**Annex 1 TERMS OF REFERENCE**

**PROJECT SCOPE/WORKS DEFINITION:** Preparation of the project design for water regime restoration works at permanent habitat for capercaillie in Jaamaküla.

**LOCATION:** Pärnu County, Saarde Parish, Jaamaküla and Kikepera Village. The works are located on the cadastral parcels of state land 75601:001:0679 and 75601:006:0117.

**Site area**: 461,2 ha.

**Length of the ditch network in the study area:** around 30 km (some ditches not subject to closure).

**Related land management systems:**

The proposed area is located on land reclamation sites:

* White tail (TTP-536) 6114540010310/004
* White tail (TTP-536) 6114680020020/001

1. **PURPOSE OF WORKS**

Compensate for the negative impacts of the Rail Baltic high-speed railway on forests in South-Pärnumaa. The permanent capercaillie habitat in Jaamaküla is one of the most important in compensating for the connectivity of the Kikepera-Soomaa and Luitemaa populations. The extension of the target protection zone and the restoration of the natural water regime are expected to result in the addition of at least one male capercaillie (cock) to the permanent habitat.

1. **RESEARCH**
   1. Map ditches and ditch banks. The contracting authority may require a precise survey of ditches with significant impact. The ditches to be surveyed will be defined at the pre-study meeting.
   2. Map the condition of ditch sections in terms of their ability to impact the water level of the surrounding community, based on the following ditch condition classes:
2. **Functioning ditch**: the ditch is at least 0.5 m deep, the slope is open in spite of flow obstructions and drains water out of the swamp. The drainage function of the ditch is not expected to decrease significantly in the near future (10 years).
3. **Depreciated ditch**: the ditch is impeded by flow to such an extent that water run-off through the ditch is intermittent. Removal of flow obstructions is sufficient to make the ditch functional. Ditches that are otherwise open but are currently closed due to a head surge are also included. The surrounding area shows strong drainage effects and re-siltation has not started again.
4. **Overgrown ditch: the** ditch is at least 80-90% overgrown (e.g. with peat moss), sometimes difficult to identify in the landscape. Very little draining effect at this point in time. Typical re-creating of the wetland is already occuring in the immediate vicinity of the ditch.
   1. Investigate the sediment character of the ditch bottom to a depth of at least 0.5 m to determine the presence and character of peat layers at the bottom of the ditch. Ditches or parts of ditches at different heights shall be sampled. Sampling shall be carried out with a soil probe at a frequency of at least 1 sample per linear kilometre of ditch.
   2. Assess and describe the potential impacts of the planned activities on infrastructure and land outside the project area.
   3. Examine and assess the existence and condition of the infrastructure needed to carry out the works.
5. **A PLAN FOR CARRYING OUT THE WORKS**
   1. Plan, in cooperation with the Contracting Authority, the closure of ditches in various ways so that they do not act as water conduits in the future.
   2. Design the landscaping of the trees in the project area and its surroundings within the limits and to the extent specified by the Contracting Authority.
   3. If necessary, i.e. in cases it prevents the closure of ditches in the project area, plan additional water main closures or diversions, applying for the necessary conditions and approvals, if required.
   4. Plan the infrastructure works needed to carry out the work.
6. **OTHER CONDITIONS**
   1. The works will be carried out in accordance with the protection regulations of the target protection zone of the Jaamaküla capercaillie permanent reserve, also taking into account the restrictions of the Vaskrääma white-tailed eagle permanent reserve.
   2. The contractor must organise (and record/take minutes of) at least 3 working meetings during the design phase. The first meeting must be held before the start of the research/investigation, the second to present the results of the research/investigation and discuss the solution, and the third to discuss the designed solution. If necessary, be prepared to organise additional working meetings at the request of the contracting entity.
   3. The contractor must organise a project publicity meeting, including publication of invitations in local newspapers and other media 14 days before the meeting and ensure that minutes of the meeting are kept. If necessary, the contracting authority may require an additional public hearing.
7. **PROJECT REQUIREMENTS** 
   1. The project must comply with RMK's "Model Composition for Wetland Restoration".
   2. RMK will provide the designer with input (the designer does not have to write these sections himself) to the following chapters of RMK's "Model Component for Wetland Restoration":
8. Ptk. 2.2 Purpose of restoration works;
9. Ptk. 4.5;
10. Ptk. 6.1. Impact on nature conservation values.

The input will be submitted to the designer by RMK no later than 45 days after the submission of the studies to -acceptance.

* 1. In addition to the digital spatial data required in the model set out in point 5.1. above, the following must be provided:
     1. the surveyed ditch network with the associated data table according to Table 1 of the sample composition;
     2. Ditches filled with soil (from ditch banks or from above ground material) with a data table (the ditch ID must be included in the data table).
  2. The project must be in accordance with the Nature Conservation Act and the Land Conservation Act, and the legislation and normative documents deriving from them.
  3. In addition to the components of the indicative content referred to in point 5.1., the project shall include at least the following aspects related to the scope of work:
* the history of the ditches in the area;
* mapping of the condition of ditches according to the methodology outlined in the baseline study;
* explanations of the solutions chosen to close the ditches;
* explanations of the proposed felling (to be submitted to the designer by RMK at least 45 days before the date of delivery of the project);
* the impact of the proposed works on adjacent land and infrastructure;
* measures to mitigate the potential negative impacts of the works and a description of them;
* descriptions of the temporal and spatial constraints (restricted areas) associated with the works, together with maps;
* drawings and maps relating to the work must include, inter alia, the longitudinal profiles of the ditches to be closed, to the extent agreed at the pre-study meeting;
* drawings related to the work must be at a scale of 1:5000 and no picnetting is required in nature.
  1. The conditions of the Environmental Board, the Food and Agriculture Board and the Saarde Municipality (if available) must be taken into account in the design to avoid any negative impact on human property and objects and species of nature conservation value that may arise as a result of the works. Any conditions imposed by the authorities must be linked to the relevant chapters of the project fiche.
  2. The work is to be carried out in two stages:

**Phase I** involves mapping the ditches and assessing their condition. The feasibility of closing the ditches will be assessed on the basis of the affected forest habitats and other conservation values. A research report will be prepared. The survey report shall be accompanied by a gps record of movements in the project area.

**In Phase II, a** restoration project will be prepared. To this end, the ditch closures will be designed in the detail of the project in a way that best meets the parameters of the specific ditch. The specific solutions will be decided in cooperation with RMK.

* 1. The report on the design works shall be submitted to the RMK Nature Conservation Specialist for approval.
  2. Before applying for official approvals from the Environmental Board and the Food and Agriculture Board, the draft works must be submitted for review to RMK's Nature Conservation Specialist, Ants Animägi (ants.animagi@rmk.ee). The opinion of the Saarde Municipality should also be sought.
  3. Coordination of the works with the relevant authorities and landowners will be arranged by the contractor, including access to the project area.
  4. If necessary, RMK will organise the project expertise.

1. **ANNEXES TO THE TOR**

Annex 1-1. Replacement plan

Annex 1-2. Position of the Environment Agency

Annex 1-3. The position of the Food and Agriculture Office

Annex 1-4. Project area (map layer)

Annex 1-5. Study ditches (map layer)

1. **DELIVERY OF WORKS**

The work shall be delivered to the Nature Conservation Manager of the Nature Conservation Department of RMK in triplicate in hard copy and digital format, including the project as a whole in pdf format and the project drawings in georeferenced pdf format, the proposed activities in layered pdf format, in addition to the tables of work volumes and materials in MS Excel format and the project map files in Esri shape format, in accordance with the deadlines specified in the contract.

1. **THE TERMS OF REFERENCE WERE DRAFTED BY**

Ants Animägi, Nature Conservation Specialist, Nature Protection Department of RMK.

1. **COORDINATION**

Apply to the Environment Board and the Food and Agriculture Board for approval. Ask for a position from Saarde Municipality.

19.06.2024 Ants Animägi

(date) RMK Nature Conservation Specialist