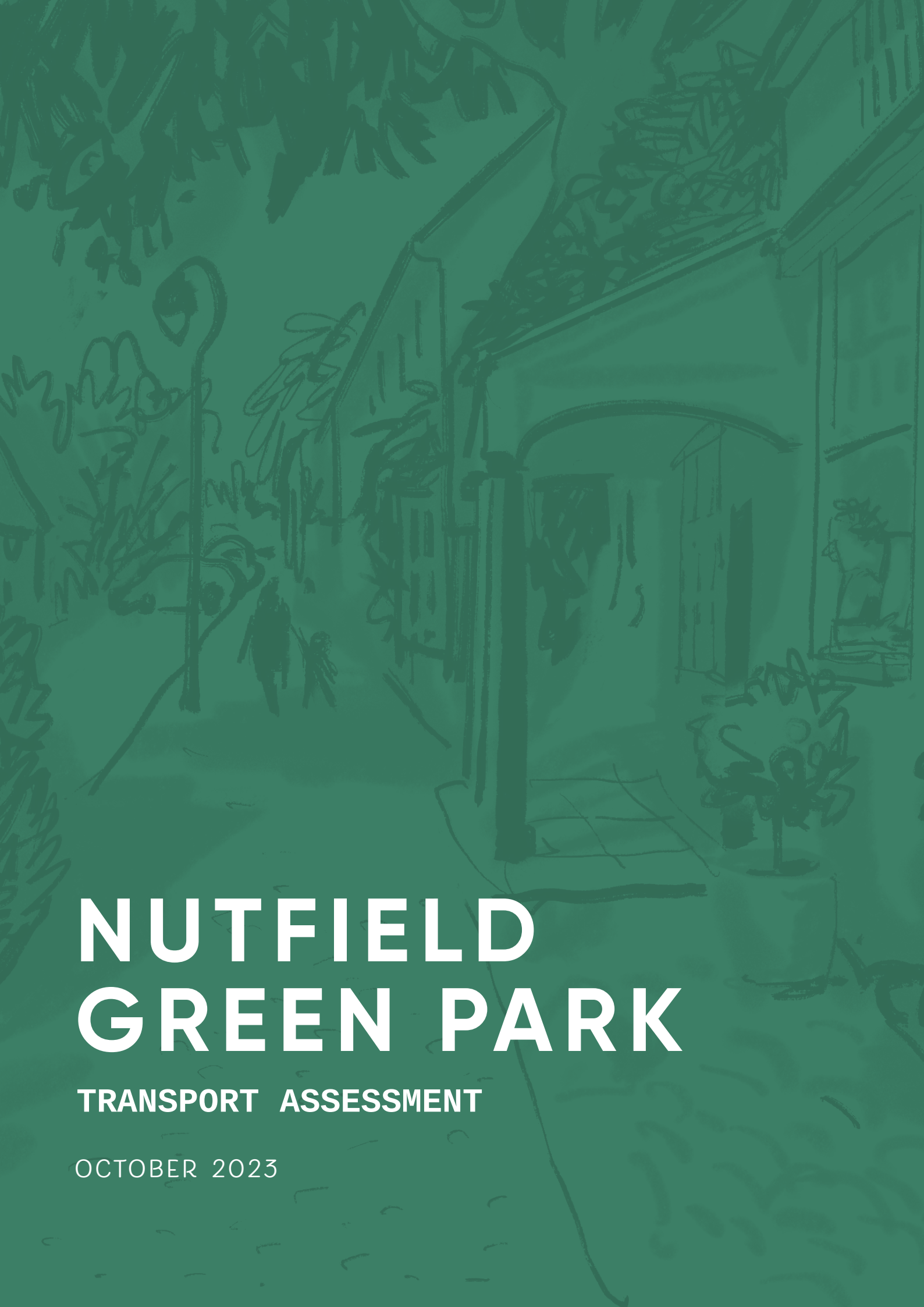


NUTFIELD GREEN PARK

TRANSPORT ASSESSMENT

OCTOBER 2023

vectos. | PART OF SLR

TRANSPORT ASSESSMENT

Nutfield Park Developments Ltd

Nutfield Green Park

Transport Assessment

October 2023

vectos.co.uk

Contents

Figures

Appendices

1 Introduction

Overview

1.1 Vectos (Part of SLR) has been instructed by Nutfield Park Developments Ltd to provide transport and highways advice in relation to the promotion of land at Nutfield Green Park.

1.2 The proposals seek to develop the land for a residential-led settlement comprising a quantum of 166 residential units, 41 units for later living and a 70-bed care home. In addition, community uses are being considered under use class E(e)/ F2.

1.3 The developer seeks an outline consent with matters relating to access to be determined at this stage, and all other matters reserved for later determination. The accompanying transport related documents to the application are as follows:

- Transport Assessment
- Framework Travel Plan
- Detailed drawing of a proposed new junction on A25
- An Access and Movement Parameter Plan containing location of the internal spine road, existing Public Rights of Way (PROW), and upgraded/new pedestrian and cycle routes/connections.

1.4 A separate Air Quality Assessment has been undertaken by Air Quality Consultants Ltd to assess the impact of the proposed development. Vectos have provided Air Quality Consultants Ltd with the relevant traffic flow information to allow for completion of this assessment. Further details can be found within the Air Quality Assessment Report.

1.5 This report has been prepared by Vectos to set out the Transport Assessment (TA) approach for proposed development. The site is located within the administrative boundary of Tandridge District Council (TDC) and the local highway authority is Surrey Count Council (SCC).

1.6 A pre-application meeting was held between Vectos and Surrey County Council (SCC) on Friday 17th March 2023. SCC subsequently returned a formal response on 12th May 2023, as shown in **Appendix A**. A highways response note was issued to SCC by Vectos on 4th August 2023 addressing each of the comments raised, as shown in **Appendix B**. A second pre-application meeting was held between Vectos and SCC on 30th August 2023, with the agreed meeting minutes attached at **Appendix C**.

1.7 In addition, a pre-application meeting was held between Vectos and SCC's Countryside Access Officer regarding public right of ways on 27th September 2023. This meeting discussed the options to upgrade routes to be suitable for pedestrians and cyclists, and the principle of upgrading or forming new routes was agreed.

1.8 These pre-application discussions have informed the content of this TA.

Relevant Planning Background

1.9 The land has been subject to a previous outline planning application (TA/2021/1040) which sought to redevelop the site for:

"Construction and operation of Nutfield Green Park with access from Nutfield Road and Nutfield Marsh Road comprising the construction of an outdoor activity park using imported inert materials, the operation of an outdoor activity park, the construction and operation of an associated wellbeing centre (GP surgery, pharmacy, community diagnostic hub, community shop, restaurant/cafe, creche, office hub, event space, indoor and outdoor gyms together with ancillary uses such as 2 staff accommodation units, treatment rooms and storage) together with development of up to 239 residential units, a 70 bedroom rehabilitation and respite care facility with an associated up to 100 extra care units and staff accommodation for up to 21 staff together with infrastructure, landscaping and open space".

1.10 The application was refused by Tandridge District Council (TDC) in September 2021 with the following reasons relating to transport and traffic detailed below.

1.11 Reason 13:

"The unsustainable location of the site and lack of reliable and regular public transport would not support the provision of care facility in this location and future residents would be largely contained to their setting. The applicant has therefore failed to demonstrate the care provision is appropriately located and would meet the needs of the district and future occupant's contrary to Policies CSP7 and CSP8 of the Core Strategy 2004 and the provisions of the National Planning Policy Framework 2021."

1.12 Reason 19:

"The proposed development located at a site with limited accessible services by means other than the private car, would be likely to encourage reliance on the private car over more sustainable transport modes such as walking and cycling, and the use of public transport, thus contrary to Policies CSP1 and CSP12 of Tandridge District Core Strategy (October 2008); Policies DP1, and DP5 of Tandridge Local Plan Part 2: Detailed Policies 2014 – 2019 (July 2014) and Section 9 of the National Transport Planning Policy Framework (NPPF) 2021."

1.13 Reason 20:

"The application as submitted, has not sufficiently demonstrated that the impacts of the development on the highway network in regards to highway capacity and safety, can be satisfactorily accommodated or mitigated, thus contrary to Policy CSP12 of Tandridge District Core Strategy (October 2008); DP5 of Tandridge Local Plan Part 2: Detailed Policies 2014 – 2019 (July 2014); Section 9 of the National Transport Planning Policy Framework (NPPF) 2021; and Surrey County Council Local Transport Plan (LTP3)."

1.14 This TA has addressed the transport related reasons for refusal as part of the previous planning application and has set out the opportunities, challenges, and key principles that the scheme can promote to deliver a successful approach to transport that is acceptable to SCC and TDC.

Report Structure

1.15 The remainder of this report is structured as follows:

- **Section 2:** A review of the site's existing accessibility;
- **Section 3:** A overview of national, regional, and local policy contexts;
- **Section 4:** A summary of the development proposals;
- **Section 5:** Trip generation and distribution methodology;
- **Section 6:** Impact on the transport network; and
- **Section 7:** Summary

2 Existing Conditions

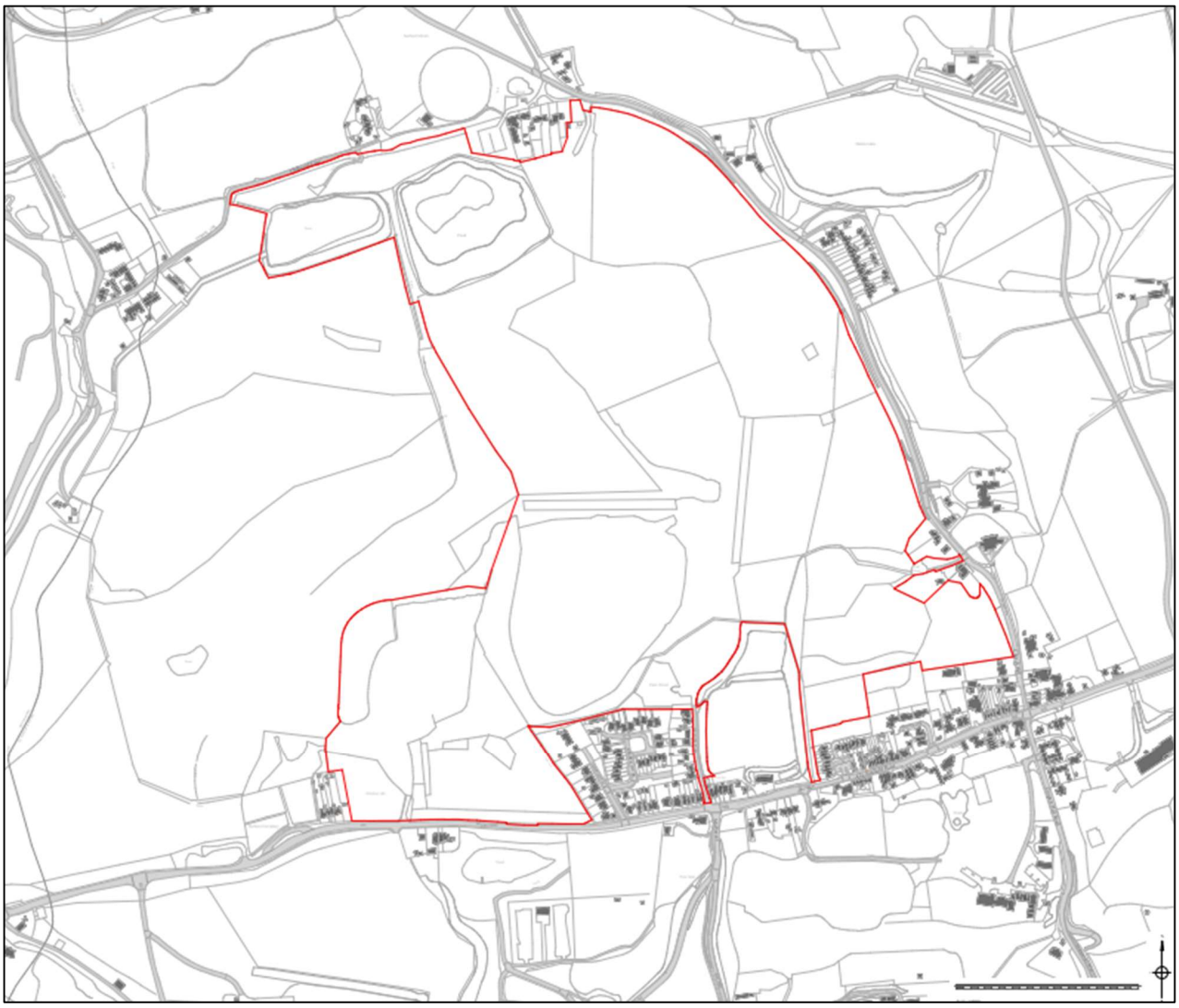
2.1 This section of the TA will examine the site's existing accessibility, specifically focusing on sustainable travel modes.

2.2 The site currently consists of a mixture of grassland, blocks of self-seeding woodland and waterbodies with an area of the former infrastructure remains, such as access roads, pipework, and former settlement lagoons.

2.3 Furthermore, the site comprises the former Laporte Works Site which was an operational mineral extraction and processing facility until 1986 before it was decommissioned in 1997.

2.4 The site is bound by former restored landfill to the west, Chilmead Lane and residential properties to the north, Nutfield Marsh Road/Church Hill to the east, and the A25 Nutfield Road and residential properties to the south. The site location is shown in **Figure 2.1**.

Figure 2.1: Site Location



Accessibility

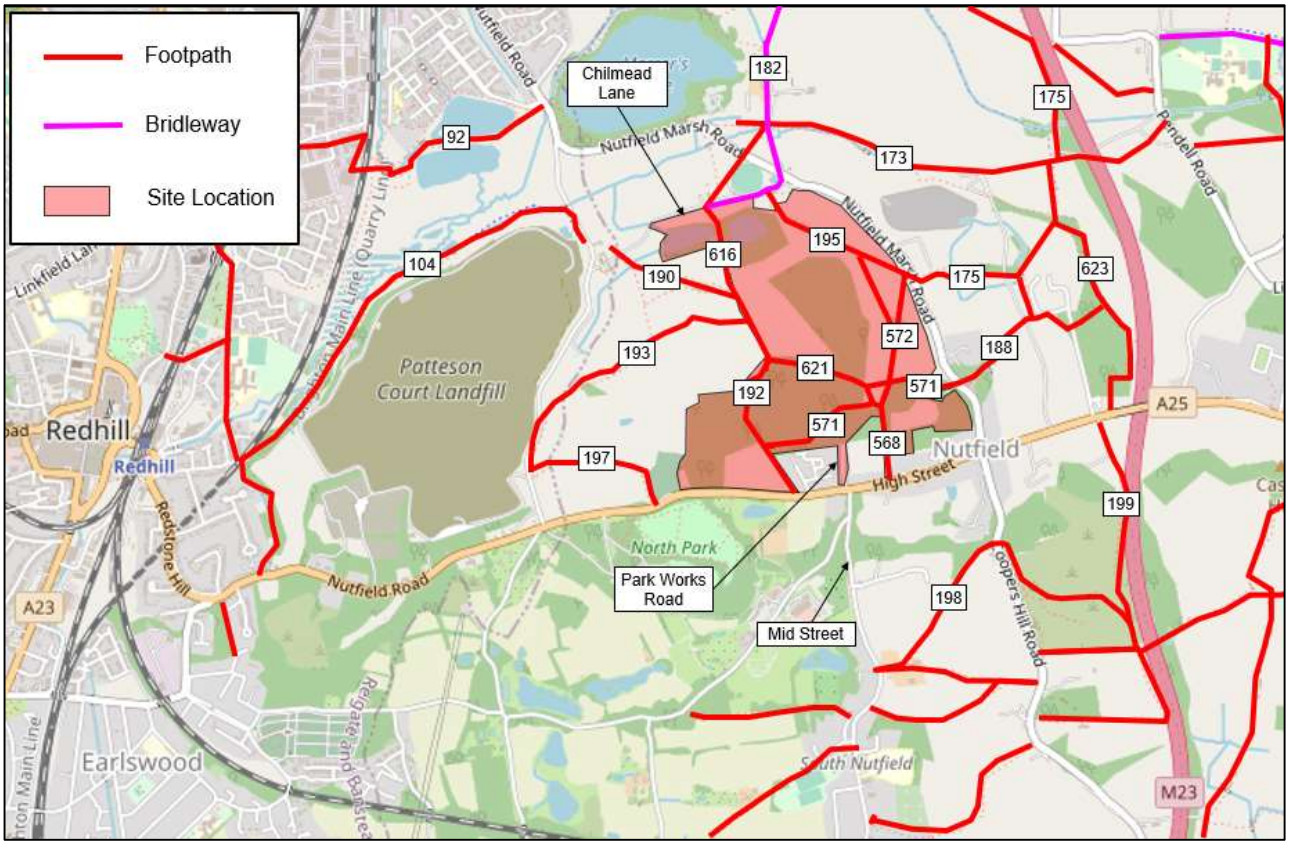
Walking Provision

2.5 A footway is present along the northern side of Nutfield Road along the site's southern frontage, providing access into Nutfield to the east. Directly to the east of Nutfield Road's junction with Mid Street, an informal pedestrian crossing is present comprising tactile paving, dropped kerbs and a central refuge island. This provides access to westbound bus stops along Nutfield Road and Mid Street to the south.

2.6 There is an existing pedestrian access point to the site along Park Works Road which is a local residential access road considered to be a lightly trafficked, low-speed environment. Park Works Road connects to existing footways along Nutfield Road to the south. The road is within the ownership of the applicant.

2.7 Additional pedestrian access points to the site are available utilising existing Public Right of Way (PROW) routes onto the A25 to the south, Church Hill/Nutfield Marsh Road to the east, and Chilmead Lane to the north. A map showing the existing PROW routes through and around the site is shown in **Figure 2.2**.

Figure 2.2: Public Rights of Way



2.8 The existing PROW routes through the site will be protected and enhanced where appropriate in accordance with local policy to encourage multi-functional use for the benefit of a range of users

including walkers and cyclists. Further details on the proposed enhancements are contained in the proposed development section at **Chapter 4** of this report.

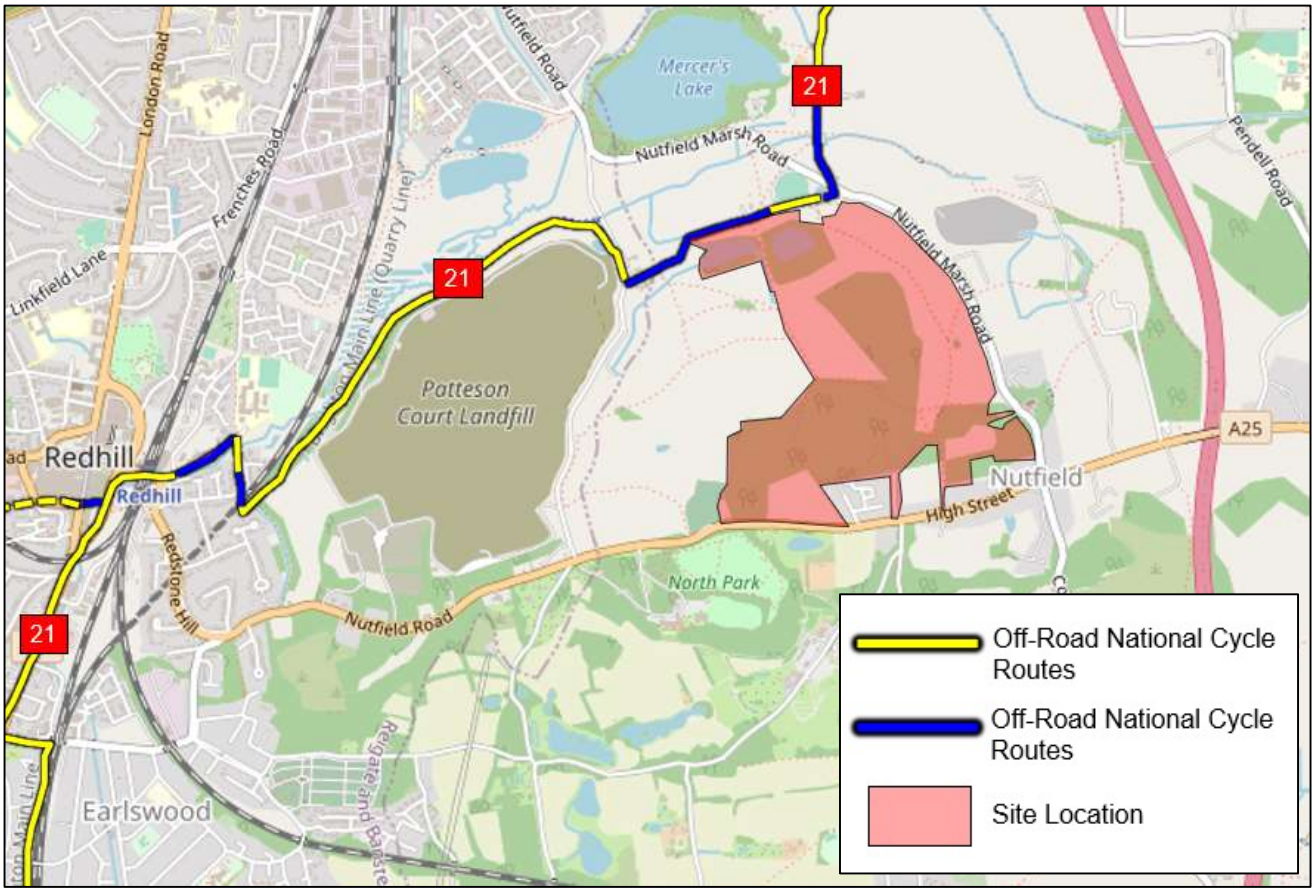
Cycling Provision

2.9 Whilst there is limited cycle provision along the A25 Nutfield Road itself, National Cycle Network Route (NCNR) 21 runs along the northern edge of the site boundary at Chilmead Lane and Cormongers Lane. NCNR21 is provided in the form of an on-road provision along Chilmead Lane Cormongers Lane, beyond which, the route becomes an off-road provision continuing west into Redhill via Nutfield Marshes.

2.10 To the north-east of the site, NCNR21 routes towards the M25 Junction 7 via Bridleway 119 and Bletchingley Road whereby it connects to NCNR20 routing north towards Coulsdon, and NCNR21 continuing east towards South Caterham and Woldingham.

2.11 An overview of the local cycle network is shown in **Figure 2.3**.

Figure 2.3: Local Cycle Network



2.12 It should be noted that resurfacing and improvement works are proposed for NCNR21 within the Tandridge Infrastructure Delivery Plan (IDP) dated January 2019. The total estimated funding for these works is £200,000 with funding provided by SCC and/or Sustrans. At this stage, the works are classified as 'desirable' with no timescales given. The applicant is content to discuss with SCC during the determination period providing a reasonable financial contribution towards the costs of these

works as a planning obligation, providing that such an obligation meets the necessary legal and policy tests. However, this will be a matter to determine during the determination of the application, or at the reserved matters stage.

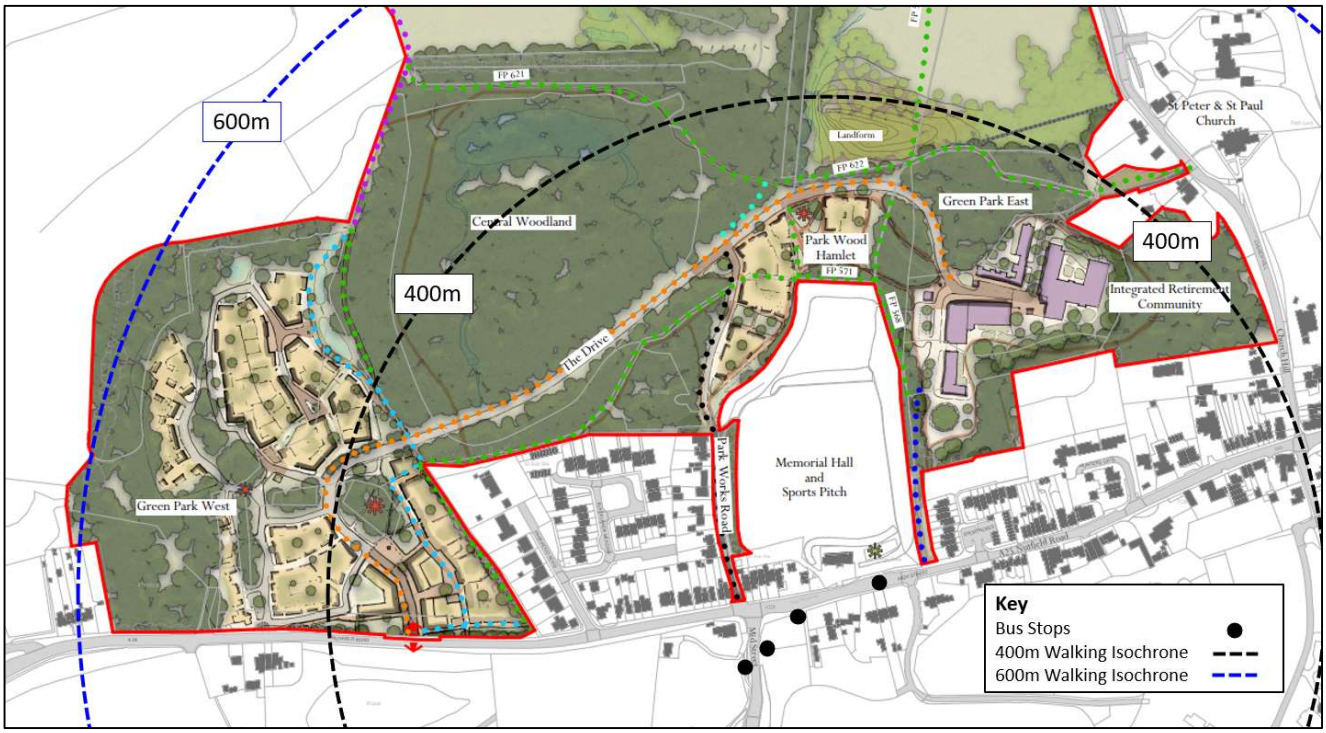
2.13 Whilst it is noted that TDC do not have a Local Cycle and Walking Infrastructure Plan (LCWIP), the neighbouring district of Reigate and Banstead has a LCWIP setting out a 10-year investment plan for walking and cycling. Whilst this includes investment into a network of existing and new cycle connections between Merstham and Redhill Town Centres, it is considered that these schemes will not provide notable benefit to the proposed development at Nutfield.

Public Transport

Bus Provision

2.14 The majority of the site's proposed areas of development are within 400m, or a 5-minute walk, of existing bus stops. Furthermore, all of the developable areas are within 600m, equating to a 7-minute walk, as shown in **Figure 2.4**. This is deemed an acceptable walking distance for a development of this nature within this semi-rural locality.

Figure 2.4: 400m & 600m Walking Isochrones to Bus Stops



2.15 The nearest bus stops to the site are located on Nutfield Road and Mid Street to the south of the site. The Nutfield Road bus stops are served by bus routes 400, 410 and 610. In addition, bus route 315 can be accessed from Mid Street. The frequency of service on these routes is summarised in **Table 2.1**.

Table 2.1: Local Bus Services

Service Number	Route	Frequency		
		Monday - Friday	Saturday	Sunday
315	Dormansland – Lingfield Station – Blindley Heath – South Nutfield – Redhill Bus Station – East Surrey Hospital	3 services per day (1 is a school service)	-	-
400	East Grinstead – Three Bridges Station - Crawley Bus Station – Gatwick Airport – Redhill Bus Station – Nutfield - Godstone - Caterham	1 per hour (until 20:00)	1 per hour (until 19:35)	4 services per day (until 17:19)
410	Snow Hill - South Godstone Station – Broadham Green – Hurst Green – Oxted Station – Godstone – Bletchingley – Nutfield – Redhill Bus Station	2 per hour (until 19:57)	1 per hour (until 18:47)	1 per hour (until 17:43)
610	Smallfield – South Nutfield – Bletchingley – Godstone Green – Oxted	School Service	-	-

2.16 The bus stops on the A25 and Mid Street (referred to as the 'Memorial Hall' and 'Mid Street Top' stops) allow for direct access to Redhill Bus Station within a 10 - 15 minute journey time via bus routes 315, 400 and 410. Redhill Bus Station is immediately adjacent to Redhill Railway Station which is deemed the most attractive nearby station for rail trips due to its wide range of destinations and good frequencies (ranging from 2 - 5 services per hour to each destination). Furthermore, Redhill Bus Station is located within the town centre of Redhill with a wealth of facilities, shops, and leisure venues accessible within a 400m walking distance.

2.17 Whilst it is noted that bus services are not at a consistent frequency throughout the day, when considering the weekday peak travel times, **Table 2.2** shows there are 4 bus services available per hour between the Memorial Hall bus stops and Redhill Bus Station within the peak periods. This considers the most likely scenario that commuting/education/shopping trips generated by the proposed development require bus travel to Redhill in the AM peak period and require bus travel from Redhill in the PM peak period.

Table 2.2 – Bus Service Frequencies in the Peak Hours

Time Period	Bus Service Frequency (One-Way)			
	315	400	410	Total
AM Peak (To Redhill Station from Nutfield)	07:57	07:59	08:17 08:45	4 services
PM Peak (To Nutfield from Redhill Station)	17:15	17:56	17:15 17:45	4 services

Rail Provision

2.18 The nearest rail station to the site is Nutfield Station which is 1.7km to the south via Mid Street and Station Approach. Nutfield Station provides local services between Tonbridge and Redhill.

2.19 Redhill Station is located 3km to the west of the site and can be reached directly by bus routes 315, 400 and 410 within 10-minutes, by car within 5-10 minutes, and by cycle ride within 10-15 minutes.

2.20 Redhill Station provides a much more comprehensive list of services to destinations such as Gatwick Airport, Peterborough, Reading, Tonbridge, Horsham, London Victoria, Bedford and Reigate. Rail services from Redhill Station also operate frequently to each of these destinations with between 2 – 5 services per hour. On this basis, it is felt that the majority of residents of the site who wish to use rail, will be attracted to Redhill Station.

2.21 A summary of the rail services, destinations and frequencies are set out in **Table 2.2** below.

Table 2.2: Rail Services

Route	Frequency		
	Monday - Friday	Saturday	Sunday
Nutfield Station			
Tonbridge – Leigh (Kent) – Penshurst - Edenbridge – Godstone – Nutfield - Redhill	2 per hour	1 per hour	1 per hour
Redhill Station			
Gatwick Airport – Redhill – East Croydon – London Bridge – London St Pancras International – Luton Airport Parkway - Bedford	5 per hour	2 per hour	2 per hour
Horsham – Crawley – Three Bridges – Gatwick Airport – Redhill - East Croydon – London Bridge – London St Pancras International – Stevenage - Peterborough	2 per hour	2 per hour	2 per hour
Redhill – Reigate – Guildford – Farnborough North – Blackwater – Wokingham - Reading	5 per hour	3 per hour	3 per hour
Tonbridge – Leigh (Kent) – Penshurst - Edenbridge – Godstone – Nutfield - Redhill	2 per hour	1 per hour	1 per hour
Reigate – Redhill – Merstham – Coulsdon South – Purley – East Croydon – Clapham Junction – London Victoria	2 per hour	2 per hour	1 per hour

Demand Responsive Transport

2.22 Vectos has been made aware that SCC currently operate Demand Responsive Transport (DRT) services within the county. Whilst it is understood that a network currently operates in the nearby district of Mole Valley, there is not currently a network operating within Tandridge, or specifically Nutfield.

Highway Network

A25 Nutfield Road

2.23 The A25 Nutfield Road is located along the southern boundary of the site and is a two-way single carriageway. The road is subject to a 40mph speed limit which reduces to a 30mph speed limit upon entrance to the settlements of Nutfield and Bletchingley.

2.24 The A25 routes through Redhill Town Centre and Redhill Rail Station to the west whereby the road joins a number of local roads via a 5-arm around (The Station Roundabout) to connect to the M25 westbound at Junction 8. To the east, the A25 routes through Godstone providing a connection to the M25 at Junction 6 via the B2235.

Mid Street

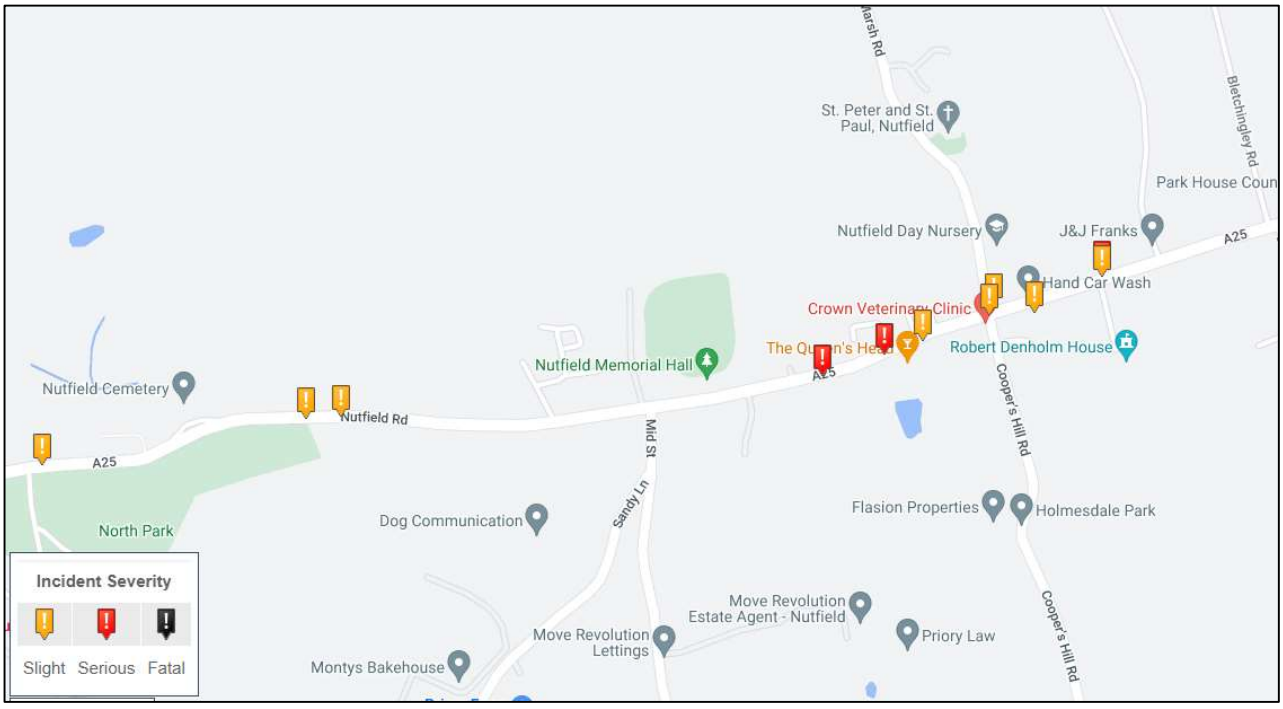
2.25 Mid Street routes in a north-south alignment between the A25 Nutfield Road and South Nutfield. The road is a two-way single carriageway set in a dense cutting of vegetation with a footpath set back behind a row of hedgerow/trees along the western side.

2.26 Mid Street is subject to a 30mph speed limit. Access to Nutfield Rail Station can be reached via North Station Approach and South Station Approach to the west of Mid Street.

Accident Data

2.27 Accident data mapping has been obtained from CrashMap for the surrounding area for the latest 5-year period available (2017-2021), as shown in **Figure 2.5**.

Figure 2.5: Accident Data Overview Plan



2.28 **Figure 2.5** shows 8 slight accidents, 3 serious accidents, and no fatal accidents, within the analysis area. Of these accidents, none feature pedestrian casualties, whilst only two slight and one serious accident feature cyclists.

2.29 At the location of the proposed site access along the A25 two accidents have occurred. Both were classified as slight in severity and neither involved vulnerable road users i.e. pedestrians and/or cyclists. The accidents occurred in March 2019 and July 2019 and different locations along the route. Therefore, it is deemed that there is no indication that the incidents are connected or attributed to any highways design issues.

2.30 Through the centre of Nutfield along the A25 there were 3 accidents recorded to the west of the A25/Coopers Hill Road/Church Hill crossroad, and 3 accidents to the east, with a further 2 accidents recorded at the crossroad junction itself.

2.31 To the west of the junction, 2 serious accidents occurred in July 2018 and August 2021. The 2018 accident involved a pedal cyclist. A further slight accident involving a cyclist occurred in August 2017. All accidents occurred in dry weather conditions during the day. The accident reports indicate that the 2018 incident was the result of a vehicle and cyclist colliding whilst proceeding normally along the carriageway. For the 2017 incident, the accident report cites a car turning off the highway colliding with a cyclist. It is deemed that the accidents recorded at this location are unlikely to be a reoccurring problem as they refer to differing vehicle/cyclist manoeuvres.

2.32 At the A25/Coopers Hill Road/Church Hill crossroad, two accidents classified as slight in severity were recorded during the time period. One of these involved a cyclist and occurred in March 2017 in dry weather conditions during darkness, with streetlights present and lit. The accident report indicates that the incident was the result of a vehicle and cyclist colliding whilst proceeding normally along the carriageway. As this is in isolated incident, it is deemed unlikely that a highways safety issue is present at this location.

2.33 To the east of the crossroad junction, 1 serious accident occurred in August 2018 and 2 further slight accidents occurred in July 2019 and September 2019 respectively. None of these accidents involved vulnerable road users. The serious accident involved one motorcyclist in dry, daylight conditions. The accident report indicates the driver was proceeding normally along the carriageway. As this is an isolated incident, this is deemed unlikely to be the results of a highways design issue.

2.34 All aforementioned accident reports are contained within **Appendix D**.

2.35 To conclude, the accident data demonstrates there are no clusters/trends that would indicate a current highways safety issue on the surrounding road network.

3 Policy Context

3.1 This section will set out the local and regional policies, strategies and evidence base pertinent to transport and strategic development in the region.

National Policy

National Planning Policy Framework (September 2023)

3.2 The primary national policy document is the National Planning Policy Framework (September 2023). This document sets out various policies related to ensuring developments are sustainable from a transport perspective. Paragraph 104 outlines the considerations that must be made for development proposals, including:

a) *"The potential impacts of development on transport networks can be addressed;*

b) *Opportunities from existing or proposed transport infrastructure, and changing transport technology and usage, are realised – for example in relation to the scale, location or density of development that can be accommodated;*

c) *Opportunities to promote walking, cycling and public transport are identified and pursued;*

d) *The environmental impacts of traffic and transport infrastructure can be identified, assessed, and taken into account – including appropriate opportunities for avoiding and mitigating any adverse effects, and for net environmental gains; and*

e) *Patterns of movement, streets, parking and other transport considerations are integral to the design of scheme and contribute to making high quality places."*

3.3 However, the document recognises the context and location of proposals need to be taken into account and, in particular at para 105, states:

"The planning system should actively manage patterns of growth in support of these objectives. Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making."

And para 111:

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

Planning Practice Guidance (March 2014)

3.4 The NPPF and Planning Practice Guidance (PPG) provides advice on when a Transport Assessment is required and what it should contain.

3.5 Paragraph 111 of the NPPF sets out that all developments that generate significant amounts of transport movement should be supported by a Transport Statement or Transport Assessment. Given the scale of the proposed development and its potential for additional trip generation, a Transport Assessment is deemed necessary.

3.6 PPG goes on to state that Transport Assessment should consider the following within the scope of the proposed assessment:

- *"information about the proposed development, site layout, (particularly proposed transport access and layout across all modes of transport)*
- *information about neighbouring uses, amenity and character, existing functional classification of the nearby road network;*
- *data about existing public transport provision, including provision/ frequency of services and proposed public transport changes;*
- *a qualitative and quantitative description of the travel characteristics of the proposed development, including movements across all modes of transport that would result from the development and in the vicinity of the site;*
- *an assessment of trips from all directly relevant committed development in the area (ie development that there is a reasonable degree of certainty will proceed within the next 3 years);*
- *data about current traffic flows on links and at junctions (including by different modes of transport and the volume and type of vehicles) within the study area and identification of critical links and junctions on the highways network;*
- *an analysis of the injury accident records on the public highway in the vicinity of the site access for the most recent 3-year period, or 5-year period if the proposed site has been identified as within a high accident area;*
- *an assessment of the likely associated environmental impacts of transport related to the development, particularly in relation to proximity to environmentally sensitive areas (such as air quality management areas or noise sensitive areas);*
- *measures to improve the accessibility of the location (such as provision/enhancement of nearby footpath and cycle path linkages) where these are necessary to make the development acceptable in planning terms;*
- *a description of parking facilities in the area and the parking strategy of the development;*
- *ways of encouraging environmental sustainability by reducing the need to travel; and*

— *measures to mitigate the residual impacts of development (such as improvements to the public transport network, introducing walking and cycling facilities, physical improvements to existing roads."*

Regional Policy

Surrey Local Transport Plan 4 2022 – 2032 (July 2022)

3.7 The Surrey Local Transport Plan 4 (LPT4) was adopted on 12th July 2022. LTP4 includes plans to reduce the 46% of carbon emissions currently generated by transport in Surrey and supersedes Local Transport Plan 3.

3.8 The LTP4 sets out four priority objectives as follows:

— **Net zero carbon emissions** – To rapidly reduce carbon emissions, ensuring that Surrey is on track for net zero emissions by 2050;

— **Sustainable growth** – To support Surrey's growth ambitions and enable business and people to prosper sustainably;

— **Well-connected communities** – To provide well connected communities that encourage social mobility and ensure no-one is left behind; and

— **Clean air and excellent quality of life** – To create thriving communities with clean air, excellent health, wellbeing and quality of life.

3.9 The proposals run to 2030 and beyond, and are set out into nine policy areas summarised as follows:

— **Planning for Place** – Including establishing '20-minute neighbourhoods' and ensuring new development focuses on sustainable travel options

— **Digital Connectivity** – Through promoting and supporting access to high quality connectivity

— **Active Travel / Personal Mobility** – Promote more journeys on foot, bicycle, scooting, e-cargo, hire schemes etc

— **Public / Shared Transport** – Including development of Mobility Hubs and expanding shared transport provisions

— **Demand Management for Cars** – Including changing parking supply and charging mechanisms, and traffic calming measures

— **Demand Management for Goods Vehicles** – Promote delivery restrictions and consolidation, and altering traffic routing to decrease is certain locations / times of day

— **Efficient Network Management** – Managing the operation and maintenance of the highway network with targeted capacity improvements

- **Promoting Zero Emission Vehicles** – Planning and enabling charging / fuelling infrastructure, and expand the use of Electric Vehicle car clubs
- **Supporting Behaviour Change** – Awareness campaign e.g. adopting technology, gamifications etc

3.10 LTP4 sets out a roadmap for implementing these nine policy areas. More detail on timings and delivery is provided in the LTP4 Delivery Plan which was published in 2022. The roadmap is separated into short, medium, and long-term timescales and takes into account the scale of change needed to achieve the LTP4 objectives, particularly the rapid reduction in carbon from our transport system.

- **Short term (2022-25)**
  - Develop 20-minute neighbourhoods
  - Extensive rollout of fibre broadband and 5G mobile coverage
  - Develop LCWIPs programme to deliver high quality networks of walking and cycling corridors connecting neighbourhoods to key destinations
  - Post COVID-19 recovery measures in line with Bus Back Better
  - Reduce parking and increase costs to incentivise low carbon alternatives
  - Minor road capacity improvements to alleviate congestion
  - Implement county EV charge point network including on-street, on route and destination charging points
  - Inform, educate, promote and incentivise measures within the other policy areas
- **Medium Term (2025-30)**
  - Develop mobility hubs
  - Develop Mobility as a Service (MaaS) and journey planning with shared transport solutions and mobility credits
  - Implement consolidation and delivery hubs
  - Use technologies to best use data to provide efficient management of travel conditions
  - Accelerate uptake of EV / hydrogen for own fleet, taxi, car club fleet and public / shared transport fleet
- **Long Term (2030+)**
  - Improve rail and bus services combined with shared Demand Responsive Travel (DRT) services
  - Potential national eco-levy (pay-as-you-drive) if carbon reduction targets not met
  - Adopt Connected Infrastructure (C-ITS)

Local Policy

Tandridge District Core Strategy (2008)

3.11 The Tandridge District Core Strategy was adopted in October 2008, with the aim to establish a vision for the district and outline key policies, until 2026.

3.12 Policy CSP 4 states:

- *"In order to maximise the supply of affordable housing the Council will require:*
  - *On sites within built up areas of 15 units or more or sites of greater than 0.5 hectare; and*
  - *On sites within the rural areas of 10 units or more*
- *That up to 34% of the dwellings will be affordable."*

3.13 Furthermore, Policy CSP 8 relates to extra care housing, with an identified requirement to provide more care housing. In regard to determining planning applications, consideration will be had to:

- *"The need for each site to accommodate at least 50 Extra Care Housing units."*

Tandridge Local Plan Part 2: Detailed Policies 2014-2029

3.14 The Tandridge Local Plan Part 2: Detailed Policies 2014-2029 was adopted in July 2014, and supports the Core Strategy by detailing planning policies to be applied in the assessment of planning applications, from 2014-2029.

3.15 DP1 frames the entire document, with 'Sustainable Development' being outlined as the "Council's overarching policy for assessing development proposals in the District", stating:

- *"When considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework.*
- *Planning applications that accord with the policies in this Local Plan… will be approved without delay unless material considerations indicate otherwise.*"

3.16 Chapter 5 of the document is concerned with Highway Safety and Design, with DP5 stating:

- *"Development will be permitted subject to meeting the requirements of all other appropriate Development Plan policies and where the proposal:*
  - *Complies with the relevant Highway Authority's and any other highways design guidance;*
  - *Does not unnecessarily impede the free flow of traffic on the existing network or create hazards to that traffic and other road users;*

- *Retains or enhances existing footpaths and cycleway links;*
- *Provides safe and suitable access to the site which is achievable by all and promotes access by public transport, foot, and bicycle to nearby residential, commercial, retail, educational, leisure and recreational areas where appropriate; and*
- *Fully funds where appropriate or contributes towards the costs of any measures required to cost effectively mitigate the significant impacts arising from the development."*

Draft Tandridge Local Plan: 'Our Local Plan: 2033'

3.17 At the time of writing, the Inspector examining the draft Tandridge Local Plan 'Our Local Plan: 2033' has issued a letter to the Council dated 10th August 2023, following a procedural meeting held on 27th July 2023.

3.18 Following a three year protracted examination process, the Inspector has acknowledged a number of procedural challenges in progressing the Plan such that it is not possible to make the Plan sound by proposing main modifications to it and will therefore recommend that the Plan is unsound and that it is not adopted. Alternatively, the Inspector has suggested that the Council may wish to withdraw the Local Plan before his recommendation is confirmed within the Inspector's Examination Report.

3.19 Until the position on the draft Plan is formalised this TA has included draft Local Plan policies, but in the circumstances, limited weight should now be attributed to them. Once the Local Plan has been found unsound / withdrawn, the draft policies referenced will no longer be relevant and carry no weight in the determination process.

4 Development Proposals

Overview

4.1 The proposals seek outline planning permission to develop the land for up to:

- 166 residential dwellings (C3);
- 41 later living dwellings (C2);
- 70-bed care home (2,000sqm);
- Community uses under Use Classes E(e)/F2.

4.2 An extract of the illustrative masterplan is shown in **Figure 4.1**. The Masterplan illustrates the individual development parcels and the location of the new junction on A25 together with the siting of the central link road connecting the development parcels.

Figure 4.1: Indicative Masterplan

Cycle Connections

4.3 Given the speed of traffic along the A25 and rural nature of the road, it is thought that mainly more experienced, confident, cyclists will use this on-road option as a direct route into Redhill Town Centre and train station.

4.4 Alternatively, a more relaxed, leisurely route is available to the north of the site, connecting to Chilmead Lane and National Cycle Network (NCN) 21. The proposals will seek to alter the status of an existing PROW route (FP 616 & FP 192) to allow for cycle use, with associated surface upgrade works and an improved cycle access point at Chilmead Lane, as shown in **Figure 4.2**.

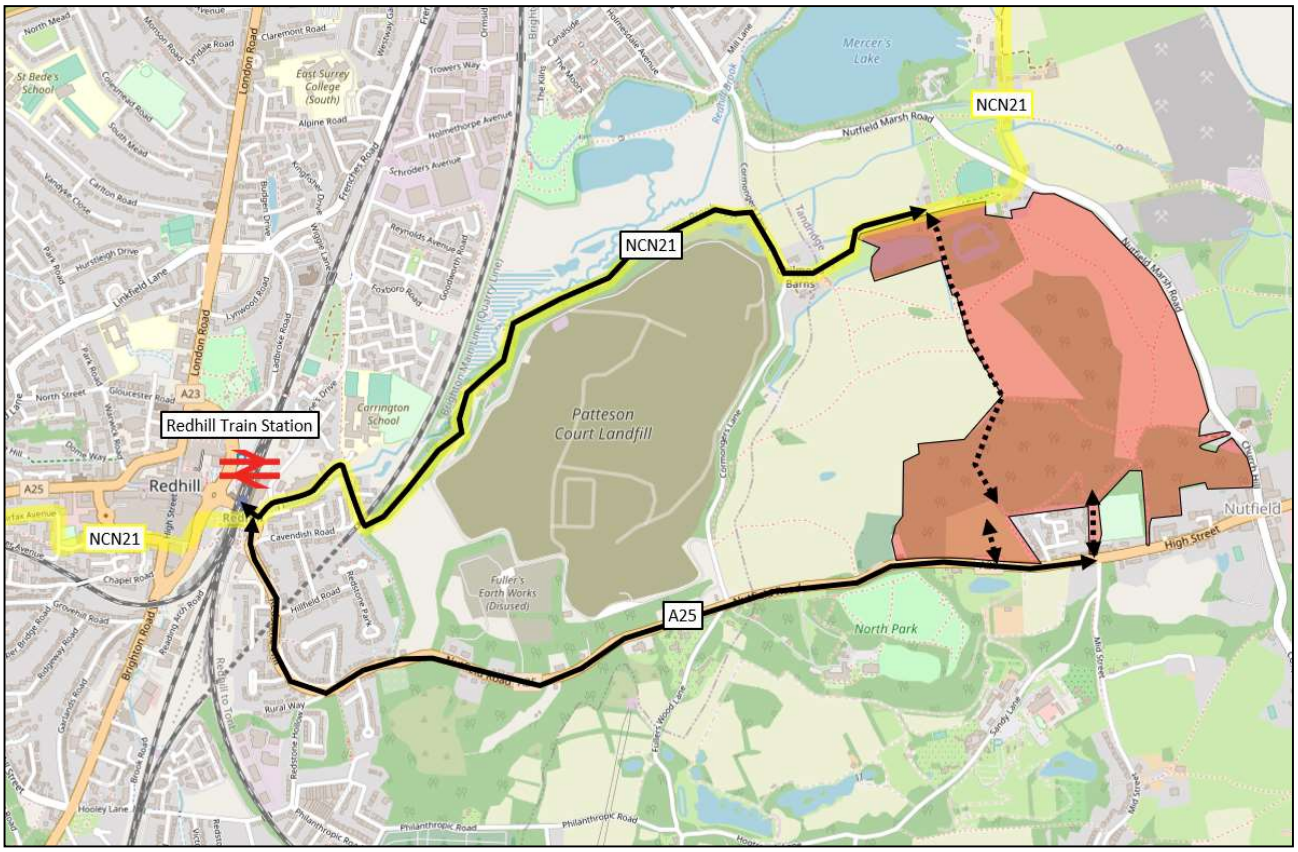
Figure 4.2: Improved Cycle Connection to NCNR21

4.5 Discussions have been held with SCC to confirm the most suitable legal route to obtaining pedestrian and cycle access along this route and the principle of upgrading/forming new routes was agreed with SCC.

4.6 From Chilmead Lane, cyclists can continue along NCN 21 routing west via off-road routes through Nutfield Marshes connecting to residential streets in Redhill and beyond. The distance to Redhill Railway Station/town centre via these routes is circa 3.5km (13 minutes) via NCN 21, and 2.6km (10 minutes) via the A25. This is shown in **Figure 4.3**.

4.7 Based on National Travel Survey Statistics, the average cycling trip lengths in 2018 and 2019 was 3.3 miles. This equates to just over 5km. Therefore, both of the identified cycling routes are within this.

Figure 4.3: Cycling Connections



Walking/Cycling Routes on-site

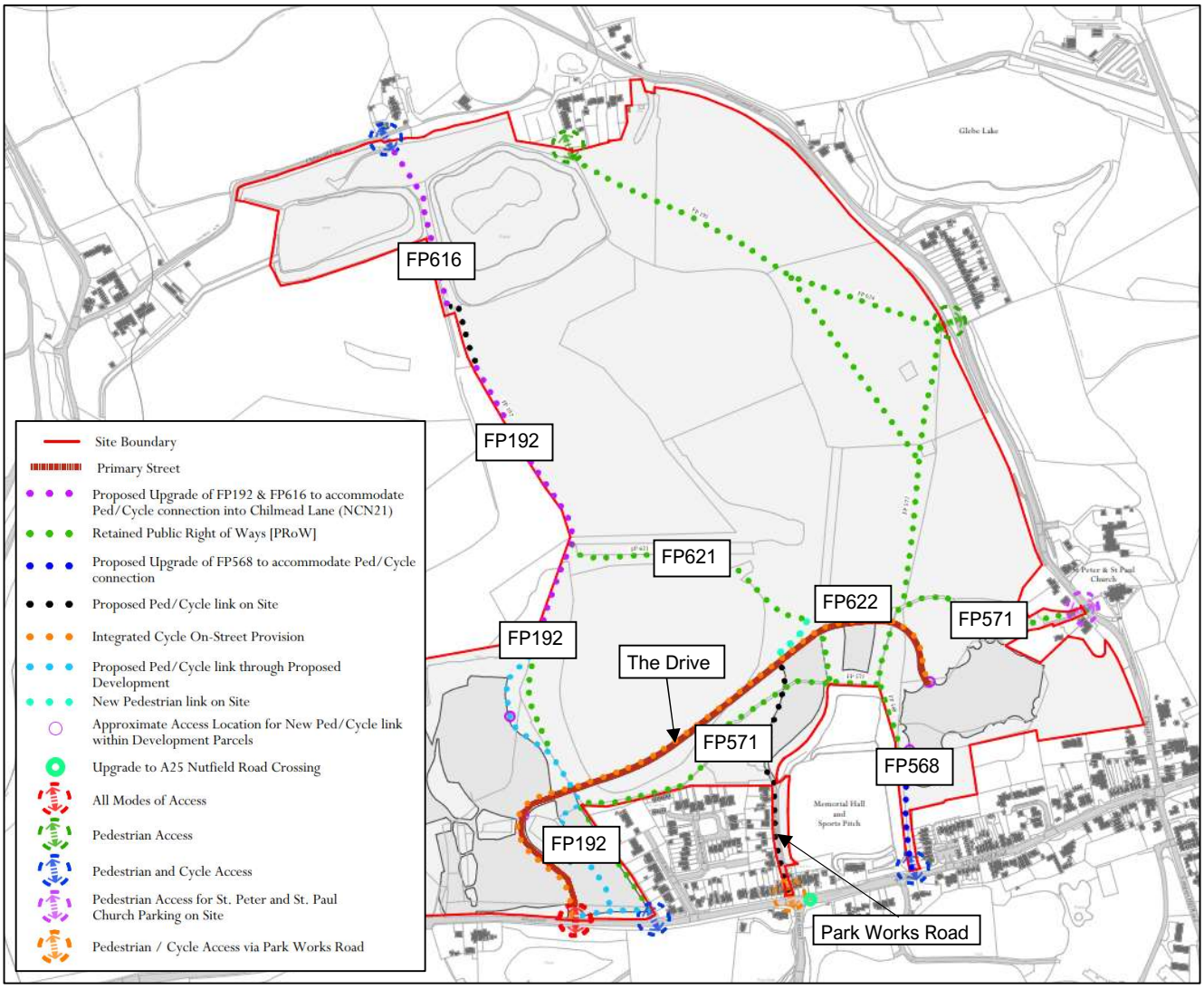
4.8 The proposals will seek to maximise connections to existing networks and key local amenities in the area, as well as promote new and improved connections to enable sustainable transport opportunities to/from the site.

4.9 The proposed footways at the site access will tie into existing footways along the A25. There is a limit to practical footway widening along the A25 due to established hedgerow growth and habitat. Furthermore, it is felt that there will be limited demand for pedestrian movements to the west of the site as this is primarily rural. For pedestrians wishing to route to the east, the existing footways along the A25 can be utilised. Alternatively, residents can make use of the internal footways provided within the site to head east into Nutfield.

4.10 The proposed development will make use of Park Works Road for pedestrian and cycle access only, as agreed with SCC. This will provide a direct connection to bus stops along the A25 to the south. Park Works Road is an existing lightly trafficked road that is within the ownership of the applicant (and historically provided vehicular access to the site). It is proposed that some improvements to this road through surface treatment and markings will be made to manage pedestrian, cyclist and the very small volume of existing vehicular movements. This will be considered at Reserved Matters Application stage.

4.11 In addition to the site access, the site encompasses a number of PROW routes and private footpaths which are currently used by members of the public. The proposed pedestrian/cycle connections through the site are shown in **Figure 4.4** which is an extract taken from the Access and Movement Parameter Plan.

Figure 4.4: Key Pedestrian/Cycle Connections



4.12 For the western residential development parcel shown in **Figure 4.4**, pedestrian and cycle access to the plots will be gained directly via a shared footway alongside the internal link road, referred to as 'The Drive'. As previously stated, to access Chilmead Lane via FP 192 and FP 616 to the north, pedestrians and cyclists will be able to make use of internal foot/cycleways within the development parcels which will connect directly onto FP 192 via the northern end of the residential development parcel. To the north of the residential parcel, FP 192 will be upgraded with improved surfacing. The status of this section will be upgraded to a bridleway or a parallel cycle route provided adjacent to the footpath, as agreed with SCC.

4.13 An additional route will also be provided through the development parcel to the east of The Drive. This will pass under The Drive and then connect to the development parcel to the north.

4.14 The central development parcels (to the north of Park Works Road) will be accessed by pedestrians and cyclists directly off the Drive at-grade. At the southern end of the western of these two parcels, a direct connection point will also lead pedestrians and cyclists onto Park Works Road and beyond to the A25.

4.15 FP 621 can also be used to gain access from these development parcels to the open countryside areas to the north of the development and a ramp, with potential additional stair facilities, is being promoted to connect these parcels to this route.

4.16 For the eastern development parcel (Later Living and Care Home), pedestrians and cyclists will be able to access directly off the Drive at-grade. In addition, the existing FP 568 will be upgraded and realigned to provide a direct pedestrian and cycle connection between the development parcel and the A25 to the south.

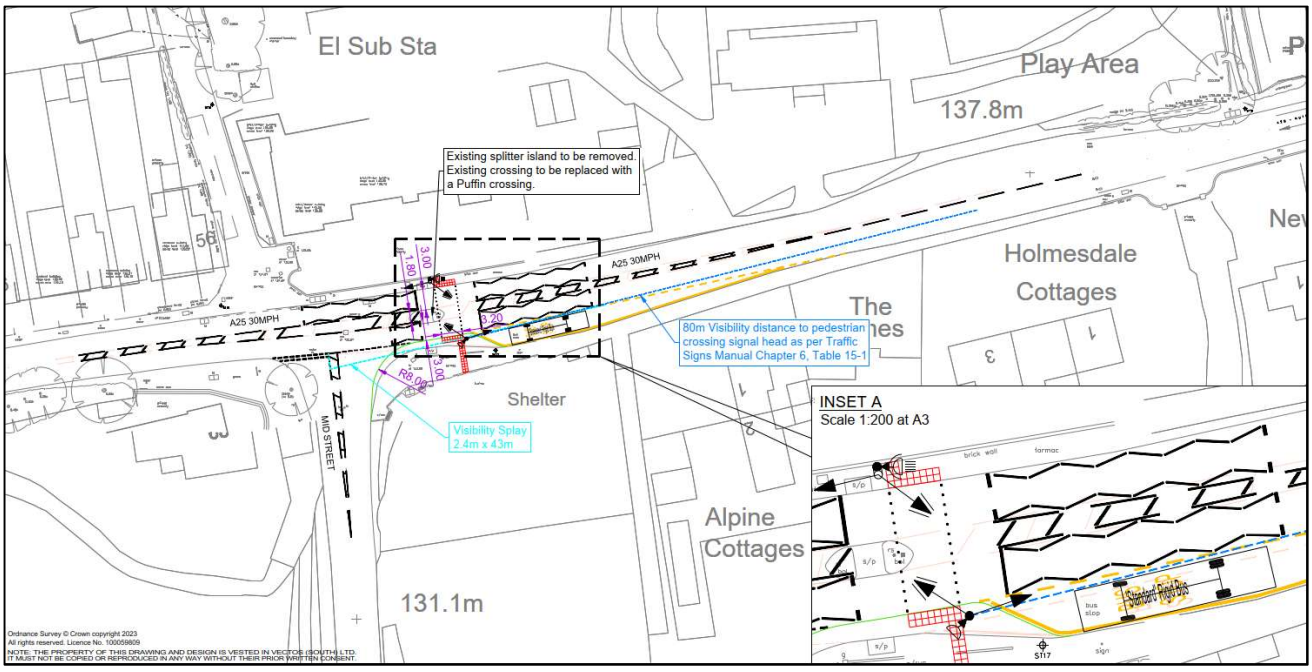
4.17 All relevant new or upgraded footways and cycle routes have been designed to not exceed a gradient of 5%.

Access to Bus Services

4.18 To improve pedestrian access to the southern bus stop on the A25, a signalised pedestrian crossing is proposed over the A25. This has been agreed in principle with SCC. The crossing would comprise a 3.2m wide crossing point with localised lane narrowing and shortening of the southern bus stop layby. This is illustrated in **Figure 4.5**, with the full design and associated swept path analysis of a rigid bus contained in **Appendix E**.

4.19 This crossing would also facilitate movements between the existing and new communities to the north of the A25 and facilities to the south, and in particular, the primary school and Nutfield railway station.

Figure 4.5: Proposed Pedestrian Crossing over A25



4.20 In addition, the developer will discuss potential funding obligations with SCC towards the upgrade of the bus stops and shelters through installation of real-time information board and vegetation/debris clearance to enhance their attractiveness.

Bus Services

4.21 As noted in Section 2, there are existing bus services between Nutfield and Redhill, Godstone, Gatwick Airport and Crawley which will be available to residents who wish to visit the local service centres of Redhill and Godstone and employment opportunities at those locations and at Gatwick and Crawley.

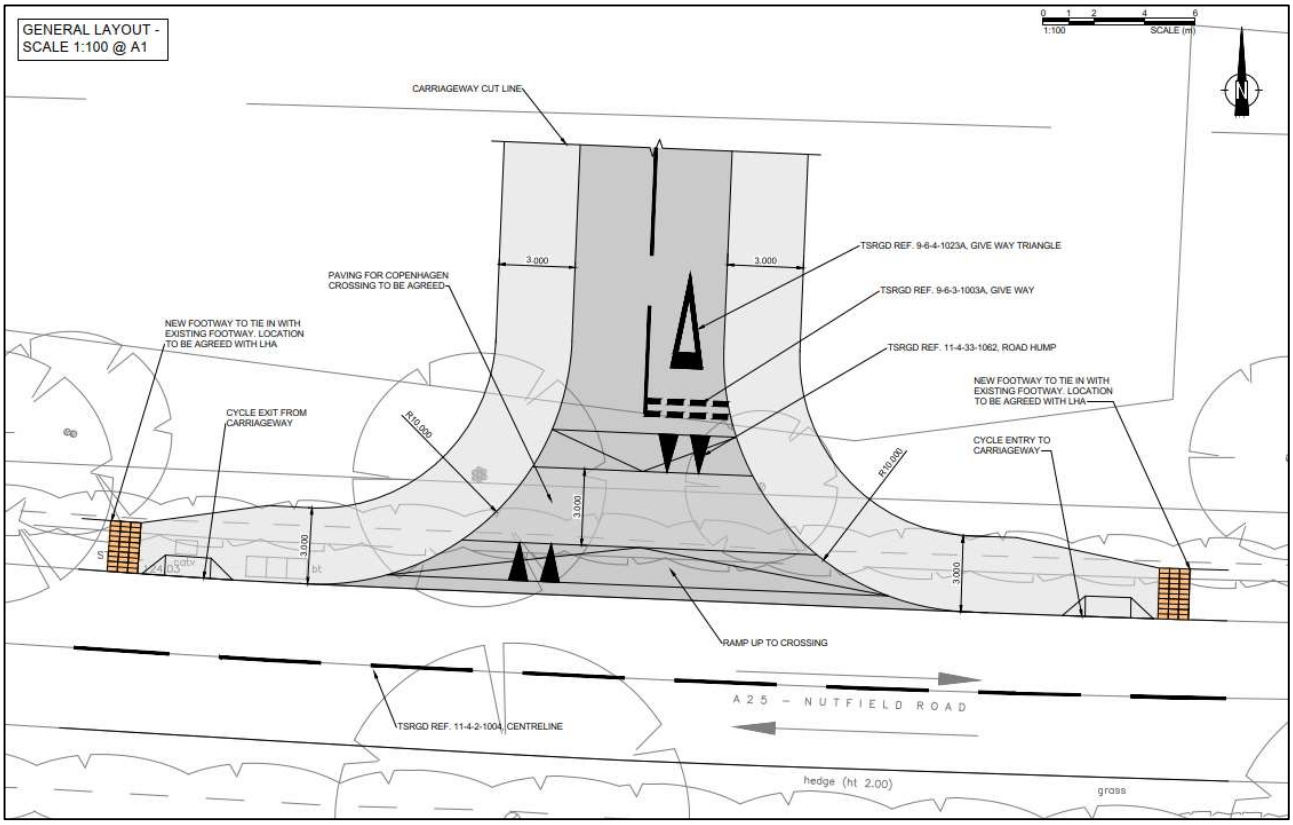
4.22 It has also been noted that a Demand Responsive Bus Service (DRT) operates in the Mole Valley area. Such a service would offer residents an alternative to traditional public transport modes via a non-fixed bus service that responds to actual demand in the local area. The developer is keen to engage with the local authorities to actively promote any DRT services that are extended to the area to future residents/visitors of the proposed development. Following the second pre-application meeting with SCC on 30th August 2023, SCC confirmed they would advise of any existing/future plans to extend a DRT service into the area.

Vehicular Access

4.23 There will be one vehicular access point onto the A25 Nutfield Road which will be located to the west of Nutfield. This will be applied for in detail within the outline application. Following receipt of SCC's formal pre-app response, the proposed access junction will accommodate a large waste collection vehicle and will comprise a 3.0m shared footway/cycleway along the site frontage, a raised 'Copenhagen' style crossing for pedestrians and cyclists, and extension of the 30mph speed limit. The 30mph speed limit will be moved west and a gateway feature to be agreed with SCC introduced.

4.24 SCC have accepted this access design in principle. The junction design in shown in **Figure 4.6** and contained in full with swept path analysis at **Appendix F**.

Figure 4.6: Indicative New Access Junction onto A25



Stage 1 Road Safety Audit

4.25 A Stage 1 Road Safety Audit was undertaken on the proposed access junction and proposed pedestrian crossing over the A25 on 5th September 2023. The full report is contained in **Appendix G**.

4.26 The designer's response to audit is contained in **Appendix H**.

4.27 The Stage 1 Road Safety Audit has not flagged up any significant safety concerns and all comments raised within the audit can be addressed at detailed design stage.

Link Road Design

4.28 As shown in the indicative masterplan at **Figure 4.1**, the development parcels are separated by a lagoon and areas of woodland/vegetation. A link road is proposed to provide a vehicular, pedestrian and cycle connection between the parcels, referred to as 'The Drive'.

4.29 The link road alignment has been aligned based on detailed topographical survey information and informed by arboricultural and ecological assessment and advice by consultants FPCR.

4.30 The road design will be able to accommodate for all vehicles requiring access to the eastern parcel, including larger waste collection vehicles. It is proposed that a segregated pedestrian route and on-street cycle route is provided along the route.

Parking Arrangements

Cycle Parking

4.31 The SCC cycle parking guidance is set out in the *'Vehicular, Electric Vehicle and Cycle Parking Guidance for New Developments'* (February 2023).

4.32 The residential and later living aspects of the proposals will comply with Use Class 'C3 Dwelling Houses', and the care home with Use Class 'C2 Care Homes/Nursing Homes'. The minimum cycle parking requirements are shown in **Table 4.1**.

Table 4.1: Minimum Cycle Parking Standards

Use Class		Minimum Standard
C3 Residential	Flats / houses without garages or gardens: 1 and 2 bedroom unit	1 space
	Flats / houses without garages or gardens: 3 or more bedroom unit	2 spaces
C2 Residential institutions: Care home and Nursing home		Individual Assessment

4.33 It should be noted that for the C2 Care Home use an individual assessment is required with the SCC guidance stating:

"Provision for uses marked individual assessment will require their own justification and the inclusion of parking management plans, travel plans and cycle strategies where appropriate. Where an individual assessment is required, it should be demonstrated that demand for parking is either met on site or mitigated against and managed as appropriate."

"Levels of parking per member of staff should be calculated using the average of those employed on site at any one time."

4.34 Given the care home will be for elderly residents with limited mobility, and given the village location, it is considered that cycle parking should only be provided for staff and visitors. The proposed number of cycling parking spaces will be determined by the prospective number of staff on-site.

4.35 Furthermore, following recommendations from SCC set out within their formal pre-app response, for the residential dwellings, the developer will seek to provide a power socket for cycle spaces (be this within garages or dedicated cycle stores) to enable the charging of electric bikes (subject to electricity supply). This will be determined at Reserved Matters Application stage.

Vehicle Parking

4.36 The level of parking on the site will be based on striking the right balance between the following factors:

- The local authority and highways authority guidance and standards;
- The sustainable transport strategy to encourage non-car modes;
- Market demand for car parking; and
- What is feasible and economic to provide on the site.

4.37 The SCC Parking Strategy was updated in January 2020 and is one of the components that makes up the Surrey Transport Plan. This sets out the statutory framework, the challenges, and the county council's aim, objectives, and preferred strategy approach. The strategy sets out a number of measures to help manage car parking as follows:

- Introduce parking controls where necessary to make best use of the space available;
- Encourage the use of off-street parking;
- Work closely with schools and other agencies to ensure the development and implementation of robust and effective school travel plans;
- Ensure adequate loading and unloading and disabled driver parking provision in all new parking schemes;
- Consider sustainable travel measures to reduce demand for on street parking, particularly in busy town centres;
- Consider ways to improve access to retail businesses; and
- Consider the use of red routes to improve traffic flow.

4.38 Attitudes towards private vehicle use and associated car parking requirements are likely to change over the delivery horizon of Nutfield Green Park. Whilst these changes are expected to take a number of forms, both behavioural changes towards car sharing and use of on-demand services, and technological advances including more electric vehicles, future autonomation and Mobility-as-a-Service, the precise nature of some of these changes is less certain.

4.39 Accordingly, one approach is to ensure that current car parking demand is accommodated, whilst ensuring the design is futureproofed and flexible in its ability to adapt to changes over time.

4.40 In progressing the design of the masterplan a range of parking types have been considered to provide flexibility and encourage further reductions in car use over time. Separate consideration will be given to the Care Home and later living parking demand which will depend on the level of mobility expected of residents. This will be determined at Reserved Matters Application stage.

4.41 At present, the SCC car parking guidance is set out in the *'Vehicular, Electric Vehicle and Cycle Parking Guidance for New Developments'* (February 2023).

4.42 Vehicle parking at the proposed development will take into account the SCC document (February 2023). Residential and later living car parking will refer to minimum standards for Use Class 'C3 Dwelling Houses', and the care home with Use Class 'C2 Care Homes/Nursing Homes', as shown in **Table 4.2**.

Table 4.2: Maximum Car Parking Standards

Use Class		Minimum Standard
C3 Residential	1 and 2 bed flats	1 space per unit
	1 and 2 bed houses	1.5+ spaces per unit*
(Suburban edge, Village and Rural)	3 bed houses	2+ spaces per unit*
	4+ bed houses	2+ spaces per unit*
C2 Residential institutions: Care home and Nursing home		1 car space per 2 residents OR individual assessment / justification

Note: where space permits, it may be appropriate to consider increased provision

Car Club Parking

4.43 The SCC guidance document also states that consideration should be given to car club spaces for residential developments of 50 new homes or more.

4.44 The possibility of a car club will be investigated although there may be challenges given the location and size of the development. This will be discussed with SCC, TDC and operators during the determination period.

Electric Vehicle Charging

4.45 Electric Vehicle (EV) parking and charging at the proposed development will be provided in accordance with the SCC document and further recommendations from SCC through their formal pre-app response.

4.46 The developer will seek to provide 1 fast charge socket per dwelling (including the later living dwellings) and fast charging sockets for 50% of spaces associated with the car home, including for visitor spaces (subject to electricity supply).

Travel Plan

4.47 A Framework Travel Plan has been prepared for the site and submitted for approval by SCC in line with national and local guidance to maximise the accessibility of the site by non-car modes of transport. It is anticipated that the requirement to agree the final travel plan will be covered by an appropriately worded pre-occupation planning condition.

4.48 The Travel Plan provides a set of aims, objectives, measures and initiatives to encourage sustainable travel among residents and visitors on a daily basis, to help minimise the impact of the development.

4.49 The Travel Plan includes the following:

- Appoint an on-site Travel Plan Co-ordinator;
- Circulate Welcome Packs to residents prior to occupation to share details on sustainable travel options;
- Provide employees with details of any Demand Response Transport services available within the area;

— Provide information on active travel routes/maps and details of public transport services within the vicinity.

5 Trip Generation and Distribution

Introduction

5.1 This section sets out a summary of the vehicle trip generation and distribution that has been used to assess the impacts of the proposed development. Given the site is currently undeveloped, any new trip generation external to the site will constitute new trips on the transport network.

5.2 A detailed trip generation assessment has been undertaken which considers the mix of land uses to be provided.

Trip Rates

5.3 Vehicular trip rates have been derived from TRICS, the industry standard database. Thee trip rates used include edge of town locations, at the request of SCC within their formal pre-app response.

5.4 These trip rates are set out for each proposed land use in turn below and have been agreed in principle with SCC.

Residential and Later Living Trip Rates

5.5 The TRICS database has been interrogated for vehicle and HGV trip rates of sites with the following parameters:

- Land Use 03/A Residential - Houses Privately Owned;
- Less than 400 dwellings;
- Surveys from January 2015 – November 2022;
- England, excluding Greater London; and
- 'Neighbourhood Centre' and 'Edge of Town Centre' locations with 'Village' and 'Residential Zone' sub-categories.

5.6 The residential trip rates have also been applied to the proposed later living land use as this is deemed to be a comparable use and will allow the assessment to form a robust trip generation for the site. In reality, it is noted that later living dwellings will likely generate a lower number of movements, particularly in the typical commuting peak hours on the network as most residents will be retired.

5.7 The resultant trip rates for the typical network peak hours of 08:00 – 09:00 and 17:00 – 18:00 are shown below in **Table 5.1**. The full TRICS report is contained in **Appendix I**.

Table 5.1: Residential Vehicle and HGV Trip Rates (TRICS-Derived)

Time Period	Trip Rate (per dwelling)					
	Vehicle			HGV		
	Inbound	Outbound	Two-Way	Inbound	Outbound	Two-Way
08:00-09:00	0.149	0.338	0.487	0.003	0.004	0.007
17:00-18:00	0.286	0.160	0.446	0.003	0.003	0.006

Care Home Trip Rates

5.8 The TRICS database has been utilised for vehicle and HGV trip rates of sites with the following parameters:

- Land Use 03/O Residential – Retirement and Care Community;
- Less than 150 dwellings;
- Surveys from January 2015 – September 2022;
- England, excluding Greater London; and
- 'Edge of Town Centre' and 'Free Standing' locations, with 'Residential Zone' and 'Out of Town' sub-categories.

5.9 The initial TRICS output includes a number of sites considered to be too urban and not reflective of the rural setting. Therefore, these sites have been manually de-selected. This results in three comparable site surveys that have been used to form the basis of the care home trip rates, as shown in **Table 5.2**.

Table 5.2: Care Home Surveys Used

TRICS Ref	Site	Location	Number of Beds	Survey Date
DV-03-O-02	Gittisham Hill Care Home, EX14 3TY	Devon	66	2015
HF-03-O-01	Castle Retirement Village, HP4 2GS	Berkhamsted	149	2015
KC-03-O-02	Joseph Hadlum Court, TN23 1AF	Kent	36	2015

5.10 These three sites are deemed to be of similar scale, location and use to that of the proposed development. They are therefore considered to be suitable for use within this assessment.

5.11 The resultant trip rates are shown below in **Table 5.3**. The full TRICS report is contained in **Appendix I**.

Table 5.3: Care Home Vehicle and HGV Trip Rates (TRICS-Derived)

Time Period	Trip Rate (per dwelling)					
	Vehicle			HGV		
	Inbound	Outbound	Two-Way	Inbound	Outbound	Two-Way
08:00-09:00	0.175	0.084	0.259	0.008	0.008	0.016
17:00-18:00	0.068	0.052	0.12	0	0	0

Use Class E(e)/F2 Trip Rates

5.12 Community uses are being considered under Use Class E(e)/F2 for the proposed development. Given this encompasses a number of different uses at outline stage, the use class expected to generate the most trips across the peak hours has been assessed. Upon a review of trip rates, Use Class E(e) 'Provision of Medical or Health Services' has been found to generate the highest trip rates. Therefore, vehicle trip rates of sites with the following parameters have been extracted from the TRICS database:

- Land Use 05/G Health =;
- Less than 2,900sqm GFA;
- Surveys from January 2015 – September 2022;
- England, excluding Greater London; and
- 'Edge of Town Centre', 'Neighbourhood Centre' and 'Free Standing' locations, with 'Residential Zone', Built-Up Zone', 'Village' and 'Out of Town'.

5.13 The initial TRICS output includes a number of sites considered to be too urban and not reflective of the rural setting. Therefore, these sites have been manually de-selected.

5.14 The resultant trip rates are shown below in **Table 5.4**. The full TRICS report is contained in **Appendix I**.

Table 5.4: Use Class E(e) Vehicle and HGV Trip Rates (TRICS-Derived)

Time Period	Trip Rate (per 100sqm)					
	Vehicle			HGV		
	Inbound	Outbound	Two-Way	Inbound	Outbound	Two-Way
08:00-09:00	3.49	2.185	5.675	0	0	0
17:00-18:00	1.37	2.055	3.425	0	0	0

Distribution

Distribution by Journey Purpose

5.15 At the request of SCC within their formal pre-app response, journey purpose data has been extracted from the latest release of the National Travel Survey (NTS) which is currently 2021. The resultant split between journey purposes in the peak hour has been taken from dataset NTS0409a and is contained in **Table 5.5**. This has been split by journey purpose as follows:

- Commuting – Commuting, Business and Other Work/Other Escort/Personal Business
- Education – Education and Escort Education
- Other – Shopping, Visiting Friends/Entertainment/Sport and Holiday/Day Trip/Other

Table 5.5: NTS Data Peak Hour Trips by Journey Purpose

Time Period	Commuting	Education	Other
08:00 – 09:00	33%	54%	14%
17:00 – 18:00	48%	5%	47%

Commuting Distribution

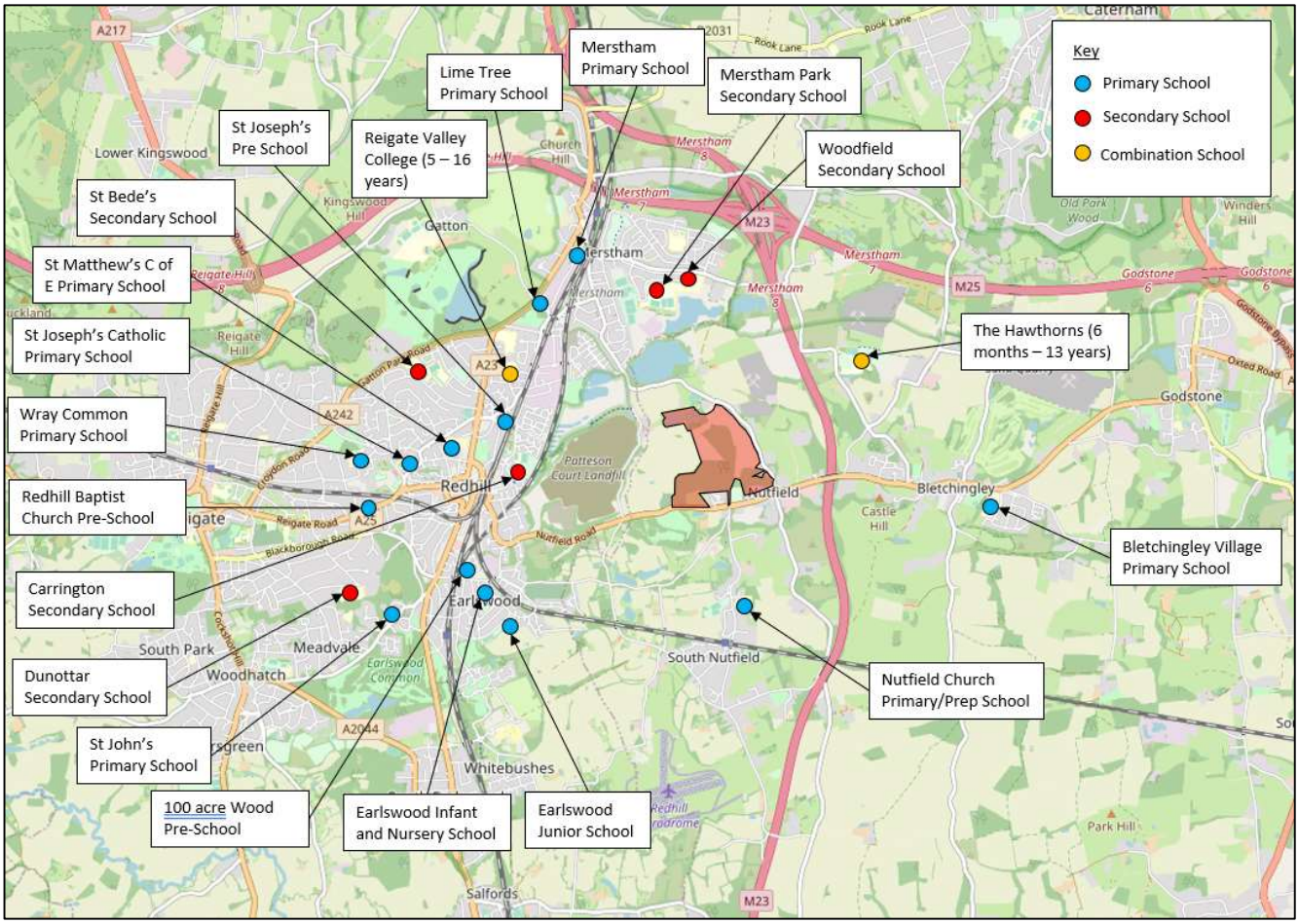
5.16 The commuting distribution has used national Census Journey to Work statistics (for car drivers) taken from the relevant Middle Super Output Area. This methodology has been agreed with SCC.

5.17 Vehicle journeys to/from the site have been assigned to the road network using the Google Maps journey planner tool based on typical peak hour traffic conditions. The distribution flow diagrams are contained in **Appendix J**.

Education Distribution

5.18 With regard to education distribution, **Figure 5.1** shows the nearest primary school is Nutfield Church C of E Primary School, with a wealth of primary and secondary schools located in the surrounding nearby areas of Redhill to the west, Merstham to the north, and Bletchingley and Godstone to the east.

Figure 5.1: Proposed Education Catchment



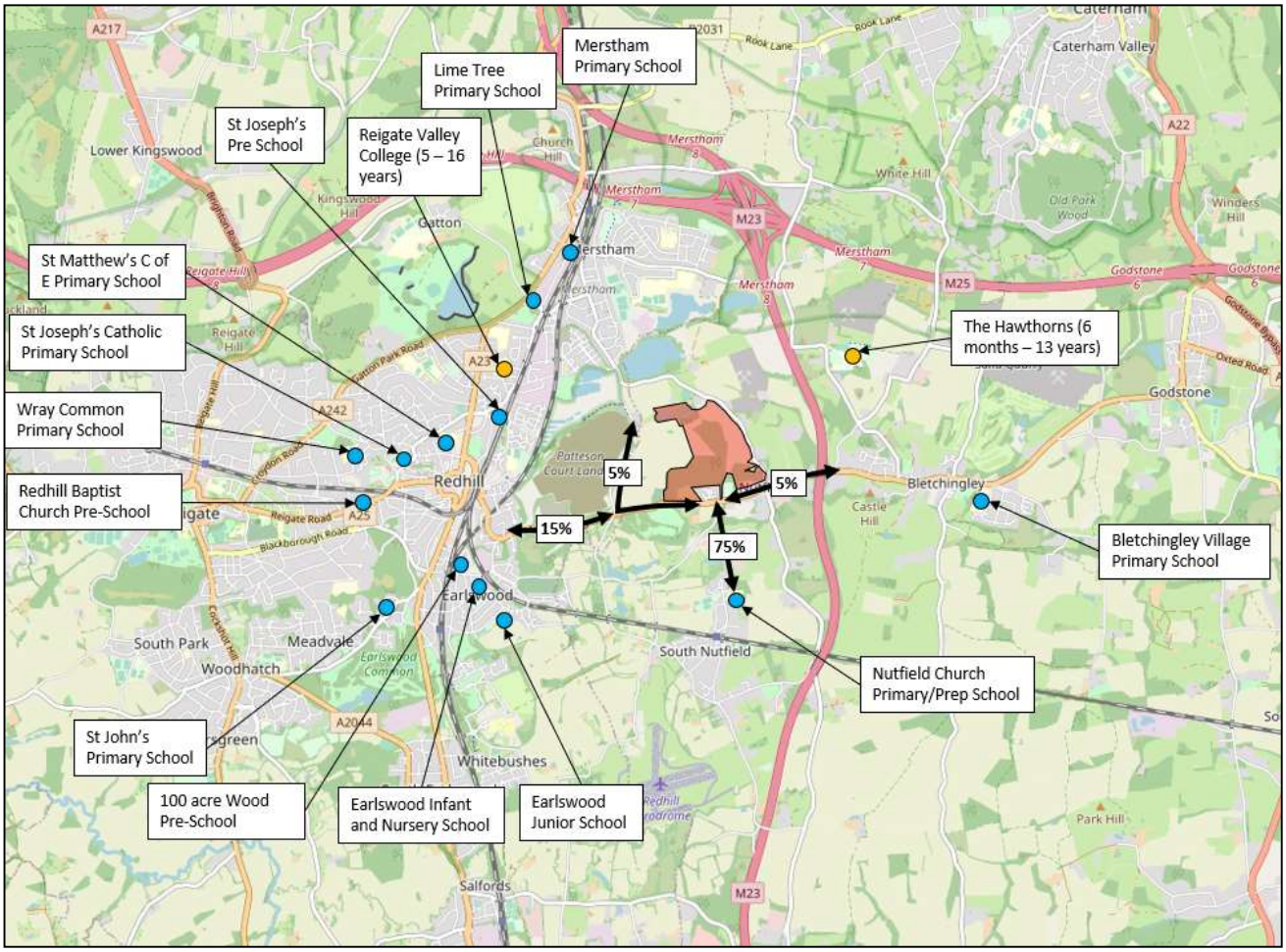
5.19 On this basis, a distribution has been applied to the local schools shown above in **Figure 5.1** as these are deemed to be the most likely education destinations the proposed development will utilise. This catchment has been agreed in principle with SCC.

5.20 The catchment has been categorised into primary and secondary education.

5.21 **Figure 5.2** shows the primary education vehicle trip distribution used. As Nutfield Church Primary School is the closest to the site and is the only school within Nutfield itself, this destination has been given greater weighting. The other locations included allow for parental choice, use of private schools etc. The primary school distribution onto the road network is as follows:

- East via A25 – 5%
- South via Mid Street – 75%
- West via A25 – 15%
- North via Cormongers Lane – 5%

Figure 5.2: Proposed Primary Education Distribution

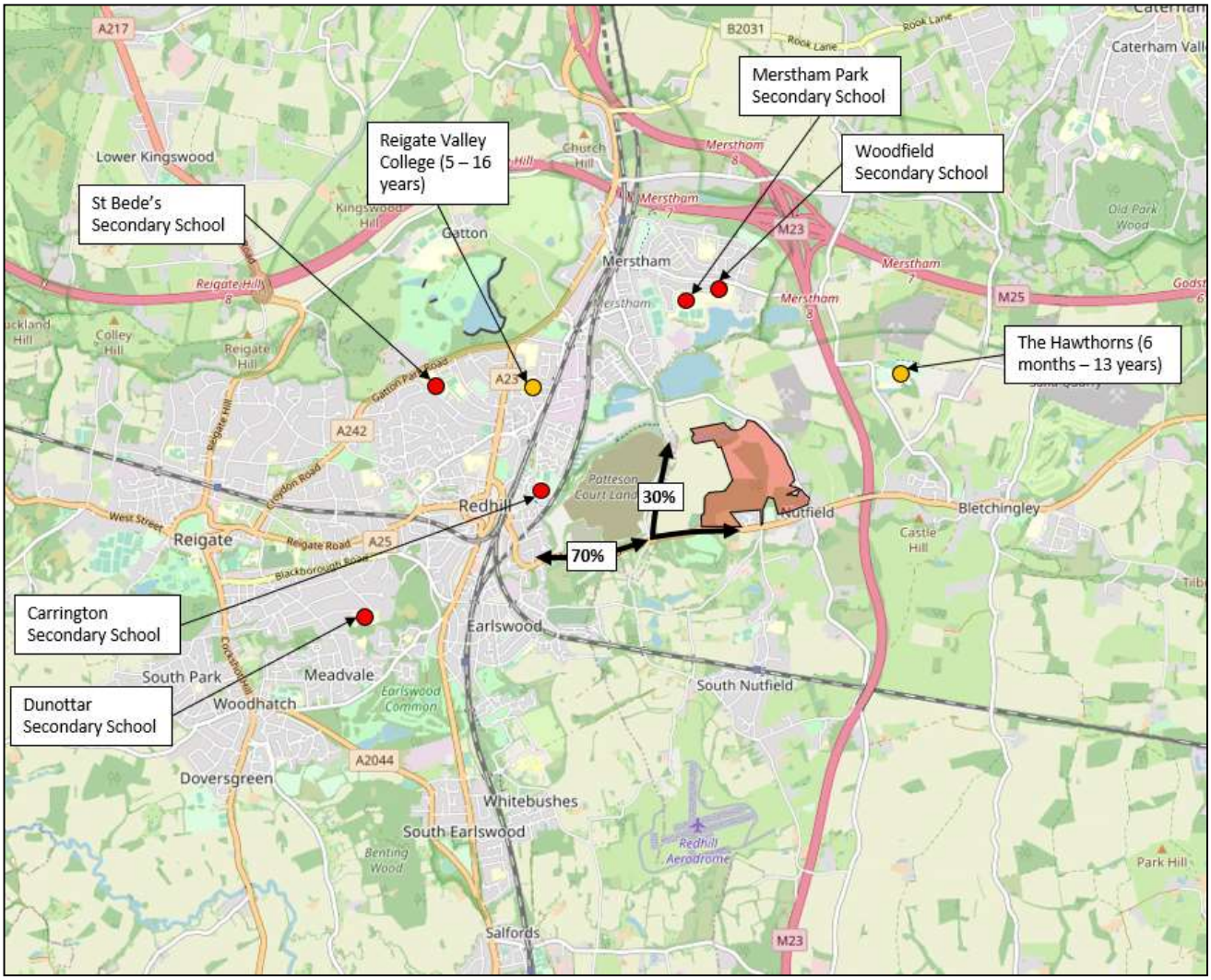


5.22 The proposed secondary education vehicle trip distribution is shown in **Figure 5.3**. This reflects that the majority of local secondary schools are located within Redhill and Merstham. The secondary distribution is as follows:

— East via A25 – 70%

— North via Cormongers Lane – 30%

Figure 5.3: Proposed Secondary Education Distribution



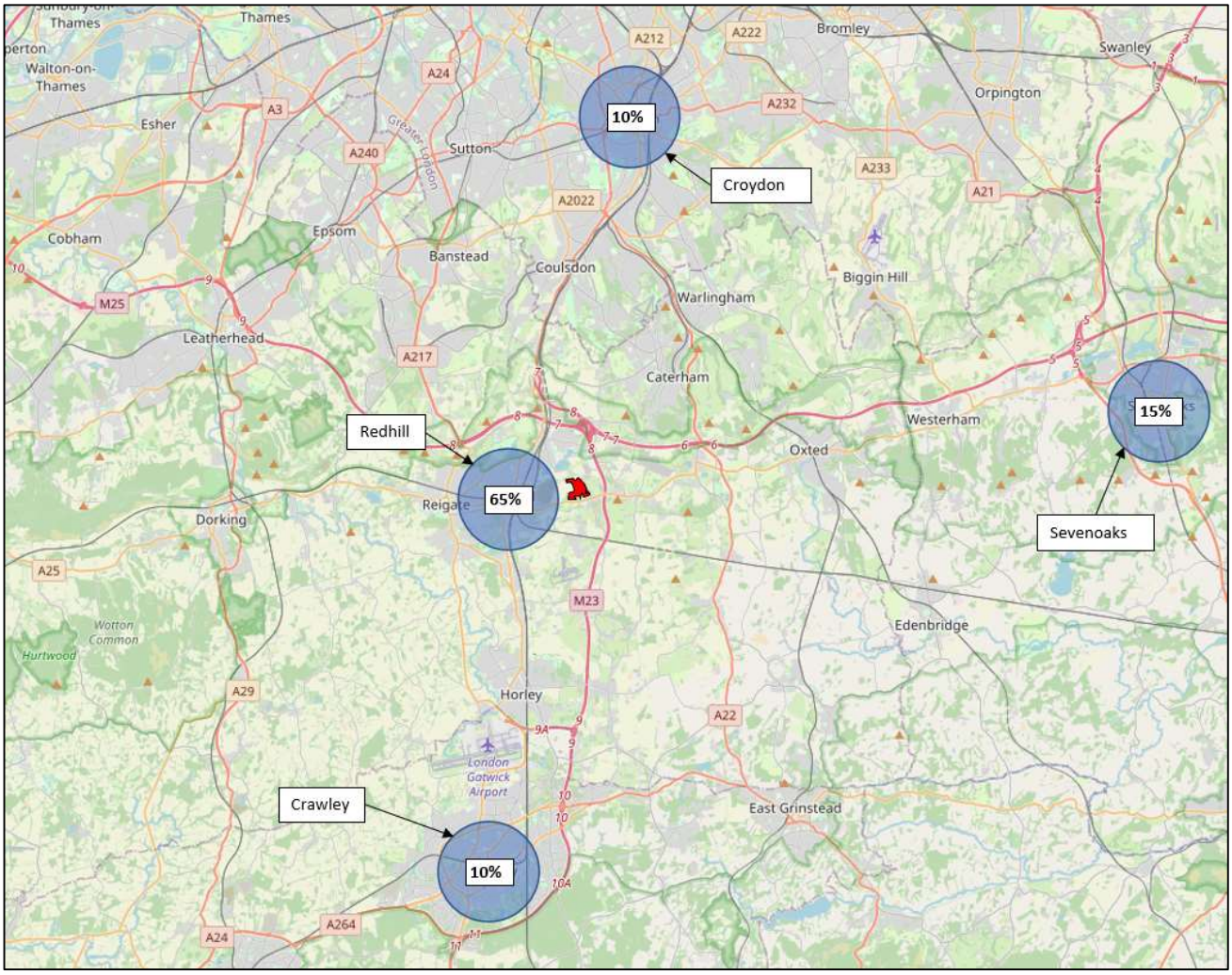
5.23 Vehicle journeys to/from the site have been assigned to the road network for each of these primary and secondary school destinations using the Google Maps journey planner tool based on typical peak hour traffic conditions. This has been agreed in principle with SCC. The distribution flow diagrams are contained in **Appendix J**.

Other Journey Distribution

5.24 With regard to other journey purposes, a desktop review of key destinations likely to be used by future residents of the site has been undertaken, with particular thought to vehicle trips as opposed to other modes. The key areas of Redhill, Croydon, Sevenoaks and Crawley have been identified.

5.25 Within the peak hours, it is deemed likely that other journey purposes will be largely attributed to Redhill as a key local centre within a 10-minute drive of the site. Therefore, 65% of these trips have been attributed to Redhill. 15% has been applied to Sevenoaks, and 10% to Croydon and Crawley respectively. This split has been agreed with SCC. This is shown in **Figure 5.4**.

Figure 5.4: Proposed Other Journey Distribution



5.26 Vehicle journeys to/from the site will be assigned to the road network for each of these key destinations using the Google Maps journey planner tool based on typical peak hour traffic conditions. This has been agreed in principle with SCC. The distribution flow diagrams are contained in **Appendix J**.

6 Impact Assessment on the Transport Network

Introduction

6.1 This section will assess the potential effects of the proposed development on the local highway network.

Baseline Traffic Conditions

6.2 Traffic surveys have been undertaken to determine baseline conditions within the local area. These surveys comprise Classified Turning Counts at each of the junctions set out below on Wednesday 19th October 2022 between the hours of 07:00 – 19:00. The full survey results are contained within **Appendix K**. The following junctions are those that which were surveyed:

- A23 / A25 Station Roundabout;
- A25 / Noke Dr Signals;
- A25 / Park Works Road / Mid Street; and
- A5 / Church Hill / Coopers Hill Road.

Study Area

6.3 The extent of the study area has been agreed with SCC as follows:

- A25/Site Access Junction;
- A23 / A25 Station Roundabout;
- A25 / Noke Dr Signals;
- A25 / Park Works Road / Mid Street; and
- A25 / Church Hill / Coopers Hill Road.

6.4 The existing traffic flows have been taken from the traffic surveys undertaken in October 2022, presented in **Appendix K**. The development traffic flows have been derived from the trip rates, level of development quantum, and distribution assumptions set out within **Chapter 5** of this report.

Assessment Scenarios

6.5 To assess the performance of the junctions listed above, a number of scenarios have been assessed as indicated below.

6.6 The scenarios for assessment would normally be as follows:

- **Scenario 1: 2022 Base**: Observed Flows;

- **Scenario 2: Base + Committed:** Observed Flows + Committed Development
- **Scenario 3: Base + Committed + Proposed Development:** Observed Flows + Committed Development + Proposed Development
- **Scenario 4: 2029 Future Base**: Observed + Committed Development + Traffic Growth;
- **Scenario 5: 2029 Future Base + Proposed Development**: Observed + Committed Development + Traffic Growth + Proposed Development Flows.

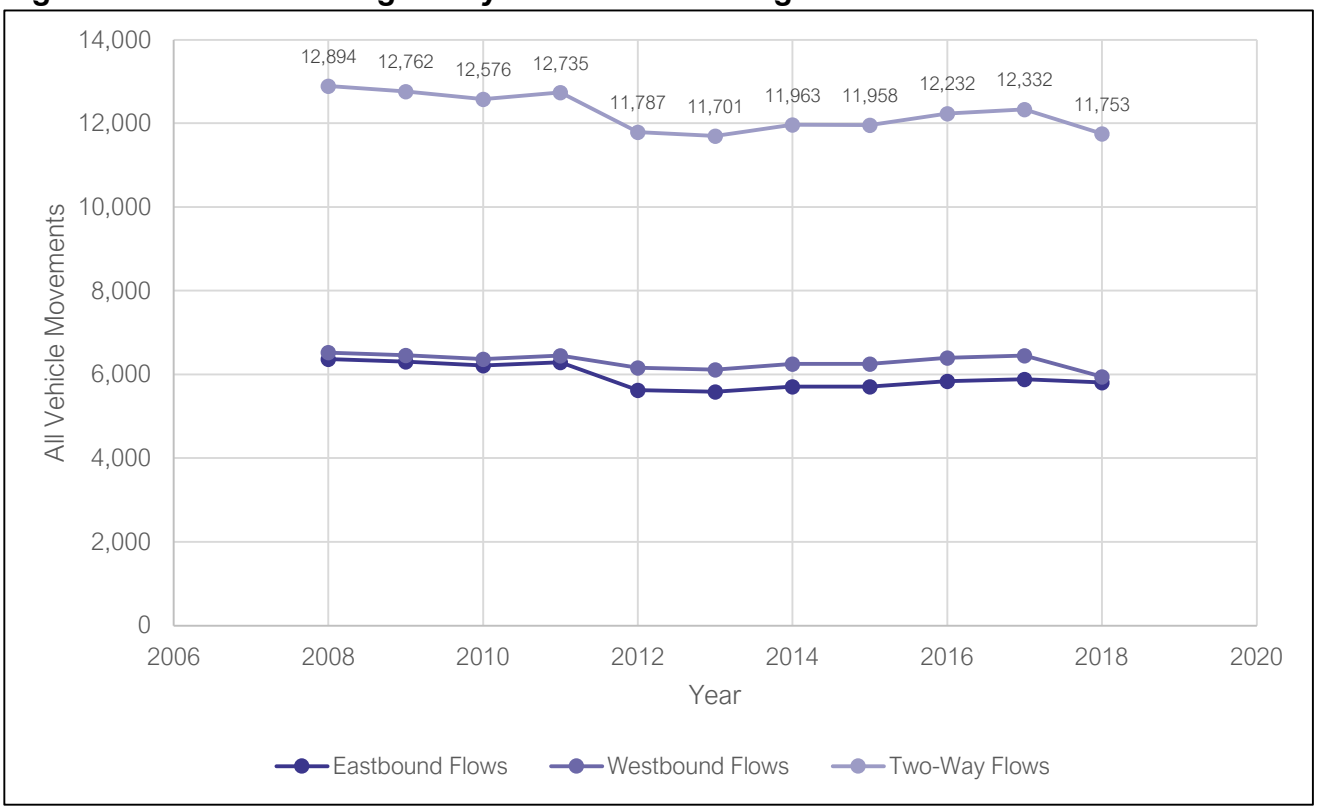
6.7 The key (Core) test is Scenario 3 vs Scenario 2. This is the basic development control test and is based on the inclusion of committed (ie developments with planning permission). This is known development with known infrastructure improvements and therefore shows the direct effects of the proposed development and any junction enhancements that may be required as a result of the proposed development.

6.8 Scenario 5 vs 4 includes the addition of Tempro traffic growth. Such growth is to allow for future development that is not defined. No assessments of that development have been undertaken and hence it is not known if any infrastructure enhancements would accompany those developments.

6.9 This analysis is provided for information only and should not be used to determine any junction enhancements associated with the Nutfield development. This is because such enhancements would be partially due to the as yet undefined development included within Tempro. If inclusion of Tempro growth triggers the need for any junction enhancements, it will be for those future developments to provide those enhancements.

6.10 Furthermore, analysis of traffic flows on the A25 demonstrates that there has been no consistent growth in flows, notwithstanding development growth in the area. Indeed between 2008 and 2018, there was a small reduction in flows. The relevant data, as included in the Scoping Report submitted to Surrey CC are shown overleaf in **Figure 6.1**.

Figure 6.1: Annual Average Daily Traffic Flows along the A25



6.11 Notwithstanding the above, analysis has been included for Scenarios 5 vs 4 below in order to provide a robust analysis. However, where such analysis identifies capacity issues, analysis of Scenarios 3 vs 2 has also been included.

Assessment Periods

6.12 The impact of the traffic generated by the proposed development will be assessed during the weekday network peak hours of 08:00 – 09:00 (AM peak) and 17:00 – 18:00 (PM peak).

Background Traffic Growth

6.13 To determine traffic growth between the 2022 base year and the 2029 completion year of the proposed development, growth factors have been extracted from TEMPRO.

6.14 The relevant growth factors used are:

- AM Peak (2022 – 2029) – 1.03845
- PM Peak (2022 – 2029) – 1.04002

Committed Developments

6.15 In addition to the background growth, committed development has been considered separately. Relevant committed developments have been identified as a permitted developments which route through the study area.

6.16 One committed development has been identified as a relevant committed development scheme with associated traffic through the study area, as follows:

- **16/01066/F** (Approved January 2017) - Demolition of existing buildings and redevelopment to provide new multi-screen cinema and flexible retail, restaurant and cafe units (use classes A1 and/or A3 and/or D2) at ground and first floor level and residential apartments within buildings comprising part five, part six, part ten and part thirteen storeys together with basement car parking and access, cycle storage and associated facilities including new amenity space and public realm.

6.17 This committed development has manually been added into the traffic flow diagrams and assessed as a cumulative scenario within the 2029 future base. It is important to note that this also takes account of TEMPRO growth and therefore could be argued as double-counting. Therefore, the methodology used signifies a robust approach.

Traffic Flow Diagrams

6.18 Traffic flow diagrams of the assessment scenarios are set out within **Appendix L**.

Modelling Results

6.19 The operation of the proposed site access, A23/A25 roundabout, A25/Park Works Road junction and A25/Church Hill junction have been assessed using ARCADY and PICADY (contained within Junctions 9). This package expresses the relationship between traffic flow and the capacity of a junction as the Ratio of Flow to Capacity (RFC).

6.20 When considering the output results, it is noted that when an RFC of 1 is recorded by ARCADY/PICADY, it indicates that a junction is operating at full theoretical capacity, whilst an RFC of 0.85 is considered to be the design capacity. Based upon these results, the model predicts the anticipated queue lengths expressed as number of vehicles, and the associated periods of delay (in seconds) likely to occur at a junction.

6.21 The signal controlled roundabout at the A25/Noke Drive junction has been modelled using LinSig, which is the industry standard computer modelling software for signal junctions. LinSig also compares the estimated flow on each arm with the capacity (known as the saturation flow) and gives the ratio as Degree of Saturation rather than RFC. The aim for new signalised junctions would be to achieve a Degree of Saturation of 90% or less. However, junctions can operate satisfactorily at degrees of saturation above this level.

6.22 A summary of the modelling results is summarised in the tables below.

6.23 Full Junctions9 and LinSig reports can be found at **Appendix M**.

<u>Site Access:</u>

6.24 The results of the PICADY assessment for the site access junction are set out below.

Table 6.1: Site Access Junctions9 Results Summary

Movement	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
Scenario 1 - 2022 Base						
Site Access to A25 East	N/A					
Site Access to A25 West						
A25 East to Site Access/A25 West						
Scenario 2 - 2022 Base + Committed Developments						
Site Access to A25 East	N/A					
Site Access to A25 West						
A25 East to Site Access/A25 West						
Scenario 3 - 2022 Base + Committed Dev + Proposed Dev						
Site Access to A25 East	0.1	6.74	0.07	0.1	7.26	0.05
Site Access to A25 West	0.3	15.72	0.22	0.2	15.79	0.14
A25 East to Site Access/A25 West	0.3	4.43	0.12	0.2	5.23	0.10
Scenario 4- 2029 Future Base						
Site Access to A25 East	0.0	0.00	0.00	0.0	0.00	0.00
Site Access to A25 West	0.0	0.00	0.00	0.0	0.00	0.00
A25 East to Site Access/A25 West	0.0	0.00	0.00	0.0	0.00	0.00
Scenario 5 - 2029 Future Base + Proposed Dev						
Site Access to A25 East	0.1	6.81	0.08	0.1	7.38	0.05
Site Access to A25 West	0.3	16.30	0.22	0.2	16.47	0.14
A25 East to Site Access/A25 West	0.3	4.39	0.12	0.2	5.20	0.10

6.25 As shown above, the 2022 Base and 2022 Base + Committed Developments scenarios do not result in any queues or delays as this will consider the current operation of traffic through this area i.e. un-impeded eastbound and westbound traffic flows.

6.26 The results show that throughout the core scenarios, the RFC reaches a peak of 0.22, when travelling west leaving the site, with a maximum queue of less than one vehicle and a delay time of 16 seconds. In the Future Base (2029) the junction continues to operate well within theoretical capacity. The queues will be negligible in the peak hours for all arms of traffic with less than 1 vehicle.

A25/A23 Station Roundabout:

6.27 The results of the ARCADY assessment for the A25/A23 Station Roundabout are set out below.

Table 6.2: Stations Roundabout Junctions9 Results Summary

Movement	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
Scenario 1 - 2022 Base						
Princess Way	1.8	6.74	0.64	3.7	12.45	0.79
A23	1.3	6.72	0.57	0.7	5.00	0.41
Marketfield Way	0.9	5.01	0.48	1.4	6.01	0.59
Stations Road	0.1	14.86	0.08	0.0	16.48	0.05
Quadrant Access	0.1	7.60	0.12	0.2	7.51	0.15
Scenario 2 - 2022 Base + Committed Developments						
Princess Way	1.8	6.75	0.65	3.7	12.48	0.79
A23	1.3	6.77	0.57	0.7	5.05	0.42
Marketfield Way	0.9	5.07	0.48	1.4	6.07	0.59
Stations Road	0.1	15.11	0.08	0.1	16.77	0.05
Quadrant Access	0.1	7.66	0.12	0.2	7.57	0.15
Scenario 3 - 2022 Base + Committed Devs + Proposed Dev						
Princess Way	1.9	7.07	0.66	4.1	13.57	0.81
A23	1.5	7.27	0.60	0.8	5.23	0.44
Marketfield Way	1.0	5.24	0.50	1.5	6.30	0.61
Stations Road	0.1	15.98	0.08	0.1	17.72	0.05
Quadrant Access	0.1	7.85	0.12	0.2	7.76	0.15
Scenario 4 - 2029 Future Base						
Princess Way	2.0	7.32	0.67	4.7	15.35	0.83
A23	1.5	7.36	0.60	0.8	5.33	0.44
Marketfield Way	1.0	5.35	0.51	1.6	6.58	0.62
Stations Road	0.1	16.34	0.08	0.1	18.67	0.05
Quadrant Access	0.1	7.99	0.12	0.2	7.98	0.16
Scenario 5 - 2029 Future Base + Proposed Development						
Princess Way	2.2	7.71	0.69	5.3	16.92	**0.85**
A23	1.7	7.97	0.63	0.9	5.54	0.46
Marketfield Way	1.1	5.55	0.52	1.7	6.86	0.63
Stations Road	0.1	17.44	0.09	0.1	19.90	0.06
Quadrant Access	0.1	8.10	0.13	0.2	8.17	0.16

6.28 The results show that in the 2022 base scenario the junction is currently operating well-within both the design capacity.

6.29 In the Future Base 2029 scenario Princess Way is forecast to operate within design capacity, with a maximum RFC of 0.83 in the PM peak with a corresponding queue of 5 vehicles and delay 16 seconds. With the addition of the development, this maximum RFC is indicated to increase marginally to 0.85, the design capacity. The delay time increase would be less than 2 seconds and

the additional queue length would only be less than 1 vehicle. This is deemed to be an insignificant impact.

6.30 Therefore, it can be concluded that the proposals would result in a negligible impact at this junction, and the junction continues to operate satisfactorily. No mitigation is required.

High Street / Park Works Road / Mid Street:

6.31 The results of the PICADY assessment for the A25 High Street/Park Works Road/Mid Street crossroad junction are set out below.

Table 6.3: High Street / Park Works Road / Mid Street Junctions9 Results Summary

Movement	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
Scenario 1 - 2022 Base						
Park Works Road to A25 & Mid Street	0.0	8.41	0.02	0.0	0.00	0.00
A25 West to A25 East & Mid Street	0.6	7.04	0.26	1.0	5.74	0.34
Mid Street to A25 & Park Works Road	1.5	35.12	0.62	4.0	61.42	0.83
A25 East to A25 West & Park Works Road	0.0	4.14	0.01	0.0	4.92	0.01
Scenario 2 - 2022 Base + Committed Developments						
Park Works Road to A25 & Mid Street	0.0	8.41	0.02	0.0	0.00	0.00
A25 West to A25 East & Mid Street	0.6	7.04	0.26	1.0	5.75	0.35
Mid Street to A25 & Park Works Road	1.6	35.50	0.62	4.1	63.24	0.83
A25 East to A25 West & Park Works Road	0.0	4.14	0.01	0.0	4.90	0.01
Scenario 3 - 2022 Base + Committed Devs + Proposed Dev						
Park Works Road to A25 & Mid Street	0.0	8.65	0.02	0.0	0.00	0.00
A25 West to A25 East & Mid Street	0.9	7.79	0.34	1.1	5.91	0.37
Mid Street to A25 & Park Works Road	2.0	46.64	0.69	5.3	81.15	**0.88**
A25 East to A25 West & Park Works Road	0.0	4.08	0.01	0.0	4.82	0.01
Scenario 4 - 2029 Future Base						
Park Works Road to A25 & Mid Street	0.0	8.53	0.02	0.0	0.00	0.00
A25 West to A25 East & Mid Street	0.7	7.19	0.27	1.1	5.89	0.37

Movement	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
Mid Street to A25 & Park Works Road	2.0	43.60	0.68	6.2	91.53	**0.90**
A25 East to A25 West & Park Works Road	0.0	4.09	0.01	0.0	4.87	0.01
Scenario 5 - 2029 Future Base + Proposed Dev						
Park Works Road to A25 & Mid Street	0.0	8.77	0.02	0.0	0.00	0.00
A25 West to A25 East & Mid Street	1.0	8.03	0.36	1.3	6.11	0.40
Mid Street to A25 & Park Works Road	2.7	61.59	0.76	8.5	122.30	**0.96**
A25 East to A25 West & Park Works Road	0.0	4.04	0.02	0.0	4.79	0.01

6.32 The results show that in the 2022 base scenario the junction is currently operating within the design capacity (an RFC of 0.85).

6.33 In Scenario 3, the movement from Mid Street to A25 and Park Works Road is forecast to exceed the design capacity, but remain within the theoretical capacity, with an RFC of 0.88 in the PM peak, with a corresponding queue of 5 vehicles. This only an increase of one vehicle compared with Scenario 2. In the 2029 future base scenario this arm has an RFC of 0.90, with an increase to 0.96 with the addition of development flows with a consequent increase in queue of 3 vehicles.

6.34 Therefore, it is concluded that in the Core Test (Scenario 3 vs 2) there is a negligible reduction in spare capacity and the junction continues to operate at close to design capacity. Hence no mitigation is required.

6.35 In the Future Scenarios with Tempro growth added there is some increase in queueing, but the impact of the development traffic is modest and the junction continues to operate within capacity.

Church Hill / High Street / Coopers Hill Road:

6.36 The results of the PICADY assessment for the Church Hill/A25 High Street/Coopers Hill Road crossroad junction are set out below.

Table 6.4: Church Hill / High Street / Coopers Hill Road Junctions9 Results Summary

Movement	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
Scenario 1 - 2022 Base						
Coopers Hill to A25 & Church Hill	3.0	75.15	0.78	0.9	28.75	0.49
A25 East to Coopers Hill/A25 West & Church Hill	0.4	9.42	0.29	0.2	10.42	0.19
Church Hill to A25 & Coopers Hill	1.2	27.65	0.55	3.8	69.38	0.82
A25 West to A25 East/Coopers Hill/Church Hill	0.0	10.03	0.05	0.1	7.84	0.10
Scenario 2 - 2022 Base + Committed Developments						
Coopers Hill to A25 & Church Hill	3.1	76.78	0.78	0.9	28.97	0.49
A25 East to Coopers Hill/A25 West & Church Hill	0.4	9.42	0.29	0.2	10.42	0.19
Church Hill to A25 & Coopers Hill	1.2	27.84	0.55	3.9	69.90	0.82
A25 West to A25 East/Coopers Hill/Church Hill	0.0	10.05	0.05	0.1	7.86	0.10
Scenario 3 - 2022 Base + Committed Devs + Proposed Dev						
Coopers Hill to A25 & Church Hill	3.7	89.72	0.82	1.1	31.30	0.52
A25 East to Coopers Hill/A25 West & Church Hill	0.4	9.54	0.29	0.2	10.42	0.19
Church Hill to A25 & Coopers Hill	1.3	29.44	0.57	4.6	82.89	**0.86**
A25 West to A25 East/Coopers Hill/Church Hill	0.1	10.34	0.06	0.1	8.01	0.11
Scenario 4 - 2029 Future Base						
Coopers Hill to A25 & Church Hill	5.0	121.63	**0.89**	1.2	35.00	0.55
A25 East to Coopers Hill/A25 West & Church Hill	0.5	9.63	0.30	0.2	10.80	0.20
Church Hill to A25 & Coopers Hill	1.4	32.85	0.60	6.0	104.14	**0.90**

Movement	AM			PM		
	Queue (veh)	Delay (s)	RFC	Queue (veh)	Delay (s)	RFC
A25 West to A25 East/Coopers Hill/Church Hill	0.1	10.42	0.05	0.1	8.00	0.10
Scenario 5 - 2029 Future Base + Proposed Development						
Coopers Hill to A25 & Church Hill	6.3	144.65	**0.93**	1.4	38.82	0.59
A25 East to Coopers Hill/A25 West & Church Hill	0.5	9.75	0.31	0.3	11.00	0.20
Church Hill to A25 & Coopers Hill	1.5	35.24	0.62	7.5	126.28	**0.94**
A25 West to A25 East/Coopers Hill/Church Hill	0.1	10.72	0.06	0.1	8.16	0.12

6.37 The results show that in the 2022 base scenario the junction is currently operating within the design capacity (an RFC of 0.85).

6.38 In Scenario 3, the movement from Church Hill to A25 & Coopers Hill is forecast to exceed the design capacity, but remain within the theoretical capacity, with an RFC of 0.86 in the PM peak, with a corresponding queue of 5 vehicles. This only an increase of one vehicle compared with Scenario 2. In the 2029 future base scenario this arm has an RFC of 0.90, with an increase to 0.94 with the addition of development flows with a consequent increase in queue of 3 vehicles.

6.39 Therefore, it is concluded that in the Core Test (Scenario 3 vs 2) there is a negligible reduction in spare capacity and the junction continues to operate at close to design capacity. Hence no mitigation is required.

6.40 In the Future Scenarios with Tempro growth added there is some increase in queueing, but the impact of the development traffic is modest and the junction continues to operate within capacity.

A25 / Noke Drive:

6.41 The results of the LinSig assessment for the A25/Noke Drive signalisation junction are shown below.

Table 6.5: A25 / Noke Drive LinSig Results Summary

Lane	AM Peak			PM Peak		
	DoS (%)	Ave. Delay (s/pcu)	Queue Length (pcu)	DoS (%)	Ave. Delay (s/pcu)	Queue Length (pcu)
Scenario 1- 2022 Base						
Cycle Time (s) AM – 120 & PM - 180						
PRC (%) AM – 63.9 & PM 33.1						
A25 (NW) Left Right	44.3	11.9	6.4	67.6	13.8	14.0
Noke Drive Right Left	49.8	34.9	2.2	51.1	34.9	2.4
A25 (South) Left Right	54.9	13.5	8.7	38.3	10.6	5.9
Scenario 2 – 2022 Base + Committed Developments						
Cycle Time (s) AM – 120 & PM - 180						
PRC (%) AM – 63.0 & PM 32.9						
A25 (NW) Left Right	44.4	11.9	6.4	67.7	13.8	14.0
Noke Drive Right Left	50.2	35.0	2.3	51.5	35.0	2.4
A25 (South) Left Right	55.2	13.5	8.9	38.7	10.6	6.1
Scenario 3 - 2022 Base + Committed Devs + Proposed Dev						
Cycle Time (s) AM – 120 & PM - 180						
PRC (%) AM – 52.3 & PM 27.8						
A25 (NW) Left Right	46.8	12.2	6.9	70.4	14.5	15.1
Noke Drive Right Left	50.2	34.7	2.3	51.5	35.0	2.5
A25 (South) Left Right	59.1	14.2	9.8	41.0	11.0	6.4
Scenario 4 - 2029 Future Base						
Cycle Time (s) AM – 120 & PM - 180						
PRC (%) AM – 46.8 & PM 23.1						
A25 (NW) Left Right	46.2	12.1	6.8	70.3	14.5	15.1
Noke Drive Right Left	52.0	35.4	2.4	53.7	35.7	2.7
A25 (South) Left Right	57.3	13.9	9.3	40.4	11.0	6.3
Scenario 5 - 2029 Future Base + Proposed Development						
Cycle Time (s) AM – 120 & PM - 180						
PRC (%) AM – 46.8 & PM 23.1						
A25 (NW) Left Right	48.6	12.5	7.3	73.1	15.3	16.2
Noke Drive Right Left	52.0	35.1	2.4	53.7	35.5	2.7
A25 (South) Left Right	61.3	14.7	10.4	42.7	11.2	6.8

6.42 A Degree of Saturation (DoS) of 90% or greater indicates an arm of a junction is operating at capacity. The results indicates that in the 2022 base surveys and the Scenario 2 (base + committed development) the junction continues to operate within capacity with a maximum DoS of 67.7% shown on the 'A25 (North-West) Left Right Arm' in the PM peak. With the addition of the proposed development onto Scenario 2, Scenario 3 shows a maximum DoS of 70.4 As shown in Scenario 5, the addition of Tempro traffic growth increases this marginally to 73.1%. %. This is still well within 90% theoretical capacity.

Summary

6.43 The conclusion from the above analysis is that all of the junctions analysed operate below or close to design capacity in Scenario 3 ie in the Base + Committed Development + Development Traffic Scenario. Furthermore, the impact of the addition of development traffic is small leading to increases of only a few vehicles in queueing. Hence, applying the test in NPPF para 111, the residual cumulative impact of the development on the road network would not be severe and hence traffic impact does not lead to a justifiable reason to refuse this application.

7 Summary

7.1 This Transport Assessment has been prepared in support of proposed development at Nutfield Green Park.

Development Proposals

7.2 The development proposals are for outline planning permission for the development of the site for new homes (Use Class C3) and Integrated Retirement Community (Use Classes C2, E(e), F2), creation of new access, landscaping and associated works to facilitate the development, in phases which are severable (Outline all matters reserved, except for Access).

Site Access

7.3 The site access is applied for in detail. This comprises an all-modes access onto the A25 via a priority junction. The access will link to an internal link road (referred to as The Drive) connecting the development parcels throughout the site. Associated with this it is proposed to introduce a gateway treatment on the western approach to Nutfield at the new location of the 30mph speed (which is moved west from its current location). These measures, along with the introduction of a signalised pedestrian crossing will assist in reducing speeds through the village.

Sustainable Transport Measures

7.4 The proposals include a network of footways and cycle routes within the site, some of which are upgrading of existing PROWS. These are shown on the Access and Movement Parameter Plan. The routes have been carefully planned to respect the site topography and the existing vegetation. The routes will facilitate access between development parcels and also access to/from the A25 and to/from the National Cycle Network (NCN 21) at Chilmead Lane to the north.

7.5 In terms of connectivity off-site, the pedestrian routes link all the development parcels to the A25 where there are existing bus stops.

7.6 A new signalised toucan crossing is proposed that will assist pedestrians crossing the A25. This will make it safer and more convenient for both new and existing residents to access the westbound bus stops as well as South Nutfield including the existing Nutfield Primary School and Nutfield railway station.

7.7 For cyclists there are also links from all the development parcels to the A25. From here cyclists can use the A25 to access Redhill, Godstone and other locations. However, it is also proposed to link the site to NCNR 21 at Chilmead Lane which will provide an alternative cycle route to Redhill using quiet roads and off-road routes. Redhill town is 3.5km distance using this route which is well within recommended cycle distances and a circa 13 minute cycle ride. The applicant is content to make any appropriate and CIL compliant contributions towards the upgrade of the section of NCNR 21 between the site and Redhill.

7.8 In terms of bus access, there are existing routes that link Nutfield to Redhill and Godstone with 3 buses per hour across the peak hours during the peak. One of these routes (No 400) also provides

a direct service to Gatwick Airport and Crawley where there are extensive employment opportunities. Opportunities to introduce demand responsive services in the area are also being explored with SCC.

7.9 The applicant is willing to fund upgrades to the stops in Nutfield such as vegetation clearance, shelter improvements and Real Time Information boards.

7.10 A Travel Plan will be introduced in conjunction with the development that will promote use of sustainable modes of transport.

7.11 Hence, in summary residents will have the opportunity to:

- Use the on-site facilities;
- Cycle to Redhill which is a major service centre as well as rail station;
- Use the existing bus services to access Redhill, Godstone, Gatwick Airport and Crawley.

Traffic Impact

7.12 Modelling of key local junctions has been undertaken with the scope of these studies having been agreed with SCC. The estimated trip generation and distribution from the site has also been agreed with SCC.

7.13 The Core test undertaken has assessed the impact of the site generated traffic on base flows comprising 2022 observed traffic flows + traffic from the one relevant committed (ie permitted) development.

7.14 The modelling results show that for the Core test all junctions continue to operate within theoretical capacity with the maximum Ratio of Flow to Capacity being under 0.9 and all queues being below 6 vehicles (except for the signalised junction of A25/Noke Drive where there is a queue of 15 vehicles but the arm operates well within capacity). The impact of the development traffic is minor. This is the fundamental development control test ie the impact that development traffic has on the known future base flows (observed + committed). The impact of the development in this scenario is not severe (using the test in NPPF para 111).

7.15 In order to assist the highway authority a further test has been carried out where traffic growth from TEMPRO has been added to the base flows. Under this scenario all junctions continue to operate within theoretical capacity with only a minor impact due to development traffic. Any detriment in junction performance compared with the Core test is due to the addition of the TEMPRO growth factors. If and when developments associated with these growth factors proceed to application stage then the appropriate assessment will be undertaken and any required mitigation introduced.

Policy Compliance

7.16 In relation to NPPF paragraphs 104 and 105, these need to be read together. In other words, the extent to which it is reasonable to provide the sustainable transport measures listed in para 104 will be affected by whether the site in question is in a rural or urban location.

7.17 With reference to the policy objectives of paragraph 104:

- The potential impacts of the development have been assessed through this comprehensive Transport Assessment;
- The opportunities from the existing transport infrastructure have been realised through creating good quality links to existing cycle and bus infrastructure;
- The TA has identified the opportunities to promote walking, cycling and public transport opportunities through the upgrading of links within the site to give access to cycle facilities (NCN 21) and bus services. A robust Travel plan will be implemented and secured by suitably worded planning condition;
- The environmental impacts of the traffic generated by the development have been assessed by other consultants (ie Air Quality). EV charging will be provided on the site in accordance with current guidance to assist the shift to non-fossil fuel vehicles;
- Extensive work has gone into integrating the design of the scheme with the proposed walking and cycling as well as vehicular access to provide a co-ordinated approach that recognises the constraints on the site.

7.18 In terms of NPPF para 111, due to the lack of a significant existing accident issues; the modest increase in traffic as a result of the development; and the safety enhancements that would be introduced through the scheme (signalised pedestrian crossing and speed reduction measures), the proposals will not have an unacceptable impact on highway safety. Furthermore, as has been demonstrated through the comprehensive traffic analysis, the residual cumulative impacts on the road network will not be severe.

7.19 In terms of Surrey's LTP 4 policy objectives the site will provide parking in accordance with current standards and appropriate EV charging facilities. Strong encouragement to use sustainable modes will be provided through the site design and Travel Plan.

7.20 In relation to Tandridge Local Plan Policy DP5:

- The scheme complies with the relevant Highway Authority's design guidance;
- The scheme will not impede traffic flow on the A25 but will lead to potential safety improvements through speed reduction measures and introduction of a signalised pedestrian crossing;
- The scheme retains and enhances existing footpath and cycle links;
- Safe and suitable access is provided that has been subject to a Stage 1 Safety Audit;
- The applicant is content to make appropriate CIL compliant contributions to other transport infrastructure measures such as bus stop enhancements and improvements to NCN 21.

Conclusion

7.21 Therefore, in conclusion, the scheme complies with National, County and Local transport policies, to the extent that this is appropriate given the rural location of the site, and there are no reasons why the application should be refused on transport grounds.

Appendix A

Highway Authority Pre-Planning Advice

Nutfield Green Park

May 2023

Introduction

The following advice is offered to Vectos following a request for pre-planning application advice. The advice is offered without prejudice to any future planning application submitted and any advice or recommendations provided by the Local Planning Authority.

The advice is offered following a review of the information and drawings provided to the County Highway Authority (CHA), a pre-application meeting, and a site visit undertaken in May 2023.

Proposed Development

The proposals seek to develop the land for a residential-led settlement comprising the following approximate quantum:

— 130 residential dwellings
— 50 later living dwellings
— 70-bed care home (2,000sqm)
— 950sqm doctors surgery with associated MRI scan facility (subject to demand)

Proposed Site Access

It is proposed to provide the main vehicular and pedestrian access from the site onto the A25 Nutfield Road. The posted speed limit adjacent to the proposed site access is 40mph, however this changes to 30mph approximately 150m further to the East. The required visibility splays for the main site access should be based on surveyed 85th percentile dry weather speeds and calculated using DMRB criteria. When visiting the site, it was not possible to view the topography within the site relative to the A25 carriageway, therefore it should be confirmed that the visibility splays can be achieved in both the horizontal and vertical plane, without any obstructions from a drivers' eye height of 1.05m down to between 0.6m and 2.0m above the carriageway. The required visibility splays should be measured with an 'x' distance of 2.4m. The 'y' distances should be measured to the nearside vehicle track.

The proposed site access drawing shows an access road with a bellmouth kerb radii of 15m, a carriageway width of 6.0m and a 2.0m wide footway on each side of the carriageway. An uncontrolled crossing with pedestrian refuge is proposed to allow pedestrians to safely cross at the junction. A right tight turn lane is also proposed. The CHA has the following comments on the proposed site access;

- Justification should be provided for the proposed right-turn lane facility. Does the need for one accord with the guidance in DMRB?
- The geometry of the access has been designed to allow access for articulated HGVS. The CHA consider that this design is not appropriate and the largest vehicle that the access should be designed to accommodate is a large waste collection vehicle.
- A 3.0m wide shared footway/cycleway should be provided alongside the access road and along the entire site frontage with Nutfield Road. Alongside Nutfield Road, the 3.0m wide footway/cycleway should be separated from the carriageway by a 0.5m wide margin.
- The uncontrolled crossing at the junction bellmouth should be designed as an in-line 'Copenhagen' style crossing.

The scoping note states that the proposed development will make use of Park Works Road for pedestrian and vehicular access. The CHA requires further details on the quantum of development that would be accessed via this road. In principle, the CHA would prefer this access to be restricted for use by pedestrians and cyclists, with access permitted for emergency vehicles only.

Pedestrian/Cycle Access

Permeability for non-car modes should be maximised within the site. A 3.0m wide shared footway/cycleway should be provided alongside the main spine road within the site access road and extend through the site to the southern and eastern boundaries. The public footpaths within the site should be upgraded and provided with a suitable width and surface for walking and cycling.

Turning

Space to turn within the site should be provided to allow all vehicles to enter and exit the site in forward gear. Swept path analysis should accompany any planning application to demonstrate that all vehicles can enter and exit the site and turn within the site. Swept path analysis should include tracking for a fire tender and large waste collection vehicle. It should be confirmed that the tracking of the refuse vehicle matches the size of the refuse vehicles used by Tandridge District Council.

Parking

Parking provision for the proposed dwellings should be in accordance with Tandridge District Council's parking standards.

When responding to consultations on residential development, it is expected that SCC will only raise objections regarding parking if there is a shortfall that would lead to danger on the adjoining highway. It is unlikely that objections would be raised on amenity grounds of a shortfall in parking.

The CHA seeks provision of electric vehicle charging points within all new developments. The guidance on EV charging within Surrey County Council's *'Vehicular and Cycle Parking Guidance (2023)'* requires 1 fast charge socket per dwelling (including the later living dwellings) to be provided (for both allocated and unallocated spaces), plus cable routes for any additional spaces. For the care home, 50% of available spaces to be fitted with a fast charge socket. If the development is provided with visitor parking spaces, 50% of these shall be provided with charge-points and the remainder of the spaces shall be provided with cable routes.

Construction Transport Management Plan

The CHA would expect a detailed Construction Transport Management Plan to be secured by condition to ensure detailed attention is given to how the highways impact of construction is to be managed.

Cycle Parking

Secure, lit, and covered bicycle parking should be provided. The quantum of cycle parking required should accord with Tandridge District Council's cycle parking standards. It should be noted that garages should be large enough (minimum 6m x 3m) for cycle storage. Houses without garages should have a dedicated cycle store (separate from a shed). A power socket should be provided to enable the charging of electric bikes (standard three-point plug sockets).

Traffic Impact Assessment

Trip Rates – The CHA considers the trip rates proposed in the scoping note are lower than would be expected for a site in this location, which has limited sustainable travel opportunities. Please can the trip rate assessment be undertaken again (using the latest TRICs version) and include edge of town locations (out of town sub-category) in the assessment.

Trip Distribution/Assignment –To provide an accurate assessment of the likely distribution of traffic from the site, separate methodologies should be applied to consider the destinations of commuting and business trips to other trip purposes. Latest available data derived from the National Travel Survey (NTS) should be obtained to establish the proportion of peak hour trips made by car, split into journey purpose. For commuting and business trips, the National Census Journey to Work statistics (for car drivers) Middle Layer Super Output Area (MSOA) for the relevant area should be used. For other journey purpose trips a P/T2 gravity model using the population of key urban areas (from the 2021 census) within a 40 minute peak hour drive from the site should be used. The two sets of data should be combined to generate a single set of distribution parameters to inform the development trip assignment.

Study Area – Subject to the trip rates and trip distribution/assignment being agreed by the CHA, it is expected that the following junctions will need to be included within the model study area:

- Proposed Site Access
- A25/Park Works Road
- A25/Mid Street
- A25/Church Hill/Coopers Hill Road
- A25/Noke Dr Signals
- A23/A25 Roundabout

It should be noted that the CHA will review the above list of junctions once the trip distribution/assignment exercise as detailed above has been undertaken and the results reviewed by the CHA.

Sustainable Travel

The scoping note does not provide any detailed proposals to address the CHA's concerns regarding the sustainability of the site in transport terms, as previously raised in our consultation response to TA/21/1040. The CHA advise that the following sustainability issues remain a key concern.

- In the vicinity of the site, there are limited facilities to encourage walking. The footway along the site frontage on the A25 is just over 1m wide and unlit. With fast moving traffic (including many large vehicles), walking along this footway is unpleasant, and does not feel safe especially for children, the elderly, and other vulnerable users.

- The existing bus stops along the A25 are in excess of the SCC acceptable walk distance of 400m to stops. The infrequent and relative low level of services provided by buses means that future residents will not be able to rely on using public transport for essential trips (commuting/shopping etc) and instead have to rely on the private car.

- The route to nearest railway station is undulating and steep in some areas, narrow along other sections, in particular, on Mid Street between the A25 and Sandy Lane. There is limited scope for improvement on some sections of this route due to the landscape and topography.

- Except for internal trips within the site, cycling does not seem to be a viable alternative option for future residents for most of their external trips. There is very limited scope to provide improvements to cycle routes between the site and the surrounding area.

Other Comments

If you would like us to engage the Local Member in any pre-application discussions or would like us to consult the Local Member on these pre-application proposals, please do let me know.

In addition to the above advice, I also refer you to guidance which is contained on our website, and the following link will direct you to a lot of the basic information needed to assist in the highway and transport consideration of many proposals.

https://www.surreycc.gov.uk/land-planning-and-development/planning/transport-development

There are also references on that website to other documentation and advice which may assist you in formulating a viable proposal.

If you have any queries or questions regarding my comments please do not hesitate to contact me.

Yours sincerely,

Richard Cooper

Principal Transport Development Planning Officer

Surrey County Council

Appendix B

Nutfield Green Park
Highways Response Note

226799/N03
4th August 2023

Introduction

1. Vectos has been instructed by Nutfield Park Developments Ltd to provide transport and highways advice in relation to the promotion of land at Nutfield Green Park. The proposals seek to develop the land for a residential settlement with associated community/commercial space and a C2 Care Home.

2. Following master-planning discussions and comments received from the recent public consultation event, a quantum of 166 residential units, 39 units for later living and a 70-bed car home are being proposed. In addition, community uses are being considered under use class E(e) for general health care facilities and F2 for a small village shop. It is important to note that this quantum is subject to change as the scheme progresses.

3. A pre-application meeting was held between Vectos (Part of SLR) and Surrey County Council (SCC) on Friday 17th March 2023. SCC subsequently returned a formal response on 12th May 2023, as shown in **Appendix A**.

4. This technical note sets out to address the comments raised within the formal response with the intention of arranging a second pre-application meeting with SCC to close out the remaining points.

5. This technical note will be structured as follows:

   — Response to SCC Comments on: Proposed Site Access, Park Works Road Access, Trip Rates, Trip Distribution/Assignment and Sustainable Travel

   — Other Matters: Pedestrian/Cycle Access, Turning, Parking, Construction Transport Management Plan, Cycle Parking and Study Area

   — Requested Next Steps

Response to SCC Highways Comments

Proposed Site Access – Visibility

Comment

6. *"It is proposed to provide the main vehicular and pedestrian access from the site onto the A25 Nutfield Road. The posted speed limit adjacent to the proposed site access is 40mph, however this*

changes to 30mph approximately 150m further to the East. The required visibility splays for the main site access should be based on surveyed 85th percentile dry weather speeds and calculated using DMRB criteria. When visiting the site, it was not possible to view the topography within the site relative to the A25 carriageway, therefore it should be confirmed that the visibility splays can be achieved in both the horizontal and vertical plane, without any obstructions from a drivers' eye height of 1.05m down to between 0.6m and 2.0m above the carriageway. The required visibility splays should be measured with an 'x' distance of 2.4m. The 'y' distances should be measured to the nearside vehicle track."

Response

7. A vertical visibility splay assessment has been completed based on the 85th percentile speeds along Nutfield Road undertaken in October 2022 (contained in **Appendix B**).

8. A note is contained within the latest junction design drawing shown in **Appendix C**. This states that vertical visibility is achieved at this junction as per the 85th percentile speeds in both the eastbound and westbound directions, which are 42mph and 41mph respectively.

Proposed Site Access – Design

Comment

9. *"The proposed site access drawing shows an access road with a bellmouth kerb radii of 15m, a carriageway width of 6.0m and a 2.0m wide footway on each side of the carriageway. An uncontrolled crossing with pedestrian refuge is proposed to allow pedestrians to safely cross at the junction. A right tight turn lane is also proposed. The CHA has the following comments on the proposed site access;*

   - *Justification should be provided for the proposed right-turn lane facility. Does the need for one accord with the guidance in DMRB?*
   - *The geometry of the access has been designed to allow access for articulated HGVS. The CHA consider that this design is not appropriate and the largest vehicle that the access should be designed to accommodate is a large waste collection vehicle.*
   - *A 3.0m wide shared footway/cycleway should be provided alongside the access road and along the entire site frontage with Nutfield Road. Alongside Nutfield Road, the 3.0m wide footway/cycleway should be separated from the carriageway by a 0.5m wide margin.*
   - *The uncontrolled crossing at the junction bellmouth should be designed as an in-line 'Copenhagen' style crossing."*

Response

10. The proposed access junction has been redesigned to include removal of the right turn lane, accommodation for up to a large waste collection vehicle, a 3.0m shared footway/cycleway along the

site frontage, and addition of a raised 'Copenhagen' style crossing for pedestrians and cyclists. The junction design in shown in **Appendix C**.

11. The proposed footway will tie into existing footways along the A25. There is a limit to footway widening along the A25 due to established hedgerow growth and habitat. Furthermore, it is felt that there will be limited demand for pedestrian movements to the west of the site as this is primarily rural. For pedestrians wishing to route to the east, the existing footways along the A25 can be utilised. Alternatively, residents can make use of the internal footways provided within the site to head east into Nutfield.

12. A preliminary assessment of the access design (presented in **Appendix C)** has been undertaken using Junctions9 software. This assessment demonstrates that the proposed junction has ample capacity for the expected level of traffic movements and will not have a negative impact on existing mainline flows along the the A25. This assessment will be revisited once the revised trip generation and distribution assumptions have been agreed with SCC. However, it is important to note at this stage that these revisions are unlikely to affect the outcome of this assessment.

13. Vectos seek to agree the suitability of this junction as a matter of urgency with SCC so that a Stage 1 Road Safety Audit can be undertaken.

Park Works Road Access

Comment

14. *"The scoping note states that the proposed development will make use of Park Works Road for pedestrian and vehicular access. The CHA requires further details on the quantum of development that would be accessed via this road. In principle, the CHA would prefer this access to be restricted for use by pedestrians and cyclists, with access permitted for emergency vehicles only."*

Response

15. Park Works Road is proposed as a pedestrian and cycle access point only. Park Works Road will not be available for vehicular access. Given the size of the development it is not considered that an emergency vehicular access is required, and we would like to agree this with SCC.

16. Given the very low vehicular use of this route it is considered that it is suitable for use by pedestrian and cyclists accessing the site. It is intended to resurface the road with appropriate road markings/signage to make drivers aware of pedestrian and cycle activity.

Trip Rates

Comment

17. *"The CHA considers the trip rates proposed in the scoping note are lower than would be expected for a site in this location, which has limited sustainable travel opportunities. Please can the trip rate*

assessment be undertaken again (using the latest TRICs version) and include edge of town locations (out of town sub-category) in the assessment."

Response

18. Each proposed land use has been updated to include edge of town locations. Updated TRICS reports contained within **Appendix D**. The updated trip rates and net change against the previous trip rates is shown in **Table 1.**

Table 1: Net Change in Total Vehicle Trip Rates

Time	Original Trip Rates			Updated Trip Rates			Net Change		
	In	Out	Total	In	Out	Total	In	Out	Total
Residential (including Later Living)									
08:00 – 09:00	0.145	0.331	0.476	0.149	0.338	0.487	+0.004	+0.007	+0.011
17:00 – 18:00	0.277	0.146	0.423	0.286	0.16	0.446	+0.009	+0.014	+0.023
Care Home									
08:00 – 09:00	0.163	0.06	0.223	0.175	0.084	0.259	+0.012	+0.024	+0.036
17:00 – 18:00	0.065	0.056	0.121	0.068	0.052	0.120	+0.003	-0.004	-0.001
Doctors Surgery									
08:00 – 09:00	3.222	2.007	5.229	3.49	2.185	5.675	+0.268	+0.178	+0.446
17:00 – 18:00	1.162	2.219	3.381	1.37	2.055	3.425	+0.208	-0.164	+0.044

19. The updated trip rates have been applied to the latest quantum of development. It is assumed that the potential proposals for a small village shop under use class F2 will not generate any new vehicle trips, rather the trips will be made up of internalised trips associated with the development, or trips on foot from within the surrounding village of Nutfield.

20. Overall, the change in trip generation as a result of the revised trip rates and updated quantum is nominal with a very small increase, as shown in **Table 2** below.

Table 2: Net Change in Total Vehicle Trip Generation (Original vs. Updated Trip Rates)

Time	Total Net Change in Vehicle Trips		
	In	Out	Total
Residential (including Later Living)			
08:00 – 09:00	+1	+1	+2
17:00 – 18:00	+2	+3	+5
Care Home			
08:00 – 09:00	+2	+3	+5
17:00 – 18:00	0	-1	-1
Doctors Surgery			
08:00 – 09:00	+2	+2	+4
17:00 – 18:00	+2	-2	0

21. The updated trip rates result in 11 additional vehicle movements in the AM peak made up of 2 additional residential movements, 5 additional care home movements and 4 additional doctors surgery movements. In the PM peak, the updates result in 4 additional movements comprising 5 additional residential movements, 1 less care home movement and no change in doctors surgery movements. We will include the updated trip rates within our assessment.

22. Vectos seek approval of these updated trip rates from SCC.

Trip Distribution/Assignment

Comment

23. *"To provide an accurate assessment of the likely distribution of traffic from the site, separate methodologies should be applied to consider the destinations of commuting and business trips to other trip purposes. Latest available data derived from the National Travel Survey (NTS) should be obtained to establish the proportion of peak hour trips made by car, split into journey purpose. For commuting and business trips, the National Census Journey to Work statistics (for car drivers) Middle Layer Super Output Area (MSOA) for the relevant area should be used. For other journey purpose trips a P/T2 gravity model using the population of key urban areas (from the 2021 census) within a 40 minute peak hour drive from the site should be used. The two sets of data should be combined to generate a single set of distribution parameters to inform the development trip assignment."*

Response

24. Data has been extracted from the latest release of the National Travel Survey (NTS) which is currently 2021. The resultant split between journey purposes in the peak hour has been taken from dataset NTS0409a and is contained in **Table 3**. This has been split by journey purpose as follows:

- Commuting – Commuting, Business and Other Work/Other Escort/Personal Business
- Education – Education and Escort Education
- Other – Shopping, Visiting Friends/Entertainment/Sport and Holiday/Day Trip/Other

Table 3: NTS Data Peak Hour Trips by Journey Purpose

Time Period	Commuting	Education	Other
08:00 – 09:00	33%	54%	14%
17:00 – 18:00	48%	5%	47%

Commuting Distribution

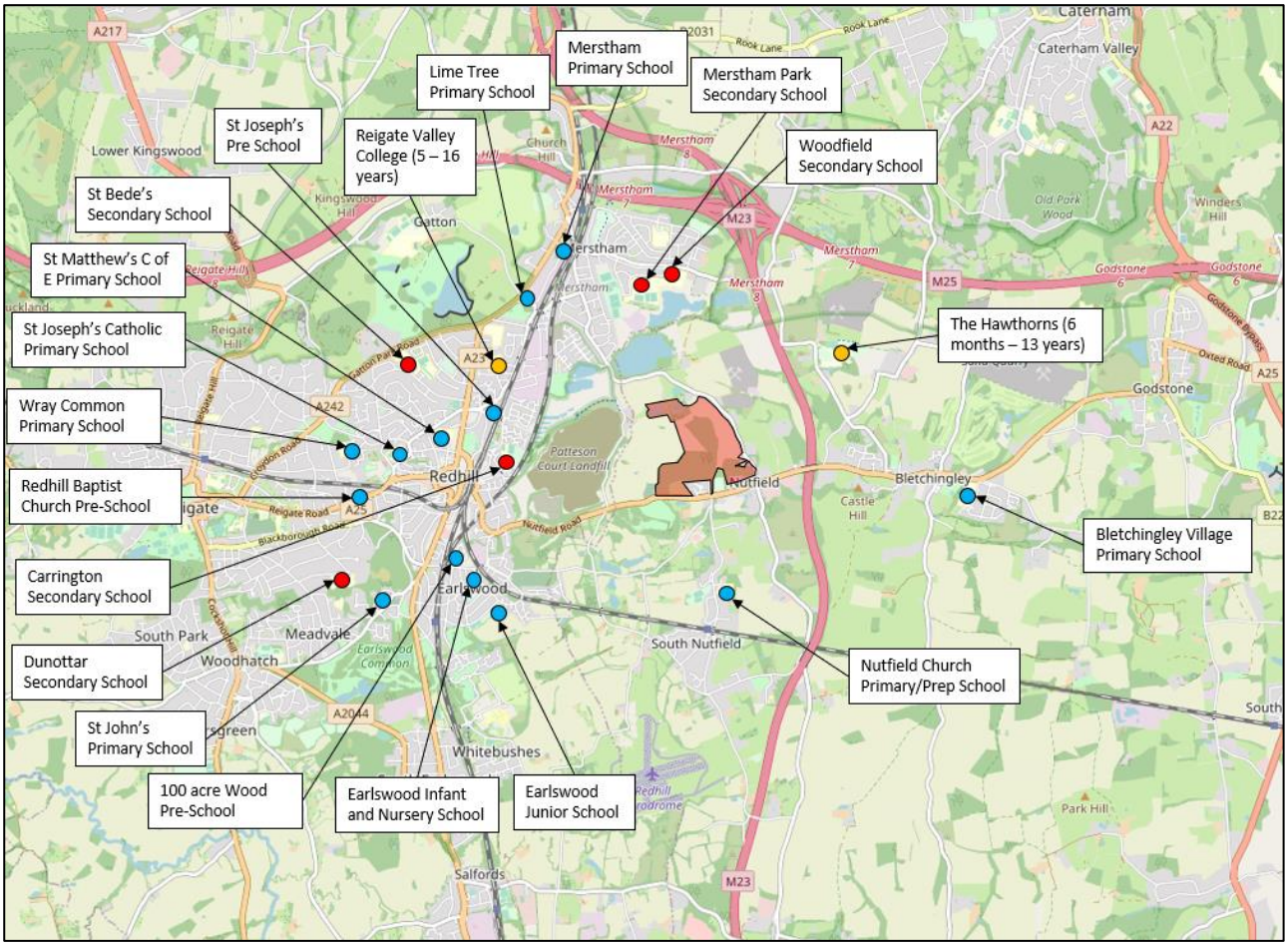
25. The commuting distribution has used national Census Journey to Work statistics (for car drivers) taken from the relevant Middle Super Output Area. This methodology follows the approach requested by SCC and therefore, no further comment on commuting distribution is needed at this stage.

Education Distribution

26. With regard to education distribution, we note that SCC request a gravity model should be developed for a 40 minute peak hour drive catchment using against key urban areas from 2021 population census. This methodology is not deemed appropriate for education distribution on the following grounds:

- A 40 minute drive time is deemed too long for education related trips, particularly primary school trips. As set out in the NTS (dataset NTS0403) the average trip duration to education has been 17-minutes when taking into account the latest 5-years, with a maximum 21 minutes recorded for pre-covid conditions.
- Schools are not necessarily defined by population areas and densities. For example, some schools, particularly larger schools, colleges or academies may be in out-of-town, rural or remote settings. Therefore, a gravity model based on population density is not appropriate.
- Many schools apply a catchment for prospective applicants which is demarked by postcode and/or home location. This is usually less than a 40-minute drive catchment.
- The local context should be factor in determining education destinations for the site. As shown in **Figure 1** below, the nearest primary school is Nutfield Church C of E Primary School, with a wealth of primary and secondary schools located in the surrounding nearby areas of Redhill to the west, Merstham to the north, and Bletchingley and Godstone to the east

Figure 1: Proposed Education Catchment



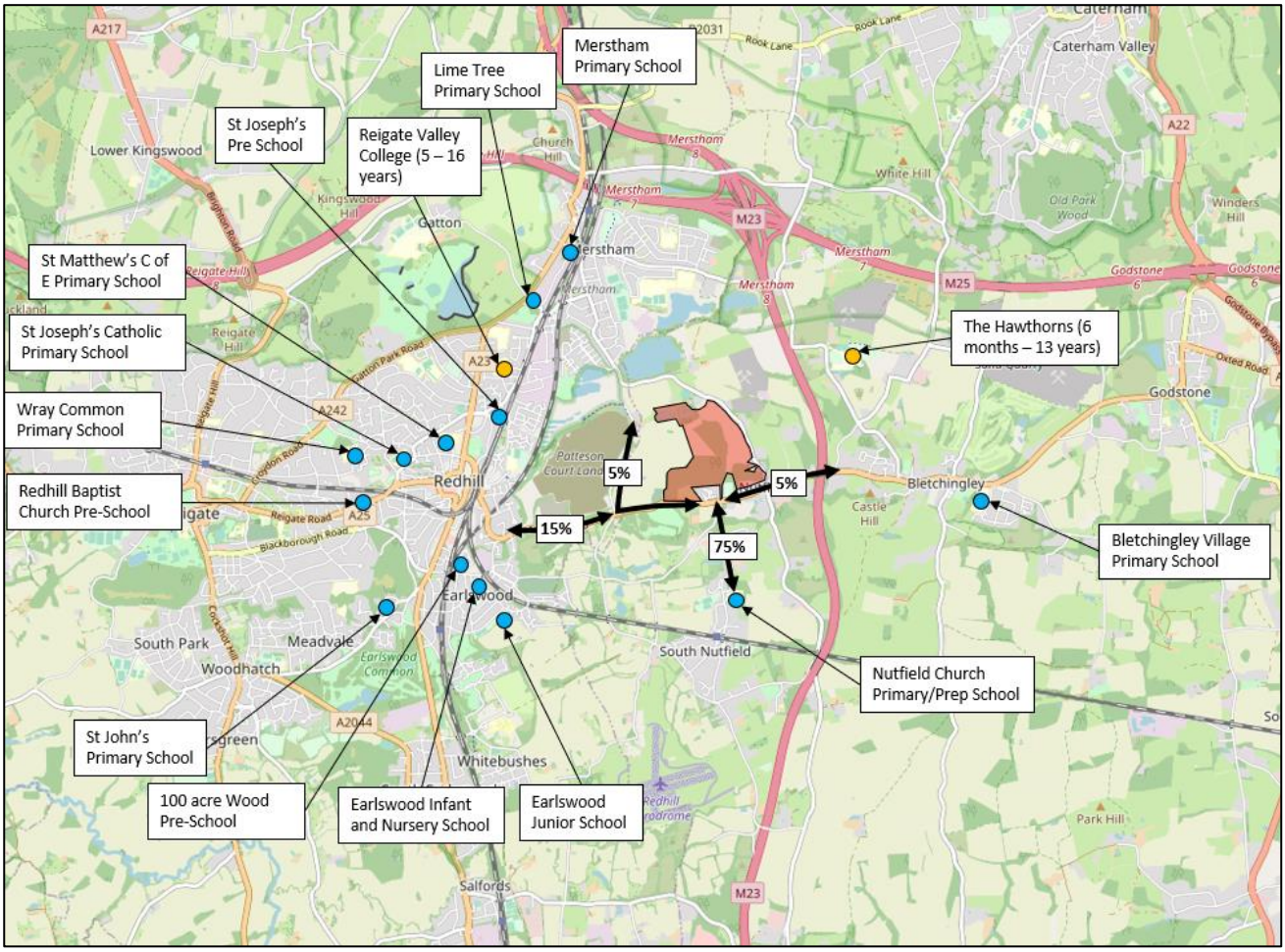
27. On this basis, a distribution has been applied to the local schools shown above in **Figure 1** as these are deemed to be the most likely education destinations the proposed development will utilise.

28. The distribution has been categorised into primary and secondary education.

29. **Figure 2** shows the primary education vehicle trip distribution we intend to use. As Nutfield Church Primary School is the closest to the site and is the only school within Nutfield itself, this destination has been given greater weighting. The other locations included allow for parental choice, use of private schools etc. The primary distribution onto the road network is as follows:

- East via A25 – 5%
- South via Mid Street – 75%
- West via A25 – 15%
- North via Cormongers Lane – 5%

Figure 2: Proposed Primary Education Distribution

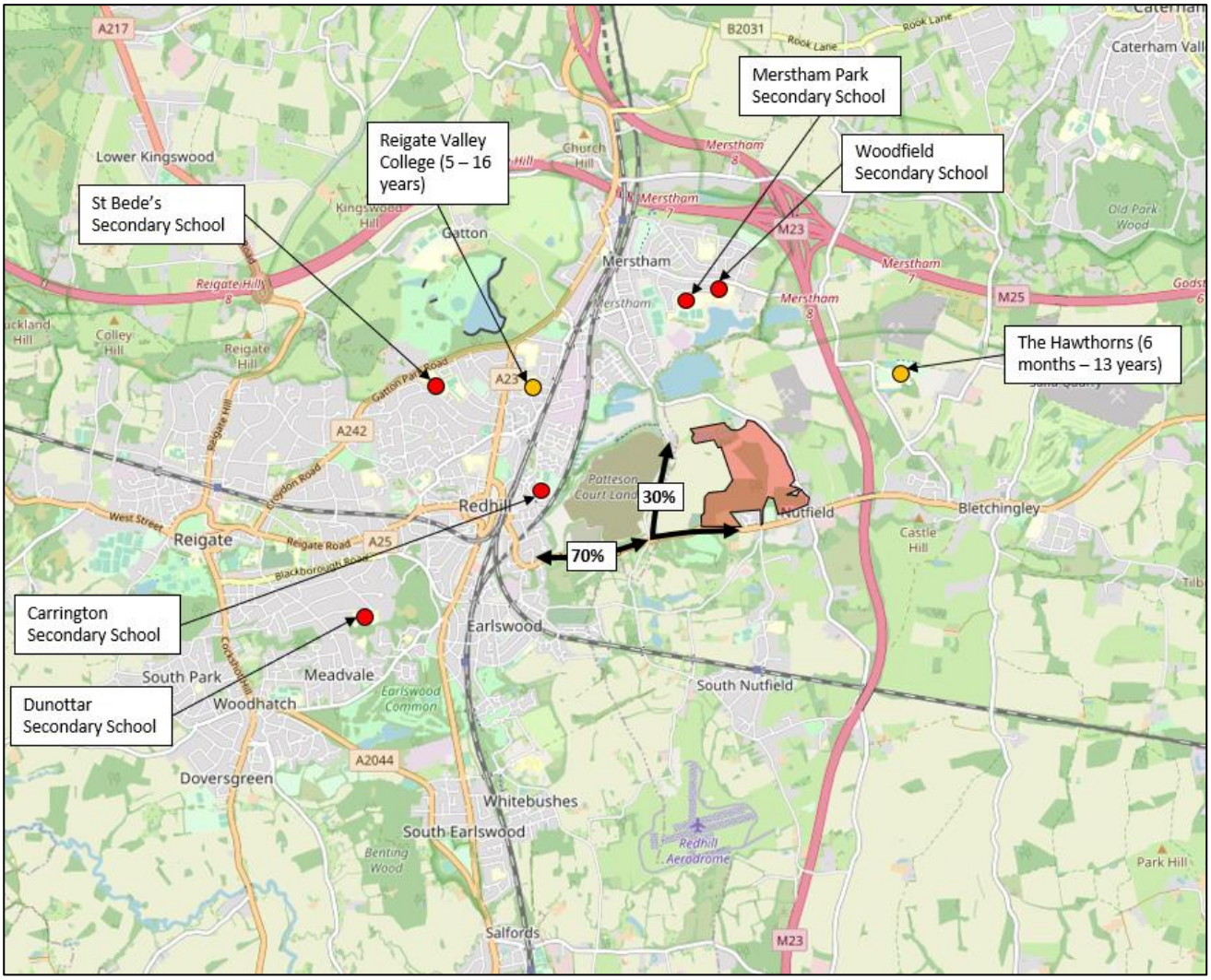


30. The proposed secondary education vehicle trip distribution is shown in **Figure 3**. This reflects that the majority of local secondary schools are located within Redhill and Merstham. The secondary distribution is as follows:

— East via A25 – 70%

— North via Cormongers Lane – 30%

Figure 3: Proposed Secondary Education Distribution



31. Vehicle journeys to/from the site will be assigned to the road network for each of these primary and secondary school destinations using the Google Maps journey planner tool based on typical peak hour traffic conditions. Vectos seek confirmation from SCC that this distribution is acceptable.

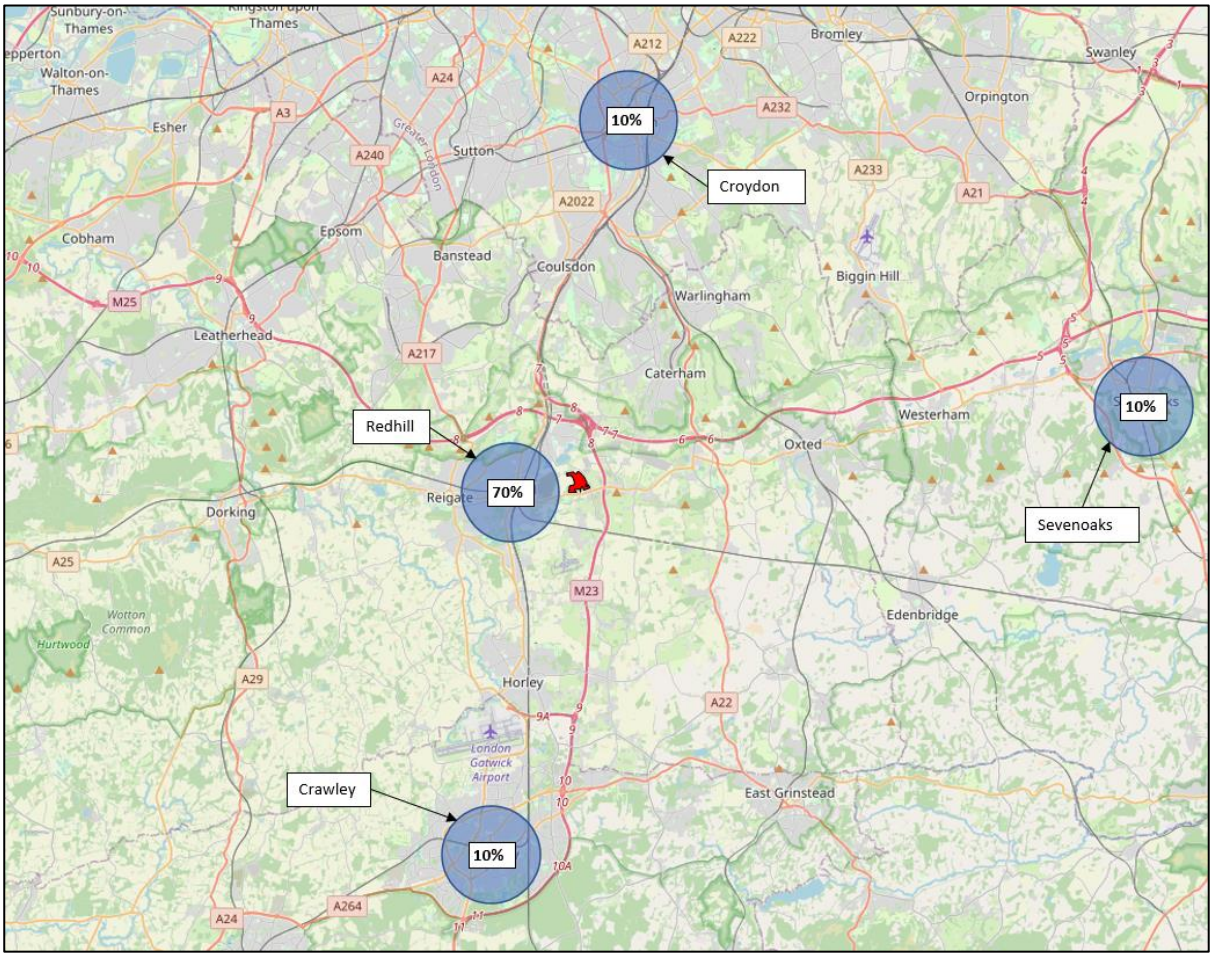
Other Journey Distribution

32. With regard to other journey purposes, once again SCC have requested a gravity model should be developed for a 40 minute peak hour drive catchment using against key urban areas from 2021 population census. As previously stated within this report, 'other journey purposes' comprises shopping, visiting friends, entertainment, sport activities and travel to holidays/day trips. Therefore, it is recommended that whilst highly populated areas have a factor to play in this, of greater prevalence is the provision of facilities and services.

33. On this basis, a desktop review of key destinations likely to be used by future residents of the site has been undertaken, with particular thought to vehicle trips as opposed to other modes. The key areas of Redhill, Croydon, Sevenoaks and Crawley have been identified.

34. Within the peak hours, it is deemed likely that other journey purposes will be largely attributed to Redhill as a key local centre within a 10 minute drive of the site. Therefore, 70% of these trips have been attributed to Redhill. 10% has been applied to the remaining three areas as key larger destinations within a 40-minute drive of the site. This is shown in **Figure 4**.

Figure 4: Proposed Other Journey Distribution



35. Vehicle journeys to/from the site will be assigned to the road network for each of these key destinations using the Google Maps journey planner tool based on typical peak hour traffic conditions. Vectos seek confirmation from SCC that this distribution is acceptable.

Sustainable Travel – Footway Along A25

Comment

36. *"The scoping note does not provide any detailed proposals to address the CHA's concerns regarding the sustainability of the site in transport terms, as previously raised in our consultation response to TA/21/1040.*

37. *The CHA advise that the following sustainability issues remain a key concern.*

— *In the vicinity of the site, there are limited facilities to encourage walking. The footway along the site frontage on the A25 is just over 1m wide and unlit. With fast moving traffic (including many large vehicles), walking along this footway is unpleasant, and does not feel safe especially for children, the elderly, and other vulnerable users."*

Response

38. The proposed footways at the site access will tie into existing footways along the A25. There is a limit to footway widening along the A25 due to established hedgerow growth and habitat. Furthermore, it is felt that there will be limited demand for pedestrian movements to the west of the site as this is primarily rural. For pedestrians wishing to route to the east, the existing footways along the A25 can be utilised. Alternatively, residents can make use of the internal footways provided within the site to head east into Nutfield. They can then use Park Works Road and PROW 568, both of which will be upgraded, to link to the A25 and in particular bus stops.

Sustainable Travel – Bus Stops Along A25

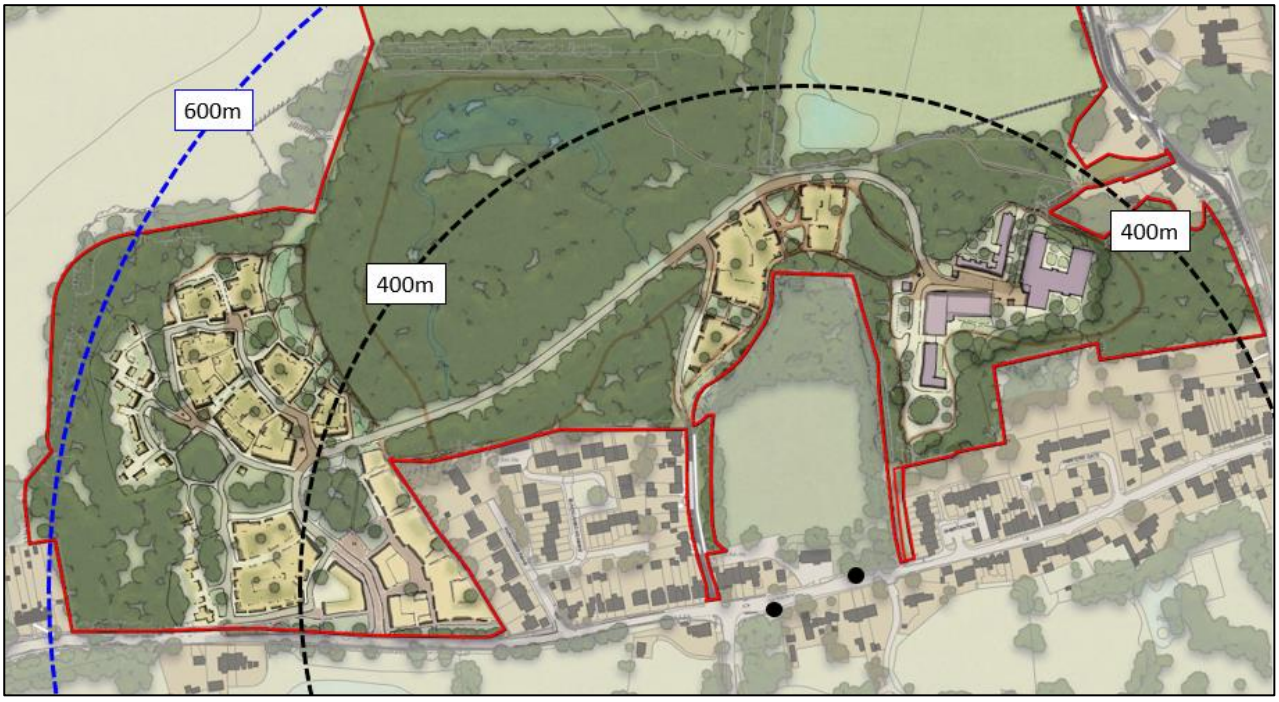
Comment

— *"The existing bus stops along the A25 are in excess of the SCC acceptable walk distance of 400m to stops. The infrequent and relative low level of services provided by buses means that future residents will not be able to rely on using public transport for essential trips (commuting/shopping etc) and instead have to rely on the private car."*

Response

39. The majority of the site's proposed areas of development are within 400m, or a 5-minute walk, of existing bus stops. Furthermore, all of the developable areas are within 600m, equating to a 7-minute walk, as shown in **Figure 5**. This is deemed an acceptable walk distance for a development of this nature within this rural locality.

Figure 5: 400m & 600m Walking Isochrones from Bus Stops



40. The bus stops on the A25 (referred to as the 'Memorial Hall' stops) allow for direct access to Redhill Bus Station within a 10 - 15 minute journey time via bus routes 315, 400 and 410. Redhill Bus Station is immediately adjacent to Redhill Railway Station which is deemed the most attractive nearby station for rail trips due to its wide range of destinations and good frequencies (ranging from 2 - 5 services per hour to each destination). Furthermore, Redhill Bus Station is located within the town centre of Redhill with a wealth of facilities, shops and leisure venues accessible within a 400m walking distance.

41. Whilst is it noted that bus services are not at a consistent frequency throughout the day, when considering the weekday peak travel times, **Table 4** shows there are 4 bus services available per hour between the Memorial Hall bus stops and Redhill Bus Station within the peak periods. This takes into account the most likely scenario that commuting/education/shopping trips generated by the proposed development require bus travel to Redhill in the AM peak period and require bus travel from Redhill in the PM peak period.

42. On this basis, it can be shown that the current bus services available will suitably cater for future residents and their needs.

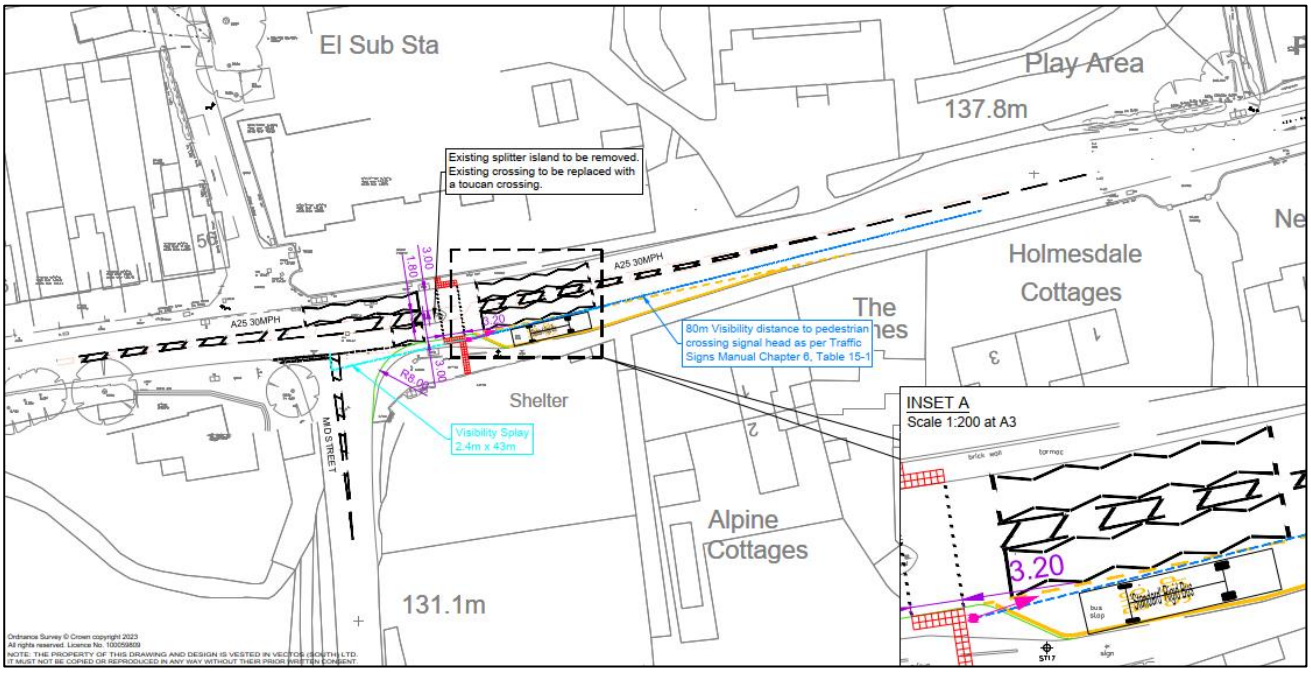
Table 4 – Bus Service Frequencies in the Peak Hours

Time Period	Bus Service Frequency (One-Way)			
	315	400	410	Total
AM Peak (To Redhill Station from Nutfield)	07:57	07:59	08:17 08:45	4 services
PM Peak (To Nutfield from Redhill Station)	17:15	17:56	17:15 17:45	4 services

43. Furthermore, to improve pedestrian access to the southern bus stop on the A25, a signalised pedestrian crossing is proposed over the A25, subject to SCC agreement. This would comprise a 3.2m wide crossing point with localised lane narrowing and shortening of the southern bus stop layby. This is illustrated in **Figure 6**, with the full design and associated swept path analysis of a rigid bus contained in **Appendix E**.

44. This crossing would also facilitate movements between the existing and new communities to the north of the A25 and facilities to the south, and in particular, the primary school.

Figure 6: Proposed Pedestrian Crossing over A25



45. In addition, the developer is exploring opportunities to upgrade the bus stops shelters themselves through installation of real-time information board and vegetation/debris clearance to enhance their attractiveness.

46. The developer is also exploring the opportunity for participation in SCC's Demand Responsive Transport (DRT) network. Through pre-application discussions with SCC, it has been advised that there is a potential to participate such networks in the future.

47. Access to a DRT service would offer residents an alternative to traditional public transport modes via a non-fixed bus service that responds to actual demand in the local area. The developer is keen to engage with the local authorities to actively promote any DRT services to future residents/visitors of the proposed development.

Sustainable Travel – Nutfield Railway Station

Comment

— *"The route to nearest railway station is undulating and steep in some areas, narrow along other sections, in particular, on Mid Street between the A25 and Sandy Lane. There is limited scope for improvement on some sections of this route due to the landscape and topography."*

Response

48. Nutfield Railway Station only provides local services between Tonbridge and Redhill. Redhill Railway Station provides a much more comprehensive list of services to destinations such as Gatwick Airport, Peterborough, Reading, Tonbridge, Horsham, London Victoria, Bedford and Reigate.

49. Rail services from Redhill Railway Station also operate frequently to each of these destinations with between 2 – 5 services per hour. On this basis, it is felt that the majority of residents of the site who wish to use rail, will be attracted to Redhill Railway Station which is deemed more attractive and can be reached directly by bus routes 315, 400 and 410 within 10-minutes, by car within 5-10 minutes, and by cycle ride within 10-15 minutes.

Sustainable Travel – Cycling

Comment

— *"Except for internal trips within the site, cycling does not seem to be a viable alternative option for future residents for most of their external trips. There is very limited scope to provide improvements to cycle routes between the site and the surrounding area."*

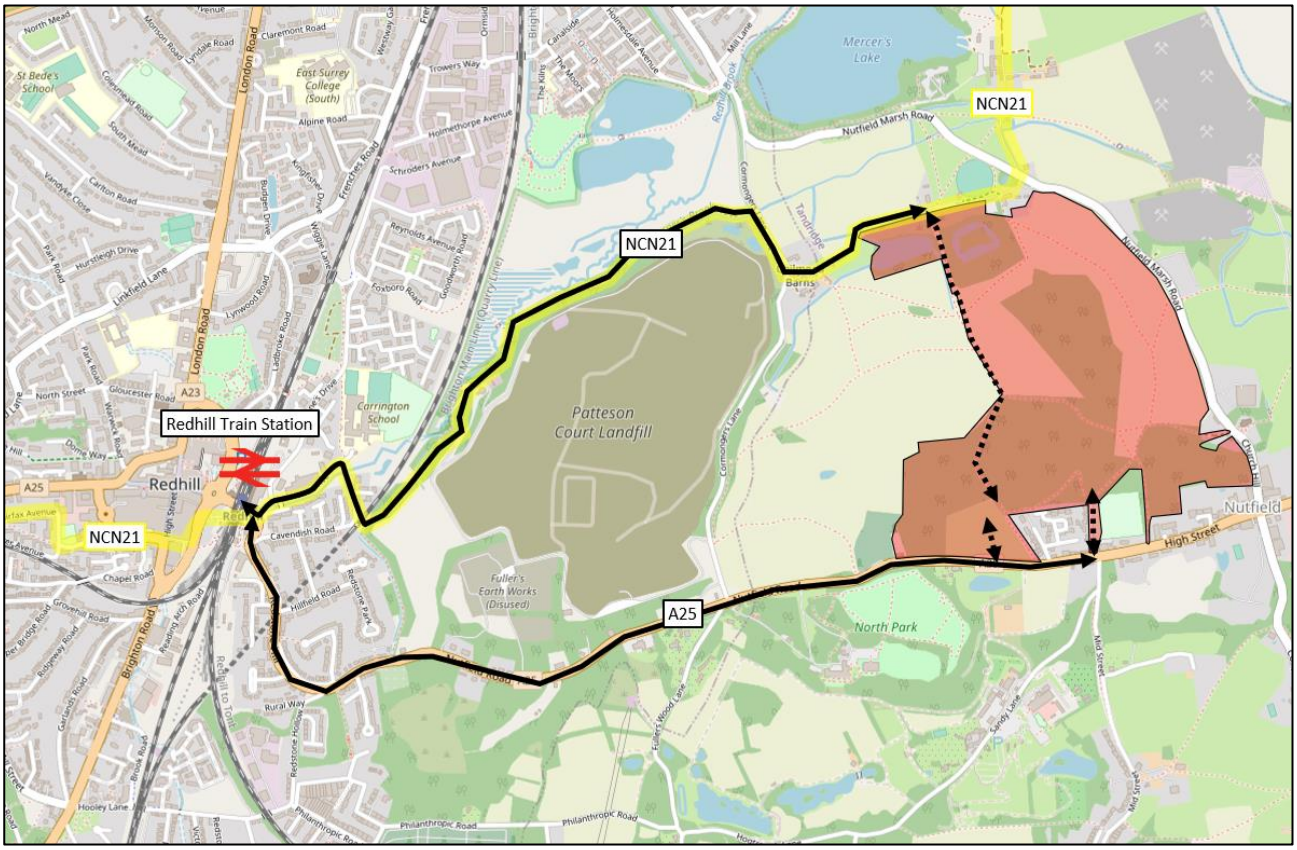
Response

50. The proposed site access will comprise a shared foot/cycleway which will offer a connection for cyclists onto the A25. Given the speed of traffic along the A25 and rural nature of the road, it is thought that mainly more experienced, confident, cyclists will use this on-road option as a direct route into Redhill Town Centre and train station.

51. Alternatively, a more relaxed, leisurely route is being explored to the north of the site, connecting to Chilmead Lane and National Cycle Network (NCN) 21. This connection would be provided via surface upgrades to PROW 192 and PROW 616 to allow for cycle access and a connection onto Chilmead Lane. From Chilmead Lane, cyclists can continue along NCN 21 routing west via off-road routes through Nutfield Marshes connecting to residential streets in Redhill and beyond.

52. The distance to Redhill Railway Station/town centre via these routes is circa 3.5km (13 minutes) via NCN 21, and 2.6km (10 minutes) via the A25. This is shown in **Figure 7**.

Figure 7: Cycling Connections



Other matters

53. Additional matters set out within the highways response are addressed below:

- **Pedestrian/Cycle Access** - A 3.0m wide shared footway/cycleway will extend into the site and public footpaths within the site will be upgraded and provided with a suitable width and surface for walking and cycling where appropriate.

- **Turning** – The latest junction design contained in **Appendix C** shows a large waste collection vehicle (the maximum expected vehicle) can enter and exit the site in forward gear. There is ample space within the site for this vehicle to turn.

- **Parking** - Parking provision will be provided accordance with Tandridge District Council's parking standards. The developer will seek to provide 1 fast charge socket per dwelling (including the later living dwellings) and fast charging sockets for 50% of spaces associated with the car home, including for visitor spaces (subject to electricity supply).

- **Construction Transport Management Plan** - a detailed Construction Transport Management Plan will be produced and secured by condition

- **Cycle Parking** – Cycle parking provision will be provided accordance with Tandridge District Council's parking standards. For the residential dwellings, the developer will seek to provide a power socket for cycle spaces (be this within garages or dedicated cycle stores) to enable the charging of electric bikes (subject to electricity supply).

- **Study Area** -The following junctions will be included within the impact assessment of the proposed development on the road network:- Proposed Site Access, A25/Park Works Road, A25/Mid Street, A25/Church Hill/Coopers Hill Road, A25/Noke Dr Signals and A23/A25 Roundabout.

Next Steps

54. Vectos are requesting a second pre-application with SCC to agree the principles set out within this response note.