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PW-20-00920855 Rare Plant Salvage – Waterton Lakes National Park

#### **ANNEX "A" - STATEMENT OF WORK**

#### 1.0 General Information

#### 1.1 Goal

The primary goal of this project is to address the need to salvage rare plant species within the disturbance footprint of the Crandell Mountain Campground and propagate/store them until after the campground is reconstructed. The project will involve salvage of plants within the park, transport to an off site storage facility, storage of the plants and transport back to site for planting. Upon transport to site, the plants will be provided to the campground reconstruction contractor who will be responsible to plant them in the ground.

## 1.2 Background

Parks Canada is currently rebuilding the Crandell Mountain Campground after it was burned in a wild fire. The campground reconstruction will involve realignment of the roads, buildings and camping sites. Within this footprint there are five species of rare plants with thousands of individual plants that require protection.

"Appendix A – Rare Plant Mapping" contains a map showing the areas of disturbance where the rare plants are to be salvaged. Also available is a shape file showing the locations where the rare plant species have previously been found. The successful contractor will be responsible for surveying the area, marking the outer limits, and ensuring salvage occurs strictly and only within the disturbance area. The survey work must be completed to an accuracy of +/- 1m or better.

## 1.3 Summary of Work

The contractor is responsible for the following:

### 1.3.1. GENERAL REQUIREMENTS

- a. Parks Canada is seeking to engage a contractor to carry out the scope of work detailed below. All mobilization and incidental costs should be incorporated into the estimate.
- b. The nursery (Contractor) must review and formally acknowledge willingness and ability to abide by the WLNP Best Management Practices (see attached Appendix B BMP.pdf).
- c. Leave the work area clean at the end of each day. Upon completion remove surplus materials, rubbish, tools and equipment.
- d. Provide all equipment, tools, materials needed in good working order to complete the Services requested.
- e. The contractor must not perform any work or cause any disturbances outside of the disturbance areas designated by the hatched lines shown on "Appendix A Rare Plant Mapping".

#### 1.3.2. REQUIRED WORK - PROPAGATION OF NATIVE PERENNIALS

- a. Refer to Table 1-A for a list of species requested for propagation. Target quantities may be subject to change based on the number of rare plants found within the disturbance footprint. It is expected that if not enough plants are harvested that the nursery will attempt to propagate from the material harvested to meet the target quantities. In consultation with the Parks Canada Agency (PCA) Vegetation Ecologist shifts in the target quantities between the listed rare plants in Table 1-A may be possible once harvest is complete and total numbers available are determined.
- b. All equipment used in seed/propagule collection must be clean and free of vegetation and soil to prevent the introduction and spread of invasive agronomic species and weed species.
- c. The contractor is responsible for cleaning and processing the seed if propagation is conducted via seed. The contractor is responsible for ensuring seeds are stored in an appropriate manner to ensure seeds remain viable until the seeds can be propagated. It is expected that for most

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species propagation from seed will not be possible on the timelines available and so salvage of plant material is expected in most cases.

- d. The contractor is responsible for researching and determining the best propagation method for the seed, root stock, plants, and/or cuttings collected on site. Since rare plants are the target of the harvest no cuttings, root stock or plants are to be harvested outside of the disturbance zone of the project. Upon consultation with the PCA Vegetation Ecologist, seeds may be harvested outside of the disturbance zone.
- e. Delivery dates are expected to be in the spring of 2021 or possibly fall of 2021 and will be dependent on the construction schedule which cannot be confirmed at this time.
- f. The Contractor must ensure the specified target quantity is delivered to site after gradeouts or losses. Parks Canada, Waterton Lakes Field Unit has the first right of refusal on overruns exceeding the ordered quantity, if available.
- g. Parks Canada, Waterton Lakes Field Unit will pay for the propagated plant material that is delivered to the site and accepted by Parks Canada. Excess propagated plant material that is not purchased by Parks Canada, Waterton Lakes Field Unit, failed starts and other costs associated with plant material that is not delivered to the site is the responsibility of the contractor.
- h. Transport method chosen must ensure plants are not damaged.
- i. Plants must be in a healthy condition at the time of delivery and free of weeds, pests and pathogens. Protect plant material from frost, excessive heat, wind and sun during delivery.
- j. Protect plant material from damage during transportation (e.g., prevent plugs from drying out, refrigerate where necessary) and transport plugs in an enclosed vehicle.
- k. In the event that the project is delayed and the Contractor is required to hold the plugs for more than 30 days (one month) past the ship date ranges noted in Table A-1: Propagation Targets and the plants have reached shippable quality, the per month storage of plants holding pricing will be used as per Annex B Basis of Payment.

Table A-1: Propagation Targets

Latin name Common Target Container **Propagule Estimate Delivery format** name Quantity Size source d delivery date1 Allium geyeri 3329 4" pot Plants /Seed March 31shipped in pots or other Gever's var geveri Onion Salvaged from September method approved by PCA 30, 2021 site Project Authority. 3235 shipped in pots or other Berberis #1 Pot Plants March 31-Oregon Salvaged from September method approved by PCA repens Grape 30, 2021 Project Authority. Site 4" Pot March 31shipped in pots or other Calochortus Mariposa Lily 935 Plants Salvaged from September method approved by PCA apiculatus 30, 2021 Site Project Authority. 36 4" Pot March 31shipped in pots or other Osmorhiza Sweetroot **Plants** occidentalis Salvaged from September method approved by PCA 30, 2021 Site Project Authority. Silverleaf 1622 4" Pot Plants March 31shipped in pots or other Phacelia September Salvaged from hastata Scorpion method approved by PCA Weed 30, 2021 Project Authority. Site

<sup>&</sup>lt;sup>1</sup> Delivery dates are estimates only, and should ultimately be determined by when the site is ready for planting. It is the responsibility of the contractor to determine the best method for salvage of material to meet the delivery dates.

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## 1.3.3. SALVAGE OF RARE PLANTS

a. The contractor will supply a salvage crew that has been trained in basic plant taxonomy and specifically the identification of the rare plants on site and basic common plants that can be confused with the rare plants to be salvaged.

- b. The contractor must use a native plant nursery specialized in propagation of native shrubs and native forbs that has the following:
  - 1. Variable climate control allowing the growth of each species in a suitable climate for that specific species
  - 2. Variable and automated watering systems allowing for specific water requirements of each species to be met.
  - 3. Capability to modify soil textures and quality for each species during potting of the plants.
- c. The contractor must provide appropriate storage on site for plants until they are shipped to the nursery.
- d. The contractor must provide appropriate plans for acclimatization of the plants to ensure they are drought tolerant and hardy for installation. Plants must be grown outdoors or acclimatized outdoors for at least 3 weeks prior to planting. The plants must be watered and fertilized in order to develop a root system that will improve drought tolerance and hardiness in the plant.
- e. The contractor and their selected nursery used to store the rare plants will allow access to a Parks Canada representative for inspection upon request.
- f. A Work Plan, describing in detail for each activity by location, the Contractor's intended methods for plant salvage, storage and propagation. The Plan must identify materials, equipment and manpower that will be used to meet the meet the objectives outlined in this Statement of Work document. The Work Plan must be linked to a project schedule that must be provided to Parks Canada prior to salvage operations commencing.

The contractor is responsible to ensure that the target quantities of plants are delivered. Modification on quantities between species may be negotiated with Parks Canada prior to delivery and will be based on the actual number of plants that can be salvaged of each species.

## 1.3.4. HEALTH AND SAFETY PLAN

- a. The Contractor must prepare and comply with a site-specific Health and Safety Plan and ensure that crews must always have available. The Contractor shall implement and maintain the Health and Safety Plan during the Work.
- b. Contractor must develop an "Emergency Procedures Protocol" in consultation with Parks Canada. On site Contingency and Emergency Response Plan to address standard operating procedures to be implemented during emergency situations. Emergency Response Plan can be incorporated into the Health and Safety Plan.
- c. The plan must specifically address the known hazards on site such as bears, ticks, remote location outside of cell range and avalanche paths.
- d. The contractor health and safety plan must comply with occupational health and safety regulations related to landscape activities.
- e. Alberta One Call and Utilities Coordination Plan, including notifications to Utility Owners.
- f. Contractor and any subcontractors to submit a copy of their valid Parks Canada Business License (see section 1.3.5. below).
- g. Contractor Chain of Command, listing key Contractor personnel, including for each name, position, qualification, experience, telephone and cellular telephone. The list shall include the names and telephone / cellular telephone for contact persons who are available on a 24-hour basis in the event of emergencies.
- h. List of subcontractors, suppliers and consultants, their role and their key personnel, including names and positions, addresses, telephone and cellular telephone.
- i. Contractor is solely responsible for any leaks and/or spills and clean up and disposal of contaminated materials in accordance with provincial and federal legislation.
- j. Immediately report any legislative violations to the PCA Project Authority.

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#### The Contractor must:

 Be responsible for health and safety of persons on-site, safety of property on-site and for protection of persons adjacent to site and environment to extent that they may be affected by conduct of work.

- II. Comply with and enforce compliance by employees with safety requirements of Contract documents, applicable Federal, Provincial, Territorial and local statutes, regulations, and ordinances, and with site-specific Health and Safety Plan.
- III. The protection of persons off-site and the environment such that they may be affected by the conduct of the work.
- IV. Conduct daily safety meetings and task specific meetings (toolbox) as required by special work. At a minimum, meetings must include refresher training for existing equipment and protocols, review ongoing safety issues and protocols, and examine new site conditions as encountered. Keep records of meetings

## 1.3.5. NATIONAL PARK REGULATIONS

- a. The Contractor must ensure that all work is performed in accordance with the ordinances, laws, rules and regulations set out in the Canada National Parks Act and Regulations.
- b. The Contractor and any sub-contractors must obtain a business license from a Parks Canada Administration Office, prior to commencement of the Contract. The business license must be valid for the Park in which the Work is occurring.
- c. All Contractor's vehicles are required to display a vehicle work pass from PCA. These permits may be obtained free of charge from the PCA Administration Office once a business permit has been obtained.

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# Appendix A - Rare Plant Mapping

Under separate attachment.

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# **Appendix B – Best Management Practices**

Under separate attachment.