1 classes

Year 2 classes

New Kitchen

Small Hall

ASD Unit

reception classes

Reception class playground

Infant playground

Caretaker's house

Staff Car Park

New nursery

Nursery day room

N

Scale 1:500

0 10 20 30 40 50m

100mm on Original

| Rev | | | | | | | APP |
| Rev | Date | Description | | | Drawn | Check | Approv |

Client:

London Borough of Hillingdon Council

HILLINGDON
LONDON

PROJECT:
Extra Form of Entry School Expansions

Site
Warrender Primary School
Old Hatch Manor, Ruislip HA4 8QG

Client
London Borough of Hillingdon Council
Hillingdon Civic Centre, High St.
Uxbridge UB8 1UW
Phone +44 (0)1895 250111
Fax
www.hillingdon.gov.uk

TITLE:

Warrender Primary School
Proposed Site Layout

Designed	n/a	Signed	Date
Drawn	PSL	Signed	Date Sept 2016
Checked	AR	Signed	Date Sept 2016
Approved	AR	Signed	Date Sept 2016
Scale	1:500	Datum:	
Original Size:	A1	Grid:	
Suitability Code:		Project Number:	35311100
Suitability Description:			

PLANNING

| Drawing Number: | | Revision: |
| 35311100 / WAR / PL06 | | |

local transport projects

Appendix 2 – PTAL Assessment

TRANSPORT FOR LONDON
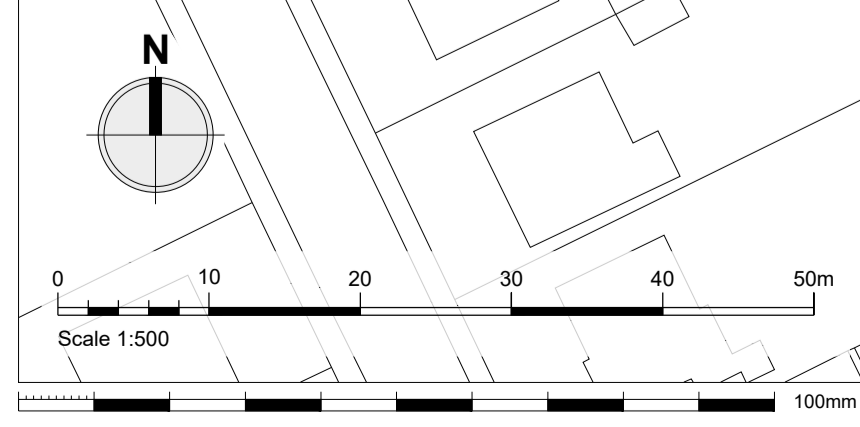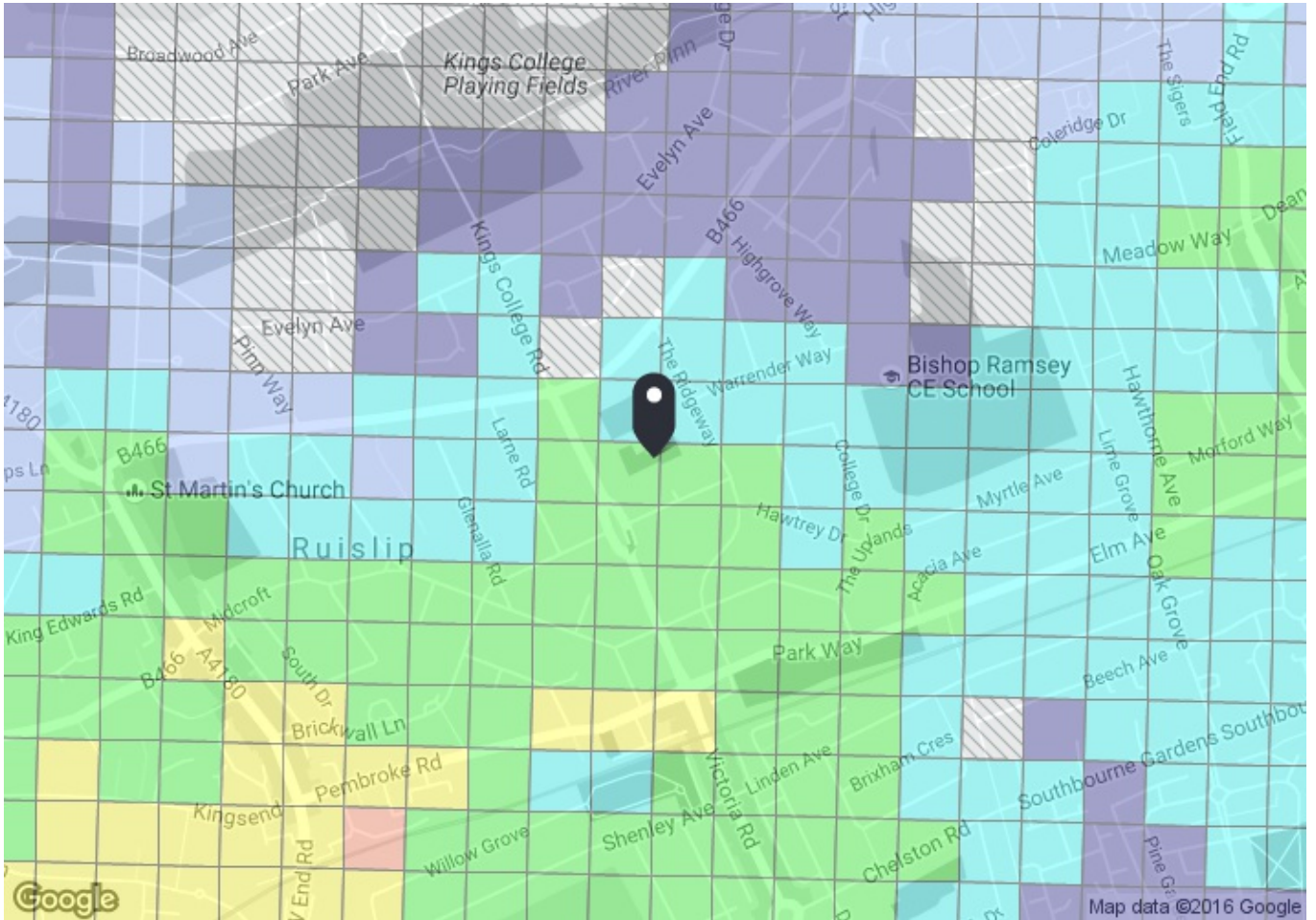
PTAL output for 20I I (Base year)

3

9 Old Hatch Manor, Ruislip HA4 8QG, UK

Easting: 509988, Northing: 187663

Grid Cell: 118544

Report generated: 05/08/2016

Map key - PTAL

▨	0 (Worst)	■	1a
■	1b	■	2
■	3	■	4
■	5	■	6a
■	6b (Best)		

Map layers

🔷 PTAL (cell size: 100m)

Calculation Parameters

Day of Week	M-F
Time Period	AM Peak
Walk Speed	4.8 kph
Bus Node Max. Walk Access Time (mins)	8
Bus Reliability Factor	2.0
LU Station Max. Walk Access Time (mins)	12
LU Reliability Factor	0.75
National Rail Station Max. Walk Access Time (mins)	12
National Rail Reliability Factor	0.75

Calculation data

Mode	Stop	Route	Distance (metres)	Frequency (vph)	Walk Time (mins)	SWT (mins)	TAT (mins)	EDF	Weight	AI
Bus	WINDMILL HILL EASTCOTE R	H13	139.36	3	1.74	12	13.74	2.18	1	2.18
Bus	RUISLIP MANOR STATION	398	549.24	2	6.87	17	23.87	1.26	0.5	0.63
Bus	RUISLIP MANOR STATION	114	549.24	6	6.87	7	13.87	2.16	0.5	1.08
LUL	Ruislip Manor	'Uxbridge-AldSlow'	513.64	5.33	6.42	6.38	12.8	2.34	1	2.34
LUL	Ruislip Manor	'BkStr-UxbridgeSFast'	513.64	2.33	6.42	13.63	20.05	1.5	0.5	0.75
LUL	Ruislip Manor	'Uxbridge-BStreetSl'	513.64	3.67	6.42	8.92	15.34	1.96	0.5	0.98
LUL	Ruislip Manor	'HarrowHill-Uxbridge'	513.64	0.67	6.42	45.53	51.95	0.58	0.5	0.29
LUL	Ruislip Manor	'Uxbridge-Cockfosters'	513.64	3.67	6.42	8.92	15.34	1.96	0.5	0.98
LUL	Ruislip Manor	'Ruislip-Cockfosters'	513.64	2.33	6.42	13.63	20.05	1.5	0.5	0.75
LUL	Ruislip Manor	'ArnosGrove-Uxbridge'	513.64	1	6.42	30.75	37.17	0.81	0.5	0.4
LUL	Ruislip Manor	'Oakwood-Uxbridge'	513.64	0.33	6.42	91.66	98.08	0.31	0.5	0.15
LUL	Ruislip Manor	'Oakwood-Ruislip'	513.64	0.33	6.42	91.66	98.08	0.31	0.5	0.15
									Total Grid Cell AI:	**10.68**

Appendix 3 – Ruislip Manor Area Bus Map

Buses from Ruislip Manor

Key

- Connections with London Underground
- Connections with London Overground
- Connections with National Rail
- ✚ Mondays to Saturdays except evenings

Red discs show the bus stop you need for your chosen bus service. The disc Ⓐ appears on the top of the bus stop in the street (see map of town centre in centre of diagram).
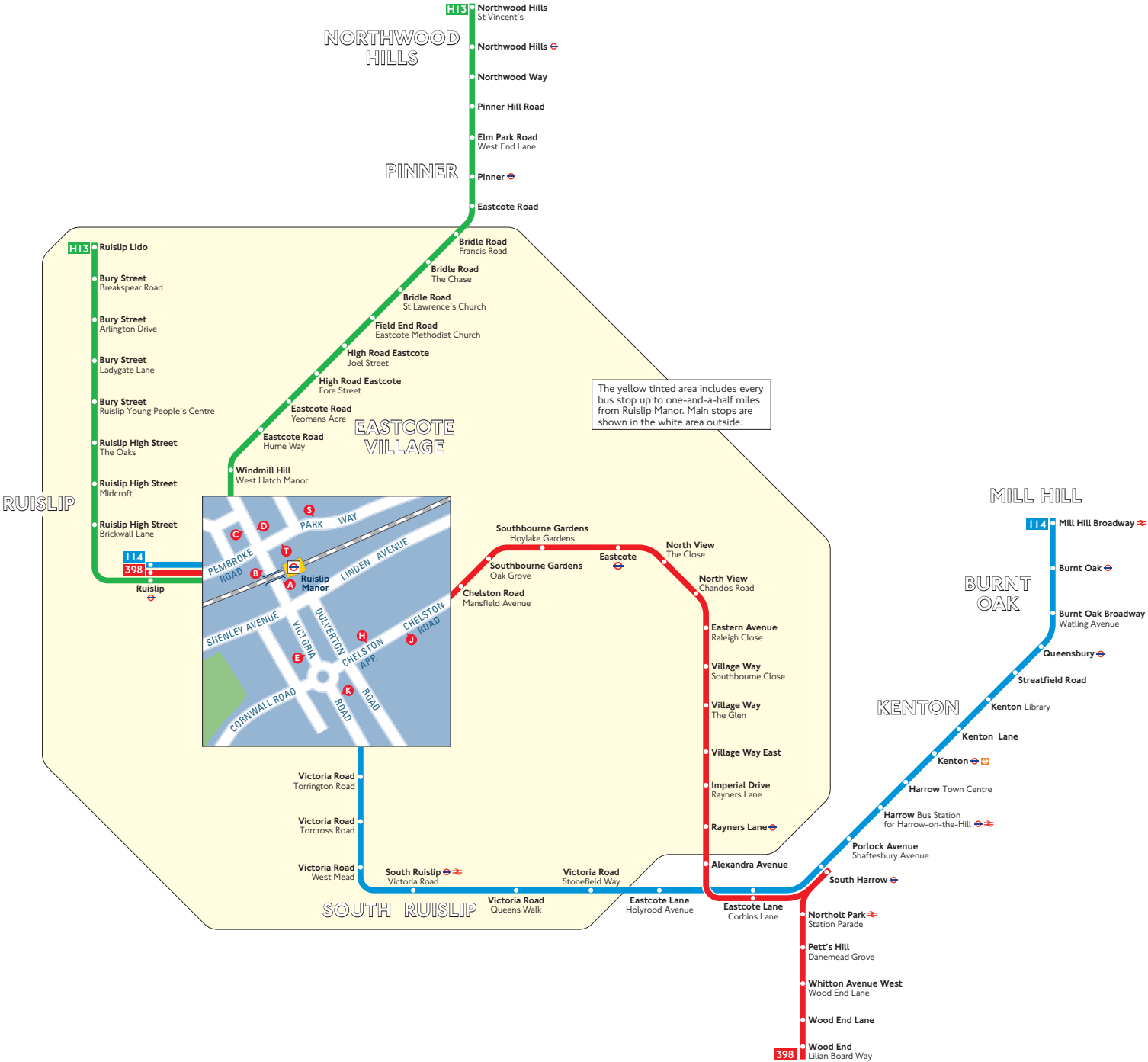
Route finder

Day buses

Bus route	Towards	Bus stops
114	Mill Hill Broadway	Ⓐ Ⓚ
	Ruislip	Ⓑ Ⓔ
398	Ruislip ✚	Ⓑ Ⓔ Ⓙ
	Wood End ✚	Ⓐ Ⓗ
H13	Northwood Hills	Ⓒ
	Ruislip Lido	Ⓓ

The yellow tinted area includes every bus stop up to one-and-a-half miles from Ruislip Manor. Main stops are shown in the white area outside.

NORTHWOOD HILLS

- H13 Northwood Hills — St Vincent's
- Northwood Hills ⊖
- Northwood Way
- Pinner Hill Road

PINNER

- Elm Park Road — West End Lane
- Pinner ⊖
- Eastcote Road

- Bridle Road — Francis Road
- Bridle Road — The Chase
- Bridle Road — St Lawrence's Church
- Field End Road — Eastcote Methodist Church
- High Road Eastcote — Joel Street
- High Road Eastcote — Fore Street

EASTCOTE VILLAGE

- Eastcote Road — Yeomans Acre
- Eastcote Road — Hume Way
- Windmill Hill — West Hatch Manor

RUISLIP

- H13 Ruislip Lido
- Bury Street — Breakspear Road
- Bury Street — Arlington Drive
- Bury Street — Ladygate Lane
- Bury Street — Ruislip Young People's Centre
- Ruislip High Street — The Oaks
- Ruislip High Street — Midcroft
- Ruislip High Street — Brickwall Lane

Town centre map

- PARK WAY
- PEMBROKE ROAD
- LINDEN AVENUE
- Ruislip Manor
- Ruislip ⊖
- DULVERTON ROAD
- VICTORIA
- CHELSTON APP.
- CHELSTON ROAD
- SHENLEY AVENUE
- CORNWALL ROAD
- 114 / 398
- Ⓢ Ⓓ Ⓒ Ⓣ Ⓑ Ⓐ Ⓔ Ⓗ Ⓙ Ⓚ

EASTCOTE / Southbourne Gardens area

- Southbourne Gardens — Hoylake Gardens
- Southbourne Gardens — Oak Grove
- Chelston Road — Mansfield Avenue
- North View — The Close
- Eastcote ⊖
- North View — Chandos Road
- Eastern Avenue — Raleigh Close
- Village Way — Southbourne Close
- Village Way — The Glen
- Village Way East
- Imperial Drive — Rayners Lane
- Rayners Lane ⊖
- Alexandra Avenue
- Eastcote Lane — Corbins Lane

MILL HILL

- 114 Mill Hill Broadway ≷
- Burnt Oak ⊖

BURNT OAK

- Burnt Oak Broadway — Watling Avenue
- Queensbury ⊖
- Streatfield Road

KENTON

- Kenton Library
- Kenton Lane
- Kenton ⊖ ⊖
- Harrow Town Centre
- Harrow Bus Station — for Harrow-on-the-Hill ≷
- Porlock Avenue — Shaftesbury Avenue
- South Harrow ⊖
- Northolt Park ≷ — Station Parade
- Pett's Hill — Danemead Grove
- Whitton Avenue West — Wood End Lane
- Wood End Lane
- 398 Wood End — Lilian Board Way

SOUTH RUISLIP

- Victoria Road — Torrington Road
- Victoria Road — Torcross Road
- Victoria Road — West Mead
- South Ruislip ⊖ ≷ — Victoria Road
- Victoria Road — Queens Walk
- Victoria Road — Stonefield Way
- Eastcote Lane — Holyrood Avenue

Information correct from February 2013
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