Appendix A **Full consultation responses for Reservoir application**

1.1 Conservation Officer

Historic context and significance

The proposed reservoir would cover part of a later 19th century Avenue that is part of Leigh Park (Staunton Country Park), a grade II* Registered Park. This avenue is also within the Sir George Staunton Conservation Area.

The registered park and garden and conservation area is centred upon the historic setting of the original pleasure grounds and parkland Estate – Leigh Park, created by Sir George Staunton, during the early years of the 19th century. Today, the Estate (more usually known as Staunton Country Park) is a rare and important example of a landscaped park of the 1820 -1830s and incorporates the trends, styles and influences of that era with a particular association with China, together with some later Victorian features. Comprising of an area of some 63 hectares, the Estate lies to the north of Havant town centre and extends to Rowlands Castle, straddling the boundary between Havant Borough Council and East Hampshire District Council. It was first designated as a Conservation Area in 1978. In 1987, it was established as a Country Park under a Joint Management Committee and in the following year 1988, the Conservation Area was reviewed and extended to include the Upper Lake and Hammond's Lands Copse to the northwest. The conservation area was further reviewed in 2008.

Designation recognises that the Estate, its setting and grounds together with any buildings, is special and warrants additional safeguards and attention. This does not mean that change cannot take place, but that any new development must take into account the area's special qualities.

The heritage statement produced by the applicant and comments by Historic England have addressed the significance of the Parkland (in particular the avenue and north west section of the conservation area) in excellent detail and I will not seek to replicate this further. However, it is important to note that

- The Avenue ran from the northwest corner of the mansion to the county boundary to the northwest and was designed to be a grand feature. Views along the Avenue were channelled along its length, with no views to the surrounding parkland and limited views to the mansion, creating a private and secluded ride and lake.

- The Avenue north of Upper Lake is now lost. Upper Lake itself is largely over grown and has lost its Boat and Bathing House, with its waterfall largely inappreciable. The significance of the remaining half of the Avenue is therefore compromised by its truncation. However, it still makes an important contribution to the significance of the park as the most ambitious element of the later 19th century works to the landscape to survive.

- The north west section of the conservation area (which is proposed to be lost) is understood to have been woodland with walks crossing it. Most of this tree planting has since been removed, although some walking routes remain. This land was included in the conservation area boundary as it forms the backdrop to Leigh Water in key views from the terrace. This pocket of land therefore positively contributes to the understanding and appreciation of the landscape that forms the significance of the conservation area.

Assessment

The Avenue

The proposals would see half of Stone's Avenue removed, including the Upper Lake. This would only leave a small section of the avenue in situ. The view down this section of the avenue would also be truncated by the construction of the reservoir embankments. However, it is important to note that the avenue has changed significantly from its original vision with the section north of the upper lake lost. This impacts on the avenue overall historic significance.

A staircase is proposed to climb the embankment of the reservoir, continuing the line of the lost section of the Avenue. It is intended that at the top of this staircase a viewing platform will be created to afford some understanding of the Avenue feature, providing medium length views along the ride, as well as the surrounding estate and reservoir

The harm caused to the conservation area and register park and garden would be significant but nonetheless would be less than substantial. Whilst there would be total loss of the upper lake part of the avenue will still be discernible ensuring that it continues to contribute to the significance of the registered park and conservation area.

The introduction of the avenue staircase also goes someway to mitigating the harm with the intention of creating integration between the historic landscape and the reservoir.

North western section of the conservation area

The proposal would see the north west section of the conservation area lost to the development of the reservoir. As noted above this is understood to have been woodland with walks crossing it. Most of this tree planting in this area has since been removed, although some walking routes remain. Whilst this area positively contributes to the understanding and appreciation of the landscape that forms the significance of the conservation area it is considered that much of the conservation area will still be unaltered. This is also a later part of the designed parkland and does not have the historic significance of other areas within the parkland.

As with the Avenue the harm would be high but less than substantial.

Terrace

The proposals largely retain key views from the terrace. However, this vista will be slightly altered by seeing a small portion of the reservoir. This would compromise to an extent the experience of looking out over unbroken countryside that the terrace was designed to take advantage of. On this basis the proposals will cause a low level of harm to the significance of the grade II listed terrace, the registered park and conservation area.

Planning obligations

As significant harm is caused to the historic parkland and the conservation area the opportunity should be taken to improve the amenity and interpretation of the conservation area and the registered park.

I would welcome a commitment to a landscape management plan for the wider registered park and garden and conservation area that would assess the condition of those built elements remaining from the 19th century and create and fund a schedule of repair and maintenance, bringing additional heritage benefits to the scheme. There is also scope for improved interpretation within the wider registered park and garden and conservation are of those known lost features of significance, something which should be included within an

interpretation strategy. This would contribute to the success of the visitor and recreation attraction which is a proposed outcome of proposals.

Conditions:

- The avenue and north west area of the conservation area is fully recorded before they are lost. This should include a photographic record and a detailed plan showing all features of historical interest.

- A landscaping scheme is devised to integrate the reservoir with the Avenue and the Sir George Staunton Country Park beyond

- Interpretation is provided to explain the purpose and original extent of the Avenue

1.2 County Ecologist

As you know I have been involved in detailed pre-application discussions with the applicant alongside Natural England and Forestry Commission officers, as well as having attended consultation events with other stakeholder representatives. These discussions have taken place over several years and I have a sound overall knowledge of the site, the scope of ecological studies undertaken, the predicted impacts, and the proposed outline ecological mitigation, compensation and enhancement strategy. The application is accompanied by detailed ecological information. I have carefully reviewed the Environmental Statement Chapter 2 Biodiversity (Atkins/Portsmouth Water, September 2020) and each of the habitat- and species-specific technical reports and appendices (ECOSA, various dates). I have reviewed the Outline Biodiversity Mitigation and Compensation Strategy (ECOSA, September 2020) and the Habitats Regulations Assessment (Atkins/Portsmouth Water, September 2020). In order to be concise I have attempted to comment in detail only on the most significant issues as I see them. The views of Natural England and the Environment Agency are critical in judging the overall acceptability of the scheme as proposed (in that there are separate licensing regimes for impacts to certain species and the water environment) and I may of course need to provide updated or amended comments in light of advice from other statutory consultees. I also recognise that there are likely to be changes to details of ecological impacts and mitigation measures as a result of other consultee comments, and that for a project of such scale there will be amendments required as the project progresses.

Scope of ecological surveys
Ecological assessments at the site have taken place over a considerable period of time and have at times been extremely focussed. I have no concerns over the scope, scale and standard of ecological assessments and I acknowledge the significant effort involved in assessing the ecological baseline over many years using expert technical advice. The robust baseline allows a greater level of certainty with respect to predicted impacts and is used to shape the overall ecological mitigation, compensation and enhancement package. I also acknowledge the applicant’s willingness to undertake updating or new surveys at the request of key consultees, and the open sharing of information with me and others over several years.

Comment on overall impacts
A project of this scale cannot be realised without significant ecological impacts, and it is clear that there are substantial implications for the existing natural environment of Havant Thicket: the proposals would require the permanent loss of irreplaceable habitats such as ancient woodland and veteran/notable trees as well as substantial losses of other woodland, grassland, scrub and seasonal watercourses and other waterbodies. Impacts to habitats are summarised as follows: c.13 Ha of semi-natural woodland to be removed, c. 18 mature veteran trees to be removed, c. 29 scattered broadleaved trees to be removed, c.139 Ha of

grassland removed, and impacts to c.3.7km of ephemeral stream habitat. The surveyed area supports a range of protected species, including nationally-rare species of bat as well as badger, hazel dormouse, common reptiles, great crested newt, breeding birds and notable invertebrate species. The profound change of land-use would result in significant impacts to many of these species. Many of the impacts cannot be directly compensated on a like-for-like basis and there is an acknowledgement that mitigation, compensation and enhancement measures must be viewed as a whole package, many of the benefits of which may not be realised for many years, just as many of the impacts will be permanent or of long duration. Given the scale of the proposals there is necessarily a reliance on off-site measures which primarily entail woodland management interventions to enhance habitat. Some of the mitigation measures for certain species – bats and hazel dormice in particular – will require intensive hands-on interventions and long-term commitment from the applicant to ensure that species are protected in accordance with any European Protected Species licence conditions.

In summary, my overall conclusion is that despite very obvious significant impacts to the current nature conservation value of the site, the scheme as proposed is likely to deliver substantial biodiversity value in the medium-to-long term, albeit in a different form to the habitats that currently exist. The permanent loss of ancient woodland and veteran trees is essentially impossible to mitigate and so there must be a case made for overriding reasons (which are beyond the scope of my advice). These substantial losses can be mitigated to a degree by the proposed new woodland planting (linking Havant Thicket woodland and Staunton Country Park) and the extensive habitat creation and management works proposed for surrounding areas that will improve the ecological value of woodland, grassland and linear watercourse habitats for a range of species over time: there is no doubt that substantial biodiversity gains can be made through better management of the surrounding woodland.

Further details have been provided of proposed off-site mitigation, compensation and enhancement measures. These details are contained within the Implementation Plan for Off Site Biodiversity Mitigation and Compensation (Atkins, April 2021) as well as the Technical Note – Article 4.7 WFD Short-listing methodology (Atkins, March 2021) and accompanying Letter to Portsmouth Water - Havant Thicket Winter Storage Reservoir – Water Framework Directive (WFD) Article 4.7 (Environment Agency, 18 February 2021). These matters are discussed below.

<u>Bats</u>
Extensive bat survey works over a period of ten years has resulted in a robust understanding of the bat populations of the site and surrounding area. Data collected from the site and adjacent areas, as well as those collected for other development sites in the wider landscape, provide a very useful overview of the bat assemblage in context. Analysis of these data provide insights into seasonal trends and activity by location. Detailed discussion and interpretation of the results is included.

At least thirteen bat species have been recorded within the surveyed area. The most significant finding is the presence of the very rare Bechstein's bat, which has been shown to roost on site in small numbers (although not during the most recent surveys) and which uses the site for foraging, commuting and presumably social purposes. The application site clearly forms part of a much larger area of habitat used by the local Bechstein's bat population, and there is a likelihood that the south-east Hampshire population is functionally linked to larger populations in West Sussex: indeed, a link has been proven for the common and widespread Natterer's bat. Following discussion with Natural England, I agree with the applicant's assessment that there is a likely (but so far unproven) functional link between Bechstein's bat populations in this area of south-east Hampshire and larger populations associated with the Singleton & Cocking Tunnels Special Area of Conservation in West Sussex,

approximately 15km east of the application site. Using a precautionary approach it is prudent to assume functional linkage between bat populations in these two areas and that impacts to bats and bat habitat within the application site would affect SAC supporting habitat.

I note the detailed analysis of data which appears to show that the application site itself does not support maternity roosts and that individual Bechstein's bats used the site for only a small percentage of time compared with off-site areas. Nevertheless, the importance of the site for this species is acknowledged. In terms of roosting bats, the site has been shown to support brown-long eared bat, Natterer's bat and Bechstein's bat. It is recognised that given the presence of woodland and trees on site it is highly likely that other bat species will roost also, and that bats continually change their roosting locations. The proposal will result in the loss of substantial areas of bat habitat in the form of woodland, trees and open grassland and will remove numerous trees with bat roosting potential.

Impacts to bat species will, at least in the short-term, be substantial due to woodland and grassland loss. In the longer term, the reservoir site (the open water, new wetland and grassland embankments) will offer suitable foraging habitat for a range of bat species. The proposed woodland enhancements will also offer new opportunities for bat species, as will the programme of roosting box installation (natural tree roost opportunities being generally scarce within surrounding forestry woodland and of course being reduced due to the loss of the Avenue). The proposed funding scheme should be focussed on securing meaningful landscape-level enhancements for bats such as reconnecting habitats; details of these can be provided at a later stage and their delivery should be a key indicator of mitigation success.

I understand that the applicant has been discussing licensing matters with Natural England specialists and that a bespoke approach to licensing is required. In terms of the LPA's judgement on the Habitats Regulations derogation tests, in recognition of the exceptional nature of this project I am willing to accept that the favourable conservation status of bats can be maintained if the proposed compensation and enhancement measures can be delivered as proposed: the use of soft-felling techniques, the reuse of tree limbs with roost features, and the installation of bat roosting boxes in the wider landscape are all suitable methods of mitigation. This very much depends on the delivery of meaningful off-site improvements that will benefit the same bat population. On the deliverability of landscape-scale mitigation, compensation and enhancement measures for bats I have provided further comment below.

Due to the exceptional nature of this project there is an unavoidable degree of uncertainty over the efficacy of proposed compensatory and enhancement measures. The new woodland plantings at Gipsies and Deerslaughter Plains (already completed) provides useful linkage between areas of woodland habitat but will not approach a comparable condition to the lost habitat for some decades although their function as a habitat corridor/foraging area in the coming years is acknowledged. In essence, lost habitat is not being directly replaced (certainly not in the short term) but rather the carrying capacity/suitability of existing habitat is being enhanced through a range of measures. Aside from direct comparisons of area measurements it is not really possible to robustly equate areas of loss to areas of compensation/enhancement in a qualitative manner: the proposed areas of enhancement far exceed those of impact and so one must assume that there would be a beneficial effect overall. The whole package of on- and off-site mitigation, compensation and enhancement measures together does provide for a robust framework

This development will affect bats, European Protected Species (EPS) which receive strict legal protection under UK law by the Wildlife and Countryside Act 1981 (as amended) and under EU law by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (commonly referred to as the Habitats Regulations). Where developments

affect EPS, permission can be granted unless the development is likely to result in a breach of the EU Directive underpinning the Habitats Regulations and is unlikely to be granted an EPS licence from Natural England to allow the development to proceed under a derogation from the law.

Will the development result in a breach of the EU Directive?
Yes, unmitigated, the development has potential to result in harm to individual bats and result in impacts to the favourable conservation status of bat species locally.

Is the development unlikely to be licensed?

An EPS licence can only be granted if the development proposal is able to meet three tests:

1. the consented operation must be for 'preserving public health or public safety or other imperative reasons of overriding public interest including those of a social or economic nature and beneficial consequences of primary importance for the environment'; (Regulation 53(2)(e))

2. there must be 'no satisfactory alternative' (Regulation 53(9)(a)); and

3. the action authorised 'will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range' (Regulation 53(9)(b)).

It is for you as the case officer to assess the proposals against the first two tests – you may wish to ask for further information from the applicant. In order to assess the development against the third test, sufficient details must be available to show how killing/injury/disturbance of bats will be avoided and how any loss or damage to habitat will be compensated. In this case, I consider that sufficient information has been provided to assess impacts to bat populations. In terms of maintaining the favourable conservation status of bat species, the proposed mitigation, compensation and enhancement measures offer a comprehensive package of measures to avoid direct harm to roosting bats, to mitigate the impacts of habitat removal, to provide enhanced roosting opportunities on- and off-site and to provide substantial long-term landscape-scale habitat enhancements. This is an exceptional proposal and a bespoke approach is required. The application is supported by extremely detailed information on bats and the applicant has engaged in detailed discussions with Natural England licensing. On this basis I am confident that the favourable conservation status of bats overall can be maintained at the population level. As detailed below, I would recommend that full updated details of all bat mitigation, compensation and enhancement measures are provided alongside future applications for each phase of development.

Hazel dormouse
A population of hazel dormice is present, inhabiting woodland and scrub areas throughout the site. This is not surprising as the species is relatively widespread throughout Hampshire. The proposals will remove substantial areas of dormouse habitat and have the potential to result in harm to individual dormice and the severance and fragmentation of dormouse populations. Mitigation includes standard two-phase habitat removal coupled with the capture, holding and soft-release of animals within enhanced habitat outside the site boundary. This is the only realistic option to avoid direct harm to dormice and acceptable in principle. My main concern would be the security of any animal holding pens at this site: the high levels of antisocial behaviour means that damage to pens and animals within is a clear risk.

This development will affect hazel dormice, a European Protected Species (EPS) which

receives strict legal protection under UK law by the Wildlife and Countryside Act 1981 (as amended) and under EU law by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (commonly referred to as the Habitats Regulations). Where developments affect EPS, permission can be granted unless the development is likely to result in a breach of the EU Directive underpinning the Habitats Regulations and is unlikely to be granted an EPS licence from Natural England to allow the development to proceed under a derogation from the law.

In this case, I consider that sufficient information has been provided to assess impacts to hazel dormice. In terms of maintaining the favourable conservation status of this species, the proposed mitigation, compensation and enhancement measures offer a comprehensive package of measures to avoid direct harm to dormice, to mitigate the impacts of habitat removal, and to provide long-term landscape-scale habitat enhancements. The applicant has engaged in detailed discussions with Natural England licensing. On this basis I am confident that the favourable conservation status of dormice can be maintained at the population level. As detailed below, I would recommend that full updated details of all dormouse mitigation, compensation and enhancement measures are provided alongside future applications for each phase of development.

Birds

The main impacts will be from the loss of woodland and grassland habitat. The loss of grassland will result in the loss of breeding skylark and meadow pipit habitat. Lapwing used to breed more numerously at the site but numbers have dropped substantially in recent years, and the proposals would impact the single territory recorded in 2018. Other species impacted include woodland, scrub and grassland species such as song thrush, dunnock, linnet, warblers and tits. Mitigation will entail the removal of suitable habitat outside the nesting season. In terms of compensatory habitat, the new woodland/scrub plantings, the new wetland and grassland and the off-site woodland enhancements will provide new opportunities for a range of bird species, albeit mostly different species.

Reptiles

The grassland and scrub/woodland edge habitats across the site support all four common reptile species in good numbers. A substantial area of reptile habitat is to be impacted, requiring the capture and removal of potentially hundreds of animals from the site. Mitigation measures comprise capture and translocation of animals to enhanced areas within adjacent woodland. This is acceptable in principle, although I would not underestimate the practical difficulties in capturing and removing so many animals from the construction site.

Amphibians

Great crested newts (GCN) occur within ponds in the surrounding area. I would not consider the proposals to result in significant impacts to this species and am content with the proposed mitigation, compensation and enhancement measures.

This development will affect GCN, a European Protected Species (EPS) which receives strict legal protection under UK law by the Wildlife and Countryside Act 1981 (as amended) and under EU law by the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 (commonly referred to as the Habitats Regulations). Where developments affect EPS, permission can be granted unless the development is likely to result in a breach of the EU Directive underpinning the Habitats Regulations and is unlikely to be granted an EPS licence from Natural England to allow the development to proceed under a derogation from the law.

In this case, I consider that sufficient information has been provided to assess impacts to GCN. In terms of maintaining the favourable conservation status of this species, the proposed mitigation, compensation and enhancement measures offer a comprehensive

package of measures to avoid direct harm to GCN, to mitigate the impacts of habitat removal, and to provide long-term habitat enhancements. The applicant has engaged in detailed discussions with Natural England licensing. On this basis I am confident that the favourable conservation status of GCN can be maintained at the population level. As detailed below, I would recommend that full updated details of all GCN mitigation, compensation and enhancement measures are provided alongside future applications for each phase of development.

Invertebrates

The loss of extensive areas of woodland, scrub and grassland habitat will undoubtedly impact various invertebrate species. The loss of a significant length of seasonal stream habitat will result in impacts to some rare/notable aquatic invertebrate species. Mitigation for terrestrial invertebrates includes the overall woodland enhancements and it can expected that the new wetland area will support invertebrate populations. In terms of mitigating impacts to the seasonal streams, I understand that discussions between the applicant and the Environment Agency has resulted in a scheme of off-site river restoration measures, entailing in-channel and riparian enhancements.

Overall comments on protected and notable species

There will be substantial impacts to a suite of protected and notable species, resulting in the loss of a considerable extent of semi-natural habitat. Given the scale and timescale of impacts there is essentially no scope for retention of meaningful habitat within the site. The bulk of mitigation is therefore related to salvage of individual animals from the construction footprint and the timing of operations to minimise impacts. The removal and translocation of animals such as hazel dormice and common reptile species is reliant on the availability of suitable receptor habitat within adjacent land.

I am content that species capture and translocation works will be undertaken in an acceptable way consistent with best-practice guidelines.

Overall mitigation strategy

The proposed outline mitigation and compensation strategy relies of several strands: the removal of certain protected/notable species from within the construction footprint; the use of habitat manipulation techniques to render habitat less suitable prior to construction; a commitment to long-term habitat management works in surrounding land; the use of artificial nesting and roost boxes; a commitment to substantial new grassland and pasture-woodland habitats off-site; the creation of new habitats within the developed site; enhancements to retained watercourses and waterbodies; and the establishment of a fund for ecological improvements.

I acknowledge the large scope and scale of the proposed mitigation and compensation measures and the efforts employed to date in ensuring that key stakeholders have been involved in their scope and design. Within the reservoir site itself the proposed land-use changes are so profound that it is essentially impossible to make meaningful comparative judgements between losses and gains that take full account of impacts to habitats, species and the local ecological network. Whilst recognising the significant ecological impacts arising from the proposal, there is no doubt, in my opinion, that there would be a significant biodiversity gain from a wetland habitat on such a vast scale and I very much welcome the proposed dedicated wetland habitat at the northern shore of the site. The wetland (containing open water, marsh, wet woodland, exposed muds and wet/damp grassland) will provide a valuable habitat for many species that do not currently occur as well as for many of the species already present. The benefits of the new reservoir and dedicated wetland area should be felt within the nearby designated Solent coastal habitats: it can be expected that bird species associated with the Solent SPAs (especially waders, wildfowl and terns) will utilise the reservoir and wetland. The additional habitat may assist in mitigating the effects of

recreational pressure on the Solent intertidal and terrestrial habitats. The expected reduction in nutrient input to the Solent will also be of overall benefit.

The extensive enhancements to woodland habitat within the immediate surrounds and further afield are ambitious and would almost certainly provide benefits for a range of species associated with woodland, scrub and edge habitats. The delivery of enhancements is dependent upon a long-term commitment and partnership working with adjacent landowners. Woodland management operations should increase the availability of open areas such as rides and track junctions and also rotational coppice, suiting species such as invertebrates, birds and hazel dormouse. Post-construction, the reservoir embankments will provide valuable grassland habitat that will likely be of greater species-richness than the existing site. This habitat will be attractive to ground-nesting bird species that are to be impacted by the proposed works.

The site as proposed would undoubtedly be a significant visitor attraction and presents many opportunities for promoting the natural environment. The proposed visitor centre should act as a hub for visitors and is an excellent opportunity for public engagement and interpretation: I do not personally see an issue with this being situated at the water's edge and consider that this provides an excellent opportunity to engage the public as happens at many large wetland sites. It is hoped that public engagement activities will take place in future years. The landscaping areas surrounding the visitor centre offer an opportunity for further wildlife-rich habitat and I would expect that every opportunity is taken to embed biodiversity within the more formal areas of the site through the use of wildflower-rich grassland throughout as well as the provision of locally-relevant habitats such as acid grassland/heathland/bare ground.

Overall, I am supportive of the outline proposals for biodiversity mitigation, compensation and enhancement. Following consultation responses from myself and Natural England, further information has been provided on the scope, location, timing and delivery of off-site measures. These are contained in the submitted Implementation Plan and the four Action Plans contained within. In summary, proposed off-site mitigation, compensation and enhancement measures include:

- Creation of 60 Ha of pasture woodland and 20 Ha of neutral grassland.
- 72 Ha of woodland enhancement within Southleigh Forest.
- 5.5km of watercourse enhancement.
- £40,000 per annum for 30 years from 2029 towards Capital Grants Scheme.

The location for the creation of the pasture woodland and neutral grassland totalling c.80 Ha is yet to be confirmed, and it is stated that several options are being reviewed across the local landscape. I understand that one option entails woodland situated to the east of the application site. The scope of proposed works is detailed, with the stated purpose of enhancing the local ecological network by creating and enhancing woodland linkages. There is clearly work to do in determining the location and extent of these proposals but I am supportive of this measure.

Southleigh Forest is owned by Portsmouth Water. Much of the woodland is classified as Plantation on Ancient Woodland (PAW) and it is proposed to actively manage these areas, alongside areas of non-plantation ancient woodland, to improve habitat quality. A management plan is being devised by the Hampshire & Isle of Wight Wildlife Trust and will be funded by Portsmouth Water. The plan is being developed currently and will be subject to review and comment by key consultees.

A package of proposed enhancement works to various ephemeral watercourses has been agreed in principle with the Environment Agency s part of the Article 4.7 Water Framework Directive. These measures will provide enhancements to headwater streams north of the proposed reservoir as well as to several watercourses within the wider landscape to the south. The proposed measures include channel restoration of e.g. profile, banks, channel substrate; on-line ponds; improvements to other pond habitats; areas of plant translocation. It is the view of the EA that, subject to legal agreement, these measures will ensure that 5.5km of watercourses are enhanced and is sufficient to compensate for the identified impacts.

The proposed Capital Grants Scheme will provide c. £40,000 per annum for 30 years from 2029 onwards in order to deliver projects to enhance habitats in the local landscape.. An outline list of project objectives has been provided, focussing on enhancing the local ecological network, enhancing knowledge of protected species distribution and status, and providing equipment for local knowledge gathering. It is proposed to establish a steering group to assess potential projects and monitor the scheme.

Overall, I welcome the submission of the Implementation Plan and Action Plans. These provide a useful level of further detail to demonstrate the scope of the proposed works and methods of delivery. I do acknowledge that there is uncertainty over the exact location and nature of some aspects but consider that these further details can be provided through future planning submissions and secured through appropriate legal agreements. I would suggest that, subject to the satisfaction of other key consultees, the submitted outline details form the basis for planning conditions. These should secure further full details for each recognised phase of works, the effect of which should be that works cannot proceed until all details are agreed.

The key issue is to ensure that for each phase of development there is a clear strategy for ecological mitigation, compensation and enhancement. The strategy should ideally be contained within a single document, of a consistent form, providing full details of the phase of development works and the ecological measures that will address any identified impacts. In recognition of the mix of on- and off-site measures, and the likely complex timing of delivery (with off-site measures being deliver in a rolling programme at various locations and times), any condition wording should allow for flexibility. An essential component is to have a ‘running total’ of mitigation, compensation and enhancement delivery in order that the applicant, LPA and other stakeholders can keep track of what is being delivered, where and by whom. I would strongly recommend the use of tabulated information and spatially presented data.

1.3 County Minerals

Hampshire County Council as the local minerals and waste planning authority is pleased to see that the applicant has acknowledged within paragraphs 5.90 – 5.93 and A.87 – A.93 of the Portsmouth Water Planning Statement, the proposed development lies within the mineral and waste consultation area (MWCA) – Minerals section. This area is informed by the mineral safeguarding area (MSA) as defined through Policy 15: Safeguarding – mineral resources of the adopted Hampshire Minerals and Waste Plan (2013) (HMWP) and indicates where viable, safeguarded mineral resources are likely to be present.

The purpose of this policy is to protect potentially economically viable mineral resource deposits from needless and unnecessary sterilisation. The policy seeks to encourage the recovery, where possible, of potential viable mineral resources prior to development, this concept is known as prior-extraction.

Prior-extraction offers potential opportunities to reuse recovered minerals within the

development itself or upcycle them to nearby aggregate recycling facilities. This in turn has strong potential to reduce the amount of waste generated through excavation on site as well as reducing the need for imported construction material.
As stated within the Planning Statement, the application proposes to reuse approximately 1.7 million m3 of excavated material within the development itself.
Based upon our data, there is potentially approximately 73.62 ha of safeguarded Brick Clay material underlying the reservoir area. While the reuse of excavated material is supported under Policy 15 of the HMWP, the County Council would like to encourage the applicant to liaise with an operator who utilises Brick Clay to ascertain any demand for the mineral resources potentially underlying the site. Currently, Hampshire has one operational brickworks – Michelmersh Brickworks, near Romsey.

1.4 Hampshire Police – Crime Prevention

Original response

The National Planning Policy Framework makes clear the Governments continuing commitment to "create safe and accessible environments where crime and disorder, and the fear of crime, do not undermine quality of life or community cohesion and resilience".

National Planning Practice Guidance advises, that planning has a role in preventing crime and malicious threats. It reminds Local Authorities of their obligations under Section 17 of the Crime and Disorder Act 1998 (as amended), specifically "to exercise their functions with due regard to their likely effect on crime and disorder, and to do all they reasonably can to prevent crime and disorder."

We receive regular reports of crime and disorder occurring within this area. Many of the disorder reports relate to the riding of motor cycles about the area.

Two vehicular accesses are to be created into the development one from Swanmore Road and the other from Manor Lodge Road (B2149). This will create a short cut between Swanmore Road and Manor Lodge Road (B2149) this connectivity will increase the opportunities for crime and disorder (Anti-Social Behaviour (ASB)), within the nearby area and the development itself. To reduce the opportunities for crime and disorder, a single vehicular access to the development should be provided from Manor Lodge Road (B2149), as is currently the case. If consent is granted for the vehicular accesses and vehicular connectivity as shown, Hampshire Constabulary object to this aspect of the development.

Currently many of the incident reports we receive regarding this area relate to the inappropriate riding of motor cycles. This proposal will create a number of cycle and pedestrian walkways, all of which will be ideal for the riding of motor cycles. Some consideration should be given as to how this activity is to be prevented, and appropriate features put in place to prevent it.

An outline application is submitted for the facilities within the site, the following relates to these facilities. The site is isolated, at night the site will be very vulnerable to crime and disorder. Any buildings within the site will be very vulnerable to crime. Buildings should be designed to minimise the opportunities for crime and disorder. To that end, the number of doors and windows within the buildings should be kept to a minimum.

To provide for the safety and security of visitors Closed Circuity Television (CCTV) cameras should be installed within the car park. These cameras should be linked to a monitoring station to provide for immediate response to incidents as they are occurring. Lighting throughout the car park should conform to BS 12464. Arrangements can be made to switch off this lighting after the café is closed and visitors might reasonably be expected to have left the site.

Response to additional information
No Objection - My previous letter of the 4th December 2020, highlights my main concern, being the creation of a vehicular route between Manor Lodge Road (B2149) and Swanmore Road. There would be very little natural surveillance of the route (especially during the hours of darkness) which would increase the opportunities for crime and disorder, within the local area and within Havant Thicket. My preference would be for one vehicular access into the site from the Manor Lodge Road (B2149). However, if physical barriers and landscaping can be used to prevent motor vehicles transiting between the two roads via the site and a management plan is put in place to address any Anti-Social Behaviour (ASB), that will provide sufficient mitigation for me to withdraw my objection.

The on-site car parking must have sufficient capacity to accommodate all visitor vehicles. We would be concerned if this development caused the parking of visitor's motor vehicles on Swanmore Road, or other residential roads within the local area.

The comments contained with my letter of the 4th December 2020 with reference to the prevention of motor cycle nuisance, building security, lighting and Closed Circuit Television (CCTV) are still relevant.

The access route from the north is to be a single track with passing places, a sufficient length of double carriage roadway must be provided at the access from the B2149 so as to prevent a build-up of vehicles waiting to enter the site causing obstruction on Manor Lodge Road (B2149).

1.5 Environment Agency

The increase in water supply from the building of the reservoir will enable a bulk supply of water to be supplied to Southern Water. They have a forecast deficit in water in the Hampshire area due to required reductions on their abstraction licences on the heavily designated Rivers Test and Itchen. Additional water made available from this scheme will help meet this forecast deficit. The scheme is already included in both Portsmouth and Southern Water's Water Resource Management Plans.

We are now in a position to confirm that we have no objection to the planning proposals as submitted subject to a number of conditions and/or legal agreements on a variety of issues including flood risk and the Water Framework Directive. Please see our detailed comments below in relation to each area of our remit and the requirements that we are seeking in order to ensure that the project is delivered in a way that protects and enhances the environment.

Water Framework Directive (WFD)
The environmental objectives of the WFD are set out in Article 4 of the Directive and relate to ensuring the continued protection of the condition of all waterbodies and the development of plans to deliver measures to improve failing water bodies to a good condition (or better). The two key objectives against which new developments or schemes should be assessed are;
- No deterioration of status (or potential) for surface and groundwaters; and
- Achievement of good status (or potential) by 2021 or 2027, for waterbodies currently failing to achieve this status or potential.

WFD compliance assessments for new developments and schemes must demonstrate that the proposals will not result in the deterioration in status (or potential) of any water body. Where a waterbody is at a status less than good (or potential), it must be demonstrated that the implementation of the proposals will not prevent the water body from meeting good status (or potential) in the future.

Following the completion of a WFD compliance assessment, Havant Thicket Reservoir was deemed to have the potential to cause deterioration of the impacted water body of the Riders Lane Stream which is part of the Hermitage Stream water body. The main area of concern relates to the construction of the embankment and reservoir footprint. The resulting loss of habitat is significant with the direct loss of 3.7km of headwater habitat within the Riders Lane Stream. The length of watercourse lost will account for approximately 42% of headwaters and 18% of the entire length of watercourse within the water body.

The WFD uses the term "quality elements" to refer to the different indicators of ecological quality comprising its ecological status classification schemes. The quality elements used to assess ecological status are: biological, chemical and physicochemical, and hydromorphological quality elements.

The assessment identified that both biological and hydromorphological WFD quality elements were at risk of deterioration. Specifically invertebrates, macrophytes phytobenthos and hydromorphology. A deterioration of any one, or more quality element can cause an overall deterioration and lowering of class status at the water body scale, this is contrary to the objectives of WFD.

In a situation where there remains a potential for deterioration, even after including embedded mitigation, the scheme can only go forward if granted a derogation under Article 4.7 of the WFD. To do this, evidence is required to meet a series of “Tests”. This information is set out in document reference - HTR-ATK-XX-XX-RP-2-0067.

We attended a number of workshops with Portsmouth Water and their consultants to determine the evidence requirements to meet the tests of Article 4.7, these being:
a) All practicable steps are to be taken to mitigate the adverse impacts on the water body concerned;
b) he reasons for modifications or alterations are specifically set out and explained in the RBMP;
c) The reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the objectives set are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development, and;
d) The beneficial objectives served by those modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option.

The WFD Article 4.7 assessment (document reference - HTR-ATK-XX-XX-RP-2-0067) describes the outcome of this process. We have worked with Portsmouth Water to identify a long list of practicable measures that would be appropriate to fulfil Article 4.7 test (a).We have agreed that that this long list was sufficient for the purposes of fulfilling the Article 4.7 derogation. We reviewed the information contained within WFD Article 4.7 assessment which outlines the reasoning for the potential non-compliance under the WFD and details the necessary justification to meet each of the tests required under the derogation process. We are satisfied that sufficient evidence has been provided to meet the tests and can therefore be used to inform the decisions of the relevant Local Planning Authorities (Havant Borough Council and East Hampshire District Council) when deciding the outcome of the submitted planning applications.

Following the above process, a shortlisting exercise was undertaken to reduce the list from the full list of practicable measures to a short list of deliverable options which could be used to define the level of mitigation and compensation required for the watercourses impacted by the scheme. We have had ongoing dialogue with regard to this process which has resulted in a short list of deliverable measures being derived. We have confirmed that we are content

that ‘package 2’ (as laid out in document reference HTR-ATK-XX-XX-PP-T-0003 Implementation Plan for Off Site Mitigation and Compensation Appendix 3) includes sufficient mitigation and compensation for the scheme. We believe that this package provides sufficient length of watercourse improvement (5.5km) and an appropriate balance of measures to satisfy both the Article 4.7 requirements and also Biodiversity Net Gain commitments, which is discussed below.

In agreeing the package of mitigation and compensation with Portsmouth Water, it has been critical to identify measures that are both environmentally sound and appropriate for the scale of loss that will result from the development. The impacts that have been identified cannot be readily mitigated or compensated for, due to the distinctiveness of the habitat. Meaning the habitat to be lost cannot be recreated. Therefore, we have sought a package of measures that once implemented will provide a joined up network of quality habitat improvements that will mitigate and compensate against the high value conservation habitat lost from the scheme.

Therefore, the proposal will only be acceptable to us and legally compliant under the Water Framework Directive once the package of measures has been secured. We advise that a legal agreement should be put in place to secure the delivery of the mitigation and compensation package proposed by the applicant.

The agreed package, for the water environment includes both on-site and off-site mitigation, and compensation totalling up to 5.5km of watercourse improvement. The on-site mitigation and compensation plan (approximately 1.57km) concentrates efforts in the headwater streams upstream of the reservoir. Off-site mitigation and compensation is spread across the wider catchment and includes measures on other reaches of the Riders Lane Stream (part of the Lake Stream) (approximately 0.45km), Hermitage Stream (approximately 2.99km) and Park Lane Stream (approximately 0.47km). Improvements along Lake Stream will provide mitigation for distinct species lost under the Scheme’s footprint.

We agree with the principles set out in document HTR-ATK-XX-XX-PP-T-0003. A full implementation plan will need to be agreed, which we want to be consulted on. A robust governance process for timely implementation of the mitigation and compensation should also be put in place. This must be secured through the planning permission process.

The package of measures includes restoration of the Hermitage Stream. The measures proposed are based upon feasibility and design work undertaken jointly by Havant Borough Council and Environment Agency in 2013. We shared with Portsmouth Water all the information that was compiled at the time, including drawings and costings. The mitigation and compensation measures agreed as part of the water environment package should be in keeping with the design work previously undertaken, including the removal of concrete bed and banks.

Portsmouth Water have provided approximate costs for the package of measures detailed in a technical note dated 11/03/21 (Version 3). We do not consider the cost presented in this paper as a cost cap. The figure presented is based upon our costings from 2013 (which are now somewhat dated) and the design team’s judgment. We believe the costs presented are realistic but require further assessment.

Portsmouth Water will be responsible for delivering the quantum of mitigation and compensation agreed. However, the company may choose to work with a delivery partner to achieve cost effectiveness. We are not opposed in principle to agreeing a cost cap for the water environment package, but this will need further discussion.
Portsmouth water will be responsible for delivery of the mitigation and compensation agreed. If the identified measures are shown to be unfeasible, additional measures will

need to be identified that provide the same if not greater length of water watercourse improvement and contribution to the environment.

Document HTR-ATK-XX-XX-PP-T-0003 sets out the broad timescale for the delivery of the water environment mitigation and compensation package. Whilst we support this in principle, we strongly recommend that as part of any legal agreement a detailed delivery plan is agreed, which we would want to be consulted on.

Portsmouth Water have confirmed via the WFD assessment processes that neither the construction of the pipeline or emergency drawdown will preclude future restoration of the Hermitage Stream, which is a fundamental part of their Water Environment mitigation and compensation package. Consideration should be given to aligning the timing of the pipeline construction with that of the compensation measures identified for the Hermitage stream.

Biodiversity

The development will result in the loss of 3.7km of watercourse as described above, as Well as other wetland habitats. This scale of loss is significant and without mitigation and/or compensation would be unacceptable.

Appendix A9.3 Aquatic Ecology (document reference: HTR-ATK-ZZ-ZZ-RP-Z-0147) has shown that the watercourses to be impacted by the development support rare and nationally scare aquatic invertebrates. The specialist taxa that have been identified are indicative of groundwater supply and ephemeral flow conditions. This form of headwater stream habitat is of high conservation value and a Priority Habitat.

The Environmental Statement (document reference HTR-ATK-ZZ-ZZ-RP-Z-0109) acknowledges the value of the streams that will be lost. “9.150. Given the ephemeral nature of the intermittent headwaters of Riders Lane Stream, as well as their position within a more rural setting in an otherwise predominantly urban catchment, these watercourses are considered to be intrinsically important. They provide a unique habitat that acts to improve aquatic species diversity and functional habitat resilience as a potential primary colonisation source for the catchment”.

As described above, this habitat and therefore the species which are supported cannot Be readily mitigated or compensated for, as it’s a habitat type that cannot be recreated. This is why ensuring a package of mitigation and compensation at appropriate scale for the loss is critical.
Section 3 of the Biodiversity Net Gain for Rivers assessment describes what is believed to be inconsistences with the Biodiversity Metric 2.0., and their influences on the calculations. We acknowledge that the Defra Biodiversity Metric is still evolving and the uncertainties this may have caused for the assessment. Sections 3 identifies three main areas of concern. The distinctiveness score, time to target and the rational for calculating units based on river length, rather than area. A Biodiversity Metric 3.0 is currently in preparation and is due for release soon. We feel that the updated metric addresses the points raised in relation to distinctiveness and time to target. Our understanding is that the updated metric will continue to use river length and not area. This recognises the importance of river habitat and processes that underpin their functionality. We believe whilst the bespoke package of measures deviates from the metric, it does however provide measures that not only fulfil the requirements of the Water Framework Directive but provides significant gains for the environment.

Further impacts to these watercourses would continue through subsequent construction phases, including borrow pit excavation, embankment construction and reservoir filling, until these streams are fully lost under the footprint of the reservoir”. What is not clear is how the flows (including sediment management/pollution

prevention) to the downstream watercourse will be managed during construction, this will need to be addressed at detailed design.

Flood Risk

We have reviewed the FRA Model, the breach model, the emergency discharge modelling and the impact of the reservoir on the flood risk. The modelling has been signed off through a review process which confirms that that the techniques and assumptions used are satisfactory.

The proposed development will however only meet the National Planning Policy Framework's requirements in relation to flood risk subject to relevant planning conditions.

We can provide the following information on the characteristics of flooding at this site to help with your decision:

The FRA states that the requirements of the Reservoirs Act 1975, and proposed mitigation measures in place (including but not limited to the emergency discharge strategy, the regular maintenance and inspection of the reservoir) make it highly unlikely that a breach will occur. Regardless, the breach and associated failure of the embankment has been modelled as required by the Reservoirs Act 1975. Figure 8.1 of the Flood Risk Assessment indicates the impact of a breach event on the nearby communities downstream of the reservoir.

We have reviewed the associated flood risk model of the Reservoir, including the model generated to help assess and inform the FRA and Emergency Discharge. As well as this proposed modelling, we have also reviewed the proposed Breach Model, separately from the planning application. Following our reviews of the models, we are satisfied with the techniques used and subsequently the accuracy of the conclusions and assessment of the flood risk that all models generate.

In all circumstances where warning and emergency response is fundamental to managing flood risk, we advise local planning authorities to formally consider the emergency planning and rescue implications of new development in making their decisions. As such, we recommend you consult with your emergency planners and the emergency services to determine whether the proposals are safe in accordance with the guiding principles of the PPG.

Water Quality

Ongoing discussion with the Applicants and their consultants resulted in an agreed approach to establishing a baseline and undertaking an impact assessment for hydrology and water quality. The water quality model applied to this project was developed through extensive consultation with us and we can confirm that the resulting model is a suitable basis for modelling the water quality impacts of the projects. The bespoke model has provided a useful quantitative element for the assessment of impacts on water quality. Overall, the results of the modelling and analysis show the water quality in the reservoir will be good, there will be a low to moderate risk to water treatment from algal growth. Impacts on the downstream watercourses however are positive with a clear improvement in water quality predicted due to the quality of the Havant and Bedhampton Spring Water being of better quality then the existing water in the Hermitage Stream.

Groundwater Protection

The majority of the works associated with this development are on greenfield locations And underlain by unproductive strata or secondary aquifers. As such there are not likely to be many groundwater quality/contamination issues with the proposed development. The Bedhampton and Havant springs Source protection zone would occur at depth beneath the site. This source provides a strategically important water

supply, including for the proposed reservoir, so should be suitably protected.

1.6 Forestry Commission – The Government advisors and specialists in woodlands

The Forestry Commission is pleased to offer the following advice as to the likely impact of the proposals on woodland, in particular ancient woodland, as the Government's specialists in woodlands. Our role is distinct from any which may be provided by Forestry England whose role is management of the public forest estate.

While we appreciate the water resources drivers for the reservoir we would advise that any loss of ancient woodland should be restricted to that which is absolutely essential to the reservoir itself i.e. the direct footprint of the reservoir and dam. Loss due to associated activities would not meet the 'wholly exceptional' description quoted in the NPPF.

In this context we draw your attention to the proposals for a northern access road. These proposals would cut through an area of ancient woodland (as shown on Natural England's provisional Inventory of Ancient Woodland) and be likely to have the following impacts:

1. Direct loss of ancient woodland: in particular we draw your attention to the loss of ancient woodland and associated features (including a grove of veteran yew trees) along the proposed route from the ancient park pale (woodbank) to the B2149. and the loss that would result from widening the existing forest ride/track along the NW boundary of Havant Thicket
2. Significant fragmentation of this ancient woodland; and its interaction with adjacent priority open habitats to the north.

References to the ecological character of Havant Thicket:
Natural England's Provisional Inventory of Ancient Woodland shows much of Havant Thicket, including Horsefoot Hill, as Plantation on Ancient Woodland Site and Section 1.2 of the OUTLINE BIODIVERSITY MITIGATION AND COMPENSATION STRATEGY states: 'Forestry England (FE) own Havant Thicket, located to the north of the reservoir, this area consists of approximately 99 hectares of predominately pine woodland.'

We would point out that the majority of the conifers in Havant Thicket were felled almost two decades ago and the woodland has been actively managed to encourage the regeneration of native broadleaved trees as part of its long term transition back to ancient woodland – as illustrated in the 2005 and 2015 aerial photo's available from Google Earth Pro and the oblique Google Earth aerial copied on the next page. As such we would point out that the majority of this woodland has been successfully restored to 'ancient and semi-natural woodland'.

Compensation and mitigation proposals:
The National Planning Policy Framework affirms that ancient woodland is irreplaceable and development resulting in the loss or deterioration should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists.

We advise that such a compensation strategy for loss of woodland beneath the reservoir should include SIGNIFICANT new woodland which is located and designed to optimize the ecological and wider ecosystem services it provides. We suggest that such new woodland should be sited to link and buffer existing ancient woodland in the local area. Ideally this new woodland should provide ecological corridors for key species impacted by the development while also helping enhance the wider social benefits of green infrastructure (such as access

routes for local people).

The OUTLINE BIODIVERSITY MITIGATION AND COMPENSATION STRATEGY provided with the planning application, in relation to compensation for ancient woodland loss, focuses on:
enhancement of existing woodland, creation of new wood pasture and small areas of woodland creation.

In respect of the proposed package of compensation and mitigation we advise that:
• The creation of wood pasture and small areas of new woodland are included in the proposed compensation package. However, in our opinion this package is 'less than significant' in respect of compensation for loss of ancient and semi-natural woodland.
• The project will understandably generate greater public access to the site and adjacent woodland. This access brings considerable public benefits but inevitably increased pressure on these sites which requires mitigation.
• A major proportion of the proposed compensation/mitigation package relates to the management of existing woodland, for instance the proposals referred to as the 'Birch Dominated Compensation Areas' in para 3.2.2. We advise that compensation should comprise replacement of the specific habitats lost rather than management of existing habitats. Mitigation for the impacts of a development should be additional to management which would be expected as the best practice.

• The compensation/mitigation package also includes creation of open space within existing ancient woodland. While open space is an integral part of most well managed woodland the creation of new permanent open space in ancient and semi-natural woodland would change the soil structure which is so key to these irreplaceable habitats. Management of rotational open space or rideside scrub/coppice is more in keeping with an ancient woodland.
• In respect of compensation for the loss of veteran trees we suggest that a program to identify all the veterans, and trees with veteran characteristics, in the local area and establish a management and succession strategy for them would be valuable.
<u>Response to additional information:</u>

We should also reiterate that while we appreciate the water resources drivers for the reservoir we would advise that any loss of ancient woodland should be restricted to that which is essential to the reservoir itself i.e. the direct footprint of the reservoir and dam. Loss due to associated activities would not seem to meet the 'wholly exceptional' description quoted in the NPPF.

Having reviewed the documentation which has been submitted since our initial response of 14th December 2020 we advise:

1. Northern Access Road - where proposals would have significant impact on ancient

woodland:

a. Alternative routes which avoid or significantly reduce the impact on the ancient

woodland do not appear to have been considered;

b. Proposed route:

i. emphasis has been made that the access proposals follow the route of an

existing track within Havant Thicket managed by Forestry England and suggestions have been made as to how the impacts could be reduced; however

ii. reference to the section of ancient woodland between Havant Thicket and the B2149, where no hardened track currently exists, relates only to its junction with the B2149; no analysis seems to have been provided as to the impacts of the proposals on this area of ancient woodland where the grove of ancient yew trees and the historic ‘park pale’ would appear to be impacted.

2. Compensation and mitigation:

a. Compensation for loss of ancient & semi-natural woodland: If the council/s were to decide to approve the reservoir proposals there will be a loss of ancient woodland. We advise that a substantial amount of new woodland should be established as compensation. We do not suggest an area ‘ratio’ based on the area of ancient woodland lost but suggest that the compensatory woodland should deliver significant ecological value. We note Portsmouth Water’s response to Natural England’s comments and reference to 60 ha of woodland/wood pasture creation. It is not yet clear where this compensatory woodland would be located so must advise that:

i. A proportion of the compensation should be woodland (as distinct from woodpasture which delivers appropriate compensation in other respects) to compensate for the loss of ancient woodland and this should deliver significant ecological value;

ii. If this/these new sites are not considered in detail as part of the planning application then they will constitute afforestation proposals under the Environmental Impact Assessment (Forestry) Regulations and as the relevant authority the Forestry Commission’s advice would need to be sought to determine whether such afforestation proposals constitute relevant projects under these regulations. We must also advise that if the wood pasture areas comprise greater than 20% canopy cover at maturity they would also be subject to the Forestry EIA Regulations.

b. Mitigation/compensation within existing woodland – Havant Thicket and Southleigh Forest: While enhancing the management of these woodland sites is highly commendable we advise that work considered as mitigation or compensation should be distinct from that which would be considered good woodland management. Any such work should respect the ancient woodland character in particular soils and ground flora. For woodlands of this scale we recommend preparation of a Woodland Management Plan.

Such plans help identify the particular features of the woodland, any key threats (such as invasive species, herbivore pressure impacting ground flora and/or natural regeneration or disease), appropriate management and when approved by the Forestry Commission include appropriate felling licences.

3 c. Mitigation for increased public impact on existing woodland:

Understandably the proposals would enhance the public recreation pressure on the site and the benefits that would bring to local people. However, such access will require management which we advise should be considered in any mitigation package.

We very much appreciate the many and diverse aspects which are encompassed in a project such as this. We have focused our advice on aspects relating to trees and woodland. We remain happy to discuss proposals further and help identify opportunities to compensate and mitigate for adverse impacts and optimize the positive impacts.

1.7 Hampshire Highways

Original response

Assessment Phases
The application has been assessed within two phases. There is the operational phase for when the site is built and operational as a country park. There is also the construction phase which has also been assessed for its impacts in Highway terms.

Operational Phase
Accessibility
The applicant has provided commentary on existing pedestrian and cycling provision in the vicinity of the site, including details on the PRoW network which sits within the red line boundary of this planning application. The Highway Authority are content with the review with regards existing pedestrian and cycle provision outside the PRoW network. Countryside Services manage the PRoW and shall make relevant comments regarding the assessment work carried out by the applicant with regards these matters.

Whilst the summary of the provision is considered appropriate it is not clear how the proposed development will be accessed from the existing pedestrian and cycling provision, both from the east across the B2149, and from Havant and Staunton Country Park to the south of the site. The applicant has suggested that 30% of all trips within a 15 minute catchment of the site will access by non-car modes, however it is not clear on the likely pedestrian and cycling routes into the proposed site and how these are integrated to provide clear and well defined connectivity.

It is noted that the applicant has been in discussion with Hampshire County Council's Countryside Service regarding the internal diversion and extension of the PRoW network, however as per the above it is not clear if this includes further connections onto existing provision.

In addition, there are no details on how the development site to the north, Land East of Horndean which has resolution to grant subject to a Section 106 legal agreement, will be connected to the site for sustainable modes. A pedestrian connection, preferably off highway, to ensure future development and catchment area to the north will not rely on private car use to access the site should be provided.

Personal Injury Accidents
The applicant has provided 5 year data between 1st January 2015 and 31st December 2019 which is stated to be the latest data, however due to the timing of the application, this is not agreed by the Highway Authority. The data for the proposed access locations on the B2149 and Swanmore Road/Calshot Road have been derived from Hampshire Constabulary and is acceptable. The remaining junctions have used
CrashMap which is not currently accepted by the Highway Authority due to the lag in available data from this system.

The applicant has provided a basic review of the recorded accidents however has not provided any context to the accidents themselves and has not included the raw data which contains further information relating to the recorded accidents. In addition, it is not clear why the scope stops on Calshot Road at the marked location when further

recorded accidents are evident on the remaining network which will be subject to additional traffic relating to this development.

The current information provided does not include enough information for the Highway Authority to agree with the applicant's position that the development will not exacerbate any accident trend and will need to provide more detail to the Highway Authority, namely;

- An agreed scope of assessment with the Highway Authority
- Latest 5 year data from Hampshire Constabulary
- A detailed review of the recorded accidents within the agreed scope
- Provision of appropriate mitigation or amendments to the proposed strategy to prevent exacerbating any identified accident trends.

Baseline Conditions

Baseline traffic survey data was undertaken at 15 junctions which were previously agreed with the Highway Authority and at the time of agreeing, the assessment level and scale of the proposals were unknown.

Initial junction turning count surveys were carried out for 12 of the junctions on Saturday 7th March 2020 and Tuesday 10th March which were undertaken before full COVID-19 restrictions were in place and are therefore considered acceptable.

The remaining three junctions namely; Dell Piece East/B2149/Havant Road/Private Access, B2149/Middle Park Way and Woolston Road/Middle Park Way were undertaken on Thursday 19th March 2020 and Saturday 21st March 2020 at which point COVID-19 restrictions were being enforced.

The applicant has applied an uplift factor of around 15% to account for the reduction of traffic volumes due to COVID-19 restrictions. This has been done by comparing ATC flows which were taken over two-week periods pre and post COVID-19 restrictions.

The Highway Authority have compared these flows with 2018 data undertaken as part of the Land East of Horndean (55562/005) development, it appears that a 15% uplift is low when comparing to the 2018 flows, which found circa 20% reduction in trips. The Highway Authority however accepts that the flows and uplift factor is acceptable in this instance as the difference in the applicant's flows and the Highway Authority's interrogation would be equal to monthly and annual traffic flow fluctuations. For example there has been a recorded 1% increase in two-way traffic flow in the 2020 AM Peak and 7% decrease in the PM peak when compared with the 2018 flows. The uplifted flows at the three aforementioned junctions are therefore considered suitable in this instance.

Trip Generation

The level of vehicular trips generated by the proposed development have been calculated in a separate report titled' Visitor number and recreational amenity facilities review' found in Appendix A, based on reviewing alterative comparable attractions across the UK and reviewing against Queen Elizabeth Country Park to establish a peak hour trip rate.

The report provides a detailed assessment of how the likely trip generation is calculated which the Highway Authority has reviewed and is satisfied provides a robust

methodology for peak hour trip rates.

Trip Distribution
As it currently stands, the Highway Authority does not agree with the distribution proposed by the applicant. A gravity model has been used to establish the likely routes vehicles will use to access the proposed development and has used MSOA from Census 2011 data, the use of which is considered acceptable. However, the applicant has then distributed the trips associated with that MSOA on the road network using journey time cordons and straight line distances which is not considered acceptable.

At present, the applicant proposes that 34% of traffic will utilise the proposed southern access onto Swanmore Road and 66% will use the northern access. Of the 66% using the northern access, it has only assigned 3% travelling north along the B2149. The current distribution shows that 32% of trips using the southern access will only travel from the west and 2% from the local area.

The Highway Authority has undertaken a desk based journey planning exercise which would distribute a greater number of vehicular trips north on the B2149 from areas such as Hayling Island, Havant, Emsworth, Chichester and to some extent Bedhampton. This is based on current journey times in the identified peak hours and accounts for current delay on the local road network. Additionally, the Land East of Horndean development will add junctions, and short term delay during construction, due to the alterations to the local road network to the north of the proposed development site.

The Highway Authority has requested the applicant to review their trip distribution model, which is fundamental to the proposed access strategy and needs to be agreed before further work can be undertaken on determining the suitability of the accesses and wider assessment on the impact of the development.

Access Strategy
The Highway Authority has previously discussed the access strategy with the applicant and tabled the concerns prior to the submission of the planning application. Whilst the Highway Authority has a number of engineering concerns relating to the northern access, the principle of providing an access from the north is supported. The primary concerns relating to the southern access relate not to its junction form but the principle of the access and the routing of traffic through the Leigh Park area. This is something that has been strongly opposed through the Dunsbury application for both construction traffic, trips to the site and through traffic and this is reflected within the design. Whilst it is acknowledged that the type and frequency of trips to the proposed development are of a different scale and nature, a careful balance must be struck to ensure that a southern access does not have a determinantal effect on the Leigh Park area or give rise to additional safety concerns. Until the trip distribution is agreed, neither access proposal can be progressed or fully commented on as the final form and scale cannot be agreed. The below commentary provides an overview of the issues which have been shared with the applicant.

Northern Access – B2149
Drawing HTR-ATK-AR-RE-DR-D-001 shows the proposed access to the north which

comprises of a ghost island priority junction onto the B2149 and an independent Road Safety Audit has been submitted to support the access proposals.

In accordance with DMRB CD123 ghost islands shall only be used where major road traffic flows allow traffic turning right out of the minor road to do so in one manoeuvre. Given average daily flows of above 15,000 on B2149 and addition of 700 daily movements on the access this would mean that Single Lane Dualling should be considered. Trip distribution is key to agree the number of likely vehicles egressing the northern access by turning right, travelling south on the B2149 to establish if this is a likely manoeuvre and may lead to vehicles stopping in the carriageway as they cannot turn right in one movement.

The independent Road Safety Audit states that the B2149 is a high speed road subject to national speed limit. Four of the seven collisions which occurred along the route in the involved overtaking vehicles. Drivers who fail to realise there is a junction ahead may attempt to overtake a slower moving vehicle and find themselves on the wrong side of the carriageway as another driver turns out of the site access road resulting in a head-on collision or they may encounter a stationary vehicle in the right turn lane.
The proposed access junction is not clearly visible on the approach when travelling northbound due to the vertical alignment of the B2149, which includes a crest curve to the south of the junction. Because of this, stopping sight distances on both approaches are substandard.

The RSA1 concludes that the following measures should be investigated to overcome the fundamental safety concerns of the proposed location and form of junction

- Alterations to the vertical alignment of the B2149
- Relocation of the junction
- A reduction in speed limit with supporting measures to ensure compliance

It should be noted that the provision of a reduce speed limit alone would not be sufficient in overcoming the safety concerns.
Southern Access
The southern access is proposed in the form of a priority junction from Swanmore Road as shown on drawing HTR-ATK-AR-RE-DR-D-0006.

The RSA1 suggests that existing parked vehicles along Swanmore Road in the junction visibility splay may obstruct intervisibility between drivers exiting the access road and drivers approaching the junction. This may increase the risk of a driver pulling out into the path of a vehicle on Swanmore Road and a collision occurring.
It is understood that the existing Bridleway 121 which runs to the east of Swanmore Road may be impacted by the proposed access works and should be shown on the plan to ensure it can be maintained in its current position.

The number of recorded accidents on Swanmore Road and Calshot Road needs to be fully investigated as per the above. It does appear to be high for a what is a residential road network. The increase in vehicular trips through this network could exacerbate an underlying trend. Further to this, the area of Leigh Park is subject to traffic management measures to assist in reducing vehicular levels in this part of the road network. The proposed access strategy may compromise the effectiveness of overall traffic management policy in the area and increase future maintenance liability for the Highway Authority.

The northern section of the internal access road becomes single lane with passing places, the narrowing is understood to be required due to impact on ancient woodland. The Highway Authority has concerns that this will be less attractive for motorists, due to the additional delay and increased length of northern access road to the car park which may make the southern access more attractive and attract a larger number of trips than proposed by the applicant.

Through Route

The proposed access road as shown on drawings HTR-ATK-AR-RE-DR-D-0001 and NTR-ATK-AR-Re-DR-D-0005, shows an unrestricted route from the northern access to the southern access. Whilst as noted above it is of an unattractive nature the Highway Authority raises concern over the potential use of this as a through route or a rat run once operational as it is likely during peak times that the route would be quicker for some road users than the existing highway routes. Measures need to be included to stop this from occurring and this should be of no burden on the Highway Authority to maintain and manage. It is also a concern that it would be utilised for antisocial behaviour such as by motorbikes outside the main operational times of the site.

Parking

Parking requirements are set and controlled by the Parking Authority and will be considered by the Planning Authority. Confirmation that required parking standards have been met is required.

From the Highway Authorities perspective, we are concerned regarding the potential for on street parking, especially within the Leigh Park area in the vicinity of the southern access, or other pedestrian/cycle connection points to the site. Confirmation of control measures for parking should be provided. Depending on the controls to be provided it may be necessary to provide funding for implementation of TRO's as required to prevent nuisance parking.

If parking charges and controls are required measures such as the use of ANPR access barriers as have been implemented across a number of Forestry Commission locations and Country Parks within the County may provide both provision for parking controls and act as a physical preventative measure to prevent a through route from being created.

Junction Assessment

The junction modelling cannot be fully assessed by the Highway Authority until the vehicle trip distribution for the site has been agreed and further assessment may be required.

TEMPRO has been utilised to factor the baseline surveys from 2020 to 2029 as the future year scenario, using suitable Havant Middle Super Output Areas and the

Highway Authority is satisfied that this is acceptable. 2029 is assumed by the applicant to be the year of opening and full operation of the site.

In addition to acceptable growth rates, consideration has been given to specific developments within the immediate vicinity of the site. Traffic flows from the nearby developments of Land East of Horndean 55562/005 and Dunsbury Hill Farm APP/12/00338

have been included within the future baseline flows.
The junctions which have been assessed based on the information to date and are included within the TA are:

- Dell Piece East/B4129 Roundabout;
- Northern Site Access/B4219;
- Southern Site Access/Swanmore Road;
- Swanmore Road/Middle Park Way Priority Junction;
- Woolston Road/Middle Park Way Mini Roundabout, and;
- Purbrook Way/Middle Park Way Roundabout.

There is concern that the Dell Piece East/B2149/Site Accesses junction has been modelled incorrectly as the outputs are significantly lower than the approved model associated with the Land East of Horndean application and this should be reviewed by the applicant.

Other junctions included within the Land East of Horndean development application should be assessed as part of this application. This should include the A3(M) junction with improvements scenario and the new roundabout access on the B2149.
Construction traffic will result in a significant daily increase in trips across the network and it is not clear if these will be during peak times. The applicant needs to fully assess the impact of construction traffic across the network and may need to include two assessments, one scenario for operation traffic and one for construction traffic.

Strategic signing
Trips which are non-local or outside of the 15 minute cordon, will have a higher chance of using the strategic road network. The applicant should propose a strategic signing strategy to ensure this network is used, rather than local roads. This should be presented at this stage to ensure an appropriate level of review is undertaken by the necessary consultees and secured through planning condition or Section 106 obligation should permission be granted.

Wayfinding
As the site will be a key visitor attraction for the local area and the assumption that walking and cycling for a 15 minute radius from the site will is proposed at 30% of the modal choice it is key that the development can be easily located from the existing pedestrian and cycle network. A wayfinding strategy should therefore be proposed by the applicant to support this assumption and encourage sustainable trips to the site from the local area. Construction Phase. Within this application the assessment of the impacts of the construction phase have been reviewed by the highway authority.

Pipeline Route
The pipeline route is subject to a separate application, APP/20/00991, and additional supporting information. A separate response to this application shall be provided and should be read in conjunction with this response by the Planning Authority.

Trip Generation
The applicant has included information regarding the level of construction traffic which will be present for 9 years from 2021 to 2029, as per the applicant’s commentary, whilst the reservoir, and associated infrastructure included within this planning application, is being constructed.

At the peak of construction starting 2023, there will be circa 200 two-way HGV movements per day and 250 smaller vehicles per day accessing the site with regards the reservoir construction. There will then be an addition 30 HGV movements associated with the pipeline works at 270 LGV and car movements in relation to these works. Whilst measures can be implemented through a Construction Traffic Management Plan the proposed trip generation for construction vehicles is significant. It is not known whether the HGV trips will be spread throughout the day or
focussed on particular time periods. Clarity is sought on how the trips will arrive throughout the day and whether any restrictions are to be applied to the site to control

HGV arrivals.

Trip Assignment

Routing to the site for construction of the reservoir and onsite facilities is proposed to be on the strategic road network, A3(M) and then onto the B2149 and through the proposed access to the north. At pre-application discussions there were initial ideas tabled to route construction traffic via the Dunsbury Hill Farm site. This would remove construction traffic from junction 2 of the A3(M) and away from the Land East of Horndean development area. The Highway Authority would like further clarification on why this route is no longer being explored. The current NSIP for the Aquind project is forecasting a construction programme which coincides with this application and the vehicle routing details overlap at junction 2. It would therefore be highly beneficial for the operation of the highway if alternative access arrangements can be achieved.

Junction Assessments

The applicant has assessed the impact of construction traffic along the route within the ES Chapter 13. This is at a high level for the purpose of the EA assessment and fails to identify that there are significant increases in traffic generation as a result of the construction traffic. The proposed generation from construction for a significant period cannot be deemed to be a negligible impact. Roads which are currently subject to no HGV traffic are to be exposed to significant daily demand. No junction modelling or detailed assessment on the capacity of the road network and the impacts of the
prolonged construction period has been undertaken and must be considered by the applicant. This should consider the joint impact of other significant and emerging schemes in the area.

During the construction phase the vehicle routing at the A3(M) junction 2 roundabout will be under considerable more pressure with a number of development schemes overlapping including Aquind and the Land East of Horndean development
site. Assessment must be carried out at this junction for the construction phase to demonstrate its effective working and to understand the impacts of the additional traffic on the approved improvement scheme to be provided by the Land East of Horndean site.

In addition the impacts of junctions along the construction corridor must be assessed to ensure any issues which may arise can be appropriately addressed.

Construction Traffic Management Plan

Whilst information relevant to a CTMP has been provided within the supporting documentation a full framework construction traffic management plan must be provided to support the application and include appropriate measures to ensure the impact from the construction traffic is minimised, which should be separate to the pipeline CTMP. This should include but not be limited to:

- Appropriate directional signage for construction traffic to the site
- The provision of long term facilities for contractor parking;
- The arrangements for deliveries associated with all construction works;

- Methods and phasing of construction works;
- Suitable wheel washing facilities which given the nature of the development should be via a suitable drive through wheel wash.
- Vehicle routing proposals and appropriate signage strategy details

The construction period is planned to last around 9 years which due to the increase in HGV's may be detrimental to the existing carriageway and ongoing maintenance. A pre-condition survey should be undertaken by the applicant prior to any commencement on site to assess the condition of the construction route. At the end of the construction period, the applicant will need to make good any defects caused by HGV traffic, in agreement with the Highway Authority.

In addition to the above, the development to the north Land East of Horndean, will more than likely be on site and implementing changes to the B2149 which will need to be given further thought by the applicant. The Highway Authority needs to ensure that any damages caused by HGV traffic associated with this development is rectified by the applicant and does not become a burden to the Land East of Horndean developer.

OEMP

The OEMP contains seven objectives relating to Traffic and Transport to manage the environmental effects and impact of the development, which are:

- Minimise impact of HGV traffic on the highway network
- Minimise impact of construction traffic during typical network peak hours
- Minimise use of construction routes of local road
- Minimise the impact of PRoW closure/diversion
- Minimise staff car trips
- Maximise opportunities for all modes of travel

The first six objectives will linked to a detailed Construction Traffic Management Plan and the bottom objective is linked to the Construction and Operational Travel Plan. Whilst the principle of the above objectives is considered appropriate, the Highway Authority needs to agree and approve both the Framework Construction Traffic Management Plan the Framework Travel Plan in order for the OEMP to contain suitable measures to reduce the environmental impact of the development.

Framework Travel Plan

A framework travel plan has been provided for construction staff. This is being reviewed by Hampshire County Council's Travel Plan team and any comments will be forwarded to the applicant direct.

Mitigation

The ES Chapter 13 refers to measures which have been taken to reduce the impacts of construction. These are listed as:

- Development of an OEMP in Appendix A2.1 in ES Volume 4
- Reviewing construction sequencing to smooth out the 'peak' in construction traffic as far as possible
- Reviewing construction routes to make use of the principal road network where possible
- Reviewing the use of multiple access points to reduce the time period an impact may be experienced by the local population.

Whilst measures are welcomed such as those listed above given the scale of the project and potential impacts of construction vehicles it may be necessary to provide

additional mitigation measures, with commitments to work with other nearby construction projects to ensure works are delivered in a way which minimises the impacts of the construction phase.

Highway Authority Summary

Additional information is sought from the applicant on both matters relating to the construction and operational phases before the impacts of the development can be fully understood and appropriate measures can be agreed with the applicant to minimise the impacts of the construction phase and ensure appropriate access, integration and operation of the site in the operational phase.

Response to additional information:

This response should be read in conjunction with Hampshire County Council's previous response which contained the Highway Authority's comments in Appendix A, in the letter dated 21st December 2020. The letter outlined that the application should provide additional information to ensure the application proposals are robustly assessed and any mitigation can be secured to minimise the impact of the development and promote active travel options to access the site.

The Highway Authority and the applicant have had numerous discussions in order to work through the previous response. For continuity and ease of reference, this letter will use the headings used previously. The applications, APP/20/00991 for the pipeline and APP/20/00990 for the reservoir should be reviewed and considered together due to the interlinked nature of the applications.

Assessment Phases

The application has been assessed within two phases. There is the operational phase for when the site is built and operational as a country park. There is also the construction phase which has also been assessed for its impacts in Highway terms.

Operational Phase

Accessibility

The Highway Authority raised concerns on how the proposed development will be accessed from the existing pedestrian and cycling provision, both from the east across the B2149, from Swanmore Road and from the south providing access from Staunton Country Park. The applicant has now submitted a more detailed accessibility strategy, through document HTR-ATK-XX-XX-RP-Z-0076 titled Access for Non-Motorised Users (NMUs) which includes improving existing connections from the public highway to gain access to the site for pedestrians and cyclists. This is shown in the aforementioned document in Figure 2 and the formal links comprise of;

- Improvements to the existing crossing on B2149/Castle Road junction to provide formal crossing and footway connection to the existing access track as shown on drawing HTR-ATK-XX-ZZ-DR-D-0001 which will provide access from the east (numbered 1 in Figure 2)
- Improvements for pedestrians and cyclists to the existing crossing point on the B2149 at the Forest Bere car park as shown on drawing HTR-ATK-XX-ZZ-DR-D-0002 which will provide access from the east (numbered 2 in Figure 2)

- Improvements to Swanmore Road southern access to the site to include additional pedestrian and cycle connections and tie into the Public Right of Way network as shown on drawing HTR-ATK-AR-RE-DR-D-0005 which will provide access from Leigh Park (numbered 6 and 7 in Figure 2). The additional footway provision is focused around connecting the existing formalised crossing points associated with the bus stops to the site.
- Improvements to the Whichers Gate double mini-roundabout to provide a suitable crossing point into the site as shown indicatively on drawing HTR-ATK-XX-ZZ-DR-D-0003. It should be noted that there is a wider improvement scheme proposed for this junction highlighted through Havant Borough Council's emerging local plan and therefore a financial contribution will be secured to ensure delivery of the crossing point shown on drawing HTR-ATK-XX-ZZ-DR-D-0003 or if appropriate for timing for the monies to be used to provide appropriate crossing facilities within the wider improvement scheme at this junction, this improvement will provide access from the east (numbered 3 in Figure 2)
- Improvements to the existing walking and cycling routes through Staunton Country Park north of Middle Park Way which will provide suitable access from the south as agreed with Countryside Services
- Improvement of PRoW Bridleway 121 to provide access from the southern access to the internal crossing to be agreed through Reserved Matters

The above improvements will be secured through a Section 106 legal agreement and delivered through Section 278 works or financial contribution be provided to Hampshire County Council to implement the improvement. A financial contribution is required in order to provide improvements as highlighted above.

The Highway Authority is satisfied that the improvements to the walking and cycling access strategy provides points for local residents to reduce the reliance on private car use to access the site and ensures safe and suitable access for all users.

It should be noted that the Highway Authority previously raised that a direct link should be provided through from the Land East of Horndean development, however due to existing 3rd party land constraints this cannot currently be delivered by the applicant. Should this link be feasible in the future, the applicant should endeavour to provide the link. There are connections provided from the Land East of Horndean site to PRoW 120 which provide indirect onward connections via the right of way network to the site.

Personal Injury Accident data

The applicant has provided the most up to date accident data for the agreed study area, which includes Calshott Road and Swanmore Road and the B2149. The recorded accidents are detailed in document TNPS04 Personal Injury Collision Data Review.

<u>Calshott Road and Swanmore Road</u>

A total of 12 collisions (five serious and seven slight) have been recorded on Swanmore Road / Calshot Road. Six of the 12 recorded collisions were located in an area of the cordon 200m west of the proposed southern access junction, which is not expected to accommodate any of the construction and minimal operational traffic associated with the reservoir and therefore has not been considered within the review which the Highway Authority has accepted.

The applicant has acknowledged that five of the 12 collisions included pedestrians or cyclists and has agreed that pedestrian and cycle links therefore need to be improved to gain access to the site to ensure any trend is not exacerbated. The previous section outlines the agreed improvements to Swanmore Road which will be secured through a Section 106 legal agreement.

Vehicular accidents were attributed to driver error, failing to look properly, poor manoeuvre and following too close. Based on the agreed trip generation and distribution, once the proposed development is operational, there is expected to be fewer than 10 two-way trips generated during the typical network peak hours, and less than 50 trips during a weekend peak, which is unlikely to exacerbate the identified collision factors. There was no mitigatable accident pattern identified through the accident analysis.

HGV traffic associated with the construction of the pipeline will be limited and controlled through the Construction Traffic Management Plan and Traffic Management Plan.

<u>B2149</u>

A total of seven collisions (two serious and five slight) were recorded along the B2419 and four of the collisions recorded involved overtaking vehicles. The proposed northern vehicular access includes measures which will restrict overtaking manoeuvres along this section of the B2149. Further commentary on the northern access proposal is provided below and covers further this element of the recorded accidents. The recorded accident history on the B2149 has been considered carefully by the Highway Authority when reviewing the suitability of the proposed Northern Access and the design of the junction.

<u>Local road network</u>

The Highway Authority previously raised concerns over the use of CrashMap at other locations agreed with the applicant. After discussions, it is agreed that in this instance due to the Highway Authority agreeing trip distribution, the limited increase in operational traffic as a result of this development will not give rise to significant movements at the Middle Park Way/Woolston Road junction and the Middle Park Way/Purbrook Way junction. Therefore the scope of the study area was contained to those above.

The construction traffic as highlighted above will be controlled through a Construction Traffic Management Plan and Traffic Management Plan and therefore the Highway Authority is satisfied that the impact can be minimised in this location and accidents are not likely to increase as a result of this development in this location.

Trip Distribution

The Highway Authority raised concerns over the previously proposed trip distribution, which was derived from a gravity model, to establish the likely routes vehicles will use to access the proposed development and used MSOA from Census 2011 data, the use of which was considered acceptable. However, the applicant distributed the trips associated with that MSOA on the road network using journey time cordons and straight line distances which was not considered acceptable.

The application has provided a revised distribution model for vehicular trips across the local road network, in discussion with the Highway Authority, and is presented within document TNPS02 Traffic Distribution Model Sensitivity Revision. Eight main routes to access the site were proposed;

- Route 1 – A3(M) South (northern access)

- Route 2 – A3(M) North (northern access)
- Route 3 – B2149 South towards Emsworth (northern access)
- Route 4 – B2149 South towards Havant (northern access)
- Route 5 – Swanmore Road – Dunsbury Way (southern access)
- Route 6 – B2149 North – across A3(M) junction 2 (northern access)
- Route 7 – Swanmore Road – Middle Park Way – Purbrook Way (southern access)
- Route 8 – Swanmore Road – Middle Park Way – Hulbert Road

The applicant has revised their assignment on these trips based on journey times, particularly through the peak hours, and has derived that 74% of operational trips will access the site through the northern access and 26% will utilise the proposed southern access. Further detail is presented in Table 3 - Route Assignment Assumptions for MSOA cordons which assumes assignment based on the trip origin. The Highway Authority is now satisfied that the methodology and figures presented are robust and therefore distribution of operational traffic is agreed.

Access Strategy

The Highway Authority previously raised concerns that until the trip distribution is agreed, neither access proposal can be progressed or fully commented on as the final form and scale cannot be agreed. However, given the above, the access strategy as presented in the application can now be fully considered.

The access strategy proposed consists of two vehicular access points for the reservoir. The northern access on the B2149 is proposed to be the main access and the access via Swanmore Road, the southern access, is a minor secondary access for localised traffic. The Highway Authority is satisfied that the proposed access strategy is acceptable subject to an appropriate and robust signage strategy including the need for signage as appropriate on the strategic highway network being secured to reduce trips associated with the development site on localised residential roads and will utilise the strategic road network where possible.

<u>Northern Access</u>

Drawing HTR-ATK-AR-RE-DR-D-010 shows the proposed access to the north which comprises of a ghost island priority junction onto the B2149. The Highway Authority previously commented on the Independent Road Safety Audit Stage 1 (RSA1) which was submitted by the applicant to accompany the access proposal. The RSA1 raised concerns over the access which were mirrored by the Highway Authority, which was namely the existing overtaking accident history on the B2149 and the lack of forward visibility on the main line when approaching the junction. The RSA1 concluded that the following measures should be investigated.

- Alterations to the vertical alignment of the B2149
- Relocation of the junction
- A reduction in speed limit with supporting measures to ensure compliance

The Highway Authority previously ruled out the reduction in speed limit at this time due to the nature of the existing road network in its rural feel and existing recorded speeds.

The applicant has submitted to the Highway Authority, an access optioneering exercise which is understood to have been carried out prior to this planning submission. The report contains six access options along the B2149 and considers each against certain criteria, namely engineering, environment and project drivers. Each access was given a score based on high level appraisal and the proposed northern access was considered to be the most appropriate.

The Highway Authority questioned two further options, one through the Land East of Horndean development which was discounted due to third party land constraints and unknown ecological impact which could not be overcome through the planning process. Another access to the south of the proposed access would sever the ancient woodland making it difficult for forestry management and it would result in a greater loss of the designated ancient woodland. It was therefore considered that in order to achieve the agreed access strategy, the proposed access would need to be progressed.

Junction form has also been considered by the applicant and the Highway Authority in detail. The appropriate form of the junction is based on DRMB guidance and the ability to provide an appropriate design. Design is discussed further within this section. Regarding junction from initially this is based on daily vehicle flows. Flows on the B2149 are 14,240 (7281 north bound and 6959 southbound) on average per a day and it is acceptable that peak daily movements from the proposed development are 834. Based on CD123 Revision 2 figure 2.3.1 the appropriate junction form is that of a ghost island right turn lane as presented.

Two Departure from Standards (DfS) submissions have been applied for by the applicant, which is for the visibility on the main line as raised in the RSA1. The vertical alignment of the B2149 as existing, presents a crest and sag on the approach to the proposed access locations and therefore stopping sight distances are compromised. As part of the DfS submissions, the applicant proposed mitigation in order to reduce the risks highlighted within the RSA1.

It is proposed that the B2149 will be reprofiled in order to reduce the crest and will be filled in the sag to provide a flatter gradient which improves the forward visibility on the main line. The applicant has stated that the reprofiling will not result in any further impact on tree loss. The Planning Authority should satisfy themselves that this is the case. It is acknowledged that the B2149 experiences movement due to the soil conditions and there is flexibility within the proposed reprofiling. The Highway Authority will impose that the scheme is subject to an extended maintenance period to cover the entire construction phase until 12 months after the site becomes operational to the public or 12 months post construction traffic movements stopping whichever is later. This will include, but not be limited to, monitoring any movement of the B2149 which will need to be rectified by the applicant should movement occur within the maintenance period.

In order to reduce overtaking opportunities, the applicant has proposed traffic islands to be provided north and south of the access junction. Additionally, a solid white line will be painted on the B2149 which restricts vehicles from overtaking manoeuvrers.

Visibility from the access to the near side kerb, as shown on drawing HTR-ATK-AR-RE-DR-D-0010, is based on recorded speeds and takes the gradient of the road into account as per Hampshire County Council's TG3 document. The plan shows that visibility can be achieved within the public highway and land controlled by the applicant. The applicant has also submitted long sections of the visibility splays which shows that the crest and sag of the B2149, in this instance, does not impact the splays. Land required for the visibility splays

that sits outside the current highway boundary will need to be dedicated as Highway as part of the s278 process.

Having regard to the above the Highway Authority is satisfied that the proposed northern access can be delivered subject to further detailed design which will be subject to Hampshire County Council's Section 278 design check process. The detailed design process will ensure that the vertical reprofiling of the B2149 can be achieved as set out by the applicant, without the need for tree loss. Should this not be achieved, either the reprofiling cannot be implemented as stated or if it results in tree loss, the applicant will not be able to proceed with implementing the junction and will be required to revisit planning approval for access.

The access must be constructed prior to any commencement on site and may be subject to traffic management measures through the construction period to better manage access for HGV movements. Conditions and obligations will be required to carefully ensure that only works that can be appropriately accessed in advance of the northern access being constructed to the satisfaction of the Highway Authority, including the reprofiling is undertaken.

<u>Southern Access</u>

The southern access is proposed in the form of a priority junction from Swanmore Road as shown on drawing HTR-ATK-AR-RE-DR-D-0006. The Highway Authority stated that the following concerns needed to be overcome in order for the access to be acceptable.

- On-street parking near the junction may restrict visibility splays
- Bridleway 121 would be impacted by the proposed junction
- Underlying accident trend on Swanmore Road

The applicant has agreed to provide a TRO payment to restrict parking within the visibility splays of the junction and will be secured through a Section 106 legal agreement.

Bridleway 121 will need to be altered and this will be secured through the planning process as advised by the Rights of Way team. Drawing HTR-ATK-AR-RE-DR-D-0005 shows that the extension of the Bridleway will capture cyclists using the Swanmore Road access by introducing dropped kerbs to join a shared footway/cycleway into the site on the northern side of the junction. A footway will be provided between the proposed site and the bus stop to the north of the access. This ties the access point to the west into the existing footway provision in Swanmore Road. To the south of the access an additional footway connection will be provided from the bus stop to the south of the existing vehicle maintenance access point. This access point will become the primary pedestrian and cycle access point to the site from Swanmore Road and tie internally directly into the shared use provision within the site.

Bridleway 121 along the western boundary of the site will cross the internal access road further within the site at an appropriate point to be agreed through reserved matters.

Having regard to the above the Highway Authority is satisfied that the southern access junction can be delivered. It will be subject to further detailed design through Hampshire County Council's Section 278 design check process. The access will need to be in prior to any commencement of any phase on site that requires access via the Swanmore Road. As per the northern access, there may need to be additional traffic management measures through the CTMP which will restrict access to the public.

Through Route

Drawings HTR-ATK-AR-RE-DR-D-0001 and HTR-ATK-AR-RE-DR-D-0005, shows the access route from the northern access to the southern access. The Highway Authority raised concern over the potential use of this as a through route or a rat run once operational as it is likely during peak times that the route would be quicker for some road users than the existing highway routes. The applicant has agreed to implement a barrier system and will be secured through the condition/obligation. It is also noted that the applicant has stated that the internal access roads and car park strategy, which are matters to be dealt with at a later stage and may include altering the widths of the access road from the southern access junction, will discourage through traffic by design. The Highway Authority requests that they are consulted on these proposals when they come forward.

Parking

Concerns were raised previously regarding the potential for on street parking, especially within the Leigh Park area in the vicinity of the southern access, or other pedestrian/cycle connection points to the site. The applicant has confirmed that they are willing to provide a financial contribution of £24,000 to cover costs of implementing parking restrictions through a Traffic Regulation Order, as required to prevent nuisance parking. This includes parking measures on Swanmore Road which is highlighted above in the Southern Access section.

Junction Assessment

The junction modelling previously could not be fully assessed by the Highway Authority until the vehicle trip distribution for the site had been agreed, however given agreement on these matters the Highway Authority can now review in full.

As highlighted in the last response, TEMPRO has been utilised to factor the baseline surveys from 2020 to 2029 as the future year scenario, using suitable Havant Middle Super Output Areas and the Highway Authority is satisfied that this is acceptable.

2029 is assumed by the applicant to be the year of opening and full operation of the site. In addition to acceptable growth rates, consideration has been given to specific developments within the immediate vicinity of the site. Traffic flows from the nearby developments of Land East of Horndean 55562/005 and Dunsbury Hill Farm APP/12/00338 have been included within the future baseline flows.

The junctions which have been assessed based on the information to date and are included within the TA are:

- Dell Piece East/B4129 Roundabout;
- Northern Site Access/B4219;
- Southern Site Access/Swanmore Road;
- Swanmore Road/Middle Park Way Priority Junction;
- Woolston Road/Middle Park Way Mini Roundabout,
- Purbrook Way/Middle Park Way Roundabout

Due to the now agreed trip distribution, the Southern Site access/Swanmore Road, Dell Piece East/B4129 roundabout, Swanmore Road/Middle Park Way Priority junction and Woolston Road/Middle Park Way mini roundabout do not a significant increase in trips

through the junctions which would result in a significant change in the modelling presented in the original TA. This has therefore not been revisited.

It is shown through the modelling that there will be sufficient spare capacity in the 2029 with development future year scenario through the following junctions:

- Dell Piece East/B2149 (with Land East of Horndean improvements)
- Swanmore Road/Middle Park Way junction
- the Middle Park/Woolston Road mini roundabout.

The Middle Park Way/Purbrook Way roundabout modelling shows that there is an arm which operates over theoretical capacity in the PM peak and the Saturday peak. This is evident in the 2029 base scenario with an RFC value of 1.04 and delay of 6 seconds on the Purbrook Way East arm. The 2029 with development scenario shows a very minor increase of 0.01 in RFC and 1 additional second delay as a result of the trips associated with this site. The Highway Authority is therefore satisfied that the operational traffic associated with this site will not result in a significant impact on the local highway network.

The trip distribution has resulted in minor changes to the modelling for the northern access and as a result the junction will see a delay to right turning vehicles from the site access of 26 seconds in the PM peak. There will be minimal queuing traffic within the right turn lane on the B2149 and the access junction. The Highway Authority accepts that the junction will operate well within capacity.

Strategic Signing and Wayfinding

The applicant has agreed to secure a Wayfinding Infrastructure Strategy which will include the design and location of signage across the site and include key areas surrounding Havant Thicket such as, but not limited to, Dunsbury Park, Horndean, Leigh Park, Rowlands Castle and Staunton County Park. The strategy will be for both vehicular and active travel modes.

Vehicular signage will direct traffic to the northern access junction from strategic routes and the applicant should include a plan which shows where these will be located for inclusion within the s106 agreement. The active travel mode signage will direct users of the site to the access points which have been discussed above to ensure safe and suitable access is promoted.

<u>Construction Phase</u>

Trip Generation

Clarity was sought on how the trips will arrive throughout the day and whether any restrictions are to be applied to the site to control HGV arrivals. The applicant has highlighted that at the peak of construction starting 2023, there will be circa 200 two-way HGV movements per day and 250 smaller vehicles per day accessing the site with regards the reservoir construction. There will then be an additional 30 HGV movements associated with the pipeline works at 270 LGV and car movements in relation to these works.

The applicant has now provided a Framework Construction Traffic Management Plan which contains measures, but is not limited to, to restrict the movement of HGV and staff trips for both the construction of the reservoir and the pipeline through the traditional peak times of 08:00-09:00 and 17:00-18:00 across the local road network. Where school drop off and pick up movements, both vehicular and active travel modes, be impacted HGV trips will be limited to arriving/departing outside of this window.

In addition to this, the applicant has agreed that HGV movements during weekdays will be restricted to 32 (16 arrivals and 16 departures) per hour with no more than 200 in a day (100 arrivals and 100 departures). On Saturdays HGV movements will be restricted to 32 per hour (16 arrivals and 16 departures) between 9am and 1pm.

Staff and contractors working on the construction of the reservoir will be restricted to 125 and will arrive and depart the site outside of the peak hours.

Construction Routing

It has now been agreed that the construction routing for HGV and staff trips to the reservoir site is to be from the A3(M) - Junction 2 – B2149 – Northern Site Access and vice versa for HGV and staff trips leaving the site. Due to the length of construction period and number of vehicles associated with the construction phase, the applicant has committed, through the CTMP, that any defects on the construction routes caused by HGV traffic associated from the development site will be made good.

As stated within the Framework CTMP, the applicant will agree with the Highway Authority a programme for periodical condition surveys, and the triggers for any remedial or interim remedial works that are needed.

The applicant has acknowledged committed schemes in the area, namely Aquind Interconnector and Land East of Horndean, and will engage with both developers to ensure the impact of all three developments is minimised where possible, and specifically at the A3(M) junction 2.

Junction Assessment

Prior to the agreement of all construction related trips arriving and departing the site outside the peak hours the Highway Authority raised concerns over the operation of the local road network due to the localised routing of traffic associated with construction. The study area was agreed to be the proposed northern access to the A3(M) J2, which should include the new and improved junctions being implemented as part of the Land East of Horndean development. It should be noted that this only relates to staff worker trips and does not relate to HGV movements which were always considered to be undertaken outside the peak hours.

The applicant has provided a Technical Note which presents the following junctions have been modelled using industry standard software ARCADY and LINSIG.

- A3 (M) Junction 2 with Land East of Horndean Signalisation Improvement Scheme.
- Dell Piece East/Havant Road/Land East of Horndean Access Roundabout
- B2149/East and West Accesses to the Land East of Horndean Development Roundabout

To undertake modelling in the future year scenario assessments, TEMPRO growth factors have been used. In addition to this, the applicant has included Land East of Horndean construction staff traffic of 60 trips in the AM and PM peak respectively. and the following scenarios have been modelled;

- 2023 Base
- 2023 Base + Construction Staff Trips
- 2026 Base

- 2026 Base + Construction Staff Trips

The future years of 2023 and 2026 have been used as these represent the start and end of the peak construction period of the reservoir site.

A3 (M) Junction 2 with Land East of Horndean Signalisation Improvement Scheme.

This junction has been assessed using LINGSIG and in the 2026 baseline + development scenario in the PM peak shows that the junction result in a practical reserve capacity of -0.9%. The arm which is most impacted is the south right ahead arm on the circulatory and has a Degree of Saturation of 90.9% which indicates that queuing traffic may not be cleared after each green signal. The results show that the junction does still operate within theoretical capacity and whilst the construction staff traffic does worsen the operation of the junction, it will not result in a significant impact and delay on the local road network.

Dell Piece East/Havant Road/Land East of Horndean Access Roundabout

This junction has been assessed using ARCADY and in the 2026 baseline + development scenario and shows that the junction will operate within theoretical capacity with the highest RFC of 0.62, found on the Dell Piece East arm in the AM peak hour and a delay of 5 seconds.

B2149/East and West Accesses to the Land East of Horndean Development Roundabout

This junction has been assessed using ARCADY and in the 2026 baseline + development scenario and shows that the junction will operate within theoretical capacity with the highest RFC of 0.78, found on the Havant Road North arm in the AM peak hour and a delay of 6 seconds.

Notwithstanding the above assessment results, it is acknowledged that the modelling represents the worse case scenario of all staff arriving in separate vehicles to the site within the identified peak period. The CTMP and the Travel Plan will reduce travel to the site within the peak hour periods and therefore the Highway Authority is satisfied that the construction traffic will not result in a severe impact on the local highway network, subject to the aforementioned mitigation in the form of CTMP and Travel Plan.

CTMP

A Framework Construction Traffic Management Plan has been submitted by the applicant which covers both the reservoir construction and pipeline elements of the development. The Framework CTMP outlines measures, some detailed above, which aim to reduce the impact that associated construction vehicles will have on the local highway network. Should the Local Planning Authority be minded to approve this application, a Construction Traffic Management Plan should be secured through condition which provides further detailed plans/information on the measures within the Framework CTMP.

The applicant has set out that the Construction Traffic Management Plan will include the following;

- Vehicle routing plans;
- Proposed programme and duration;
- Number of construction personnel including travel arrangements and mitigation where necessary;

- Alterations to the highway, including temporary and / or permanent, to enable construction;
- Details of the number of construction and delivery vehicles using the public highway (no abnormal loads are anticipated at this stage);
- Traffic management details;
- Compounds and laydown area details;
- Highway condition surveys;
- Methods for managing the site to prevent mud onto the highway; and
- Details of onsite contractor parking.

The construction phasing of the reservoir will be dynamic and should be consider a live document throughout the construction period. It will be important for the applicant to continue dialogue with the Highway Authority and Local Planning Authority to ensure measures are agreed prior to significant periods of HGV and staff traffic. This should also work alongside and compliment any traffic management arrangements for other committed developments and their CTMP.

Travel Plan

A Framework Work Place Travel Plan has been provided by the applicant to reduce the number of staff vehicle movements and promote sustainable travel modes if they are local or car/minibus share if from afar. The Framework Travel Plan does not provide enough detail on the measures that will be utilised to reduce the reliance on private car however the Highway Authority is satisfied that through continued dialogue, once further details on the contractors and staff to be used to operate at this site are known, a sufficient Full Travel Plan can be provided prior to any commencement on site.

The Full Travel Plan should contain a commitment to provide HCC with information of the contractor and where their staff will be originating from. If large staff numbers from a contractor are being housed at a hotel(s) the applicant should propose a shuttle bus to reduce all staff using a private car. If the contractors are local additional measures can be provided to make sustainable travel more attractive to staff.

An action plan should be included in the FTP which details each measure to be conducted as part of the Travel Plan (including resources to be allocated to the TPC role). A cost estimate for these items must be included which is used to approximate a Travel Plan Bond.

The Framework Travel Plan will be secured through a Section 106 legal agreement and the applicant will be required to pay Hampshire County Council's Travel Plan approval and monitoring fees. In addition to this, the applicant is required to cost the measures contained within the Framework Travel and those highlighted above to calculate a Travel Plan Bond which should also be secured through the Section 106 legal agreement.

Recommendation

The Highway Authority raise no objection to the proposed development subject to the following conditions and obligations.

Conditions

- Provision of a full CTMP prior to commencement

- To implement amendments to the vertical profile of the B2149 to the satisfaction of the Highway Authority and in accordance with drawing HTR-ATK-AR-RE-DR-D-0010 to achieve the implementation of the site access prior to commencement. In the interest of Highway Safety.
- Provision of details of the sustainable travel connections internal to the site and how these connect to the proposed offsite provision. For the position and alignment of these to be agreed by the Highway Authority.
- Phasing plan to be submitted prior to commencement.
- Barriers to prevent through traffic within the site to be provided prior to connection of the northern access and southern access and the site being open to the public.
- Details to be provided of the internal crossing point on the southern access road to tie into Bridleway 121 prior to the site being open to the public.

Obligations

- Provision of a full work place travel plan in accordance with the framework travel plan prior to commencement
- Payment of £1500 Travel Plan Approval Fee prior to commencement
- Payment of £15,000 Travel Plan Monitoring Fee prior to commencement
- Provision of a travel plan bond prior to commencement calculated at 110% the cost of the measures identified within the approved full travel plan.
- To enter into a s278 agreement for the southern access and for the access to be constructed to the satisfaction of the Highway Authority prior to commencement of any phase which requires use of this access as permitted through the approved CTMP
- To enter into a S278 agreement for the northern access and for the access to be constructed to the satisfaction of the Highway Authority prior to commencement on site.
- To pay the contribution for the Whichers Gate sustainable user improvements
- To pay the contribution or enter into a S278 agreement for the B2149 sustainable access improvements
- To pay the contribution for sustainable access improvements for between Middle Park Way and the southern bounds of the proposed development.
- Prior to operation of the site for a detailed vehicle signage strategy to be submitted and approved by the relevant Highway Authority and this to be implemented prior to occupation.
- Details of the Wayfinding strategy and infrastructure to be provided to the Highway Authority for approval and implemented prior to the site being operational
- To pay the southern access TRO contribution of £6,000 prior to completion of the southern access

- To pay the offsite TRO contribution of £24,000 prior to the site becoming operational to the public.

1.8 Hampshire Highways – Public Rights of Way

Original response

The Countryside Service are responding as Highway Authority in respect of Public Rights of Way and managers of Staunton Country Park and Countryside Site, Staunton Farm.

The Countryside Service have been actively involved in discussions with Portsmouth Water regarding the development of the Reservoir and Visitor Centre proposals and held detailed discussions on Public Rights of Way Diversion, Environmental Mitigation and the development of the Country Park and Visitor Centre. The Countryside Service is minded to support this application subject to additional information being provided Mitigation and Improvements to Public Bridleways, Footpaths and Green Infrastructure Connections

On-site paths and public Bridleways

Hampshire County Council's Countryside Service support the creation of additional footpaths and cycleways within the Country Park and the provision of surfaced alternative Public Bridleway around the south of the reservoir and north of the County Council's land.

The County Council notes that the Environmental Statement Traffic and Transport Chapter 13 does not include Bridleway 121 on Swanmore Road or consider the impact of the vehicular access on cyclists and horse riders.
The position of Bridleway 121 is not shown on the submitted access and tree protection plans, and the route actually used on the ground differs from the Definitive line (that is, the legally recorded route) of the path. It should also be noted that the use of Bridleway 121 by horse riders is currently obstructed.

It is therefore advised that the applicant needs to consider this issue and amend Vehicle Access Route South plan drawings in this location to show the existing Bridleway 121 and how it integrates with the southern vehicular access cycle and equestrian access from Swanmore road. The Countryside Service require the applicant to revise the plan drawings to show the integration of Bridleway 121 and the proposed vehicular, pedestrian and cycle and equestrian access from Swanmore road to the site.

The Countryside Service therefore recommend that the Vehicle Access Route South plans HTR-ATK-AR-RE-DR-D-0005 and 0006 are revised to include where the new access integrates with Bridleway 121 and access for cyclists and pedestrians from Swanmore Road.

S106 Legal Agreement requirements:

In order to provide access to the Country Park and visitor facilities and accommodate the increase in pedestrian, cyclist and equestrian use, the costs of drainage and surfacing improvements to Bridleway 121 and a contribution for the increased cost of maintenance must be secured.

Section 257 – Diversion, extinguishment, and creation of alternative Rights of Way
The reservoir creation proposal would require the permanent diversion to the south of Rowlands Castle Bridleway 29 and Havant Bridleway 120. During the construction phase the proposed new route would be temporarily stopped up and an alternative temporary route provided through Havant Thicket. An application must therefore be made to Havant Borough Council and East Hampshire District Council as the Planning Authorities for the diversion, or extinguishment and creation, of the alternative Rights of Way under section 257 (S257) of the Town & Country Planning Act.
The granting of a planning permission does not authorise developers to obstruct a public right of way. It cannot be assumed that because planning permission has been granted that an order under S257 for diversion or extinguishment will invariably be made or confirmed. The Countryside Service are unable to provide a temporary closure on a route that is to be diverted until the S257 Order has been confirmed.

The Countryside Service therefore advise that the submission of an application or applications to the Local Planning Authorities for the alternative Bridleway is considered alongside the current planning applications and submitted at the earliest opportunity.

As Highway Authority legally responsible for the designated Rights of Way network and its maintenance, the Countryside Service advise that the detail of the construction and surfacing and proposals for long term surface repairs of the Bridleway diversion route should be agreed prior to determination of the application.

S106 Legal Agreement requirements:
Following submission of applications for S257 diversion on to the alternative Bridleway, construction details, obligations and the contribution to the Countryside Service towards the cost of maintaining Bridleway 29 and Bridleway 120 will need to be secured via the S106 legal agreement. It is important to note that the County Council is not usually able to transfer maintenance duties to the developer.

Off-site paths and public Bridleways and Green Infrastructure Connections
The proposed vehicular access to the visitor centre from the south and west is from Swanmore Road across Bridleway 121 via a current pedestrian access to the Country Park. The Reservoir Outline Masterplan includes a pedestrian access to the south of this access but does not currently take account of the Bridleway which crosses from Swanmore Road into the Country Park and the need to accommodate equestrian as well as cycle and pedestrian access which should be provided.

On-site development proposals in the Outline Master Plan include a network of paths for walking, cycling and horse-riding. The enhancement of paths which link to the site and improve connectivity to the area is required by the emerging Havant Local Plan Policy KS8 (e), (j) and (k), but not included in the development proposals.

It is important that the applicant demonstrates an understanding of how the existing Bridleway network integrates with the development proposals as there are constraints but also opportunities provided by these routes maintained by Hampshire Countryside Service already available to horse riders, cyclists and pedestrians connecting Staunton Country Park and Havant Thicket to Waterlooville ,Warren Park, Leigh Park and Rowlands

Castle which should be enhanced to improve access to the new visitor facilities.

S106 Legal Agreement requirements:
In order to provide access to the temporary northern bridleway (which would have a lifespan of up to 8 years), encourage sustainable travel to the visitor centre and to enhance the connection of the permanent Bridleway diversion for pedestrian, cyclists and horse riders and existing communities from Dunsbury Farm via Park Lane Bridleway 123 and from Leigh Park at Bittern Close a contribution for the maintenance of Bridleway 120 and 123 will be required.

Construction Environmental Management Plan
Where paths and tracks are crossed by construction traffic (e.g. Bridleway 121), an appropriate traffic management system should be secured and implemented through a planning condition to ensure the safety and convenience of users of the rights of way and access to Bere Wood, Havant Thicket and Hampshire County Council's Staunton Country Park to the south.

Traffic and Transport Assessment
The Countryside Service advise that the Traffic and Transport Assessment should be revised to include all the Rights of Way within the vicinity of the development and the opportunities provided to enhance the existing equestrian, cycle and pedestrian network to mitigate impact of the development and improve access to this green infrastructure resource.
It is also recommended that the Traffic and Transport Assessment should provide further assessment of impacts to horse riders on the east of the development including assessment of road safety for the revised eastern access and connections around Wichersgate and links to the Shipwrights Way Rowlands Castle Bridleway 24.

S106 Legal Agreement requirements:
Highway improvements should be secured to promote safe sustainable transport options for non-motorised access to the Country Park and new visitor facilities.
Countryside Service Summary
Hampshire County Council's Countryside Service are minded to support this planning application subject to the following additional information and revised plans being submitted for clarification, alongside the recommended mitigation and contributions to be secured by planning condition and / or S106 legal agreement:
- Implementation / funding of landscaping and habitat creation on Hampshire County Council land.
- Costed Landscape and Ecological Mitigation Management and Monitoring Plans – for both construction and long-term management phases.
- A Construction Environmental Management Plan.
- Amendment of the Traffic and Transport Assessment to include omitted Bridleways and connections to the site.
- Review and revision of equestrian and vehicle access at Swanmore Lane
- Surfacing of on-site Bridleway 121.
- Contribution for surfacing off-site of Bridleway 120, Bridleway 123 and Footpath from Leigh Park in Staunton Country Park.
- Contribution towards Footpath 505 in south, Staunton Country Park paths and Bridleway 24 Shipwrights Way.

• S257 application(s) submission. Confirmation and Certification; and Commuted sum contribution for maintenance.

1.9 Historic England

No Objection – subject to condition
Summary
The proposed reservoir would cover part of a later 19th century Avenue that is part of Leigh Park (Staunton Country Park), a grade II* Registered Park. This would cause a high, but less than substantial, level of harm to the significance of the parkland. We accept that there is a justification for this harm, as it would not be possible to build a reservoir on this site without truncating the Avenue and suitable alternative sites for the reservoir are limited. We also acknowledge that the level of wider public benefit is likely to be assessed as high. We therefore do not object to this application and are content for it to be determined in its current form.

Historic England Advice
The proposed reservoir would lie within a shallow valley located between the residential settlements of Leigh Park and Rowlands Castle. This would entail the truncation of a later 19th century Avenue that forms part of Leigh Park, which is a designated grade II* landscape on the Register of Parks and Gardens. A substantial earth dam would be created to contain the water.

The significance of Leigh Park and the Sir George Staunton conservation area
Leigh Park is primarily of significance as a good example of an informal 19th century landscaped garden. Historically the gardens were particularly unusual in the way that they reflected the Chinese and botanical interests of their principal creator, Sir George Staunton. The gardens incorporated plants newly introduced from China, themed garden areas, follies and garden buildings. Staunton also created a large ornamental lake, Leigh Water. Staunton's pleasure gardens were focused around Leigh Water, and are surrounded by parkland that predates this and was later altered by subsequent 19th century owners. This parkland provides an attractive context for the gardens, greatly enhancing their attractiveness and grandeur.
The Avenue was created by William Stone, who bought the park in 1861 following Staunton's death. He moved the residential focus of the estate north to the highest part of the site, overlooking Leigh Water, where he built a Gothic mansion. All that remains of this is an arcaded terrace (listed grade II) which utilised the topography of the park to have a key view down to Leigh Water and over the surrounding parkland and land beyond.

Stone carved the Avenue out of existing woodland as a green ride with a new lake half way along its distance. Called Upper Lake, it had a waterfall as well as Boat and Bathing Houses. The Avenue ran from the northwest corner of the mansion to the county boundary to the northwest and was designed to be a grand feature. Views along the Avenue were channelled along its length, with no views to the surrounding parkland and limited views to the mansion, creating a private and secluded ride and lake. This contrasted the open parkland views from the mansion, overlooking Leigh Water.

The Avenue north of Upper Lake is now lost. Upper Lake itself is largely over grown and has lost its Boat and Bathing House, with its waterfall largely inappreciable. The significance of the remaining half of the Avenue is therefore compromised by its truncation. However, it still makes an important contribution to the significance of the park as the most ambitious element of the later 19th century works to the landscape to survive.

As well as being a Registered Park and Garden the site is also a conservation area. The boundary of this is almost identical to the registered park with the exception of the northwest corner, where more of the country park is included. From historic maps it is understood this was once woodland with walks crossing it. Most of this tree planting has since been removed, although walking routes remain. This land was probably included in the conservation area boundary as it forms the backdrop to Leigh Water in key views from the terrace. This pocket of land therefore positively contributes to the understanding and appreciation of the landscape that forms the significance of the conservation area.

The impact of the proposals on the significance of this highly designated site

The Avenue

We identify harm in proposals to curtail the Avenue. As discussed above, only half of Stone's Avenue remains discernible. The proposals would see roughly half of what remains removed, including the Upper Lake, leaving only a quarter of the historic avenue. The view down the Avenue from the southeast would be truncated by the construction of the reservoirs tall embankment.

A staircase is proposed to climb the embankment of the reservoir, continuing the line of the lost section of the Avenue. It is intended that at the top of this staircase a viewing platform will be created to afford some understanding of the Avenue feature, providing medium length views along the ride, as well as the surrounding estate and reservoir.

Harm is therefore caused by the total loss of Upper Lake and part of the remaining Avenue, as well as through the change to the view when on the Avenue near the reservoir, diminishing the ability to appreciate and understand the extensive and enclosed nature of the historic ride. We consider this harm to be less than substantial, as a remaining section of Avenue will be retained and appreciable, continuing to contribute to the significance of the registered park.

We note the Avenue staircase is being introduced to mitigate this harm, with the intention being to integrate the historic landscape with the reservoir, supported by increased interpretation.

The Terrace

While the proposals largely retain key views from the terrace this vista will be slightly altered by seeing a small portion of the reservoir. This would compromise to an extent the experience of looking out over unbroken countryside that the terrace was designed to take advantage of. On this basis, in our view, proposals will cause a low level of harm to the significance of the grade II listed terrace, the registered park and conservation area.

Heritage benefits

We note the commitment in HE4 of the Outline Environment Management Plan for interpretation of the site to 'compensate' for the physical loss of the Avenue. While interpretation is welcome we do not think this can compensate for the removal of heritage assets or reduce the level of harm entailed by the proposals.

Legislative and planning policy considerations

Local Policy

The proposed reservoir site straddles Havant Borough and East Hampshire District Council Areas.

We note site location 2 of policy CS18 of the adopted Havant Borough Local Plan

2011 and policy S31 of the draft East Hampshire District Local Plan 2017-2036, which states that planning permission will be granted for a water storage reservoir at Havant Thicket providing it meets a range of tests. This includes stipulating that the natural and rural character of the area should be conserved and that compensation should be provided for the loss of and effects on the registered park and conservation area. Policy also advises that consideration should be given to integrating the reservoir and the new landscape with the historic landscape of the registered park and conservation area.

National Policy
The proposals need to be considered against the policies of the National Planning Policy Framework which apply to designated heritage assets, including Conservation Areas and Registered Parks and Gardens. In particular, your Council should be clear that proposals meet the tests set out in paragraphs 194 and 196 of the Framework. Paragraph 194 of the NPPF advises any harm to, or loss of, the significance of a designated heritage asset (from its alteration or destruction, or from development within its setting), should require clear and convincing justification. Paragraph 196 advises where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal including, where appropriate, securing its optimum viable use.

<u>Historic England's position regarding this application</u>
In our view proposals meet the tests set out in Local plan policy. The impact of the reservoir on the registered park and conservation area has been limited to the loss of part of the Avenue and a small change to long views over Leigh Water from the listed terrace, impact which Local plan policy implicitly acknowledges is likely if the reservoir is to be constructed.

We also accept that there is a strong justification for the harm entailed that could meet the requirements of paragraph 194 of the NPPF. We accept that there is an unmet need to provide resilient water supplies for the areas covered by Portsmouth Water and Southern Water over the next 25 years, enabling Southern Water to meet its legal obligations to reduce water abstraction from the River Itchen. We acknowledge that there are few other locations that this need can be met other than at Havant Thicket.

It is for your Council to weigh the benefits of providing the reservoir against the harm to the significance of the registered park as is required by paragraph 196 of the NPPF. We recognise that providing a reservoir to secure reliable drinking water for years to come is a public benefit and potentially a very significant one that may outweigh the harm to the park.

Should your Council grant planning permission we suggest that this is conditional on the following issues being addressed:

- The full extent of the Avenue is fully recorded before it is further truncated. This should include a photographic record and a detailed plan showing all features of historical interest.
- Interpretation is provided to explain the purpose and original extent of the Avenue
- A landscaping scheme is devised to integrate the reservoir with the Avenue. We suggest that the proposed Avenue staircase is designed to be as green as possible, allowing it to blend into the landscape
- Works should be undertaken in such a way that they do not impinge on the successful operation of Staunton Farm which is focussed on the historic nucleus of the former Leigh Park estate.

The Sir George Staunton Conservation Area Management Plan 2008 sets out a series of opportunities for enhancement. We suggest your Council discuss these with the applicant and explore if they can be incorporated into proposals and secured by condition or obligation. The improved amenity and interpretation of the conservation area and therefore registered park, would contribute to the success of the visitor and recreation attraction which is a proposed outcome of proposals.

Recommendations
Historic England has no objection to the application on heritage grounds.
While the proposals involve a level of harm to a Registered Park and Garden and conservation area we accept that this is justified as is required by paragraph 194 of the NPPF. It is for your Council to weigh the public benefit of proposals against the harm we have identified as required by paragraph 196 of the Framework. Your authority should take these representations into account in determining the application.

1.10 Landscape

- We have concerns with the amount of the construction occurring within the root protection area (RPA) of existing trees to facilitate the proposals. For example sheet 4 of 40 Tree protection plan drawing no. 1104 illustrates a significant amount of highway construction with the RPA . Furthermore it appears that a road sits on a bund which would mean the build-up of earth at within the RPA that could lead to compaction and consequently suffocation of shallower roots. A large number of trees have been removed to facilitate the reservoir and we require greater assurances to ensure that no further loss of trees occur to the detriment of the landscape character of the area. As such we require a more robust mitigation strategy which clearly demonstrates how the development conforms to BS 5837:2012 tree in relation to design, demolition and construction.
- The proposed shared footpath which runs along the eastern edge of the reservoir up towards the new car park ends abruptly with no further connection into the development. We require further details on how all cycle routes will connect to the wider network and how that transition occurs.
- It is noted that the play area sits within close proximity to the bin store the car park with the only hard surfaced connection to the car park to the west, which does not afford for the most safest or pleasant locations. Given the amount of open space which is available a more suitable location should be explored. I would recommend swapping the proposed woodland with the play area are moving the picnic area where the proposed wildflower meadow is. This takes the play area away from the car park and bins and affords a more pleasant location to picnic.
- There should be DDA compliant footpath with sufficient connectivity to allow wheelchair users to navigate around the site. Widths should be a minimum width of 2m to facilitate two wheelchair users to pass each other comfortably.
- The location of the cycle storage location does not afford the most natural surveillance which could lead to the increase of bike theft and the reduction in cycle trips. All effort should be made to encourage sustainable transportation and as such a more appropriate location should be explored.
- There does not seem to be a clear permeant cycle route around the reservoir, the masterplan suggests a temporary bridleway (which is to be reinstated to permissive path), we require a permeant hard surfaced designated cycle route which allows users to cycle around the reservoir , which connects to the wider cycle network.
- There is a lack of seating with the proposed viewing area, it is reasonable to presume that viewing points should be deemed a destination location and as such should be provide with adequate seating provisions.

1.11 Langstone Harbour Board

No Objection, with the following comments:

1. The scheme includes the creation of a retained wetland habitat at its northern shore which we strongly support. The proximity of the reservoir to Langstone Harbour means that this wetland is very likely to be utilised by our wildfowl, waders, and seabirds. If birds are disturbed by recreational activities in the harbour this wetland will provide an alternative site for them to roost, rest and feed. Additionally, islands in the wetland area may prove attractive breeding sites for some of our rarest seabirds. Water sports are to be forbidden at the reservoir which means the wetland could provide temporary refuge for birds disturbed by kayaks / jet skis / paddleboards in the harbour.
2. The reservoir will result in reduced Nitrates entering Langstone Harbour, with Portsmouth Water modelling indicating that this reduction could be as much as 7.1kg per day while the reservoir is being filled, with considerable reductions in Nitrates entering the harbour even once the reservoir is full as run off water high in Nitrate will be stored in the reservoir where it will naturally degrade. Much has been heard about Nitrates recently and any reduction of its levels in Langstone Harbour is positive for many reasons.
3. The reservoir site will include a visitor centre, cafe, walking trails, access to wildlife and outdoor recreation which is likely, to some degree at least, to reduce recreational pressure upon Langstone Harbour's wildlife. Many dog walkers and other outdoor recreationists (particularly those who live closer to the reservoir than the harbour) are likely to choose it as an alternative destination.
4. The pipeline connecting the reservoir to the pumping station will have an emergency drawdown discharge structure which will release into Hermitage Stream. The drawdown structure along with the abstraction of water during the winter months when the reservoir is initially filled have, according to the projects EIS, the potential for ecological deterioration of Hermitage stream. The Hermitage stream is a very heavily modified (canalised for much of its length) water body, with numerous impassable structures for migratory fish such as salmonids and eels. Naturalising suitable sections of the stream, as well as creating fish passes would help to offset any negative impacts and should be included in the proposal.
5. The Langstone Harbour Board recognises that there is a major negative ecological impact associated with the reservoir, in that 12.45 hectares of ancient woodland (a highly protected and irreplaceable habitat) will be lost. The applicant should do everything possible to minimise any loss of ancient woodland.

1.12 Natural England

The proposed development will lead to a loss of 12.45 hectares of ancient woodland including 3 blocks of designated ancient semi-natural woodland (The Avenue, Middle Clearing and Round Wood) and part of a plantation on ancient woodland site (Corsican Pine Plantation). It is noted that 17 veteran trees will be lost from The Avenue. This is a relic of an ancient pasture woodland complex and has good surviving elements of that complex. The management history of Middle Clearing and Round Wood is one of significant intervention, of clearances and replanting, plus grazing and fragmentation in an impermeable arable landscape. The survey evidence is in accordance with disturbed woodlands of ancient origin.

Ancient woodland takes hundreds of years to establish and is defined, along with ancient and veteran trees, as an irreplaceable habitat. It is important for its wildlife (which include rare and threatened species), soils, recreational value and cultural, historical and landscape value. It is any area that has been wooded continuously since at least 1600 AD. ‘Wooded continuously’ does not mean there’s been a continuous tree cover across the whole site. Not

all trees in the woodland have to be old. Open space, both temporary and permanent, is an important component of ancient woodlands. A woodland in poor condition can be improved with good management. Where a proposal involves the loss of ancient woodland, you should not take account of the existing condition of the ancient woodland when you assess the merits of the development proposal.

In line with NPPF paragraph 175c your authority you should refuse planning permission if development will result in the loss or deterioration of ancient woodland, ancient trees and veteran trees unless:

- • there are wholly exceptional reasons, and

and

- • there is a suitable compensation strategy in place.

Your consideration of the scheme should ensure that both criteria can be satisfied. Consequently, you should not consider the proposed compensation measures as part of your assessment of the merits of the wholly exception reasons that justify the proposed development.

Alternatives and wholly exceptional reasons for reservoir project

Natural England expects the local planning authority to be fully satisfied that there are wholly exceptional reasons for the need for the reservoir project and that alternative projects to deliver water resource solutions have been fully explored.

Water shortages are forecast to be most acute in the South and South East of England, and there is an urgent need for Southern Water to plug the gap between supply and demand, and to end the use of drought permits and orders by the end of 2027, except for the most extreme drought events. Southern Water currently has drought orders and permits in place on the River Itchen Special Area of Conservation (SAC) and River Test Site of Special Scientific Interest (SSSI) until 2027. The Drought orders and permits are temporary solutions to prevent a deficit in dry weather and drought but they also cannot avoid an adverse effect on integrity of the River Itchen SAC and significant harm to the River Test SSSI. Natural England fully supports the need to act to prevent harm to these nationally and internationally important chalk rivers.

Southern Water predicts a future deficit which was listed originally as 146 ML/d but is changing as modelling evolves. With this project, Portsmouth Water will provide an additional 21ML/d of water to Southern Water from the scheme proposed in the published Water Resources Management Plan. Additional water made available by the scheme will form at least 14% of the resources required to meet the forecast deficit.

Further strategic work is needed by Southern Water to bring forward a long term water resource solution and address the remaining significant deficit (up to 86%) and to alleviate the impacts from abstraction on protected chalk streams.

In addition to the published transfer we are aware that the Havant Thicket reservoir forms part of a number of other potential solutions for a long term water resources solution for the western area of Hampshire and the Isle of Wight. For example, it is one of four options that has been put forward by Southern Water to receive additional funding from Ofwat to further investigate feasibility for raw water transfer of up to 61 ML/d which now forms the majority of the modelled deficit. Ofwat has requested confirmation that this project will be progressed as a collaboration between Portsmouth Water and Southern Water. Until this has been confirmed, there is uncertainty whether additional funding will be released to explore this option further, which is the first stage of the project’s progression.

Whilst significant work is needed to determine the outcome of the RAPID (Regulators' Alliance for Progressing Infrastructure Development) programme, understanding the nature of the role that Havant Thicket reservoir could play in delivering a larger proportion of the long term solution and whether there is a commitment from relevant parties to bring that forward, is, in our view, an important aspect of the decision making in this case.

It is Natural England's view that the local planning authority fully explores the need and role of the current project within the long term plan for strategic water resources for the region. The project's potential role as part of the long term solution and its comparative impacts compared to other alternative schemes should also be considered where the local planning authority is satisfied that future collaboration and commitment is deliverable by key partners.

Given the relatively large scale of irreplaceable habitat that will be lost to the scheme, it is particularly important to understand this context in order to confirm if wholly exceptional circumstances have been met in this case.

Alternative locations for reservoir and design options
It is noted that the alternative site assessment has identified Havant Thicket as the preferred location for the reservoir and reservoir design has been determined by a separate alternatives assessment. While Natural England has no reason to doubt these assessments we advise that the local planning authority satisfies itself that the alternative site location assessment and alternative reservoir design option have been fully considered and assessed by the applicant.

In addition to the reservoir itself, the application is also for a visitor centre, car park and access roads. Damage to ancient woodland should always be avoided in the first instance. Natural England seeks further clarification on the alternative routes and design considerations available for the access routes to the visitor centre so that it can be demonstrated that the loss of irreplaceable habitats has been kept to an absolute minimum.

The northern access road is routed along an existing woodland management access track through ancient woodland. It is noted that the footprint of the existing track has been excluded from the calculated figures of ancient woodland loss given that part of the track is already present in this location. However, utilising this route as the main access track to the visitor centre and construction route will result in further ancient woodland loss and associated impacts. This is in addition to the loss associated with the footprint of the reservoir. Natural England is aware alternative access options have been considered that would undoubtably reduce harm to the ancient woodland.

Natural England therefore strongly recommends that these alternatives are explored further by Portsmouth Water and local planning authorities to ensure that loss of irreplaceable habitat is minimised. In accepting the further harm associated with the proposed access route your authority should be satisfied that all alternative options that would reduce harm to the ancient woodland have been fully explored with key land owners.

Mitigation and compensation strategy
An outline mitigation and compensation strategy has been developed by the applicant to address the loss of irreplaceable habitat and to address the impacts arising from the project on habitats and species. In addition to the loss of ancient woodland, there will be direct and indirect impacts to European and nationally protected species as well as wider biodiversity impacts from the loss of 130 ha of semi-improved grassland, loss of 3.7 km of ephemeral streams with notable species, impacts to SINCs and priority habitats and species.

Natural England has welcomed the extensive pre-application engagement with Portsmouth Water during the development of the Environmental Statement for the proposals. This has

allowed the scope of the ecological surveys completed to be agreed, along with the principles and scope of the necessary biodiversity mitigation and compensation strategy. In our view the submitted strategy will help to create, restore, enhance and monitor/study priority habitats at a landscape scale, which if fully realised will contribute significantly to the local Nature Recovery Network. Providing the LPA are satisfied that there are no alternative access road design options that would result in less damage to and loss of ancient woodland, Natural England is also satisfied that provided the mitigation and compensation strategy is secured and fully implemented the scheme will have delivered a suitable compensation strategy for the loss of irreplaceable habitats in the context of NPPF paragraph 175c. Further, we are satisfied that the survey effort and mitigation measures proposed for European and Nationally protected species are appropriate. On this basis, in relation to European Protected Species your authority may be satisfied that the proposals provide sufficient measures to ensure that the test in Regulation 55 (9)(b) of The Conservation of Habitats & Species Regulations 2017 is capable of being met.

Natural England, however, required further areas of confirmation regarding elements of the mitigation and compensation strategy to be clarified prior to determination.

Nitrogen neutrality
It is noted that Portsmouth Water has undertaken a separate report to examine whether the reservoir will deliver a nitrogen reduction to the Chichester and Langstone Harbours Special Protection Area and Ramsar site and the Solent Maritime Special Area of Conservation. Natural England agrees with the principle of this nitrogen reduction proposal. It is understood that Portsmouth Water has commissioned consultants to peer review the assessment. Natural England's specialists will also review the reports in due course and provide further advice on nitrogen credit capacity in due course.

Natural England – following the receipt of further information – dated 2nd March 2021
Additional information has been submitted by Portsmouth Water to address our earlier consultation response dated 19 December 2020. Please note many of our earlier comments still stand. Additional information has been submitted by Portsmouth Water to address these issues:

• alternative options considered for the design of the access roads

• clarification of measures identified in the outline compensation and mitigation strategy and in relation to the outline pipeline application.

• a mitigation approach to address in-combination impacts on the favourable conservation status of Bechstein's bat that hibernate in Singleton and Cocking Tunnels Special Area of Conservation.

Alternative options for the design of the access roads
Northern access – further clarification sought

We note that the design options for the northern access road have been explored in detail by Portsmouth Water and efforts made to minimise the additional impact on ancient woodland as far as possible and this is welcomed.

In accepting the further harm associated with the proposed access route your authority should be satisfied that all alternative options that would reduce harm to the ancient woodland have been fully explored with key landowners. Natural England requested further information to clarify if all options have been fully exhausted. As you are aware, the northern access route is routed through ancient woodland and will have both direct and indirect effects, in addition to the arising from the footprint of the reservoir.

We note from the submission that the option to access the site from Swanmore Road to the south via Dunsbury Business Park scored the highest in an options appraisal, but this route has not been supported by Portsmouth City Council, who own and manage the business park, due to concerns about likely significant impact on its users.
We have recommended that this alternative access route is explored further by Portsmouth Water with input from the local planning authorities; Havant Borough Council, East Hampshire District Council and Portsmouth City Council. The reservoir is of regional importance from a water resource perspective and will also provide a cross-boundary benefit in terms of recreational resource. We encourage a further conversation between all key stakeholders to confirm whether all avenues to minimise the impact of the proposal on irreplaceable habitat have been explored and to discuss the impact on users of the business park further and understand if there are mitigation measures that can be taken at the business park to allow this access route to be supported.

It is also noted that there is an alternative option - 2A - through land owned by Borrow, which is outside of ancient woodland.

Southern access
Natural England and Forestry Commission advice for ancient woodlands is that there should be a buffer zone of at least 15 metres to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, you're likely to need a larger buffer zone. For example, the effect of air pollution from development that results in a significant increase in traffic.

It is Natural England's preference that a buffer of a minimum of 15 metres is fully met for the southern access road. It is noted that this is not practicable for some sections of the southern access due to the tight constraints. We advise that the local planning authority is satisfied with the design details for the access route and that all alternative options and design measures have been considered in this case. We advise that this is explored by the local planning authorities as part of the wider discussion on access arrangements to ensure you are satisfied with the approach taken.

Mitigation and compensation strategy
It is welcomed that Portsmouth Water is producing action plans for the detailed elements of the mitigation and compensation strategy. It is noted that this is work in progress and we look forward to reviewing these action plans in due course.
If it would be helpful to the local planning authority, Natural England would be happy to attend a meeting to discuss how the elements outlined in the action plans are secured through the legal agreement.

Natural England – following the receipt of further information dated 22nd April 2021
Alternative options for the design of the access roads
Our earlier response recommended that the alternative access route through Dunsbury Business Park is explored further by Portsmouth Water with input from the local planning authorities; Havant Borough Council, East Hampshire District Council and Portsmouth City Council. The reservoir is of regional importance from a water resource perspective and will also provide a cross-boundary benefit in terms of recreational resource. Further information has been submitted on the access strategy, rat running and construction management.

As you are aware, the application will lead to a significant loss of irreplaceable habitat. In addition to the loss from the reservoir footprint, the northern access route is routed through ancient woodland and will have further direct and indirect effects on this irreplaceable habitat.

In accepting the further harm associated with the proposed northern access route your authority should be satisfied that all alternative options that would reduce harm to the ancient woodland have been fully explored with key landowners and that there are 'wholly exceptional reasons' for this additional loss. We strongly recommend that the local planning authority satisfies itself that all less damaging alternative options have been fully exhausted.

We are aware that there are outstanding highways issues to be resolved regarding construction traffic along the northern access route. As these discussions evolve, we advise that the local planning authority is mindful of the additional direct and indirect impacts to ancient woodland arising from this access route. It is our advice that less damaging alternatives should be progressed in all cases unless there are wholly exceptional circumstances for an alternative approach.

Other biodiversity issues
One further outstanding issue relates to the impact of the reservoir on skylark territories. We advise that a Skylark Conservation Plan is secured that ensures mitigation to fully address the impact to existing skylark territories during construction and operation. This may include new permanent options on the reservoir banks and other areas on site, where appropriate, as well as funding for an appropriate number of skylark plots per territory lost on neighbouring farms in the locality. This approach will ensure the impacts during construction and operation have been fully addressed.

Natural England – following the receipt of further information dated 22nd April 2021
Alternative options for the design of the access roads
Our earlier response recommended that the alternative access route through Dunsbury Business Park is explored further by Portsmouth Water with input from the local planning authorities; Havant Borough Council, East Hampshire District Council and Portsmouth City Council. The reservoir is of regional importance from a water resource perspective and will also provide a cross-boundary benefit in terms of recreational resource. Further information has been submitted on the access strategy, rat running and construction management.

As you are aware, the application will lead to a significant loss of irreplaceable habitat. In addition to the loss from the reservoir footprint, the northern access route is routed through ancient woodland and will have further direct and indirect effects on this irreplaceable habitat.

In accepting the further harm associated with the proposed northern access route your authority should be satisfied that all alternative options that would reduce harm to the ancient woodland have been fully explored with key landowners and that there are 'wholly exceptional reasons' for this additional loss. We strongly recommend that the local planning authority satisfies itself that all less damaging alternative options have been fully exhausted.

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as well as funding for an appropriate number of skylark plots per territory lost on neighbouring farms in the locality. This approach will ensure the impacts during construction and operation have been fully addressed.

1.13 Planning Policy – East Hampshire District Council

Support:
Overview
The proposed land is identified in Policy CP26 of the Joint Core Strategy as land to be safeguarded from development for the creation of a new winter storage reservoir. East Hampshire District Council recognises the importance of meeting the future demand for water, whilst I note that the need for the reservoir has been outlined in the applicant's planning statement. Reference is made to the fact that many areas of the South East are classified as 'seriously water-stressed' by the Environment Agency (paragraph 4.14, planning statement). It is understood that water from the reservoir would be transferred to Southern Water, to help meet the demand for water within its catchment area, in the context of increasing population growth, the effects of climate change and the imposition of tighter limits for the abstraction of water in the River Itchen and the

River Test catchments.
In addition to addressing water resource needs, the proposed development would create a new visitor attraction that could complement the facilities of Staunton Country Park. However, I note that the development would result in the loss of ancient woodland and result in a permanent change in landscape character within a defined gap between settlements. The following comments are offered in relation to these and other matters that are significant for planning policy in East Hampshire.

Water Resource
Policy CP26 states: "The site identified for the Havant Thicket reservoir will be safeguarded from development (see Map 3)". The supporting text at paragraph 7.50 of the JCS says "East Hampshire recognises the importance of implementing this approach by promoting efficient use of existing water resources, while recognising the development of new water resources, such as the Havant Thicket Winter Storage Reservoir. This reservoir will not only provide further water resources but will provide a real opportunity to create a natural and sustainable recreational attraction. The timescale for the provision of the Havant Thicket Winter Storage Reservoir is uncertain and will depend on future regional forecasts of demand for water."

The proposed land is also identified in Policy UI2 within the Local Plan: Second Review (2006) for a reservoir. The supporting text says: "Land south of Havant Thicket, Rowlands Castle which extends into Havant Borough Council and is owned by Portsmouth Water Company, is identified in the Local Plan as being reserved for a reservoir which is likely to come forward in the Plan period. The ecological constraints that apply on the site and the impact on existing tree cover will have to be carefully considered when the detailed proposal for the reservoir, whose precise area is unknown, comes forward. The potential for recreational use will also be encouraged."

In line with Policy CP26 and saved policy UI2, the proposal for a winter water storage facility is supported, subject to the other policy considerations detailed below. The proposal also includes the creation of a network of footpaths, cycle routes and
bridleways along the edge of the reservoir as well as places for bird watching. These recreational opportunities are also supported by Policy CP31 and saved Policy UI2.
The Council's Draft Local Plan 2017-2036 also recognizes the potential for a new reservoir at Havant Thicket, through its Policy S31. This policy proposes a site for a winter water storage facility to meet the demand for increased water supply in the south-east in the future,

including a network of paths for walking, cycling and horse riding.

Biodiversity

The proposed development includes the loss of important habitats and biodiversity, including Sites of Importance for Nature Conservation (SINCs) that comprise areas of ancient woodland. In policy terms, policies CP20 (Landscape), CP21 (Biodiversity) and CP28 (Green Infrastructure) are particularly relevant to this proposal.

Policy CP21 requires development proposals to maintain, enhance and protect the District's biodiversity and its surrounding environment. However, the proposed development includes the loss of SINCs, which is contrary to criterion a), part iii) of CP21. The proposed loss of ancient woodland and veteran trees would also count as the loss of irreplaceable habitat (paragraph 175 of the NPPF). I note that Natural England has confirmed that net gain cannot be achieved in relation to these assets, and that further information has been requested from the applicant, to determine whether a net gain to biodiversity would be achieved overall. The achievement of an overall net gain in biodiversity is important for meeting the requirements of criterion d) of CP21. It will be important to follow the advice of Natural England and Havant Borough Council's ecologist on this matter.

The NPPF (paragraph 175) states that development resulting the loss of ancient woodland and veteran trees should be refused, unless there are 'wholly exceptional reasons' and a suitable compensation strategy exists. I note that the applicant's planning statement summarises a case for determining that the public benefits would outweigh the loss of the habitat. The planning statement also references proposals for extensive planting of woodland, trees, hedgerows and wildflowers, as well as new wetland habitats. It will be important to ensure that adverse impacts on biodiversity can be appropriately mitigated and that compensatory measures have been shown to be the last resort to meet the requirements of criterion d) of CP21.

Overall, the proposal has some potential to meet criteria c), d) and e) of Policy CP21 – depending on expert advice concerning the applicant's proposals for mitigation and compensation – but will not meet part a) of CP21 in respect of maintaining, enhancing and protecting SINCs in East Hampshire. As noted above, the SINCs that would be lost due to the reservoir's development include areas of ancient woodland. The material considerations established through paragraph 175 of the NPPF and the relevant submissions on the biodiversity mitigation and compensation proposals should be therefore be taken into account, in determining whether there are overriding reasons to support the development.

I also note that the proposals are also thought to have beneficial impacts on nutrient discharges to the Chichester and Langstone Harbours SPAs. The potential for improvements to water quality could help to enhance these internationally important habitats, thus helping to reduce the degree of conflict between the proposal and part a) of Policy CP21.

Transport

The proposal includes one vehicular access point within East Hampshire including the creation a new junction off the B2149, utilising an existing narrow track through an area of Ancient Woodland. A range of new cycle and pedestrian links are also proposed, which would improve the recreational opportunities at the new reservoir. It appears that an existing bridleway crossing the site and linking with Manor Lodge Road would be lost, but that alternative provision would be made for users of this route.

Policy CP31 requires development proposals to protect and provide safe and convenient cycle and pedestrian links that integrate with existing cycle and pedestrian networks (criterion b). New infrastructure for vehicular access must be compatible with improving

highway safety (criteria c) and d)), whilst accessibility by public transport modes should be enhanced (criterion a)). Please note that East Hampshire's Vehicle Parking Standards SPD does not have specific parking standards for visitor centres, or for large recreational opportunities such as the Havant Thicket reservoir proposal.
Comments from Hampshire County Council as the Highways Authority should be considered in the context of the applicant's Transport Assessment findings and the requirements of Policy CP21, such as those highlighted above. The supporting text to Policy CP31 states "Walking and cycling need to be promoted as a means of access to jobs, facilities and services but also as a recreational opportunity with a positive impact on physical and mental health (see Policy CP18)." The proposed improvements to local walking and cycling opportunities are therefore supported in terms of supporting physical and mental well-being in East Hampshire.

Other Matters
With regards to other matters, the site falls within and identified gap between Rowlands Castle and Havant. Policy CP23 aims to protect the generally open and undeveloped nature of this gap to prevent coalescence and to retain the separate identity of settlements. It is considered that the type of development proposed; the large water body and green infrastructure have a low urbanising effect on the landscape and therefore would not compromise the integrity of the gap nor result in coalescence of the two distinct settlements.

Policy CP20 (Landscape) requires that the setting of the South Downs National Park, as well as local distinctiveness and sense of place, are conserved and enhanced by development (criteria a) and b)). This policy also extends protection to distinctive landscape features, such as trees, woodlands and water bodies (criterion d). I note that as part of the assessment of alternative sites for the reservoir, several have been dismissed because of visual impacts, including on views from the South Downs National Park (planning statement, pages 26-27). The natural topography of land at Havant Thicket, allowing the reservoir to sit within the landscape with limited visual impact, has been identified by the applicant as a reason for the current site selection (planning statement, paragraph 4.47). As noted previously, land is safeguarded in the Joint Core Strategy for the development of a winter storage reservoir. Provided that suitable mitigation and compensation measures are put in place to limit landscape impacts, by (e.g.) enhancing natural landscape features adjoining the reservoir, the principle of a new reservoir in this location can be supported in terms of CP20.

CP30 (Historic Environment) requires development to conserve, enhance, maintain and manage the district's heritage assets and their setting (criteria c). However, the proposed development lies within a Conservation Area and includes the partial loss of The Avenue, a grade II* Registered Park and Garden which is contrary to criteria c of CP30 and paragraph 194 of the NPPF. I note that the applicant's planning statement summarises a case for determining that the public benefits would outweigh the impact on the Historic Environment and includes measures to reduce the impact, stating that the significant views within the Registered Park and conservation area would be preserved and where there are impacts, sensitive design and opportunities for interpretation and enhancement will maintain the significant connection between the historic and current landscapes. I note that Historic England conclude that the impact of the reservoir on the registered park and conservation area has been limited to the loss of part of the Avenue and a small change to long views over Leigh Water from the listed terrace, which can be justified by the need for water resource. In the context of this expert advice, I am content that although the proposal does not meet criterion c) of Policy CP30, the impacts on cultural heritage would not be sufficient to outweigh the benefits of the proposal from a water resource and recreational perspective.

Conclusion
Based on the above, Planning Policy supports the principle of developing a new water

storage reservoir at Havant Thicket, for reasons of securing water resources to meet future demands. Planning Policy also supports the recreational benefits alongside the reservoir, including the proposed network of footpaths, cycle routes and bridleways. However, concerns are raised in relation to the loss of SINCs, areas of ancient woodland and veteran trees, in terms of Policy CP21 of the Joint Core Strategy and the NPPF. It will be important to demonstrate that the potential impacts on biodiversity have been appropriately considered, mitigated and (where necessary) compensated for, taking into account the NPPF and Natural England's consultation response.

1.14 Planning Policy – Havant Borough Council

Principle of Development
The site lies within the area as defined by Policy CS18 (Havant Thicket Reservoir) of the Adopted Local Plan. This strategic site allocation is carried forward into Policy KP9 of the 2020 Pre-Submission Local Plan, with associated developer requirements largely transposed, with a number of key additional/expanded developer requirements as follows:
'j. Changes to the natural and rural character are mitigated in particular by:
…..i. Limiting impacts on biodiversity including the creation of additional habitats to ensure biodiversity net gain is secured…..

….v. Minimising the loss of ancient woodland and trees and compensating for the loss of irreplaceable habitat within a costed management strategy;

vi. A comprehensive mitigation strategy is secured for impacts to protected and notable species, including appropriate mitigation measures for Bechstein's bats in line with Policy E15.'

'm. Opportunities have been explored for the prior mitigation of minerals to the satisfaction of Hampshire County Council;

n. The potential impact of the development on the setting of the South Downs National Park has been assessed any necessary avoidance and mitigation measures are included in the scheme design.'

It should also be noted that specific developer requirement are also included in relation to the Registered Park and Garden – these is set out in detail below.
In addition to the above, Policy AL6 which relates to the pipeline route is subsumed into the latter part of Policy KP9.

For the avoidance of doubt, the principle of the development of the site for the proposed reservoir is supported in policy terms subject to the relevant developer requirements being met.

Leisure and recreation facilities
Both ALP Policy CS18 and HBLP Policy KP9 affirm the need for the development to provide community benefits in terms of additional leisure opportunities which complement existing provision in the borough and the surrounding area as an attraction for local communities. In this respect, it is noted the development proposals include the construction of a visitor centre / café, welfare facilities to be used for recreational and education purposes, together with picnic areas and children play areas and bird watching hide/screens. The Council's Communities Team should be consulted with regard to the proposed visitor and leisure provision.

The historic environment and heritage assets
Given the adjacent Sir George Staunton Conservation Area, which includes the Avenue and

the Registered Park and Garden of special historic environment (grade II*), ALP Policies CS11 and DM20 are of relevance in assessing harm or loss to the significance of these heritage assets. Emerging Policy E13 in the HBLP being of relevance in the context of assessing of 'substantial harm' and 'less than substantial harm' to the Registered Park and Garden in particular. The Council's Conservation Team and Historic England will be able to offer further advice on this matter.

Ancient woodland

CS11 and DM8 of the ALP and emerging Policy E14 in the HBLP are of relevance given the presence of SINCs, and significantly, the areas of ancient semi-natural woodland and planted woodland present on site. Policy E14 indicates there is a presumption against any development involving the net loss of biodiversity or the loss of any natural features, unless there are wider public benefits that outweigh the harm of this loss.

Criterion j. v. therefore seeks to minimise the loss of ancient woodland and trees, and adequately compensate any loss within a costed management strategy. Natural England's representations to the 2019 Pre-Submission Plan indicate this is needed to address the impacts from increased recreational use associated with the reservoir proposal on the remaining ancient woodland, SINCs and associated habitats and species post-construction. This is to ensure this pressure is managed, monitored and biodiversity enhancements secured in perpetuity. Detailed consideration should also be given to the phasing and timing of any mitigation and compensation proposals.

Policy KP9 also advises that additional habitats should be created to secure net biodiversity gain (under criterion j. i.). This is required in order to address the loss of ancient woodland which is an irreplaceable habitat. DEFRA's Biodiversity Metric is one method of calculating net gain, but the Council's Ecologist and Natural England will be able to advise further in terms of whether the submitted Environmental Statement effectively addresses this matter.

Protected species

As the site is used by Bechstein bats, Policy E15 is of relevance in terms of the survey methods which should be employed. Planning permission will only be granted where:
'c. Impacts on Bechstein's bat breeding habitat (i.e. net loss of/significant disturbance to woodland or trees containing roosts) are avoided;

d. Proposals include appropriate buffers to woodlands, trees, hedgerows and other flight corridors, considering the location of roosts and foraging/commuting habitats; and
e. Review and monitoring plans are put in place.
Where the above measures cannot be met planning permission will be refused, unless the applicant can show, subject to meeting the tests of the Habitat Regulations, that there would not be an adverse effect on the population of the relevant protected species.'
The proposals will therefore require a project level Habitat Regulations Assessment (HRA) and if necessary, an Appropriate Assessment (AA).

Minerals

Two small parts of the north eastern boundary of the site lie in a Mineral Safeguarding Area as defined by the Hampshire Minerals and Waste Plan because it is likely to be underlain brick-making clay. Criterion m. of Policy KP9 therefore expects opportunities for the prior extraction of minerals to have been explored. This is reinforced by the Minerals & Waste Safeguarding in Hampshire SPD which confirms the LPA should consult Hampshire County Council as the total area is over 3 hectares. It is therefore recommended that HCC are consulted.

The pipeline route

ALP Policy AL6 and emerging HBLP Policy KP9 do not specifically refer to this element of

the development, but generally seek to safeguard the pipeline route's buffer zone so as not to prejudice its delivery.

Summary

The application proposals are supported in policy terms, subject to relevant environmental considerations (as set out above) being appropriately addressed. In addition, it will also be of importance to ensure that the scheme delivers appropriate community benefits which mitigate the loss of the recreation opportunities currently offer by the site.