

400 Longwater Avenue Green Park, Reading

Transport Statement

On behalf of **Green Park Reading No.1 LLP**

Project Ref: 27159 /5501 | Rev: A | Date: March 2016



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1 Introduction

1.1 Background

- 1.1.1 This Transport Statement (TS) has been prepared by Peter Brett Associates LLP (PBA) on behalf of Green Park Reading No.1 LLP in support of a Full Planning Application for the latest B1 development proposal on Green Park. The application site is located on plot 400 Longwater Avenue and lies towards the western perimeter of Green Park,
- 1.1.2 The 6.3 acre (2.55 hectare) site forms part of a wider historic masterplan that has been progressively implemented over two decades. It sits in the heart of a thriving business community served by a comprehensive range of transport links within the Reading urban area.
- 1.1.3 The site is subject to previous outline consent (ref. 85/TP/690 dated 26th July 1995) and received approval of a Reserved Matters Consent (REF) for the development of 14,080m² of open B1 (Business) use, including access, 440 car parking spaces, servicing, landscaping and related works. The application site was also subject to more recent pre-application consultation and a transport scoping agreement in late 2013, although the planning application was not submitted at that time for other planning reasons. The scheme that formed the basis of that consultation along with the agreed transport scoping and the draft TS was very similar to the current versions for this new application.
- 1.1.4 Consequently, Green Park Reading No.1 LLP are looking to submit an updated application for 400 Longwater and increase the floor space from 14,080m² to circa 27,207m². Parking provision will also increase from 440 to 702 spaces. 136 cycle parking and 14 motorcycle spaces will also be provided. For comparison, the 2013 proposal for plot 400 equated to 26,805m² of floor space with an associated increase (but pro-rata reduction) in parking from 440 spaces to 691 spaces.
- 1.1.5 It has been agreed via email on 21st January 2016 with RBC that the pre-application scoping carried out in 2013 is still considered valid with regards to this application. The scoping note and the correspondence in which this was agreed are provided in **Appendix A**.
- 1.1.6 The plot is subject to reserved matters consent and therefore the agreed scoping requires to the assessment of transport impacts associated with the difference between the extant consent and the proposed.
- 1.1.7 This TS should be considered in conjunction with the supporting Planning Statement, Travel Plan and other accompanying planning application documents.
- 1.1.8 The report has been produced in accordance with the guidance set out in the Department for Transport (DfT) publication 'Guidance for Transport Assessments' published in March 2007 and of course the agreed scoping.

1.2 Aims of the Transport Statement

- 1.2.1 The DfT guidance states that a Transport Statement should address the following:
- "Reducing the need to travel, especially by car - ensure, at the outset that thought is given to reducing the need to travel; consider the types of uses (or mix of uses) and the scale of development in order to promote multipurpose or linked trips.

- Sustainable accessibility - promote accessibility by all modes of travel, in particular public transport, cycling and walking; assess the likely travel behaviour or travel pattern to and from the proposed site; and develop appropriate measures to influence travel behaviour.
- Dealing with residual trips - provide accurate quantitative and qualitative analyses of the predicted impacts of residual trips from the proposed development and ensure that suitable measures are proposed to manage these impacts.
- Mitigation measures - ensure as much as possible that the proposed mitigation measures avoid unnecessary physical improvements to highways and promote innovative and sustainable transport solutions”.

1.2.2 The progression of the masterplan and the TS has been carried out in accordance with the above objectives and agreed scope, as appropriate. Importantly, access and movement to and from the site by alternative modes has been considered with an emphasis on sustainable travel provision and initiatives to help promote these modes

1.3 Report Structure

1.3.1 The structure of this report is as follows:

- **Section 2** – reviews the relevant transport and land use planning policies;
- **Section 3** – reports on site accessibility primarily in terms of sustainable modes including pedestrian, cycle and public transport provision;
- **Section 4** – describes the development proposals;
- **Section 5** – outlines baseline highway assumptions and traffic flows;
- **Section 6** – outlines site generation and highway impact for the development proposals. It quantifies the potential level of person and vehicular trips generated from the proposed Green Park Village development and assesses the impact the potential level of generated vehicular trips will have on the local highway network and M4;
- **Section 7** – Sets out the future transport opportunities and infrastructure improvements that will support travel to and from Green Park;
- **Section 8** – summarises and concludes the report.

2 Transport Planning Policy

2.1 Context

- 2.1.1 The transport strategy and proposals for the proposed development have been considered in the context of national guidance and local policy.

2.2 National Planning Policy Guidance

- 2.2.1 The Government published the National Planning Policy Framework (NPPF) in March 2012. This forms a key part of their reforms to make the planning system less complex and more accessible, to protect the environment and to promote sustainable growth.

- 2.2.2 With regards to achieving sustainable development, paragraph 7 of the NPPF sets out the requisites for sustainable development, stating: *"There are three dimensions to sustainable development: economic, social and environmental. These dimensions give rise to the need for the planning system to perform a number of roles:*

- *An economic role – contributing to building a strong, responsive and competitive economy, by ensuring that sufficient land of the right type is available in the right places and at the right time to support growth and innovation; and by identifying and coordinating development requirements, including the provision of infrastructure;*
- *A social role – supporting strong, vibrant and healthy communities, by providing the supply of housing required to meet the needs of present and future generations; and by creating a high quality built environment, with accessible local services that reflect the community's needs and support its health, social and cultural well-being; and*
- *An environmental role – contributing to protecting and enhancing our natural, built and historic environment; and, as part of this, helping to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change including moving to a low carbon economy."*

- 2.2.3 The NPPF provides further guidance on how sustainable development should be achieved, with paragraph 9 stating *"Pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life, including (but not limited to):*

- *Making it easier for jobs to be created in cities, towns and villages;*
- *Replacing poor design with better design;*
- *Improving the conditions in which people live, work, travel and take leisure; and*
- *Widening the choice of high quality homes."*

- 2.2.4 Paragraph 14 states *"At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.*

- 2.2.5 *For plan-making this means that:*

- Local planning authorities should positively seek opportunities to meet the development needs of their area;
- *Local Plans should meet objectively assessed needs, with sufficient flexibility to adapt to rapid change, unless:*
 - Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
 - Specific policies in this Framework indicate development should be restricted.

2.2.6 *For decision-taking this means:*

- Approving development proposals that accord with the development plan without delay; and
- Where the development plan is absent, silent or relevant policies are out of date, granting permission unless:
 - Any adverse impacts of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in this Framework taken as a whole; or
 - Specific policies in this Framework indicate development should be restricted.”

2.2.7 With regards to promoting Sustainable Transport, paragraphs 29 to 32 of the NPPF states:

“Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives. Smarter use of technologies can reduce the need to travel. The transport system needs to be balanced in favour of sustainable transport modes, giving people a real choice about how they travel. However, the Government recognises that different policies and measures will be required in different communities and opportunities to maximise sustainable transport solutions will vary from urban to rural areas.

Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion. In preparing Local Plans, local planning authorities should therefore support a pattern of development which, where reasonable to do so, facilitates the use of sustainable modes of transport.

Local authorities should work with neighbouring authorities and transport providers to develop strategies for the provision of viable infrastructure necessary to support sustainable development, including large scale facilities such as rail freight interchanges, roadside facilities for motorists or transport investment necessary to support strategies for the growth of ports, airports or other major generators of travel demand in their areas. The primary function of roadside facilities for motorists should be to support the safety and welfare of the road user.

All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- The opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;
- Safe and suitable access to the site can be achieved for all people; and

- Improvements can be undertaken within the transport network that cost-effectively limits the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.”

2.3 Planning Practice Guidance (PPG) – Department for Communities and Local Government (March 2014)

2.3.1 The supporting ‘Planning Practice Guidance’ provides a section on ‘Travel plans, transport assessments and statements in decision-taking’. This states that Transport Statement can positively contribute to:

- “encouraging sustainable travel;
- lessening traffic generation and its detrimental impacts;
- reducing carbon emissions and climate impacts;
- creating accessible, connected, inclusive communities;
- improving health outcomes and quality of life;
- improving road safety; and
- reducing the need for new development to increase existing road capacity or provide new roads.”

2.3.2 The guidance also states that Transport Statements should be:

- “proportionate to the size and scope of the proposed development to which they relate and build on existing information wherever possible;
- established at the earliest practicable possible stage of a development proposal;
- be tailored to particular local circumstances (other locally-determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally);
- be brought forward through collaborative ongoing working between the Local Planning Authority/Transport Authority. Engaging communities and local businesses in TAs can be beneficial in positively supporting higher levels of walking and cycling (which in turn can encourage greater social inclusion, community cohesion and healthier communities).”

2.3.1 Each of these principles have been considered into the assessment of the 400 Long Water Avenue redevelopment, building upon established principles that have emerged through previous applications. The design and assessment of transport and highways has been undertaken with close collaboration with RBC, demonstrated through the extent of the scoping exercise and ongoing liaison between developer team and Local Authority.

2.4 Local Policy

Reading Borough Council Local Development Framework Adopted Core Strategy (2008)

- 2.4.1 Reading Borough Council adopted its Core Strategy in January 2008. This document, in conjunction with the policies of the Local Plan, forms the suite of policies at a local level by which planning applications are considered.
- 2.4.2 Policy CS4 (Accessibility and the Intensity of Development) states that *“the scale and density of development within the Borough will be related to its level of accessibility by walking, cycling and public transport to a range of services and facilities.”*
- 2.4.3 Policy CS20 (Implementation of the Reading Transport Strategy) specifically relates to highways and provides guidance with regard to development proposals and their impact upon the highway network and the promotion of alternatives to the use of the private car.

Reading Borough Council Third Local Transport Plan, 2011-2026

- 2.4.4 Reading's third Local Transport Plan (LTP3) was published in April 2011 and provides the context for Reading in terms of the economy, environment and quality of life. The long-term vision for transport in Reading is the aim of better 'connecting Reading' through a transport system that enables people to move around easily, safely, sustainably and in comfort promoting inclusion, intervention and innovation. This is reflected in the key LTP3 objectives which are:
- To facilitate more physically active travel for journeys in a healthy environment;
 - To improve personal safety on the transport network;
 - To provide affordable, accessible and inclusive travel options for everyone;
 - To ensure that the transport network operates safely and efficiently to meet the needs of all users;
 - To align transport and land use planning to enable sustainable travel choices, improve mobility, reduce the need to travel and preserve the natural environment;
 - To deliver balanced packages of value for money transport solutions and make best use of existing transport investment;
 - To offer sustainable transport choices for the Travel to Work Area and beyond, integrating within and between different types of transport;
 - To improve journey times, journey time reliability and the availability of information;

To reduce carbon emissions from transport, improve air quality and create a transport network which supports a mobile, affordable low carbon future

Car and Cycle Parking Standards

- 2.3.20. Appendix 3.0 of the Reading Borough Local Plan, adopted in October 2011, sets out the Summary of Car Parking Standards for B1(a) Office developments.
- 2.3.21. Reading is recognised as an urban area with great diversity in transport provision and need. Therefore, standards are differentiated according to their location. According to RBC's zonal classification system, Green Park lies within Zone 3.
- 2.3.22. **Table 2-1** shows the required parking provision for B1(a) office:

Table 2-1: Reading Borough Council Parking Standards 2011

Use Class	Maximum 1 space per m2			
	Zone 1	Zone 2	Zone 3	Zone 4
B1(a) Office	250 m ²	100m ²	50m ²	Dealt with on a case by case basis

- 2.4.5 With regard to Parking for Pedal Cycles, it states:

"The provision of cycle parking must be considered essential for most developments. The quality of any cycle parking should reflect the likely usage, either with Sheffield type stands for short term parking or more secure systems for longer term storage".

- 2.4.6 For zones 1-4, minimum cycle parking for B1(a) office developments should be provided at a rate of 1 space per 200m².

2.5 Green Park Travel Plan

- 2.5.1 The Green Park Travel Plan is in place as an ongoing commitment to reduce the proportion of single occupant private car trips to the park, and promote alternative means of travel for purposes relating to commuting and business travel. The overall objective of the Travel Plan is to reduce the reliance by employees working at Green Park and members of the public visiting Green Park on single occupancy car journeys.
- 2.5.2 More specifically, the TP develops realistic travel targets by mode to suit Green Park occupants and local transport infrastructure. Green Park monitor and review travel modes to assist in developing the strategy for promoting alternative travel modes to staff working on the park

2.6 Summary

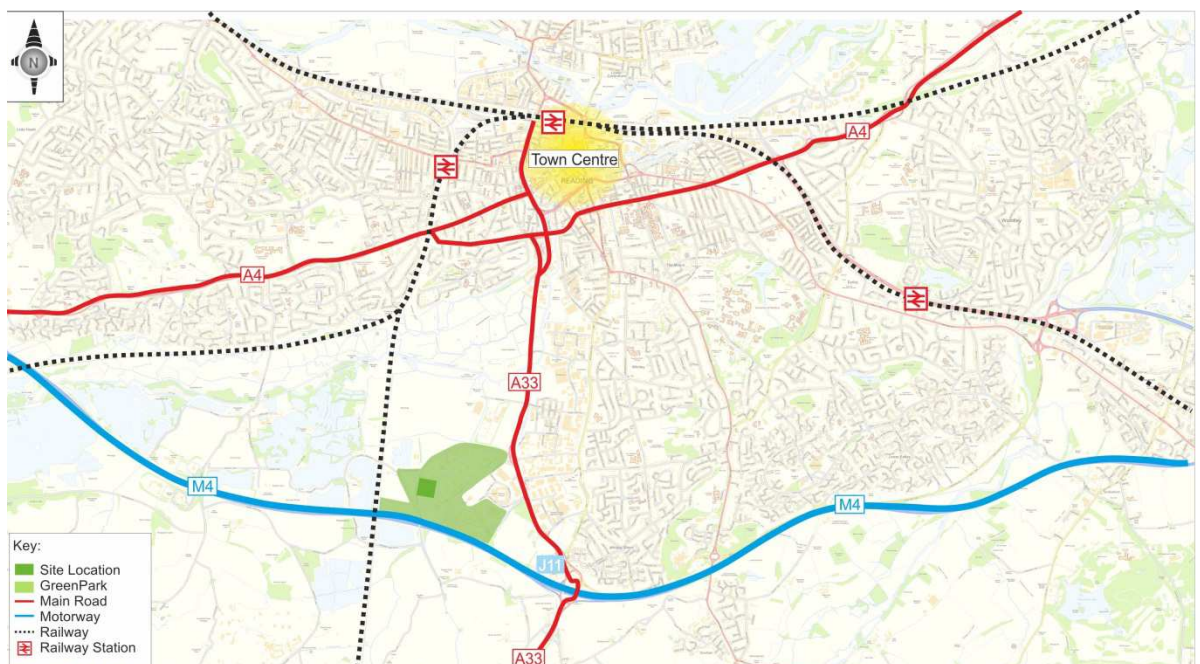
- 2.6.1 As will be demonstrated in further detail within the following chapters, the attributes of the proposed development will help to meet the objectives of national guidance and local planning policy.

3 Site Accessibility

3.1 Site Location

- 3.1.1 **Figure 3-1** shows the site location in the context of the wider Reading area. Green Park is situated in a well connected, accessible location approximately 3.7km to the south of Reading town centre and 1.7km to the north of Junction 11 of the M4.
- 3.1.2 The A33 provides the main focus of highway access and borders Green Park to the east. Madejski Stadium and its associated hotel facilities as they currently stand are adjacent and again to the east. The southern extent of Green Park is bounded by the M4. Smallmead Road and the Reading to Basingstoke railway line are located to the west. The Green Park Village (GPV) residential development is adjacent to the north-west of the site.
- 3.1.3 In the wider context, Green Park is strategically placed as a high quality, market leading business park located within the Thames Valley and , sufficiently close to Heathrow Airport to attract international business. Regionally, it is easy access to the Great Western Railway (GWR), making it a very well connected business community.

Figure 3-1: Site Location



3.2 Pedestrian and Cycle Access

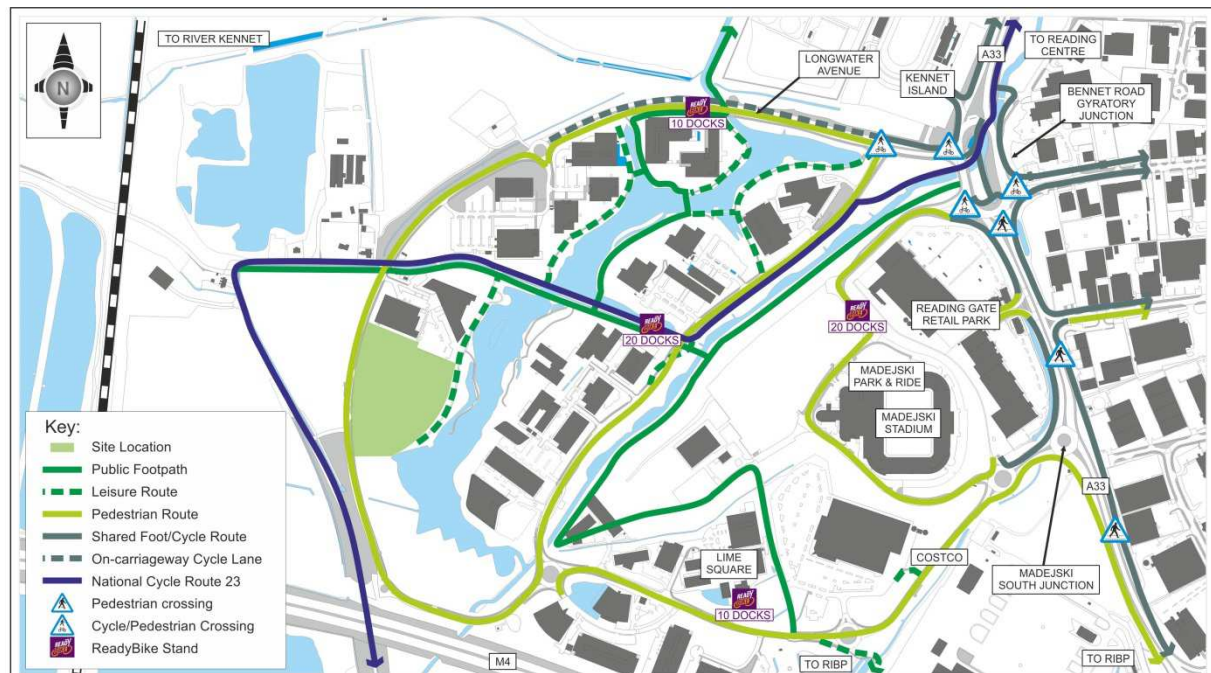
- 3.2.1 400 Longwater Avenue is located on the west side of Longwater Lake, to the south end of Longwater Avenue and in the southwest of Green Park. The on-site pedestrian and cycle connectivity takes advantage of this attractive environment as shown further in **Figure 3-2**.
- 3.2.2 Pedestrian and cyclist access to Green Park is very well facilitated by a number of shared footpath cycle routes located along the A33. This network provides various links to Reading town centre adjacent to the highway or waterways. Together with the presence of at grade controlled (Toucan) crossing points, or alternative 'continuous' subway links across the A33 they permit pedestrian and cycle accessibility to and from neighbouring residential and

commercial areas to the east of Green Park. There are also excellent cycle links to the south and west via National Cycle Routes as outlined below.

3.2.3 The baseline pedestrian and cycle networks in the vicinity of the site are illustrated on **Figure 3-2** and include:

- A high quality pedestrian and cycle network within Green Park provides for the development and connects into the A33 facilities. CCTV coverage within Green Park increases the perception of the security of walking through the park.
- A comprehensive footway and cycleway network along the A33 corridor providing a direct link between Green Park and Reading Town Centre. This incorporates the National Cycle Route (NCR) 23, which connects Reading with Basingstoke and extends as far as Southampton to the south.
- National Cycle Route 4 (NCN4) passes the north of the site and provides excellent links east and west towards London and Newbury respectively, plus rail stations such as Theale, Midgham, Maidenhead and Slough etc. which can serve a partial cycle/rail commute
- Crossing facilities are located at a number of locations across the A33 Relief Road with both subway and at-grade crossings. These include at the Bennet Road Gyratory and then further north towards the town centre at Island Road. Further signalised at-grade crossings are located opposite Reading Gate Retail Park to the south Longwater Avenue. All signalised crossings cater for both cyclists and pedestrians.
- Improvements to cycle route connectivity and continuity along the A33 corridor, was delivered more recently as part of Reading Borough's Local Sustainable Transport Fund allocation. This includes providing links between the paved sections of the cycle route to allow a safer and more direct all-weather use route for cyclists especially for when fluvial flooding of lower lying routes occurs.
- Continuous pedestrian and cycle connectivity was provided at the upgraded M4 Junction 11 (2010) with improved pedestrian crossing facilities. A pedestrian/cycle bridge over-sails the junction, linking the A33 (S) with pedestrian/cycle routes on Whitley Wood Lane and the A33 (N).
- A cycle hire scheme called ReadyBike has been established by RBC to improve sustainable transport options in and around the town. Three docking stations are located within Green Park. These are also well-used for accessing amenities on Green Park during the day, such as retail outlets and eateries at Lime Square. 10 docking stations are provided at Lime Square, 20 on Brook Drive and 10 on Longwater Avenue

Figure 3-2: Existing Pedestrian and Cycle Network



3.3 Bus Access Opportunities

3.3.1 **Figure 3-3** shows the public transport network for Green Park.

3.3.2 The owners of Green Park have contributed, to the access infrastructure and public transport services in and around Green Park over many years. This has helped to facilitate the operation of the Greenwave bus services, which operates up to 9 buses per hour in peak periods between Reading Town Centre and Green Park.



3.3.3 Greenwave bus services 53, 53a, 53b and 53x serve the site via Longwater Avenue. There are bus stops with shelter and seating located within a 300m walk from the site at 300 Longwater Avenue.

3.3.4 A new dedicated shuttle between MereOak Park and Ride and Green Park (Service 63) is scheduled to commence in April 2016.

3.3.5 Greenwave is a fleet of low emission, eco-friendly buses producing significantly lower levels of carbon dioxide and nitrogen oxide, further improving and the overall sustainability of the site.

3.3.6 Park and Ride facilities also operate from Madejski Stadium situated to the east of the site to Reading Town Centre and rail station at a frequency of one bus every 7 to 8 minutes in peak hours. Steps link the western side of Madejski Stadium to Green Park.

3.3.7 The routes and frequencies of the relevant bus services are outlined in **Table 3-1**.

Figure 3-3: Greenwave Bus Network

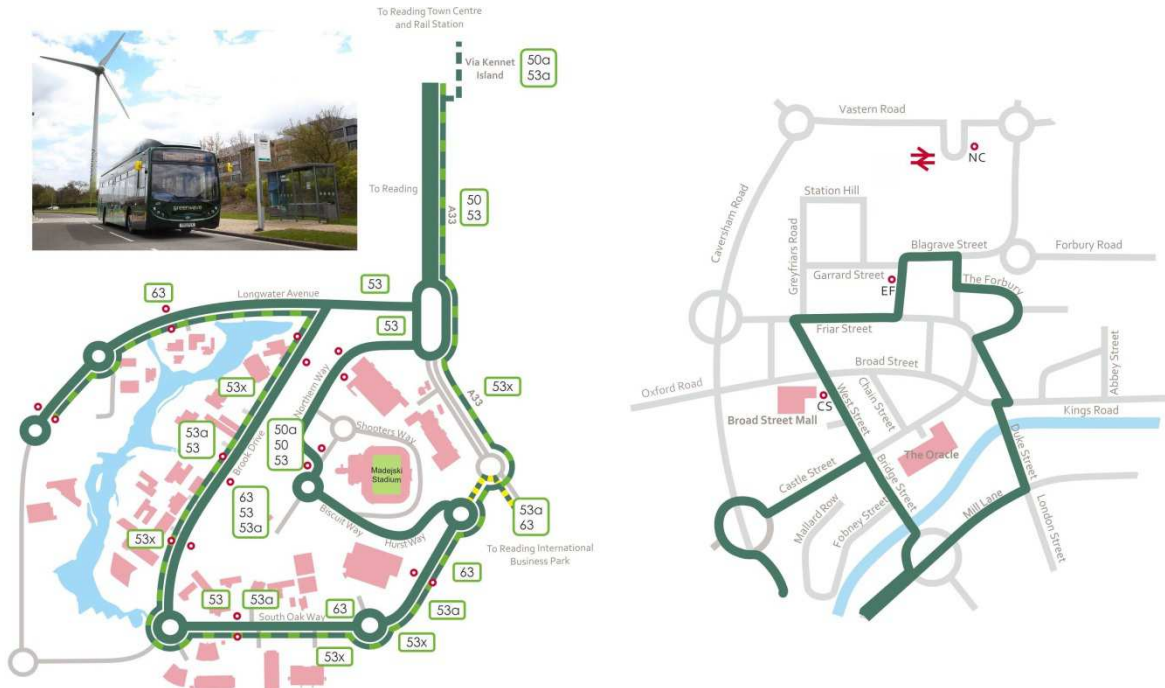


Table 3-1: Local Bus Services

Service	Operator	Route Description	Service Details
53	Reading Buses	Reading Town Centre – Green Park	Mon – Fri (Every 30 minutes)
53a	Reading Buses	Central Reading – Green Park – Reading Station – Green Park	Mon – Fri AM Service Only (Every 30 minutes)
53b	Reading Buses	St. Mary's Butts/Reading Station – Kennet Island – Longwater Avenue	Mon – Fri (Every 1 hour)
53x	Reading Buses	Reading Station – South Oak Way – Brook Drive – Longwater Avenue	Mon – Fri AM Service Only (Every 11-16 minutes)

3.4 Rail Access Opportunities

- 3.4.1 Reading Central Station is located approximately 3.7km to the north of the site in central Reading.
- 3.4.2 Until Green Park Station is delivered and becomes operational there are a number of frequent bus services that link the site to Reading station, as described in **Section 3.3** and outlined in **Table 3-1**. The bus services all operate to Reading town centre, which forms the interchange with Reading Rail station. Cycling is also a practical secondary mode of transport for employees to access rail.
- 3.4.3 Rail services at Reading station are operated by First Great Western, South West Trains and Cross Country Trains and they provide vast national network coverage in terms of destinations, some of which are highlighted below:
- 3.4.4 **London Paddington** - mainline services run to London Paddington, with an approximate journey time of 29 minutes train ride from Reading. Average train frequency is eleven trains per hour throughout the day, with an increase of up to 13 trains per hour during peak periods.
- 3.4.5 **London Waterloo** - a second mainline service runs from Reading Station to London Waterloo, with an approximate journey time of 1 hour 25 minutes and an average train frequency of 2 direct trains every hour throughout the day. This service also calls at Winnersh, Wokingham, Bracknell, Ascot, Staines, Richmond and Clapham Junction.
- 3.4.6 **Birmingham New Street** - a mainline service runs from Reading Station, with an approximate journey time of 1 hour 35 minutes and an average train frequency of 2 direct trains every hour.
- 3.4.7 **Basingstoke** - is a 16 -25 minutes train ride from Reading, with a service frequency of four per hour throughout the day. There is two direct train operated by Cross Country, with a journey time of 16 to 19 minutes. The remaining 2 half hourly rail services, operated by First Great Western, also call at Reading West, Mortimer, and Bramley. It is proposed that, when it comes forward, this rail service will call at the proposed Green Park rail station to the west of the proposed development.
- 3.4.8 **Southampton Central** - is a 1 hour train ride from Reading with an average frequency of two trains every hour throughout the day. This Cross Country Trains rail service also calls at Basingstoke, Winchester and Southampton Airport Parkway.
- 3.4.9 **Redhill** - is a 1 hour 20 minutes train ride from Reading with an average frequency of 2 trains per hour throughout the day. This service also calls at Wokingham, Crowthorne, Sandhurst, Blackwater, Farnborough North, Guildford, Dorking West and Reigate.
- 3.4.10 **Oxford** - is approximately a 25 minute train ride from Reading with an average frequency of five direct trains in the peak hour.
- 3.4.11 The information described above is summarised in **Table 3.2**;

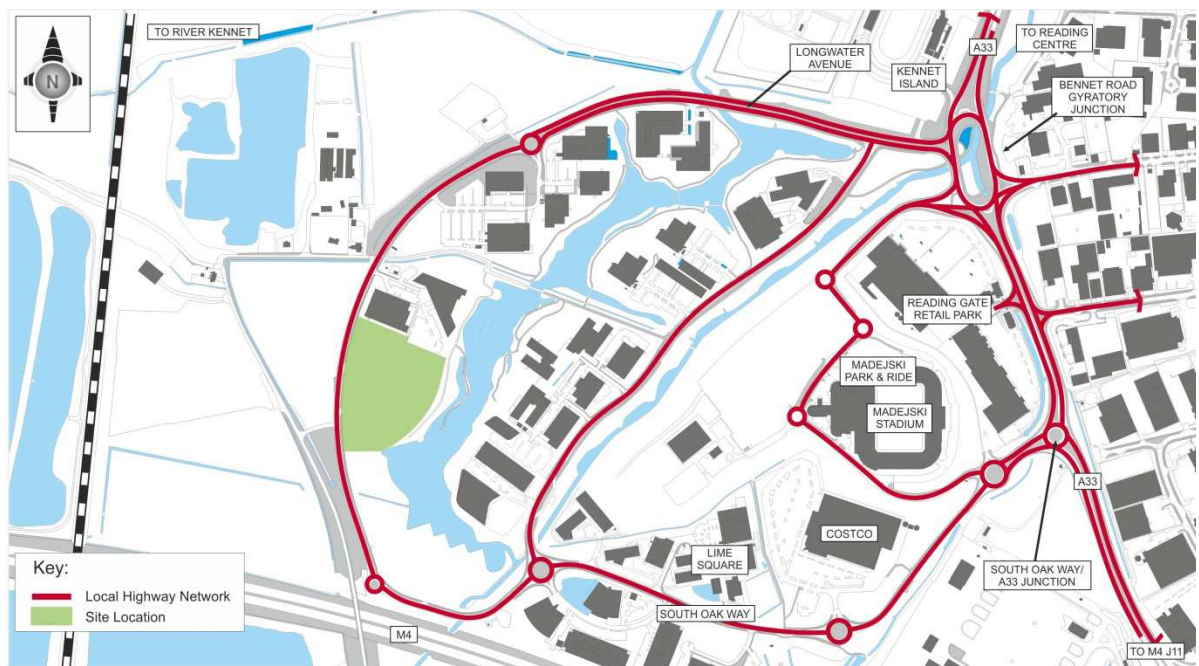
Table 3-2: Reading train journey times and frequencies.

Destination	Journey Time	Frequency
London Paddington	29 Minutes	11 per hour
London Waterloo	1 Hour 25 minutes	2 per hour
Birmingham New street	1 Hour 35 mins	2 per hour
Basingstoke	25 Minutes	4 per hour
Southampton	1 Hour	2 per hour
Redhill	1 Hour 20 Minutes	2 per hour
Oxford	25 Minutes	2 per hour

3.5 Highway Access

3.5.1. The local highway network in the vicinity for the site is illustrated on **Figure 3-4**.

Figure 3-4: Existing Highway Network



3.5.2. Green Park is well connected to the strategic road network with direct access via South Oak Way and Longwater Avenue to the A33. The A33 is a dual carriageway road running north / south, to the east of Green Park and provides connections to J11 of the M4 and then on to Basingstoke to the south and central Reading to the north.

3.5.3. Longwater Avenue combines with South Oak Way as the main perimeter roads surrounding Green Park. Longwater Avenue is a private single carriageway, road built to high adoptable standards, approximately 9.5m wide with two vehicular lanes each measuring approximately

4.0m in width and a central median strip separating the lanes. The road carries an advisory 25 mph speed limit and standard street lighting.

- 3.5.4. Longwater Avenue connects with the A33 at the Bennet Road Gyratory. The opposite end of Longwater Avenue extends past the proposed development to a roundabout with South Oak Way and Brook Drive. South Oak Way runs along the south of the Green Park development and links to the southern access roundabout with CostCo, the Madejski stadium and finally the A33 three arm roundabout junction.

4 Development Proposals

4.1 400 Longwater Avenue

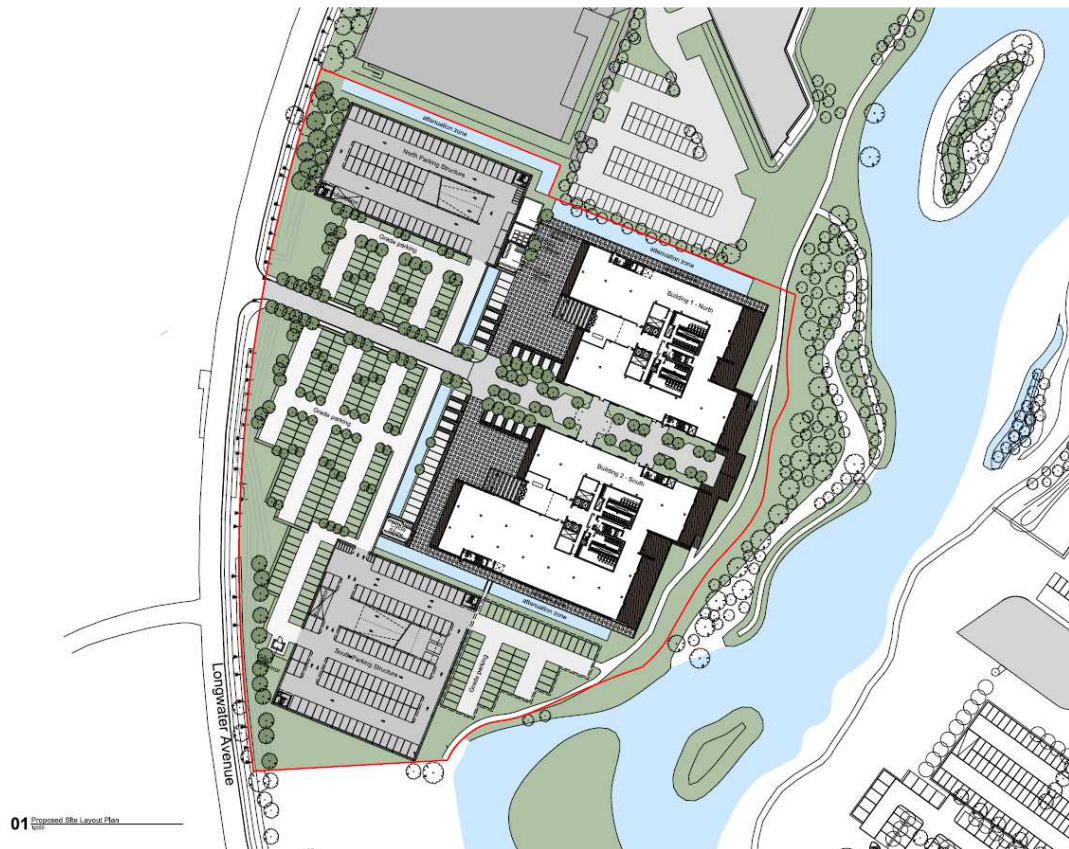
- 4.1.1 The proposed planning application site (400 Longwater Avenue) is currently undeveloped but benefits from an existing Reserved Matters consent (08/00261/REM) pursuant to Outline consent (85/TP/690). This consent is for the development of 14,080m² of open B1 (Business) Use, including access, 440 car parking spaces, servicing, landscaping and related works.
- 4.1.2 The application site was also subject to more recent pre-application consultation and a transport scoping agreement in late 2013, although the planning application was not submitted at that time. The scheme that formed the basis of that consultation along with the agreed transport scoping and the draft TS was very similar to the current versions for this new application.
- 4.1.3 Consequently, Green Park Reading No.1 LLP are looking to submit a new planning application that will re-visit and modify the consented scheme for this plot, which will increase the floor space from the permitted level of 14,080m², up to 27,207m². The site will be developed as two buildings to allow flexibility of leasing..
- 4.1.4 Parking provision will also increase from 440 to 702 spaces. 136 cycle parking and 14 motorcycle spaces will also be provided.
- 4.1.5 For comparison, the 2013 proposal for plot 400 equated to 26,805m² of floor space with an associated increase (but pro-rata reduction) in parking from 440 spaces to 691 spaces.
- 4.1.6
- 4.1.7 The northern building will provide circa 12,440m² of office space and 321 parking spaces and the southern building will provide circa 14,767m² of office space and 381 parking spaces. **Table 4-1** sets out the floor space and parking provision for each building.

Table 4-1: 400 Longwater Avenue Development Floor Area and Parking Provision

Development Proposals					
Building	Floor Area	Parking Provision	Accessible parking bays	Cycle Parking	Motor Cycles
Building 1 (Northern block)	12,440 m ²	321	10	62	6
Building 2 (Southern block)	14,767m ²	381	10	74	8
Total	27,207m²	702	20	136	14

- 4.1.8 As previously stated the proposal results in a floor area increase of 13,127m²
- 4.1.9 **Figure 4-1** illustrates the ground floor layout of the proposed scheme when fully developed:

Figure 4-1: Proposed Site Layout



4.2 Car Parking

- 4.2.1 The increased floor space is accompanied by an associated increase in car parking (but pro-rata reduction for the additional floor space above the consent). This means parking will increase from the consented 440 spaces up to 702 spaces plus the disabled bay provision.
- 4.2.2 This increase in parking provision will equate to a pro-rata reduction relative to the additional quantum of floor space, due to the more restrained parking standard of 1 space per 50m² in accordance with RBC parking standards that will be applied to additional uplift in floor space over consented levels. Therefore, it is intended for the first 14,080m² to be quantified at 1 per 32 as consented and the remainder to be at 1 per 50m².
- 4.2.3 Car parking will be provided in two separate decked structures. Both structures are 3 levels including ground and will provide the majority of the parking for each building. The remaining parking spaces will be provided at surface level. Building 1 will provide 187 parking spaces within its decked car park and 134 as surface level. Building 2 will provide 301 parking spaces within its decked car park and 80 as surface level.
- 4.2.4 Accessible parking spaces will be provided at grade within close proximity of the main building access points. Building 1 and 2 will have 10 accessible parking spaces each.
- 4.2.5 Passive Electrical charging bays for hybrid/electric vehicle will be provided at 5% of parking provided. Passive provision requires the necessary underlying infrastructure (e.g. capacity in the connection to the local electricity distribution network and electricity distribution board, as well as cabling ducting to parking spaces) to enable simple installation and activation of a charge point at a future date.

- 4.2.6 Applied pro rata to the proposals 16 charging bays will be provided within the car parking for Building 1 and 19 charging bays for Building 2.

4.3 Cycle Parking

- 4.3.1 Cycle parking is proposed at a ratio of 1 space per 200m² in accordance with RBC standards, which equates to a provision of 136 spaces. This means Building 1 and 2 will provide 62 and 74 covered cycle parking spaces respectively with dedicated shelters located close to the main building. A separate cycle/pedestrian access will provide connection to the building forecourts.

4.4 Pedestrian and Cycle Access

- 4.4.1 Pedestrian and cycle access will also be via the main site access and connecting to provision served by Longwater Avenue. For pedestrians this is facilitated by a segregated pedestrian footway on the both sides of the access road. As discussed earlier there is a high quality pedestrian and cycle network within Green Park and this provides for the development.

4.5 Site Access

- 4.5.1 Vehicle access to the site is in the form of a priority junction with Longwater Avenue. This will lie on an east-west orientation with appropriate geometric design criteria to adoptable standards as outlined below. The access will provide internal access to the car parks and drop off areas.
- 4.5.2 The proposed site access will have a carriageway width of 6.0m on entrance into the site and will be an all moves junction. The proposed layout will have 10.0m radius to allow for two-way access and provides sufficient room for a refuse/delivery vehicle and car to pass. This is shown in **Drawing 27159_001_SK007**
- 4.5.3 The proposed location of the access also achieves 90m of visibility in both directions along Longwater Avenue. Longwater Avenue is to retain existing geometries of 4m lanes and a 1.5m central median strip. This is shown in **Drawing 27159_001_SK008**
- 4.5.4 Drawings **27159_001_SK007** and **27159_001_SK008** Can be found in **Appendix C**

4.6 Service/Fire & Refuse Access

- 4.6.1 The site layout provides suitable access for servicing, refuse and emergency vehicles. Vehicle swept path drawings can be found in **Appendix D** and are summarised below
- 4.6.2 Refuse for both buildings will be kept in a dedicated store located adjacent to the car park for Building 1. The building forecourt provides sufficient space for a 3 axle 10.2m refuse vehicle to undertake a three point turn adjacent to the refuse store. This is shown in **Drawing 27159_001_SK009**
- 4.6.3 There is no dedicated service bay for the proposed building as the forecourt areas for each building provides sufficient room for service vehicles to turn and unload. **Drawing 27159_001_SK010** demonstrates a 10.0m FTA Heavy Goods Vehicle undertaking a three point and exiting for both buildings.
- 4.6.4 The fire strategy requires forecourt access for fire pump appliances. **Drawing 27159_001_SK011** demonstrates a 7.9m pump appliance entering, turning within and leaving each building forecourt. As can be seen the vehicle can undertake this manoeuvre without the need to reverse more than the maximum reversing distance of 20m.

- 4.6.5 These vehicle swept path drawings demonstrate that vehicle access to both sites can be achieved.

5 Baseline Traffic Conditions

5.1 Baseline Scenario

5.1.1 The baseline traffic conditions for the internal road network within Green Park have been obtained from the approved Phase I and II Green Park model. The baseline data includes the trip generation for Green Park plots 1 to 13 inclusive (including 400 Longwater Avenue at 14,080m²), Green Park 3 South (Plot 17) and Green Park Village and Costco Superstore. The assessment is therefore based on all of these plots being built and occupied.

5.1.2 **Table 5-1** outlines the total consented development included in the baseline scenario, the majority of which is built and operational and therefore picked up in previously measured flows.

Table 5-1: Green Park Consented Development

Development	Element	Land Use	Consented
Green Park Phases I and II	Plots 1-13	Commercial	217,686 m ²
Green Park Phase 3	Plot 17	Commercial	22,540 m ²
Green Park Village	Residential Units	Residential	737 units
Green Park Village	Commercial Floorspace	Commercial	16,00 m ²
	Retail Floorspace	Retail	683 m ²
	Community Facilities	Place of Public Assembly and Facilities	1,850 m ²
	Primary School	Place of Public Assembly and Facilities	1,360 m ²
Other	Costco Superstore	Retail	~13,000 m ²

5.2 Highway Appraisal Assumptions

5.2.1 To reflect the established 'site specific' and 'wider' assessment approvals that are in place for 400 Longwater Avenue and Green Park respectively, it has been agreed in scoping with RBC that a simplified link based traffic generation comparison forecast covering the internal Green Park main road network will be appropriate for 400 Longwater Avenue in appraising the development proposals.

5.2.2 This approach is set firmly in the context of previous assessment that has been agreed for Green Park which is considered to provide robust levels of reassurance, because of at least two key factors:

- The significant amount of floor space that has permission, but is not yet built or occupied on Green Park; and
- There have been significant capacity improvements that have taken place along the A33 corridor since the original assessment was agreed in the early 90's, some of which have been funded partly by owners of Green Park. These include most notably Junction 11 in 2010, Island Road crossroads and more recently pinch point works that were carried out in 2015. These were therefore unable to be taken in to account in the original traffic impact assessment for the original Foster's Masterplan, but have undoubtedly since their implementation contributed significantly to building extra capacity in to the surrounding road network.

5.2.3 Consequently, the assessment identified in this TS more broadly projects flows from the proposed development on Longwater Avenue (to the north) and South Oak Way (to the south) and summarise the relative impact in proportion to baseline flows.

5.3 Baseline Assessment

5.3.1 **Figure 5-1** and **Figure 5-2** shows the baseline traffic flows within Green Park for the AM and PM peak hours, respectively, as obtained from the approved Green Park Phase I and II model. The morning peak hour identified as 0800-0900 and the evening peak hour 1700-1800.

5.3.2 During the morning peak hour, the two-way flow on Longwater Avenue to the west of Bennet Road Gyratory is 2106 vehicles. The two-way flow on South Oak Way to the west of the junction with Green Park South Roundabout and the A33 is 1661 vehicles.

5.3.3 During the evening peak hour, the two-way flow on Longwater Avenue to the west of Benner Road Gyratory is 1880 vehicles. The two-way flow on South Oak Way to the west of the junction with Green Park South Roundabout and the A33 is 1820 vehicles.

Figure 5-1: AM Baseline Traffic Flows

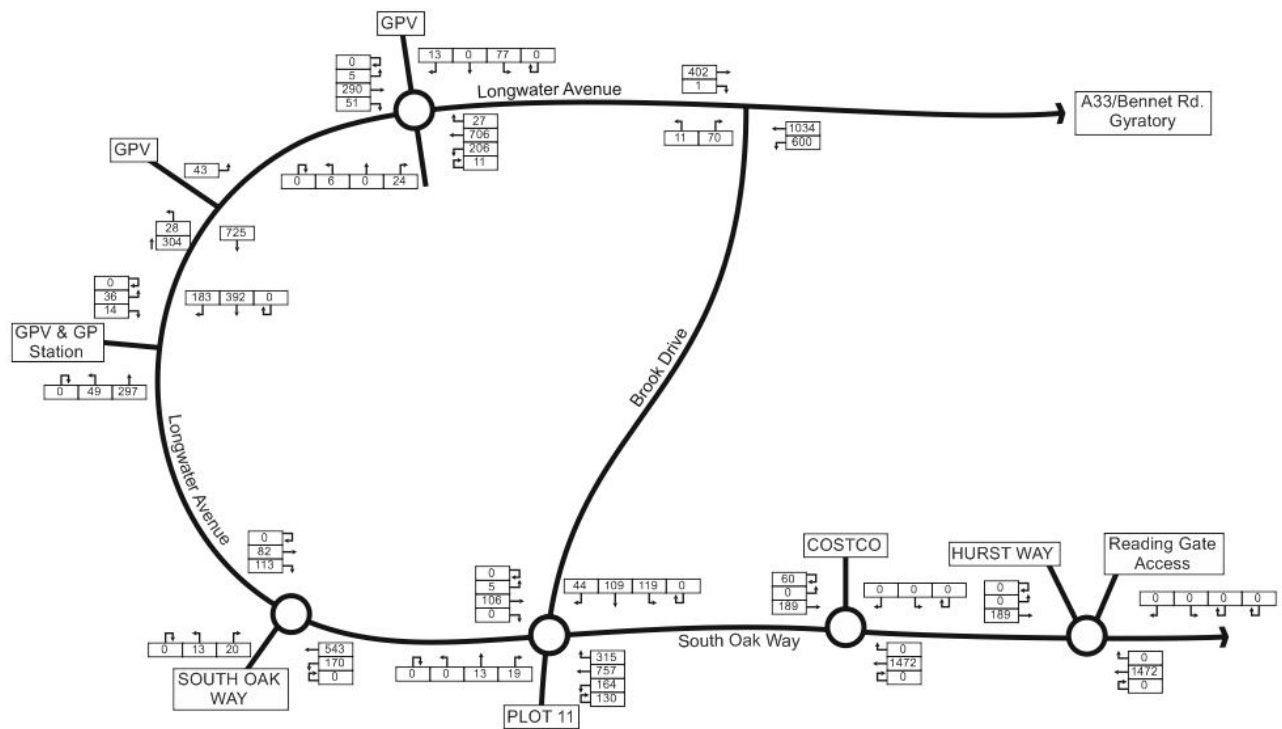
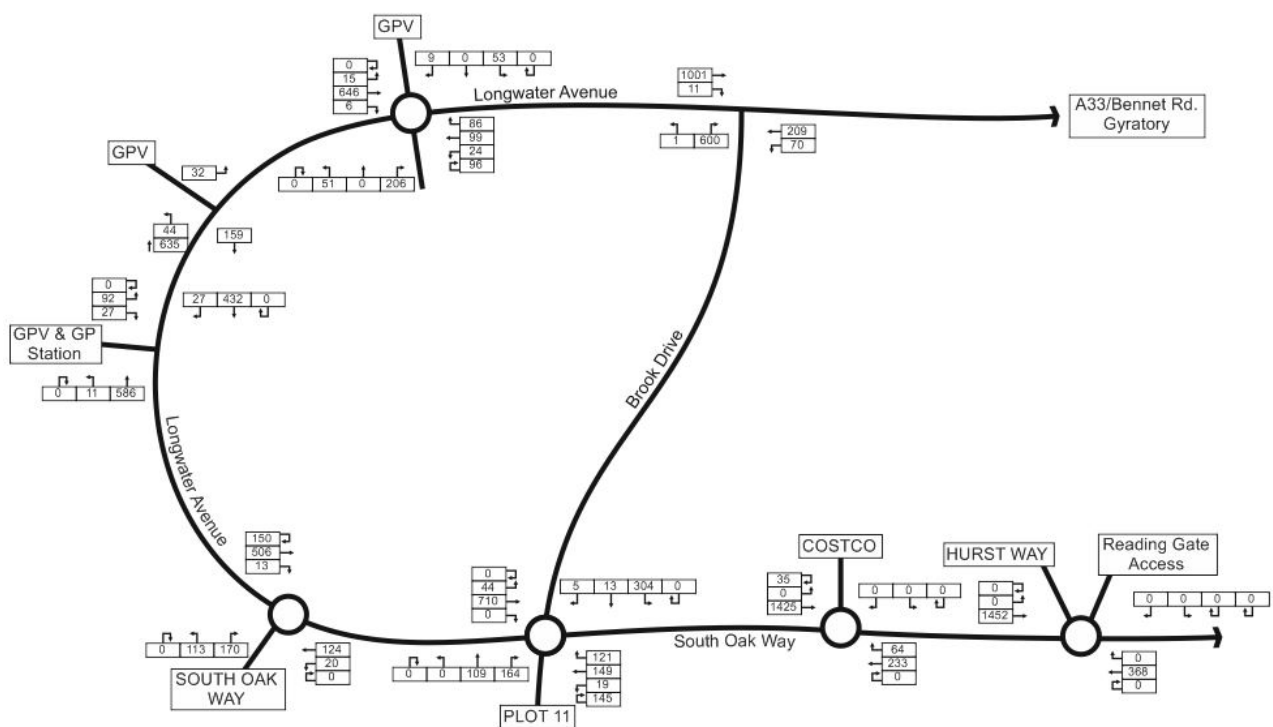


Figure 5-2: PM Baseline Traffic Flows



5.4 Baseline Sensitivity Test (Green Park Station)

- 5.4.1 Planning consent has been granted by RBC for a railway station, interchange and Park & Ride situated to the east of Reading-Basingstoke line at Green Park. This consent was originally granted in 2007 (Ref: 97/02570/COMIND), renewed in 2010 (Ref: 10/01048/ADJ) and renewed again in 2015 (Ref: 15/141944). Funding has been secured through Thames Valley Local Enterprise Partnership to deliver Green Park Railway Station and is scheduled to open in 2019.
- 5.4.2 In recognition that the station could be delivered in the short to medium term, a sensitivity test based on the proposals granted consent in 2015 has been carried out to take account of the traffic generated by the Green Park Railway Station.
- 5.4.3 Green Park Railway Station will provide a rail service approximately every 30 minutes with a journey time of 6 minutes to Reading Rail Station and a 21 minute journey time to Basingstoke Railway Station. This service would also call at Reading West, Mortimer and Bramley.
- 5.4.4 Previously, as part of the above scheme, a 242 space Park & Ride facility was also granted planning consent to the south west of the site close to the new rail station.
- 5.4.5 Access to the railway station and Park & Ride facility will be via a link road which joins Longwater Avenue via a roundabout. This road also serves as the western access to Green Park Village.
- 5.4.6 The planning application documents referenced above for the approved Green Park Station show that the proposed facility will generate up to 264 two-way trips in the AM and 234 two-way trips in the evening peak.
- 5.4.7 This sensitivity test assigns the additional trips generated by Green Park Station to the local network. Whilst Green Park Station may lead to some car trips being removed from the network, the model has not made these assumptions.

5.5 Assignment of Sensitivity Test Flows (Green Park Station)

- 5.5.1 The baseline sensitivity data therefore includes the trip generation for Green Park Plots 1 to 13 inclusive (including 400 Longwater Avenue at 14,080m²), Green Park 3 South (Plot 17) Green Park Village, Costco Superstore and Green Park Railway Station.
- 5.5.2 The trip generation extracted from the Green Park Railway Station planning application, provided in **Table 5-2**, has been applied to the baseline traffic flows assuming the additional traffic will travel through every junction within the development to reflect the worst case scenario.

Table 5-2: Green Park Railway Station Vehicular Traffic Flows

Green Park Railway Station Vehicular Traffic Flows				
Direction of Travel	AM In	AM Out	PM In	PM Out
Longwater Avenue	56	44	40	50
South Oak Way	100	64	56	88

- 5.5.3 **Figure 5-3** and **Figure 5-4** show the sensitivity test traffic flows within Green Park for the AM and PM peak hours respectively, The morning peak hour identified as 0800-0900 and the evening peak hour 1700-1800.
- 5.5.4 During the morning peak hour, the two-way flow on Longwater Avenue to the west of the Bennet Road Gyratory is 2206 vehicles. The two-way flow on South Oak Way to the west of the junction with Green Park South Roundabout and the A33 is 1825 vehicles.
- 5.5.5 During the evening peak hour, the two-way flow on Longwater Avenue to the west of the Bennet Road Gyratory is 1970 vehicles. The two-way flow on South Oak Way to the west of the junction with Green Park South Roundabout and the A33 is 1964 vehicles.

Figure 5-3: AM Baseline Sensitivity Test Flows

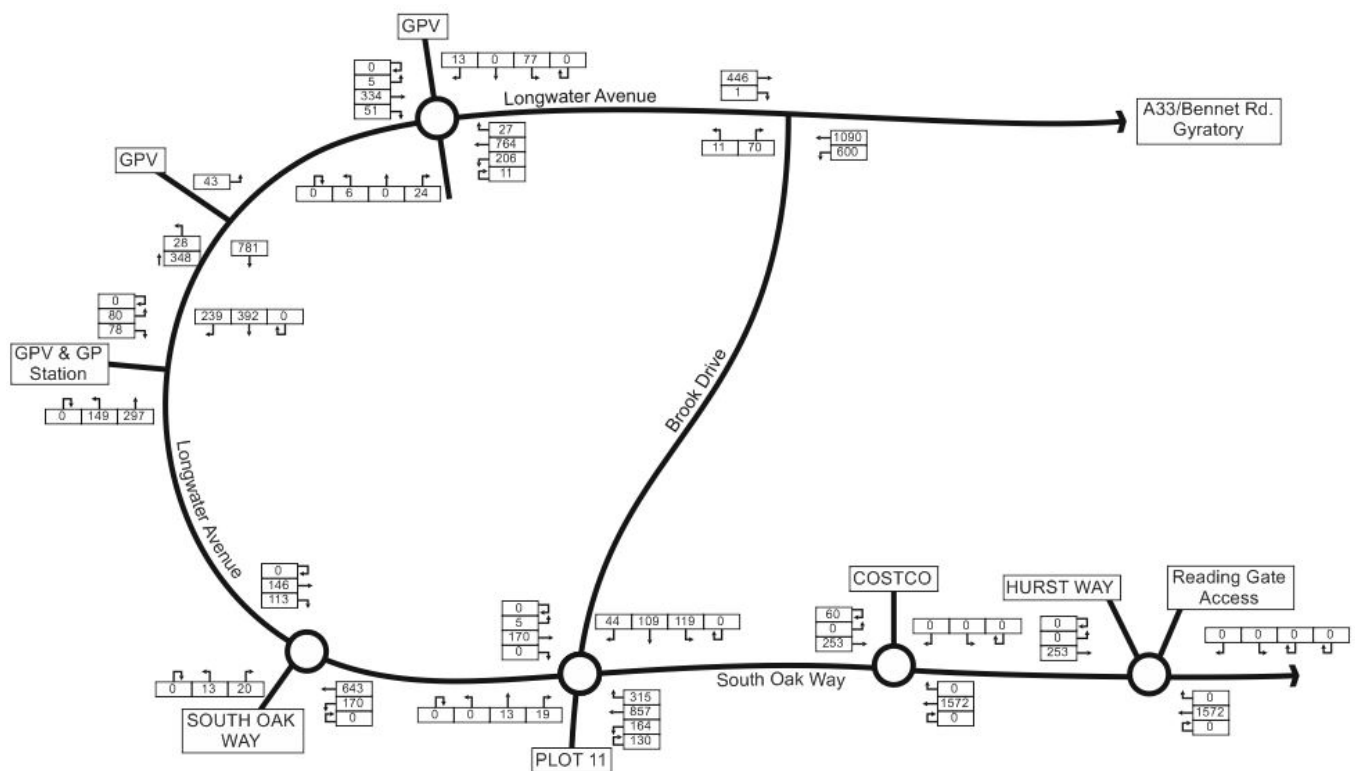
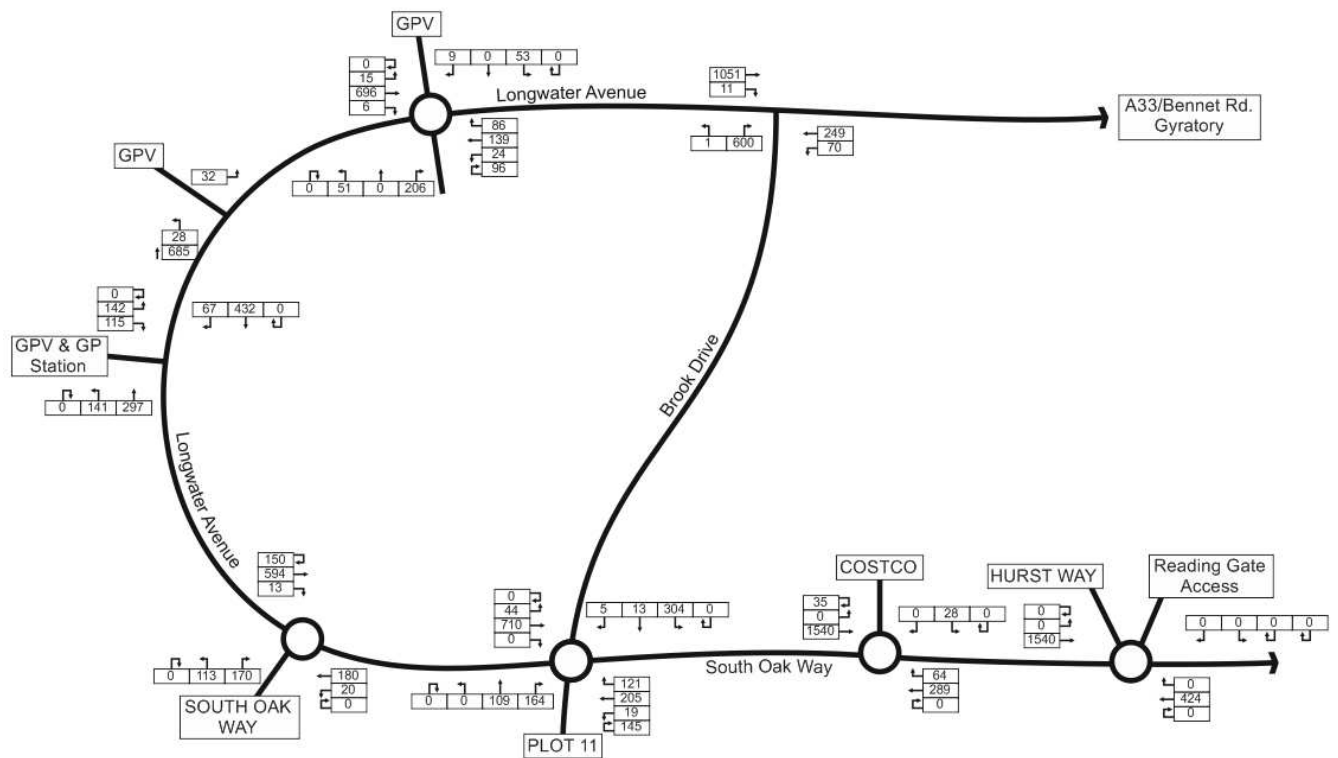


Figure 5-4: PM Baseline Sensitivity Test Flows



6 Site Generation & Highway Impact

6.1 Introduction

- 6.1.1 This section provides the forecast of trip generation for all modes that the proposed development will generate and in terms of car trips, quantifies the impact that these movements will have on the surrounding highway network as agreed in scoping.
- 6.1.2 As referred to previously, the site currently has planning consent for 14,080m² open B1 office and 440 parking spaces. This forms an 'on plot' baseline for the assessment. The net difference between the extant and the proposed has therefore been assessed as agreed in scoping. This difference equates to an additional 13,127m² and 262 parking spaces.

6.2 Person Trip Generation

- 6.2.1 As previously agreed in scoping, the person trip rates for the 'office' component of the consented Green Park Village scheme (ref: 10/01461/OUT) form the basis of the person office trip generation at 400 Longwater Avenue. These rates, agreed by RBC during pre-application scoping in 2013, together with the calculated trip generation for the extant, proposed and net change are set out sequentially in the following **Tables 6-1, 6-2, 6-3 and 6-4**.

Table 6-1: Person Trip Rates

Person Trip Rates			
	B1 Office Person Trips / 100m ²		
	Arrivals	Departures	Two-Way
AM Peak Hour (0800-0900)	2.79	0.44	3.23
PM Peak Hour (1700-1800)	0.34	1.34	1.68

Table 6-2: Person Trip Generation – Extant

Person Trip Generation - Extant			
	B1 Office Person Trips		
	Arrivals	Departures	Two-Way
AM Peak Hour (0800-0900)	393	62	455
PM Peak Hour (1700-1800)	48	189	237

Table 6-3: Person Trip Generation – Proposed

Person Trip Generation - Proposed			
	B1 Office Person Trips		
	Arrivals	Departures	Two-Way
AM Peak Hour (0800-0900)	759	120	879
PM Peak Hour (1700-1800)	93	365	457

Table 6-4: Person Trip Generation – Net Change

Person Trip Generation – Net Change			
	B1 Office Person Trips		
	Arrivals	Departures	Two-Way
AM Peak Hour (0800-0900)	367	58	424
PM Peak Hour (1700-1800)	45	176	220

6.3 Vehicular Trip Generation

- 6.3.1 In line with the assessment for Green Park (ref: 08/00261/REM) , the vehicular trip rates for the existing and proposed are obtained from the trip rates used previously in the approved Green Park, although the evening peak hour departures trip rate presented to RBC during pre-application scoping in 2013. These are summarised in **Table 6-5**.

Table 6-5: Agreed Green Park Vehicular Trip Rates

Vehicular Trip Rates			
	B1 Office Trips / 100m ²		
	Arrivals	Departures	Two-Way
AM Peak Hour (0800-0900)	1.395	0.22	1.615
PM Peak Hour (1700-1800)	0.17	1.095	1.265

- 6.3.2 The agreed vehicle trip generation for 400 Longwater Avenue (14,080m²) is provided in **Table 6-6**.

Table 6-6: Vehicular Trip Generation – Extant

Vehicular Trip Generation – Extant			
	B1 Office Trips / 100m ²		
	Arrivals	Departures	Two-Way
AM Peak Hour (0800-0900)	196	31	227
PM Peak Hour (1700-1800)	24	154	178

6.3.3 The proposed vehicular trip generation for 27,207m² is set out in **Table 6-7**.

Table 6-7: Vehicular Trip Generation – Proposed

Person Trip Generation – Proposed			
	B1 Office Person Trips		
	Arrivals	Departures	Two-Way
AM Peak Hour (0800-0900)	380	60	439
PM Peak Hour (1700-1800)	46	298	344

6.3.4 The impact calculation assumes the proposed full development of 27,207 m². Based on completion and occupation, the proposed full development would generate 439 two-way movements in the morning peak hour and 344 two-way movements in the evening peak hour.

6.3.5 The breakdown of the net change in vehicular trips relative to the previous consent is summarised in **Table 6-8**.

Table 6-8: Vehicular Trip Generation – Net Change

Vehicular Trip Generation – Net Change			
	B1 Office Trips / 100 m ²		
	Arrivals	Departures	Two-Way
AM Peak Hour (0800-0900)	183	29	212
PM Peak Hour (1700-1800)	22	144	166

6.3.6 The comparison between the extant and the proposed highlights a net change in two way vehicular movements of 212 and 166 for the AM and PM peak hours, respectively.

6.4 Trip Distribution

- 6.4.1 The distribution of trips entering and departing the site has been obtained from the Green Park Phase I and Phase II model and is provided in **Table 6-9**.
- 6.4.2 The model shows that 62% of traffic enters Green Park via South Oak Way and 38% via Longwater Avenue in the AM peak hour (0800-0900). During the same time period, 32% leave the site via Longwater Avenue and 68% leave the site via South Oak Way.
- 6.4.3 During the evening peak (1700-1800), 78% arrive to the site via South Oak Way and 22% via Longwater Avenue. It has also been highlighted that 62% depart via South Oak Way and 38% via Longwater Avenue.

Table 6-9: Trip Distribution

Vehicular Trip Distribution				
	AM In	AM Out	PM In	PM Out
Longwater Avenue	38%	32%	22%	38%
South Oak Way	62%	68%	78%	62%

- 6.4.4 The resultant flow by approach is summarised in **Table 6-10**, which shows that a net increase of 114 vehicles will arrive at the development via South Oak Way in the morning peak hour and 70 vehicles will do so from Longwater Avenue.
- 6.4.5 In the evening peak, a net increase of 89 vehicles will leave Green Park via South Oak Way and 55 will leave via Longwater Avenue.

Table 6-10: Distribution Development Traffic

Net Change Vehicular Trip Distribution				
	AM In	AM Out	PM In	PM Out
Longwater Avenue	70	9	5	55
South Oak Way	11	20	17	89

6.5 Baseline + Development Assessment

- 6.5.1 The baseline and development assessment includes the trip generation for Green Park Village, Costco Superstore, Green Park Plots 1 to 13 inclusive (including 400 Longwater Avenue at 27,207 m² with 702 spaces and disabled bays) and Green Park 3 South.
- 6.5.2 **Figure 6-1** and **Figure 6-2** show the baseline plus development traffic flows within Green Park for the AM and PM peak hours respectively.

Figure 6-1: AM Baseline + Development Flows

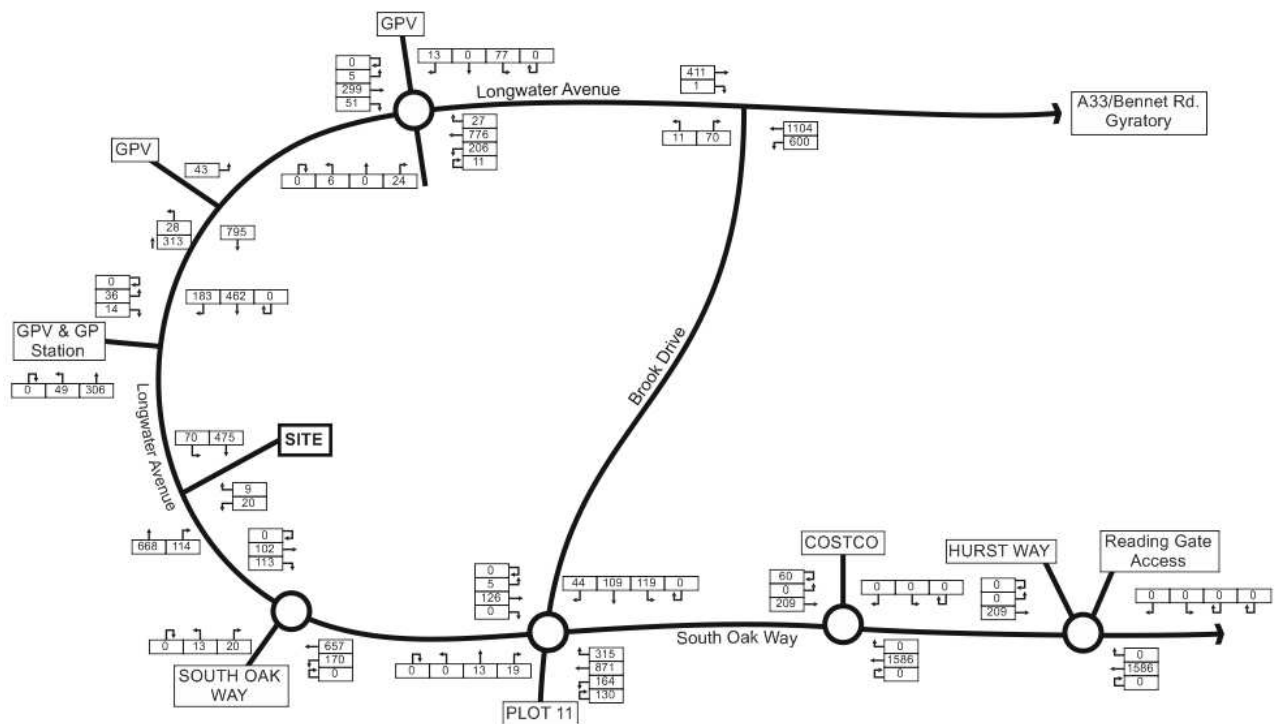
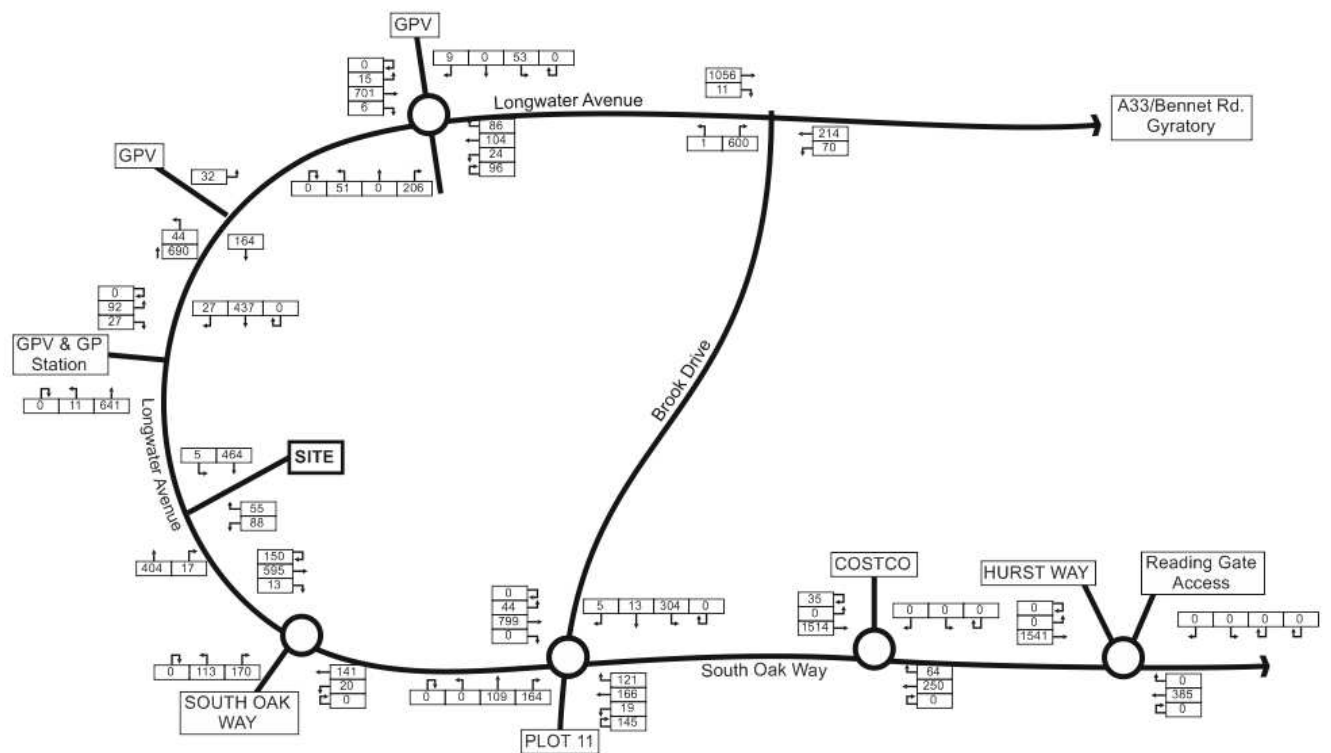


Figure 6-2: PM Baseline + Development Flows



- 6.5.3 During the morning peak hour, the two-way flow on Longwater Avenue to the west of Bennet Road Gyratory is 2185 vehicles. The two-way flow on South Oak Way to the west of the junction with Green Park South Roundabout and the A33 is 1794 vehicles.
- 6.5.4 During the evening peak hour, the two-way flow on Longwater Avenue to the west of Bennet Road Gyratory is 1940 vehicles. The two-way flow on South Oak Way to the west of the junction with Green Park South Roundabout and the A33 is 1927 vehicles.

6.6 Baseline Sensitivity + Development Assessment

- 6.6.1 As in **Section 4.5**, an additional baseline sensitivity assessment has been carried out to include Green Park Railway Station. The baseline sensitivity + development assessment therefore includes the trip generation for Green Park Village, Costco Superstore, Green Park Plots 1 – 13 inclusive (including 400 Longwater Avenue at 27,207 m² and with trip rates as calculated above), Green Park 3 South (Plot 17) and Green Park Railway Station.
- 6.6.2 **Figure 6.3** and **Figure 6.4** show the baseline traffic flows within Green Park for the AM and PM peak hours respectively, the morning peak hour identified as 0800-0900 and the evening peak hour 1700-1800.
- 6.6.3 During the morning peak hour, the two-way flow on Longwater Avenue to the west of Bennet Road Gyratory is 2285 vehicles. The two-way flow on South Oak Way to the west of the junction with Green Park South Roundabout and the A33 is 1958 vehicles.
- 6.6.4 During the evening peak hour, the two-way flow on Longwater Avenue to the west of Bennet Road Gyratory is 2030 vehicles. The two-way flow on South Oak Way to the west of the junction with Green Park South Roundabout and the A33 is 2071 vehicles.

Figure 6-3: AM Baseline Sensitivity Test + Development

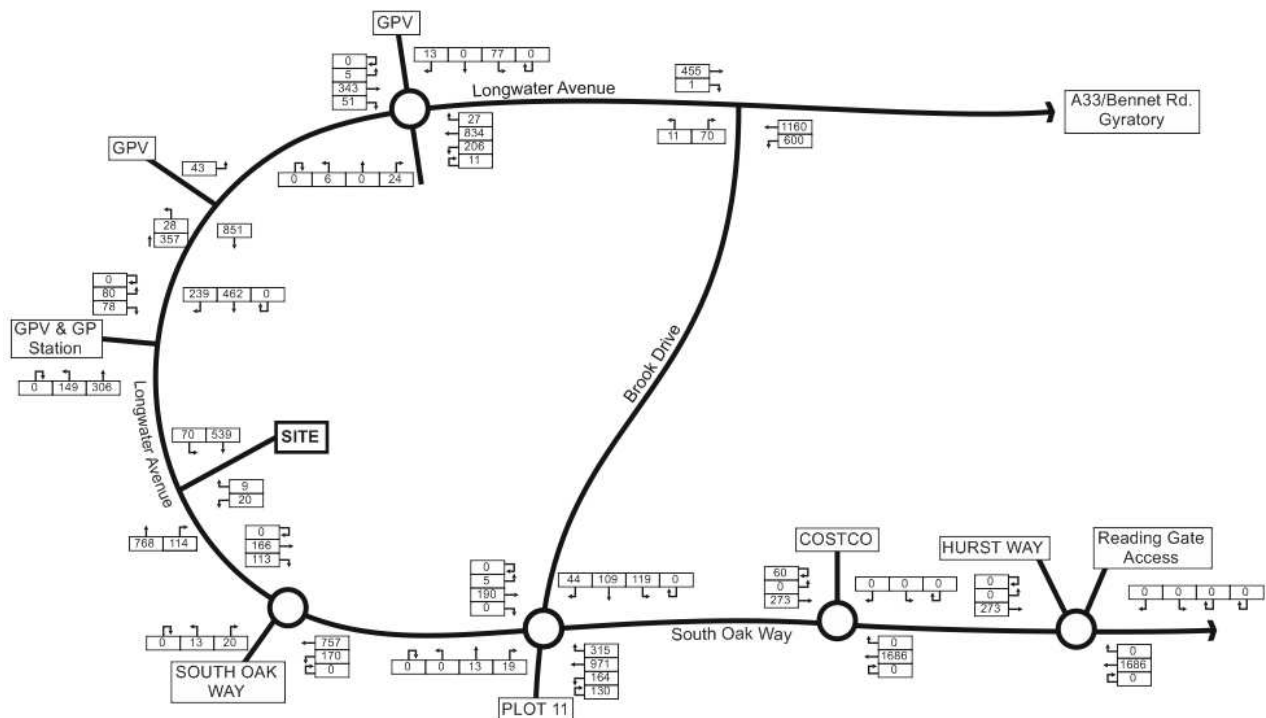
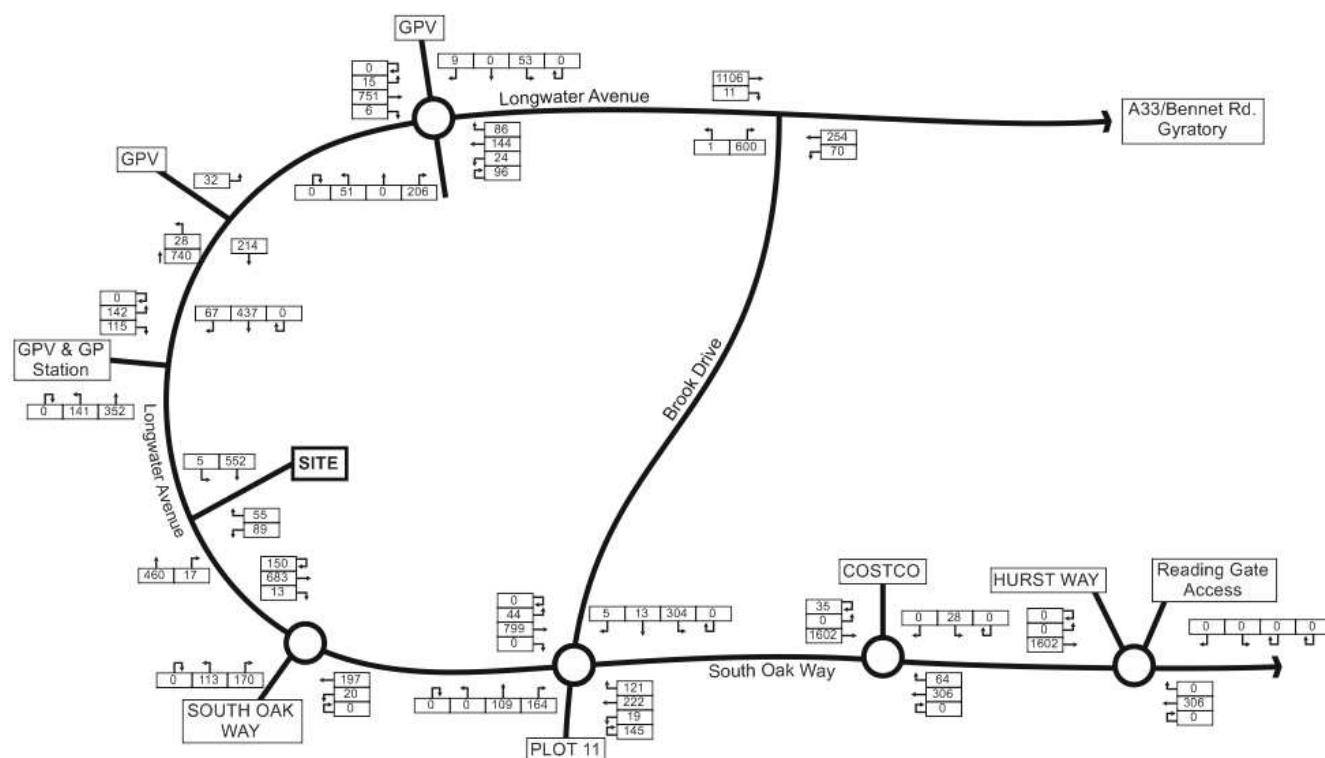


Figure 6-4: PM Baseline Sensitivity Test + Development



	Flow	Baseline	Baseline + Development	% Change	Baseline Sensitivity	Baseline Sensitivity + Development	% Change
Longwater Avenue	Two-Way	1880	1940	3.2%	1970	2030	3.0%
South Oak Way	Two-Way	1820	1927	5.9%	1964	2071	5.4%

6.7.2 The morning peak hour assessment highlights that the largest percentage increase observed for the baseline plus development scenario is on South Oak Way, with an increase of 133 vehicles amounting to a percentage increase of 8.0%. However, South Oak Way has been observed to operate within capacity in the morning peak hour and this increase is therefore considered immaterial. Similarly, for the baseline sensitivity + development scenario, an increase of 133 vehicles is predicted, amounting to a percentage increase of 7.3%.

6.7.3 During the evening peak hour, the most significant increase is predicted to occur on South Oak Way for both scenarios, with an increase of 107 vehicles representing a 5.9% and 5.4% increase, respectively. This reflects the expected increase, however it is not considered to have a material impact on the operation of South Oak Way.

6.8 A33 Impact

6.8.1 This assessment also quantifies the level of additional traffic generated by the proposed development and its impact on the A33. Through discussions with RBC, a link assessment has been undertaken on the three links of the A33 adjacent to the Green Park entrances.

6.8.2 The Reading Transport Model was used to obtain the trip distribution for all traffic travelling to and from Green Park in both the morning and evening peak hours. **Figure 6-5** and **Figure 6-6** illustrate the distribution of traffic entering and exiting Green Park via the A33 as a percentage of the total traffic generation via all routes.

6.8.3 These were applied to inbound and outbound development flows, provided in **Table 6-10**, to calculate the development northbound and southbound flows on the A33 in the peak hours.

6.8.4 The Reading Transport Model shows that, of the inbound AM flow on South Oak Way, 89% arrives from the A33 south and 11% arrives from the A33 north. During the AM peak, 36% of the flow on Longwater Avenue arrives from the south and 46% arrives from the north.

6.8.5 Similar patterns of distribution are observed, albeit in the opposite direction in the evening peak. 87% of the traffic leaving Green Park from South Oak Way travel to the south and 12% travel northbound. 52% of traffic leaving Green Park via Longwater Avenue travels northbound on the A33 and 9% travels south. The remaining traffic arrives via other routes.

6.8.6 **Table 6-13** and **Table 6-14** summarise the baseline flow on the A33 and the additional flow generated by the proposed development for the AM and PM peak hours, respectively.

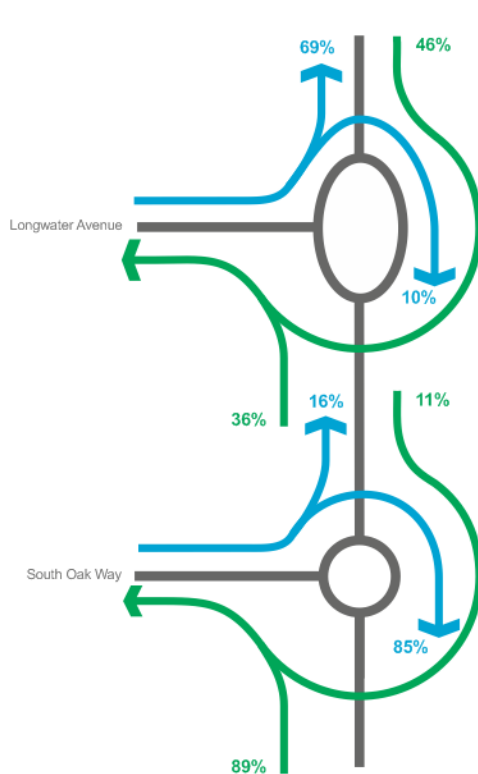


Figure 6-5: AM Green Park Traffic Distribution

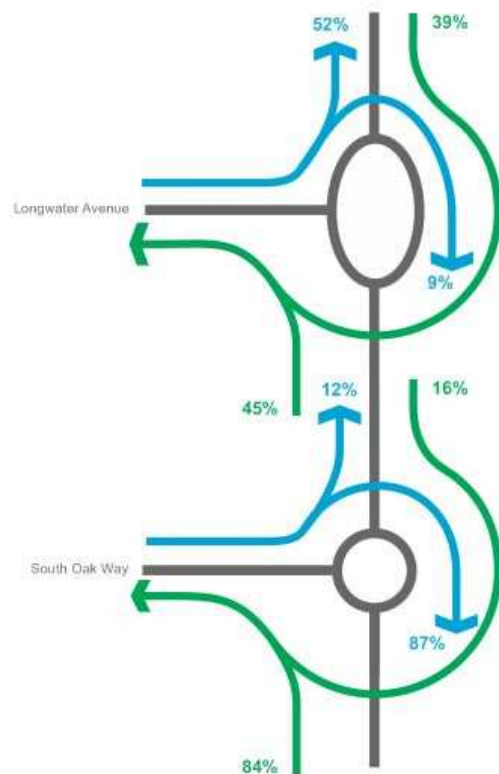


Figure 6-6: PM Green Park Traffic Distribution

Table 6-13: A33 Assessment AM Peak Hour

A33 Assessment – AM Peak Hour					
	Direction	Baseline	Proposed Development	Baseline + Development	% Change
A33 North of Bennet Road Gyratory	NB	802	9	811	1.2%
	SB	1823	45	1868	2.4%
A33 in between Bennett Road Gyratory and South Oak Way	NB	1643	28	1671	1.7%
	SB	1770	14	1784	0.8%
A33 South of South Oak Way	NB	2744	126	2870	4.6%
	SB	1236	18	1254	1.4%

Table 6-14: A33 Assessment PM Peak Hour

A33 Assessment – PM Peak Hour					
	Direction	Baseline	Proposed Development	Baseline + Development	% Change
A33 North of Bennet Road Gyratory	NB	2031	40	2071	1.9%
	SB	2127	5	2132	0.2%
A33 in between Bennett Road Gyratory and South Oak Way	NB	1900	13	1913	0.7%
	SB	1627	8	1635	0.5%
A33 South of South Oak Way	NB	1912	17	1929	0.9%
	SB	2323	83	2406	3.6%

6.8.9 The morning peak hour assessment highlights that the largest percentage increase is observed on the northbound approach to South Oak Way roundabout, with 126 additional vehicles (just over 2 vehicles per minute) representing a 4.6% increase in traffic. A dedicated left turn slip for northbound traffic approaching South Oak Way removes this flow from the South Oak Way roundabout and is therefore this small increase in flow is considered to have minimal impact.

6.8.10 During the evening peak hour, the most significant increase is predicted to occur on the southbound direction away from the South Oak Way roundabout, with an additional 104 vehicles representing a 4.5% increase in traffic.

6.9 M4 Impact

6.9.1 Green Park lies approximately 1.7km from Junction 11 and the M4, and as such this report includes an assessment of the flow using the M4.

6.9.2 The Reading Transport Model was used to obtain information on the trip origins (in the AM peak hour) and the trip destinations (in the PM peak hour) to understand the proportion of main-direction traffic that would use M4 Junction 11. As can be seen from the trip generation provided in in [Table 6-10](#), the outbound AM and inbound PM flows are not material in association with the proposals so have been excluded from any assessment relating to the M4.

6.9.3 The model shows that, of the AM inbound flow on South Oak Way, 53.4% of the traffic arrives from the M4. This is made up of 36.9% from M4 westbound and 16.5% from M4 eastbound. In the PM peak hour, 36.8% of the outbound flow on South Oak Way uses the M4 at Junction 11, which is made up of 27.3% travelling eastbound on the M4 and 9.5% travelling westbound on the M4.

- 6.9.4 Of the AM inbound flow on Longwater Avenue, 11.8% of the traffic arrives from the M4. This is made up of 7.8% from M4 westbound and 4.0% from M4 eastbound. In the PM peak hour, the model indicates that all traffic heading to the M4 leaves via South Oak Way.
- 6.9.5 These proportions have been applied to the higher generating AM inbound and PM outbound development traffic to quantify the level of additional trips that are predicted to use the M4 in each peak hour. **Table 6-15 to Table 6.17** presents this information.

Table 6-15: M4 Traffic Distributions

M4 Traffic Distributions				
Route	AM Arrivals		PM Departures	
	From M4 Eastbound	From M4 Westbound	Via M4 Westbound	Via M4 Eastbound
Longwater Avenue	4.0%	7.8%	0%	0%
South Oak Way	16.5%	36.9%	9.5%	27.3%

Table 6-16: Additional M4 Traffic Flows

Additional M4 Traffic Flows				
Route	AM Arrivals		PM Departures	
	From M4 Eastbound	From M4 Westbound	Via M4 Westbound	Via M4 Eastbound
Longwater Avenue	3	5	0	0
South Oak Way	19	42	8	24
Total	22	47	8	24

Table 6-17: Percentage Impact on M4

Percentage Impact on M4				
Route	Arrive		Depart	
	From M4 Eastbound	From M4 Westbound	Via M4 Westbound	Via M4 Eastbound
Longwater Avenue	0.06%	0.11%	-	-
South Oak Way	0.4%	0.82%	0.16%	0.49%
Total	0.46%	0.93%	0.16%	0.49%

- 6.9.6 The results of the analysis show that, in the morning peak hour, the M4 westbound approach flow will increase by 47 vehicles as a result of the proposed development. It is estimated that

the eastbound approach will experience an increase of 22 vehicles. Typically, the M4 mainline flow either side of the junction in the morning peak hour is 4651 vehicles per hour on average¹. In terms of percentage increase as a result of the proposed development, the M4 westbound and eastbound experience increases of 0.46% and 0.93% respectively. This is not expected to have any material impact on the operation of the M4.

- 6.9.7 During the PM peak hour, the eastbound on-slip is predicted to have an increase of 24 vehicles. For the westbound on-slip, the analysis highlights that there will be 8 additional vehicles during the same time period. The mainline flow on the M4 in the evening peak is forecast to be 5099 vehicles per hour on average. Therefore, the additional flows generated by the proposed development represent an increase of 0.49% and 0.16% for the eastbound and westbound directions respectively. This increase in flow is not considered to have a material impact on the M4.

6.10 Summary

- 6.10.1 When compared to the baseline scenario, the proposed development is predicted to result in an increase in 1.3 additional vehicles every minute along Longwater Avenue to the north of the development during the morning peak hour and 1 in the evening peak hours.
- 6.10.2 To the south of the site, the proposed development is predicted to generate approximately 2.2 additional vehicles every minute along South Oak Way to the south of the development during the morning peak hour, and approximately 1.7 additional vehicles during the evening peak hour compared to the Baseline scenario.
- 6.10.3 The results of the link-based assessment for the Baseline plus Development scenario are considered to show a minimal increase in traffic, drawing the conclusion that the impact of the development traffic on the surrounding highway network will be acceptable.
- 6.10.4 This assessment recognises the proximity of the proposed development to the M4 and, as such, reports on the level of additional traffic likely to use the motorway. This assessment shows that the level of peak hour traffic generated is unlikely to have a material impact on the operation of the M4 which has been recently and majorly upgraded.
- 6.10.5 In recognition that the station could be delivered in the short to medium term, a sensitivity test (based on the proposals granted consent in 2015) has been carried out to take account of the traffic generated by the Green Park Railway Station.

¹ Source: Highways England Traffic Flows Data, October 2015

7 Sustainable Transport Strategy

7.1 Future Opportunities

- 7.1.1 In addition to the infrastructure improvements that have been delivered since the opening of Green Park, there are a number of additional transport interventions still to come on line that will further improve and influence sustainable access for development in the South Reading and wider TV region. Some of these are local, but some are of regional and even national significance.

Green Park Station

- 7.1.2 As referred to earlier, it is understood that planning permission has been granted for Green Park Station on the Reading to Southampton Central/Bournemouth line via Basingstoke and operated by Cross County Services. .
- 7.1.3 The new station would be approximately 650m to the north-west of the site and would provide local rail connectivity to the wider rail network. Upon opening it would increase the future sustainable travel options for the site.
- 7.1.4 The station would also have a benefit for the local highway network by providing a significant opportunity for journeys currently undertaken by car to transfer to rail.
- 7.1.5 In addition to the Reading Green Park Station, the Reading to /Southampton Central/Bournemouth line has been identified for electrification by 2019 which is set to provide improved journey times and capacity, whilst allowing the introduction of electric rolling stock on the route.

Crossrail

- 7.1.6 The railway network around Reading forms the western interchanges of the Crossrail route - a new high-frequency service operating from Reading through central London to Shenfield (Essex) and Abbey Wood (Royal Borough of Greenwich). The Crossrail network is currently under construction and it is expected that Crossrail services will run from Reading Station from 2019 and provide further opportunities for trips into Central Reading by public transport.

Rail/Air connection to Heathrow

- 7.1.7 Network Rail has committed to build a new rail connection from the Great Western line into Heathrow that will provide a direct Reading to Heathrow rail service, similar to the Heathrow Connect service from Paddington.
- 7.1.8 The service will offer a up to 4 trains an hour to Heathrow with a journey time of under 30 minutes and is projected to remove a significant number of car trips from the M4 (estimated at 200,000 per annum) helping to reduce congestion

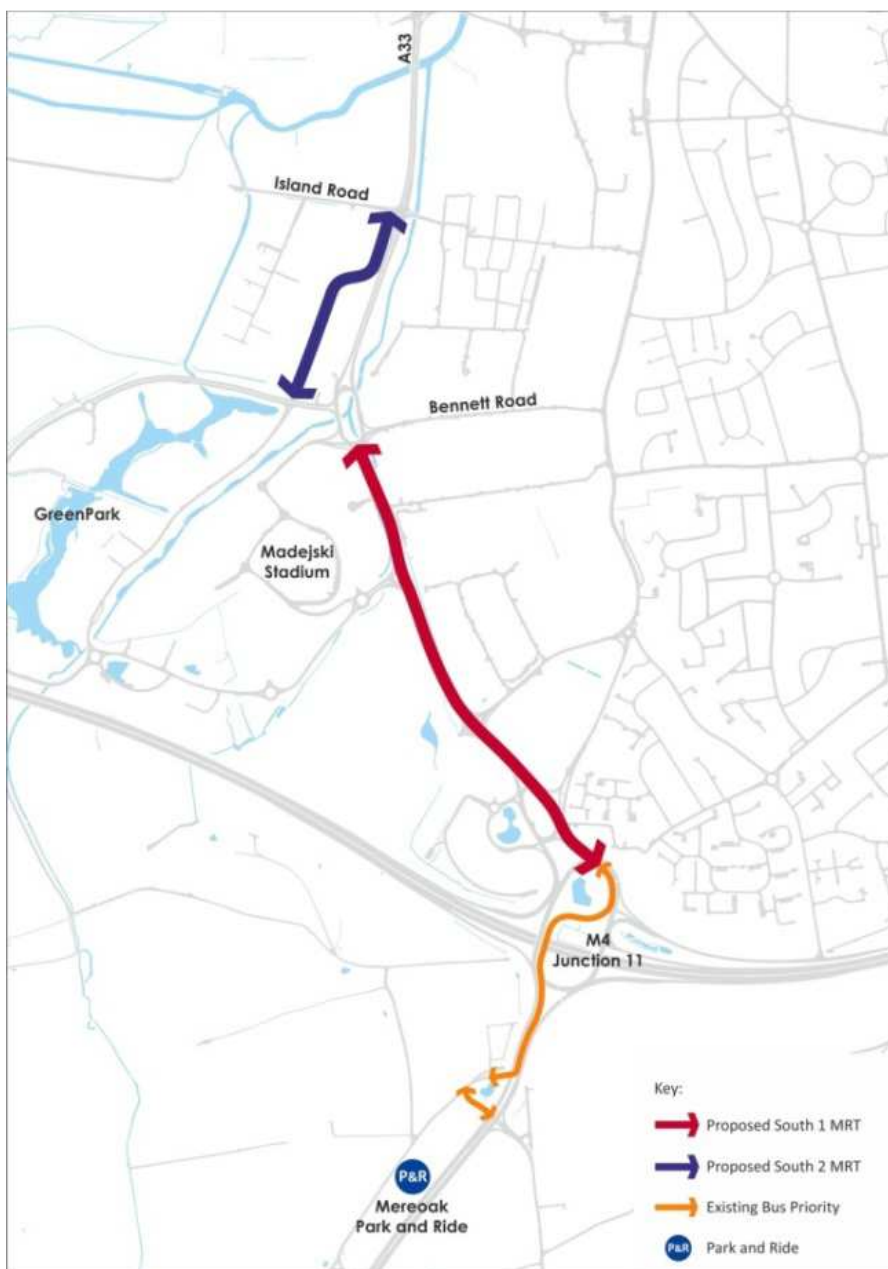
Network Improvements

- 7.1.9 The GWR is undergoing major upgrades including electrification to South Wales. A new fleet of intercity express and high speed trains will provide a faster service and increased capacity.

Mass Rapid Transit (MRT)

- 7.1.10 Reading Borough Council are promoting a Mass Rapid Transit (MRT) which will connect Mereok Park and Ride site to the south of M4 Junction 11 with Reading town centre via major employment centres and destinations in South Reading and the A33 corridor as well as supporting the future growth.
- 7.1.11 The capacity improvements undertaken at M4 junction 11 included a dedicated two-way bus link through the junction to form part of the MRT route. RBC have secured LEP funding to deliver the southern section of this route from Junction 11 of the M11 through to Island Road to the north of the site. The details of the MRT extents are summarised in **Figure 7-1**.

Figure 7-1: South Reading MRT Proposals



Highway Improvements

7.1.12 There are two locally committed highways schemes:

- The replacement of Cow Lane bridges to the west of the town centre is providing a segregated cycle footway link under the main line railway and new vehicle portals capable of allowing a double decker bus to pass underneath. Current traffic flow is restricted to alternate working.
- Shinfield Eastern Relief Road to the east provides a new bridge over the M4 and link road as part of works to deliver development to the south of the M4 to support about 2,700 homes with associated primary schools, school expansion, local shopping facilities, open spaces and the University of Reading Science Park.

M4 Hardshoulder Running

7.1.13 Highways England (formally the Highways Agency) is proposing to improve the M4 between Junction 3 and Junction 12 by making it a smart motorway. The hard shoulder will be converted to a running lane, and variable speed limits will be put in place to ease traffic flow and increase capacity. The extent of the proposals are shown in **Figure 7-2**.

Figure 7-2: M4 Junction 3 to 12 Smart Motorway (source DfT Consultation Document Preliminary Environmental information report November 2014)



8 Summary and Conclusion

- 8.1.1 This Transport Statement (TS) has been prepared by Peter Brett Associates LLP (PBA) in support of the Hybrid Planning Application for the proposed B1 development at 400 Longwater Avenue, GreenPark.
- 8.1.2 400 Longwater Avenue has extant consent for 14,080m² of B1 Office Development and 440 car parking spaces. Current proposals are for an increase in floor space to 27,207m² and 702 car parking spaces plus disabled bays. Therefore, as agreed with RBC, this Transport Statement has assessed the transport impacts associated with the difference between the existing extant consent and that being proposed.
- 8.1.3 The site's location on Green Park means it is well placed to access public transport services provided in Green Park alongside the comprehensive network of cycle routes and footpaths providing access to central Reading.
- 8.1.4 The proposals are accompanied by a separate Travel Plan, which includes measures to promote walking, cycling, public transport and car sharing to and from the site.
- 8.1.5 The predicted trip generation for the increase in floor space has been calculated. Baseline data includes the trip generation for Green Park Plots 1 to 13 inclusive (including 400 Longwater Avenue at 14,080m²), Green Park 3 South (Plot 17), Green Park Village and Costco Superstore. An additional baseline sensitivity test with the inclusion of Green Park Railway Station has been included. The uplift of floor space on this plot has been considered comparatively on this basis.
- 8.1.6 It is predicted that the development will generate approximately an increase in 1.3 additional vehicles every minute along Longwater Avenue to the north of the development during the AM peak hour and 1 in the PM peak hours. For South Oak Way, the development generate approximately 2.2 additional vehicles every minute development during the AM peak hour, and approximately 1.7 additional vehicles during the PM peak hour compared to the Baseline scenario.
- 8.1.7 An assessment has been made of the potential impact of the development proposals on the A33. The maximum percentage increase on the A33 as a result of the proposals is 4.6% in the AM peak hour and 3.6% in the PM peak, which is unlikely to have any material impact on the operation of this road.
- 8.1.8 An assessment has been undertaken to ascertain the level of traffic generated by the proposed development that is likely to use the M4. This highlights that the development impact is not considered to be material.
- 8.1.9 This assessment of the proposed development is considered to have demonstrated that the transport impacts associated with the proposed increase in floor space and car parking spaces can be accommodated within the surrounding transport network and therefore should be approved on transport grounds.

Appendix A Transport Scope and Agreement

Plot 3.2
400 Longwater Avenue
GreenPark, Reading
Transport Scoping Report

On behalf of **Oxford Properties**



Document Control Sheet

Project Name: Plot 3.2, 400-450 Longwater Avenue, GreenPark, Reading

Project Ref: 27159

Report Title: Transport Scoping Report

Doc Ref:

Date: 22nd October 2013

	Name	Position	Signature	Date
Prepared by:	Jenny Hughes	Graduate Transport Planner		18 th October 2013
Reviewed by:	Doug McDougall	Principal Engineer		21 st October 2013
Approved by:	James Overend	LLP Director		22 nd October 2013
For and on behalf of Peter Brett Associates LLP				

Revision	Date	Description	Prepared	Reviewed	Approved

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Appendices

Appendix A – Transport pre-app correspondence

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1 Introduction

- 1.1.1 This transport scoping note has been prepared following initial pre-application consultation with the Transport Development Control department at Reading Borough Council (RBC) during October 2013, including an initial pre-app meeting on 10th October 2013. **Appendix A** of this report contains the pre-app dialogue between RBC and PBA.
- 1.1.2 The note should also be helpful to the Highways Agency in keeping them informed at an early stage of pre-app engagement.
- 1.1.3 Plot 3.2 is currently undeveloped and benefits from an existing Reserved Matters permission (08/00261/REM) pursuant to Outline consent (85/TP/690). This consent was for the development of 14,080m² of open B1 (Business) Use, including access, 440 car parking spaces, servicing, landscaping and related works.
- 1.1.4 To accommodate the projected growth and relocation of an existing office occupier on GreenPark, the owners of GreenPark, Oxford Properties, are looking to submit a new planning application that will re-visit and modify the consented scheme for 400 Longwater Avenue. This will effectively increase the floor space from the permitted level of 14,080m² to 26,621m², implemented over three growth phases.
- 1.1.5 This will bring an associated increase in car parking from the consented 440 spaces up to 691 spaces, plus disabled bays, provided all three phases are built out and occupied in the future. This increase in parking provision will equate to a pro-rata reduction relative to the new quantum of floor space, due to the more restrained parking standard of 1 per 50 that will be applied to the net uplift in floor space for the majority of the last two phases. It is intended for the first 14,080m² to be built out at 1 per 32 as consented to align with the introduction of further passenger transport improvements and to de-risk parking overspill.
- 1.1.6 Cycle parking will be provided at a ratio of 1 space per 200m² in accordance with RBC standards, which equates to a provision of 115 spaces or 58 Sheffield type stands.
- 1.1.7 In accordance with pre-application discussions with the authorities, this scoping note sets out the proposed scope of work and key parameters for the preparation of a Transport Statement. A TS is considered to be appropriate, in this case, as it reflects both the established site specific consent that is already in place for Plot 3.2; and the comprehensive assessment that has previously been undertaken for the wider GP development permission. It is intended to form part of the supporting transport documentation for the planning application.

2 Assessment Parameters

Highway Assessment Principles

- 2.1.1 To reflect the established 'site specific' and 'Park wide' assessment approvals that are in place for Plot 3.2 and wider GP, it has been agreed with RBC, that a simplified link based traffic generation forecast, covering the internal GreenPark main road network will be sufficient for Plot 3.2 to support the development proposals.
- 2.1.2 This approach is firmly in the context of previous assessment that has been agreed for GreenPark which is considered to provide robust levels of reassurance, because of at least two key factors:
- the significant amount of floorspace that has permission but is not yet built or occupied; and
 - the significant capacity improvements that have taken place along the A33 corridor (including Junction 11) since the original assessment was agreed in the early 90's and which therefore was unable to be taken in to account in the original assessment.
- 2.1.3 Consequently, the assessment will more broadly project flows from the proposed development on Longwater Avenue (to the north) and South Oak Way (to the south) and summarise the relative impact in proportion to baseline flows.
- 2.1.4 This simplified highway impact assessment will supplement the main thrust of the TS which will focus on the sustainable transport strategy for the site and travel planning based on existing multi-modal access opportunities, and potential future planned measures for south Reading.
- 2.1.5 As referred to previously, the site currently has planning consent for 14,080m² open B1 office and 440 parking spaces. This forms a useful 'on plot' baseline for the assessment. The net difference between the extant and the proposed will be assessed. This difference equates to an additional 12,541m² GEA (or 11,020m² GIA).

Assessment Methodology

- 2.1.6 To be consistent with approved work from recent plots that have come forward on GP including the 2008 consent for Plot 3.2 (Reserved Matters permission 08/00261/REM pursuant to outline consent 85/TP/690) the baseline assessment is again intended to be based on these agreed parameters, which were originally derived for the approved GreenPark Phase I and II model.
- 2.1.7 The Baseline data therefore includes the trip generation for GreenPark Plots 1 to 13 inclusive, GreenPark 3 South (Plot 17) and Costco Superstore. The assessment is also based on all of these plots being built and occupied.
- 2.1.8 At present, South Oak Way comprises a single lane carriageway in each direction. However, internal capacity is also safeguarded for dualling once development and occupation of plots reaches a tipping point, requiring this intervention.
- 2.1.9 The approved GreenPark Phase I and II model covers the weekday morning (0800-0900) and evening (1700-1800) peak hours. Due to the nature of the development proposals, no other assessment periods are proposed.

Person Trip Generation

- 2.1.10 The person trip rates for the 'office' component of the consented GreenPark Village scheme (10/01461/OUT) form the basis of the person office trip generation at 400 Longwater Avenue. These rates, together with the calculated trip generation for the extant, proposed and net change are set out sequentially in the following tables:

Person Trip Rates			
	B1 Office Person Trips/100m ²		
	arrivals	departures	two way
AM Peak Hour (0800-0900)	2.79	0.44	3.23
PM Peak Hour (1700-1800)	0.34	1.34	1.68

Table 1 – Person Trip Rates

Person Trip Generation – Extant			
	B1 Office Person Trips		
	arrivals	departures	two way
AM Peak Hour (0800-0900)	393	62	455
PM Peak Hour (1700-1800)	48	189	237

Table 2 – Person Generation – Extant

Person Trip Generation – Proposed			
	B1 Office Person Trips		
	arrivals	departures	two way
AM Peak Hour (0800-0900)	743	117	860
PM Peak Hour (1700-1800)	91	357	447

Table 3 – Person Generation – Proposed

Person Trip Generation – Net Change			
	B1 Office Person Trips		
	arrivals	departures	two way
AM Peak Hour (0800-0900)	350	55	405
PM Peak Hour (1700-1800)	43	168	211

Table 4 – Person Generation – Net Change

Vehicular Trip Generation

- 2.1.11 In line with the assessment for 08/00261/REM, the vehicular trip rates for the existing and proposed are obtained from the trip rates used previously in the approved GreenPark Phase I and II scheme. These are summarised in Table 1, below.

Vehicular Trip Rates			
	B1 Office Trips/100m ²		
	arrivals	departures	two way
AM Peak Hour (0800-0900)	1.395	0.22	1.615
PM Peak Hour (1700-1800)	0.17	0.67	0.84

Table 5 – Agreed GreenPark Phases I and II Vehicular Trip Rates

- 2.1.12 The agreed trip generation for 400-450 Longwater Avenue is as follows:

Vehicular Trip Generation – Extant			
	B1 Office Trips/100m ²		
	arrivals	departures	two way
AM Peak Hour (0800-0900)	196	31	227
PM Peak Hour (1700-1800)	24	94	118

Table 6 – Vehicular Generation – Extant

- 2.1.13 The proposed vehicular trip generation over the three phases is set out below.

Vehicular Trip Generation – Proposed				
		B1 Office Trips/100m ²		
		arrivals	departures	two way
AM Peak Hour (0800-0900)	Phase 1 @ 12,020m ²	168	26	194
	Phase 1 and 2 @ 19001m ²	265	42	307
	All Phases @ 26,621m ²	371	59	430
PM Peak Hour (1700-1800)	Phase 1 @ 12,020m ²	20	81	101
	Phase 1 and 2 @ 19001m ²	32	127	160
	All Phases @ 26,621m ²	45	178	224

Table 7 – Vehicular Generation – Proposed

- 2.1.14 The proposed development will be built out over three phases as broken down above. The impact calculation assumes the proposed full development of 26,621 m².
- 2.1.15 Based on completion and occupation of the full three phases, the proposed full development would in theory generate 430 two way movements in the morning peak hour and 224 two way movements in the evening peak hour.

- 2.1.16 The breakdown of the net change in vehicular trips relative to the previous consent is summarised in Table 8, below.

Vehicular Trip Generation – Net Change			
	B1 Office Trips/100m ²		
	arrivals	departures	two way
AM Peak Hour (0800-0900)	175	28	203
PM Peak Hour (1700-1800)	21	84	105

Table 8 – Vehicular Generation – Net Change

- 2.1.17 The indicative comparison between the extant and the proposed highlights a net change in two way vehicular movements of 203 and 105 for the AM and PM peak hours respectively. This reflects an increase, as expected, although the overall traffic generated on GreenPark is still considered to be comfortably well below the original peak flows that were tested for GreenPark Phases I to III.

Trip Distribution

- 2.1.18 The GreenPark Phase I and II model shows that 62% of traffic enters GreenPark via South Oak Way and 38% via Longwater Avenue in the AM peak hour (0800-0900). During the same time period, 68% leave the site via South Oak Way and 32% leave via Longwater Avenue.
- 2.1.19 During the evening peak (1700-1800) 63% leave the site via South Oak Way. In terms of vehicles entering the development in the evening peak, the assignment model highlights 78% of traffic arrives via South Oak Way.
- 2.1.20 Table 9, below, sets out the proposed site trip distribution.

Vehicular Trip Distribution				
	AM In	AM Out	PM In	PM Out
Longwater Avenue	38%	32%	22%	38%
South Oak Way	62%	68%	78%	62%

Table 9 – Trip Distribution

Assessment Tools

- 2.1.21 A spreadsheet-based assessment tool will be developed, which will assign development traffic, on a link only basis, based on the above model-based traffic distribution forecasts from GreenPark Phases I and II.
- 2.1.22 It has been agreed with RBC that the above link flow impact approach will be a useful measure of the development in terms of appraising highway impact. More detailed junction testing is not considered necessary, because of the key factors outlined earlier, under 2.1.2.

3 Sustainable Access

- 3.1.1 The owners of GreenPark have substantially contributed, financially, historically and recently, to the access infrastructure and public transport services in and around GreenPark. The operation of the Green Wave bus service which operates 6 buses per hour between Reading Town Centre and GreenPark is an example of their current commitment.
- 3.1.2 The site, and GreenPark as a whole, has a high quality network of pedestrian, cycle and passenger transport provision to encourage these important means of travel.
- 3.1.3 The accessibility of the site by these modes will be demonstrated in the TS, along with on-site provision such as cycle parking, priority parking for car sharers, shower and changing facilities etc. The site-specific Travel Plan will outline a framework of measures for employees on the site, aligned with the objectives of the overarching site-wide Travel Plan.
- 3.1.4 It is understood that further RBC planned transport improvements, in addition to GreenPark Station, include bus infrastructure and reliability measures along the A33 corridor and the implementation of MRT which is an RBC aspiration within the Local Plan and Local Transport Note.

4 Summary

- 4.1.1 This scoping report sets out the key principles and parameters of the supporting transport appraisal work considered appropriate for supporting Plot 3.2 and based on pre-application discussions with Transport Development Control at RBC.
- 4.1.2 It is requested that these are confirmed and agreed by Transport Development Control at RBC in order that the Transport Statement can be completed on an agreed basis and to ease the post application consultation process with regard to transport matters.
- 4.1.3 In addition, it is submitted to the HA alongside the current site layout proposals for early information and to invite comment on any specific areas the HA would like PBA to consider outside those prescribed in this document, while taking on board and appreciating the baseline consent for the site and the wider Green Park permission.

5 Appendix A

James

Thank you for your email and I apologise for the delay in replying. Your comments do accurately reflect our telephone conversation on Friday 11th October 2013.

With regards your comments if the Green Park Station does not come forward I recommend that improvements to bus infrastructure and reliability along the corridor from the town centre will be required together with the implementation of MRT which is within the Local Plan and Local Transport Note.

If you need anything else, please let me know.

Kind Regards

*Chris Saunders IEng, FIHE
Transport Development Control Manager
Reading Borough Council
Civic Centre
Reading
RG1 7AE*

Tel 0118 937 3949

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www.reading.gov.uk/weneedtotalk

From: James Overend [<mailto:joverend@peterbrett.com>]

Sent: 14 October 2013 13:01

To: Saunders, Chris

Cc: Cook, Darren; camcdade@deloitte.co.uk; Doug McDougall

Subject: RE: 131253 400 Longwater Avenue PREAPP

Chris

I write to confirm our discussion on Friday 11th Oct in terms of clarifying your earlier message on the 10th (see below) which followed our helpful meeting with David and Darren in the morning.

As clarified, we will provide a Transport Statement to support the proposed Plot 3.2, Green Park office development based on up to 26,621 sqms of floor space and 691 car parking spaces plus disabled provision. As recognised, this plot will cause the cumulative floor space cap for the Park to exceed the previously agreed level, predicted from assessment undertaken in the early 90's for the original park wide consent, albeit a large proportion of this running total remains as consented in planning terms, rather than as built out occupied space. As discussed, we also now have the external highway capacity improvements and demand management measures in operation along the A33 corridor and Junction 11, plus the future ability to dual specific internal links on the Park, as consented.

We recognise RBC's stance that future new plots, beyond Plot 3.2, are likely to need a fuller highway impact assessment, perhaps by utilising ATC's on the main Park links to monitor flows against previously forecast volumes. Extensions to existing offices like Plot 3.1, however will be less of a concern and not require significant assessment.

The car parking relates to 440 spaces at 1 per 32 sqm (14,080 sqm) as previously consented on the site (2008) with the remaining 251 spaces equating to 1 per 50 sqm (12,541 sqm). We consider 1 per 32 for the first proportion of floor space offers a useful degree of restraint and in connection with this, thank you for sending me the CLG link. Accordingly, and in line with the current consent on the site, it is preferred that the 1 per 32 standard comes on line first so that overspill issues do not arise in the opening phase(s) and also to allow time for GP Station or other PT improvements to take hold. With regards to what these other improvements might be, in the event that GP Station does not come forward, it would be useful to have your thoughts so that we can refer to them in our planning submission?

I trust this reflects an accurate position and we will incorporate in our Transport Scoping note which we will submit shortly for your approval.

Regards

James

Stephen Charters

From: James Overend
Sent: 21 January 2016 17:34
To: Stephen Charters
Subject: FW: Plot 400, GP
Attachments: 400 Longwater Avenue - Transport Scoping Note - Final (HA).pdf; 400 LWA Transport Statement - Final.pdf

[For info](#)

[Regards](#)
[James](#)

From: Cook, Darren [mailto:Darren.Cook@reading.gov.uk]
Sent: 21 January 2016 15:45
To: James Overend
Subject: RE: Plot 400, GP

Hi James,

As discussed and detailed below I am happy to progress the application for Plot 400 as previously agreed and set out in the Transport Scoping Note.

I would however stress that this response is not based on the attached Transport Statement, which I have not had an opportunity to review.

Kind regards,

Darren Cook
Transport Development Control Manager
Transport | Directorate of Environment and Neighbourhood Services (DENS)

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Civic Offices
Bridge Street
Reading
RG1 2LU

0118 937 2612 (72612)

[Website](#) | [Facebook](#) | [Twitter](#) | [YouTube](#)



From: James Overend [<mailto:joverend@peterbrett.com>]
Sent: 20 January 2016 13:34
To: Cook, Darren
Subject: FW: Plot 400, GP

[Darren](#)

As discussed briefly at the end of yesterday's mtg, I write to confirm that the approach and methodology adopted in the previous transport documents, as attached, remain relevant and acceptable for the forthcoming Plot 400 application on GP. This is on the understanding that we will update the TS with any relevant baseline changes previously described in chapters 3 to 7 of the TS, as well as report on any refinements and impacts of the development proposals for 400, which have emerged since the previous round of consultation in late 2013. The report will maintain an estimate of site traffic generation on to SOW and LWA as well as J11 (for HE purposes).

I trust this is agreeable and if not the case then await your response.

Regards,
James

James Overend
Equity Director

For and on behalf of Peter Brett Associates LLP

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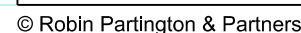
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Appendix B Development Masterplan



Date Last Saved: Tuesday, March 08, 2016

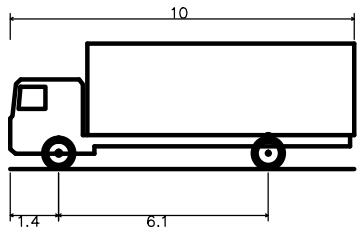
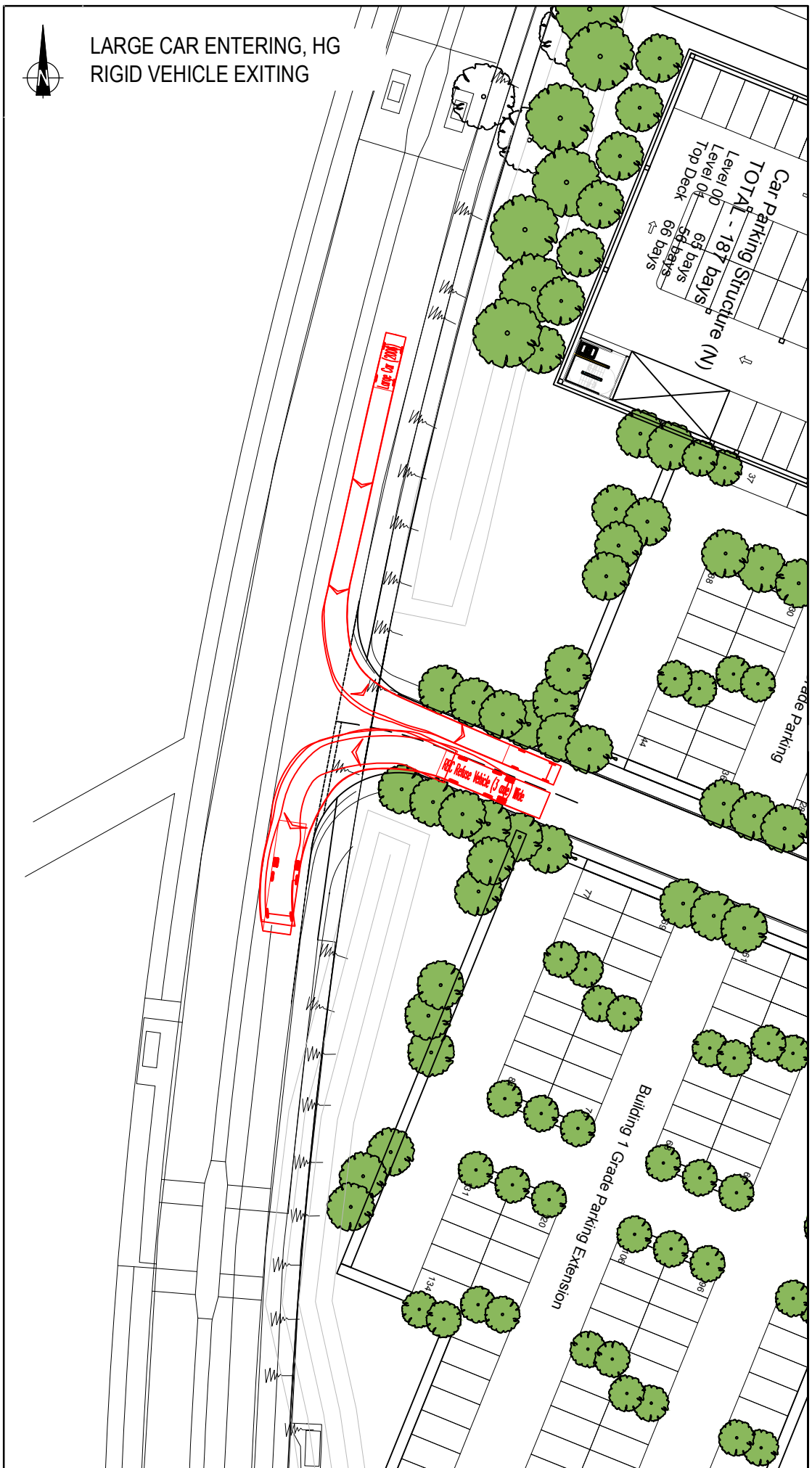
Appendix C Site Access & Visibility Splays



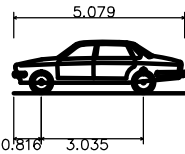
HG RIGID VEHICLE ENTERING,
LARGE CAR EXITING



LARGE CAR ENTERING, HG
RIGID VEHICLE EXITING



FTA Design HG Rigid Vehicle (1998)
Overall Length 10.000m
Overall Width 2.500m
Overall Body Height 3.645m
Min Body Ground Clearance 0.440m
Track Width 2.470m
Lock to Lock Time 3.00s
Kerb to Kerb Turning Radius 11.000m



Large Car (2006)
Overall Length 5.079m
Overall Width 1.872m
Overall Body Height 1.525m
Min Body Ground Clearance 0.310m
Max Track Width 1.831m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 5.900m

Mark	Revision	Date	Drawn	Chkd	Appd
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SCALING NOTE: Do not scale from this drawing. If in doubt, ask.
UTILITIES NOTE: The position of any existing public or private sewers, utility services, plant or apparatus shown on this drawing is believed to be correct, but no warranty to this is expressed or implied. Other such plant or apparatus may also be present but not shown. The Contractor is therefore advised to undertake his own investigation where the presence of any existing sewers, services, plant or apparatus may affect his operations.

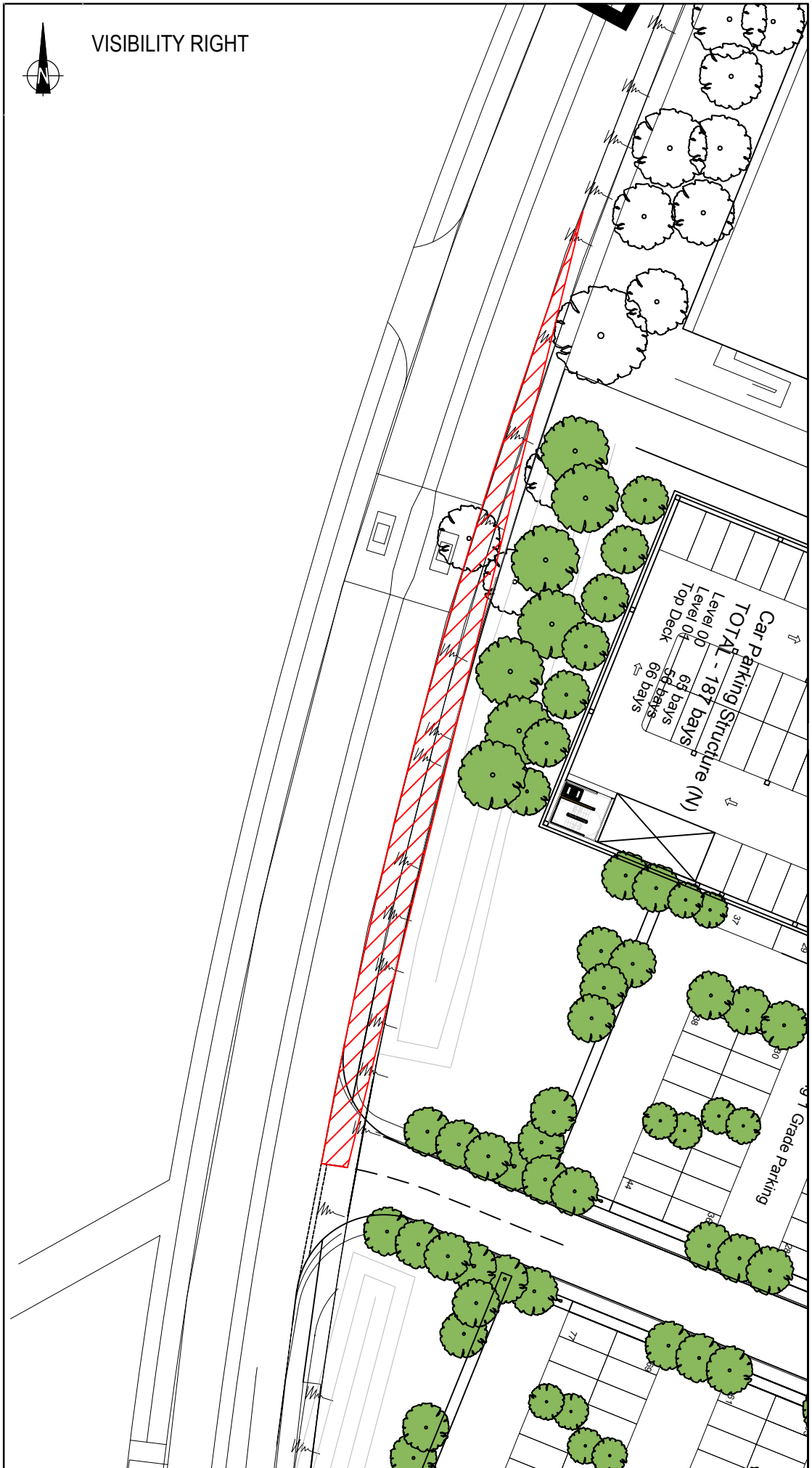
Drawing Issue Status
FOR INFORMATION

GREEN PARK, 400 LONGWATER AVENUE
HG RIGID VEHICLE & LARGE CAR
SWEPT PATH FOR SITE ACCESS

Client
GREEN PARK READING
NO.1 LLP

Date of 1st Issue 11/03/2016	Designed -	Drawn BH
A3 Scale 1:500	Checked SC	Approved -
Drawing Number 27159-001-SK007	Revision -	

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Drawing Issue Status
FOR INFORMATION

GREEN PARK, 400 LONGWATER AVENUE
2.4M X 90M VISIBILITY SPLAY
SITE ACCESS

Client
GREEN PARK READING
NO.1 LLP

Date of 1st Issue	Designed	Drawn
11/03/2016	-	BH
A3 Scale	Checked	Approved
1:500	SC	-

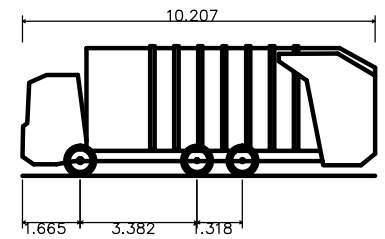
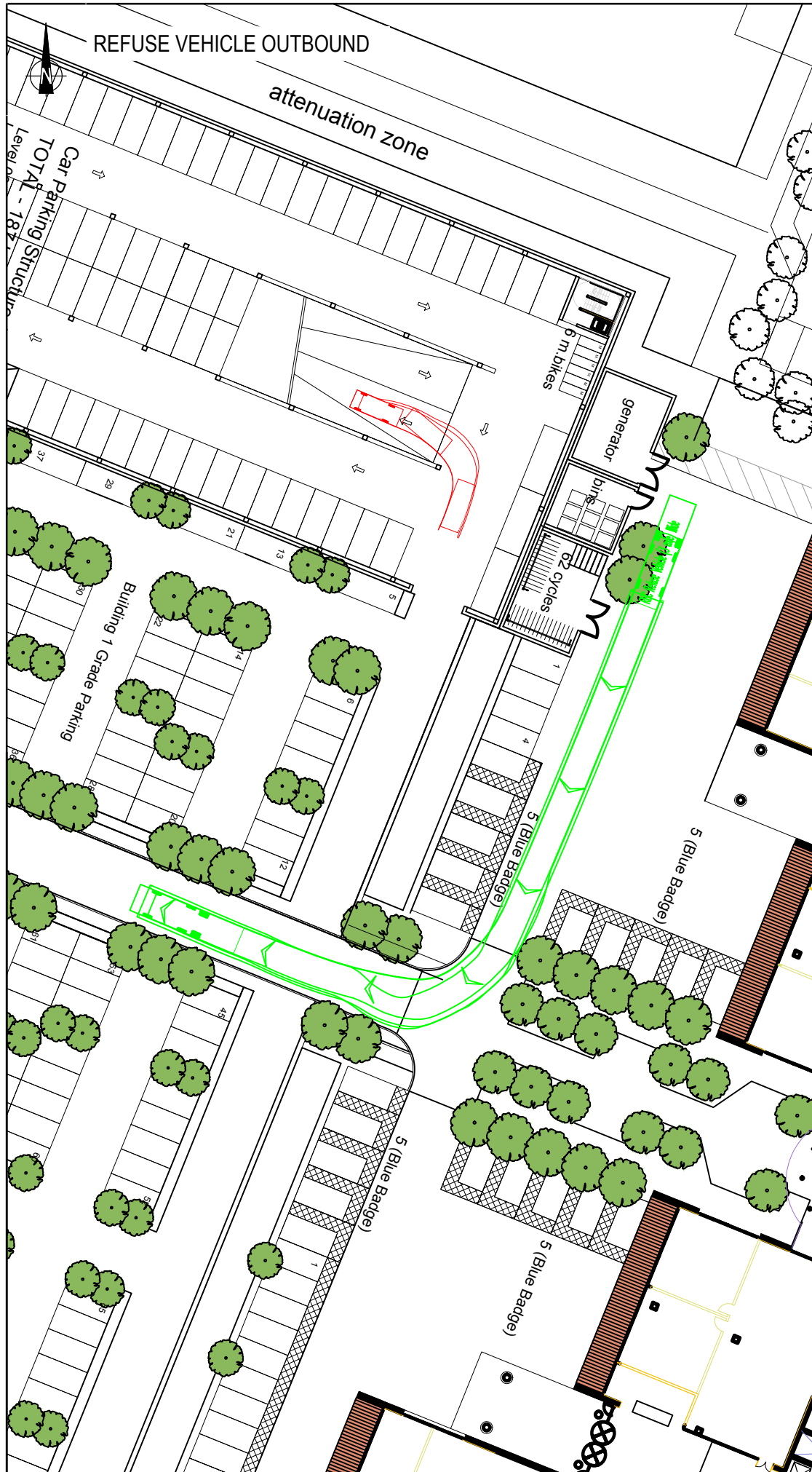
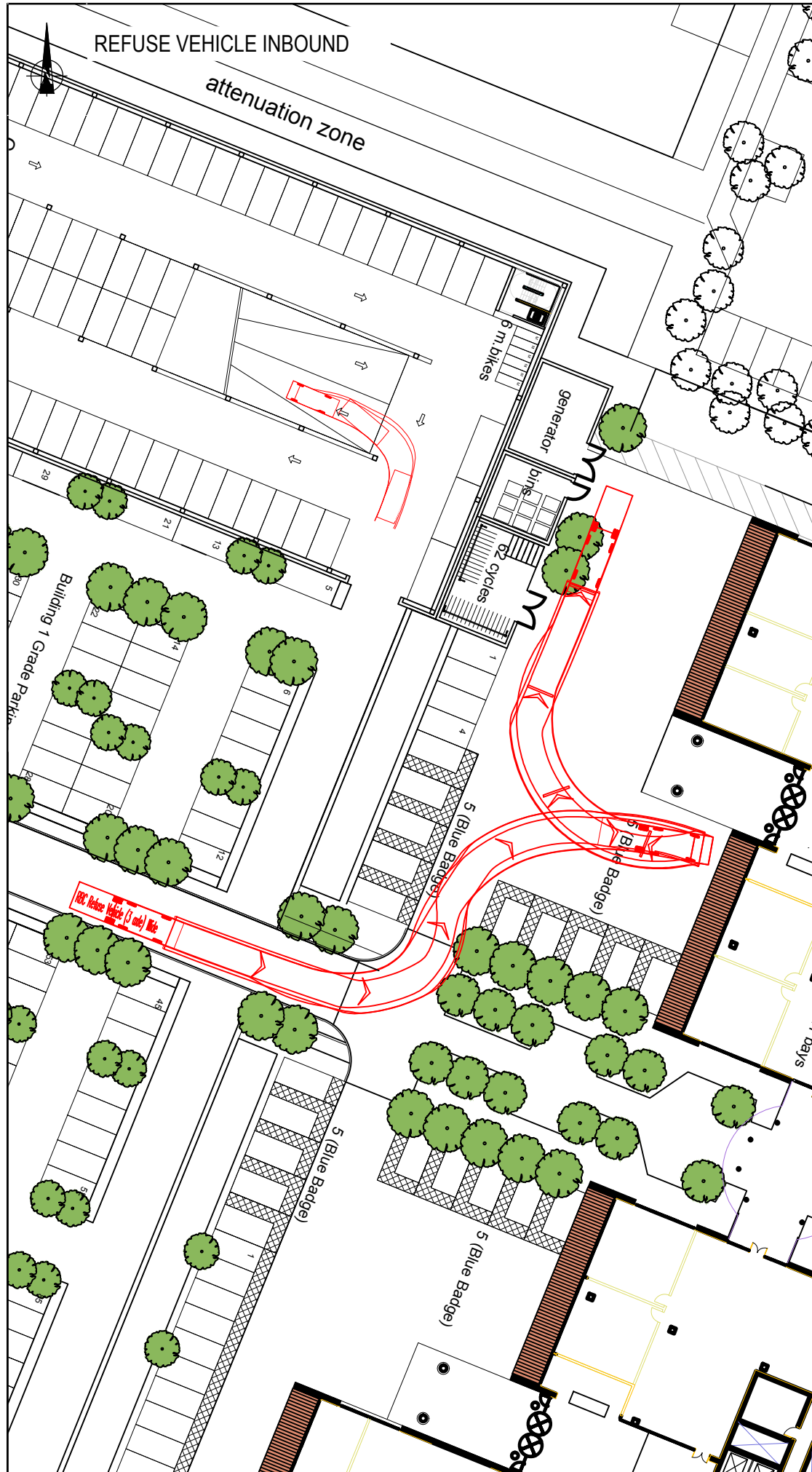
Drawing Number
27159-001-SK008

Revision
-



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Appendix D Vehicle Swept Path Analysis



RBC Refuse Vehicle (3 axle) Wide
Overall Length 10.207m
Overall Width 2.530m
Overall Body Height 3.748m
Min Body Ground Clearance 0.300m
Track Width 2.480m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 8.600m

Mark	Revision	Date	Drawn	Chkd	Appd
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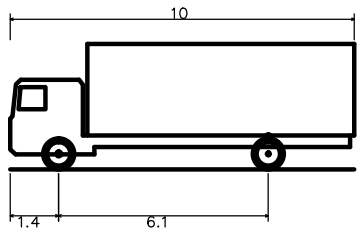
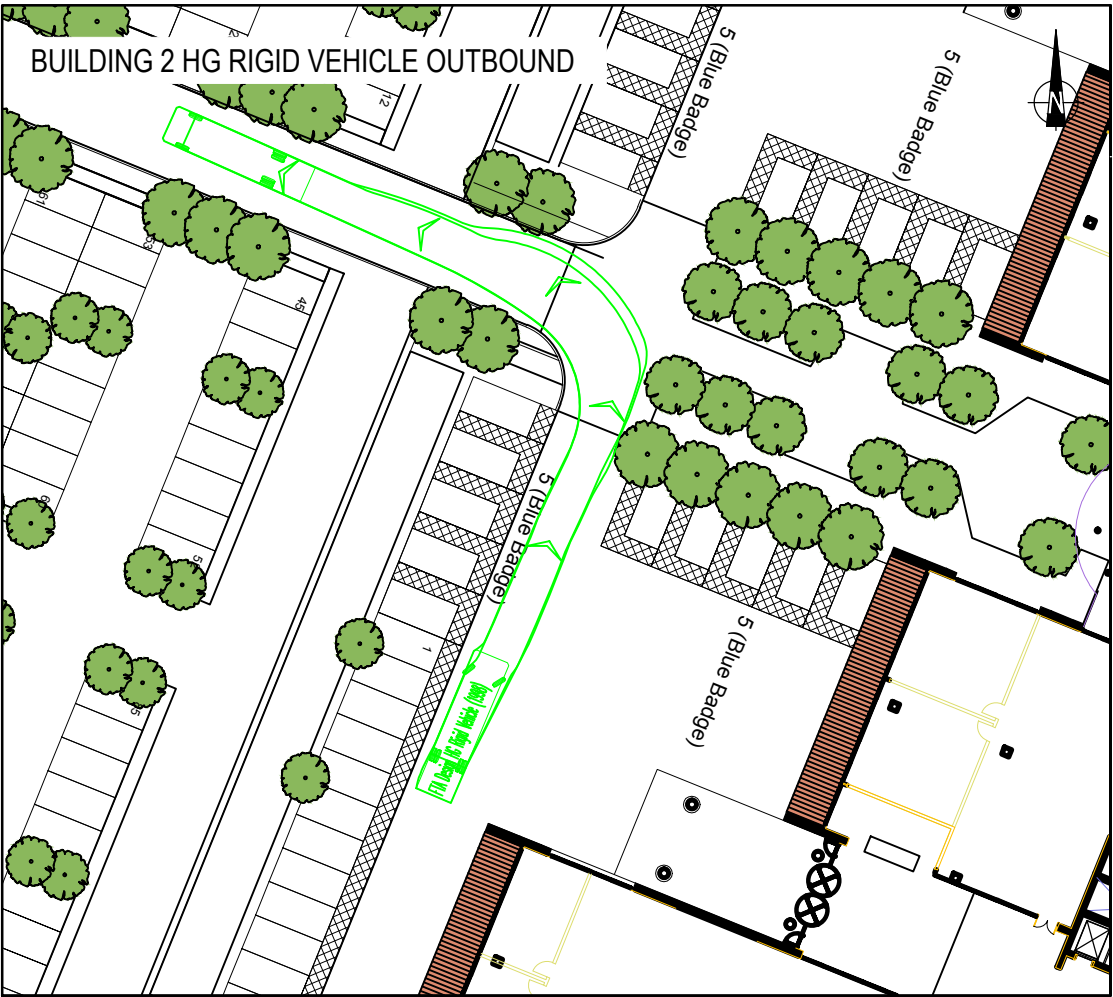
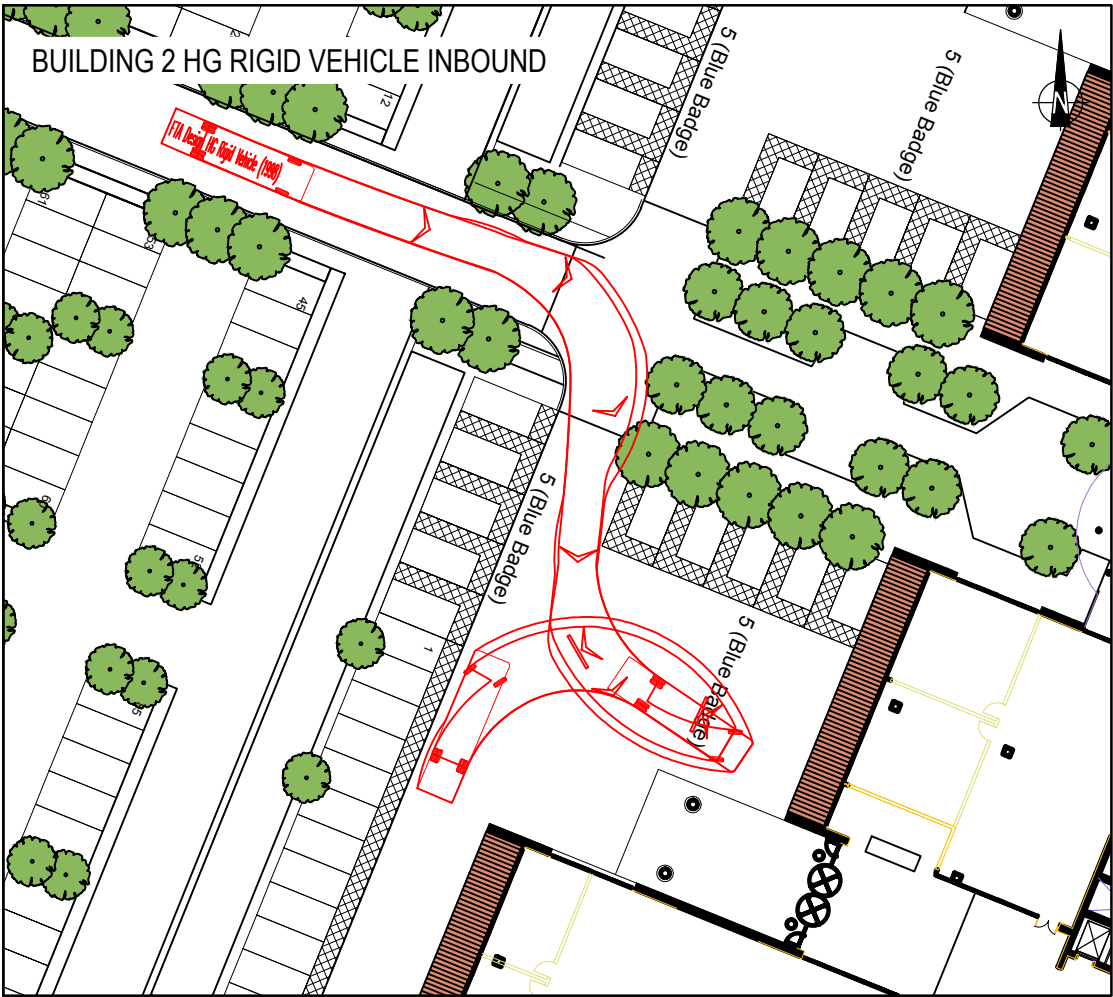
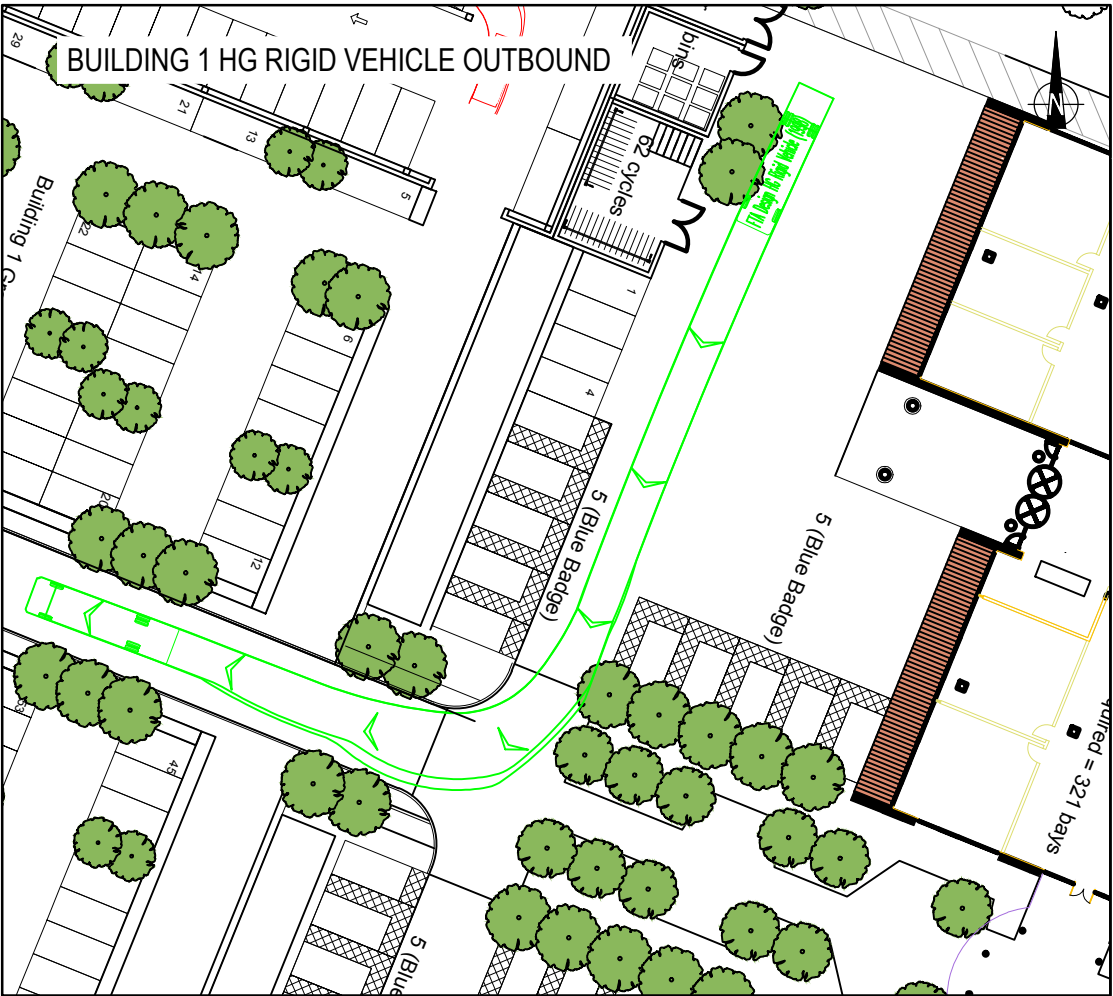
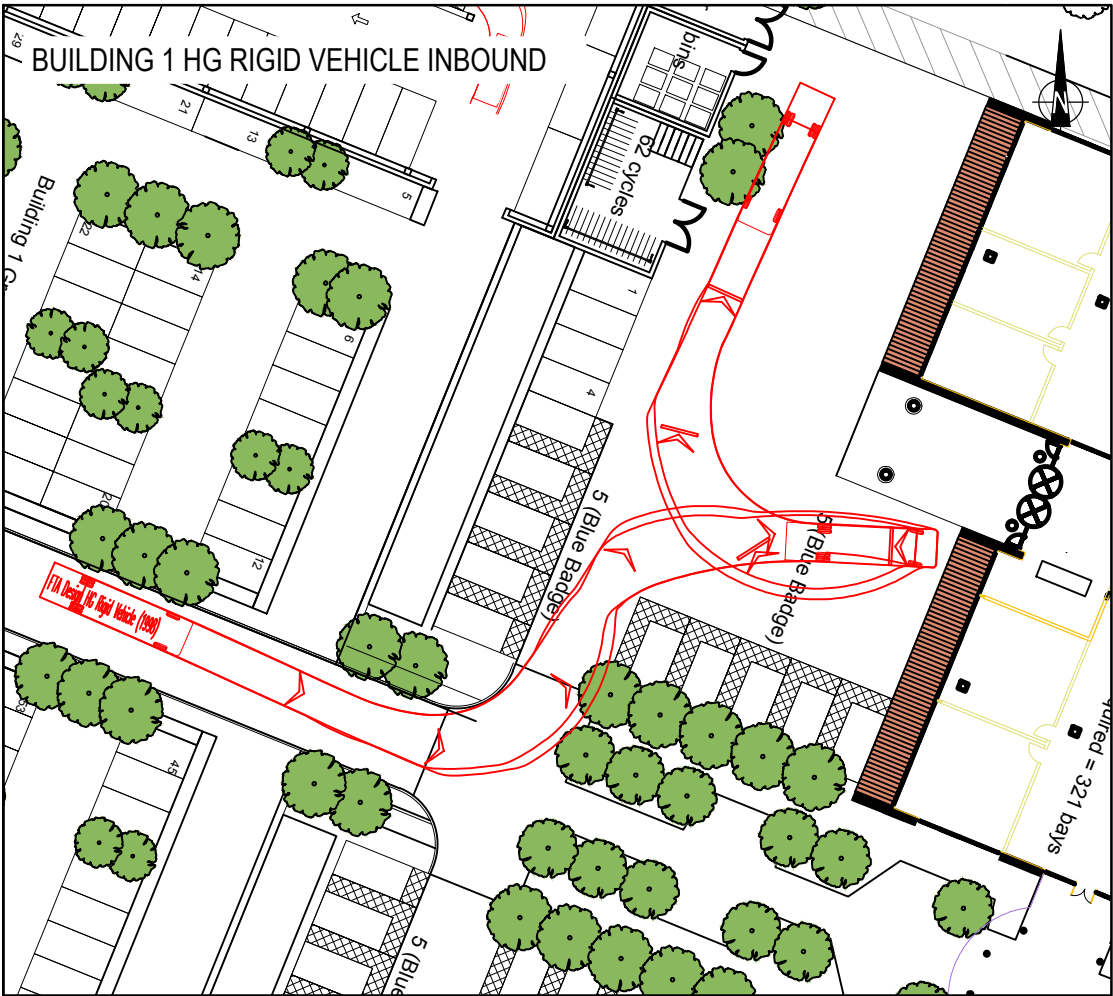
Drawing Issue Status
FOR INFORMATION

**GREEN PARK, 400 LONGWATER AVENUE
REFUSE VEHICLE
FORWARDS ENTRY, REVERSE TO REFUSE
STORE (BUILDING 1)**

Client
**GREEN PARK READING
NO.1 LLP**

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FTA Design HG Rigid Vehicle (1998)	
Overall Length	10.000m
Overall Width	2.500m
Overall Body Height	3.645m
Min Body Ground Clearance	0.440m
Track Width	2.470m
Lock to Lock Time	3.00s
Kerb to Kerb Turning Radius	11.000m

Mark	Revision	Date	Drawn	Chkd	Appd
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Drawing Issue Status

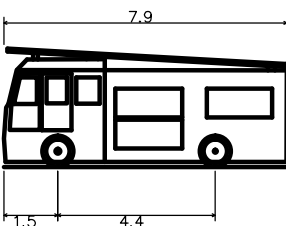
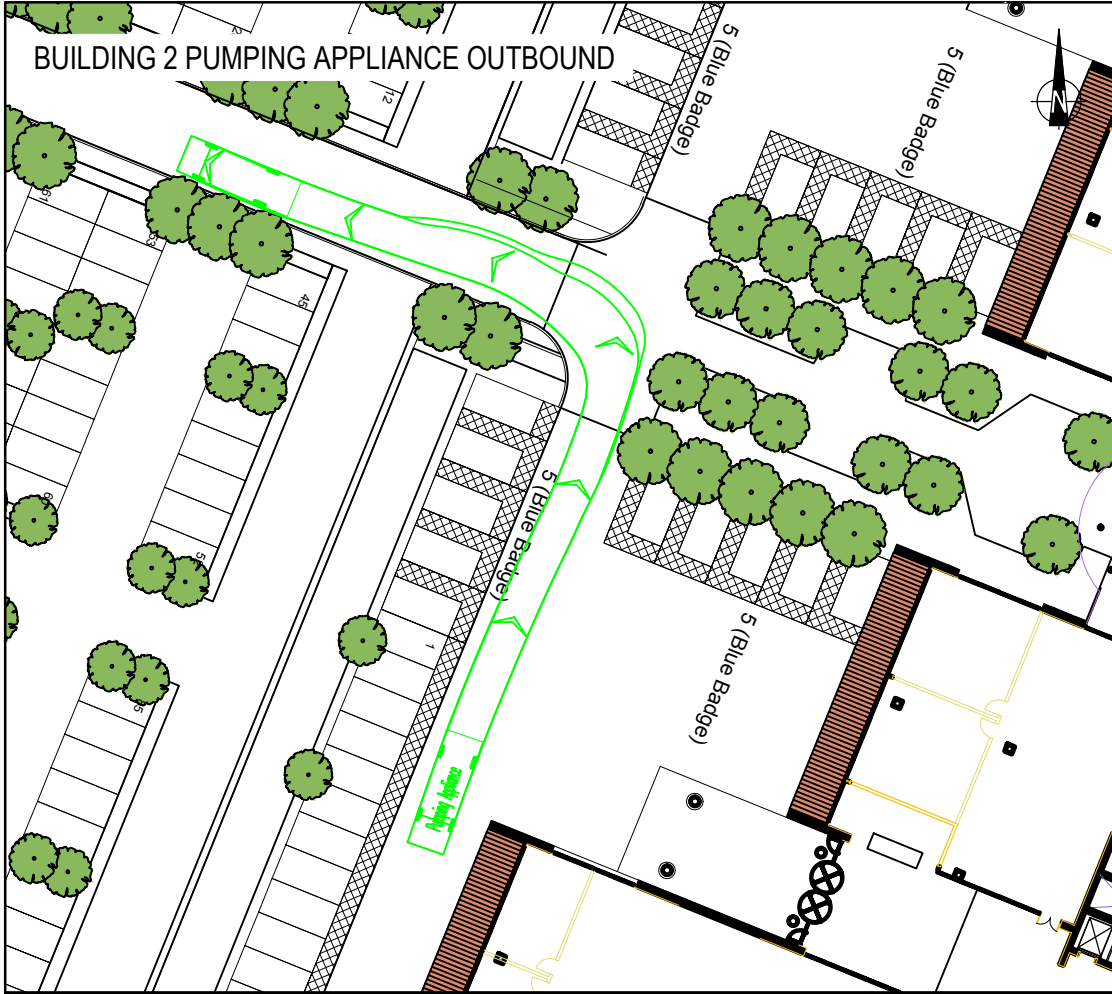
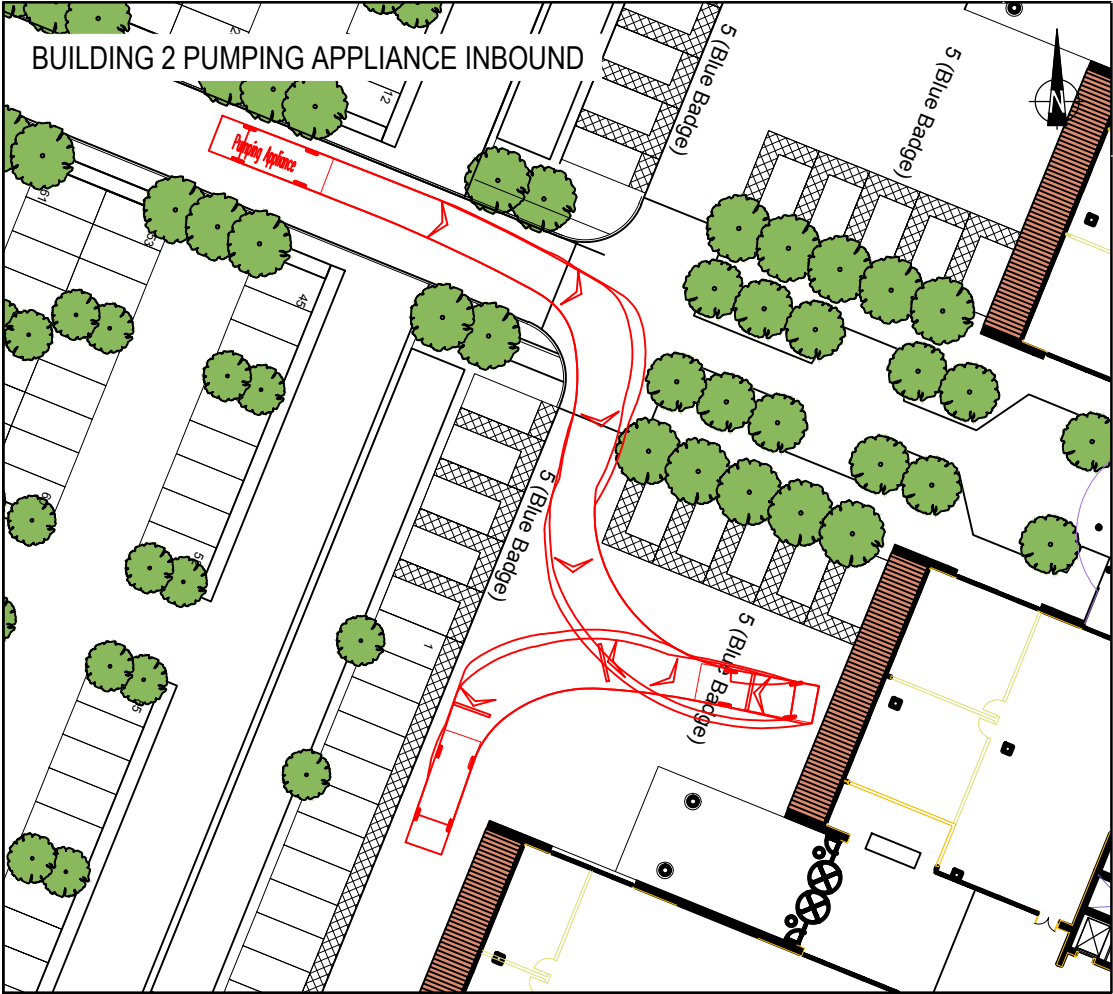
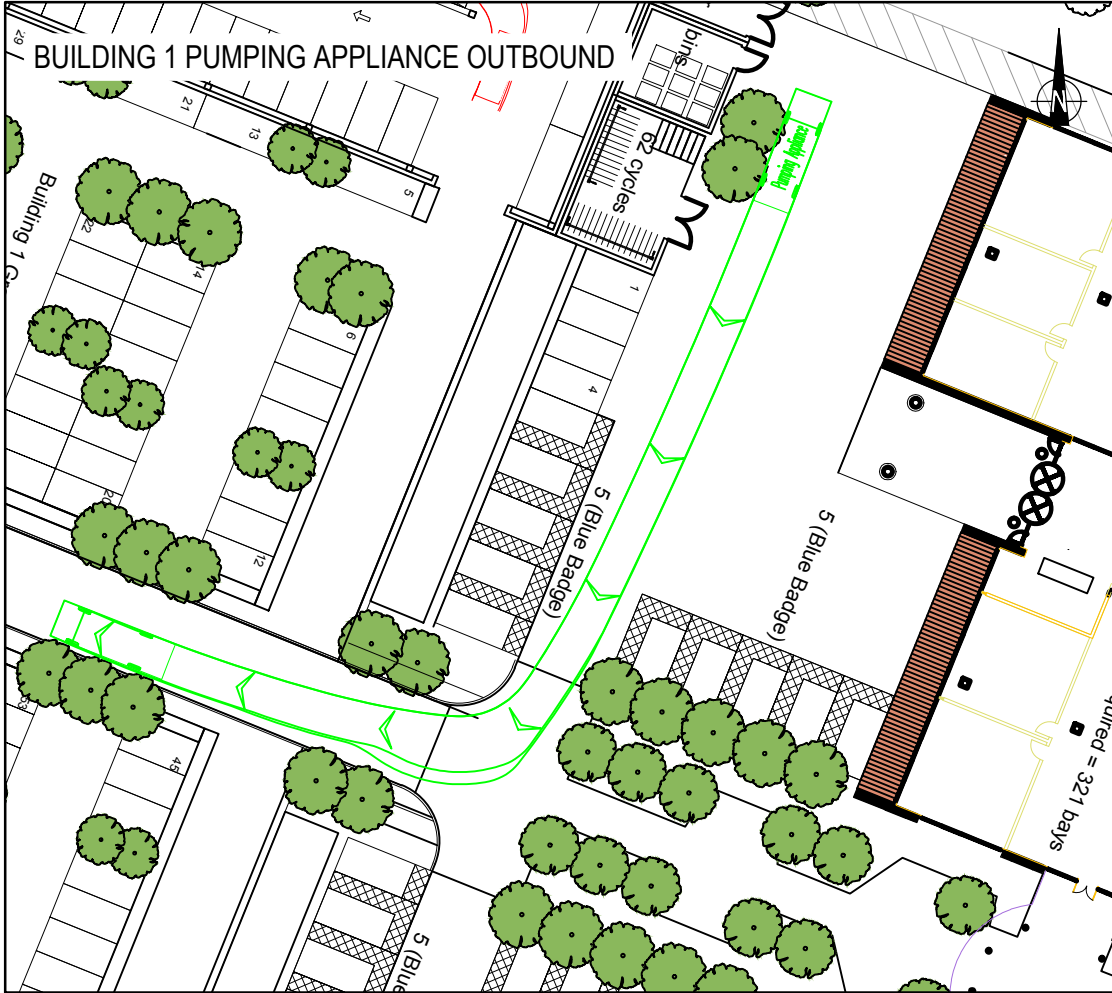
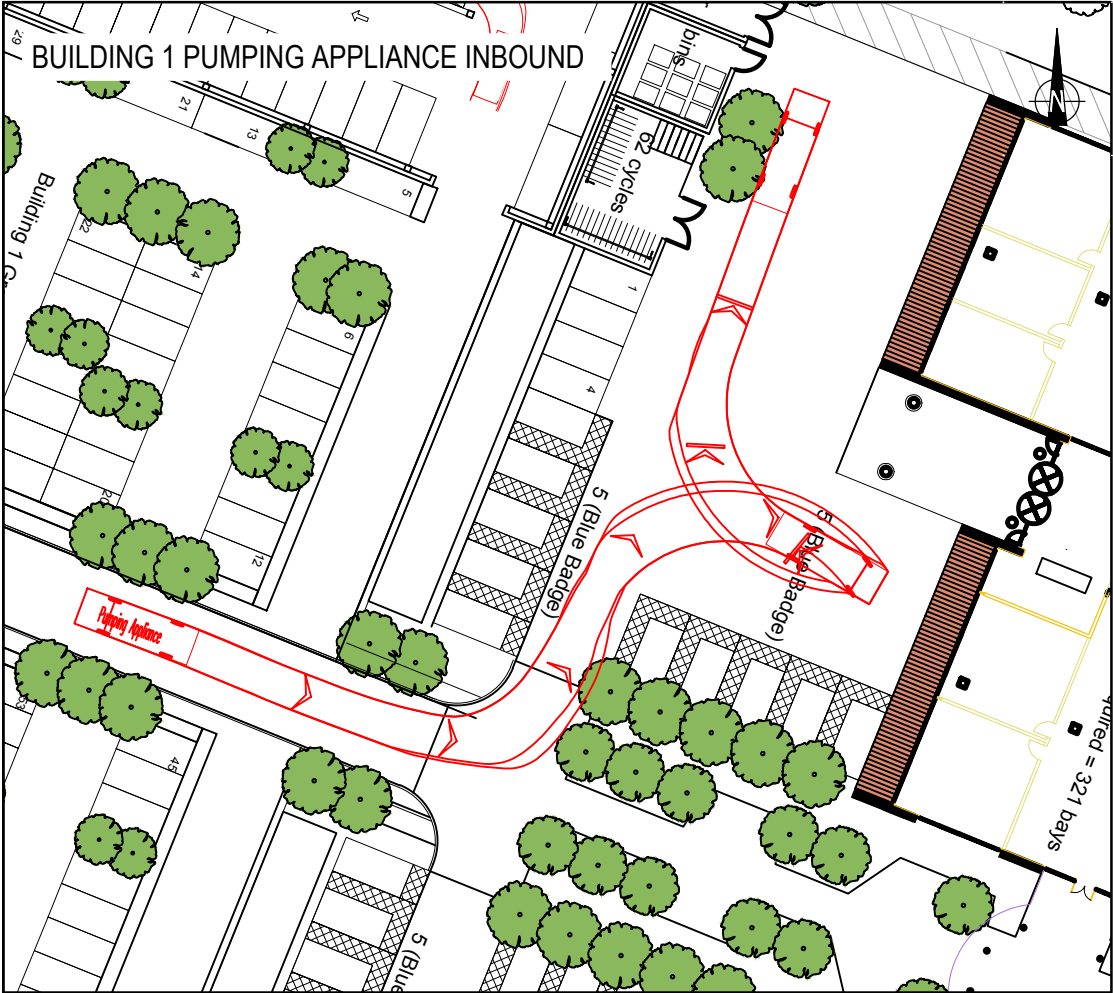
FOR INFORMATION

GREEN PARK, 400 LONGWATER AVENUE
HG RIGID VEHICLE
SWEEP PATH FOR BUILDING 1 & 2 ACCESS

Client
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NO.1 LLP

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Pumping Appliance
Overall Length 7.900m
Overall Width 2.500m
Overall Body Height 3.300m
Min Body Ground Clearance 0.140m
Track Width 2.500m
Lock to Lock Time 4.00s
Kerb to Kerb Turning Radius 7.750m

Mark	Revision	Date	Drawn	Chkd	Appd
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Drawing Issue Status
FOR INFORMATION

**GREEN PARK, 400 LONGWATER AVENUE
PUMPING APPLIANCE
SWEEP PATH FOR BUILDING 1 & 2 ACCESS**

Client
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