

O/25/99506 NAVIGATOR QUARTER, MITCHELL WAY, EASTLEIGH, SO18 2NL

Hybrid Planning Application - Outline application for development of the land adjacent to Southampton Airport to provide employment floorspace of up to 92,000 sqm (GIA) within Use Classes E(g) (ii & iii), B2 and B8 with ancillary offices and areas for service yards, car parking, landscaping, ancillary buildings and associated activities, and access from Wide Lane (all matters reserved except for access). Full planning application for initial infrastructure works and construction of new access road including site levelling and other engineering works. This application is subject to an Environmental Impact Assessment and is accompanied by an Environmental Statement.

Ecology Comments

Summary:

We place a **holding objection** on the application for reasons including the following:

- The ecological baseline is potentially incorrect.
- There will be excessive, and potentially avoidable, permanent loss of habitat which will result in detrimental impacts on associated species (e.g. Mitchell Way, scrub corridor north of the runway, woodland edge habitat).
- There may be indirect adverse impacts on retained on-site habitats and adjacent designated sites (e.g. shading, noise, changes in water quality and quantity).
- The submitted parameters plan provides insufficient spatial information to ensure adequate ecological mitigation will be provided on site and therefore does not provide the certainty we require at this stage in the planning process.

Further information and modifications to the layout are required.

Documents reviewed:

Environmental Statement (ES) Chapter 10 Ecology

ES Annex E Ecology

BNG plans, spreadsheet, condition assessments

ES Annex J Parameters and Illustrative Layout Plan

Information for Habitats Regulations Assessment

Mitchell Way Proposed Site Clearance Sheets 1-3

Proposed Link Road Site Clearance Sheets 1-2

Tree Survey and Arboricultural Impact Assessment Rev A

Tree Survey and Constraints Plan

Baseline habitats/ BNG metric

Most of the BNG requirement will be delivered off-site through the purchase of BNG units.

A length of hedgerow/ treeline at north-west of site (top of Mitchell Way, adjacent to the car park) does not appear to have been recorded and therefore its loss resulting from the proposals will not have been accounted for in the BNG metric. This needs to be included.

A substantial amount of the habitat between the two fields at the east of the site has been recorded as hawthorn scrub. Although hawthorn is the dominant species, the habitat is more a woodland than dense scrub, with a distinct canopy which easily exceeds 5m in height, and therefore it should be recorded as this in the BNG metric. The building of the access road through this habitat will result in the loss of this habitat, including several trees of different species. Details of this tree loss have not been provided in the AIA.

It is not clear if the area of SSSI which is in the red line boundary has been included in the metric. The inclusion of this area appears to have been a later addition to the proposals (to enable a surface water connection to a discharge point) and therefore ecological survey work has not been undertaken here. Regarding the post development habitat, the ES chapter states that the condition of the affected SSSI habitat will be returned to baseline condition within two years. Given that there is likely to be some tree/ understorey loss (currently unquantified) within this woodland habitat (for the tracking of machinery to the discharge point), it seems unlikely this will be the case and the return to baseline condition will take significantly longer. This is also true for the woodland habitat outside of the SSSI, around the site boundary, where access is presumably required to install the surface water pipe. Please note however, that this method of discharge may not be the most appropriate approach (see drainage comments). All habitats affected by the works which do not return to baseline condition within two years must be recorded as losses on the metric and discussed in the ES chapter.

Any SuDS features, such as attenuation basins, will need to be shown on the post development BNG plans and inform the BNG metric calculations. The drainage proposals and BNG proposals must not conflict.

It is noted that there has been a significant amount of scrub clearance to the north of the extended runway since 2021 which is now modified grassland. The removal of this scrub habitat did not form part of the 2018 runway extension application. Has this scrub been removed as a subsequent consequence of the runway extension, possibly for aircraft safety, and was this omission an oversight in the 2018

application? This scrub habitat formed part of an important east-west wildlife corridor and reforming/ maintaining a functional east-west link should be sought as part of the proposals in this application.

Changes to layout/ permanent loss of habitat

Access Road

The proposed widening of Mitchell Way will result in significant tree/ scrub/ hedgerow loss and complete removal of existing mature treelines for long stretches parallel to Mitchell Way. The access proposals must be revisited with a view to modifying the design to retain these features. A tree survey has not been provided for this area.

The access proposals to the south of the railway sidings and north and north-west of the runway will result in a significant loss of scrub habitat which form an important east-west wildlife corridor currently greater than 20m wide within the site (most of the corridor lies within the site). The width of the proposed retained corridor within the site (to the north of the proposed access road) has not been specified but it appears to be only 2 metres wide in places. This is a significant reduction in width and could have a significant impact on wildlife behaviour (e.g. see reptiles below). Whilst the constraints in this area are appreciated, modification of the proposals should be investigated to reduce the impact and maximise the retained corridor width e.g. reducing the road to one lane with traffic signals.

Wider site

Whilst we appreciate that this is a hybrid application, we must have confidence at this stage in the planning process that appropriate mitigation can be delivered for the whole site. Spatial details, such as a greenspace parameters plan, is therefore required as this will ensure there is enough safeguarded space in the right places for SuDS features and habitat for species present (e.g. reptiles and bats). This will also inform, as accurately as possible at this stage, the on-site BNG delivery. The greenspace parameters plan and BNG plan should therefore align when overlaid.

A 20m buffer has been specified adjacent to the SSSI/ SINC but ecological species surveys (Annex E) suggest that significant buffers (preservation of sufficient edge habitat) are required to other woodland/ scrub habitats (e.g. bats). These have not yet been specified in the proposals and the indicative layout plan does not appear to have retained enough edge habitat. The parameters plan shows even less retained habitat.

The current drainage proposals may adversely affect several on-site and off-site wetland features which may become drier as the surface water would no longer mimic the existing hydrology. See drainage comments below.

If the preferred surface water discharge point remains in the SSSI, presumably a headwall will be installed at the outfall to the receiving watercourse which will result

in the permanent loss of bank habitat within the SSSI. Details have not been provided and impacts not considered.

Additionally, although directional drilling to install the surface water pipe to the discharge point has been proposed, which will reduce the impact, not all above-ground impacts will be removed as tracked plant and machinery will still need to access the woodland (around the site boundary and in the SSSI) to travel to the point of discharge. Therefore, there could be an unavoidable loss of trees/understorey within the woodland of the SSSI and around the site boundary which has not been quantified.

Impact on species

Although many of the surveys are older than two years old, most of the habitats have not changed significantly. The exception to this is the removal of scrub habitat, replaced with modified grassland, to the north of the runway as mentioned above. The ecological value of this area will therefore have already been reduced compared to that recorded in the surveys.

The evaluation of the site for protected and notable species in Tables 10.7 and 10.8 of the ES chapter does not fully reflect the findings of the surveys and effectively gives lower levels of importance to those provided in the survey reports:

Badger (Annex E, part 5)

The PEA from 2021 did find evidence of badgers adjacent to the site in the SSSI. No setts were found but given the presence of badgers in the area, the PEA recommends a pre-works badger check be undertaken within three weeks of starting construction to confirm absence of badger setts within the site boundary.

Breeding bird Assemblage (Annex E, parts 2 and 3)

Not reported in the ES chapter, the breeding bird surveys recorded:

1. North-east field: 43 bird species recorded including 22 notable species, 9 of these notable species were probable breeders.
2. Network Rail field: 31 bird species recorded including 12 notable species, 6 of these notable species were probable breeders.
3. Mitchell Way link road: 31 bird species recorded including 13 notable species, 1 of these notable species was a confirmed breeder and 6 were probable breeders.

The site, and immediate surrounds, therefore, supports both nationally and regionally protected breeding birds.

There will be some direct loss of scrub and woodland which supports these birds. Much of the woodland and scrub where the birds were recorded will be retained but

the edge habitats which are within the development area must also be preserved. This can be achieved by providing a suitably sized buffer to the woodland and scrub, using the survey results as a guide, which must be incorporated into the design. Buffer sizes (beyond that for the SSSI/ SINC) have not been provided and must be at this stage. Minimum buffer provisions must be specified within a greenspace parameters plan which will inform the BNG calculations.

Regarding the grassland habitat, the breeding bird surveys identified four red listed species using the two eastern fields. Of particular concern, skylarks were probable breeders with potentially eight territories identified on site and the development would result in the permanent loss of this suitable breeding habitat. House martins, swifts and starlings were also observed.

The breeding bird report states that the loss of suitable breeding habitat may require compensation via BNG. Compensation proposals need to be provided at this stage regarding the off-site BNG provision ensuring it has the capacity to support the displaced skylark population and any other permanently displaced species.

Bats (Annex E, parts 3 and 4)

Not reported in the ES chapter, the survey work demonstrated high levels of bat activity in general and has shown that the site is an important area for bats, particularly the north-east field. Grey long-eared and Leisler's bats are rare species and were repeatedly recorded during the survey work. These findings appear not to have been considered in the design of the scheme and therefore there is a high risk that important bat habitat would be permanently lost as a result of the development.

Retention and protection of important foraging woodland edge (in addition to the buffer to the SSSI) is essential to avoid adverse impacts on these species. Using the survey results, suitably sized buffers to woodlands/ scrub belts must be incorporated into the design. This must be shown spatially and set as a minimum, within a greenspace parameters plan and will inform the BNG calculations at this stage. A sensitive lighting strategy is critical.

Only a Preliminary Ground Level Roost Assessment (PGLRA) for Potential Roost Features (PRFs) for bats has been carried out to date (November 2022) and does not cover the full application area; notably Mitchell Way is excluded. All unavoidable tree loss will need to be assessed for PRFs and as recommended in the PGLRA, follow up surveys carried out to confirm presence or absence. The locations of all PRFs and confirmed roosts will need to be shown on a plan.

Dormice

Dormice were not recorded. Enhancements were proposed in the survey report, notably installing nest boxes in the woodland given the suitability of the woodland for dormice.

Invertebrates (Annex E, parts 4 and 5)

The information provided in the ES chapter and the survey reports conflicts. The late summer 2021 scoping survey recorded 195 species of which five have a conservation designation. The 2023 survey (two days in mid- late summer) recorded 210 species of which 16 have a conservation designation. A combined list of these two surveys would comprise a higher number. Table 10.7 in the ES states that 173 species (11 of which are of conservation concern) were recorded. It also notes the recording of the ground beetle *Amara tibialis* and hoverfly *Sericomyia silentis*. I cannot find reference in the surveys included in Annex E to either of these species nor the 173 total number of species. Please can this be clarified.

The survey report recommended a further two surveys be carried out in late spring 2024 to ensure a full survey coverage and enable an accurate condition assessment of the Specific Assemblage Types to be determined. These surveys, along with a recommended brown hairstreak egg search, were not carried out and therefore a full picture of the invertebrate population has not been obtained.

The survey report highlights the areas of interest for invertebrates as the scrub mosaic and peripheral grassland habitats located between the runway and railway sidings and which continue eastwards between the two fields (the east-west corridor mentioned above). The development proposals will result in the removal of most of this habitat, with a net loss of scrub habitat on site, and therefore the invertebrate assemblages associated with these habitats at the site are at particular risk.

A robust mitigation/ compensation strategy for invertebrates has not been provided and if this can be delivered on-site, off-site or a combination of both. Sufficient space on site, with suitable environmental conditions, may need to be provided and therefore will need to inform a greenspace parameters plan which shows retained habitats including all buffers. In the absence of a complete survey dataset, provision of habitat for a presumed presence of likely species will be required.

Reptiles (Annex E, part 5)

The reptile reports (Dec 2022) comprise presence/ likely absence surveys. At the link road site, a total of 74 reptiles (slow worm and common lizard) were found over seven visits along the grassland and scrub mosaic habitat and indicates a medium reptile population, not reported in the ES chapter. The report concludes that the location to the north of the runway provides *a functionally linked corridor for reptile movements across the wider landscape* and *provides a unique mosaic habitat not currently present within connected habitat*. This is important habitat for reptiles, particularly at this location where it provides an east-west movement corridor amongst relatively hostile surrounding habitat (closely mown airside grassland to the south and railway sidings to the north).

The access road proposals will result in significant loss of this habitat, and the corridor width will be significantly reduced, potentially only retaining a 2m width within the applicant's ownership (the removed and retained widths of habitat have

not been specified on the plans or in the documents). The impact of this loss of habitat on the reptile population and appropriate mitigation have not been adequately addressed in the ES chapter. It is not clear if the on-site retained habitat will be sufficient to continue supporting the existing reptile population and serve as a functional corridor. The survey report recommends a minimum 10m habitat buffer along the site boundary specifically for reptiles. Population estimation surveys may be required. Translocations are often unsuccessful and should be avoided.

Sufficient, connected reptile habitat must be provided on site and its locations spatially shown on a greenspace parameters plan at this stage in the application process. This will also inform the BNG metric. The greenspace parameters plan must also provide for reptiles found elsewhere on site such as the mound, where maintaining connectivity to surrounding habitat is essential and also around the eastern fields where a small reptile population comprising grass snakes, slow worms and lizards were recorded. Modifications to the access road should be investigated where space is limited to maximise a retained east-west wildlife corridor (see previous comments, permanent habitat loss, regarding this).

Great Crested Newts

Please refer to the advice given by Nature Space.

Potential Enhancement Area to the East of Application Area (Annex E, parts 5 and 6)

This survey report looks at off-site land within the SSSI which potentially could be enhanced. However, it is not clear if this land will be connected to the application. Although the woodlands were already in good condition, the Other Neutral Grassland and reedbeds were in poorer condition and could therefore potentially be enhanced (although any enhancement would have to be separated from any existing statutory duties). It was also identified as a potential reptile receptor site.

Shading

Shading impacts on retained habitats (including buffers) have not been fully addressed in the ES. Buildings of up to 22m in height are proposed in the submitted parameters plan, however it does not zone the developable area into different height limits. The parameters plan must specify maximum building heights at various locations to minimise shading impacts on all the retained habitats (including buffers), not just the designated sites, and any residual impacts must be identified.

Air Quality (Annex E, part 6 and shadow HRA)

This looks at potential AQ impacts on designated sites in proximity to the main road network. Only the operational impacts from increased NO_x, NH₃ and Ndep are considered as they are likely to provide the worst-case scenario. Dust impacts during construction must be mitigated and a detailed CEMP/ dust mitigation plan must be conditioned (see CEMP comments below).

Cumulative or development-alone levels exceed the 1% screening threshold in several places and the table provides specific distances from the roadside where the values drop below the 1% screening threshold (not the actual predicted levels). Although not explicitly stated, it is likely that the screening thresholds are exceeded within the designated sites but it is not clear over how much area of the designated site this screening exceedance occurs. The tables show the predicted levels at roadside only and not beyond so it is not possible to see how much of each designated site will experience exceedance of the critical levels/ loads.

Where the 1% screening threshold is exceeded and the critical level/load is exceeded, justification for no impact is given because the critical level/ loads already will be exceeded without the development. This alone is not a convincing argument as a larger exceedance can cause more damage. However, the predicted increase at roadside resulting from the development is imperceptibly small (coupled with a general downwards trend in NO_x) and I agree with the conclusion that there is unlikely to be any significant effects on the designated sites from the proposal. I support my AQ colleague's recommended condition to produce an AQ strategy to reduce pollutant levels arising from the development which will contribute to the excessive Ndep loads on the designated sites, and other habitats, and to contribute to the downwards NO_x trend.

Noise

Noise Impact Assessment Rev 1

Limited information has been provided in the Ecology ES chapter or shadow HRA regarding noise. The Noise Impact Assessment (Hoare Lea) assesses impacts on human receptors but proposes a noise limit of 33dB LA_r for building services plant. This noise level is not a concern for the surrounding ecological receptors although it is not clear if any site-specific noise generating activities/ processes have been considered.

The NIA also predicts a daytime noise level of 51dB LA_{eq} from the access road at receptor 2 (the closest residential location) which is approximately 70m from the proposed access track at the nearest point. Therefore, the noise level at source at the access road will be higher and the habitats adjacent to the access road will be subject to this higher level of noise. Noise at source has not been provided and therefore the impact on the habitats nearer the access road cannot be properly assessed, although noise from the access road is unlikely to impact on the designated sites which lie much further to the east (SINC, SSSI or SAC). However, these traffic movements will permeate the development site towards the designated sites and the noise levels generated closest to the designated sites is unknown. It

needs to be demonstrated that a 20m buffer to these designated sites is sufficient for any proposed operational activities.

Artificial lighting

Animals and plants are adversely affected by artificial lighting and an appropriate lighting strategy must be conditioned to mitigate these adverse impacts.

Outline CEMP

Outline Construction and Management Plan (Aug 25)

A detailed CEMP, including Dust Mitigation Measures, must be conditioned. This outline CEMP is required to provide sufficient certainty that construction impacts on ecological receptors can be managed and to inform the HRA.

Various mitigation methods are outlined for noise, vibration and dust control and provide sufficient certainty that impacts can be managed. However, it needs to be acknowledged in sections 4.1- 4.3 that the levels will be controlled to avoid a detrimental impact to ecological receptors as well as people.

Section 4.4 states that no storage will occur within 20m of the designated sites. The following paragraph states that all hazardous materials will be stored at least 10m from watercourses. I believe all watercourses are within the designated sites but if there are any that are not, given the proximity of the designated sites and close hydrological connectivity, it would be more precautionary to not have any storage within 20m of any watercourse/ wetland.

Section 4.4 states that [contaminated] surface water run-off will be prevented from entering the Itchen. However, it must also not be allowed to leave the site or enter the buffer zones on-site. Treatment of surface water must be provided prior to discharge into these areas and sufficient space on site provided to do this as a priority. Silt fencing or similar are likely to also be required in a treatment train to ensure all pollutants do not leave the site.

The outline CEMP does not address the works that are currently proposed to take place in the SSSI and buffer zones, to enable the surface water pipe connection to the discharge point. The above measures, and others outlined in the document, cannot be adhered to in these areas. Potential impacts on additional riparian species may also need to be considered.

Surface Water Drainage

Indicative Drainage Layout 30228-BGL-XX-XX-SK-C-0P004

Proposed Link Road Drainage Sheet 1 30228-BGL-XX-LNK-DR-C-P00022

Proposed Link Road Drainage Sheet 2 30228-BGL-XX-LNK-DR-C-P0003

My understanding of the scheme is that all surface water from the North Plot, South Plot and access road will discharge via one discharge point (off-site) at the north-east of the North Plot.

Discharge will not be via infiltration because of the likely high-water table, with high chance of groundwater flooding (note, ground water monitoring has not been carried out). Additionally, there is potential for contaminated land on the South Plot (note, intrusive site investigation has not been carried out).

The surface water plans are currently unclear:

- Not all the application area is shown on the plans (the southern part of Mitchell Way is missing).
- Section 5.14 of the Drainage Strategy states that all surface water will pass through separators or swales prior to discharge into the attenuation ponds. It is not clear on the plans where these will be located. Please note, SuDS features must be identified as accurately as possible at this stage to inform the BNG proposals/ calculations.
- The inlets to the attenuation ponds are not shown.
- Flow directions on the Indicative Drainage Layout plan are not shown.
- Some of the attenuation pond features overlap/ conflict with pond features shown on different layers.
- The “main attenuation pond”, referred to in section 5.14 of the Drainage Strategy through which “all drainage from the site road and other hard surfaces will pass”, is not identified on the plans. Unit 2 Attenuation Pond potentially may be the main pond but this currently appears to only take drainage from the South Plot and the access road, not the North Plot.

There are several concerns regarding the design which need to be resolved prior to determination:

- Site investigation has not been carried out (only a preliminary investigation) and there is a lack of information regarding the existing hydrological regime and how surface water features on and off site at the south-east boundary interact with it. These include the Itchen Navigation, several ponds and springs identifiable on OS plans and ditches within the SSSI, SAC and SINC.
- The existing hydrological regime has not been mimicked. In the South Plot, surface water currently flows to the south-east towards the Itchen Navigation and other ditches and ponds around site boundary, some within the SINC, SSSI/ SAC. The proposals would result in the water from the South Plot being moved against the natural contours and flow paths northwards and discharged via a watercourse to the River Itchen. This water would therefore bypass the Itchen Navigation and the other water features at the site's

boundary potentially having a negative impact on the ecosystem, including statutorily protected nature conservation sites.

- The wetland area in the north-east corner of the North Plot, comprising reedbeds and wet woodland, would be adversely affected by the drainage proposals. Currently the land of the North Plot drains towards the wetland but the drainage scheme would intercept most of the flow and bypass the wetland features which are likely to become a lot drier as a result. Additionally, the surface water pipe network is proposed to cross this wetland which will result in direct habitat loss. Additionally, there will be impacts on the onsite woodland and offsite woodland (some within the SSSI) to install the connection to the discharge point.
- One point of discharge is proposed for the whole development which is to a feeder stream of the River Itchen situated within the SSSI. To enable a piped connection from the site to the discharge point, works would need to take place within the SSSI. I believe Network Rail owns this land. Details of this have not been provided but it is highly likely to require the removal of woodland habitat and digging to install the infrastructure. Impacts on the SSSI have not been assessed and potentially could be of an unacceptable level. A single point of discharge does not mimic the existing drainage and diffuse discharge from within the site boundary may be more appropriate.
- As currently proposed, not all surface water from different parts of the site would pass through three forms of naturalised filtration in a treatment train as required by EBC policy DM6. DM6 is not referenced in the Drainage Strategy. Surface water from some parts of the site does not appear to pass through any forms of filtration. Compliance with DM6 is essential, particularly given the proximity of the River Itchen SSSI and SAC.
- Proprietary treatment systems, such as separators, are not naturalised forms of filtration and are only appropriate for use in exceptional circumstances where other types of SuDS are not practicable. The use of swales or other naturalised forms is preferred. Any proprietary treatment system proposed must demonstrate it can address each contaminant type.
- SuDS features must be designed with a maximum gradient of 1 in 4 slopes for biodiversity and amenity purposes.
- Several underground storage tanks are proposed which is not in keeping with the principles of SuDS. Water should be kept at the surface.

Other conditions

Additional conditions to be placed on any permission granted, in addition to others already mentioned, must include an Ecological Mitigation and Management Plan (EMMP)/ Biodiversity Mitigation and Enhancement Plan (BMEP), Landscape and Ecological Mitigation Plan (LEMP) and Biodiversity Net Gain conditions.

Sarah Boyd

Ecologist