

SLR Consulting Limited

Nutfield Green Park Developments Ltd

Nutfield Green Park

SLR Project No.: 425.065470.00001

19 December 2024

Revision: 00

RE: COMPREHENSIVE TRANSPORT UPDATE

1.0 Introduction

- 1.1 This note relates to Planning Application Ref 2023/1281 for a residential led mixed use development submitted by Nutfield Park Developments Ltd (NPDL) on the 20th of October 2023.
- 1.2 There are two purposes to this note. The first is to directly address the comments raised in Surrey County Council's ('SCC's') latest response to the application, dated November 18th. The second is to address what might be considered as the residual outstanding concerns raised by SCC on the sustainable transport provision and highway capacity issues, through their various consultation responses.

2.0 Updated Bus Proposal

- 2.1 On November 18, SCC wrote to Tandridge District Council setting out their response on the proposal to provide and fund an electric bus service to and from the site – as set out in the applicant's document "Nutfield Green Park – Proposals for Electric Bus Provision" submitted on 5 November 2024. A key element of the response was as follows:

"The CHA has concluded that the proposed commitments submitted by the applicant in their latest submission do not represent a sufficiently robust set of mechanisms in order to provide sufficient guarantee that the proposed bus service would or could be provided in perpetuity by the proposed development."

- 2.2 It therefore remains the case that the CHA (SCC) is supportive of the principle of providing a dedicated bus service and this is welcomed by the Applicant. This is further supported by SCC's response of October 2024 which states, when referring to the bus service:

"This would represent a significant improvement over the sustainable transport provision originally included in the application and could, if it were realistic, potentially provide sufficient sustainable transport connectivity to support the proposed development and reduce car dependency thereby minimising the impact on highway capacity"



2.3 The area that is in dispute is over the costs of provision of the service, the likely revenue (from different sources) and hence the fund that is required to cover the shortfall. These are matters that are commonly and more properly resolved during detailed section 106 negotiations between a committee resolution to grant planning consent and the final grant of consent. We see no reason why the same procedure cannot be followed here. During any such negotiations it will be entirely in the gift of SCC to agree or not agree to figures presented and without their agreement planning permission will not be granted.

2.4 The key principles that are agreed between the parties (and would be reflected in the S106 mechanism) are that:

- The Brookfield Trust (Trust) agree to provide the e-bus service from the early stages of occupation of development and to provide the service for the lifetime of the development.
- The Trust agree to provide a suitable fund ('Fund') to guarantee the funding of the service for the lifetime of the development. The exact value of this Fund and how it will be provided will be as agreed with SCC. No upper limit is currently being placed by the Trust on the Fund.
- A review mechanism will be introduced to monitor and adjust the Fund based on experience of operating the bus service, but any changes can only be implemented with the agreement of SCC.

2.5 This follows the principles established within other planning permissions and S106 agreements granted within Surrey such as, for example, the Dunsfold Park scheme.

2.6 In terms of the values for costs and revenue issued to you, these were for illustrative purposes. We note SCC's helpful comments. Whilst we may not agree with all the points made, in order to move matters forward and demonstrate that our client is flexible and will adjust the amount to give a Fund which is reasonably anticipated to meet the anticipated shortfall, a further illustration is provided below.

2.7 On the basis of the above, we do not consider it reasonable for the SCC to maintain its objection. We have fully addressed the concerns raised and have given assurances that a suitable Fund will be put in place at a value to be agreed with SCC. We have backed this up with a revised illustration seeking to address SCC's comments. But to be clear, if SCC disagree with the revised assumptions, that is not sufficient reason to continue to object, since our client has committed to follow the approach taken at Dunsfold and to provide a Fund which will cover the reasonably anticipated shortfall.

2.8 The revised illustrative bus proposal is shown below:

2.9 **Bus Costs:** Attached to this note at **Appendix A** is a proposal from GM Coachworks giving the costs of provision of the buses at £136,100.

2.10 We have assumed the same depreciation as suggested by SCC i.e. over a 10-year period.



2.11 On operating costs, it is important to remember when comparing the proposals here with other cost evidence, that two buses will only be operating in the peak periods except in exceptional circumstances. Outside these hours, only one bus is likely to be required with the second bus being on standby in case of break down or exceptional demand. Furthermore, electricity costs are lower than diesel operating costs.

2.12 In terms of bus operating costs these are set out in **Table 2.1** below.

Table 2.1: Bus Operating Costs

| COSTS | | BREAKDOWN | GROSS | ANNUAL COST |
|---|--------------------------------------|---------------------|--|--------------------|
| 2 no E-buses | Purchase Price | | £131,600 (Depreciation 10% per annum) | £13,160 |
| Capital Finance Costs | | 5% | £6,580 per annum | £6,580 |
| Maintenance and Tyres | | £3,000 ea | £6,000 per annum | £6,000 |
| Electricity | 90/kw – 250 miles (40 miles per day) | 14.4 kw/ea/d | £0.32 per kw/hr | £3,363.84 |
| Road Tax and Insurance | | £1,200 ea/per year | £1,200 | £2,400 |
| Van Drivers (3no) | Basic Salary | £35,000 ea/per year | £51,450 (inc NI, insurance, holiday & training) per annum x3 | £154,350 |
| <i>Sub Total</i> | | | | £185,853.84 |
| <i>Gross</i> | | | | £185,853.84 |
| Less Part Time Park Keeper Contribution | | | | -£25,725 |
| Gross Costs for 2 Vehicles | | | | £160,128.84 |
| Contingency (20%) | | | | £32,025.77 |
| Total Costs for 2 Buses | | | | £192,154.61 |

2.13 Hence the bus costs are estimated £160K per annum. However, to reflect the planning stage of the proposals and in order to be robust we have added a 20% contingency to give an annual operating cost of £192K which we have rounded to **£195K per annum**.

2.14 Turning to revenue, in our email response to SCC of 30 August 2024, we used a bus mode share of 10% as an illustration of the effect it would have on highway capacity. SCC have queried this figure. In order to be robust, we have assumed a lower, 6% bus mode share and have also assumed that this is split 50/50 between the existing bus services and the e-bus services. This is a very conservative assumption given that the e-bus will travel from the heart of the site and provide a high frequency and targeted service.

2.15 This leads to 7 bus trips in the AM Peak hour and 5 in the PM Peak hour. Doubling this to cover the 4 hours that the peak services will be operating leads to 24 trips per day. Over 5 days per week and 50 weeks per year leads to 6,000 trips per year.



2.16 Off peak trips are inevitably more of a judgement at this stage but will include organised trips from the Care Home as well as use by residents. Trips can be targeted to go where people wish to go rather than a fixed route and timetable. It will also include Care Home and other site staff. For this illustration, we have assumed 15 trips IN and 15 trips OUT from the site each day i.e. 30 trips per day. Using a 6-day week and 50-week year leads to 9,000 trips per year.

2.17 Hence there would be a total of $6,000 + 9,000 = 15,000$ trips per annum

2.18 On fares, at a £3 fare per trip this leads to a revenue of **£45K per annum**.

2.19 Hence, the operating deficit is: £195K (cost) - £45K (revenue) = **£150K per annum**.

2.20 To cover this shortfall, the owner proposes to cross subsidise with income from rental of commercial buildings on the site. This is reasonable and is similar to the agreed approach taken at Dunsfold where the commercial property was seen as part of the guarantee of bus funding in perpetuity.

2.21 The Trust estimates income derived from rental of commercial buildings on the site at £90K per annum.

2.22 Note that at the request of SCC, the Trust is no longer assuming income from service charges although such charges may well be forthcoming.

2.23 Hence the residual shortfall on bus operations would be £150K - £90K = **£60K shortfall**.

2.24 This sum would be covered by an escrow account set up by the client and robustly secured through the S106 Agreement. For illustrative purposes, it is assumed that the Escrow is set at £4M. At a 2.5% above inflation interest rate, this would yield a net interest of **£100K per annum**.

2.25 It can therefore be seen that based on this illustration, there would be ample funds to cover the bus costs for the lifetime of the development. This would therefore allow for variations in costs, revenue, rental income etc.

2.26 Note this also illustrates that if there were any small shortfall in the e-bike operating costs vs revenue this would be covered by the Escrow account (see below).

2.27 To further emphasise, the above is an illustration/worked example. The headline commitment is that the Owner will provide the necessary funds to cover the reasonable agreed estimate of the shortfall.



3.0 Other Sustainable Transport Initiatives

3.1 This section of the note covers the other sustainable transport. It deals with specific concerns raised by SCC in their various responses.

3.2 In their response of 18 November, SCC, when commenting on “other measures” state that:

“these do represent beneficial measures however the collective package of deliverable measures proposed do not adequately mitigate the impacts of the development and do not represent sufficient active travel infrastructure to support the proposed development, as concluded in our previous comments”

3.3 Based on the meeting held between SLR and SCC on 23 October, we understood that if sufficient assurances can be given on the e-bus proposal then this was likely to alter the position of the authority such that the collective package of measures would be considered sufficient.

3.4 This is further supported by SCC’s response of October 2024 which states, when referring to the bus service:

“This would represent a significant improvement over the sustainable transport provision originally included in the application and could, if it were realistic, potentially provide sufficient sustainable transport connectivity to support the proposed development and reduce car dependency thereby minimising the impact on highway capacity”

3.5 SCC’s 18th of November response goes on to state:

“The additional information from the Applicant does not include any additional or updated mitigation measures to address the issues raised by the CHA concerning these proposals.”

3.6 No updates were included in our response of 5 November as this response dealt specifically with the bus service component of the proposals. In SCC’s response of 6 June, four issues were raised (in summary) as follows:

1. Further information on bus service improvements
2. Further information concerning the proposed electric bike scheme, including lifetime of scheme
3. Updated modelling scenarios to reflect sustainability improvements
4. Supporting evidence to allow a detailed review of modelling.

3.7 Item 1 is covered above, with Items 2-4 covered below. In order to address the possibility of any outstanding concerns, the paragraphs below also summarise the sustainable transport offer.



4.0 Existing Bus Services

4.1 Existing bus services serve the site. Access to the westbound bus stops will be enhanced by the introduction of a Puffin crossing over the A25 and new footpath to the Cemetery bus stop. All areas of the development will be within 500m of an eastbound and westbound bus stop with the majority of the development within 400m. The access points to the site itself (the criteria used by SCC elsewhere) are all within 400m of a bus stop.

4.2 In combination, the existing and e-bus services will provide the following peak hour frequencies.

Table 4.1: Proposed Electric Minibus Frequency

| STATUS | OPERATOR | SERVICE | AVERAGE FREQUENCY (PER HOUR) | | | |
|--------------|------------------|---------|------------------------------|----------------------------------|-----------------------------------|--|
| | | | To Redhill (06:00-09:00) | From Redhill (16:00-19:00) | To Redhill (During the Day) | From Redhill (During the Day) |
| Existing | Metrobus | 400 | 1 | 1 | 1 | 1 |
| | | 410 | 2 | 2 | 2 | 2 |
| | Cruisers | 315 | <1 | <1 | 0 | 0 |
| Proposed | Electric Minibus | | 4 | 4 | 4 | 4 |
| TOTAL | | | 7 | 7 | 7 | 7 |

4.3 The combination of existing bus services and the proposed electric minibus means that future site users will have access to a bus service into Redhill (in the AM) and back to the site (in the PM) at an average frequency of every 9-minutes. The maximum gap between services is 15-minutes. This is an excellent level of bus service. At off peak periods the e-bus can be flexible, so it is used to serve a wide range of destinations.

5.0 Electric Bike Scheme

5.1 The SCC response of 6 June requests specific details on the lifetime of the bike scheme which is covered below. The response of October 2024 refers to the lack of suitable cycle connections. This topic is covered later in this note but is not a direct comment on the cycle scheme but rather on its effectiveness.

5.2 A pool of 20 electric bikes will be provided at one or more secure and covered locations within the Site. It is likely that the e-bikes will be geo-fenced to provide good control of where the bikes are used. There are bike stands available at Redhill station.

5.3 It is proposed that the key principles of the bike scheme are set out in the S106 Agreement with a commitment to provide a detailed Cycle Management Strategy prior to first occupation.



- 5.4 The first year of use of the bikes will be free for residents. Subsequently, a charge will be made which will cover the ongoing maintenance and renewal costs.
- 5.5 The bike scheme will be provided for the lifetime of the development, subject to a review mechanism and secured through the S106 Agreement.
- 5.6 The cost of provision of the e-bike scheme is estimated at £37K with ongoing maintenance costs of circa £5K per annum. If there is any shortfall between ongoing maintenance costs and income this will be underwritten by the owner through the Escrow account set up to cover the e-bus service.

6.0 Cycle Route Enhancements

- 6.1 The applicant has invested significant resource into exploring the potential to enhance the Sustrans 21 Route. A summary of the proposals are contained in the report at **Appendix B** with the detailed study by Land and Water into the works required included at **Appendix C**. The conclusions from the report are that significant enhancements can be made to the route. This primarily involves resolving drainage issues and providing appropriate surfacing along the route. The scheme has been fully costed and will be provided in full by the applicant.
- 6.2 This is a major benefit to the area and will assist new and existing residents of and visitors to the area. It is supported by Sustrans as evidenced at **Appendix D**. It will provide an appropriately surfaced traffic free or lightly trafficked route to Redhill and Rehill station with the journey taking some 15 mins. This will be ideal for use by the e-bikes to be provided on site. Lighting of the route remains an option subject to further exploration.

7.0 Other Walking and Safety Enhancements

- 7.1 The other walking and safety enhancements offered by the scheme are (in summary):
 - Introduction of new Puffin style pedestrian crossings to the east of Mid Street/A25 junction and west of Church Hill/A25 junction.
 - Enhanced walking routes on site including improvements to FP616 and 192.
 - Extension of 30MPH speed reduction to site entrance – thus reducing speeds as vehicles enter the village from the west.
- 7.2 It is particularly noteworthy that the Puffin crossing to the east of the Mid Street junction will enhance connections between the site, Nutfield and South Nutfield, assisting existing and new residents.

8.0 Highway Capacity

- 8.1 In their response of 6 June SCC requested additional data to allow them to undertake an audit of the highway capacity modelling. This was provided and no further comments have



been received on the technical aspects of the modelling and it is therefore assumed that this is agreed. The outstanding issue is whether the level of impact is acceptable.

- 8.2 The residual concerns of SCC are set out in their October response.
- 8.3 Of all the junctions and scenarios assessed, SCC's residual concern is only at 3 junction arms:
 - Mid Street Junction: One arm in one peak hour
 - Church Hill Junction: Two arms in one peak hour
- 8.4 SCC focus is on the situation in 2029 i.e. with general traffic growth in addition to committed developments. It is the applicant's contention that the transport effects of any development should be assessed without this additional growth (which comes from uncommitted developments). What SCC are effectively saying is that due to the impact of traffic from developments without any planning permission that may or may not come forward at some point before 2029, this application should be refused.

Mid Street Junction

- 8.5 Dealing with Mid-Street in the Base + Committed + Proposed Development scenario with no modal shift, all Ratio of Flow (RFC) are below 0.85 except one which is 0.86. With modal shift this reduces to 0.85.
- 8.6 With growth added to 2029, this increases to 0.92 compared with 0.86 without development. This leads to an increase in queue of 2 vehicles which will have an immaterial impact on the performance of the highway network. The RFC reduces to 0.9 with modal shift.

Church Hill Junction

- 8.7 On the Coopers Hill Arm in the Base + Committed + Proposed Development scenario with no modal shift, the RFC is 0.86. With modal shift this reduces to 0.85.
- 8.8 With growth added the RFC increases to 0.95 but with a queue increase of less than one vehicle when compared with the no development scenario – in effect no increase.
- 8.9 On the Church Hill Arm, in the Base + Committed + Proposed Development scenario with no modal shift, the RFC is 0.88 with the queue increase compared with the scenario without development being 0.2 vehicles i.e. effectively no increase, and all queues are less than 2 vehicles.
- 8.10 With growth added The RFC is 0.96 with development but only an increase of 0.3 vehicles in queue compared with the scenario without development. Again, all queue lengths are less than 2 vehicles.
- 8.11 SCC's justification for concluding that this impact is severe is as follows:



“Whilst a numerical difference between these RFC values may appear small in abstract, the reality is that an RFC changing from 0.86 to 0.92 actually represents a potentially significant change in the performance of the junction. While an RFC of 1 represents the total maximum theoretical capacity of a junction, any RFC over 0.85 represents a junction without any resilience to continue operating when vehicle flows on the network fluctuate. Any further loss of capacity over that 0.85 threshold therefore represent a significant loss in the resilience of the highway network.”

- 8.12 The response goes on to suggest that this would have knock on effects on capacity and safety on the network due to increased queue times.
- 8.13 There is no evidence or policy position to support this stance taken by SCC. To determine that the change in RFC represents a potentially significant change one would need to look at the effect on queueing. It is difficult to see that an increase in queue of 2 vehicles on Mid-Street (less in all other cases) would lead to significant changes at that junction or on the wider network.
- 8.14 SCC also suggest that *“any RFC over 0.85 represents a junction without any resilience to continue operating when vehicle flows fluctuate”*. Again, there is no evidence or policy position to support this approach. The 0.85 is a design criteria that allows for a factor of safety and resilience. If this is exceeded, then the resilience may reduce to a small degree but would not suddenly become a junction “without any resilience”. We do not consider that such minor changes in the resilience could be concluded to be a severe impact.
- 8.15 The above impacts lead SCC to conclude that the proposed development would lead to severe cumulative impacts on the road network (based on paragraph 115 on NPPF).
- 8.16 Since October, the December 2024 Revision of NPPF has been published. Paragraph 115 is replaced by Paragraph 116 which states:

“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, following mitigation, would be severe, taking into account all reasonable future scenarios.”

- 8.17 The glossary describes “all reasonable future scenarios” as:

“a range of realistic transport scenarios tested in agreement with the local planning authority and other relevant bodies (including statutory consultees where appropriate) to assess potential impacts and determine the optimum transport infrastructure required to mitigate and adverse impacts, promote sustainable modes of travel and realise the vision for the site”
- 8.18 Hence, the approach is positively rather than negatively couched i.e. determine the optimum transport infrastructure required to mitigate impacts, promote sustainable modes of travel and realise the vision for the site. This is the approach taken by the applicant where sustainable solutions have been promoted rather than highway capacity enhancements.



8.19 We do not believe a Vision Led approach, as set out in NPPF, would support refusal of an application based on the very minor effect on the road network that have been demonstrated here.

9.0 Conclusion

9.1 In summarising the position on transport in relation to this application it is appropriate to test the proposals against the guidance set out in the December 2024 version of NPPF.

9.2 Paragraph 109 of the NPPF sets out that the overall approach to plan making and development proposals should be vision led. This is very much the approach taken by the applicant at Nutfield with a long-term investment for the site and a strong desire to make the site sustainable in all respects.

9.3 Para 110 states that development should be at locations that are or can be made sustainable thus emphasising that investment in sustainable transport measures, such as those proposed at Nutfield, can make a real difference to a site. The paragraph goes on to state that there should be a genuine choice of travel modes. There is no obligation to use a particular mode – but a choice should be available. At Nutfield, the existing and proposed bus services along with the cycle route enhancements and e-bike pool provision provide this genuine choice to residents and visitors.

9.4 This paragraph also highlights that “*opportunities to maximise sustainable transport will vary between urban and rural areas.*” Hence, when judging if sufficient and appropriate sustainable transport provision has been made, the location of Nutfield in a relatively rural area needs to be taken into account.

9.5 Turning to paragraph 115, the analysis of Nutfield against the guidance is as follows:

- a) “*Sustainable modes are prioritised taking account of the vision for the site, the type of development and its location*”. At Nutfield sustainable modes have been at the forefront of the vision for the site;
- b) “*Safe and suitable access to the site can be achieved for all users*”. This is provided for the site and is not in dispute;
- c) “*The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including national guidance, including the national Design Guide and National Model Design Code*”. The detailed street design will follow at Reserved matters stage.
- d) “*Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision led approach*”. Again, there is a reference to the vision led approach which has been a guiding principle at Nutfield. The potential



impacts from the development, already minor, have been further mitigated by the provision of significant sustainable transport enhancements.

9.6 Paragraph 116 deals with the residual impacts of the development which have been covered in the paragraphs above.

9.7 Paragraph 117 gives further guidance on what is expected of developments as follows:

- a) *“Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use”.* The Nutfield scheme has taken this approach by delivering active travel improvements (including new crossings of the A25) rather than highway capacity enhancements. High quality public transport has been provided which goes beyond what one might expect in an area such as this.
- b) *“Address the needs of people with disabilities and reduced mobility in relation to all modes of transport”.* The site is designed to be DDA compliant and one of the e-buses to be provided will have specific facilities for wheelchair bound users.
- c) *“Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards.”* This has been achieved at Nutfield albeit the application is in outline. SCC have raised no issues with the site layout.
- d) *“Allow for the efficient delivery of goods, and access by service and emergency vehicles”.* This is not in dispute.
- e) *“Be designed to enable charging of plug-in and other low emission vehicles in safe, accessible and convenient locations”.* All residential properties will have charging facilities as will commercial areas.

9.8 In summary, it is considered that the proposals are fully compliant with the policy guidance within the NPPF for the following reasons.

- A vision led approach has been taken;
- The emphasis has been on provision of sustainable modes rather than highway capacity enhancements;
- Significant enhancements to the walking and cycling infrastructure will be provided, including upgrading existing routes through the site and improving the Sustrans 21 route towards Redhill;
- An e-bike pool will be provided on site, available to all residents;
- As well as the existing bus services available to the site, a bespoke e-bus scheme has been developed and will be provided with guaranteed funding at a level to be agreed with SCC for the lifetime of the development;



- Safety enhancements will be provided through extending the speed limit and introducing two new controlled pedestrian crossings which will enhance connectivity between South Nutfield and Nutfield;
- There are only minor residual impacts on the highway network with minimal changes in queueing. These impacts are further reduced if the sustainable transport improvements are factored in (as recommended in NPPF). These impacts cannot be characterised as severe; and
- We do not believe a Vision Led approach, as set out in NPPF, would support refusal of an application based on the very minor effect on the road network that have been demonstrated in the analysis.



Appendix A GM Bus Cost Letter

Comprehensive Transport Update

Nutfield Green Park

Nutfield Green Park Developments Ltd

SLR Project No.: 425.065470.00001

19 December 2024



The Brookmead Trust

c/p Mattioli & Woods

1 New Walk

Leicester

LE1 6PU

To whom it may

concern

14th December 2024

1

Ref; Nutfield Green Park Nutfield Surrey – Provision of 2nr Electric Minibuses

Dear Sir/madam

We write to confirm our position as one of the Uks leading providers of Minibuses to Schools, Developers, and Institutions in the UK.

We have provided The Brookmead Trust/Nutfield Park Developments Limited an offer to supply and implement 2 Electric Minibuses (one with wheelchair access giving 13 seats), and one with 16 seats and fully support the strategy of this development which we believe aligns with the emerging EV market in the UK.

The cost of supplying these vehicles is £65,550+vat for the 16-seater and £70,550+vat for the 13-seater with wheelchair lift.

GM is an accredited converter for all the leading commercial vehicle manufacturers including IVECO Ford, Peugeot, Renault, Vauxhall, and Volkswagen.

We are proud to be ISO9001 accredited and equally proud to have achieved ISO 14001 status reflecting our dedication to minimising our environmental impact.

GM Minibus offers a full mobile service facility which includes the following:

- Fully equipped mobile service vehicles
- Factory trained engineers
- 6 monthly service and appraisal
- 12 monthly service and weight test
- Full inspection report and weight certificate
- Automatic service reminder
- We are committed to promoting and enabling sustainable change to our environment.



As part of our plans, we recognise Climate Group www.theclimategroup.org/about-usrepresents

Climate Group represents 28 leading UK businesses, including BT Openreach, LeasePlan and Royal Mail through the UK Electric Fleets Coalition

Sandra Roling, Director of Transport at Climate Group said:

“Market uptake of electric vans must accelerate. The businesses we work with are keen to buy the vehicles, but they can’t get them in the number and specifications they need.”

“An ambitious ZEV mandate is one of the most important measures the UK Government can introduce to rapidly increase market supply, alongside continued investment in charging infrastructure across the country”.

An important factor and benefit, also, is the availability of grants from HM Government.

“Operators of vehicles that hold a zero emission bus certificate may be eligible for a 22p per kilometre rate of BSOG for those vehicles. Eligible buses must: meet the normal BSOG rules. demonstrate zero tailpipe emissions.”

In respect of running costs, charging an electric minibus overnight is estimated to cost £8.35 to fully charge a flat battery, versus £22.00 on diesel to cover 100 miles.

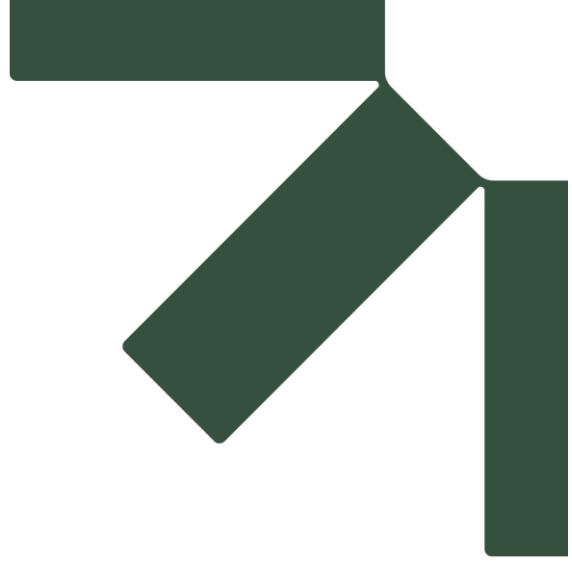
We trust the foregoing is supportive of your plans and we look forward to working with you

Yours faithfully

Stephen Murphy

Sales Director

GM Coachwork Ltd



Appendix B Sustrans Route Upgrade Report

Comprehensive Transport Update

Nutfield Green Park

Nutfield Green Park Developments Ltd

SLR Project No.: 425.065470.00001

19 December 2024

To

**Surrey County Council
Tandridge District Council**

For

Sustrans 21 Cycle Route; Active Travel Plan and Contextual Contribution

At

**Nutfield Green Park
Nutfield
Surrey**

By

The Brookmead Trust

Nutfield Park Developments Limited

Index

1. Overview, Structure, and Objectives

- 1.1 Overview – Integrated Sustainable Travel Plan
- 1.2 Sustrans 21 – Background
- 1.3 Sustrans 21 - Condition

2. Context and Beneficial Linkages

- 2.1 Sustrans 21 – Regional Context
- 2.2 Direct Linkages with Nutfield Green Park
- 2.3 Local Context and the proposed Toucan Crossing to South Nutfield

3. Restoration

- 3.1 Restoration Strategy
- 3.2 Stakeholder Support
- 3.3 Commercial Deliverability

4. Conclusion

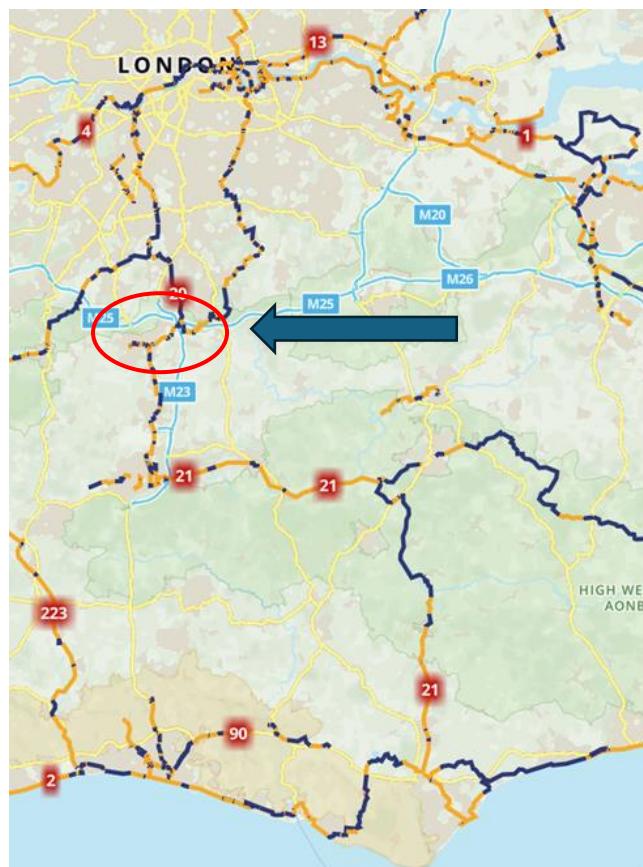


Figure 1. Sustrans 21 National Cycle Way

1. Overview, Structure and Objectives

1.1 Overview - Integrated, Sustainable, Active Travel Plan

The land known as Nutfield Green Park is currently the subject of a planning application submitted October 2023, to Tandridge District Council (ref 2023/1281) for the development of 166 houses, both private and affordable, 41 retirement apartments, a 70-bed care home, and a medical centre providing a dental surgery, pharmacy, and a MRI centre for the screening of cancer and other imaging requirements.

This paper addresses the role played by the restoration of Sustrans 21 and its new connection to a new network of multi-use paths and cycleways through Nutfield Green Park for use by the residents of the proposed development and the co-joined settlements of Nutfield and South Nutfield.

The new cycleways and restoration works seek to contribute to a wider plan to connect Nutfield, South Nutfield and Nutfield Marsh to Redhill using Non-Car transport and taking pedestrians and road users off the A25.

The Key parties are; -

Owner of the site is the Brookmead Trust.

The Trust is managed by Professional Trustees, Mattioli & Woods LLP

The developer of the project is Nutfield Park developments Limited

Unlike "conventional developments" the application site at Nutfield is being retained by the landowner (a Registered Trust) and its trading vehicle Nutfield Park Developments Ltd (NPDL). As such the operation of the remainder of the site, and the maintenance and improvement of the open space and communal areas and the governance of the Sustainable Active Travel Plan are secured in perpetuity, with the control of the Estate Management Company retained by the Trust and supported by a Unilateral Undertaking.

1.2 Sustrans 21 - Background

Sustrans 21 is part of the designated national cycleway network and connects Central London to Eastbourne on the south coast, passing through Redhill and along the northern boundary of Nutfield Green Park. Locally the route provides direct connectivity to Redhill with bridges over the London/Brighton mainline railway to Redhill Station and Redhill town centre.

The section of Sustrans 21 between The Inn on the Pond Public House at Nutfield Marsh and the railway bridge at Cavendish Rd, Redhill is approximately 2507 lin m (1.55 miles) in length.

Generally, the eastern section from the public house to Cormongers Lane is on a tarmacadam road (Chilmead Lane) which services a small number of dwellings and has very low traffic demands. This section is 755 lin m in length and requires little maintenance or upgrade.

The western section of Sustrans 21 from Cormongers Lane to Cavendish Rd rail bridge is 1752 lin m in length and largely runs between the northern boundary of Biffa landfill at Cormongers Lane and the southern boundary of The Moors Nature Reserve and SSSI which is managed by Surrey Wildlife Trust (SWT).

Figure 2; Sustrans 21 Linkage; Nutfield Green Park to Cavendish Road Bridge



1.3 Condition of Sustrans 21

The general condition of the Eastern Section of the route (Inn on the Pond public House to Cormongers Lane) is in good repair and requires little maintenance.



The Western Section between Cormongers Lane and Cavendish Road Rail Bridge (passing the frontage of The Moors Nature Reserve and the Biffa landfill) is in a poor condition and is flooded/impassable for long periods of the year.

Over a protracted period there has been an unsuccessful multi-agency/landowner



investigation into the flooding issues in an attempt to improve the accessibility to the path. Key stakeholders include Sustrans, Biffa Waste Services, Surrey Wildlife Trust and local stakeholders and politicians.

The Sustrans is subject to surface water flooding, with sections of the path inundated with surface flows from The Chilmead Brook and surface water runoff from both Biffa's facility and The Moors Nature Reserve. Between the months of November and April the path becomes impassable and dangerous, with users now forging informal paths across third-party land to obviate the flooded sections.

2. Context and Beneficial Linkages

2.1 Sustrans 21 – Regional Context

Referring to Figure 1 (above) we can see that Sustrans 21 is a major arterial cycle way that links Central London to the South Coast of England. The path originates in Greenwich and terminates in Eastbourne and passes multiple conurbations along its 95-mile route. It is important to note that immediately East of Nutfield Sustrans 21 connects with Sustrans 20 a busy and popular route that passes through South-West, Central London and the City. The section past Nutfield Green Park and into Redhill is of strategic regional importance as it has the existing potential to accommodate traffic flows from both regional routes 20 and 21.

Any potential upgrade or repair to the failed section of Sustrans 21 between Cormongers Lane and Cavendish Road Bridge will bring travel benefits that extend regionally and outside of locale.

2.2 Direct Linkages with Nutfield Green Park.

The Applicant has proposed a network of new, 3m wide cycle paths through Nutfield Green Park that will serve to funnel new users from the park to the Sustrans. Access and use of the Sustrans will be further promoted provision of an e-bike scheme, which will be operated by NPDL and available to all residents.

The network of paths will allow all residents trouble-free access directly to Sustrans 21 on land solely under the control of the applicant.

The network of paths proposed (yellow in Figure 3 below), connect to the settlement areas proposed in the Nutfield Green Park Development, but also connect through the development to existing easements within the village of Nutfield at 6 Separate locations; a). Gore Meadow, b). Adjacent to Park Wood Rd, c). Blacklands Meadow, d). Park Works Rd e). Adjacent to Shortacres and f). Church Hill Car Park. It is important to note that all of these accesses to the A25 or Church Hill are on land under the control of the Applicant and require no third-party agreements. Figure 4 (below) shows these access points in closer detail.

The new connections within Nutfield Village provide an opportunity for connectivity to the Sustrans 21 for Nutfield Village residents without the use of the public highway/Church Hill.

Figure 3; Proposed Interconnecting Cycle Route within Nutfield Green Park

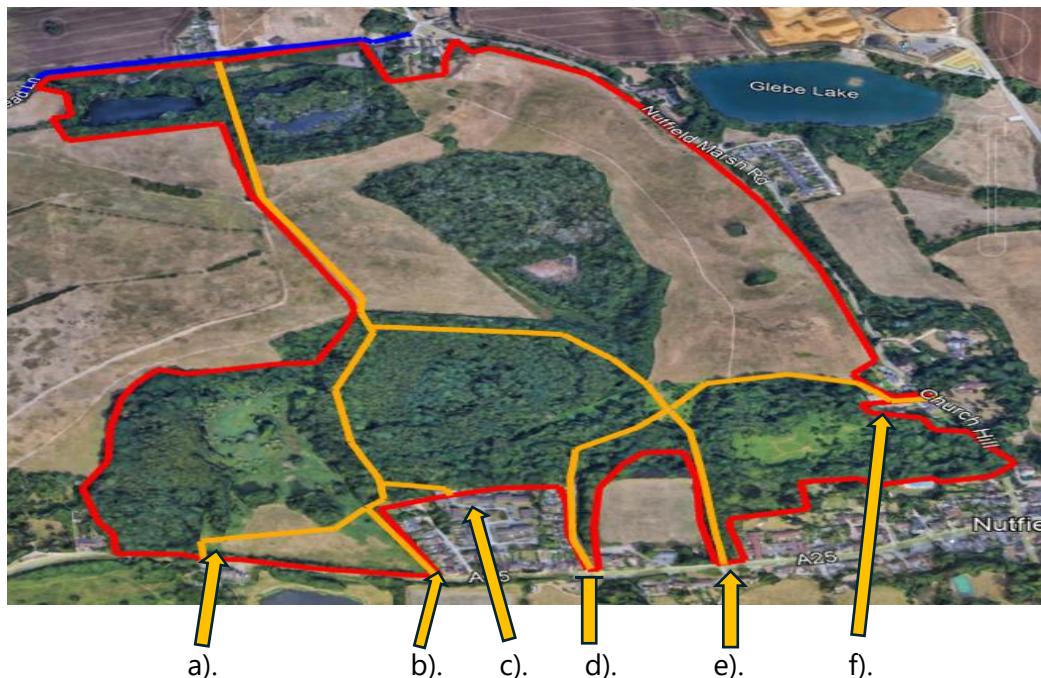


Red; Site Boundary, Nutfield Green Park

Yellow; New Cycleways/Links within Nutfield Green Park

Blue; Sustrans 21 Route; Inn on the Pond (East) to Cavendish Road Bridge (West)

Figure 4. Proposed Connection Locations to Nutfield Village



2.3 Local Context and Proposed Toucan Crossing

The multiple access points to the high-quality cycleways represents a new opportunity for the residents of Nutfield Village to gain "through-access" to Sustrans 21 and Redhill town without reliance on the A25, and without using motor vehicles.

Nutfield Green Park is a catalyst for this change and can deliver sustainable active travel for residents of the scheme and the existing residents in the settlement of Nutfield. This interconnectivity to sustainable travel is provided through the development at Nutfield Green Park and provides interconnectivity beyond the boundary of the application site.

As part of a suite of transport measures improvements the Applicant has proposed the installation of a fully funded pedestrian crossing on the A25 at location d). The crossing will enable residents from South Nutfield and wider communities to safely access Nutfield Green Park and opens up beneficial, extensive active travel networks to Redhill which cannot currently be used.

The provision of the extensive cycle path provision at Nutfield Green Park provides a platform for sustainable travel for communities beyond the development, and delivers a safe, peaceful and sustainable alternative to motor vehicle transport to and from Redhill.

3. Restoration

3.1 Restoration Strategy

A detailed restoration strategy has been prepared by Environmental Engineers the Land and Water Group. The investigation has highlighted the root cause of the flooding issues and has proposed and costed the full restoration of the failed sections of Sustrans 21 (Cormongers Lane to Cavendish Rd Rail Bridge). The investigation also considered two alternative diversion routes for the Cycleway and concluded that restoration of the existing infrastructure was the most viable proposals. The investigation has concluded that the failed section of the route, and the proposed network of cycle paths within Nutfield Green Park can be delivered for a sum of £1,342,936.92 over a period of 24 weeks.

3.2 Stakeholder Support

The proposed restoration works have been shared and discussed with Surrey Wildlife Trust and with Sustrans whom are supportive of the solution proposed and welcome the commitment to restore this troublesome part of the national network.

3.3 Commercial Deliverability

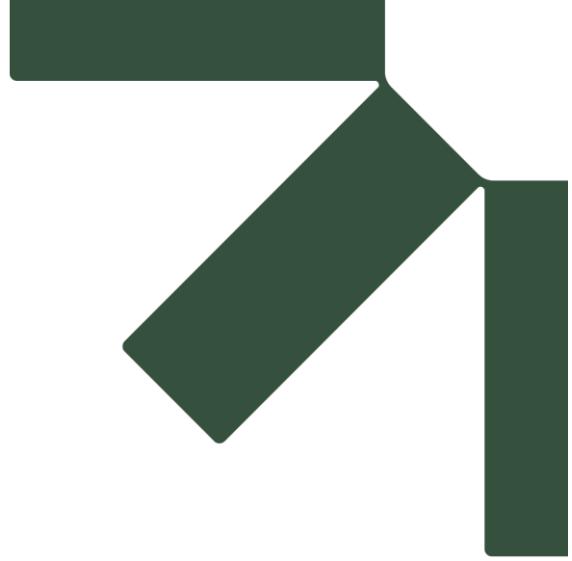
The Applicant has included the full costs of the Sustrans restoration and the new cycleways and crossings in the Site Wide Commercial Viability Assessment prepared by Messers. Aspinall Verdi. The Viability Assessment has been further examined by Tandridge District Councils' third party commercial assessors Dixon Searle whom have also confirmed the scheme remains viable when fully supporting the expenditure proposed.

It is proposed that the remedial works outlined and new cycleways will be secured by virtue of a Section 106 obligation or planning condition.

4. Conclusion

The proposed restoration of the failed section of Sustrans 21, the provision of 2681 liner metres of new, interconnected cycleways with 5 access points to Nutfield Village and a new pedestrian crossing to access South Nutfield represents a significant and viable contribution to a Sustainable Active Travel Plan.

The Plan builds on existing infrastructure to offer residents from within the development and the settlements of Nutfield and South Nutfield a new, safe, tranquil and sustainable travel alternative to motor vehicles and will make a demonstrable positive contribution to the sustainable location of Nutfield Green Park.



Appendix C Land & Water Feasibility Report

Comprehensive Transport Update

Nutfield Green Park

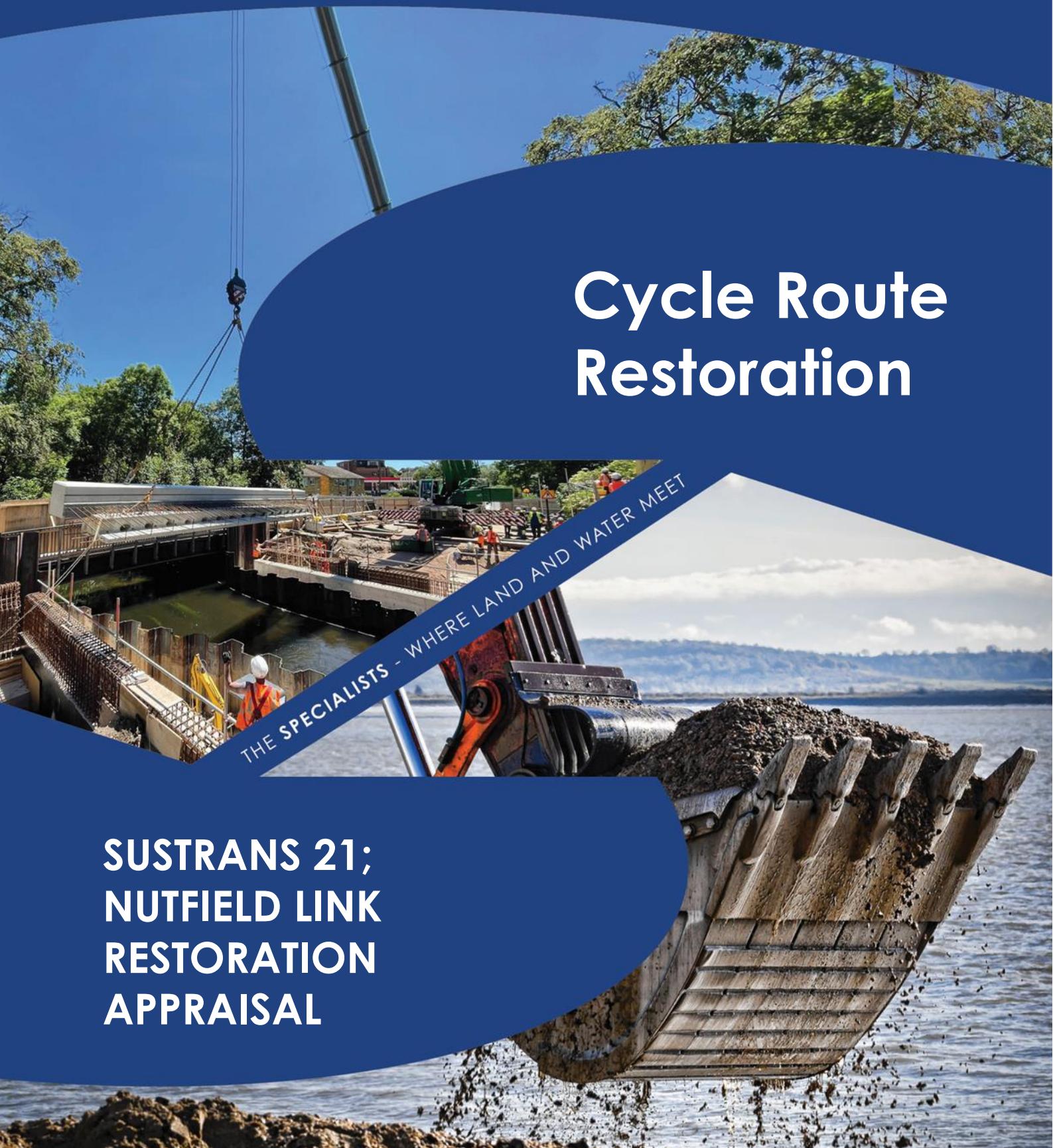
Nutfield Green Park Developments Ltd

SLR Project No.: 425.065470.00001

19 December 2024



Cycle Route Restoration



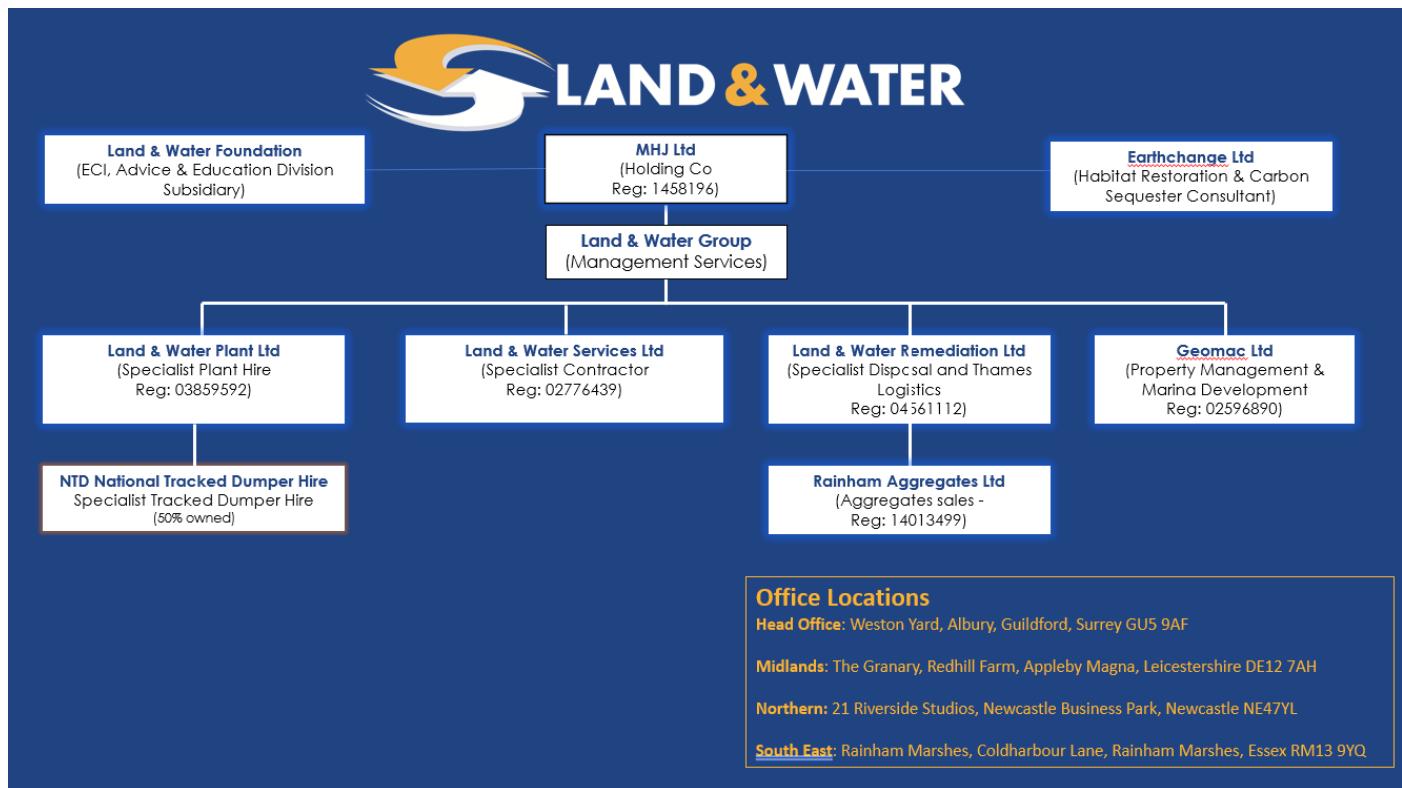
THE SPECIALISTS - WHERE LAND AND WATER MEET

**SUSTRANS 21;
NUTFIELD LINK
RESTORATION
APPRAISAL**



LAND & WATER SERVICES – WHY USE US

Group structure



INTRODUCTION

The Land & Water Group is made up of individual yet complimentary companies. From Contract Services to plant hire, waste remediation and soft engineering material supplies we provide innovative solutions to improve the environments in which we work; “Helping Nature to Help Herself”.

Land & Water Services Ltd is an award-winning inland waterway and coastal civil and environmental engineering company and an SME. Throughout our 35-year history, our name has become synonymous with finding creative and effective solutions to complex challenges in the specialist environment where land and water meet. Often working in sensitive habitats, our work is completed with sympathy for the local surroundings, people, and the environment. Our specialism is working in areas of difficult access and ecologically sensitive areas requiring long reach, amphibious, low ground pressure and floating equipment to help manage risk profiles that others may reject.

ACCREDITATIONS



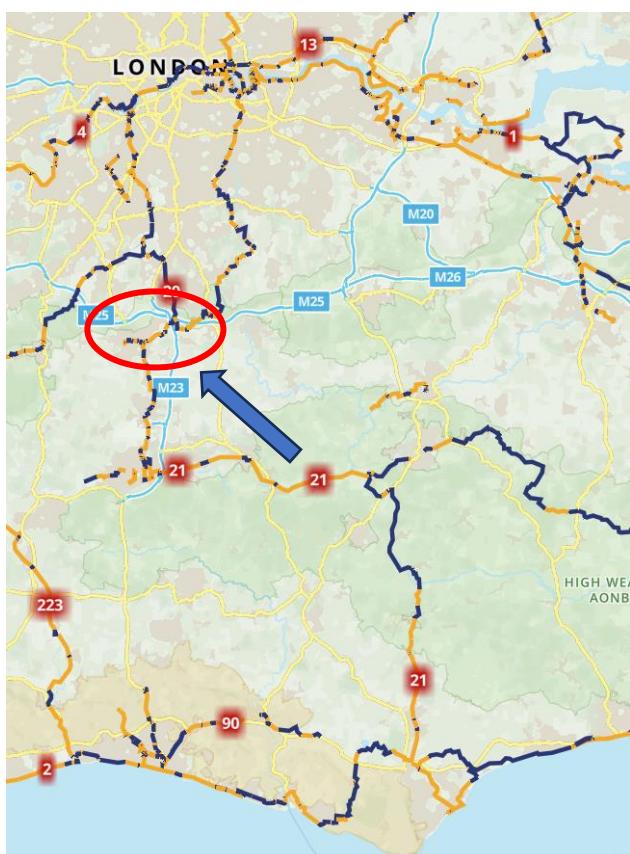


PROJECT BRIEF

Nutfield Park Developments Ltd is considering a wider strategy for the connectivity of its site on the northern edge of the village settlement of Nutfield, these plans will contribute to improving the sustainability of the sites' location and make a positive contribution to connectivity for the residents of Nutfield with the nearby town of Redhill. Currently, the only tangible option for residents to access Redhill on foot or bicycle from Nutfield is along the pavement of the busy A25. The A25 carries traffic into and out of the settlement of Redhill and its traffic is augmented by the frequent passage of HGV's which service the Biffa landfill site at Cormongers Lane (which between Nutfield and Redhill). There is no designated cycle link between Nutfield and Redhill and the highway pedestrian path between the two settlements is inconsistent and requires the user to cross the trunk road to maintain a route to and from the town.

Nutfield Green Park (NGP) is located on the former Fullers Earthworks site (quarry and industrial site) to the immediate north of the village settlement and can offer a number of points of connectivity to the village centre and A25 to the south and the SUSTRANS 21 route to the immediate north of the site. The land in question is in single ownership, and subject to a planning application for a small area to be developed (approx.12 % being 7ha of the 58.9ha site) and the balance of the site is to be enhanced with nature conservation and public access in mind.

Figure 1; Sustrans 21 National Cycleway



Sustrans 21 is part of the designated national cycleway network and connects Central London to Eastbourne on the south coast, passing through Redhill and along the northern boundary of Nutfield Green Park. Locally the route provides direct connectivity to Redhill with bridges over the London/Brighton mainline railway to Redhill Station and Redhill town centre.

The section of Sustrans 21 between The Inn on the Pond Public House at Nutfield Marsh and the railway bridge at Cavendish Rd, Redhill is approximately 2507 lin m in length.

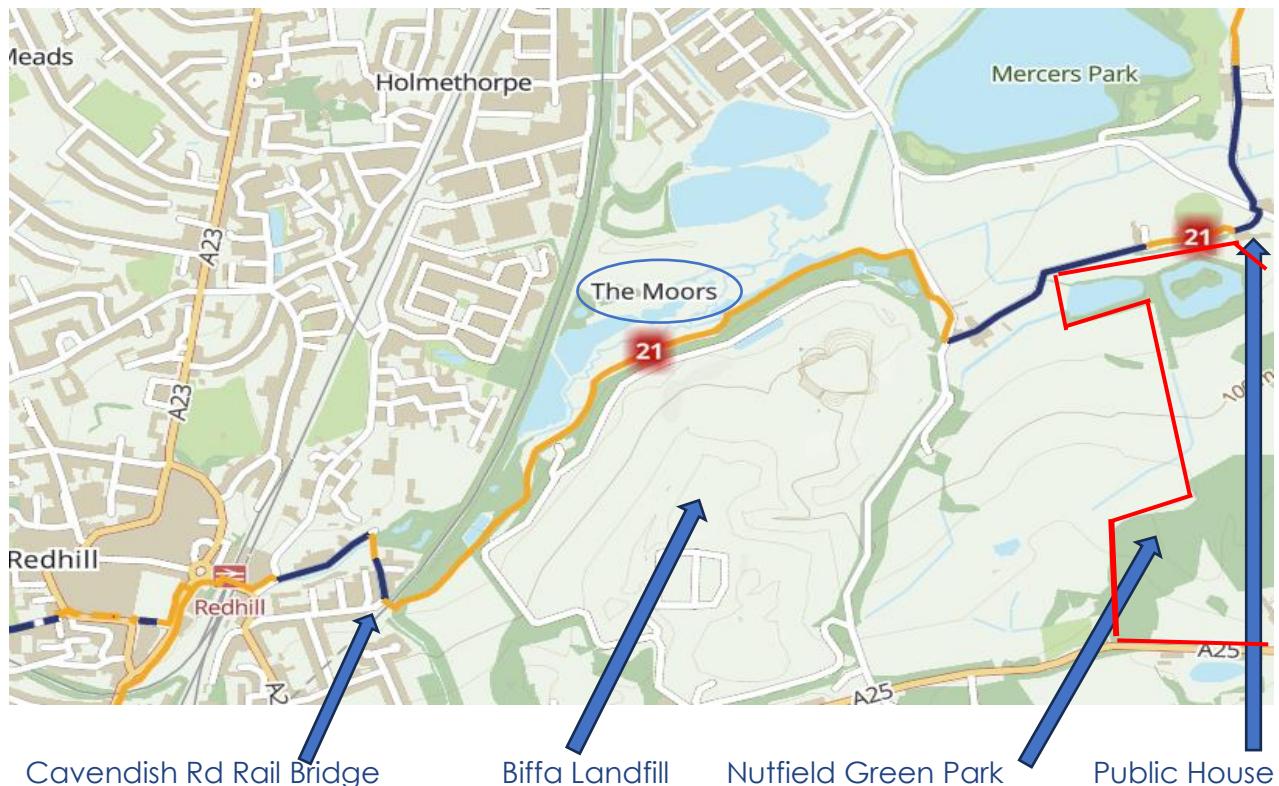
Generally, the eastern section from the public house to Cormongers Lane is on a tarmacadam road (Chilmead Lane) which services a small number of dwellings and has very low traffic demands. This section is 755 lin m in length and requires little maintenance or upgrade.



The western section of Sustrans 21 from Cormongers Lane to Cavendish Rd rail bridge is 1752 lin m in length and largely runs between the northern boundary of Biffa landfill at Cormongers Lane and the southern boundary of The Moors Nature Reserve and SSSI which is managed by Surrey Wildlife Trust (SWT).

The western section of the Sustrans route is in significant state of disrepair and requires sympathetic renovation to restore its suitability as part of the national cycleway network with careful consideration for the adjacent SSSI.

Figure2: Sustrans 21 Local Route Plan – Nutfield Marsh to Redhill Section



Orange Line denotes original Sustrans 21 route on a gravel path
 Blue Line denotes original Sustrans 21 route on tarmac/adom roadways
 Red Line denotes approx. boundary to Nutfield Green Park

Land and Water Services Ltd (LAWS) have been asked to consider the feasibility, deliverability and cost implications of the restoration of the transport route and how to build nature into the easement as a regenerative contribution to the concept.



The brief extends to the costs and feasibility of improving some of the existing network of statutory and permissive only footpaths within Nutfield Green Park to a similar standard to that of the restored Sustrans 21 such that the residents of NGP and the residents of the wider Nutfield Settlement can travel through NGP and access the Sustrans from a number of separate access points along the NGP site boundary. Complimenting the sustainability of the location and assisting in a strategy of non-car transport to and from Redhill in a safe environment.

Figure 4; Cycle and Pedestrian Route Masterplan



Blue; Sustrans 21

Yellow; Internal Connecting Cycleway/ Footpaths (NGP)

Red; NGP Site Boundary

General Situation

LAWS undertook site walkovers and detailed assessments on 04.03.23 (in heavy rainfall) and 19.3.24 (dry conditions). The assessment of the route was after the wettest February on record.

In general, the easement of the cycleway is fully intact, however it is suffering from substantive lack of maintenance to the track surface, to the linear vegetation, to the bridges, signage and furniture. Notably the drainage infrastructure within the easement and the track is impacted by localised flooding from a lack of drainage maintenance from third parties alongside the route (most notably at The Moors SSSI).

With little or no impact, the route could be fully restored to a 2m wide, fine graded, stone surface suitable for cycles, push chairs, pedestrians, wheel chairs and power-assisted single person vehicles (scooters etc) without any changes to engineering, without the need to fell trees or move any significant infrastructure.



The ultimate objective being the restoration of easement and the delivery of a fully functional trail to link Nutfield to Redhill. Akin to the Camel Trail in Cornwall or similar (see image below)

Figure 5 Example access trail; Bodmin to Padstow – The Camel Trail



Recommended Works:

Eastern section (Public House to Cormongers Lane)



CH0- CH178. From the Public House Car Park to Chilmead Lane there is a 178lin m section of track which requires some surface vegetation cutting back, the potholes require filling with MOT type 1 stone and a top dressing of 8mm to dust limestone pathway gravel should be added. Signage at the pub car park and the cricket ground cottages should be improved.



CH178-755. From the Cricket Pitch to Cormongers Lane the surface is metalled and suitably wide for a cycleway, no further enhancements are proposed.



CH755-780. The exit from Chimead Lane and crossing at Cormongers Lane requires improved signage for road users and trail users. There is existing signage but it is insufficient/obscured by vegetation which requires cutting back to improve sight lines.



CH 780-850. From the Cormongers Lane crossing there is a 74m section of path which requires scraping clean, MOT type 1 stone pothole repairs and a 60mm topping of 8mm to dust limestone pathway gravel. The vegetation requires cutting back.

Western Section (Cormongers Lane to Cavendich RD Rail Bridge)



CH850-900. The Sustrans runs along the Cormongers Lane carriageway for approx. 45m and will require the removal of surface debris topping with 60mm of 8mm-dust pathway gravel and the vegetation cutting back. Improved signage and cosmetic improvements to the entrance "style" are recommended.



CH900-CH1100. The path requires some Type 1 stone dressing after the debris is removed and a topping of 8mm to dust pathway gravel, a local ditch needs to be re-cut to drain ponded surface waters to the Redhill Brook (to the north). (*see arrow)



CH1100-CH1105. The bridge crossing the Redhill Brook appears structurally sound (bearers appear in good condition). Recommend to treat and paint the steel bearers and renew handrails and surface boarding – replace with hardwood equivalent



CH1105 – CH1545 There is good evidence of a stoned surface beneath the surface debris, scrape off the debris, address potholes as required, address local drainage to the adjacent Redhill Brook and top dress with 8mm to dust limestone pathway gravel and remove woody debris/dredge the Redhill Brook to prevent water spilling back onto the pathway.



Woody debris to be removed and the Redhill Brook dredged to prevent the pathway flooding above the blockages (4no blockages observed) (*arrow denotes back-flooding)



CH1545-CH1565 The bridge at CH1545 is unsafe and requires a new hardwood surface deck and handrails, the steel beam bearers appear in condition but require surface treatment and painting.

HOWEVER: The bridge beams are partially submerged due to the Redhill Brook water levels being raised/backed up by choked vegetation downstream on "The Moors". The backing up of river water will accelerate decay of the steel bridge structure. It is recommended that the brook is dredged immediately downstream of the bridge to relieve water levels.



High water levels under the bridge cause the water to back up and flood the Redhill Brook above the bridge & onto the adjacent Sustrans and farmland.



Meadow flooding on The Moors as a result of waster spilling from the choked Redhill Brook.



CH1565-CH1645 localised flooding of the Sustrans downstream of the bridge is caused by waters backing up from the choked Redhill Brook alongside, dredging and debris clearance from the Redhill Brook is recommended to relieve the flood risk.

Then remove surface silt and debris, pothole repair with MOT Type 1 and surface dress with 8mm to dust limestone pathway gravel.



CH1645-CH1953 localised surface flooding (can be addressed with Redhill Brook dredging and clearance), then remove surface debris and mud, place MOT Type 1 raise by 150mm, and top with 8mm to dust pathway gravel.





CH1953-2355 Generally the path is well defined and in good condition, general cut back of vegetation and side debris to 2m, pothole repairs with MOT Type 1, local drainage improvements and dress with 8mm to dust limestone pathway gravel.



CH2340-2355 A blocked culvert under the Sustrans is causing surface flooding and needs to be reinstated and the ditch to the north recut for 30m to relieve the flow (currently filled with leaves and debris)



CH2355-CH 2507 scrape back surface debris, MOT Type 1 pothole repairs and topping with 60mm of 8mm to dust limestone pathway gravel.



CH2507 Exit to Cavendish Rd Rail Bridge; Improve signage, demarcation. Remove weeds and debris and local patch repairs to the tarmac surface.

Works within Nutfield Green Park

All of the proposed new cycle path routes within Nutfield Green Park have been assessed, the five access points that will serve to link Sustrans 21 to Nutfield Village and the A25 total a length of 2696Lin m.

Figure 6 Shows the Network of New Access Routes Proposed Through Nutfield Green Park

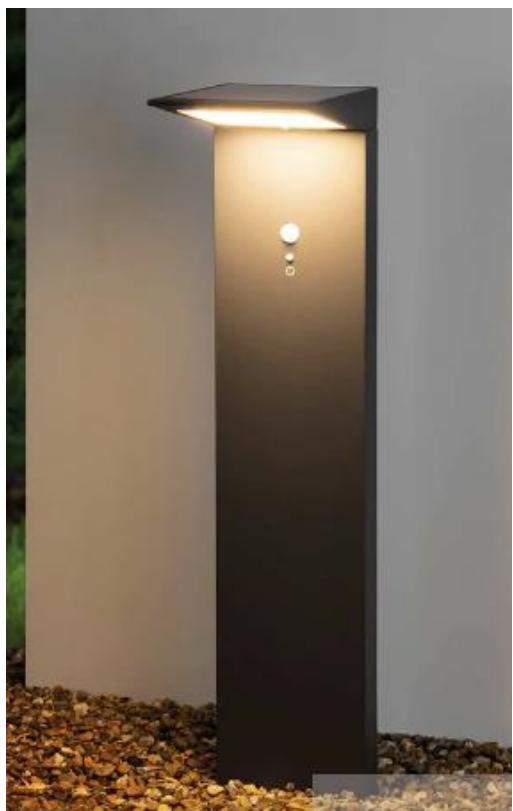




All of the routes proposed align with existing public footpaths or existing permissive footpaths and can be installed without the need for land clearance and tree removal.

The current walking surfaces within NGP are not suitable for a national cycle-way standard path and will require a new formation/construction. The recommended construction detail would be a 2m wide track (minimum width) comprising a basal geotextile separator with 150mm of type 1 limestone base (or recycled equivalent) topped with 60mm of 8mm to dust limestone pathway gravel (a porous product).

Lighting Recommendation (option)



To optimise the use of the new cycleway infrastructure we would recommend it is lit during the twilight and dark hours.

To minimise the impact of any access lighting we do not recommend the use of conventional streetlighting, but instead low level, solar powered bollards (1.0m high).

The bollards can be equipped with one direction only downward lighting and so can be positioned to illuminate the Sustrans/Cycleway surface but turned away from sensitive ecology and habitats. The bollards are equipped with a waist height PIR which turns on the two units on either side for 30 seconds only to allow the passage of a human on foot or pedal cycle, but above the levels of most ground/wildlife (preventing unnecessary illumination).

Bollard spacing should be at 20m centres. The lighting is an optional feature, supported in principle by Surrey Wildlife Trust.

River Restoration Works; Redhill Brook

For a distance of approx. 487m The Redhill Brook runs immediately alongside the route of Sustrans 21. The river is in a poor state of neglect. In multiple places it has been dammed or blocked by timber and debris to form makeshift crossing points for the public. Fallen timber Kriss-crosses the watercourse and the river has been contaminated with urban debris including traffic cones, shopping baskets, litter and an old bicycle. In addition, the lower branches of the adjacent Poplar plantation that abounds the adjacent landfill have not been managed and they now droop into and towards the watercourse, denying sunlight and stifling aquatic growth. The high proportions of debris in the watercourse are causing the water to "back up" and back-flood over the



Sustrans, and in areas where the water has been slowed by the debris there is increased siltation and high levels of sediment deposition masking the true bed of the brook.

Section of Redhill Brook for Restoration (487 linm)



Examples and river blockages and in-channel (non-natural) debris;





To restore the river health and increase fluvial capacity we would recommend the following actions;

- Cut back (trim) adjacent overhanging vegetation (limbing only, no felling is required)
- Remove and dispose of timber debris and blockages
- Dredge the channel centre (retaining emergent edge aquatic vegetation) and remove the sediment from the watercourse entirely
- Remove man-made debris and obstructions
- Install localised gravels berms (8 no) and meanders to encourage self-cleansing flows and diversity of the restored riverbed suitable for macrophytes and indigenous river species.

The actions proposed above will be subject to an Environment Agency FRAP consent which has a minimum determination period of 8 weeks.

The river restoration proposals are included within the Sustrans budget proposals as there are notable efficiencies to be gained by undertaking the bio-diverse enhancements of the river simultaneously to the cycle path works.

Budgets

A detailed topographical survey and some ground investigation works will be required to finalise a fixed cost for the restoration of Sustrans 21 and the new network of link-cycleways within. However the table presented below is our best estimate of the likely costs for the works including a 5-year maintenance plan.

Table 1



Sustrans 21 Restoration Master Budget

| | | | | | |
|----|--|----------|-----------|------------|--------------|
| 1 | Mobilise to site, Contractors plant , machinery and compound | | sum | | 8,500.00 |
| 2 | Establish Contractors Compound | | sum | | 6,500.00 |
| 3 | Contractors prelimonaries and Security | 7,000.50 | per week | 24 weeks | 168,012.00 |
| 4 | Permanent and Temporary Works design inc investigations | | sum | | 15,000.00 |
| 5 | Restoration works CH 0-178 | 119.60 | per lin m | 178 Lin m | 21,288.03 |
| 6 | Signage Improvements CH 0-755 | | sum | | 8,500.00 |
| 7 | Cormongers Lane Crossing Improvements and Signage | | sum | | 45,450.00 |
| 8 | Restoration works CH780-1100 and drainage works | 145.77 | | 320 lin m | 46,646.08 |
| 9 | Bridge repairs CH 1100 | | sum | | 16,400.00 |
| 10 | Restoration works CH1105 -1545 and drainge works | 145.77 | | 440 lin m | 64,138.36 |
| 11 | Bridge repairs CH 1545 | | sum | | 24,240.00 |
| 12 | Redhill Brook Dredging and Clearance SWT land | | sum | | 18,974.00 |
| 13 | Restoration and drainage works CH 1565-1953 | 145.77 | | 398 lin m | 58,016.06 |
| 14 | Restoration works CH 1953-2355 | 119.60 | | 402 lin m | 48,077.46 |
| 15 | Drainage works and ditching CH 2340 | | sum | | 11,435.00 |
| 16 | Restoration works CH 2340-2507 | 119.60 | | 167 lin m | 19,972.48 |
| 17 | Street Works and signage ch 2507 | | sum | | 6,352.00 |
| 18 | General vegetation trimming and cutting back | | sum | | 16,845.00 |
| 19 | Signage improvements | | sum | | 18,500.00 |
| 20 | Low level lighting option | 465.00 | ea | 265 no | 123,225.00 |
| 21 | New cycleways NGP | 195.45 | per lin m | 2681 Lin m | 524,001.45 |
| 22 | River Restoration Works as proposed | | sum | | 64,364.00 |
| 23 | Demobilisation | | sum | | 8,500.00 |
| | | | Total | | 1,342,936.92 |



Further Recommendations

After further discussion with Councillor Johnathan Essex (Surrey County Council), advocate of cycling and green initiatives, two further route options/alternations have been appraised with the intention of obviating the flooding risks to the section of Sustrans 21 that runs between the Cormongers Lane landfill (Biffa Plc) and The Moors Nature Reserve (Surrey Wildlife Trust) (orange, below).

Alternative 1:

This option proposes a new high-level path (blue line) alongside the Biffa's boundary fence, and parallel to the existing Sustrans for 465 lin m (orange path).



The advantages of this proposal include;

- The high-level path with obviate flood risk from this section of the route.
- There is an existing/informal path along the proposed alignment.
- It does not require the use of the two existing bridges of the Chilmead Brook (shown; red), which could be removed (obviating a long-term maintenance liability) and improving river quality.
- It removes people from close proximity to the nature reserve, with the Chilmead Brook and existing dense vegetation forming a visual buffer between the transit of people on the new alignment and the Nature Reserve.

To deliver this option;

- 7 trees would be required to be removed, of these 3 are fallen down/leaning on Biffa's boundary fence and 4 would require selective felling and removal (of these 2 are showing canopy disease and degradation).
- The two bridges over the Chilmead Brook would become redundant and require removal.
- The embankment (on which Biffa's boundary fence is located), would be required to be widened, using approx. 2800m³ of imported soils, to accommodate the new path.
- 3 trees close to the easement of the new path would need to be protected with low-level retaining walls (timber) to keep protect their root systems from surcharge from the new embankment fill materials.
- The path can be part-constructed from stone materials gleaned from the restoration of the former path alignment and topped up with imported stone.
- Planning permission for the new alignment would be required and an agreement from SWT to undertake the path translocation on their land.

Costs

- The additional costs to deliver this scheme over and above the budget presented above would be in the order of £148,000 (*assuming the use of sandy soils ex Nutfield Green Park could be utilised for the embankment fill materials).



Alternative 2

This option proposes a new circular route for the Sustrans that largely obviates the areas of the existing route that are prone to flooding and dramatically reduces the human impacts of passage alongside the southern boundary of the Nature Reserve.



The proposal seeks to abandon the section of path that abounds the Chilmead Brook, using a 365 lin m new section of path (on SWT land) adjacent to Cormongers Lane (heading North), linking into the Watercolour Development, using the existing carriageways of "Holmesdale Avenue", "Canalside" and "The Kilns" to help Sustrans users circumvent the Nature Reserve, and then rejoin the Sustrans using an upgraded section of 820 lin m of existing paths on the western side of The Moors.

The advantages of this option include:

- The substantive use of existing roads, carriageways and paths
- The removal of people entirely from the southern portion of the nature reserve
- One bridge could be removed entirely from use – improving the Chilmead Brook
- Very limited vegetation clearance or impact

To deliver this option:

- 365 lin m of new path would be need to constructed in the field alongside Cormongers Lane, and a new, permanent hedge would need to be planted alongside the path to screen the users from the Nature Reserve.



- New signage and safety management schemes would need to be implemented along Holmesdale Avenue, Canalside and The Kilns.
- 825 lin m of existing tracks would need to be upgraded on the western side of the nature reserve.
- Planning permission would need to be sought for the new route and land/access agreements from Surrey Wildlife Trust and third-party landowners at WaterColour/The Kilns and Surrey County Council.

Costs

- The additional costs to deliver this scheme over and above the budget presented above would be in the order of £315,000

The Applicant at Nutfield Green Park is prepared to pledge the sum in Table 1 above on granting of planning permission for the Nutfield Green Park scheme and would be happy to have this sum set-aside under S106 agreement and to work with Sustrans, local stakeholders, Surrey Wildlife Trust etc to undertake the works as listed or augment either Options 1 or 2 above subject to further/match funding.

Further Recommendations (2).

It will be necessary to open dialogue with Surrey Wildlife Trust regarding maintenance works to the Redhill Brook, we would recommend consideration being given to the installation of some further wetlands alongside the Sustrans on SWT's land which will provide additional flood storage capacity, provide further bio-diversity gains and improve the environment. The spoils from this activity could be incorporated into the cycleway improvements and provide further flood resilience to climate change. In this respect we have identified an ideal location for this improvement as highlighted below (flooded already by the poor drainage and choking of the Redhill Brook).

Figure 7. Potential Permanent Wetland (currently flood waters from the choked Redhill Brook)



Note:

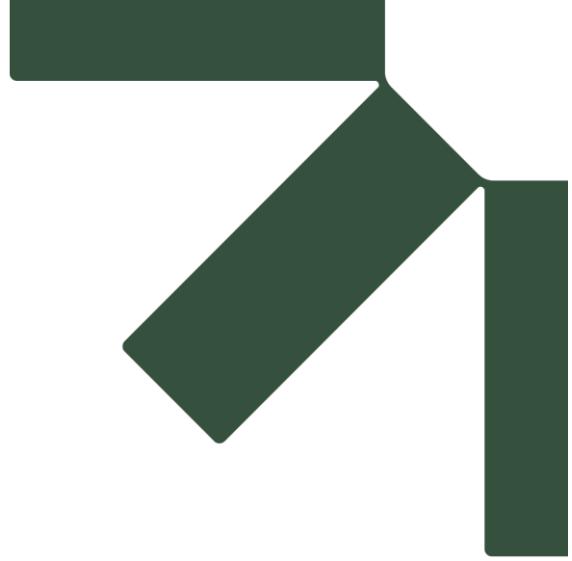
The proposed restoration works to Sustrans 21 do not require any new engineering or significant infrastructure works, change to alignment or new structures, and largely represent the backlogged maintenance of an existing landscape feature, as such consideration should be given as to the need or otherwise for planning permission (save for the low-level lighting option).

The new cycleways within NGP will require planning permission and consideration should be given to this forming part of the main planning application for the site.

Conclusion

By liaison with Sustrans and Surrey Wildlife Trust the restoration of the Sustrans 21 to link Nutfield Village and Nutfield Green Park directly to Redhill is feasible, deliverable and sustainable. The works can be delivered with the minimum of impact and will use the existing infrastructure (and/or further Options 1 and 2).

The restored link and new network of feeder cycleways will provide a sustainable, safe, vibrant and healthy link between Nutfield and Redhill and break the need to travel between the two along the busy A25.



Appendix D Sustrans Letter of Support

Comprehensive Transport Update

Nutfield Green Park

Nutfield Green Park Developments Ltd

SLR Project No.: 425.065470.00001

19 December 2024

Sustrans comment on proposed NCN21 improvements at Nutfield Park.

Following a meeting with James Maclean of Land and Water Group Ltd, and reading the accompanying "Nutfield Green Design and Access Statement" showing the plans for the Nutfield Park development, I am pleased to support the restoration and improvement of the section of National Cycle Network (NCN) 21 at "The Moors", a route which also forms part of the flagship "Avenue Verte" cycle route connecting London with Paris.

The existing route has suffered from degradation and groundwater flooding for a number of years, which has gradually worsened due to factors such as poor maintenance of the adjacent Redhill Brook and local landfill activity. This has led to the path now being permanently underwater for the majority of the route between Cormonger's Lane and Cavendish Road.

The development of this route is essential in order to serve the new residents of Nutfield Park and enable them to travel more sustainably. This proposal represents a special opportunity to restore and promote the use of this section of NCN to provide sustainable transport opportunities, and I would be pleased to see the route improved to a standard that would support increased usage as a result of the new development. Please note that my comment only relates to the NCN at this time and is not a comment on the proposed walking and cycling routes within the development itself. However, it is positive to hear that sustainable transport links have been considered to, from and within this development, to avoid residents becoming locked into car-dependency.

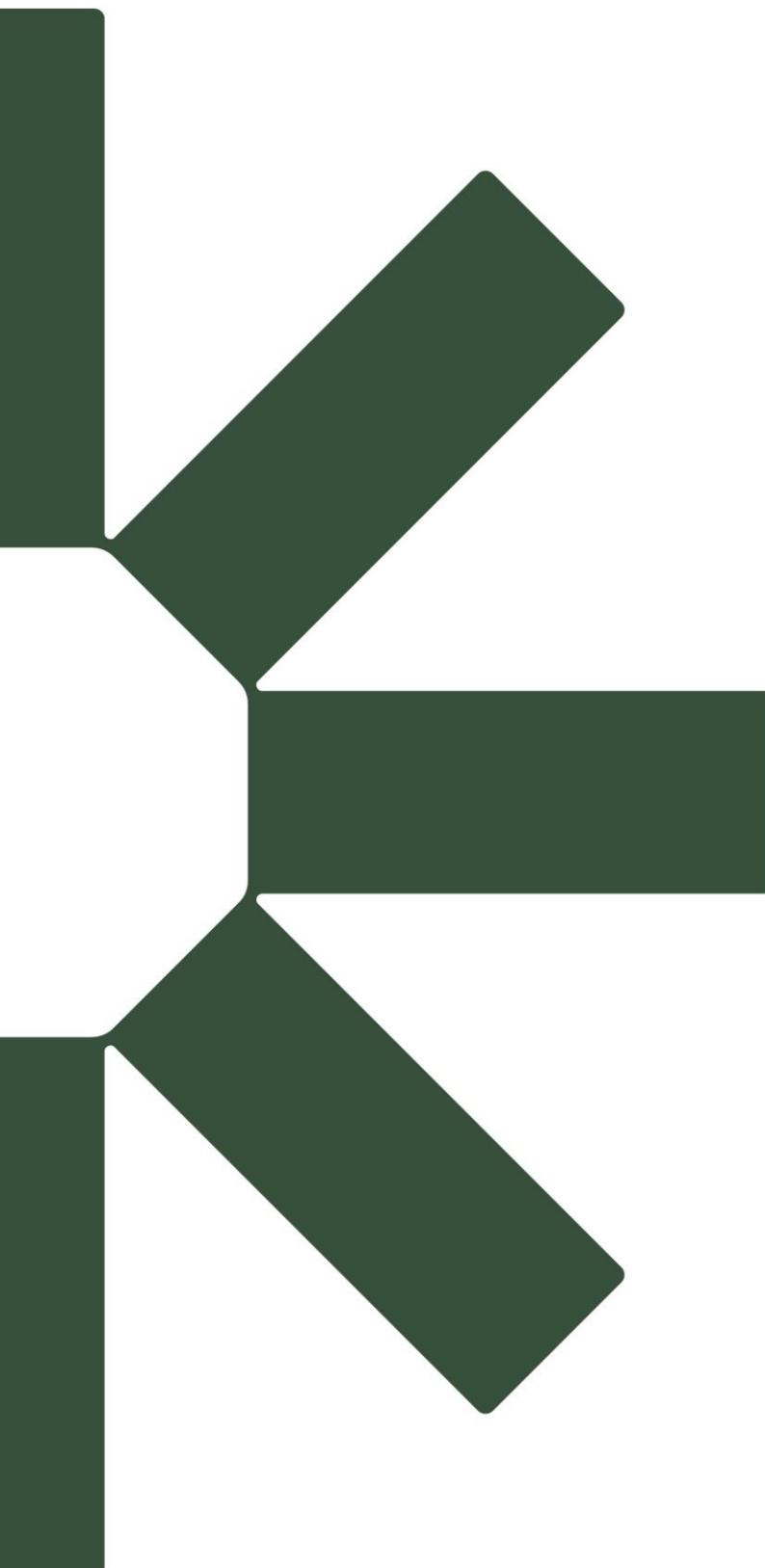
The remedial works proposed to NCN 21 will be a much-welcomed improvement and should be secured by virtue of a section 106 agreement. I would welcome consideration being given to these works becoming a pre-commencement condition to enable the benefits to be enjoyed by route users as early as is practical.

Kind regards

Helen Kinsella

Network Development Project Manager for Surrey, Hampshire and Buckinghamshire

a special opportunity to restore and promote the use of the Sustrans for sustainable transport



Making Sustainability Happen