Clarifications to Bidder’s Questions:

Shore-based low tide counts and validation study of digital aerial survey methods at Morecambe Bay and Duddon Estuary Special Protection Area (SPA)

**Q1) Can we be provided with maps of the intended count zones so we can establish how many vantage points or surveyors would be needed to adequately cover the area per day.**

A) Maps of the relevant count sectors have been uploaded to contracts finder and you should now be able to access them.

**Q2) Can you confirm that you are expecting a single count per survey for each area, or are you expecting multiple counts across the four hour tidal window, like every hour.**

1. There are two components of this project:
2. The low tide counts of WeBS sectors (as set out in Figures 2-6 of the Request for Quotation document). The requirement is for 4 once monthly counts to be completed according to WeBS low tide count survey methodology: Low Tide Counts Methods | BTO - British Trust for Ornithology. The ideal is one count of each sector in each month November-February during the two hours either side of low tide, preferably spaced evenly apart, with co-ordination between counters on different sectors.
3. The second task is a validation survey of a selection of WeBS count sectors (as set out in Figures 7-8 of the Request for Quotation document) where repeated counts each over a minimum of three consecutive days should be undertaken. The survey method is set out fully in section 3.2 of the Request for Quotation document, however, to summarise:

The counts should be carried out in December 2023 or January 2024, coordinated with the expected date of the aerial survey being undertaken for this validation work. Repeat counts over a minimum of three days around and including the aerial survey date are required (to understand day-to-day variation in numbers and how the relative timing of counts affects comparisons) with one of these days ideally being the exact date of the aerial survey. Counts on each day should be undertaken to include the same tide conditions as the aerial survey. It is expected that on the date of the aerial survey, the count sectors which are the focus of this task will be surveyed two or three times, e.g., on the falling and rising tide and/or over low tide, and ground-based counts should thus also be repeated at these times on each of the days.

**Q3) We have previously undertaken Drone monitoring as part of a HRA covering a SPA in Lincolnshire, has a survey methodology been drawn together to cover the works.**

1. Natural England don’t consider that unmanned aerial vehicles (UAVs or drones) have the capacity to fulfil the requirements of this project. The separate Request for Quotation for the aerial survey component is also available to view on contract finder.

**Q4) 4) Will a HRA be required to undertake the drone flight and will this be undertaken by yourselves or Natural England.**

A) See above.

**Q) Do you have the vantage point shapefiles available if possible?**

A) My colleague will forward these to you.

**Q) Are all estuary areas to be conducted on the same day?**

A) There are two parts to the ground survey work

1. **Conduct 4 (four) once monthly (November 2023 – February 2024), standardised, shore-based surveys of the abundance and distribution of all waterbirds (including gulls) within the Leven, Kent, Lune and Wyre estuaries and the Morecambe Bay West site (including South Walney & Piel Channel Flats)** in accordance with the current WeBS LTC scheme methodology (<https://www.bto.org/our-science/projects/wetland-bird-survey/taking-part/low-tide-counts-methods> ).Ideally surveys of each of the areas depicted in Figures 2-6 of the RfQ (Task 1) will be conducted on the same day covering all these areas 1x a month (Nov – Feb) with multiple surveyors. However, this is not essential because, as noted in the standard LTC scheme methodology “*although simultaneous counts of all sections within a site are preferable, they are not compulsory. The principal reason for this is that the primary purpose of the scheme is to investigate relative distribution, averaged over several dates, and not to determine overall population sizes*.” Thus, if bidders consider that it is not practical to conduct counts of all of the areas depicted in Figures 2-6 of the RfQ on the same day in a given month but that these need to be staggered over more than one day, they should make this clear in their tender.
2. **Conduct ground-based surveys (entailing repeated counts through each of a minimum of three consecutive days) of the abundance and distribution of all waterbirds (including gulls) within selected low tide count sectors within the ‘Morecambe Bay West’ and ‘Morecambe Bay Kent’ sites, according to a bespoke methodology set out in the RfQ (section 3.2**).  It is not essential that each of the two validation study areas (task 2) (figures 7 & 8) of the RfQ are surveyed on the same days as each other or indeed on the same days on which the other sites to be surveyed under Task 1 of the RfQ (as shown in Figures 2-6) are surveyed in that month. The key issue is that the repeated counts of these areas over three+ consecutive days **must** encompass the day/time at which an aircraft will be scheduled to pass over the survey areas (under aseparate contract let by Natural England) specifically for the purpose of this validation exercise. Whether both the sites to be surveyed under Task 2 of this RfQ need to be surveyed on the same series of days will be dictated by whether it is or is not practical for the aerial surveys of these two sites to be flown on the same day.

**Q) Should the report include aerial survey results?**

A) No this is covered under the aerial contract.

**Q) Please could you clarify the purpose or aim of the survey? Should the emphasis be for a quota requiring an accurate snapshot in time or is it for monitoring change requiring repeatability?**

A) Ideally the digital aerial survey will provide a snapshot in time which can be compared with the findings of the visual aerial survey of Morecambe Bay conducted in 2005/6 but also provide a baseline against which the results of future repeat surveys, using the same methodology and the same or similar survey design, can be compared in order to understand changes in abundance and particularly distribution of birds over time.

**Q) Prior to the survey, would it be possible to conduct a site visit, preferably in the company of an ornithologist who could elaborate on appearance, habitat and behaviour in order to structure the survey appropriately?**

A) It would be expected that the successful bidder will have sufficient ornithological expertise within their company or engage sub-contractors with the necessary knowledge/expertise, such that arranging a site visit with Natural England would not be necessary.

**Q) In the RFQ document there is a 2018 study listed in the references, but it is not public. Would it be possible to obtain a copy of this report and some of the sample imagery?**

A) I’ll look into this.

**Q) It is not clear whether the identification is required at the family, genus or species level. We will need to establish the visual discriminatory characteristics that would enable spectral signatures to be determined. Please advise what the expectation is?**

A) Identification of each individual bird should be made to the lowest taxonomic level possible, ideally with an accompanying categorisation of the degree of confidence in that identification being correct. Thus ideally, a bird will be identified to a species level with a high degree of confidence. In some cases though it may be that a bird can only be identified to a higher group level – e.g. large gull with a high degree of confidence but not identified at all to species level with any confidence. In other cases a bird might be identified to a higher group level – e.g. large gull with a high degree of confidence and to species level e.g. lesser black backed gull with a lower degree of confidence in that species level identification. Thus, two tier identification is often adopted as a standard approach with an ID to a higher taxonomic level and a lower taxonomic level (where possible) each with an associated confidence score.