



Unit H, George Curl Way, Eastleigh, SO18 2RX.

BIODIVERSITY NET GAIN ASSESSMENT

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EXECUTIVE SUMMARY

Southern Planning Practice Ltd is instructed on behalf of Hampshire and Isle of Wight Air Ambulance Ltd to undertake a Biodiversity Net Gain (BNG) Assessment of Unit H, George Curl Way, Eastleigh, SO18 2RX.

The purpose of the assessment is to quantify the baseline habitat, identify areas available for biodiversity restoration and provide a project with a measurable minimum 10% BNG utilising the statutory BNG metric (2023).

The following survey work was undertaken:

- Desk study using freely available resources.
- A habitat survey utilising UK Habitat Classification (UKHabs) methodology.

Proposed improvements to the vegetated habitat along the front boundary of the site and a new native hedgerow along the southern boundary will result in environment benefits to wildlife whilst providing **13.97% (habitat units) and 122.8% (hedgerow units) on site Biodiversity Net Gain.**

This report is an update on a earlier submission in March this year to reflect a small amendment to the block plan, amendments to the habitat plan to show the location of the industrial building on site and hedgerow numbering (1 & 2), and a slight decrease in BNG in hedgerow units from 139.47% to 122.8%.



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SECTION I – INTRODUCTION

- I.1 Southern Planning Practice Ltd is instructed on behalf of Hampshire and Isle of Wight Air Ambulance Ltd to undertake a Biodiversity Net Gain (BNG) Assessment in support of an application for the change of use of the site at Unit H, George Curl Way, Eastleigh, SO18 2RX (the site).
- I.2 The objectives of the BNG assessment are to:
- i. Quantify the baseline biodiversity of the site.
 - ii. Make recommendations to deliver ecological enhancements.
 - iii. Quantify a deliverable BNG for the project.
- I.3 The BNG assessment will be undertaken utilising the statutory BNG metric (2023) and associated, relevant conditions assessment sheet(s).

Note: The findings of this report are valid for 18 months and should works not be undertaken within this timeframe the report may need updating.

SITE DESCRIPTION

- I.4 The site is located to the south of Southampton Airport and just north of the M27 motorway and forms part of a wider business park. The site is a 1.05ha plot (centred on OS grid reference SU44841653). The site has parking to the front and rear and a large square flat roofed building central to the plot.
- I.5 To the front boundaries are poorly maintained shrub and tree planting and within the front car park there are seven urban trees set within tree pits. The car park itself is tarmac. To the rear there is further car parking/external storage on tarmac and block paving bordered by hedge and tree planting. A 22m section of this planting is proposed to be removed to accommodate the new access into a new Helipad area to the east. Internal to the site there is a pedestrian walkway along the northern edge of the site with an invasive, non-native snowberry (*Symphoricarpos albus*) hedgerow growing alongside. To the southern boundary is a strip of land approximately 2m wide which contains low level ornamental shrub planting.

Figure I. Site location with red line boundary.



Note. Adapted from Google Earth, 2023

- 1.6 The Environment Agency flood risk map locates the site in Flood Zone I, so is not at risk from flooding from rivers and the sea.
- 1.7 The site is adjacent to Southampton Airport and the proposed development is for a use which includes the flying of helicopters, both of which could be affected by unsuitable biodiversity enhancements.

PROPOSAL

- 1.8 The proposed development is for the change of use and minor alterations to existing building to a mixed use comprising B2, B8, E(e) and E(g) to facilitate a new headquarters for the HIOWWA and other healthcare services including offices, creation of a helipad and associated works. The development proposes to retain all boundary treatment except for a

es to the east of the rear parking area as indicated on

Unit H

Hellpad area

existing pedestrian gate to be removed

KEY

- Existing Airport Critical Part fence line
- Existing Airport Critical Part fence line to be removed
- New Airport Critical Part fence line
- New Airport Critical Part fence line with clear zone (dashed line)
- New Airport Critical Part gateways
- New Airport Critical Part gateways with security controlled linked to airport security systems and cabling
- site area

[illegible]

SECTION 2 – LEGISLATION

The Conservation of Habitats and Species Regulations 2017 (as amended)

- 2.1 The EU habitats directive is transposed into UK law by the Conservation of Habitats and Species Regulations. Part 2 of the regulations provide protection for European designated sites and species whilst Part 3 provides protection to species listed in Schedule 2. Paragraph 43 makes it an offence to deliberately disturb, capture, injure or kill Schedule 2 listed species as well destroy eggs or damage or destroy breeding or resting places. The 2019 amendment (The Conservation of Habitats and Species (Amendment) (EU Exit) Regulations 2019 ensures existing protection for habitats and species is maintained.

The Wildlife and Countryside Act 1981

- 2.2 The Wildlife and Countryside Act 1981 is the primary legislation protecting animals, plants, and certain habitats in the UK. Protected flora and fauna are listed in Schedules 1, 5, 6 and 8 of the Act, including all species of UK bats and reptiles as well as wild birds, their eggs, and nests.

The Countryside and Rights of Way Act 2000

- 2.3 Part III and Schedule 12 of the Act strengthen existing powers under the Wildlife and Countryside Act creating an offence of 'recklessness' and strengthening police powers.

Natural Environment and Rural Communities Act 2006

- 2.4 The NERC Act 2006 makes provision with respect to biodiversity and requires all public bodies to have due regard to the conservation of biodiversity. Section 41 of the Act makes a requirement for a list of Habitats and species of principle importance in England to be published. In November 2022 (last update) this includes 56 habitats and 943 species.

Protection of Badgers Act 1992

- 2.5 The Act makes it an offence to wilfully kill, injure take a badger, or attempt to do so; possess a dead badger, or any part of; ill-treat a badger; Interfere with, damage, or destroy a badger sett; cause a dog to enter a sett; or disturb a badger whilst occupying a set.



Hedgerow Regulations 1997

- 2.6 The Regulations provide protection to ‘important’ hedgerows as defined within the Regulations. Any works to such hedgerows will require permission from the Local Authority. Garden hedgerows are not affected.

The Environment Act 2021

- 2.7 Of relevance, the Environment Act 2021 makes provision for targets, plans, and policies for protecting and improving water quality, air quality and nature and biodiversity. The legislation established the Office for Environmental protection, tasked to hold the government accountable on environmental issues. Part 6 details requirement for the achievement of 10% biodiversity gain mandatory for development under the Town and Country Planning Act (1990).

SECTION 3 – POLICY

National Planning Policy Framework 2023

- 3.1 The National Planning Policy Framework (NPPF) sets a presumption in favour of sustainable development to which there are 3 dimensions: economic, social, and environmental. The environmental objective seeks to protect and enhance the natural environment and improve biodiversity. Chapter 15 seeks to protect and enhance biodiversity, minimising impacts on, and providing net gains, for biodiversity and improving local environmental conditions.

UK Post 2010 Biodiversity Framework

- 3.2 The UK Biodiversity Action Plan (UKBAP) is superseded by the UK Post 2010 Biodiversity Framework and is in response to the EU Biodiversity Strategy and an internationally agreed set of commitments termed the Aichi Targets, which combined aim to halt biodiversity losses. The habitats and species contained within the UKBAP are regarded as priorities under the Framework and are a material consideration in the planning process.

Local: Eastleigh Borough Council

- 3.3 The Eastleigh Borough Council Local Plan 2016-2036 was adopted on 25 April 2022. The earlier appeal was determined in accordance with this plan. The Plan outlines several policies that seek to preserve and enhance biodiversity which are detailed below.

- Policy SI. Delivering sustainable development.

This policy highlights several strategic aims including to *‘maintain, enhance, extend and connect the natural habitats within and landscape value of the Borough, extending natural habitats into new and existing development to achieve an environmental net gain’* (l.k.)

- Policy S9. Green infrastructure.

The Council seeks to retain, enhance, or create multifunctional green infrastructure to improve connectivity for biodiversity across the district.

- Policy DMI General criteria for new development.

This states all new development should not have an unacceptable impact on biodiversity, and where possible should enhance it.

At **international level** the policy reiterates the legal requirement for Habitat Regulation Assessments and proposes the development of a strategic approach to the protection and enhancement of internationally designated sites which are to include:

a. implementing:

i. the Solent Recreation Mitigation Strategy (requiring contributions from residential developments within 5.6 kilometres of the Solent Special Protection Area to the Strategy); and

ii. the interim and any future New Forest Recreation Mitigation Strategy if required; or alternative agreed site-specific measures to address recreational disturbance;

b. preserving the water quality and flows within the Itchen and Hamble, Southampton Water and Solent;

c. protecting the River Itchen SAC, in particular the maintenance and where appropriate restoration of habitats and qualifying species to favourable conservation status (as defined by article 1 of the Habitats Directive); and

d. seek contributions towards measures set out in the Southern Damselfly Conservation Strategy (or other strategy) specifically to deliver biodiversity net gain.

At a **national and local level**, the policy seeks to ensure development will not adversely affect a Site of Special Scientific Interest (SSSI), Site of Importance for Nature Conservation (SINC) or Local Nature Reserve (LNR) utilising the mitigation hierarchy and includes biodiversity net gain. The same approach is advocated for **Priority habitats, protected and priority species and the local ecological network**. And in all but exceptional circumstances, and with appropriate compensatory measure development is not permitted which would result in the loss or deterioration of **irreplaceable habitats**. There is a requirement for development free buffers and survey requirements for protected species notably as part of the great crested newt strategic survey strategy and the strategic bat trapping survey.

SECTION 4 – METHODOLOGY

DESK STUDY

- 4.1 Data sourced using freely available online maps and databases have helped informed this report.

FIELD SURVEY

- 4.2 The site was surveyed at 10am on 17/01/24 by Nichola Windebank (MSc.) (CIEEM qualifying membership). The weather was 4°C, overcast, and with a light wind. Habitats were classified in accordance with Habitat Definitions Version 2.0 (UKHab Ltd., 2023).

BNG METRIC

- 4.3 Field survey data was entered into the statutory metric (2023) using metric condition sheets for scoring where necessary. Following the establishment of baseline data the biodiversity improvements proposed for the site were calculated.

LIMITATIONS

- 4.4 The survey was conducted outside of the optimum season for flowering vascular plants and trees. Trees hedgerows and shrubs were where possible identified on their wintering buds, any leaves or fruit remaining on the vegetation, tree silhouettes, bark and any other defining features.
- 4.5 Please note this survey does not constitute a full assessment for invasive species and is a snapshot of the site taken at a singular point in time. Ecological habitats can change and therefore this report is only valid for 18 months.

SECTION 5 – RESULTS

DESK STUDY

Designated Sites

- 5.1 The River Itchen Site of Special Scientific Interest (SSSI) and Special Area of Conservation (SAC) is situated 700m to the east. of the site 300m to the west of the site. SINC?

Priority Habitats

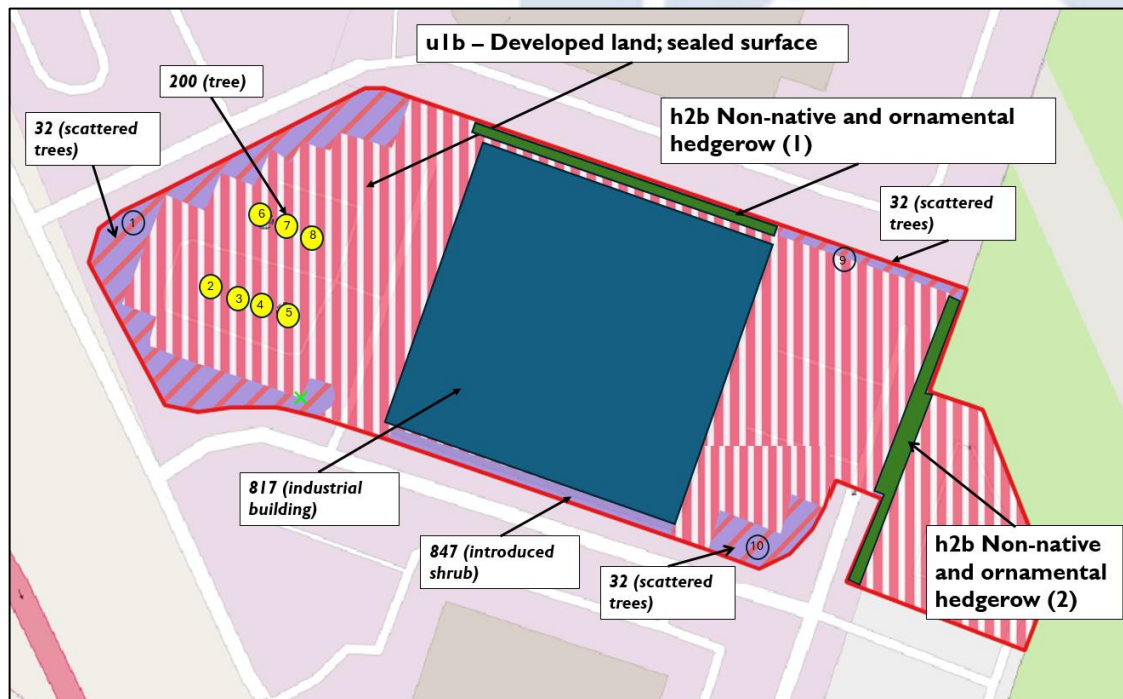
- 5.2 Several priority habitats were identified within 1km of the site. An area of Coastal and Flood plain grazing marsh is located around the River Itchen environs to the west, and deciduous woodland 500m to the east, with further small parcels beyond but within 1km of the site.

FIELD SURVEY

- 5.3 The site is an urban business park with predominantly linear areas of mixed planting to the boundaries comprised of the following habitats as classified with UKHab Ltd, 2023:

1. u1b – Developed land; sealed surface. Secondary codes 200 (tree), 524 (invasive non-native species), 804 (car park), 817 (industrial building), 847 (introduced shrub).
2. h2b - Non-native and ornamental hedgerow, 200 (tree), 523 (non-native), 524 (invasive non-native species),

Figure 3. Baseline habitat map



1. u1b – Developed land; sealed surface. Secondary codes 32 (scattered trees), 200 (tree), 523 (non-native), 524 (invasive non-native species), 804 (car park), 817 (industrial building), 847 (introduced shrub).

5.4 The land is predominantly urban with less than 10% vegetated. To the front boundaries (northeast and southeast the vegetation is a mix of shrubs which have become overgrown, predominantly non-native and with a heavy presence of Buddleia and cotoneaster in the scrub layer as well as large area of ground Ivy. There are significant areas of leaf litter and brash. The area forms a block of urban trees; species include goat willow, silver birch and small leaved lime planted almost uniformly to create a tree lined boundary with the street, but which have been constrained by the available space. Some informal pathways have been trodden through creating heavily compacted routes through into the car park (Figure 4).

Figure 4. Block of urban trees along the front boundaries of the site.



- 5.5 A further block of trees exists on the northern boundary at the rear of the site, these include field maple small leaved lime and a young oak. They form a narrow line of boundary treatment planting which also contains significant amounts of cotoneaster in the shrub layer (Figure 5).

Figure 5. Block of urban trees along the rear northern boundary of the site.



- 5.6 To the southeast of the site four trees have been planted in a small boarder. Three of which appear to be goat willow. A large metal security fence is sited between the area and the

street and access road. There is no scrub layer in this location and the trees appear in poor condition with a heavy presence of Ivy on one tree (Figure 6).

Figure 6. Block of urban trees along the rear southern boundary of the site.



2. h2b - Non-native and ornamental hedgerow, 200 (tree), 523 (non-native), 524 (invasive non-native species),

- 5.7** There are two non-native ornamental hedgerows on the site. Along the northern boundary is a long mono-species Snowberry (*Symphoricarpos albus*) hedgerow (hedgerow 1) which has also been planted along the boundary of the adjacent site to the north. Maintained at around 1m high and heavily pruned to maintain pedestrian access along the side of the building (Figure 7).

Figure 7. Snowberry hedgerow along the northern boundary.



- 5.8 The other hedgerow forms the eastern boundary (hedgerow 2) and a 22m section is to be removed to accommodate the access into the Helipad area. Identification within this section was impeded by areas of bramble and non-native species. Google street view images were used to supplement the survey results. A long low-level cotoneaster dominates the frontage with substantial stands of buddleia and an area of privet. A Goat Willow tree and Silver Birch are set with the hedgerow.

Figure 8. Mixed non-native hedgerow along the northern boundary.



SECTION 6 – BNG PRINCIPLES

- 6.1 BNG good practice principles have been followed when considering development of this site. The proposed development will result in a loss of a short stretch of non-native hedgerow. The habitat enhancements will include a new 50m long mixed native hedgerow along the southern boundary with improvement management to blocks of urban trees to improve condition.

Principle 1. Apply the Mitigation Hierarchy.

- 6.2 The loss of hedgerow will impact on biodiversity resulting in a loss of habitat and break in connectivity. However, the new hedgerow mitigates the habitat loss by creating additional habitat for small mammals, birds and insects and creating additional wildlife corridors.

Principle 2. Avoid losing biodiversity that cannot be offset by gains elsewhere.

- 6.3 There are no impacts on irreplaceable biodiversity.

Principle 3. Be inclusive and equitable.

- 6.4 The design of the BNG on site will be implemented by the site owners with monitoring to be agreed with the Local Planning Authority.

Principle 4. Address risks.

- 6.5 Implementation and monitoring will be addressed through an appropriate management plan to be agreed in writing with the LPA. Any plan should include a management strategy for the urban tree block and hedgerow. The hedgerow planting may require temporary fencing during a period of establishment.

Principle 5. Make a measurable Net Gain contribution.

- 6.6 Utilising the statutory biodiversity metric a net gain of 13.97% (habitat units) and 122.8% (hedgerow units) can be achieved by the proposed mitigation works.

Principle 6. Achieve the best outcomes for biodiversity.

- 6.7 The loss of the hedgerow to the rear of the site will have a negative impact on the available habitat and green corridor at this location. However, the hedgerow is not native and provides limited winter feeding or nesting opportunities. The new native hedgerow along the southern boundary can provide year-round food sources and sheltering opportunities once established.

and can provide a further green corridor linking to another linear habitat to the front of the site and beyond. There are limited opportunities to the rear of the site where additional habitat, particularly for birds, is to be discouraged around the airport.

Principle 7. Be additional.

- 6.8 Given the use of the land it is considered highly unlikely that any improvements to the land would occur naturally.

Principle 8. Create a Net Gain legacy.

- 6.9 Net gain can be easily achieved with minimal management for perpetuity on site. The additional benefits will be improved visual interest and provide wildlife opportunities in a limited urban environment.

Principle 9. Optimise sustainability.

- 6.10 The development is relatively small scale and will provide site level gains.

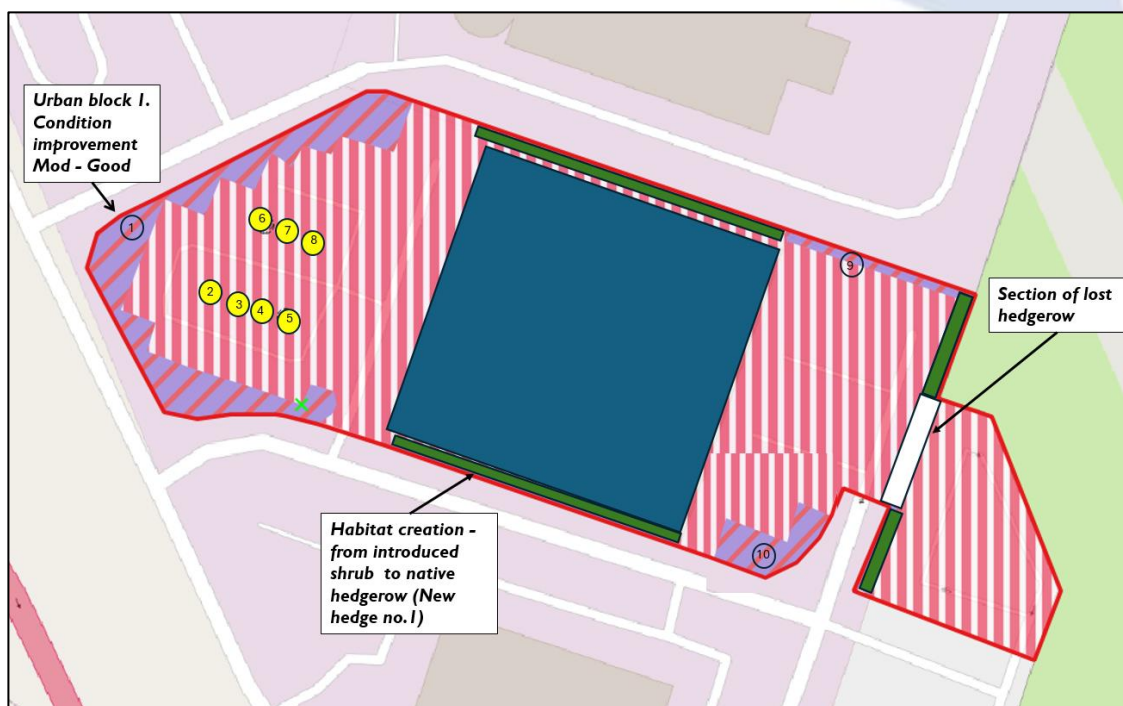
Principle 10. Be transparent.

- 6.11 Management and monitoring reports will be freely available throughout the process.

SECTION 7 – BIODIVERSITY NET GAIN

- 7.1 The development can demonstrate a 13.97% (habitat units) and 122.8% (hedgerow units) biodiversity net gain using the BNG Statutory Metric. Details and condition assessment sheets are provided separately to this report. Habitat improvements are shown at figure 9.
- 7.2 The presence of wildlife at airport surrounds is a safety hazard and recognised risk particularly in relation to birds, and encouraging wildlife into these areas may result in measures by the airport to implement wildlife management and control activities. Therefore, given the improvements already provide which already exceed the sites BNG requirements, no additional enhancements are proposed.

Figure 9. Habitat changes

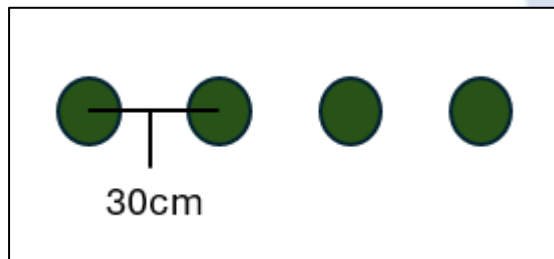


Hedgerow planting

- 7.3 A new mixed native hedgerow is proposed along the southern boundary of the site. To ensure year-round fruiting species mix could include, hawthorn (*Crataegus monogyna*), blackthorn (*Prunus spinosa*), dogwood (*Cornus sanguinea*), spindle (*Euonymus europaeus*), dog rose (*Rosa canina*). Given the limited space planting can be in a single row at a spacing of 30cm central to the width of the strip to allow the hedge to fill out. 45-60cm whips have a

good survival rate and will grow quickly. All planting will require biodegradable tree guards. Comprehensive details of planting, management and aftercare should be provided by appropriate condition.

Figure 9. Single row planting



Urban tree management

- 7.4 Urban trees provide a multitude of ecosystem services from improving air quality, reducing the urban heat island effect, carbon sequestration, improving mental health as well as supporting biodiversity however they survive in a stressed environment with limited access to space, nutrient, water and increased levels of pollution and trampling. To improve the condition of this habitat (and in accordance with the metric condition assessment sheet – Footnote 2) *Enhancement of this habitat is only possible by improving the habitat so that it meets all criteria B, D and F. It is not possible or appropriate to enhance individual trees through meeting just one or two of those criteria, nor by meeting A, C or E.*
- 7.5 Urban tree block I already meets criteria B of the condition assessment and therefore to improve the habitat condition score improvements must be made to criteria D and F (Table I). Improvements can be made with improved management to reduce trampling and littering, reduce heavy pruning, and promote an improved canopy floor layer. Comprehensive details of any planting, management and aftercare should be provided by appropriate condition to secure improvements with the above criteria.

Table I. Condition scoring criteria

Criteria		Passed
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Yes
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide, or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	No
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	No

Monitoring

- 7.6 Monitoring of the urban tree block improvements and hedgerow planting will be undertaken each year and a monitoring report with any remedial measures required (including timescales for action) will be submitted to and agreed in writing by the LPA.

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