

WORK SPECIFICATION FOR MANAGEMENT OF INVASIVE ALIEN PLANTS IN THE PORT OF DURBAN FOR THE PERIOD OF THIRTY-SIX (36) MONTHS

1. BRIEF DESCRIPTION OF SERVICE:

This contract covers proper identification, mapping, eradication, and control of invasive alien plants through application of appropriate control methods in the specified areas within the Port of Durban for the period of 36 months. The total coverage of the areas to be assessed and controlled within the Port is approximately **862 255^{m2} square meter as shown in ariel photo map**. The areas include but not limited to; Bayhead Natural Heritage Site, Ambrose Park, the Island View commonage areas, Fynnlands, Power Supplies depot and Pollution Control area, Kingsrest, Dry Dock Complex and Maydon Wharf commonage areas. The contractor shall advise on suitable methods of controlling invasive alien plants that can be applied after assessing the infested areas shown in the map.

2. BACKGROUND

Bayhead Natural Heritage Site is a natural habitat within the boundary of the Port of Durban that boasts a considerable diversity and abundance of flora, fauna. This area has some of the rarest grassland and the last remains of mangrove swamps hence restoration and preservation of the indigenous flora and fauna is important. Amongst many other techniques of achieving this will be to control and monitor the spread of invader plants. Island View commonage, Ambrose Park, Fynnlands, Power Supplies depot and Pollution Control, Kingsrest, Dry-dock complex and Maydon Wharf commonage areas have also become vulnerable to the infestation of invasive alien plants hence the scope of this project was extended to cover the

whole Port. The infestation poses a risk of loss of biodiversity in this habitat. As such, the intended invasive alien plants control will enhance and ensure endurance of the ecological functions of the Port of Durban's green areas and compliance with the following minimum legal requirements:

- National Environmental Management Biodiversity Act 10 of 2004 which requires landowners to take steps to control and eradicate invasive plants and prevent or minimize harm to biodiversity.
- Conservation of Agricultural Resource Act No 43 of 1983, stating that landowners are legally responsible for the control of alien invader plants and weeds on their properties.

The port of Durban's Environment Department is committed to ensuring that the infested areas are effectively managed. The Ports Act 12 of 2005 stipulates that the protection of the environment within the Ports boundaries is of paramount importance. The control of invasive alien plants requires expertise in terms of identification and application of appropriate methods to control and monitor the infestation. However, in this instance, a reasonable price also needs to be considered given the size of the area and extent of the infestation. Control of invasive alien plants is an on-going requirement for the Port of Durban to ensure compliance with applicable legal requirements.

3. DELIVERABLES

- At an initial stage of field work, the contractor should conduct an invasive alien plants assessment and provide a well detailed report with an inventory for identified invasive alien plants in all specified areas within the Port of Durban. This report must be in-line with Pest Control Operator Regulations requirements.
- The herbicides which the contractor deems feasible to utilize must be registered with the Department of Agriculture Land Reform and Rural Development for specific alien weeds and plants to which they will be applied.

Evidence must be submitted to Transnet National Ports Authority's Environment Department.

- A list of invasive alien plants provided in section 4 is provided only as a guide for priority species to be controlled and is therefore not necessarily a reflection of a comprehensive list of all species solely to be found on site. This inventory list shall be updated taking into consideration emerging invasive plants.
- When a mechanical method is used to eradicate and control invasive alien plants, all slashed or mowed plants should be removed from site and be disposed of at an approved landfill site to avoid re-growth where reasonably practicable.
- Submission of Safe Disposal Certificates for every waste material such as herbicide containers and slashed invasive alien plants disposed of remains vital to form part of records for this project.
- Invoices are to be submitted to the TNPA Environment Department on completion of each stage of work.
- A detailed report in line with Pest Control Operator Regulations requirements, use of pictures after completion of each stage of work should be submitted to TNPA Environment Department.

4. PROJECT PROGRAMME

PROGRAMME OF WORK AND CONTRACT PERIOD

- The period of this contract is thirty-six (36) months, and an appointed tenderer is expected to execute the work within the stipulated period.
- The appointed contractor will be required to submit a project schedule prior to project commencement. This schedule will have to reflect reasonable and practicable timelines in line with the size of the mapped areas and should be agreed upon with the TNPA Environment Department after the contract has been awarded.

- The appointed contractor should undertake the monitoring control at all specified areas in the Port (as shown in the map annexure C).
- The control of invasive alien plants should be undertaken quarterly (3 times) in year 1 and thereafter bi-annually (2 times) until end of contract in year 3. This is to be undertaken in all specified areas for effective management of spread and re-growth of invasive alien plants in the port.
- The first follow up controls must be conducted in all areas of the port as shown on the map.
- The number of hectares that a contractor is expected to work on within the 36 months period should not be less than a total average of all sites.
- The removal of all listed invasive alien plants in terms of the categories stipulated in the National Environmental Management Biodiversity Act 10 of 2004, are considered dangerous and therefore should be given priority.
- The aim should be the elimination of all alien plants listed under the legislation. The table below reflects the inventory list of invasive alien plants found in the port following the mapping conducted in 2018.

Invasive alien Plant Species list for the Port of Durban (TNPA) IAPS Clearing Project (2018)

Taxon	Common Name	NEMBA	Maydon Wharf	Fynlands	Ambrose Park	Island View	Kingsrest	Bayhead Natural Heritage Site
<i>Cardiospermum grandiflorum</i>	Balloon Vine	1b	✓		✓			✓
<i>Arundo donax</i>	Giant Reed/Spanish Reed	2			✓			✓
<i>Ipomoea indica</i>	Morning Glories	1b			✓			✓
<i>Lantana camara</i>	Lantana	1b	✓	✓	✓	✓	✓	✓
<i>Leucaena leucocephala</i>	Leucaena	2	✓	✓	✓			✓
<i>Ageratum conyzoides</i>	Ageratum	1b		✓	✓			
<i>Litsea glutinosa</i>	Indian Laurel	1b	✓	✓	✓			
<i>Melia azedarach</i>	Syringa	1b	✓	✓	✓		✓	✓

<i>Nephrolepis exaltata</i>	Sword Fern	1b		✓				
<i>Ricinus communis</i>	Castor-oil Plant	1b	✓	✓	✓	✓	✓	✓
<i>Senna didymobotria</i>	Peanut-butter Cassia	1b		✓	✓			✓
<i>Solanum mauritianum</i>	Bugweed	1b		✓	✓			✓
<i>Tecoma stans</i>	Yellow Bells	1b	✓	✓	✓		✓	✓
<i>Tithonia diversifolia</i>	Mexican Sunflower	1b	✓	✓	✓			✓
<i>Schefflera actinophylla</i>	Queensland Umbrella tree	1b	✓	✓	✓	✓		
<i>Morus alba</i>	Mulberry	1b	✓	✓	✓	✓		
<i>Chromolaena odorata</i>	Paraffin/Triffid Weed	1b	✓	✓	✓		✓	✓
<i>Schinus terebinthifolius</i>	Brazilian Pepper Tree	1b	✓		✓			✓
<i>Psidium guajava</i>	Guava	1b		✓		✓		
<i>Pennisetum Purpureum</i>	Napier Fodder	1b						✓
<i>Anredera Cordifolia</i>	Medeira Vine	1b			✓			✓
		1b						
		1b						
		2						

- However, should it emerge that there are invasive alien plants not mentioned in the above priority list but pose significant risk to the ecosystem, such invasive alien plants should still be reflected in the new list to be provided by the new awarded tenderer.
- Regular control and monitoring of invasive alien plants should be conducted consistently, as areas exposed for the first time are usually devoid of vegetation and are therefore prone to heavy re-infestation by invasive alien plant species.
- An experienced person (with a certificate of registration) in alien weeds identification and control must always be on site to supervise the progress of the project.

- In areas where waterborne sewerage is not available, the contractor must designate an area on the site for the erection of portable chemical toilets. The toilet must be located no less than 100 m from any natural water body.

5. INFORMATION TO BE OBTAINED ON SITE

The tenderers must attend the compulsory site visit of the proposed work and acquaint themselves with the area where the work will be conducted. Tenderers must conform to any limitations or restrictions that may be imposed by Transnet National Ports Authority or other authorities and in general with all matters that may influence or affect the contract and shall be deemed to have allowed in their tender for any additional cost involved due to the foregoing, as no claims for any extras in connection with the position or nature of work will be entertained.

6. DURATION OF SERVICE

The service will be undertaken for a period of 36 months from the date of award of the contract (in line with the schedule to be submitted as stipulated). The total size of the areas to be controlled is **862 255m²**

7. CHARGES

The Contractor shall quote on the total area of **862 255m²**. The contractor will be expected to undertake the control as per the service programme of this document. The control will not only be limited to certain priority invasive plants listed **7.1**. See Appendix A for the Schedule of Quantities.

8. GENERAL

- The Contractor shall not cede, assign, transfer or sub-let the agreement or any part thereof and not enter any sub-contract of whatsoever nature for the execution hereof without the prior written consent of Transnet National Ports Authority.
- No amendment or variation of, or addition to this agreement shall be of any force or effect unless reduced to writing and signed by both parties.

9. QUALIFYING CRITERIA

Tenderers to submit the following documents as proof that they comply with the tender requirements and failure to submit will lead to the disqualification of the tenderer. The following are deemed to be pre-requisite requirements.

11.2.1. Letter of good standing with the Compensation Commissioner from the Department of Labour.

11.2.2. Copy of a valid certificate for registration as a pest control operator (weeds controller) according to the "Fertilizers Farm Feeds, Agriculture Remedies and Stock Remedies Act" Act No.36 of 1947 with the Department of Agriculture Land Reform and Rural Development.

10. EVALUATION CRITERIA

A technical threshold score of 60 % advances bidders to the next evaluation phase. The evaluation sheet is attached as annexure B to this specification.

Evaluation Criteria	Minimum Threshold (%)
Technical/Functionality	60%

