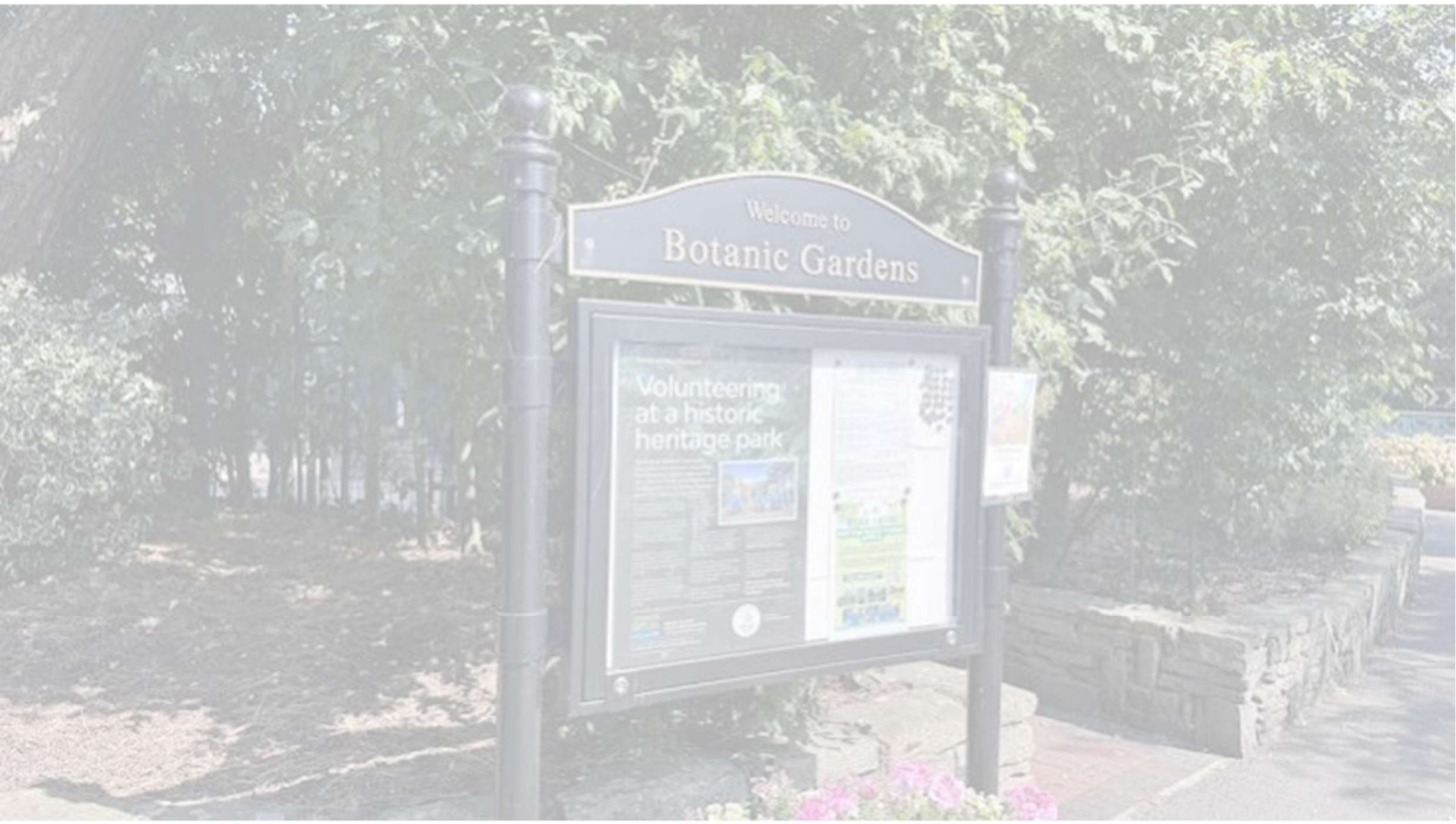
Gosling Consulting Limited (GCL)

Botanic Gardens, Southport
Aviary Reconstruction Order of Cost Estimate
Confidential (Commercially Sensitive)

November 2026

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CHARTERED QUANTITY SURVEYORS | PROJECT MANAGERS | CONSTRUCTION COST CONSULTANTS

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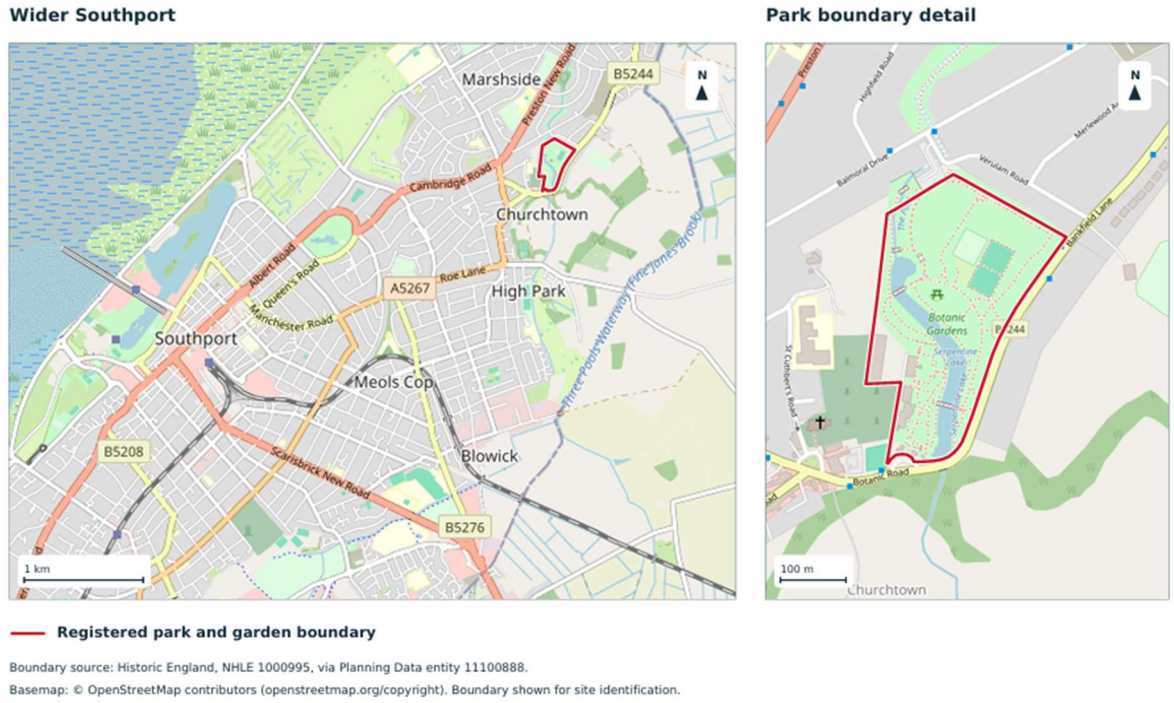
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1. Introduction & Background

Churchtown Botanic Gardens is a public park in Churchtown, Southport. Churchtown is a suburban village just north-east of Southport town centre in Merseyside, England. The park is located on Barnfield Lane, with boundaries along Botanic Road and Verulam Road. Coordinates for reference: 53°39'43"N 2°57'33"W.

Figure 1: below indicates the park boundary and the location within the wider Southport area:



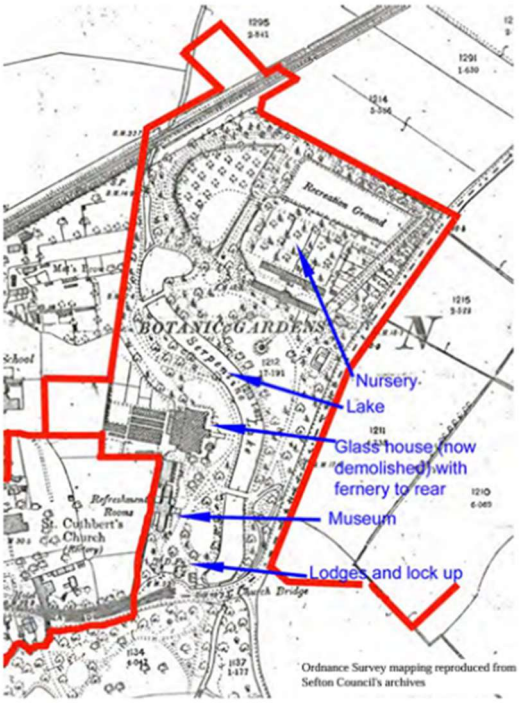
The A4 landscape plan in Figure 1 shows the gardens in the wider Southport area alongside a close-up of the park. Both views carry a red outline based on Historic England's registered park and garden boundary (NHLE 1000995). The outline is for site identification.

The gardens opened in 1875 and were subsequently acquired by Southport Corporation, which opened them as a public park in 1937. Historic England records the gardens as a Grade II registered park and garden under National Heritage List entry 1000995. The register identifies an aviary approximately 30 metres north-east of the principal entrance on Botanic Road. Historic England, Churchtown Botanic Gardens, list entry 1000995.

Figure 2: The location of the aviary is identified on the Botanic Gardens plan



Figure 3: Churchtown Botanic Gardens in 1893. Ordnance Survey plan reproduced in Sefton Council's Churchtown and North Meols Conservation Areas Appraisal



Sefton Council records that the aviary first opened in 1939 and Historic England describes the aviary structure in its register entry as dating from the late twentieth century. In more recent years, the Council's Green Sefton service maintained the aviary with support from the Botanic Gardens Community Association and local volunteers. Sefton Council recorded the closure announcement on the 30 June 2026 and Historic England register entry.

The aviary operated as a public visitor attraction within Churchtown Botanic Gardens and provided accommodation for captive birds, including birds taken in for rehoming. Sefton Council's conservation area appraisal describes a row of low timber buildings divided into compartments for small groups of birds, with each compartment opening onto an outdoor flight enclosure screened by two layers of heavy netting. The layout provided indoor accommodation and outdoor flight space across a series of separate enclosures.

Sefton Council records provide that the facility housed several kinds of parrots, as well as rabbits and guinea pigs. Contemporary local reporting also identifies blue-and-gold macaws, African grey parrots, ring-necked parakeets, conures and cockatiels among the birds kept there.

The Council approved closure of the aviary as part of its 2026/27 budget process and publicly announced its decision on 30 June 2026. In its published explanation, the Council identified animal welfare as the principal consideration and referred to the age and suitability of the existing infrastructure and the financial implications of continuing to operate the facility. The Council reported that repairs had been undertaken in recent years and identified the enclosures, indoor accommodation and roof as areas that would require improvement or more substantial works if the facility were to continue operating. Recorded in Sefton Council, Botanic Gardens aviary FAQs and Council minutes, 17 September 2026.

2. Scope and Purpose of the Commission

Sefton Council has commissioned **Gosling Consulting Limited (GCL)** to prepare an order of cost estimate for removing the former aviary at Churchtown Botanic Gardens and providing a new aviary.

The purpose of the commission is to establish the indicative capital cost of that scenario for the Council's consideration. For estimating purposes, the replacement is assumed to be a public-facing facility within the gardens, with its siting, capacity and operating requirements subject to confirmation.

The estimate will identify the cost of removing the existing facility and the cost of constructing the replacement. The removal allowance will cover the dismantling and disposal of the existing structures, with allowances for service isolation, protection of adjacent park features and making good as applicable. The replacement allowance will cover the assumed enclosures, indoor accommodation, keeper facilities, services and associated external works. The extent of below-ground removal and the scope of the replacement will be stated in the estimate.

The estimate will be informed by a non-intrusive site visit, including photographs and indicative measurements of accessible areas, together with relevant cost data and any information made available by the Council. At this stage, survey information, a design and a confirmed schedule of accommodation are unavailable. The estimate will identify the quantities derived from site observations, the assumptions used to price the replacement and the allowances made for material uncertainties.

For the replacement, the estimate will allow for an assumed scope informed by published guidance on modern aviary provision. The applicable licensing requirements, species-specific accommodation needs and technical specification are to be confirmed by the Council and its specialist advisers. The commission provides preliminary cost advice. Detailed design, condition assessment and confirmation of regulatory compliance sit with the relevant specialists.

As part of this appraisal, GCL will carry out a comparison of existing vs required accommodation. This also allows and assessment to be made of whether or note the required facility would fit on the current plot. Subject to outcomes, this may require an alternative location to be considered, which could impact the potential cost of continuing the operation.

It should be noted that Gosling Consulting Limited are not Avian specialists. This report, and any assumptions, calculations or costs contained herein are based on publicly available research we have carried out via reputable sources. Our interpretations and assumptions should ultimately be validated by qualified specialist and designers, were the project to proceed any further.

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3. Basis of the Estimate and Supporting Research

Basis of the estimate

The order of cost estimate covers removal of the former aviary and construction of an assumed replacement at Churchtown Botanic Gardens. The removal estimate will be based on photographs, indicative measurements and observations from a non-intrusive site visit. In the absence of detailed survey information, a design or a confirmed schedule of accommodation, the replacement will be priced against stated assumptions for the number and size of enclosures, indoor accommodation, keeper facilities, services and associated external works. The existing dimensions will inform the removal quantities. The replacement's size and layout will depend on the proposed species, numbers and operating requirements.

Indicative enclosure dimensions will be assessed using the species and maximum occupancy advised by Sefton Council. Published flying wingspans and the RSPCA's outdoor aviary guidance will be used to establish initial allowances for each proposed enclosure. The number of enclosures, compatibility of groups, clear flight dimensions and provision for indoor housing and isolation will be subject to review by a suitably qualified avian specialist. The estimate will identify the assumed flight areas and supporting accommodation so that the cost can be updated once the collection and operating brief are confirmed.

Existing facility, heritage and demolition

Sefton Council's aviary FAQ records previous repairs and identifies the enclosures, indoor accommodation and roof as elements that would have required improvement for continued operation. This information, together with the Council's conservation area appraisal, will help identify features. The FAQ's reference to a possible six-figure cost concerns works to the former facility. The underlying scope and pricing basis would need to be obtained before that figure could inform the removal and replacement estimate. *Ref. Sefton Council, Botanic Gardens aviary FAQs and Churchtown and North Meols Conservation Areas Appraisal*.

Churchtown Botanic Gardens is a Grade II registered park and garden. The heritage setting will inform allowances for contractor access, protection of park features and reinstatement. The Council's planning and conservation officers should confirm the implications for demolition and for the siting and design of the replacement, including any consents or supporting assessments required. *Ref. Historic England, list entry 1000995 and Sefton Council, Historic parks and gardens*.

HSE guidance will inform allowances for pre-demolition investigations and safe dismantling. Existing asbestos records would ideally be available, with provision for an appropriate refurbishment or demolition asbestos survey where the works may disturb materials that could contain asbestos. The estimate will state the assumed extent of slab and foundation removal, service isolation, waste handling and making good. Concealed construction and buried services remain subject to investigation.

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Animal welfare and licensing

Section 9 of the *Animal Welfare Act 2006* requires those responsible for animals to take reasonable steps to meet their welfare needs. For a replacement aviary, the duty informs provision for a suitable environment, normal behaviour, appropriate grouping or separation, feeding and protection from injury and disease. The main cost implications are likely to include usable flight space, enclosure subdivision, shelter and indoor accommodation, secure keeper access, and facilities for feeding, cleaning, isolation and biosecurity as required. The proposed species and numbers should be confirmed through an avian specialist brief. *Ref Animal Welfare Act 2006, section 9*.

The Zoo Licensing Act 1981 may also apply if animals of species not normally domesticated in Great Britain are exhibited to the public on seven or more days in a 12-month period. The Council's licensing team should confirm the position for the proposed collection and operating model, including any dispensation. *Defra's 2012 Standards of Modern Zoo Practice* remain in effect through 23 May 2027, with the 2027 standards taking effect on 24 May 2027. If the replacement falls within the licensing regime and is expected to open from that date, the 2027 standards should inform the brief. One example with a direct cost implication is the provision of double-door systems for bird enclosures, subject to the risk-assessment and written-agreement exception in the standards (noting that this provision is evident in the current facility so has been replicated and allowed for the in the costs of the replacement). *Ref GOV.UK, Keeping zoo animals and Defra, Standards of modern zoo practice*.

Cost evidence and reporting

The estimate will follow the principles of RICS NRM 1. Conventional works will be priced using relevant regional tender evidence or BCIS data. Where possible, and where time permits, specialist budget quotations have been sought for the enclosure package where its scope can be defined sufficiently. The estimate will show removal and replacement costs separately and state the price base, assumptions, exclusions and treatment of preliminaries, fees, risk, inflation and VAT. Where an unresolved item could materially change the budget, the estimate will show the effect of changing the assumption, such as removing all foundations or increasing the area of serviced indoor accommodation. Confirmation of compliance will depend on the developed design and review by the relevant specialists and authorities. *Ref RICS, New Rules of Measurement*.

Existing vs Required Accommodation Appraisal

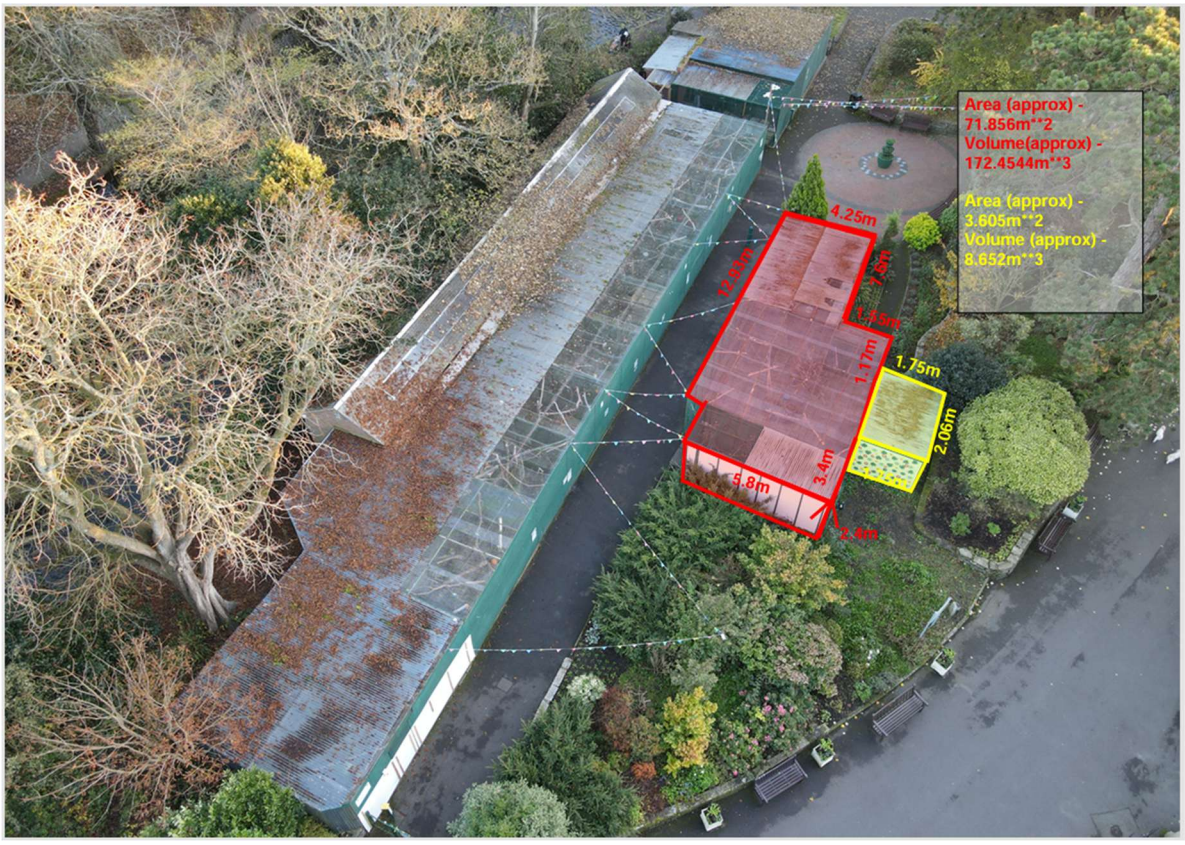
As part of this report, GCL have looked to establish the comparison between existing and required accommodation. In addition to informing the order of cost estimate, this exercise also establishes whether there may be a risk of a proposed facility not fitting on the current site, with an alternative location required (which would also impact the cost).

Figure 4 overleaf shows dimensions taken on site to establish the existing dimensions of accommodation currently provided.

Existing Accommodation

Figure 4: Mark Ups of Existing Accommodation Showing Dimensions, Areas and Volumes

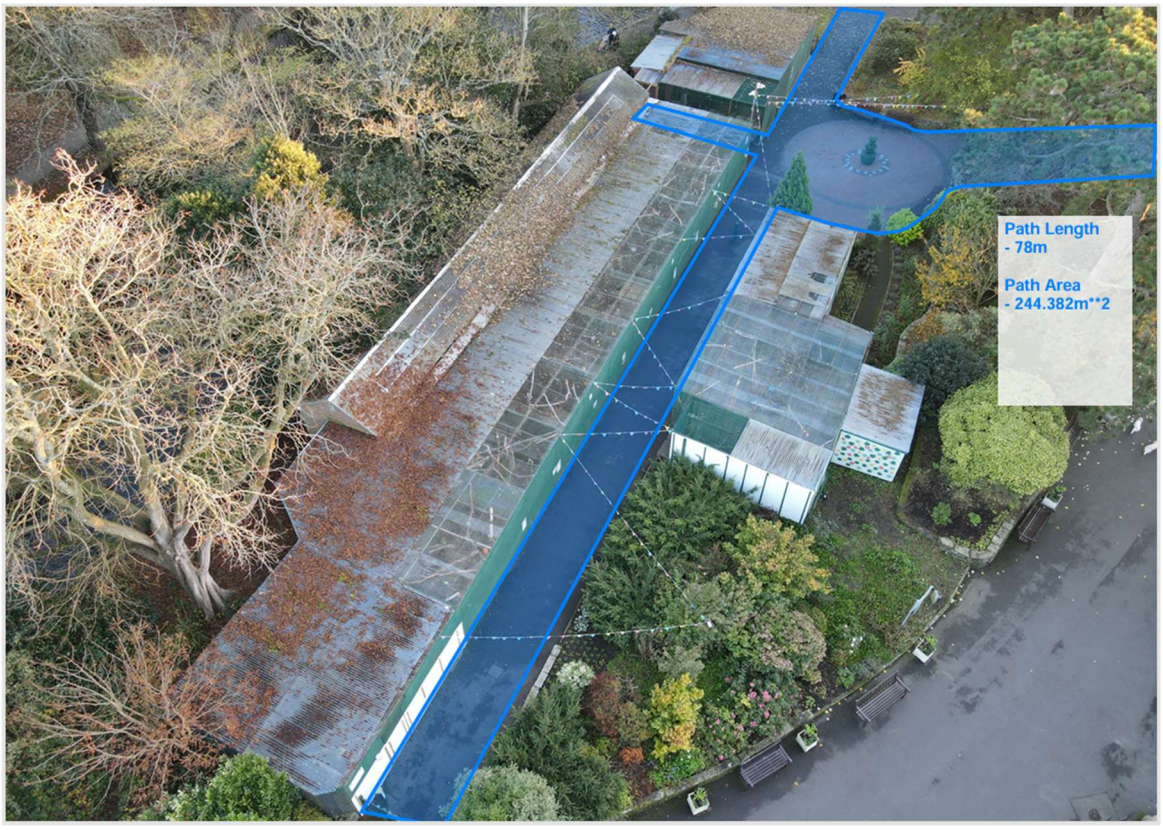




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Figure 4 (cont'd)





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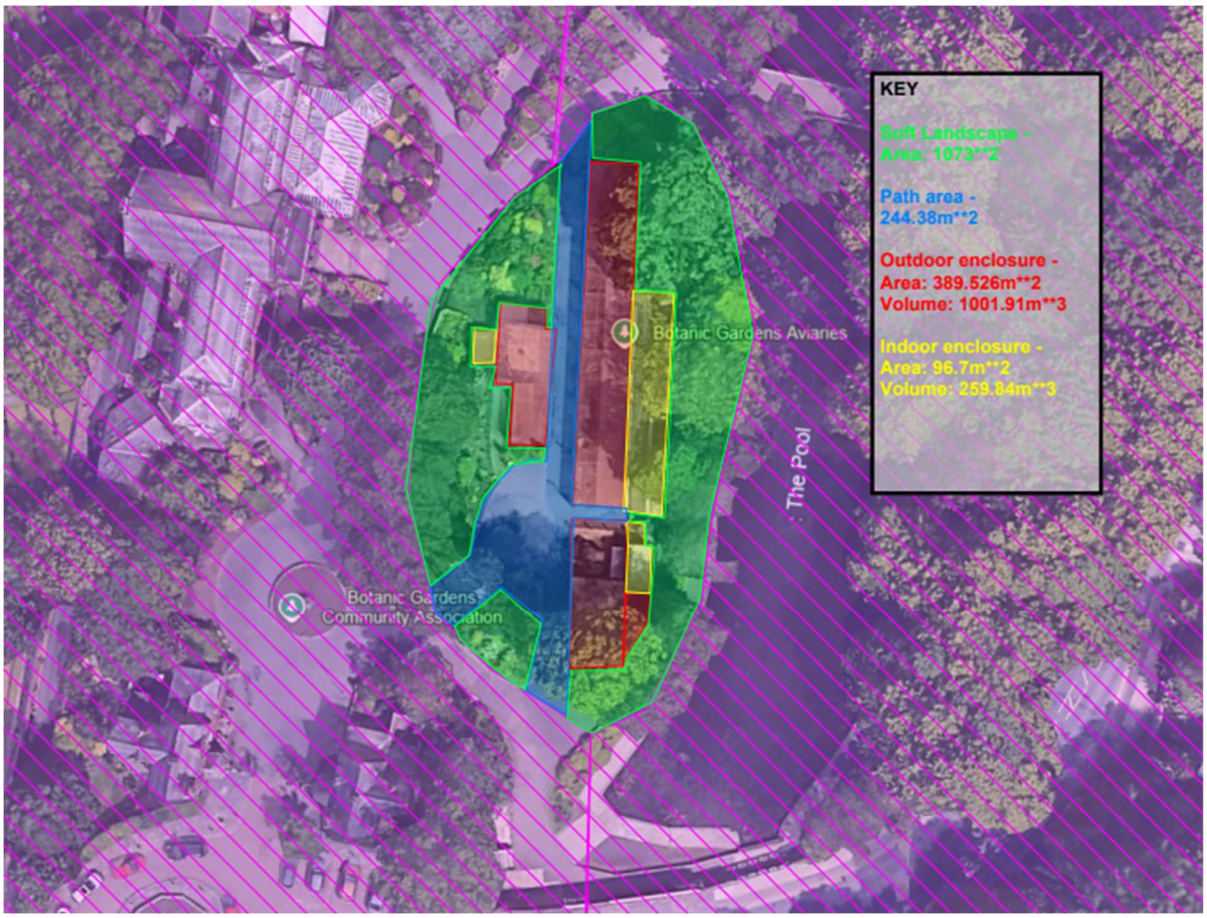


Figure 5 below, summarises this information into a table to establish the overall provision of each accommodation type

Figure 5: Table Summarising Accommodation Dimensions, Areas and Volumes

Location	Plan Area (m2)	Volume (m3)
Avian Outdoor Accommodation (marked in red on Figure 4 plans)	390	1,002
Avian Indoor Accommodation (marked in yellow on Figure 4 plans)	97	260
Pedestrian Circulation / Hard Landscaping (marked in blue on Figure 4 plans)	244	-
Soft Landscaping (marked in green on Figure 4 plans)	1,073	-
Total Quantities	**1,804**	**-**

Required Accommodation

From our research, and to inform the order of cost estimate, we suggest that the most useful starting point is the RSPCA's wingspan-based aviary guidance, applied to each proposed enclosure. The statutory welfare duty and any applicable zoo standards then inform what else the enclosure and supporting accommodation need to provide.

RSPCA outdoor aviary guidance describes that, for one bird, use four times its flying wingspan as the starting point for each clear dimension: length, width and height. For a group, start with the largest bird's wingspan. The guidance calls for a further 20% increase in enclosure size for each additional bird, but does not specify how to distribute that increase across length, width and height, so we have assumed we apply 20% across a plan area calculation. *Source RSCPA website*

Whilst we have based our calculations on the above, there are other sources of data, such as the Global Federation of Animal Sanctuaries 'Standards for Ground Feeding Bird Sanctuaries' document dated April 2019. This suggests that the requirements are derived from 5 times the wingspan of the largest bird, which would clearly generate a larger required accommodation space. GCL would suggest that this is recorded as a further risk, and we have allowed a provision of 'Optimism Bias' to account for any further increase in the scope that items of this nature may create.

The examples in Figure 6 below apply the RSPCA's four-times-wingspan benchmark to the Scottish Government's indicative wingspans. They show the starting dimensions for one bird, before group occupancy and ancillary accommodation are considered. *Ref rspca.org.uk*

Figure 6: Indicative Calculations for Enclosure Area Based on Wingspan

Bird or group	Indicative wingspan	Clear enclosure dimensions, L × W × H	Net plan area
Cockatiel	0.48 m	1.92 × 1.92 × 1.92 m	3.7 m^2
African grey parrot	0.70 m	2.80 × 2.80 × 2.80 m	7.8 m^2
Large macaw, using the published group average	1.10 m	4.40 × 4.40 × 4.40 m	19.4 m^2

Sefton Council have provided GCL with information regarding numbers and species, this is contained within Appendix D annexed to the report.

GCL have taken this data and applied the logic described in Figure 6 and the supporting narrative, to establish revised plan areas for compliant Aviary provision.

This assessment is contained within Figure 7 below.

It should be noted that, within the overall cost assessment, we have also taken a subjective view of the following provisions, which would need developing and ratifying by an appropriate specialist consultant or designer:

- Secure access provision
- Internal cage separation (depending on numbers and types of species)
- Indoor to Outdoor ratio
- Cage height
- Roof & Wall mesh specification
- Keeper circulation
- Feed provision
- Doors & Isolation
- Flight Length
- Public Viewing space

Figure 7 overleaf summarises the species and numbers currently occupying the space and utilises the calculation methods researched elsewhere in this report to indicate a current under provision of around 50% (i.e. the accommodation should be double the size that it currently is).

Figure 7: Updated Required Accommodation

Species	Group	Bird Count	Approx Wingpspan	Clear Enclosure Dimensions			Net Plan Area	Total Plan Area Per Species	Add for group Provision	Total
				L	W	H		m2	m2	m2
Orange Winged Amazon	Amazon	3	70-85 cm	3.20	3.40	3.40	10.88	32.64	17.41	50.05
Blue Fronted Amazon	Amazon	2	85-100 cm	3.60	3.60	3.60	12.96	25.92	18.14	44.06
Blue Cheeked Amazon	Amazon	1	70-85 cm	3.10	3.10	3.10	9.61	9.61	11.53	21.14
Yellow Headed Amazon	Amazon	2	85-100 cm	3.70	3.70	3.70	13.69	27.38	19.17	46.55
Yellow Crowned Amazon	Amazon	1	75-90 cm	3.30	3.30	3.30	10.89	10.89	13.07	23.96
African Grey	Parrot	5	50-60 cm	2.20	2.20	2.20	4.84	24.20	9.68	33.88
Timneh Grey	Parrot	2	50-60 cm	2.60	2.60	2.60	6.76	13.52	9.46	22.98
Chestnut Fronted Macaw	Macaw	2	80-90 cm	3.40	3.40	3.40	11.56	23.12	16.18	39.30
Blue & Gold Macaw	Macaw	2	100-115 cm	4.30	4.30	4.30	18.49	36.98	25.89	62.87
Harlequin Macaw	Macaw	1	105-120 cm	4.50	4.50	4.50	20.25	20.25	24.30	44.55
Galah	Cockatoo	4	75-90 cm	3.30	3.30	3.30	10.89	43.56	19.60	63.16
Monk Parakeet	Parakeet	10	45-50 cm	1.90	1.90	1.90	3.61	36.10	10.83	46.93
Green-Cheeked Conure	Conure	14	40-50 cm	1.80	1.80	1.80	3.24	45.36	12.31	57.67
Crimson-Bellied Conure	Conure	1	40-50 cm	1.80	1.80	1.80	3.24	3.24	3.89	7.13
Sun Conure	Conure	2	45-55 cm	2.00	2.00	2.00	4.00	8.00	5.60	13.60
Indian Ringneck	Parakeet	15	40-50 cm	1.80	1.80	1.80	3.24	48.60	12.96	61.56
Alexandrine Parakeet	Parakeet	5	45-55 cm	2.00	2.00	2.00	4.00	20.00	8.00	28.00
Budgerigar	Parakeet	21	30-35 cm	1.30	1.30	1.30	1.69	35.49	8.79	44.28
Masked Lovebird	Lovebird	1	25-30 cm	1.10	1.10	1.10	1.21	1.21	1.45	2.66
Fischer's Lovebird	Lovebird	2	25-30 cm	1.10	1.10	1.10	1.21	2.42	1.69	4.11
Peach Faced Lovebird	Lovebird	13	25-30 cm	1.10	1.10	1.10	1.21	15.73	4.36	20.09
Red-Crowned Kakariki	Parakeet	1	35-40 cm	1.50	1.50	1.50	2.25	2.25	2.70	4.95
Bronzefallow Cockatiel	Cockatiel	32	45-50 cm	1.90	1.90	1.90	3.61	115.52	26.71	142.23
Whiteface Lutino Cockatiel	Cockatiel	5	45-50 cm	1.90	1.90	1.90	3.61	18.05	7.22	25.27
Crimson Rosella	Rosella	2	45-55 cm	2.00	2.00	2.00	4.00	8.00	5.60	13.60
Eastern Rosella	Rosella	2	45-55 cm	2.00	2.00	2.00	4.00	8.00	5.60	13.60
Superb Parrot	Parakeet	1	50-60 cm	2.20	2.20	2.20	4.84	4.84	5.81	10.65
Red Rump Parakeet	Parakeet	2	30-40 cm	1.40	1.40	1.40	1.96	3.92	2.74	6.66
Bourke's Parrot	Parakeet	2	35-40 cm	1.50	1.50	1.50	2.25	4.50	3.15	7.65
Zebra Finch	Finch	2	20-24 cm	0.88	0.88	0.88	0.77	1.55	1.08	2.63
Bengalese Finch	Finch	3	20-24 cm	0.88	0.88	0.88	0.77	2.32	1.24	3.56
Canary	Canary	2	20-25 cm	0.90	0.90	0.90	0.81	1.62	1.13	2.75
								654.79	**317.3072**	**972.10**

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Existing Site Capacity for Required Accommodation

In this section we have considered the capacity on the existing site to accommodate the additional provision we have calculated earlier in this report.

The overall site area is calculated as 1,804m2 incorporating avian accommodation, hard and soft landscaping.

Within the above, the accommodation totals 487m2 of indoor and outdoor avian provision.

GCL revised calculations suggest that this should be 972m2, an addition of 485m2.

If we assume that the hard paving pedestrian circulation also needs to increase by the same ratio as the accommodation, the current 244m2 would increase to 488m2.

The revised total of accommodation plus circulation is therefore 1,460m2, meaning that the current soft landscape areas would have to reduce by 729m2 if the required facility were to remain on the same site.

We would note the following constraints associated with the above:

- The proximity of the site to the pond at the rear of the existing aviary would present potential construction challenges and may mean that this area is unsuitable for an extension to the structure. We measure this area as being 344m2.
- The areas to the front of the site are currently ornamentally planted and are not regular in shape on plan, which may prevent or constrict their use for extension of the current accommodation space

GCL would recommend a full topographical and measured survey of the site be carried out, alongside a geotechnical assessment, to assess whether the required structures could actually sit on the existing plot.

It should be noted that moving the aviary to an alternative location would significantly increase the costs, requiring:

- Reinstatement of the existing site with hard/soft landscaping
- Potential requirement for new services including power, water and drainage to a new location. This could be significant depending on position and proximity to points of connection for each service
- The temporary housing of birds during the works

For the purpose of this exercise, we have assumed that the site will remain in it's current location, but the risk remains and would need to be reviewed and mitigated should the scheme proceed to a further stage.

4. Order of Cost Estimate Narrative

A full breakdown of the Order of Cost Estimate is included in Appendix A to this report

Works cost

The works cost element has been quantified based on the accommodation assessment described in Figure 7 (Section 3) of this report.

The specifications are assumed and would be subject to further survey, design and specialist input but indicate an appropriate order of cost for the works.

We have assumed a full removal of existing structures and substructures, to facilitate new paving, cage bases, outdoor structures and indoor structures.

The elements of works costs are described as follows:

Element A: Close & Secure

Allowances to consider - Interim animal care, any Council-funded veterinary and transport costs, cleaning, service isolation where required, barriers and signage, and any continuing inspection or security costs. Identify which costs sit with Green Sefton and which fall within the works contract.

Element B: Remove and make good

Allowances to consider - Surveys, contractor mobilisation, public segregation and protection, dismantling of mesh, roof and frames, removal or retention of slabs and foundations, waste handling, drainage and service works, and basic reinstatement. Define what condition the site is to be left in.

Element C: Permanent landscape works

Allowances to consider - Ground preparation, paths and edges, planting or habitat features, and establishment maintenance. Price these against a defined brief or show a clearly described provisional allowance.

Element D: Continued operation

Allowances to consider – As previously described and assumed. Includes enclosure fabric, indoor accommodation, keeper access and services.

To support the cost exercise, GCL have completed a site visit to gather supporting data to validate the cost assessment:

- Measure each enclosure bay and record plan dimensions, heights, wall and roof mesh areas, solid roof areas, doors, partitions and indoor accommodation.
- Key photographs to a simple sketch and flag dimensions that could only be estimated.
- Route to the works. Record gate widths, path widths, turning space, potential loading and waste collection points, and interfaces with public paths and adjacent structures. These observations will inform plant, handling and segregation allowances.

It should be noted that the works cost assessment is based on a completely new structure to replace the demolished existing provision. It may be possible, following a condition survey of the existing facility, that elements of it may be worthy of re-use, which could reduce the cost. It is, however, often the case that re-using materials can fail to achieve the savings anticipated as they need to be cleaned, repaired and altered to incorporate them into a wider replacement project.

Prelim allowances

Main contractor's preliminaries cover the cost of setting up, managing and running the site, including mobilisation, supervision, welfare, temporary fencing and security. The percentage varies with the size and complexity of the works, the construction programme and the site's location and access. On a small project such as the Southport aviary replacement, fixed set-up costs can account for a greater share of the works cost. A longer programme, restricted deliveries or the need to maintain public access during construction will also increase the allowance.

For context, RICS guidance indicates that preliminaries often account for 10–20% of the total building contract sum. **For this budget estimate, 20% of the measured works cost is considered a reasonable provisional allowance**, assuming some abnormal pedestrian and works access constraints, a reasonably short programme and minor site constraints. The allowance should be reviewed once the programme and site logistics are confirmed.

Summarise total cost £117,851.97

OHP allowances

The allowance for main contractor's overheads and profit covers a contribution towards the contractor's head office and business running costs, together with its target profit on the contract. For this budget estimate, the allowance is calculated as a percentage of the estimated construction works cost, including main contractor's preliminaries, in line with RICS NRM 1.

The actual percentage will always vary with tender competition, contractors' existing workloads and their appetite for the project. When several suitable contractors are seeking work, competition can put downward pressure on margins. Where contractors have full order books, specialist suppliers are limited or the contract places greater risk on the contractor, tenderers may seek a higher return. Project size, procurement route, design certainty and programme constraints also influence pricing. Whilst the allowance should be reviewed before tender in light of local contractor interest and the availability of specialist aviary installers, we would suggest an OHP provision of 10% is appropriate for a project of this type and size.

Summarise total cost £70,711.18

Design & Survey Fees

Whilst this would require some further consideration, we would consider the following fees and surveys being required to progress the project to later stages:

Fee allowance	**Scope to include**
Lead designer / architect	Layout, keeper and visitor access, coordination, planning drawings and tender information
Structural and civil engineer	Frame and foundation design, assessment of any slab or foundations proposed for reuse, and surface water drainage (noting presumed replacement in costs)
MEP	Possible requirement to address lighting, small power and heating
Specialist aviary designer and animal welfare input	Species-specific enclosure requirements, mesh and containment details, escape-prevention lobbies, shelter, ventilation, cleaning and keeper access
Measured, topographical and utility surveys	Existing enclosure and slab dimensions, site levels, adjacent paths and trees, and buried services within the proposed works area
Tree survey, Arboriculture and BNG	Survey of surrounding spaces for inclusion in any potential planning application
Asbestos demolition survey	Allow for a competent surveyor to inspect the existing structure and associated buildings within the demolition scope
CDM Principal Designer	Duties as CDM Regulations
Building Regulations Principal Designer	All to comply with the requirements of the Building Safety Act
Planning	Pre app. Main application fee. Potential heritage assessment?
Building Regulations	Depending on enclosure size, keeper facilities and associated services

Based on current projects, we recommend an allowance of 15% of construction cost to cover fees and surveys.

Summarise total cost £116,673.45

Risk allowances

In accordance with RICS NRM 1, the order of cost estimate aviary replacement includes a risk allowance in addition to the base cost estimate, with inflation assessed separately.

The allowance reflects the current level of design and site information and considers four categories:

- Design development risks
- Construction risks
- Employer change risks
- Other employer risks

Potential cost impacts include refinement of the enclosure and foundation design, unforeseen ground conditions or buried services, changes to the employer's brief, and delays in securing approvals.

The allowance should be reviewed as surveys are completed, the design develops and approval requirements are confirmed. GCL would recommend that a detailed costed risk register is implemented to manage the commercial provision but, at this early order of cost stage, we recommend that a 15% risk allowance is retained and spread across the elements noted above.

Summarise total cost £138,646.95

Cost inflation indices and assumptions

The order of cost estimate is priced at the estimate base date (the date of this report), with inflation assessed separately from the project risk allowance.

In accordance with RICS NRM 1, tender inflation covers the period from the estimate base date to the anticipated tender return date, and construction inflation covers the period from tender return to the midpoint of construction. The provision reflects relevant market forecasts, which are benchmarked using BCIS indices (refer to Appendix C annexed hereto) and should be reviewed as the procurement and construction dates are confirmed.

Summarise total cost £16,681.30

Optimism Bias

Optimism bias is the tendency for early project estimates to understate costs and delivery times and overstate benefits. HM Treasury's Green Book addresses this through an explicit adjustment informed by evidence from comparable projects. Where suitable evidence is limited, Treasury's generic uplifts provide a starting point. The adjustment is reviewed as the project develops and there is evidence that the underlying risks have been reduced.

For the Southport aviary replacement, optimism bias reflects the potential for the early estimate to understate the cost of delivering the scheme, particularly while the specialist enclosure design, foundation requirements and site access arrangements are being confirmed. HM Treasury's 51% uplift is the upper-bound benchmark for non-standard buildings. The rate applied to this scheme reflects the balance of conventional and specialist works, evidence from comparable projects where available, and the extent to which surveys, design development and supplier pricing have reduced uncertainty. Any residual optimism bias provision is then reconciled with the separate NRM 1 risk allowance so that the same cost exposure is counted once.

Applying the upper bound benchmark it to the whole estimate would assume that the scheme is best classified as non-standard overall and that the evidence supports retaining the full upper bound. Where standard and non-standard elements are both significant and cannot be physically separated, Treasury guidance allows a weighted calculation based on their share of capital cost. *Ref: GOV.UK*

Figure 8: Optimism Bias Calculation for The Project

Works Classification	**Calculated Share of Capital Cost**	**Treasury Upper Bound**	**Contribution to Uplift**
Standard works, such as conventional groundworks, drainage and reinstatement	67%	24%	16%
Non-standard works, such as a bespoke aviary frame, mesh and containment systems	33%	51%	17%
Combined upper-bound uplift	**100%**		**33%**

Summarise total allowance £294,617.83

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Main Cost Summary

Figure 9: Aviary Cost Summary

Works Cost	£589,259.84
Prelims	£117,851.97
OHP	£70,711.18
Design Fees	£116,673.45
Risk Allowance	£138,646.95
Cost Inflation	£16,681.30
Optimism Bias Allowance	£294,617.83
Order of Cost Estimate Total (Excl VAT)	**£1,344,442.51**
Order of Cost Estimate Total (Incl VAT)	**£1,613,331.01**

As part of the next stage of cost planning, a quantitative risk assessment should be undertaken to establish the project's P50 and P80 cost positions for the agreed scope. The P50 position represents the modelled cost outcome with a 50% probability of not being exceeded, while P80 represents the modelled cost outcome with an 80% probability of not being exceeded, based on the risk model, cost inputs and assumptions adopted.

5. Summary and Conclusion

Following a review of the accommodation currently provided, for the number and type of species occupying the space, it is our opinion that the facility does not meet minimum spatial, and therefore minimum welfare, requirements. This position is supported by publicly available research carried out by GCL and information available from the RSPCA, RSPB and Zoological Society but should ultimately be validated by an Avian specialist, were the project to proceed.

This can be summarised as follows:

- Current avian accommodation — 487m2 (indoor & outdoor provision)
- Minimum required accommodation — 972m2 (indoor & outdoor provision)
- **Calculated accommodation shortfall** — **485m2 (indoor & outdoor provision)**

This results in a requirement to demolish the existing provision and replace with something that is fit for purpose and this is the basis on which the costs contained within this report have been calculated.

In addition to the above, there are potential risks around the capacity of the existing site to accommodate the revised requirements, alongside construction constraints and challenges, something which should be addressed in more detail at the next stage of the design.

Freely available data has been used to calculate the appropriate and compliant accommodation requirement. There are differing outcomes, depending on which data is used, which would have a further impact on the costs. For this reason, an 'Optimism Bias' allowance has also been included, to account for the early stage of the cost review and to further reinforce the need for more developed design, survey work and specialist input.