



## **TRANSNET FREIGHT RAIL**

### **SPECIAL CONDITIONS OF CONTRACT AND SPECIFICATION**

**CUTTING OF TREES AND BUSHES TO A MAXIMUM HEIGHT OF 300MM, AND THE  
TREATMENT OF TREE STUMP WITH AN APPROVED HERBICIDES FROM KOSTER TO  
MAFIKENG IN THE RAIL RESERVED UNDER THE GEOGRAPHICALLY AREA  
CONTROLLED BY THE DEPOT ENGINEER KRUGERSDORP**

**PART A – GENERAL**

**PART B – PROJECT SPECIFICATION**



## **SPECIAL CONDITIONS OF CONTRACT AND SPECIFICATIONS**

### **A. GENERAL**

#### **A1 SCOPE OF WORK**

This contract cover the cutting of trees and bushes to a maximum height of 300mm, and the treatment of tree stump with an approved herbicides from Koster to Mafikeng in the rail reserved under the geographical area controlled by the Depot Engineer, Krugersdorp.

The performance due by the Contractor shall include any work arising from or incidental to the above or required of the Contractor for the proper completion of the contract in accordance with the true meaning and intent of the contract documents.

The Contractor shall obtain his/her own information regarding species, occurrence and extent of vegetation to be controlled in order to comply with the required standards.

#### **A2 SUFFICIENCY OF TENDER**

A2.1 The contract will only be awarded to a tenderer who has experience in the fields of vegetation control, industrial herbicide application, and the felling of tall and problematic trees in Southern Africa.

A2.2 A Site Inspection Certificate (E4A) signed by the Manager or his/her deputy (compulsory) must be submitted with the tender. The submission thereof will be deemed to indicate the Contractor's acquaintance with the occurrence and extent of species of vegetation to be controlled and all aspects that will and/or may affect such control and costs thereof.

#### **A3 DURATION OF CONTRACT**

The work provides for the control of vegetation for a period of twelve months commencing on the date of notification of acceptance of tender with Transnet Freight Rail.

#### **A4 COMPLIANCE WITH STATUTES**

A4.1 The Contractor shall comply with all applicable legislation, Codes of Practice and Local, Regional or Provincial Authority regulations. The Contractor shall in particular, comply with the following Acts;

- a) The Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act (Act 36 of 1947) as amended.
- b) The Hazardous Substance Act (Act 15 of 1973) as amended.



- c) The Water Act (Act 54 of 1956) and the Water Amendment Act (Act 96 of 1984)(where applicable).
- d) The Environmental Conservation Act (Act 73 of 1989).
- e) SABS Code of Practice No. 0206-1985 "Safety procedures for the disposal of surplus pesticide and associated toxic waste".
- f) Conservation of Agricultural resources Act (Act 43 of 1983) as amended.
- g) Common law of nuisance.
- h) Mountain Catchment Area Act (Act 63 of 1970).
- i) The compensation for Occupational Injuries and Diseases Act (Act 130 of 1993).
- j) The Occupational Health and Safety Act (Act 85 of 1993)

A4.2 Where herbicide is to be used the Contractor shall ensure that this work be done in the presence and under the supervision of a **Pest Control Operator**, specialising in the field of industrial weed control. The Pest Control Operator must be registered in terms of the Farm Feeds Agricultural and Stock Remedies Act, Act 36 of 1947, as amended.

#### **A6 TO BE PROVIDED BY TRANSNET FREIGHT RAIL**

The following material, equipment and services will be provided free of charge by Transnet Freight Rail where required:

- A6.1.1 Water as required from Transnet Freight Rail's existing points of supply; such water may be untreated, chemically treated or borehole water. The Contractor shall be responsible for all work and equipment needed to fill the water trucks or spray units from the water point provided and to ensure that the water is suitable for its intended use.
- A6.1.2 Inspections of the areas of work by motor trolley may be arranged with the Manager or his/her deputy, but will have to coincide with normal track inspections carried out by the inspection/technical staff of the Depot. The Manager or his/her deputy shall be given timeous notice (4 calendar weeks) of the Contractor's intention to inspect.

#### **A7 TO BE PROVIDED BY THE CONTRACTOR**

A7.1 In addition to all labour materials, plant, equipment and incidentals needed to complete the work, the Contractor shall provide all accommodation and toilet facilities for his/her employees.

A7.2 The Contractor shall provide safe and secure storage facilities for all herbicides or chemicals brought onto and in use on the site. Such facilities shall be capable of ensuring that unauthorised persons or animals cannot gain access to such chemicals.

The Contractor shall provide at his/her own cost any security measures he/she may deem necessary for safe and effective execution of the work within the contract area.

A7.3 The Contractor shall appoint at each work site personnel whose sole task shall be to be on the lookout for approaching rail traffic. These employees shall operate an audible warning device to timeously warn all people on the work site of approaching rail traffic.



An effective safety procedure to be followed by all personnel on any work site in the case of approaching rail traffic shall be compiled by the Contractor and implemented before any work commences. The procedure shall be updated whenever the need arises and any changes shall be communicated to all employees on a work site before work proceeds.

The personnel of the contractor shall at all times during bush and tree felling operations wear reflective safety jackets. These reflective jackets must either be yellow or light blue and preferably bear the name of the contractor's company. Should the contractor wish to use another colour this must first be cleared with the Manager or his/her deputy.

**The Contractor shall make available employees to be trained, certificated and used as lookouts when required. The training shall be done at no charge to the Contractor.**

#### **A8 SCHEDULE OF QUANTITIES AND PRICES**

A8.1 The quantities in the Schedule of Prices are estimated and may be more or less than stated. The Contractor shall submit with his/her tender a complete and detailed priced Schedule (prepared in ink) for the Works.

A8.2 The Tenderer shall price each item. If the Contractor has omitted to price any items in the Schedule, the cost of the work included in such items will be held to be spread over and included in the prices given in the other items of work.

The absence of stated quantities in the Schedule is no guarantee that none will be required. Reasonable prices should therefore be inserted for every item as these prices may be considered in adjudication of tenders.

A8.3 The short descriptions of the items in the Schedule are for identification purposes only. The Transnet US7 Standard Terms and Conditions of Contract together with the Special Conditions of Contract and Specifications shall be read in conjunction with the Schedule. In so far as these documents have any bearing, they shall be referred to for details of the description, quality, and test of plant and material used, and the workmanship, conditions, obligations, liabilities and instructions generally which shall be complied with in carrying out the Contract. The cost of complying with all conditions, obligations and liabilities described in the contract documents including profit, shall be deemed to be included in the rates quoted by the Contractor in the Schedule of Prices.

#### **A9 CONTRACT PRICE AND ADJUSTMENT FACTOR**

No contract price adjustment will be applicable in this contract. Any price increase due to escalation will be for the Contractor's account and any price decrease will be to his/her benefit.

#### **A10 VALUE-ADDED TAX**



Value-added tax in terms of the Value-added Tax Act No. 89 of 1991 should not be included in the tendered rates. Provision is made in the Schedule of Prices for the lump addition of Value-added Tax.

**A11 SITE MEETINGS**

The Contractor shall attend site meetings when required. These meetings will be held under the chairmanship of the Manager or his/her deputy. When sub-contractors are required to attend, the Contractor shall ensure their attendance.

**A12 SITE BOOKS**

A12.1 The Contractor shall provide a site instruction book and a daily diary at the site as directed by the Manager for the duration of the contract.

A12.2 The site instruction book shall only be used by the Manager or his/her deputy and will be used for the issuing of instructions to the Contractor.

A12.3 The Contractor shall complete the daily diary and a detailed description of the work done shall be recorded on a daily basis. Neither of the books shall be removed from the site without the permission of the Manager or his/her deputy.

**A13 INFORMATION TO BE PROVIDED WITH TENDER**

The Tenderer shall submit the following information at the time of tendering:

A13.1 Full description of the plant and methods of control to be used by him/her for all aspects of the work required to ensure performance as specified.

A13.2 Whether the tenderer intends to work on Saturdays, Sundays or statutory holidays or is prepared to work on such days if required to do so by Transnet Freight Rail.

A13.3 Proof of inspection of all sites on the enclosed Site Inspection Certificate.

A13.4 The Schedule of Prices must be completed in full.

A13.5 An undertaking that all equipment will be ready for operation and that the work can commence timeously, to comply with requirements of the contract.

A13.6 A list of registered herbicides to be used in the work, supported by specimen labels, indicating:  
Trade name  
Generic name  
Registration Number  
Ingredients (type and content) as shown on the label  
Application rates



Where herbicides are to be used for stump treatment **e.g. Chopper be used** it is required that a suitable colourant be added to the herbicide or that an herbicide containing a colourant be used. Detail of the colorants, and with which products they are to be used, must be provided.

The Manager or his/her deputy's approval shall first be obtained for use of other herbicides.

- A13.7 A description of the methods to be used for controlling the vegetation must be provided. Where herbicides are to be used the description and rate of application of chemicals, design mixtures, the precautions to be taken to prevent damage of adjacent vegetation, and any other relevant information must be given.

The methods of vegetation control, description and rates of herbicidal application submitted shall serve as the minimum basis for estimating performance and vegetation control by the Contractor.

The Contractor shall not depart from the methods of vegetation control or minimum herbicide usage tendered, without approval from the Manager or his/her deputy.

- A13.8 **A copy of the certificate issued by the Department of Agriculture to certify that the tenderer or his/her representative is a pest control operator in terms of Act 36 of 1947, as stipulated under clause A4.2, must be submitted.**

- A13.9 The contractor must indicate whether he/she intends using sub-contractors. No sub-contractors will be allowed on site without the prior permission of the Manager

## B. PROJECT SPECIFICATION

### B1 SCOPE

B1.1 B1.1 The scope of the work covers the cutting of trees and bushes to a maximum height of 300mm, and the treatment of tree stump with an approved herbicides form Koster to Mafikeng in the rail reserved under the geographical area controlled by the Depot Engineer, Krugersdorp.

B1.2 **Certain protected plant species and desirable plants are not to be controlled or removed and this plant material will be identified by the Manager or his/her deputy) prior to the start of the Contractor's program.**

B1.3 This part covers the techniques, types and use of spraying equipment, required standards of workmanship, inspections, measurement, payment, and acceptability of the works in respect of the control of vegetation required in terms of the contract.

B1.4 The essence of the contract is that Transnet Freight Rail requires vegetation to be brought under control and maintained at a certain standard as specified, for the duration of the contract period.

B1.5 The ways and means by which the above-mentioned results are obtained are the responsibility of the Contractor. Transnet Freight Rail, however, shall have the right to monitor the materials and activities of the Contractor to ascertain that all procedures and herbicidal applications are in accordance with his/her tender, the relevant legislation and are conducive to the achievement of long term control of vegetation. Such right of monitoring shall be entirely without prejudice to Transnet Freight Rail and shall in no way relieve the Contractor of his/her responsibility for satisfactory control of vegetation.

B1.6 Failure to comply with the minimum performance proposed by the Contractor in his/her tender may form the basis for non-payment for work done, pending the achievement of control as defined and/or termination or cancellation of the contract.

### B2 DEFINITIONS

#### B2.1 CONTROL

Control is achieved when;

- Woody and certain plant material, i.e. trees, bush, declared weed, declared invader plants and reeds, has been cut back to a height of 0.3 metre and that the remaining stumps and growth cease to exist as living organisms or entities (killed),



- No new growth, such as seedlings or saplings, of woody plant material and reeds, of any height, occur,
- Plant material, other than woody plant material and reeds stipulated above, remains alive,
- All cut, dead or dry remains of any vegetation within the treated area are completely removed from Transnet Freight Rail property, or to sites designated on Transnet Freight Rail property by the Manager or his/her deputy,
- All branches of plants, outside the area to be controlled, which protrude or hang over into the area to be controlled, are removed.

B2.1.1 Control constitutes a process or situation where the control of vegetation on treated areas occurs on an **on-going basis** and not only at the time of measurement and payment inspections.

B2.1.2 Declared weeds means category 1 plants and declared invader plants means category 2 and 3 plants proclaimed under the Conservation of Agricultural Resources Act, Act No. 43 of 1983, including amendments (GN Regulation 1048 of 25/05/1984 amended by GN Regulation 280 of 30/03/2001) thereto.

## B 2.2 WORK AREA

For the purpose of this contract the work will be measured either in square metre or individually as stipulated in the Schedule of Prices. The work to be done will be subdivided into sections as stipulated in the Schedule of Prices.

## B 2.3 MODERATE TO DENSELY POPULATED GROWTH (GROUP A)

Group "A" is vegetation growth that is moderate to heavily dense and is not practical to count the individual trees or bushes for the purpose of this contract. This Group (A) will be measured in square meters (m<sup>2</sup>) as indicated in the schedule of quantities.

The area to be controlled consists of a strip of 5 metre wide along sections on either side of the railway line(s) specified in paragraph B1.1 unless otherwise stipulated by the Manager or his/her deputy. These strips will run parallel to the railway line(s). The starting distance of the inner dimensions of these strips, i.e. closest to the railway line, will be 3 metre measured from the centre of the closest railway line. See sketch (Annexure 1). In yards it is the area parallel to the outermost rail and measured 8 metre from the centerline of the outermost rail, or as otherwise stipulated by the Manager.

## B 2.4 INDIVIDUAL TREES (GROUP B)

Trees, which for this contract are quantifiable into individual trees and classified according to girth and into classes, are indicated in the schedule of quantities.

**B 2.5 MANAGER OR HIS/HER DEPUTY**

The Manager pertaining to this tender will be the Technical Support Manager of the Infrastructure Maintenance Depot, Sthembiso Jwara, and his deputy will be a person he/her has delegated the responsibility to in his/her absence.

**B 2.6 ELECTRICAL OFFICER OR HIS/HER DEPUTY**

The Electrical Officer pertaining to this tender will be the Engineering Assistant (Electrical department) of the Infrastructure Maintenance Depot, or as otherwise advised.

**B3 METHOD OF VEGETATION CONTROL**

B3.1 The Contractor's methods and program shall provide rapid and effective control in all areas. Techniques, programming and chemicals employed shall therefore be directed at this aim. The Contractor shall carry out immediate action to control growth in all instances where rapid and effective control is not achieved during any period of the contract.

B3.2 Plant material, other than woody material and reeds stipulated in clause B2.1, such as grasses and herbaceous plants are to remain alive to prevent soil erosion.

B3.3 Burning and hoeing ("Skoffeling"), of plant material will not be allowed as a method of control. Herbicides which act as a scorching agent (e.g. with Paraquat or similar active ingredients) shall not be used.

B3.4 Any deviation from the method of work submitted as per clause A13.1 by the Contractor shall be subject to the approval of the Manager.

B3.5 Where plant material, stipulated in clause B1.2 and B3.2, is severely damaged or destroyed due to negligence on the part of the Contractor, the Contractor shall be held responsible for the full reinstatement thereof.

**B4 STANDARDS OF WORKMANSHIP**

B4.1 Plant material, other than woody plant material and reeds, must be alive.

B4.1.2 Cut woody plant material, i.e. trees, bush, declared weeds and declared invader plants, as well as reeds must cease to exist.

B4.1.3 There must be no cut, dead, or dry remains of any vegetation within the treated area. In instances where the Contractor is allowed to stack vegetative material elsewhere in the rail reserve, this material will be neatly stacked according to the requirements of the



Manager or his/her deputy. Branches of bushes and trees must be cut in sections of one metre or less before stacking.

#### B4.2 OVERALL CONTROL

B4.2.1 The overall standard of control to be achieved by the Contractor over the contract area, defined as "Overall Control" and expressed as a percentage, will be determined by application of the following formula;

$$\text{Overall Control} = \frac{(\text{SquareMetre / Trees controlled} - \text{SquareMetre / Trees rejected})}{\text{SquareMetre / Trees controlled}} \times 100$$

B4.2.2 The minimum percentage of the total work that shall comply with the standard of control, shall be 80%. This measurement will be applicable for each inspection carried out during the term of the contract.

B4.2.3 Failure by the Contractor to achieve the standard of "Overall Control" shall enable the Project Manager to terminate the Contract in terms of the Transnet US7 Standard Terms and Conditions of Contract.

#### B5 PROGRAMME OF WORK

B5.1 The Contractor shall undertake the planning and programming of the entire vegetation control operation and shall submit to the Manager for approval full particulars thereof within 2 weeks from the date of notification by Transnet Freight Rail.

B5.1.1 Transnet Freight Rail requires that the initial works be completed within **12 weeks** from the date of notification by Transnet Freight Rail.

B5.2 The particulars to be provided in respect of the Contractor's vegetation control program shall include but not be limited to the following:

B5.2.1 An assessment, based on a proper site investigation of the nature and types of vegetation to be controlled in the contract area,

B5.2.2 The appropriate methods and procedures to be implemented by him/her to achieve the standards of vegetation control required in terms of the contract,

B5.2.3 The chemicals to be applied, design mixes, rates of application and the timing and number of applications.

B5.2.4 The methods and procedures to be implemented in mixing of chemicals pertaining to health and safety, quality control, protection of third parties and security,



- B5.3 The Contractor shall conduct regular site investigations and monitoring procedures for the purpose of :
- ascertaining factors that could influence the work;
  - monitoring the standard of vegetation control achieved;
  - identifying any damage or hazards which may have been caused by the vegetation control operation, and
  - planning of timeous execution of remedial work where control is not being achieved.

B5.4 In addition to the annual program provided for in terms of B5.1, the Contractor shall submit daily working programs to the Manager, 7 days in advance of the next working week, indicating the specific areas where the Contractor will be working each day of the week. Failure by the Contractor to submit a daily program and/or deviating from it without notifying the Manager, preventing him/her from monitoring the Contractor's performance, may result in payment for such work being withheld.

## **B6 PERFORMANCE MONITORING AND EVALUATION**

B6.1 The Contractor shall at all times be responsible for supervision of the work and for follow-up inspections to monitor the successful control achieved over areas of completed application. He/she shall immediately take appropriate remedial action in areas where the specified standards of control are not achieved.

B6.2 The Manager or his/her deputy shall at any time during the operation carry out inspections of the Contractor's performance methods and procedures. He/she may at any time take samples of the chemicals applied and arrange for the testing thereof. Where test-samples fail to conform to the specifications the costs of testing will be recovered from the Contractor. The Manager may order the Contractor to retreat entire sections where such chemicals were applied.

B6.3 The Manager or his/her deputy shall, during the contract period, carry out two official inspections of the work for the purpose of measuring progress and evaluating whether control, as defined, has been achieved.

**The Manager or his/her deputy will inform the Contractor 14 days in advance of the program of these inspections and will arrange the transport such, that adequate space and time is available for the purpose of the inspection.**



**The inspections shall be performed visually and the Contractor shall be present or forfeit his/her right to dispute the measurements and evaluation of the Manager or his/her deputy.**

- B6.3.1 The first inspection will take place at or within 2 weeks after completion of the Contractor's initial program and at which time control as described in B2.1 shall have been achieved.
- B6.3.2 The second inspection will take place at or within 2 weeks after **4 weeks** from the date of notification by Transnet Freight Rail, and will be evaluated on the specified level of control as described in B2.1.

## **B7 REMEDIAL WORK**

- B7.1 The Contractor shall carry out remedial work to all work where control has not been achieved, prior to the official inspections in terms of clause B6 taking place. Such remedial work shall include the removal of cut, dry or dead growth from the controlled work area.
- B7.2 The Manager may, at any time after the first measurement order the Contractor to carry out remedial action, to commence within 2 weeks after being so ordered. Prior to the commencement of this proposed remedial action an envisaged remedial work program must be submitted to the Manager for his/her approval. Failing to do so the Manager may arrange for such action to be carried out by others at the cost of the Contractor.

## **B8 DAMAGE TO FAUNA AND FLORA**

- B8.1 The Contractor shall ensure that his/her employees at all times exercise care and consideration for the fauna and flora within and adjacent to the area to be sprayed. The Contractor shall take the presence of drainage works within yards or depots into account and shall ensure that no water-borne movement of herbicides is possible.
- B8.2 The Contractor shall not apply any chemicals of an explosive, inflammable, highly volatile or corrosive nature, which may damage crop vegetation or property, or be hazardous to humans or animals. The Contractor shall assume full responsibility for the efficiency and safety of whatever chemicals are used.
- B8.3 Dumping or polluting of any kind will not be permitted. This stipulation is also applicable to the washing out of tanks and equipment containing harmful chemicals and pollutants.

The Contractor shall institute and maintain procedures for the safe disposal of all chemicals and residual materials originating from the execution of the works.

Containers and residual material shall not be disposed of on Transnet Freight Rail property or as part of Transnet Freight Rail refuse.



- B8.4 The Contractor shall take particular note of environmentally sensitive areas and shall plan and execute his/her work with the utmost care and responsibility.
- B8.5 **Burning will not be allowed under any circumstances as a means of control. The making of fires, for whatever purpose, on Transnet Freight Rail property is also strictly prohibited.**

## **B9 MEASUREMENT AND PAYMENT**

- B9.1 Payment will be based on the numbers of trees treated as instructed by the Manager and to which the Contractor successfully applied the vegetation control measures and has achieved the standard of control defined in clause B2.1.
- B9.3.1 After completion of the initial program of the entire contract area the Manager or his/her deputy and the Contractor will measure and evaluate the work performed in terms of clause B6.3.1 (number of square metre treated). The Contractor will thereafter receive payment at **50%** of the rates tendered for all work where control as specified has been achieved.
- B9.3.2 A second measurement and evaluation will be made concurrent with the second official inspection conducted in accordance with clause B6.3.2. The Contractor will thereafter receive payment at **50%** of the rates tendered for all work where control as specified has been achieved.