A326 Junction Improvements

Full Business Case

A report by Hampshire County Council, Volterra Partners and Markides Associates, September 2019

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1 Introduction

1.1 This report provides a Full Business Case (FBC) for improvements at eight junctions along the A326 in Hampshire.

1.2 The business case is being submitted by Hampshire County Council (HCC), in conjunction with Fawley Waterside Ltd. HCC are the local Highway Authority, while Fawley Waterside Ltd has proposals to transform the old Fawley Power Station site into a thriving residential and commercial waterside community which becomes a destination for employment and leisure activity. Implementing the junction improvements will not only bring about benefits for vehicles, pedestrians and cyclists, it will also enable the Fawley Waterside Development to be brought forward, allowing the benefits associated with the development to be realised earlier than they otherwise would have been.

1.3 This report has been prepared based on Department for Transport guidance for producing a transport business case. The rest of the report is therefore structured as follows:

- Chapter 2: Strategic case
- Chapter 3: Financial case
- Chapter 4: Economic case
- Chapter 5: Commercial case
- Chapter 6: Management case

2 Strategic case

Scope

2.1 This business case supports HCC's bid for Solent LEP Prosperity Funding towards junction improvements at the southern end of the A326 and on the B3053, along with improvements for pedestrians and cyclists to help facilitate development at Fawley Waterside. The bid is for £5.7m of capital funding towards a total scheme cost of £8.1m. Fawley Waterside Ltd have agreed to contribute the remaining £2.4m or 30% as a local match funding contribution (see letter in Appendix C). The improvements are summarised in Table 1; the locations are shown in Appendix A, and the drawings for these schemes are included in Appendix B. The junctions are numbered on the map in Appendix A and are referred to in the text that follows by these numbers.

Table 1: Proposed improvements

Location	Proposed measure
Junction 3 – Blackfield Road / Church Lane/ B3053	Signalised junction
Junction 4 Long Lane / A326 (Holbury Roundabout)	Widening of approaches and exit lanes
Junction 4b A326 / Holbury Drove	New southbound right-turn ghost island
Junction 4c A326 / Southbourne Avenue	New southbound right-turn ghost island
Junction 5 Hardley Roundabout	Widening of approaches and exit lanes
Junction 6 Dibden Purlieu Roundabout	Widening of approaches and exit lanes
Junction 7 Applemore Roundabout (Sizer Way)	Widening of approaches and exit lanes
Junction 8 Dibden Roundabout	Widening of approaches and exit lanes

2.2 Ongoing costs associated with the junction improvements are not within the scope of the funding bid; however, an allowance for maintenance costs is included within the economic appraisal in order to provide a complete picture of the value for money of the scheme.

Objectives

2.3 The Hampshire Local Transport Plan[1] sets out HCC's vision of providing "safe, efficient and reliable ways to get around a prospering and sustainable Hampshire". It notes that

[1] Hampshire County Council (2013), *Hampshire Local Transport Plan 2011-2031*, available at http://documents.hants.gov.uk/transport/HampshireLTPPartALongTermStrategy2011-2031RevisedApril2013.pdf (accessed 23 August 2019)

developing and delivering a well-functioning, reliable transport network will play a key role in supporting wider economic development within the Authority.

2.4 The long-term strategy will be delivered by HCC efficiently delivering their resources whilst working effectively with others to contribute to the prosperity of places where people live and work. HCC will work to ensure transport projects serve places' economic needs, minimise carbon emissions, are fully integrated with other areas of policy, and help places to be sustainably and socially connected.

2.5 Over the next five to ten years, HCC will focus on the following three key priorities:

1. Support economic growth by ensuring the safety, soundness and efficiency of the transport network in Hampshire;
2. Provide a safe, well-maintained, and more resilient road network in Hampshire; and
3. Manage traffic to maximise the efficiency of existing network capacity, improving journey time reliability and reducing emissions, thereby supporting the efficient and sustainable movement of people and goods.

2.6 While the above statements set out the three main transport priorities, a further 14 policy objectives are included structured into the broad themes of:

a) Supporting the economy through resilient highways;
b) Management of traffic;
c) The role of public transport;
d) Quality of life and place; and
e) Transport and growth areas.

2.7 The following significant transport challenges have been identified as key to the New Forest area of HCC:

- Maintaining the existing highway network and improving its resilience to extreme weather events;
- Congestion of inter-urban road corridors – including motorways, trunk roads and some town centres;
- Mitigation of transport impacts on strategic and local network arising from planned housing growth and urban growth;
- Minimising the adverse impact of traffic on quality of life through speed management and HGV routing; and
- Protecting the rural areas on the fringes of major planned major development areas.

2.8 The proposed A326 junction improvements sit well with HCC's objectives as they will contribute to the resilience of the existing highway network and relieve congestion on a key inter-urban road corridor. The junction improvements will also enable the development at Fawley Waterside to be brought forward whilst mitigating the potential transport impacts associated with the development. They will also help to protect the rural environment of the New Forest by improving capacity on a strategic route (the A326) and helping to ensure that traffic does not divert onto less

appropriate more minor routes through the National Park, during times of congestion on the A326.

Fawley Waterside

2.9 The Fawley Waterside (FW) development will transform the old Fawley Power Station site into a thriving residential and commercial waterside community which becomes a destination for employment and leisure activity. The proposed development is identified in the adopted New Forest National Park Local Plan 2016-2036 (Policy SP26) and is a key element of the draft New Forest District Council Local Plan 2016-2036, which has recently been subject to examination in public. The development is supported by both planning authorities, subject to an exceptionally high standard of design and layout being secured across the whole of the site.

2.10 The site itself lies outside of the National Park boundary, but land adjoining the site located within the National Park is providing habitat mitigation for the development, therefore FW will require planning approval by both planning authorities. It is the subject of two separate planning applications – to New Forest District Council (application number 19/10581) and the New Forest National Park Authority (19/00365). Planning consent for FW is expected to be granted in January 2020 and development first completions in approximately 2023/2024. Demolition of the disused power station is proposed for late 2019.

2.11 FW forms part of an overarching vision for the Waterside, designed to promote the economic growth of this area, benefiting local residents and the UK overall. It will make a major contribution to the Government's long-term Maritime 2050 ambition by helping to make the UK the best place in the world to conduct maritime business.

2.12 The current masterplan includes the following principal elements:

- Approximately 1,500 homes with a wide variety of sizes and tenure. From one bedroom studios and flats, to family houses and apartments, to large detached marine villas. The town will have a higher level of residential density within the Heart of the Town & Southern Quayside which will gradually reduce towards the Southern Quarter.
- Creation of 2,000 jobs in advanced manufacturing, marine and technology industries and in support services likes cafes, shops and leisure.
- An enlarged dock and new canal that will provide marine access to the North of the site.
- Retention and conversion of the existing Turbine Hall basement into an underground car park for residents and visitors. This car park will have capacity for approximately 2,000 vehicles. Undercroft parking will also be provided for individual residential blocks and some street level parking will be provided in and around the Town. The Southern Quarter will have on-plot parking.
- Provision of services such as shops, cafes, restaurants, doctor's surgery, health centre and fitness uses.

2.13 Supporting and accelerating the delivery of FW is one of the strategic aims of the A326 improvement scheme. The proposed junction improvements will help to deliver FW by reducing local concerns regarding existing road infrastructure, improving accessibility to and from the site and by accommodating additional future demand.

The need for the intervention

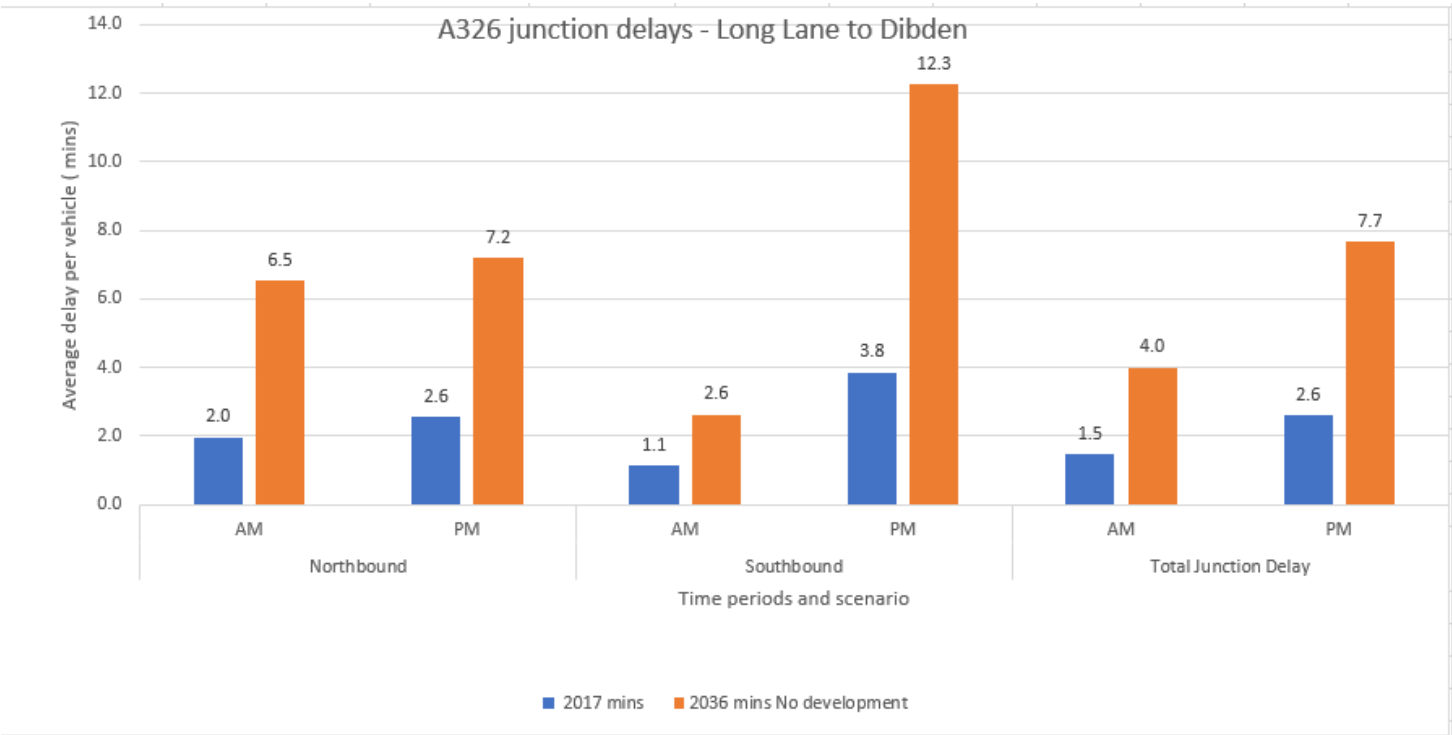
2.14 The A326 (and the B3053 at its southern end) is the key road linking the communities of the Waterside Peninsula to the A35, the M27 and onward to Southampton and the wider area. It is a single carriageway road for most of its length, and various junctions experience existing peak period capacity issues, including the Heath (J6), Applemore (J7) and Dibden (J8) roundabouts. Analysis below shows that various arms of these junctions are already over capacity in the peak periods. This is based on transport modelling using the industry standard junction assessment models (Junctions 9, LINSIG).

2.15 The anticipated background traffic growth from 2017 to 2036 derived using TEMPRO (database v7.2) 'localised' NTM factors for New Forest are 1.15 (AM peak) and 1.14 (PM peak), which means traffic is expected to grow by 14-15% up to 2036. This growth is expected to introduce more delays to the local network even in the absence of the FW development.

2.16 Analysis below shows that with the addition of this background growth, the capacity issues noted above at Junction 6 (Beaulieu Road/The Heath) Junction 7 (Applemore) and Junction 8 (Dibden) will increase, with more delays and more arms over capacity. In addition, J4 (Long Lane) will have one arm over capacity. The other junctions will not be over capacity, but delays are expected to increase at all of them.

2.17 Figure 1 shows the junction delays on the A326 between the Long Lane and Dibden junctions for the 2017 baseline (blue) and 2036 with just background traffic growth (orange), including northbound, southbound and total junction delays. It is clear that there is expected to be a significant increase in delays due to background growth.

Figure 1: A326 junction delays – Long Lane to Dibden (Without FW)



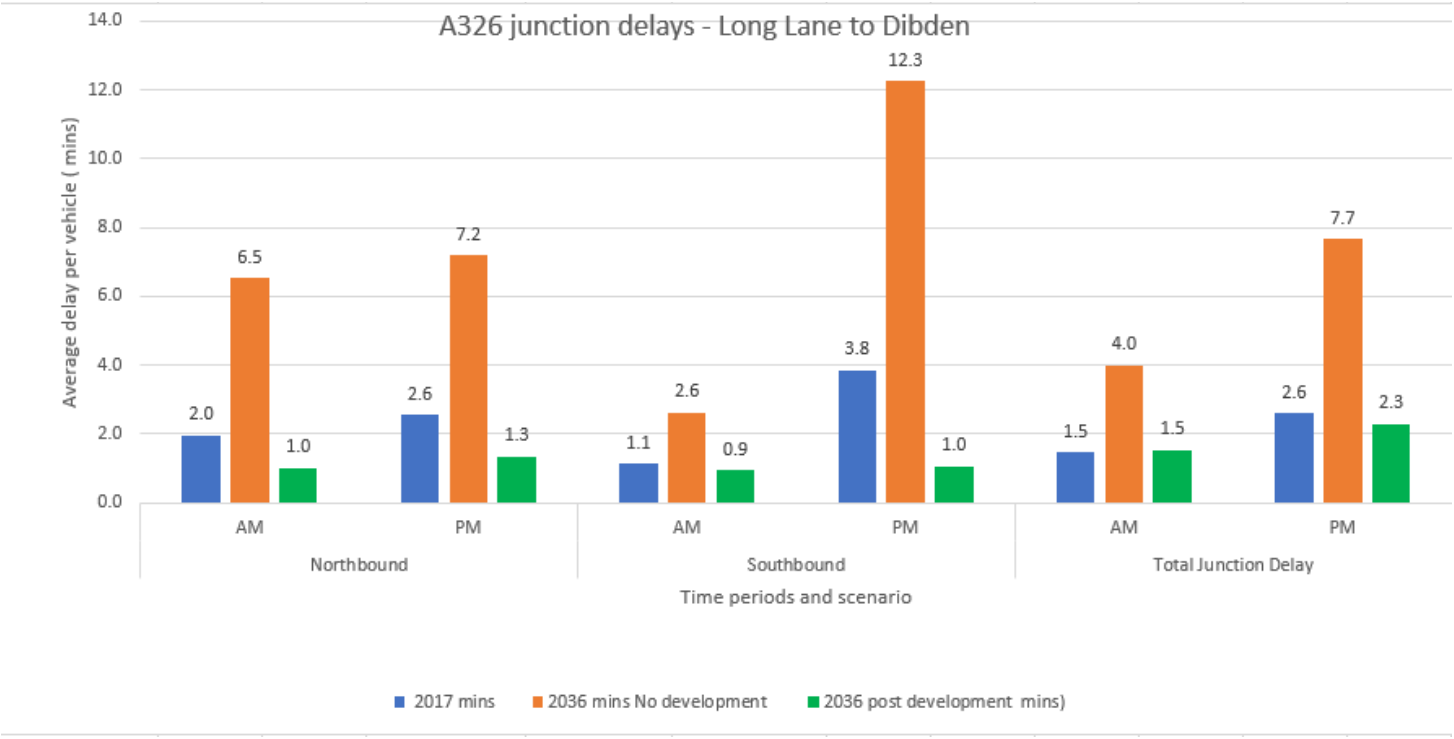
Source: Markides Associates

2.18 Turning count and queue length surveys carried out at these junctions revealed that unequal lane usage is occurring at a number of roundabouts on the A326. This is principally due to the characteristics of the highway network at these locations where the A326 is single lane and the dominant flow is between the A326 arms of the junction. Consequently, despite the roundabouts providing two lanes on approach, the majority of traffic only uses the nearside lane in order to travel ahead along the A326.

2.19 The model results demonstrate that vehicle delay is forecast to increase significantly. As noted above, this is particularly true of junctions 6, 7 and 8 which are already over capacity and are expected to see vehicle delays increase by over 200% in most cases. Without any change, residents and business travellers will experience much higher delays at these junctions, and at least four of these junctions will be over capacity by 2036.

2.20 The proposed junction improvements are designed to bring vehicle delay back to more acceptable levels given predicted background growth, whilst also accommodating the future growth in demand associated with the Fawley Waterside development. Figure 2 shows graphically the expected impact of the junction improvements even with the additional traffic from FW – this is based on junction modelling using Junctions 9 software as referred to above. This shows that in contrast to the increased delays shown in the 'Do – Nothing' Scenario in Figure 1, the addition of the improvements even with FW additional traffic is expected to bring junction delays down to the baseline 2017 levels.

Figure 2: A326 junction delays – Long Lane to Dibden (With FW)



Source: Markides Associates

Drivers for change

2.21 During public consultation for the proposed Fawley Waterside Development, it was clear that existing and future congestion on the A326 was the most frequently mentioned concern of Waterside residents and businesses. They expressed strong views that existing traffic conditions were poor and that background traffic growth and new development would exacerbate this. They were strongly in favour of highway capacity improvements to the A326.

2.22 The A326 forms a fundamental part of the Primary Road Network in Hampshire, connecting the M27 at Junction 2 to Fawley. The A326 is important at a regional and national level serving critical national infrastructure including: Fawley Oil Refinery; Marchwood Military Port; and is a gateway to the New Forest National Park (visited by circa 13.5m people each year). It also provides the only major road link between the Waterside settlements and the City of Southampton and beyond.

2.23 A 2017 Waterside Transport Study[2] identified that links and junctions on the A326 experience significant congestion and journey time delay (particularly during peak periods) along the single carriageway sections of the route and around key junctions. These capacity issues mean that the current A326 is unable to cope with the existing levels of traffic at peak times and therefore has limited or no spare capacity to accommodate any future growth in traffic using the corridor. This poses a significant problem in an area that has been identified for substantial future development, regeneration and economic growth, of both regional and national importance.

2.24 The poor resilience of the highway network in this peninsula-type location is also an important issue that is recognised by HCC and has been cited by key stakeholders in the Waterside area as a significant risk. Access to the Military Port and Refinery need to be protected in case pipelines are compromised or other national emergencies arise. If there is a problem on the A326 the lack of viable alternative routes can create serious problems, with traffic forced to divert onto much more minor routes that are longer and are inappropriate for heavy goods traffic, e.g. narrow roads through the New Forest National Park – with resulting negative air quality, noise and severance impacts.

2.25 The population in the Waterside area (c. 60,000) has the lowest relative prosperity compared to neighbouring New Forest area with 54% of local residents in work with the smallest proportion in higher skilled occupations (37.5%) and the largest proportion in lower skilled occupations (18.2%). In terms of education the region has the lowest percentage of graduate level residents (25.3%) and 11.8% have no qualifications. Investment in the A326 and at the FW development will help to deliver a significant amount of development, that would help rebalance the economic prosperity of the local populace.

2.26 Improvements to the A326 are therefore a priority for Hampshire County Council as Highway Authority, and the proposed scheme of junction improvements between Dibden roundabout and Fawley will go some way towards achieving this wider objective. The scheme to improve the A326 will help to facilitate development and

[2] Atkins (2017), *Waterside Transport Strategy*, report for Hampshire County Council

growth by providing a less congested, more reliable and more resilient primary route for all road users, by increasing the capacity of junctions.

Options examined

2.27 The two core options are:

- Do Nothing: there is no funding proposed in the HCC capital programme for capacity improvements to this section of the A326, or other improvements between Holbury and Fawley. Consequently the Do Nothing option is no change to the network.
- Do Something: various junction improvements (including new pedestrian/cycle facilities) as shown in Appendix B and summarised in Table 2.

Table 2: Summary of Do Something scenario

Junction	Drawing No	Proposed Mitigation
Junction 3 – Blackfield Road/Church lane/B3053	16031-01-207-K	Signalised junction proposed, including new crossing facilities
Junction 4 – Long Lane/A326 – (Holbury Roundabout)	16031-01-200-H	Localised improvements to the existing roundabout (widening of approaches and exit lanes)
Junction 4b - A326/Holbury Drove	16031-01-230-f	New southbound right-turn ghost island including new pedestrian crossing facilities.
Junction 4c -A326/Southbourne Avenue	16031-01-229 - E	New southbound right-turn ghost island
Junction 5 – Hardley Roundabout	16031-01-208-F	Localised improvements to the existing roundabout (widening of approaches and exit lanes)
Junction 6 – Dibden Purlieu Roundabout	16031-01-205-G	Localised improvements to the existing roundabout (widening of approaches and exit lanes)
Junction 7 – Applemore Roundabout (Sizer Way)	16031-01-204-H	Localised improvements to the existing roundabout (widening of approaches and exit lanes)
Junction 8 – Dibden Roundabout	16031-01-206-G	Localised improvements to the existing roundabout (widening of approaches and exit lanes) and new pedestrian crossing

2.28 The Waterside Transport Study[3] assessed future transport for the A326 corridor and concluded that road improvements (with a package of other measures) were an appropriate solution. At individual junctions, different design options were tested in relation to the ability to achieve appropriate capacity and for safety/other objectives. Most of these improvements were similar to those identified in the Transport Strategy. These were then generally discussed with HCC as the Highway Authority, and the options chosen were those regarded as best performing of these options.

[3] Atkins (2017), *Waterside Transport Strategy*, report for Hampshire County Council

2.29 Analysis has been undertaken to further help identify which improvement would be best to make at each relevant junction.

Delivering policy objectives

2.30 In addition to HCC's Local Transport Plan, the proposal aligns with other local and regional policies including:

- **Solent Strategic Economic Plan**: the junction improvements will bring forward the Fawley Waterside development, which will help to promote the area as a growth hub for advanced manufacturing and marine technology, unlock critical employment, provide new housing and provide effective support to SMEs.
- **Solent Strategic Transport Investment Plan**: the proposed improvements will contribute to a modern and resilient transport network that can enable businesses and people to thrive in the area, by upgrading and developing existing transport networks.
- **NFDC Local Plan**: The transport strategy includes support for improvements that reduce congestion, improve accessibility and improve road safety, with capacity improvements on the A326 highlighted as a high priority for the Waterside area. The FW site is one of the principle new development locations in the Local Plan submitted for examination.
- **NFNPPA Local Plan** – the FW site is included in the new adopted Local Plan.

2.31 The scheme strongly aligns with the Solent LEP's aims. Given the predicted congestion in the future case even without any development, the scheme will help the LEP strategic aim of 'Connecting communities and businesses' on the vital A326 route.

2.32 The schemes will also, by supporting/unlocking and accelerating the FW development, help achieve other LEP aims:

- **Enable housing delivery**: FW will provide approximately 1,500 homes with a wide variety of sizes and tenure; the proposed infrastructure improvement will help to unlock/accelerate this;
- **Provide employment growth**: with an objective to create 2,000 jobs in priority sectors such as advanced manufacturing, and marine and technology;
- **Develop skills and talent**: apprenticeship schemes will be offered providing opportunities for young people to gain work experience and build careers in construction, civil engineering, the marine industry and other business sectors;
- **Lead to innovation and research**: established partnerships with the region's universities will mean offices and workshops for research and development, with a particular focus on innovation and entrepreneurship.

Constraints and interdependencies

2.33 HCC has relatively limited design resources and a large capital programme. However, in order to meet LEP delivery timescales, HCC have agreed with Fawley Waterside Ltd. that they will assist with the necessary design of the improvements, which will then be entered into the HCC capital programme and delivered by HCC.

3 Financial case

Whole life costs

3.1 The scheme costs have been estimated by HCC using in-house quantity surveying resource. The capital costs of the junction improvements are estimated to be £4.8m (in 2018 prices with a 4% allowance for inflation to the end of construction); this includes a works risk allowance of 15%.

3.2 The allowance for design fees, management, supervision etc. (30.6%) and optimism bias of 30% have been added, which results in an overall budget of £8.12m.

3.3 The costs are assumed to be incurred in 2019/20, 2020/21 and 2021/22, with all costs incurred by the end of calendar year 2022.

3.4 This funding bid is to apply for 70% of the capital cost from the Solent LEP. The remaining 30% will be funded by a private sector contribution from Fawley Waterside.

3.5 The total capital costs, split by year, are therefore as shown in Table 3.

Table 3: Capital costs

Contributor	2019/20	2020/21	2021/22	Total
Solent LEP	405,786	5,275,223	0	5,681,009
Private Sector contribution	405,786	0	2,028,923	2,434,718
TOTAL	811,573	5,275,223	2,028,923	8,115,727

3.6 Only capital costs are being applied for from the LEP. Other costs that have been estimated for the purposes of the economic appraisal in chapter 4 are as follows:

- Renewal costs: it is assumed that renewal costs are incurred in 2050/51, 2051/52 and 2052/53, equivalent to the upfront capital costs incurred in 2019/20, 2020/21 and 2021/22.
- Maintenance costs: it is assumed that annual maintenance costs over the 60 years of the appraisal period are equivalent to around 13% of the value of the capital costs, based on experience from other schemes. Thus annual maintenance costs are equivalent to around 0.2% of capital costs.

3.7 These additional costs for maintenance and renewal would be met by Hampshire County Council as part of their routine maintenance programme.

Financial risks

3.8 Table 4 summarises the key risks for the project, the impact that they would have on costs, and how they will be mitigated.

Table 4: Summary of Financial risks

Risk	Likelihood	Impact on Cost	Mitigation
Environmental impacts	Small	Small	Preliminary work already carried out has not shown significant impacts. Early screening and discussion with planning authorities have been undertaken.
Utilities cost overrun	Medium	Medium	Early engagement with utilities; design to reduce cost; allow adequate contingency; utility information has been obtained and a site visit held with the key local gas supplier. Final design work is also being focused on reducing utility costs.
Tender cost prices too high	Small	Medium	Early engagement with contractors, review with HCC, allow adequate contingency
Build programme too long	Medium	Small	Early engagement with contractors, review with HCC, allow adequate contingency. Allowance in programme for two tender packages, to deal with easier packages first.

3.9 Fawley Waterside Limited have agreed to cover cost over-runs for the project; a letter of confirmation is included in Appendix C.

Funding cover

3.10 A letter is provided in Appendix C confirming Fawley Waterside Limited's commitment and ability to pay for 30% of the Capital costs and to also cover any project cost overruns.

4 Economic case

Introduction

4.1 The economic case for the scheme has been produced in line with the Department for Transport's WebTAG guidance. Where possible, impacts have been quantified and monetised. Where this has not been possible, a qualitative assessment is provided.

4.2 This chapter describes the method that has been applied to assess the economic benefits and costs, and the assumptions applied. A value for money assessment is provided, using the standard appraisal tables from WebTAG.

Benefits

4.3 This section takes each of WebTAG's objectives - 'Economic', 'Environmental', 'Social' and 'Public Accounts' - in turn, and describes the benefits and costs included and the method and assumptions used for those that have been quantified and valued. From a transport perspective, benefits to business trips fall under the 'Economic' heading whereas benefits to other trips are included under 'Social'.

Economic Impacts

4.4 From the perspective of economic impacts, the impacts can be divided between those that are brought about during construction and operation. These are as follows; the key assumptions used are presented in Table 5 at the end of this section.

Construction

- Additional delay to business trips by highway users
- Creation of construction jobs

Operation

- Journey time savings to business trips by existing highway users
- Journey time impacts associated with new business highway trips generated by Fawley Waterside
- Vehicle operating costs for business trips
- Bringing forward benefits associated with Fawley Waterside, such as additional jobs and GVA
- Supply chain and spillover effects

Additional delay to highway users

4.5 During construction, it is likely that there will be some additional delay to users of each junction as the necessary works associated with the junction improvements are undertaken. For the purposes of this assessment, it has been assumed that there is an average delay of one minute per trip for all journeys made in 2020.

4.6 The number of person trips using each junction is obtained from transport modelling undertaken by Markides Associates using the industry standard junction assessment

models (Junctions 9, LINSIG). This provides the number of journeys for each junction, by mode (car, light goods vehicle, heavy goods vehicle, bus, motorbike and cyclist), for an average morning and evening peak hour. These are expressed as total vehicle trips; they are converted into person trips, and split by journey purpose, by using WebTAG vehicle occupancies and journey purpose splits.

4.7 The number of trips in 2020 has been obtained by taking the base number of trips in 2017 and interpolating the growth between 2017 and 2036 (the future modelled year).

4.8 To obtain an annual figure, the morning peak hour is multiplied by 2 and the evening peak hour is multiplied by 3, with the resulting figures assumed to represent the whole morning and evening peak periods. These factors were based on a review of the available traffic data over these periods. The resulting figure is then multiplied by 253. The annualised figure therefore represents a whole year of morning and evening peak period flows.

4.9 The total delay is valued using the WebTAG values of time.

Creation of construction jobs

4.10 The number of construction jobs created has been estimated based on guidance from the Solent LEP, which gives a value of 12.5 full time equivalent jobs (FTEs) per £1m of construction spend.

4.11 Since the cost of the scheme (including contingencies and optimism bias) is estimated to be £8.1m, this equates to 101 gross FTE jobs.

4.12 It is then assumed that the level of displacement is 50%, and that there is a multiplier of 1.5; these are the same assumptions as were applied in the socio-economic assessment of the Fawley Waterside development. Thus the net additional number of FTE construction jobs created is 76.

4.13 This is a wider impact that is included in the Appraisal Summary Table (see Appendix D), but, in line with WebTAG guidance, not the central BCR.

Journey time savings to business trips by existing highway users

4.14 As well as the 2017 base year, the model results have been produced for three future year scenarios:

- 2036 Do Nothing
- 2036 Do Something: i.e. with the proposed junction improvements but just applying background traffic growth
- 2036 Do Something + development: i.e. with the proposed junction improvements, but also including the additional trips associated with the Fawley Waterside development as well as the background traffic growth

4.15 For the impacts of the junction improvements on existing users, the difference between the delay per vehicle in the 2036 Do Something and the 2036 Do Nothing is applied to the number of trips in 2036. It is assumed that there is no further increase

in trip numbers after 2036. For years prior to 2036, an interpolation between a benefit of zero in 2017, and the model results for 2036, is applied.

4.16 The resulting impacts on highway users are then valued by applying the WebTAG values of time. The benefit associated with business trips in included in the Appraisal Summary Table under the 'Economic' objective, whereas the benefit to commute and leisure trips is included under the 'Social' objective.

Journey time impacts associated with new business highway trips generated by Fawley Waterside

4.17 The Fawley Waterside development will generate new highway trips, which will impact on vehicle delay. Although vehicle delay will still be lower than in the Do Nothing scenario, there will be a worsening of vehicle delay in the 'Do Something + development' scenario relative to the 'Do Something' scenario. Given that the highway improvements will help to unlock Fawley Waterside, this has been accounted for to ensure that the net benefit reported in the TEE table is not overstated.

4.18 To estimate this impact, the same process is followed as that described above for the journey time impacts to existing users, except:

- The change to vehicle delay is estimated by comparing the '2036 Do Something + development' with the 2036 Do Something scenario
- The 'rule of half' is applied, since the trips that this impact is applied to are additional to those in the Do Nothing scenario

Vehicle operating costs for business trips

4.19 The new trips associated with Fawley Waterside will lead to additional vehicle operating costs being incurred, through increased consumption of fuel and an increase in non-fuel costs such as vehicle maintenance. Vehicle operating costs are estimated using the change to vehicle distance and applying WebTAG parameters.

4.20 In order to estimate the total additional vehicle distance in the Do Something + development scenario, the following is assumed:

- Average per distance per trip is 15 kilometres
- The average distance per trip cannot be applied to total trips through all junctions, because many trips will use more than one junction and hence the increase in vehicle distance would be overstated. The increase in vehicle distance is therefore based on the number of trips using the busiest junction (Junction 8)

4.21 The WebTAG values for fuel and non-fuel vehicle operating costs, for each mode (car, LGV, OGV1 and OGV2) are then applied in order to estimate the total impact.

Bringing forward benefits associated with Fawley Waterside, such as additional jobs and GVA

4.22 Investing in the junction improvements will facilitate, support and accelerate the Fawley Waterside development, because:

- It will reduce congestion, a key concern for local residents/politicians, supporting early implementation of Fawley Waterside;
- It will allow funding to be focused on-site, to accelerate the development of the houses and jobs;
- It will reduce project and programme risks.

4.23 The anticipated positive impacts of the FW development include the following:

- 102,600 sqm of commercial, civic and employment space
- Net additional jobs created: 265 FTEs during construction, 2,610 FTEs when operational
- Based on the average level of productivity in Hampshire and the Isle of Wight, this would equate to £99m of additional GVA per year (in 2010 prices)
- 1,500 additional dwellings, housing 3,285 residents
- Additional local spend by new residents of £24m a year

4.24 Whilst these impacts are not captured within the BCR, they represent a significant boost to the Hampshire economy and as such should be considered as part of the value for money assessment.

4.25 Other positive impacts of the development include:

- Landscape:
  - Creation of a saline lagoon and grazing marsh.
  - Restoration of the quarry to a semi-natural habitat.
  - Protection and enhancement of ancient woodland.
  - New recreational areas.
  - Formal squares and greens.
- Connectivity: New adopted road and more bus services.
- Amenities: shops, cafes, restaurants, doctor's surgery, health centre and fitness uses.
- Local business support: premises and support for local businesses, on-site jobs such as current MHI Vestas Offshore Wind Turbine work.

Supply chain and spillover effects

4.26 Section 4.10 refers to estimates of construction jobs and multiplier effects. At this stage of design and procurement it is not possible to be provide more detail of supply chain and spillover effects, but these can be considered in the monitoring of the scheme.

Table 5: Assumptions used for impacts included within Economic assessment

Assumption	Value	Source
Average delay per trip during construction	1 minute	Professional judgement by Markides Associates. Existing total junction delays between Long Lane and Dibden are some 1.5 minutes in the morning peak hour and 2.6 minutes in the evening peak hour per vehicle. An additional one minute would be an increase of some 70% in the morning peak and 40% in the evening peak. Given that the schemes are relatively small in construction terms and can be managed on-site, these estimates are regarded as reasonable.
Vehicle occupancy	Car AM: Work 1.20, commute 1.17, leisure 1.68. PM: Work 1.17, commute 1.16, leisure 1.71. LGV AM: Work 1.20, non-work 1.46. PM: Work 1.20, non-work 1.46. HGV AM: Work 1.00, non-work N/A. PM: Work 1.00, non-work N/A. Bus AM & PM: 12.2.	WebTAG November 2018 databook

Assumption	Value	Source
Journey purpose split	Car AM: Work 7.0%, commute 38.3%, leisure 54.7%. PM: Work 5.1%, commute 32.6%, leisure 62.3%. LGV AM & PM: Work 88%, non-work 12%. HGV AM & PM: Work 100%, non-work 0%. Bus AM: Work 2.1%, commute 25.6%, leisure 72.3%. PM: Work 2.6%, commute 33.5%, leisure 64.0%.	WebTAG November 2018 databook
Annualisation factor	AM peak hour to AM peak period: 2 PM peak hour to PM peak period: 3 Single peak period to whole year: 253	Source: Markides Associates Source: Markides Associates Source: 261 weekdays in a year, minus 8 public holidays

Assumption	Value	Source
Value of time	2017 values based on market prices (2010 prices): **Business trips** Car driver / passenger: £19.30 LGV: £13.29 HGV: £15.66 Bus passenger: £10.94 Motorcycle: £19.30 Cyclist: £10.94 **Commute trips** All modes: £10.86 **Leisure trips** All modes: £4.96 Growth for future years applied in line with WebTAG.	WebTAG November 2018 databook, sheet A1.3.2
FTE jobs per £1m of construction spend	12.5	Solent LEP guidance (explanatory note within Large Project Application Template)
Displacement rate	50%	Fawley Waterside socio-economic assessment
Multiplier	1.5	Fawley Waterside socio-economic assessment

Environmental Impacts

Noise

4.27 The Fawley Waterside development will generate additional vehicle trips. Since the development is assumed to be accelerated by the junction improvements, the trips associated with the new development are only included in the Do Something + development scenario. This means that there are more trips in the Do Something scenario than there are in the Do Nothing scenario, and hence an increase in environmental impacts such as noise and emissions.

4.28 The noise impacts have been quantified and valued by using the 'marginal external costs' from the WebTAG databook, which gives values, in pence per kilometre, that can be used to value the impact of additional vehicle distance.

4.29 The total change to vehicle distance is estimated using the same method as described above for vehicle operating costs.

4.30 The WebTAG value for noise, using the value for 'Other urban - A roads' is then applied to the increase in vehicle kilometres in order to estimate the total impact.

Air Quality

4.31 This impact is estimated using the same method as outlined above for Noise, using the Local Air Quality values from WebTAG.

Greenhouse Gases

4.32 This impact is estimated using the same method as outlined above for Noise, using the Greenhouse Gases values from WebTAG.

Landscape

4.33 There are no known landscape issues with the schemes.

Townscape

4.34 There are no known townscape issues with the schemes.

Historic Environment

4.35 There is one known historic building that is impacted by one of the schemes (J3, Church Lane), the Grade II Listed Fawley Village Schoolhouse. An initial review has concluded that in regard to the road re-alignment proposals and adjusting the islands at the junction there is likely to be no harm to the setting of the listed building. While traffic signals are proposed, the initial conclusion from planning and archaeological reviews was that these signals do not alter the setting of the listed building or the elements which are noted as being significant in the listing. The conclusion was thus that the proposals would not harm the setting of the listed building.

Biodiversity

4.36 An Extended Phase 1 Habitat Survey has been undertaken for the schemes. The conclusions from this were that the proposed highway improvements at two roundabouts (Beaulieu Road and Applemore) impinge on the New Forest Special Protection Area (SPA) and Ramsar site. However, it was concluded that there will be no likely significant effect on the New Forest SPA or Ramsar site and there will not be a requirement for an Appropriate Assessment in accordance with the Habitats Regulations (2017).

4.37 The road verges around the Beaulieu Road roundabout are designated a Site of Importance for Nature Conservation (SINC) and a Road Verge of Ecological Importance (RVEI). There is likely to be some loss of grasslands of nature conservation importance within the SINC at the junctions of Roman Road to the east and west of the roundabout (but outside of the SPA and Ramsar site). It will be necessary to ensure any loss of grassland is mitigated through the creation of sufficient replacement grassland habitat of similar or better quality at this or potentially other junctions within the proposed highway improvement scheme. If this can be assured there will be no significant adverse effect on this SINC.

4.38 There are minor impacts on areas of grassland of moderate nature conservation value at other junctions within the proposed highway improvement scheme. However, these

are not considered to be significant and could be mitigated through changes in management and removal of scrub and secondary woodland to create additional grassland areas.

4.39 Based on a pre-environmental screening by HCC, it was concluded that full environmental screenings should be undertaken on junction 6 (Beaulieu Road), Junction 7 (Applemore) J8 (Dibden) and J3 (Church Lane), primarily as they were in or bordered the New Forest National Park. In addition the local planning authorities attended a site visit to review the proposed works. These screenings have not identified any need for full Environmental Assessment of the works.

4.40 Recommendations are made to further enhance the wildlife value of habitats within the proposed highway enhancement scheme.

Water Environment

4.41 There are no known significant issues. Ordinary Watercourse Consent (OWC) is likely to be required for J4 (Holbury Long Lane) And J5 (Heath Roundabout), but this is included in the design programme.

Table 6: Assumptions used for impacts included within Environmental objective

Assumption	Value	Source
Distance per vehicle trips	15 kilometres	Markides Associates
Cost per kilometre – noise (2010 prices)	0.22 pence, increasing for future years in line with WebTAG (no growth after 2035)	WebTAG November 2018 databook
Cost per kilometre – air quality (2010 prices)	0.06 pence, increasing for future years in line with WebTAG (no growth after 2035)	WebTAG November 2018 databook
Cost per kilometre – greenhouse gases (2010 prices)	0.76 pence, increasing for future years in line with WebTAG (no growth after 2035)	WebTAG November 2018 databook

Social Impacts

4.42 As with the benefits under the 'Economy' objective, the 'Social' impacts can be divided between those that are brought about during construction and operation. Table 7 (at the end of this section) summarises any further assumptions beyond those already summarised above.

Construction

- Additional delay to commute and leisure trips by highway users

Operation

- Journey time savings to commute and leisure trips by existing highway users
- Journey time impacts associated with new commute and leisure highway trips generated by Fawley Waterside

- Vehicle operating costs for commute and leisure trips
- Other impacts associated with new highway trips generated by Fawley Waterside such as safety

Additional delay to commute and leisure trips by highway users

4.43 The impact on commute and leisure trips follows the same approach as that used for business trips, summarised above under the 'Economic' objective.

Journey time savings to commute and leisure trips by existing highway users

4.44 The impact on commute and leisure trips follows the same approach as that used for business trips, summarised above under the 'Economic' objective. As outlined above, the split of trips by journey purpose has been made by using journey purpose splits from WebTAG, summarised in Table 5.

Journey time impacts associated with new commute and leisure highway trips generated by Fawley Waterside

4.45 The impact on commute and leisure trips follows the same approach as that used for business trips, summarised above under the 'Economic' objective.

Vehicle operating costs for commute and leisure trips

4.46 The impact on commute and leisure trips follows the same approach as that used for business trips, summarised above under the 'Economic' objective.

Other impacts associated with new highway trips generated by Fawley Waterside such as safety

4.47 Assuming that there is no change to average accident rates per vehicle kilometre, the additional vehicle trips associated with Fawley Waterside may lead to an increase in accident numbers.

4.48 This impact has been valued using the same approach as described above for noise, local air quality and emissions, using the marginal external costs from WebTAG.

Benefits associated with walking and cycling, such as ambience and improved health

4.49 In addition to the junction improvements, the proposed scheme will provide some betterment for cycling and walking, by introducing a new Toucan crossing (J3, Church Lane) and new pedestrian refuges at J4B (Holbury Drove) and J8 (Dibden). There are no existing formal crossings at Junction 3, and this location includes a primary school

4.50 The proposed walk and cycle improvements are likely to lead to two particular benefits:

- Journey quality: WebTAG notes that journey quality is an important consideration in scheme appraisal for cyclists and walkers. The better quality someone's journey is, the more value that they put on it. In particular, perceptions of quality can include fear of potential accidents; this means that segregated cycle tracks greatly improve journey quality compared with cycling on a road with traffic.
- Health: for people who regularly walk and cycle, there are benefits to their health. In particular, WebTAG places a value on two health impacts: i) reduced levels of

mortality (i.e. the likelihood of dying in a given year) and ii) reduced levels of short term absenteeism due to improved health, which leads to an increase in GVA.

4.51 The measures proposed will have a small beneficial effect on the Providing offer for these active travel modes, generating new trips and leading to journey quality and health benefits. HCC and FWL are working together on further walk/cycle improvements in the area which would complement the measures proposed in this bid.

4.52 Data on the current number of walk and cycle trips is extremely limited, and so this impact has not been assessed quantitatively in this business case. However, qualitatively the improvements will lead to a positive impact.

Security

4.53 Other than improvements to security for pedestrians and cyclists via the new segregated routes, the improvements are expected to have a neutral impact.

Access to services

4.54 In WebTAG, this impact typically relates to public transport access to services. The improvements are highway related, and are expected to reduce delays to buses, and hence have a small positive score against this sub-objective.

Table 7: Assumptions used for impacts included within Social objective

Assumption	Value	Source
Cost per kilometre – safety (2010 prices)	3.24 pence, increasing for future years in line with WebTAG (no growth after 2035)	WebTAG November 2018 databook

Public Accounts

4.55 The impacts included within the 'Public Accounts' objective are as follows:

- Increase in indirect tax revenue
- Increase in infrastructure costs
- The direct capital, maintenance and renewal costs associated with the junction improvements

Indirect tax revenue

4.56 Although the increase in vehicle trips associated with Fawley Waterside will lead to disbenefits such as increased emissions, the positive impact on indirect tax revenue receipts (as more fuel is consumed) should be netted against this as per WebTAG guidance.

4.57 This impact has also been estimated by using values from the WebTAG marginal external costs data. The convention is to include this within the appraisal as an increase in benefits rather than a decrease in costs.

Infrastructure costs

4.58 A final impact included within the guidance on marginal external costs is the impact on infrastructure costs as a result of more vehicle trips. This is also based on the increase in vehicle kilometres, applying the values shown in Table 8.

4.59 This impact is included as a cost within the appraisal.

Direct costs associated with the scheme

4.60 The costs of the scheme are in line with those outlined in the financial case in chapter 3. For the purposes of the economic appraisal:

- The costs in the financial case, which are expressed in 2018 prices, are converted to 2010 prices by applying an assumed cost inflation rate (worked backwards so as to deflate the costs);
- An indirect tax adjustment factor is applied – WebTAG requires that this is done for the purposes of the economic appraisal so that the costs are expressed in the same terms as the benefits – according to WebTAG "*both public and private sector providers perceive costs in the factor cost unit of account so all costs should be converted using the indirect tax adjustment factor*".

Table 8: Assumptions used for impacts included within Public Accounts objective

Assumption	Value	Source
Cost per kilometre – indirect tax (2010 prices)	-3.69 pence, increasing for future years in line with WebTAG (no growth after 2035)	WebTAG November 2018 databook
Cost per kilometre – infrastructure (2010 prices)	0.11 pence, increasing for future years in line with WebTAG (no growth after 2035)	WebTAG November 2018 databook
Construction cost inflation	1.96%	ONS construction output inflation, average annual rate between October 2014 and June 2019 https://www.ons.gov.uk/businessindustryandtrade/constructionindustry/datasets/interimconstructionoutputpriceindices
Optimism bias	30%	Supplementary Green Book Guidance, within the range given for standard civil engineering https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/191507/Optimism_bias.pdf

Assumption	Value	Source
Indirect cost adjustment factor	19%	WebTAG databook

Results

4.61 The benefits and costs estimated from the approach described above are converted into a Present Value, using a 60-year appraisal period from 2022-81. The WebTAG discount rate of 3.5% a year to 2049, and 3.0% a year thereafter, is applied.

4.62 The following tables show the results in the standard WebTAG format. Table 9 is the Transport Economic Efficiency (TEE) table, Table 10 is the Public Accounts table, and Table 11 shows the Analysis of Monetised Costs and Benefits (AMCB).

4.63 The AMCB table shows that in total the scheme will provide £42.8m of benefits as a PV over 60 years. The cost to the public sector transport budget, taking into account the developer contribution, is £6.5m. The Benefit/Cost Ratio (BCR) is therefore 6.6. This represents very high value for money, the highest category on the DfT's value for money scale.

Table 9: TEE table

Non-business: Commuting	ALL MODES		ROAD		BUS and COACH	RAIL		OTHER
User benefits	TOTAL		Private Cars and LGVs		Passengers	Passengers		
Travel time	25.03							
Vehicle operating costs	-4.85							
User charges								
During Construction & Maintenance	-1.03							
COMMUTING	19.15	(1a)						
Non-business: Other	ALL MODES		ROAD		BUS and COACH	RAIL		OTHER
User benefits	TOTAL		Private Cars and LGVs		Passengers	Passengers		
Travel time	28.29							
Vehicle operating costs	-7.79							
User charges								
During Construction & Maintenance	-1.11							
NET NON-BUSINESS BENEFITS: OTHER	19.39	(1b)						
Business								
User benefits			Goods Vehicles	Business Cars & LGVs	Passengers	Freight	Passengers	
Travel time	17.25		3.70	13.54	0.01			
Vehicle operating costs	-4.97							
User charges								
During Construction & Maintenance	-0.63							
Subtotal	11.66	(2)						
Private sector provider impacts						Freight	Passengers	
Revenue								
Operating costs								
Investment costs								
Grant/subsidy								
Subtotal	0.0	(3)						
Other business impacts								
Developer contributions	-1.66	(4)						
NET BUSINESS IMPACT	9.99	(5) = (2) + (3) + (4)						
TOTAL								
Present Value of Transport Economic Efficiency Benefits (TEE)	48.53	(6) = (1a) + (1b) + (5)						

Notes: Benefits appear as positive numbers, while costs appear as negative numbers.
All entries are discounted present values, in 2010 prices and values

NB Values are shown in £m

Table 10: Public Accounts table

	ALL MODES		ROAD	BUS and COACH	RAIL	OTHER
Local Government Funding	TOTAL		INFRASTRUCTURE			
Revenue						
Operating Costs	2.54		2.54			
Investment Costs	5.64		5.64			
Developer and Other Contributions	-1.66		-1.66			
Grant/Subsidy Payments						
NET IMPACT	6.52	*(7)*				
Central Government Funding: Transport						
Revenue						
Operating costs						
Investment Costs						
Developer and Other Contributions						
Grant/Subsidy Payments						
NET IMPACT	0	*(8)*				
Central Government Funding: Non-Transport						
Indirect Tax Revenues	-3.70	*(9)*				
TOTALS						
Broad Transport Budget	6.52	*(10) = (7) + (8)*				
Wider Public Finances	-3.70	*(11) = (9)*				

Notes: Costs appear as positive numbers, while revenues and 'Developer and Other Contributions' appear as negative numbers.
All entries are discounted present values in 2010 prices and values.

NB Values are shown in £m

Table 11: Analysis of Monetised Costs and Benefits

Noise	-0.51	(12)
Local Air Quality	-0.03	(13)
Greenhouse Gases	-1.23	(14)
Journey Quality		(15)
Physical Activity		(16)
Accidents	-7.71	(17)
Economic Efficiency: Consumer Users (Commuting)	19.15	(1a)
Economic Efficiency: Consumer Users (Other)	19.39	(1b)
Economic Efficiency: Business Users and Providers	9.99	(5)
Wider Public Finances (Indirect Taxation Revenues)	3.70	- (11) - sign changed from PA table, as PA table represents costs, not benefits
Present Value of Benefits (see notes) (PVB)	42.76	(PVB) = (12) + (13) + (14) + (15) + (16) + (17) + (1a) + (1b) + (5) - (11)
Broad Transport Budget	6.52	(10)
Present Value of Costs (see notes) (PVC)	6.52	(PVC) = (10)
OVERALL IMPACTS		
Net Present Value (NPV)	36.24	NPV=PVB-PVC
Benefit to Cost Ratio (BCR)	6.56	BCR=PVB/PVC

NB Values are shown in £m

Sensitivity tests

4.64 A number of sensitivity tests have been undertaken to show the impact on the BCR of adjusting various assumptions. Given that the BCR is already very high, these tests focus on negatively affecting the assumptions, to verify their robustness. The following has been tested:

- Use a 30-year instead of 60-year appraisal;
- A 60-year appraisal, but decrease all the benefits by 25%;
- A 60-year appraisal, but increase all the costs by 25%;
- A combination of all three of these tests (30 year appraisal with lower benefits and higher costs).

4.65 The results are shown in Table 12. This shows that even if the appraisal period is halved, the benefits are reduced by 25% and the costs are increased by 25%, the BCR is 2.4, which represents high value for money.

Table 12: Sensitivity tests

	Central case	30 year appraisal	Decrease benefits by 25%	Increase costs by 25%	30 year appraisal, 25% lower benefits, 25% higher costs
Present Value of Benefits	42.8	18.0	32.1	42.8	13.5
Present Value of Costs	6.5	4.6	6.5	8.1	5.7
Net Present Value	36.2	13.4	25.6	34.6	7.8
Benefit/Cost Ratio	6.6	3.9	4.9	5.2	2.4

Appraisal summary table

4.66 An Appraisal Summary Table is provided in Appendix D, bringing together all of the information summarised above, in order to show an assessment of the scheme against the various WebTAG objectives.

5 Commercial case

Preferred procurement route

5.1 It is anticipated that the full scheme will be delivered by HCC via one or two procurement packages, both using the same process. (The preference is one package, but the design programme may require two, a few months apart).

5.2 The construction of the scheme will be procured via HCC's new Gen 4 framework which will commence in April 2020. This framework covers specialist civil engineering structural works, complex highway infrastructure works, public authority civil engineering works and associated medium value construction work between the individual project values of £50k to £10m. The Generation 4 Framework will commence April 2020 and continue until the end of March 2024.

5.3 The call off contract used to appoint a Contractor for this scheme will be procured under the terms and conditions of the NEC 4 Engineering and Construction Contract using the most appropriate payment option and will be let under the Framework Contract. This Contract is applicable to both the value and the timescales required for the scheme and is used for contracts up to £10m and is therefore suitable for this scheme.

Procurement strategy

5.4 The procurement strategy was designed to encompass the specific constraints of the project with particular reference to funding requirements, design and construction periods and incorporation of statutory undertaker's services. The project has been designed to national standards for highways projects and in accordance with Hampshire County Council's asset management requirements.

5.5 The Gen 4 framework will commence in April 2020 with a number of select contractors in the framework. Framework contractors' performance will be monitored using Key Performance Indicators (KPI) and other performance data.

5.6 This mechanism provides an incentive for the Framework Contractors to maintain a high quality of work and standard of service whilst working for HCC. The previous Gen 3 framework has been demonstrated to provide value for money and this procurement route is also most suitable for the proposed delivery timescales for the scheme, for instance when compared to the OJEU process which would extend the delivery programme significantly.

5.7 This framework covers specialist civil engineering structural works, complex highway infrastructure works, public authority civil engineering works and associated medium value construction work between the individual project values of £50k to £10m. The Generation 4 Framework will commence April 2020 and continue until the end of March 2024.

5.8 Procurement timescales are set out in the Project Delivery Programme provided as Appendix E.

6 Management case

Introduction

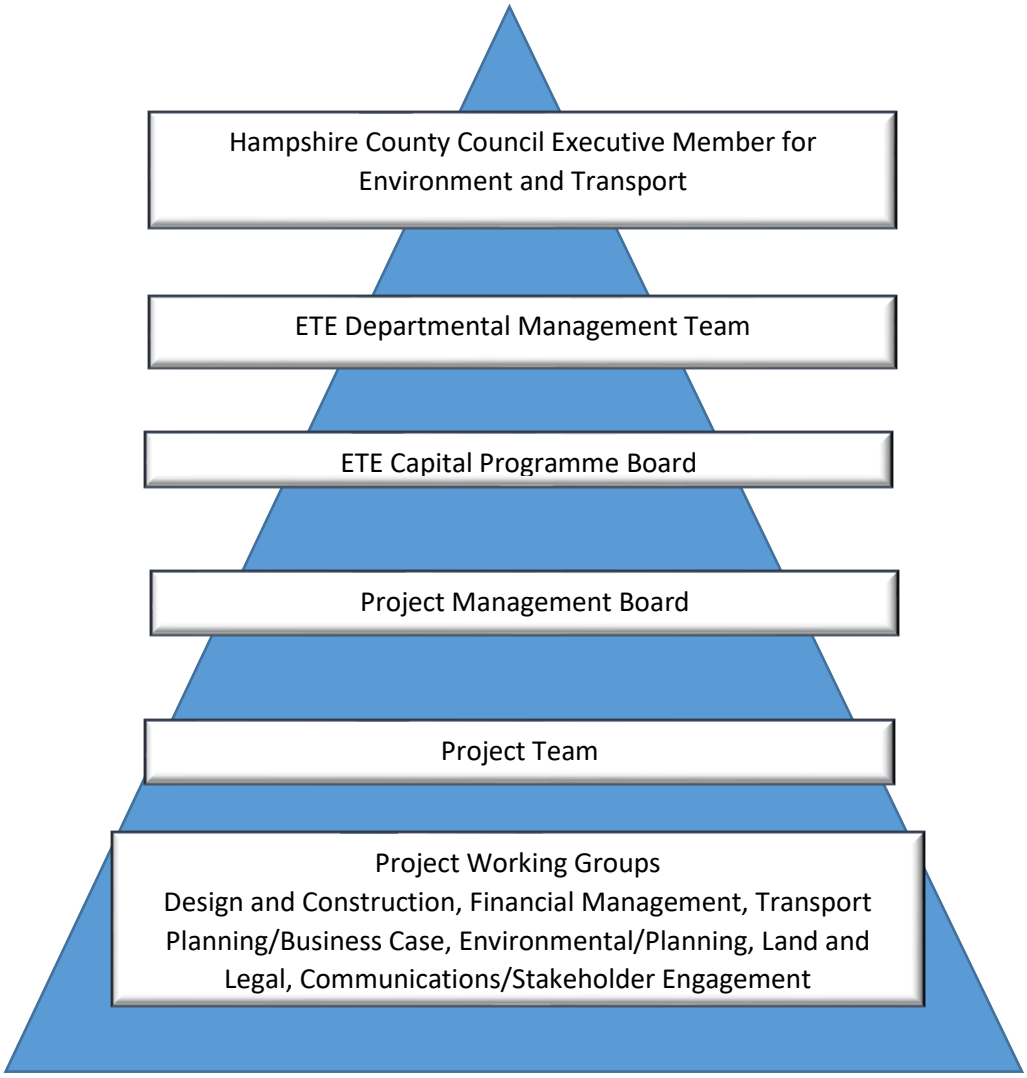
6.1 The Management Case sets out how the project will be delivered. It provides evidence from similar projects and programmes, to show that the governance, organisational structure and roles will be appropriate. The assurance and approval processes oversee delivery to ensure risks are identified and mitigated. The Management Case sets out the means by which the scheme's objectives will be realised with the benefits being realised, assessed and monitored.

Roles and responsibilities

6.2 For all projects, HCC assembles a qualified and experienced team of individuals best suited to deliver major projects. HCC, represented by the Assistant Director of Transport, will manage and oversee the delivery of the scheme. The Project Management Board already meets on a monthly basis to consider and approve contract management arrangements.

6.3 The organogram shown in Figure 3 sets out the different governance levels and key roles in relation to scheme delivery.

Figure 3: Organogram for delivery team



6.4 The Senior Responsible Officer (SRO) is Keith Willcox (Assistant Director Transport – HCC). The SRO is responsible for keeping the Executive Member aware of the development of the scheme towards meeting the project objectives.

6.5 The Project Management Board comprises officers with responsibility for the strategic delivery of all HCC major schemes, thus ensuring effective coordination between all schemes. The Board has a key focus on ensuring project assurance objectives are met, ensuring that the project remains on target in terms of business, user and technical objectives and ensures delivery of the project on time and to budget. It will also manage project risks.

6.6 David Wilson, the Head of Implementation in Strategic Transport, will have overall responsibility for ensuring the scheme follows the identified programme and will maintain the operation of the project delivery team. He will ensure that regular reporting is presented to the Project Management Board with sufficient information and that the Board clearly understands that information in order to provide necessary

guidance on programme decisions. He also has responsibility for leading the Delivery Teams and reporting to the SRO to ensure that all parties are up-to-date with relevant information.

6.7 The project teams will be organised around project working groups focusing on a particular technical delivery topic. Project teams will consist of HCC staff, HCC Engineering Consultancy and HCC Strategic Partner consultants (Atkins) and staff from Fawley Waterside Limited's consultancy team. The Project Managers will coordinate the work of the project teams. Project team meetings will be held on a monthly basis, with the outcomes escalated to the Project Management Board. Issue escalation will be via the Client Manager to the Board initially.

6.8 The Project Board ensures that relevant delivery partners, as well as other stakeholders (such as Town Councils) are represented within the delivery process.

Project assurance

6.9 The project lifecycle will be underpinned by Hampshire County Council through a Gateway Review Process (GRP) to ensure each stage is critically assessed by personnel with the relevant skills and experience, prior to commencing the next stage. The GRP provides an audit trail and ensures relevant scrutiny and challenge, visibility and transparency, and compliance.

HCC's track record

6.10 Hampshire County Council (HCC) has a strong track record in delivering transport infrastructure schemes, including major schemes. HCC is confident that this project can be completed within the stated timescales and milestones. The scale and types of works involved are familiar to those delivering them. Some examples of HCC delivery of transport infrastructure schemes are provided below.

B3385 Newgate Lane corridor, Fareham

6.11 A £20m investment supporting the 'Improving Access to Fareham and Gosport Strategy', including online capacity improvements to the northern section (£7.25m), signalisation of the Peel Common Roundabout (£3.25m) at the southern end, followed by a new bypass to the southern section (£9.5m). The overall delivery programme commenced in 2014 and was completed on time in 2018. A small overspend on the first phase was absorbed by an underspend on the final phase. Similarly, a short delay in the first phase was absorbed in the overall delivery programme.

6.12 Being off-line from the existing highway, planning permission was required for the southern section and Compulsory Purchase Order powers were implemented to acquire the necessary third-party land. As a main arterial route on the Gosport peninsula, one of the key delivery criteria successfully achieved was to minimise disruption to businesses, including the emerging Solent Enterprise Zone at Daedalus, and the regular commuting patterns of residents.

A27 improvements - Segensworth to Titchfield, and Central Fareham

6.13 £20 million of improvements to upgrade the existing single carriageway sections of the A27 Southampton Road between Segensworth (near M27 Junction 9) and the Titchfield Gyratory junction with the B3334, and in Central Fareham by the railway station and college.

6.14 The Segensworth to Titchfield scheme focused on a 2.5km length of the A27 and included as a first phase, the signalisation of the St Margaret's Roundabout. This was commenced in 2015 and completed on time in June 2016. These works were valued at £4.6m and were completed under budget. A second phase of work to provide the dual carriageway on either side of the St Margaret's roundabout were commenced in the autumn of 2016 and completed on time in spring 2018, under the £10.2m budget.

A33 Crockford and Binfields Roundabouts

6.15 This scheme, planned, designed and carried out by the County Council has also had significant funding support from the Enterprise M3 LEP. Hampshire County Council started work on 7 August 2017 to construct a £10.6 million package of highway improvements to increase capacity and help reduce congestion on the A33 in Basingstoke, between the Ringway and Binfields roundabouts.

6.16 Dyer & Butler was appointed as the County Council's contractor to deliver the scheme. The works were programmed to last approximately 18 months and finished to budget and early in December 2018.

A325 Whitehill and Bordon Inner Relief Road

6.17 Work to build the £27.4m relief road commenced in September 2015, with Phase 1 completing in November 2016 and Phase 2 completing in January 2019. The two-way single carriageway road traverses MOD areas to the west of the Whitehill and Bordon and is 2.6 miles (4.1km) long. It includes four roundabouts and two signalised junctions, and separate provision for pedestrians and cyclists.

6.18 The new road replaces the former A325 from the north side of Bordon to the southern side of Whitehill. The Relief Road supports the planned regeneration of Whitehill and Bordon to provide a free-flowing alternative to the A325 and relieve local traffic congestion. The road removes community severance caused by heavy traffic flows on the former A325 corridor and provides access to new housing and business developments, which are now under construction with reduced disruption to the local community.

6.19 Phase 1 was completed to budget as scheduled in time for the coordinated opening of new show homes on adjacent developments. Phase 2 was completed on time and within budget despite the collapse of the original contractor, Carillion.

Readiness of the project for delivery

6.20 HCC design consent is included in the delivery programme – this is regarded as achievable, given that the FW design team is working closely with the HCC design consent lead.

6.21 The schemes are generally low in construction requirements and environmental screening has already been carried out where relevant. The schemes have already been through stage 1 safety audit, and preliminary review of utilities, C3 utility agreements are currently underway.

6.22 The walk cycle scheme requires consent from the Parish Council to use a pathway through their land for part of the scheme. This is under discussion, but an alternative alignment is also possible suing highway land.

Statutory consent

6.23 Table 13 summarises details of each power or statutory consent that has been either obtained or is still outstanding (and when it is expected to be received).

6.24 All of the proposed works are on public highway land and ordinarily do not require any planning consent. The exception to this is where a scheme has a significant effect on sensitive areas or locations (such as a National Park or listed building).

6.25 In the present case, four of the schemes - J3 (Church Lane), Junction 6 (Heath roundabout), J7 (Applemore), J8 (Dibden) are situated in or very close to the National Park. In addition Junction 6 and 7 may affect sensitive environmental designated areas (SSSI, SPA). An environmental pre-screening exercise was carried out, and based on this, a full environmental screening assessment has been carried out for these schemes. This screening did not identify any significant impacts and consequently did not recommend any further environmental assessment.

6.26 In addition a Stage 1 HRA screening has been undertaken for all the works and provided to Natural England. This screening likewise did not identify any significant impacts and consequently did not recommend any further HRA assessment.

6.27 As noted in 4.35, there is one historic building that is potentially impacted by one of the schemes (J3, Church Lane), the Grade II Listed Fawley Village Schoolhouse. An initial review has concluded that the proposals would not harm the setting of the listed building.

6.28 Based on current knowledge and assessment, the only consents required are those described in the table below.

Table 13: Statutory Powers / Consents

Statutory Power or Consent	Description (include whether already obtained or if still outstanding)	Date acquired	Challenge period (if applicable)	Date of expiry of powers	Details of any conditions attached to powers/ consents
Ordinary Watercourse consent - HCC process	Still outstanding, programmed in design phase	TBC	N/A	N/A	N/A

6.29 The Fawley Waterside development is identified in both relevant Local Plans for the area (draft New Forest District and adopted National Park) and is supported by the local planning authorities, and there is thus significant confidence that a development will come forward on the former power station site. Outline planning consent has been submitted and a decision is expected in early 2020.

Project milestones

6.30 Key milestones for the project are presented in Table 14. The project delivery programme is included in Appendix E

Table 14: Project milestones

Project stage / key milestone	Description	Indicative date
LEP Board	Decision on bid	14/10/2019
Tender award (package 1)	Earlier tender package	February 2020
Package 1 woks complete	Completion earlier tender package	September 2020
Tender award (package 2)	Later tender package	September 2020
LEP funds spent (70% of funds)	LEP milestone	March 2021
Final scheme completion 9 Inc. 30% private sector funding	Project completion	August 2021

Equality Act 2010

6.31 The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited under the Act;
- Advance equality of opportunity between persons who share a relevant protected characteristic (age, disability, gender reassignment, pregnancy and

maternity, race, religion or belief, gender and sexual orientation) and those who do not share it;

- Foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

6.32 Due regard in this context involves having due regard in particular to:

a) The need to remove or minimise disadvantages suffered by persons sharing a relevant characteristic connected to that characteristic;

b) Take steps to meet the needs of persons sharing a relevant protected characteristic different from the needs of persons who do not share it;

c) Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity which participation by such persons is disproportionally low.

6.33 Currently the proposals are expected to have no or low impact upon groups with protected characteristics, and the schemes should be accessible to all road users. Where bus stops are affected, access to the buses by disabled people will be considered in terms of the County Councils requirements for accessible bus stops. In addition new or improved pedestrian crossing will incorporate required facilities/features for disabled road users. An EQIA screening will be undertaken for each scheme during the design phase.

Stakeholder Management

6.34 Hampshire County Council has a good understanding of the key stakeholders involved in the delivery of these schemes. The schemes have been consulted on as part of the Fawley Waterside consultation, and there has been detailed engagement with the New Forest District Council and New Forest National Park Planning Authority – this will continue throughout final design and implementation. These will all be evaluated, and amendments made to the Communications if necessary.

6.35 Effective stakeholder management will be undertaken in line with a scheme specific communications plan. A draft communications plan is included below. This sets out the key events / actions that have been identified throughout the full life cycle of the scheme, the key messages that require dissemination, and the preferred means of achieving this. The principal communication approaches will include the web (HCC website, social media and travel information sites), press releases, local newsletters, events, meetings and formal reporting, depending upon the target audience.

Communications Plan

6.36 The Communications Plan aims, overall, to raise awareness of the scheme, keep all audiences informed and manage public expectations in relation to the scheme objectives.

6.37 The aim of the communications and engagement plan is to:

- Identify key audiences affected by or with an interest in this scheme; and
- Keep all audiences informed in a timely manner.

6.38 In order to measure the effectiveness of communications, measures of success have been developed:

- Engaging Hampshire's residents, communities and businesses, e.g. monitoring social media interaction. Respond to social media questions;
- Evaluation of media coverage by tone of positive/neutral/negative;
- Managing public expectations;
- Number of public enquiries;
- Answering all enquiries within timescale set in policy;
- Feedback from project team;
- Number of compliments and complaints from the contractor; and
- Feedback and attendance at public events.

6.39 Table 15 summarises the key stakeholders and the approaches to engagement, consultation and dissemination.

Table 15: Stakeholder Engagement

Who	Role / relevance / interest	How	Involve / inform / consult	When
Councillors – HCC – NFDC	Political representatives	Internal Member documents / Meetings / Webpages / engagement event	Raise awareness and consult	At key points in the project
Solent Local Enterprise Partnership	Funding body	One-to-one briefings	Inform, involve and consult	As necessary
Local residents	General interest, construction / scheme impacts / actively manage resident expectations	Press releases, public consultation exhibition, Community and parish magazines, Website, social media and electronic newsletters	Inform, raise awareness	Regular updates
Local MP (Rt Hon Dr Julian Lewis MP	Political representative	Meetings / Webpages/ engagement event	Consult and gain buy in	As necessary, and at key decision points
New Forest District Council	Local Planning Authority and landowner	Meetings / emails	Involve in scheme design and development	At regular Intervals
Local businesses	Interest in localised scheme impacts	Meetings / emails / Webpages / Business Forum	Consult and gain buy in	As necessary
Fawley Parish Council	Owner of section of shared use path	Meetings / emails	Involve in scheme design and development	As necessary

Who	Role / relevance / interest	How	Involve / inform / consult	When
Local media	Keep public informed of scheme progress	Press information via Communications teams at NFDC and HCC	Inform	At regular intervals
Travelling Public	Construction impacts	Advance notice boards / Matrix signs / ROMANSE /social media	Inform	Just prior to and during construction
Utility companies	Direct impacts of scheme on equipment	Letters / e-mail updates	Inform and involve	As necessary

6.40 Co-ordination between departments within the Council, the Solent LEP, and partner organisations will ensure that information is released in a coordinated fashion, reducing confusion and supporting the process. Media relations will be co-ordinated through the Council's press team and local media will be kept informed.

Consultation

6.41 The consultation for Fawley Waterside included information on the traffic implications and mitigation, this also included the junctions proposed in this LEP bid. A summary of these events is given below:

- Autumn Public Exhibitions:

- Wednesday 27th September 2017 at Calshot Activities Centre 2 - 8pm.
- Thursday 28th September 2017 at St Francis Church, Langley 2 - 8pm.
- Friday 29th September 2017 at Jubilee Hall, Fawley 2 - 8pm.
- Saturday 30th September 2017 at Jubilee Hall, Fawley 10am - 4pm.
- Over 2,000 attended.
- 364 feedback forms received.

- Summer Public Exhibitions:

- Friday 13th July 2018 at Jubilee Hall, Fawley 2 – 8pm.
- Saturday 14th July 2018 at Jubilee Hall, Fawley 10am – 4pm.
- Over 500 attended.
- 179 feedback forms received.

- Calshot Village Public Exhibition:

- Thursday 6th December 2018 at St George's Hall, Calshot 4 – 8pm.
- Over 230 attended.
- 12 feedback forms received.

6.42 The vast majority of consultees were very supportive of the principles of the development, but had concerns about the existing traffic congestion and how the development could make this worse. They generally supported the junction improvements but also wanted more strategic transport interventions (such as dualling of the A326 and reopening of the existing freight railway line for passengers) – the former is being considered by HCC as part of a separate workstream and FW is helping promote the latter separately. .

Risk management

6.43 Risk management is a key process underpinning good scheme governance and achievement of scheme objectives in a cost-effective manner. Accordingly, an appropriate framework (comprising managing, reporting, process and responsibilities) has been implemented as part of scheme management arrangements.

6.44 In the context of the scheme, risk has been defined as the potential for future events which have a negative impact on the achievement of scheme objectives. Events which provide a potential opportunity to impact positively on objectives have not been addressed. It should be noted also that risks relating to the operational management of the scheme have been excluded although technical performance risks shall be addressed through compliance with appropriate design standards and codes of practice.

6.45 The risk identification process has been informed through project meetings held with project team technical specialists in the various working group disciplines, along with the Project Manager and Client Manager.

6.46 Risk descriptions, causes and consequences have been established in order to allow assessment of the likelihood of occurrence and direct and indirect impacts. It should be noted that catastrophic risks, which arise from extraordinary events and result in exceptional consequences to the achievement of scheme outcomes and objectives, have not been included.

6.47 Table 16 provides a summary of the main risks attached to the project, specifying their likelihood, impact and how they will be managed and mitigated.

Table 16: Risks

Risk	Likelihood (L / M / H)	Impact (L / M / H)	How risk will be managed / mitigated
Environmental impacts	Low	Medium l	Preliminary work already carried out has not shown significant impacts. Early screening and discussion with planning authorities has been undertaken.
Utilities cost overrun	Medium	Medium	Early engagement with utilities; design to reduce cost; allow adequate contingency
Tender cost prices too high	Low mall	Medium	Early engagement with contractors, review with HCC, allow adequate contingency/optimism bias
Build programme too long	Medium	Small	Early engagement with contractors, review with HCC, allow adequate contingency

Monitoring and evaluation

6.48 The scheme objectives are set out in the strategic case, and the expected benefits and outcomes are detailed in the economic case. Benefits related to improved journey time reliability are likely to arise more immediately following implementation of the scheme. The resultant outcomes in terms of helping to unlock housing and jobs at Fawley Waterside will come forward over a longer time frame.

Monitoring

6.49 The management arrangements will be outlined in a generic monitoring strategy for all LEP schemes and reported back to the Solent LEP on a regular basis.

6.50 The Monitoring and Evaluation plan will assess the performance of the proposal against the specific scheme objectives / outcomes.

6.51 Before and after scheme monitoring will be undertaken to evaluate the scheme's effectiveness against stated objectives. Traffic data will be collected and collated, and journey time data evaluated. HCC has access to Traffic master journey time data, which is supplied annually, which can be used to quantify changes in journey times and journey time reliability.

6.52 Table 17 sets out an indicative monitoring framework and identifies potential performance indicators.

Table 17: Indicative monitoring framework

Ref	Benefit	Indicator	Base	Target	Data	Timeframe
Project outputs						
1	Provision of junction improvements at 8 junctions along the A326, together with improved pedestrian and cycle facilities	Extent of implementation of the proposed scheme	Not implemented	Fully implemented	None	2021 (completion
Project outcomes						
1	Improved journey times and reliability for motorists	Extent to which modelled journey times are achieved	2019	TBC	Journey time surveys	6 months after opening
2	Improved journey experience for pedestrians and cyclists	Pedestrian and cyclist satisfaction with journey	2019	TBC	Survey data	Annually
3	Provision of new homes at Fawley Waterside development	Number of new homes constructed	Number of homes	1,500	Number of houses	Monitor annually until completion of FW
4	Job creation at Fawley Waterside development	Level of employment at FW	Number of jobs	2,610 full time equivalent jobs	Employment data	Monitor annually until completion of FW

Evaluation

6.53 Post Project Evaluation (PPE) is recognised as an important element of the overall project delivery lifecycle. Lessons learned from the implementation of the scheme will be documented on completion of key stages. An audit will be undertaken of performance against aims and objectives as part of the project assurance process – this will be broader in nature than the monitoring plan and include evaluation in relation to activity performance, financial projections (actual vs forecast costs), construction and commissioning. The Project Manager will oversee the maintenance of a Lessons Learned Log and a Lessons Learned Report will be produced at project closure.

6.54 Monitoring and evaluation information will be shared with stakeholders as appropriate and reported to the Solent LEP at timescales to be agreed.

Appendices

Appendix A – Map of Scheme Location

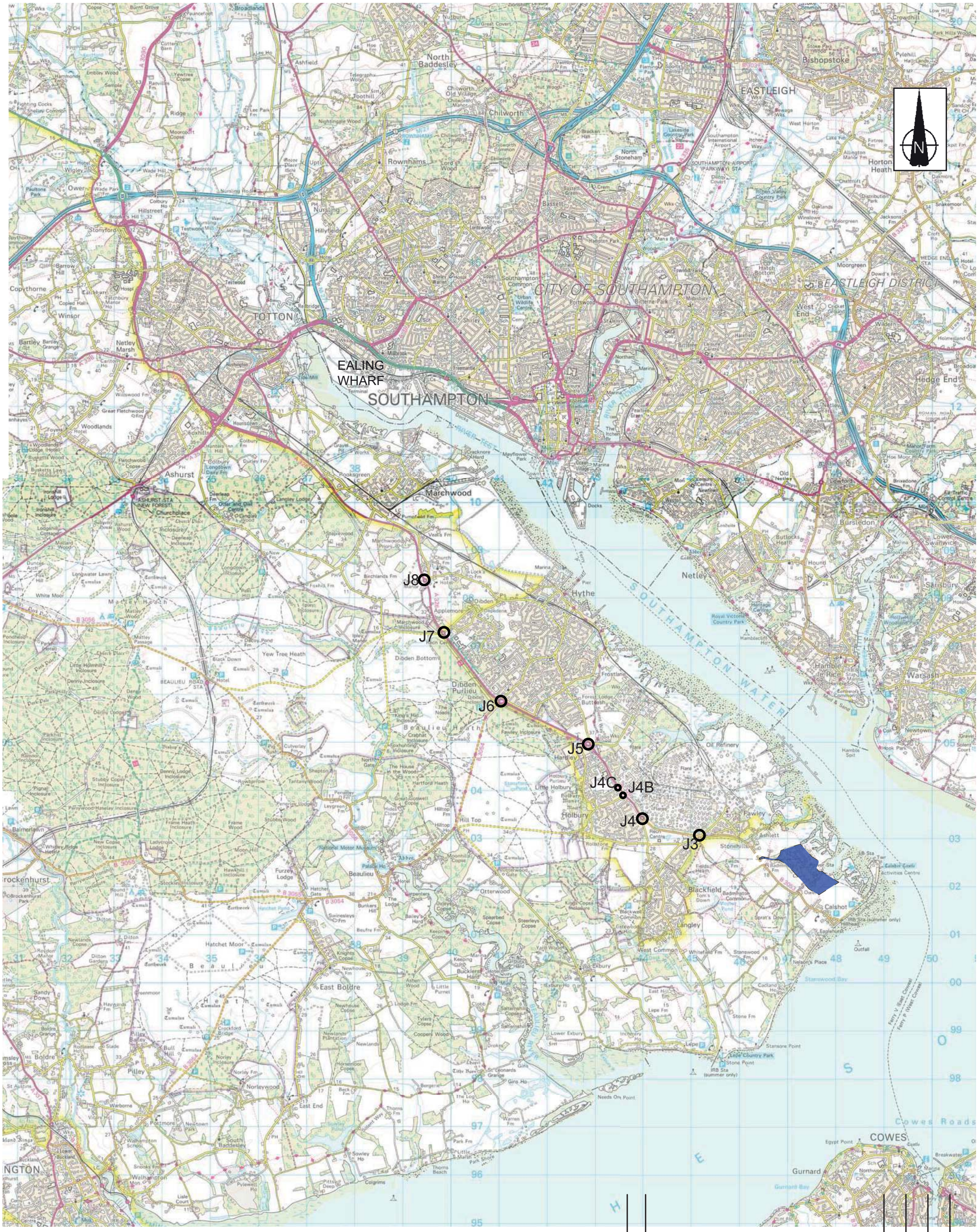
Appendix B – Scheme Drawings

Appendix C – FW Letter of Support

Appendix D – Appraisal Summary Table

Appendix E – Project Delivery Programme

Appendix A – Map of scheme location



Rev	Amendments	Drn	Chk	App	Date

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Job Title: FAWLEY WATERSIDE	Scale: NTS	Date: May '19	Designed: JC	
Drawing Title: Proposed Project Locations	Drawn: JC	Checked: LL	Approved: AN	
Client: FAWLEY WATERSIDE	Job No: 16031-01	Figure No: FIGURE 1		Rev

Appendix B – Scheme drawings

KEY

- HIGHWAY BOUNDARY
- PROPOSED TRAFFIC SIGNAL
- PROPOSED KERBLINE
- PROPOSED TACTILE PAVING
- PROPOSED SHARED SURFACE FOOTWAY / CYCLEWAY
- NATIONAL PARK BOUNDARY
- EXTENT OF NEW HIGHWAY CONSTRUCTION

LEFT PEDESTRIAN VISIBILITY: 1.5m x 120m

RIGHT PEDESTRIAN VISIBILITY: 1.5m x 90m

EXISTING TREES POTENTIALLY AFFECTED BY CARRIAGEWAY WIDENING

PROPOSED TOUCAN CROSSING

SIGHT STOPPING DISTANCE 120m

EXISTING TREES POTENTIALLY AFFECTED BY CARRIAGEWAY WIDENING

120m SIGHT STOPPING DISTANCE

JUNCTION INTERVISIBILITY ENVELOPE

EXISTING ISLAND TO BE WIDENED TO 1.5m AND CARRIAGEWAY EXTENTS ADJUSTED TO SUIT

EXISTING FOOTWAY TO BE EXTENDED TO EDGE OF CARRIAGEWAY LANE

120m SIGHT STOPPING DISTANCE

LEFT VEHICLE VISIBILITY: 2.4m x 28m

EXISTING TREE POTENTIALLY AFFECTED BY CARRIAGEWAY WIDENING

INDICATIVE SIGNAL BOX

RIGHT VEHICLE VISIBILITY: 2.4m x 33m

PROPOSED 3.5m WIDE ISLAND TO BE CONSTRUCTED AND CARRIAGEWAY EXTENTS ADJUSTED TO SUIT

CARRIAGEWAY WIDTH TO BE REDUCED TO 3.25M ON JUNCTION APPROACH

JUNCTION INTERVISIBILITY ENVELOPE

KERB REALIGNED TO ACCOMMODATE PROPOSED SHARED FOOTWAY/CYCLEWAY

SIGHT STOPPING DISTANCE 120m

AREA IN NATIONAL PARK

0 1:1000 50m

NOTES

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2. NO STATUTORY UNDERTAKER RECORDS WERE AVAILABLE AT THE TIME OF ISSUE.

Rev	Amendments	Drn	Chk	App	Date
L	REVISED LAYOUT BASED ON HCC COMMENTS	LL	MH	AN	28.08.2019
K	REVISED LAYOUT BASED ON HCC COMMENTS	SK	MH	LL	19.03.2019
J	DRAWING NOTES ADDED & KEY AMENDED	SM	LL	LL	25.02.2019
I	MINOR AMENDMENTS	SK	LL	LL	06.12.2018
H	REVISED LAYOUT	SK	LL	LL	16.11.2018
G	HIGHWAY & NATIONAL PARK BOUNDARY ADDED	SK	LL	LL	01.11.2018
F	SSD ADDED	KO	LL	LL	10.09.2018
E	MINOR AMENDMENTS	KO	LL	LL	05.07.2018
D	MINOR AMENDMENTS	KO	LL	LL	01.06.2018
C	PREPERATION FOR PUBLIC CONSULATTION	KS	LL	LL	22.05.2018
B	REVISED LAYOUT	KS	LL	LL	30.04.2018
A	REVISED LAYOUT	KO	LL	LL	12.13.2017

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Job Title: FAWLEY WATERSIDE

Client: FAWLEY WATERSIDE LTD

Drawing Title: J3 FAWLEY BYPASS & CHURCH LANE PRELIMINARY DESIGN - JUNCTION IMPROVEMENTS

Scale	Date	Designed
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Drawn	**Checked**	**Approved**
KO	DP	AM

Job No	Drawing No	Rev
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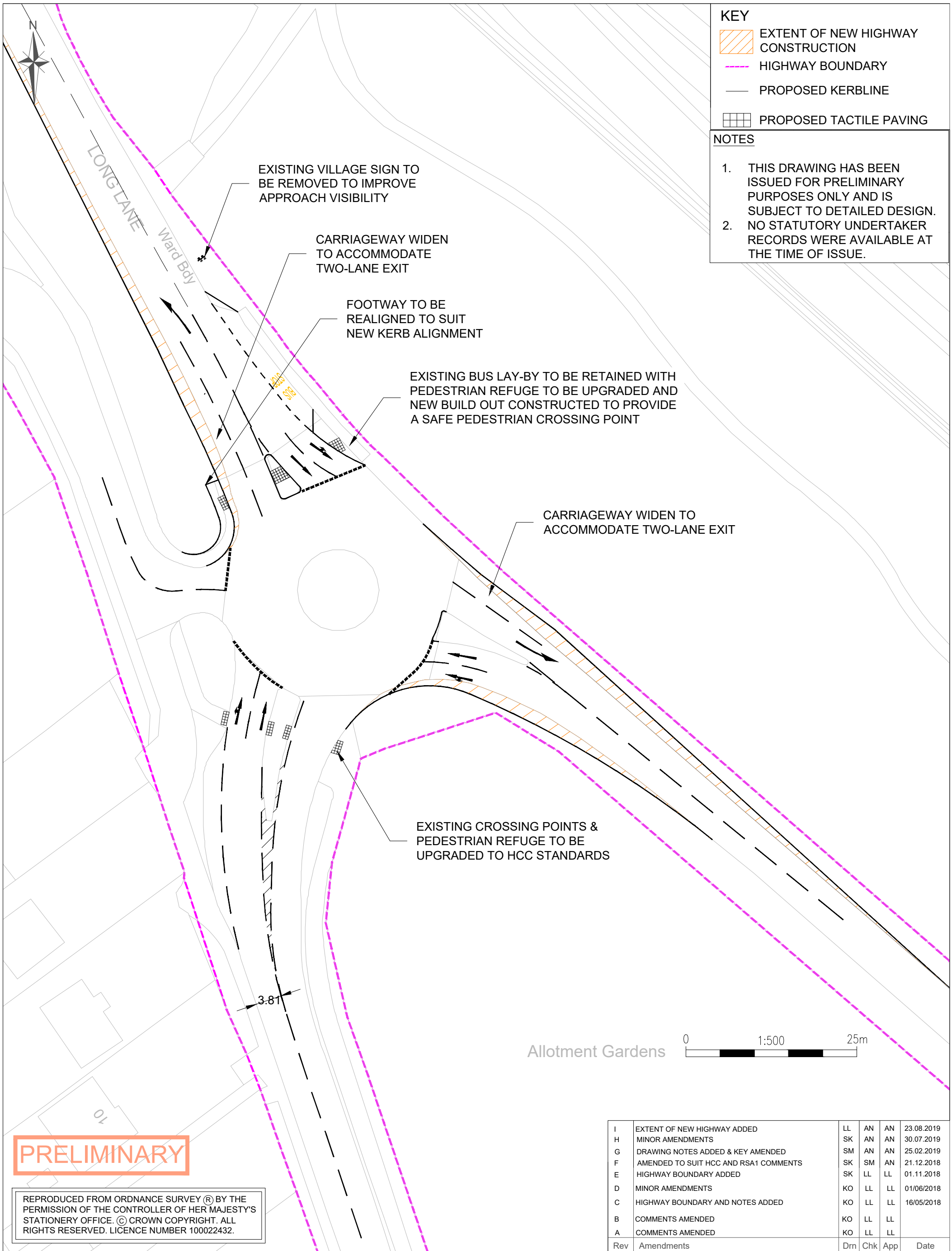

KEY

- EXTENT OF NEW HIGHWAY CONSTRUCTION
- HIGHWAY BOUNDARY
- PROPOSED KERBLINE
- PROPOSED TACTILE PAVING

NOTES

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2. NO STATUTORY UNDERTAKER RECORDS WERE AVAILABLE AT THE TIME OF ISSUE.

PRELIMINARY

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I	EXTENT OF NEW HIGHWAY ADDED	LL	AN	AN	23.08.2019
H	MINOR AMENDMENTS	SK	AN	AN	30.07.2019
G	DRAWING NOTES ADDED & KEY AMENDED	SM	AN	AN	25.02.2019
F	AMENDED TO SUIT HCC AND RSA1 COMMENTS	SK	SM	AN	21.12.2018
E	HIGHWAY BOUNDARY ADDED	SK	LL	LL	01.11.2018
D	MINOR AMENDMENTS	KO	LL	LL	01/06/2018
C	HIGHWAY BOUNDARY AND NOTES ADDED	KO	LL	LL	16/05/2018
B	COMMENTS AMENDED	KO	LL	LL	
A	COMMENTS AMENDED	KO	LL	LL	

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Job Title	Scale	Date	Designed
FAWLEY WATERSIDE	1:500 @A3	MAY 18	KO
Drawing Title	**Drawn**	**Checked**	**Approved**
J4 - PROPOSED IMPROVEMENTS TO HOLBURY ROUNDABOUT	KO	DP	DP
Client	**Job No**	**Drawing No**	**Rev**
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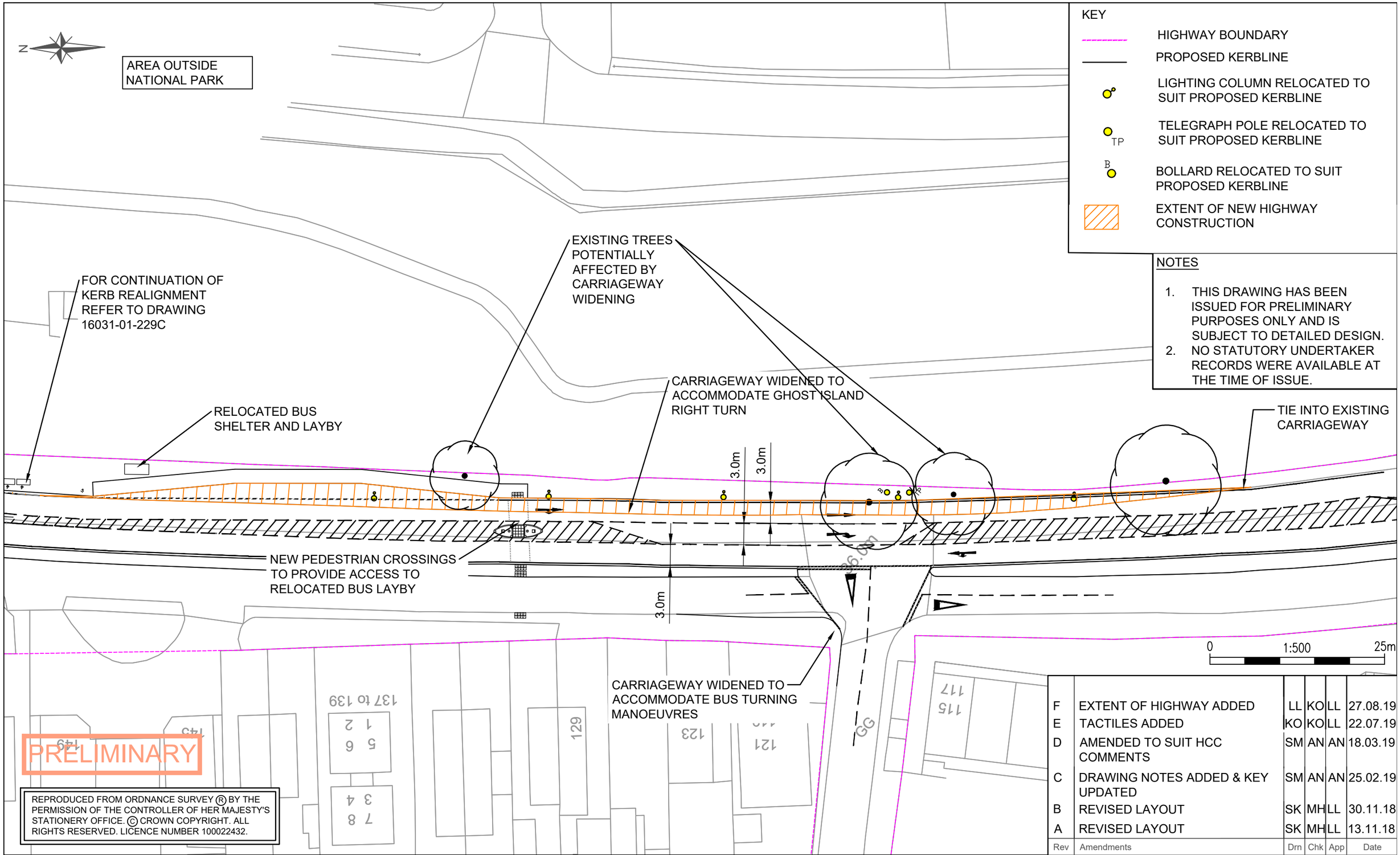

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C	DRAWING NOTES ADDED & KEY UPDATED	SM	AN	AN	25.02.19
B	REVISED LAYOUT	SK	MH	LL	30.11.18
A	REVISED LAYOUT	SK	MH	LL	13.11.18

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Job Title: FAWLEY WATERSIDE

Drawing Title: J4B - PROPOSED IMPROVEMENTS AT HOLBURY DROVE

Client: FAWLEY WATERSIDE LTD

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Drawn	**Checked**	**Approved**
KS	LL	LL

Job No	Drawing No	Rev
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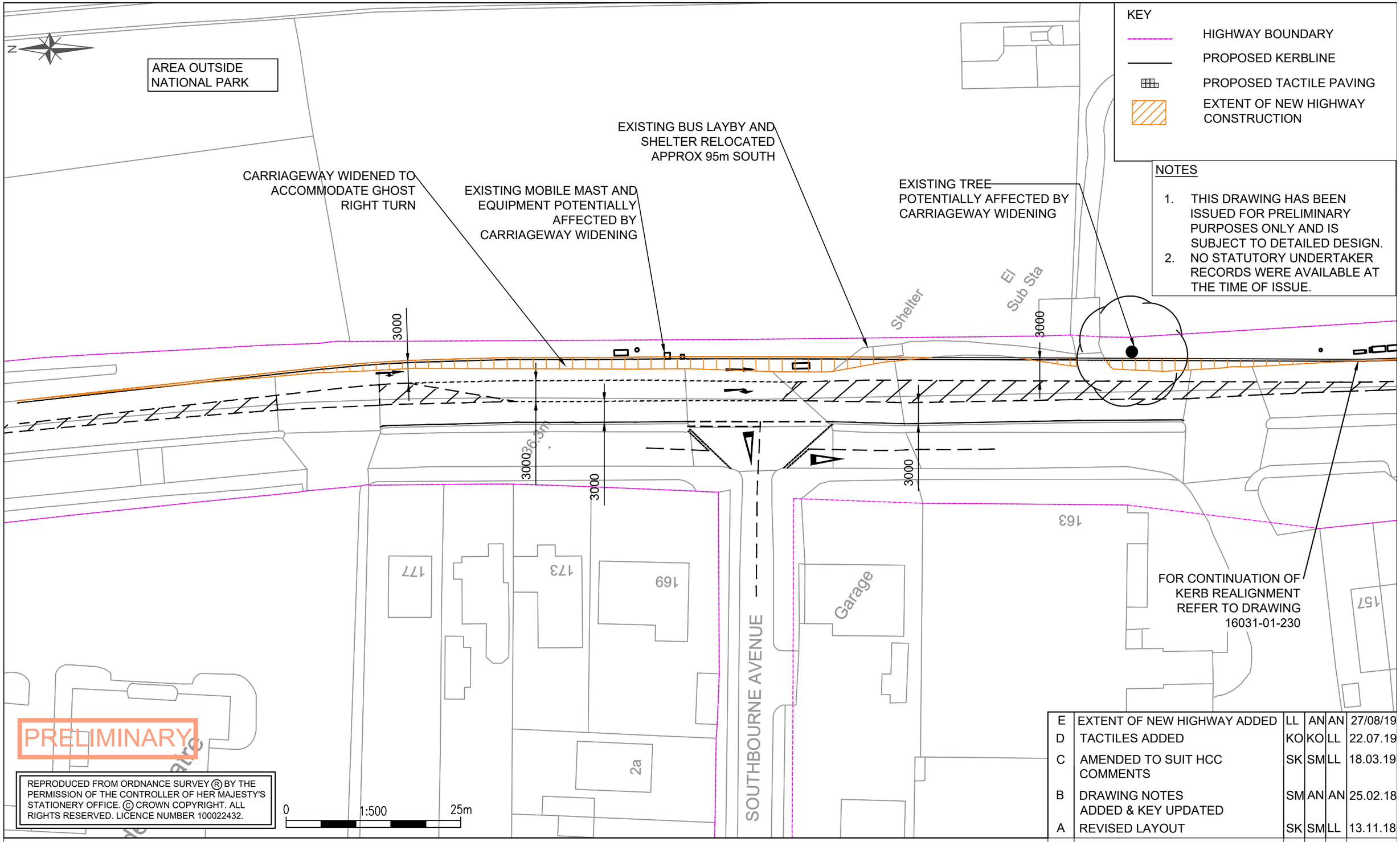

KEY

- HIGHWAY BOUNDARY
- PROPOSED KERBLINE
- PROPOSED TACTILE PAVING
- EXTENT OF NEW HIGHWAY CONSTRUCTION

NOTES

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D	TACTILES ADDED	KO	KO	LL	22.07.19
C	AMENDED TO SUIT HCC COMMENTS	SK	SM	LL	18.03.19
B	DRAWING NOTES ADDED & KEY UPDATED	SM	AN	AN	25.02.18
A	REVISED LAYOUT	SK	SM	LL	13.11.18

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Job Title: FAWLEY WATERSIDE

Drawing Title: J4C - PROPOSED IMPROVEMENTS AT SOUTHBOURNE AVENUE

Client: FAWLEY WATERSIDE LTD

Scale	Date	Designed
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Drawn	**Checked**	**Approved**
KS	LL	LL

Job No	Drawing No	Rev
16031-01	16031-01-229	E

KEY

- EXTENT OF NEW HIGHWAY CONSTRUCTION
- HIGHWAY BOUNDARY
- PROPOSED KERBLINE

NOTES

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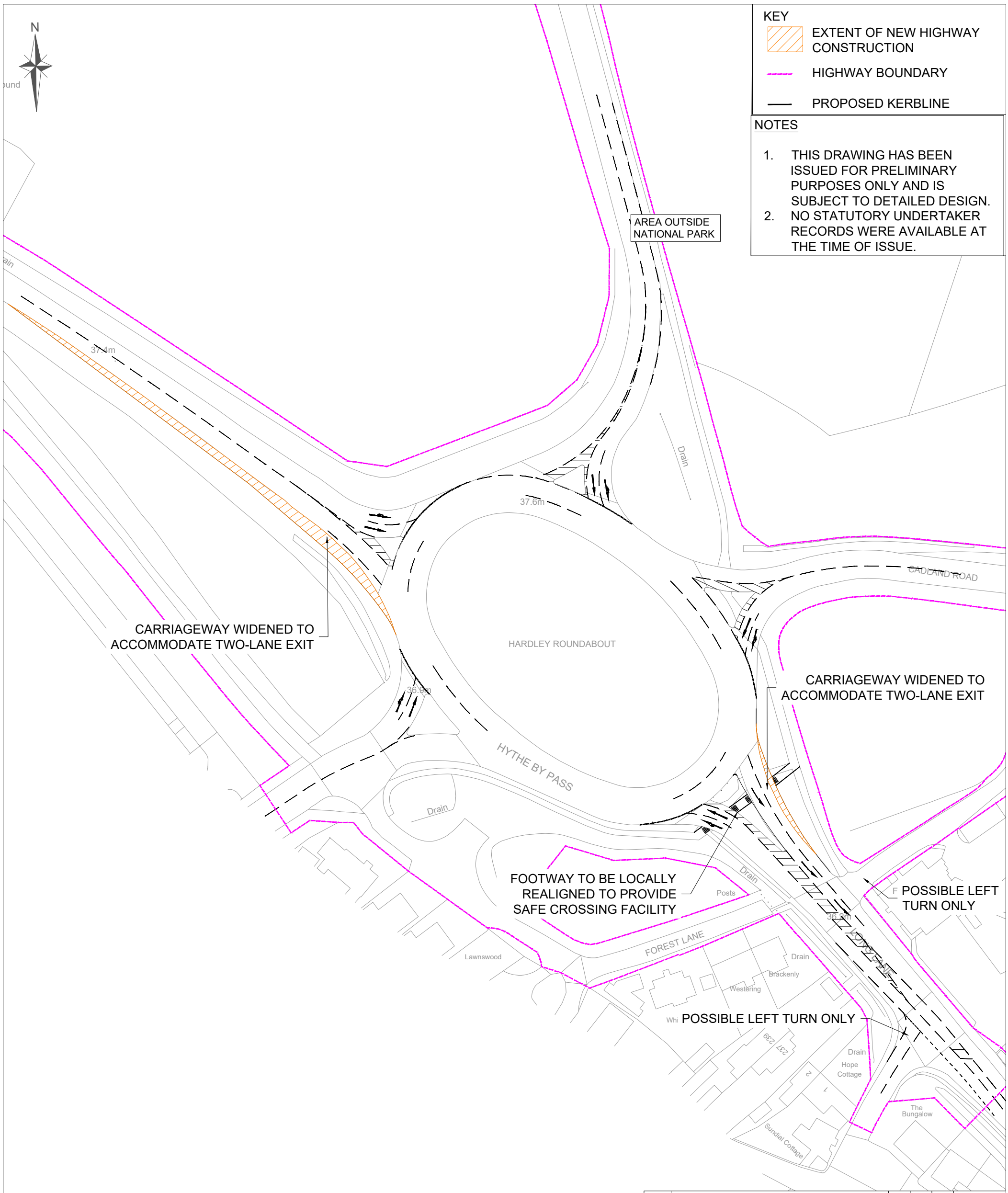

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E	MINOR AMENDMENTS	SK	LL	LL	05/12/2018
D	AMENDED TO SUIT RSA1 COMMENTS	KO	LL	LL	28/06/2018
C	MINOR AMENDMENTS	KO	LL	LL	28/06/2018
B	MINOR AMENDMENTS	KO	LL	LL	01/06/2018
A	HIGHWAY BOUNDARY AND NOTE ADDED	KS	LL	LL	16/04/2018

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Job Title	Scale	Date	Designed
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Drawing Title	**Drawn**	**Checked**	**Approved**
J5 - PROPOSED IMPROVEMENTS TO HARDLEY ROUNDABOUT	KO	LL	LL
Client	**Job No**	**Drawing No**	**Rev**
FAWLEY WATERSIDE LTD	16031-01	16031-01-208	G

KEY

- HIGHWAY BOUNDARY
- SPECIAL PROTECTION AREA & WETLAND OF INTERNATIONAL IMPORTANCE
- SPECIAL AREA OF CONSERVATION & SCIENTIFIC INTEREST (SSSI)
- NATIONAL PARK BOUNDARY
- EXTENT OF NEW HIGHWAY CONSTRUCTION
- PROPOSED KERBLINE

NOTES

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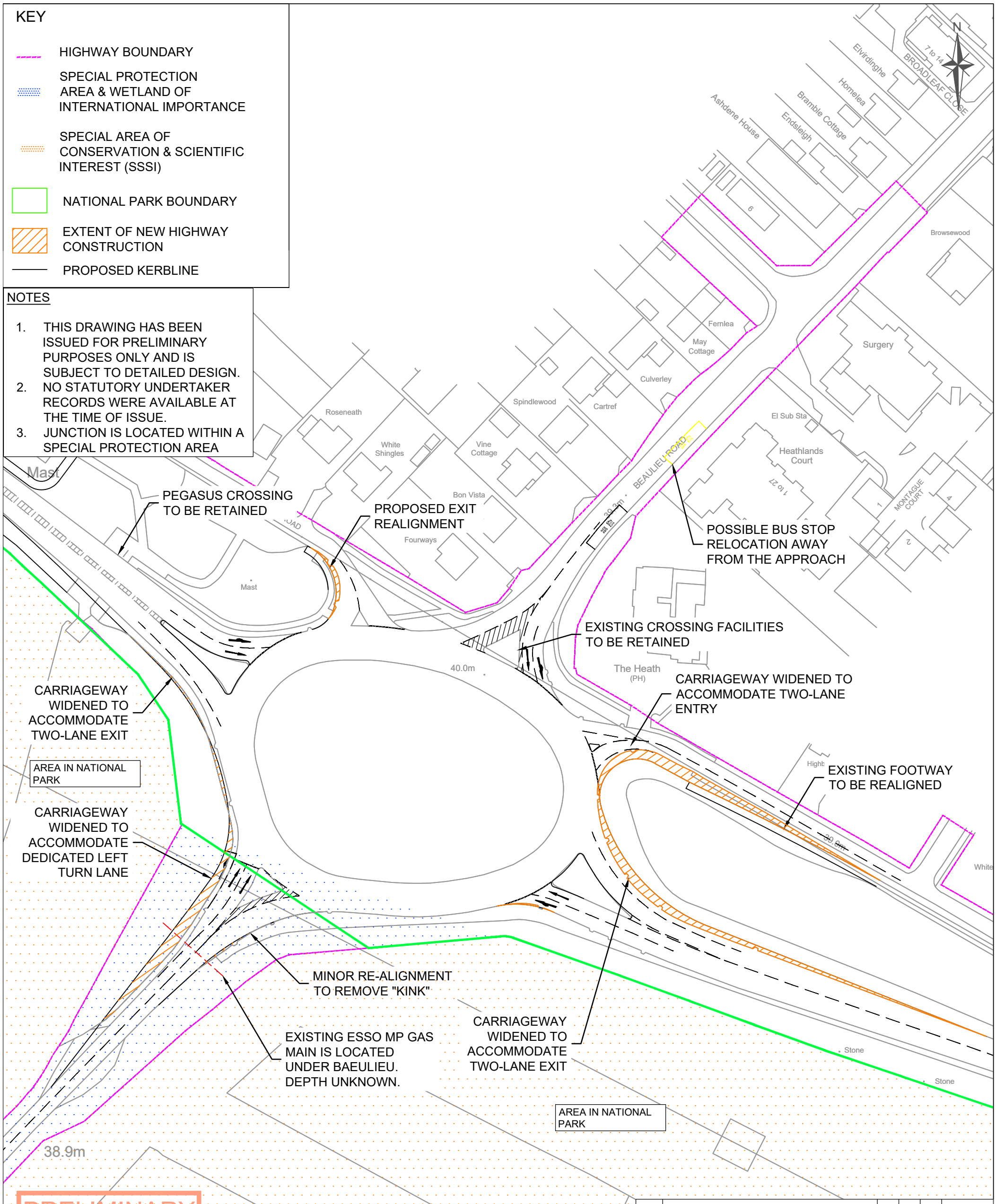
2. NO STATUTORY UNDERTAKER RECORDS WERE AVAILABLE AT THE TIME OF ISSUE.
3. JUNCTION IS LOCATED WITHIN A SPECIAL PROTECTION AREA



PRELIMINARY

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F	EXTENT OF NEW HIGHWAY ADDED	SK	AN	AN	08/07/2019
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D	ROAD MARKINGS AMENDED	SM	LL	LL	02/01/2019
C	ROAD MARKINGS AMENDED	KO	LL	LL	20/06/2018
B	HIGHWAY BOUNDARY AND NOTE ADDED	KS	LL	LL	16/04/2018

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Job Title	Scale	Date	Designed
FAWLEY WATERSIDE	1:1000 @A3	MAY 18	KO
Drawing Title	**Drawn**	**Checked**	**Approved**
J6 - PROPOSED IMPROVEMENTS TO BEAULIEU ROAD ROUNDABOUT	KO	DP	AM
Client	**Job No**	**Drawing No**	**Rev**
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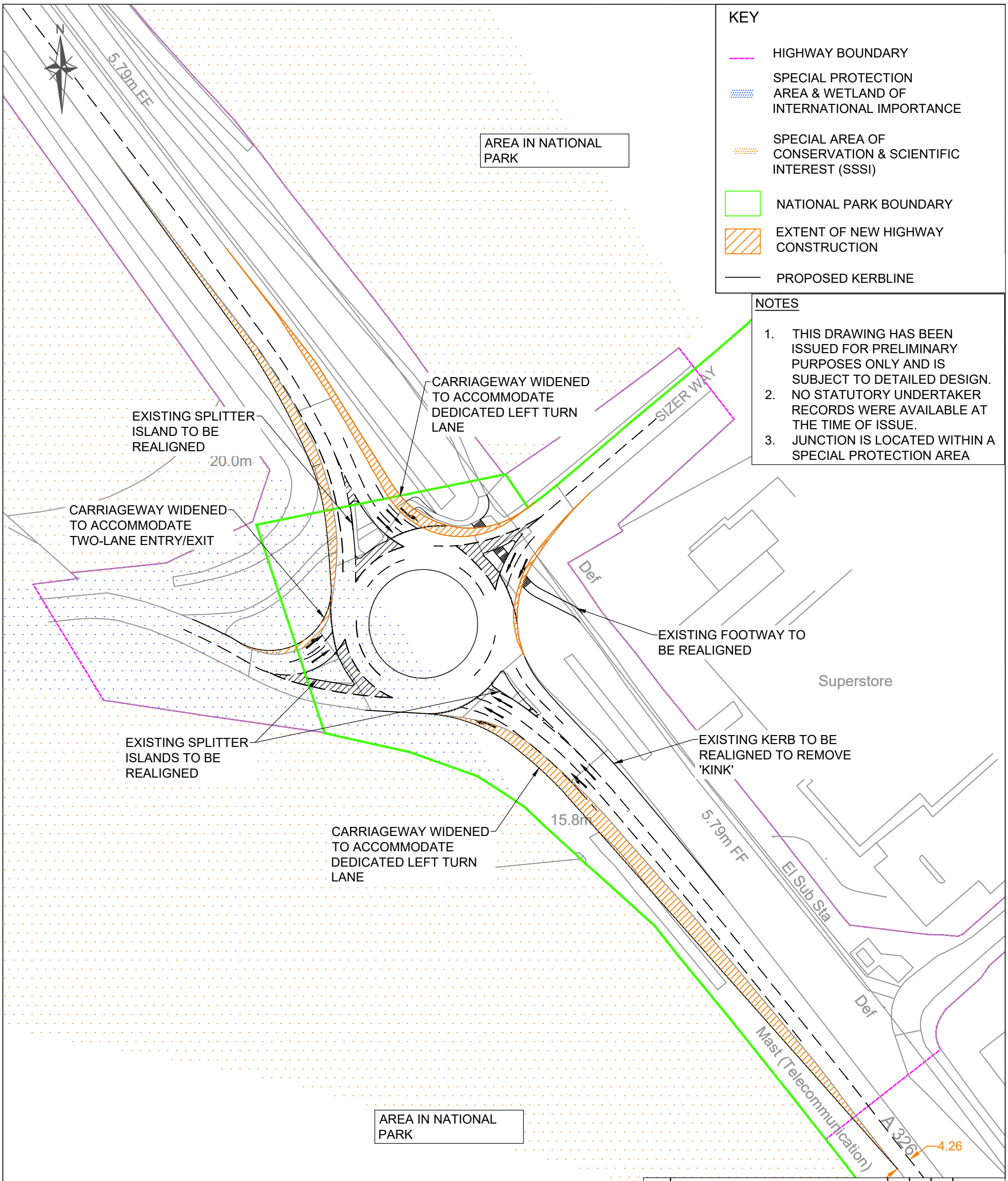

PRELIMINARY

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H	MINOR AMENDMENTS	SK	LL	AN	30/07/2019
G	EXTENT OF NEW HIGHWAY ADDED	SK	AN	AN	08/07/2019
F	DRAWING NOTES ADDED & KEY AMENDED	SM	AN	AN	25/02/2018
E	MINOR AMENDMENTS	SK	AN	AN	04/02/2018
D	MINOR AMENDMENTS	SK	AN	AN	05/12/2018
C	MINOR AMENDMENTS	KO	AN	AN	01/06/2018
B	PREPARATION FOR PUBLIC CONSULTATION	KO	AN	AN	22/05/2018
A	HIGHWAY BOUNDARY AND NOTE ADDED	KS	LL	LL	16/04/2018

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Job Title	Scale	Date	Designed
FAWLEY WATERSIDE	1:1000 @A3	MAY 18	KO
Drawing Title	**Drawn**	**Checked**	**Approved**
J7 - PROPOSED IMPROVEMENTS APPLEMORE RBT	KO	LL	AM
Client	**Job No**	**Drawing No**	**Rev**
FAWLEY WATERSIDE LTD	16031-01	16031-01-204	H

KEY

EXTENT OF NEW HIGHWAY CONSTRUCTION

HIGHWAY BOUNDARY

PROPOSED KERBLINE

NOTES

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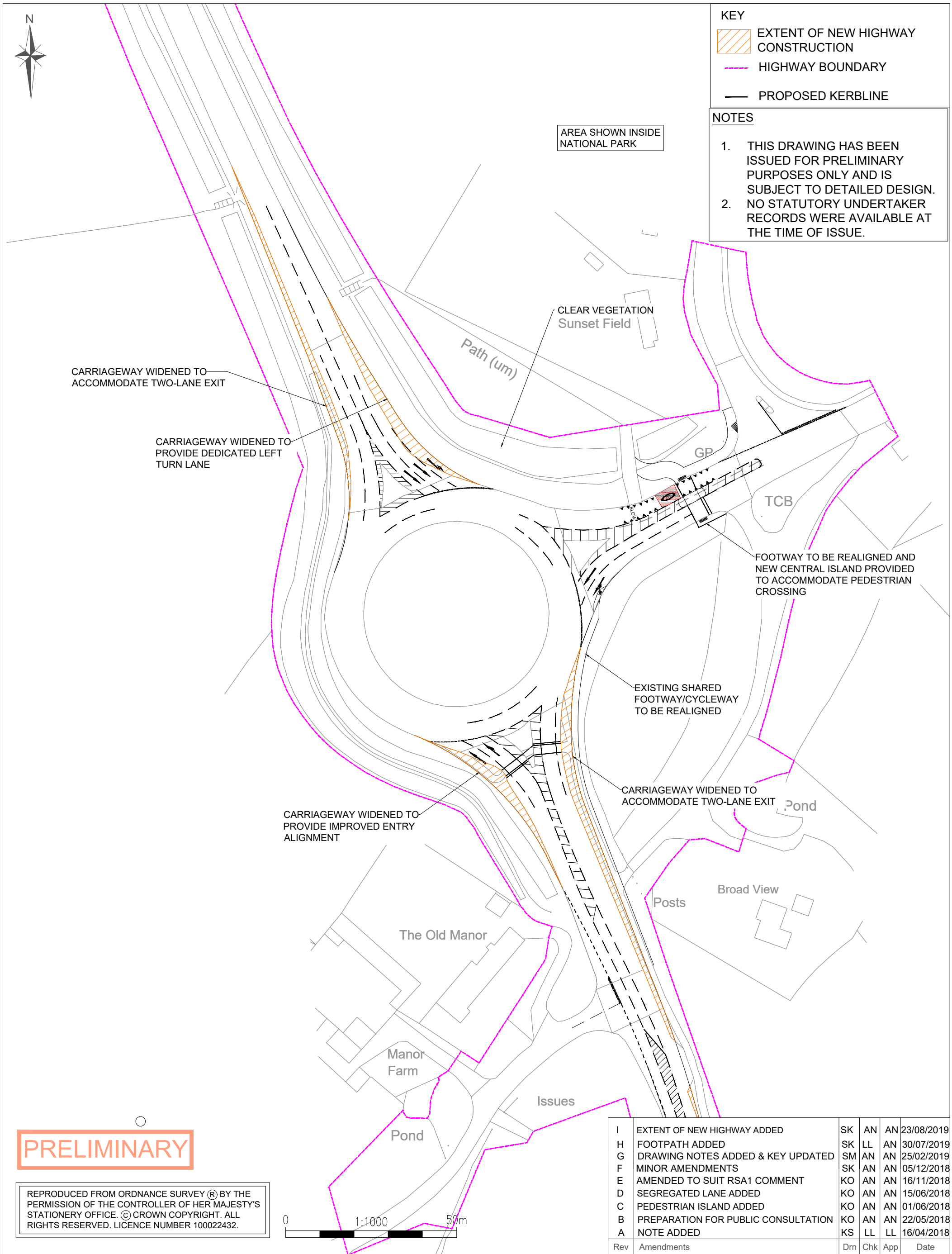
2. NO STATUTORY UNDERTAKER RECORDS WERE AVAILABLE AT THE TIME OF ISSUE.



PRELIMINARY

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H	FOOTPATH ADDED	SK	LL	AN	30/07/2019
G	DRAWING NOTES ADDED & KEY UPDATED	SM	AN	AN	25/02/2019
F	MINOR AMENDMENTS	SK	AN	AN	05/12/2018
E	AMENDED TO SUIT RSA1 COMMENT	KO	AN	AN	16/11/2018
D	SEGREGATED LANE ADDED	KO	AN	AN	15/06/2018
C	PEDESTRIAN ISLAND ADDED	KO	AN	AN	01/06/2018
B	PREPARATION FOR PUBLIC CONSULTATION	KO	AN	AN	22/05/2018
A	NOTE ADDED	KS	LL	LL	16/04/2018

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Job Title	Scale	Date	Designed
FAWLEY WATERSIDE	1:1000 @A3	FEB' 18	KO
Drawing Title	**Drawn**	**Checked**	**Approved**
J8 - PROPOSED IMPROVEMENTS DIBDEN RBT	KO	LL	AM
Client	**Job No**	**Drawing No**	**Rev**
FAWLEY WATERSIDE LTD	16031-01	16031-01-206	I

Appendix C – FW Letter of support

FAWLEY
WATERSIDE

12 September 2019

A326 improvements – Solent LEP Prosperity Fund application by Hampshire County Council

To whom it may concern

Please be advised that Fawley Waterside Limited has the 30% match funding available for the junction improvements for which this grant application applies, should the bid be successful. In accordance with the conditions of the application Fawley Waterside Limited also agrees to underwrite any cost increases or risk to the delivery of the programme.

Yours faithfully,

T. Phillips

Tim Phillips
Financial Director

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Appendix D – Appraisal Summary Table

Appraisal Summary Table

Date produced:	15 September 2019

Contact:	
Name	XXXX
Organisation	Hampshire County Council
Role	Promoter

Name of scheme:	A326 junction improvements
Description of scheme:	Junction improvements at 8 junctions along the A326, involving signalising and widening approaches / exit lanes.

	Impacts	Summary of key impacts	Assessment: Quantitative	Assessment: Qualitative	Assessment: Monetary £(NPV)	Assessment: Distributional 7-pt scale/ vulnerable grp
Economy	Business users & transport providers	Journey time savings for existing users due to lower vehicle delay. Additional delay, and vehicle operating costs, associated with the generation of new trips to and from Fawley Waterside have been taken into account, but the net effect is positive. The value shown here also takes into account construction delay.	**Value of journey time changes(£)** **Net journey time changes (£)** 0 to 2min: Estimated to be worth approx £5.77m of the £11.66m total PV 2 to 5min: Estimated to be worth approx £5.08m of the £11.66m total PV > 5min: Estimated to be worth approx £0.8m of the £11.66m total PV		11.66	Moderate beneficial
	Reliability impact on Business users	Expected to have a posiitve impact on journey reliability by reducing vehicle delay, although this is assumed to be accounted for within the journey time savings presented above.		Slight beneficial		
	Regeneration	The scheme will create jobs during construction. It will also help to unlock the Fawley Waterside development, leading to additional homes and jobs in the Solent LEP area.	77 net FTE construction jobs created. Indirect impacts associated with Fawley Waterside: 1,500 homes, 265 FTE construction jobs, 2,610 FTE jobs when operational			
	Wider Impacts	The scheme is not expected to contribute to wider economic benefits such as agglomeration.		Neutral		
Environmental	Noise	Additional trips associated with Fawley Waterside will lead to noise disbenefits			-0.51	Slight adverse
	Air Quality	Additional trips associated with Fawley Waterside will lead to air quality disbenefits			-0.03	Slight adverse
	Greenhouse gases	Additional trips associated with Fawley Waterside will lead to greenhouse gas disbenefits	Change in non-traded carbon over 60y (CO2e): 52073 tonnes Change in traded carbon over 60y (CO2e): 1135 tonnes		-1.23	
	Landscape	There are no known issues with regards to landscape.		Neutral		
	Townscape	There are no known issues with regards to townscape.		Neutral		
	Historic Environment	There is one known historic building that is impacted by the scheme, the Grade II Listed Fawley Village Schoolhouse. An initial review has concluded that in regard to the road re-alignment proposals and adjusting the islands at the junction there is likely to be no harm to the setting of the listing building.		Neutral		
	Biodiversity	The road verges around the Beaulieu Road roundabout are designated a Site of Importance for Nature Conservation (SINC) and a Road Verge of Ecological Importance (RVEI). There is likely to be some loss of grasslands of nature conservation importance within the SINC at the junctions of Roman Road to the east and west of the roundabout (but outside of the SPA and Ramsar site). It will be necessary to ensure any loss of grassland is mitigated through the creation of sufficient replacement grassland habitat of similar or better quality at this or potentially other junctions within the proposed highway improvement scheme. If this can be assured there will be no significant adverse effect on this SINC.		Slight adverse		
	Water Environment	There are no known significant issues.		Neutral		
Social	Commuting and Other users	Journey time savings for existing users due to lower vehicle delay. Additional delay, and vehicle operating costs, associated with the generation of new trips to and from Fawley Waterside have been taken into account, but the net effect is positive. The value shown here also takes into account construction delay.	**Value of journey time changes(£)** **Net journey time changes (£)** 0 to 2min: Estimated to be worth approx £19.54m of the £38.54m total PV 2 to 5min: Estimated to be worth approx £17.54m of the £38.54m total PV > 5min: Estimated to be worth approx £1.46m of the £38.54m total PV		38.54	Moderate beneficial
	Reliability impact on Commuting and Other users	Expected to have a posiitve impact on journey reliability by reducing vehicle delay, although this is assumed to be accounted for within the journey time savings presented above.		Slight beneficial		
	Physical activity	Some pedestrian/cyclist facility improvements		Slight beneficial		
	Journey quality	Some pedestrian/cyclist facility improvements		Slight beneficial		
	Accidents	Additional trips associated with Fawley Waterside will lead to accident disbenefits			-7.71	Slight adverse
	Security	No impact expected.		Neutral		Neutral
	Access to services	No impact on public transport.		Neutral		Neutral
	Affordability	Whilst there may be a very slight improvement to affordability due to quicker journeys requiring less fuel, the impact of the scheme is deemed to be neutral.		Neutral		Neutral
	Severance	No impact expected.		Neutral		Neutral
	Option and non-use values	No impact expected.		Neutral		
Public Accounts	Cost to Broad Transport Budget	The costs shown here include capital costs (with a developer contribution netted against this), renewal costs over time and regular maintenance costs.	PV of capital cost is £5.6m 30% developer contribution = £1.7m as a PV Renewal and maintenance costs are £2.0m as a PV		-6.52	
	Indirect Tax Revenues	Additional vehicle trips associated with Fawley Waterside will generate additional indirect tax revenues			3.70	

Appendix E – Project Delivery Programme

A326 Corridor & Pedestrian/Cycle Improvements programme

		2019								2020												2021											
		May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
LEP Submission (OBC)		31/05/2019																															
LEP Board		19/07/2019																															
LEP Submission (Full BC)	16/09/2019	16/09/2019																															
LEP Board final approval	16/10/2019	16/10/2019																															
LEP construction start date	31/03/2020																																
LEP final spend date	31/03/2021																																
Feasibility design	complete																																
Stage 1 safety audit	complete																																
Topographical survey	complete																																
Habitat and ecology stage 1 review survey	complete																																
SSSI EIA screening and opinion	12 weeks																																
Utility information	12 weeks																																
Detailed design package 1 - J4, 5, 6,7,8	12 weeks																																
Stage 2 safety audit and response package 1	8 weeks																																
HCC design checks package 1	8 weeks																																
Tender prep package 1	4 weeks																																
Tender, Award and lead-In package 1	8 weeks																																
Works Start on Site, and Prelims package 1	8 weeks																																
Construction package 1	20 weeks																																
Detailed design package 2 - J3, 4B, 4C	16 weeks																																
Stage 2 safety audit and response package 2	8 weeks																																
HCC prelim design check Package 2	2 weeks																																
HCC detailed design check Package 2	6 weeks																																
Tender prep package 2	4 weeks																																
Tender, Award and lead-In package 2	8 weeks																																
Works Start on Site, and Prelims package 2	8 weeks																																
Construction package 2	24 weeks																																

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