PROJECT SPECIFICATION

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1. DESCRIPTION OF THE WORKS

1.1. EMPLOYERS OBJECTIVE

- 1.1.1. The essence of the Agreement is that Transnet Freight Rail requires the control of living vegetation, and the management of dead remains of previously living vegetation, to the extent that areas treated in terms of the Agreement are free from any form of vegetation (dead or otherwise) which may obstruct, hinder or interfere with operational activities, or have the potential to damage equipment or facilities, on tracks or other areas included in the Agreement.
- 1.1.2. The ways and means by which the above-mentioned results are obtained are the responsibility of the Supplier. Transnet Freight Rail, however, shall have the right to monitor the materials and activities of the Supplier 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 Supplier of his/her responsibility for satisfactory control of vegetation.
- 1.1.3. Failure to comply with the minimum performance proposed by the Supplier 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 Agreement.
- 1.1.4. The Supplier must obtain his/her own information regarding the extent, occurrence and the species of the vegetation over the work area. He/she must also determine the best method to control the vegetation.
- 1.1.5. The performance due by the Supplier shall include any work arising from or incidental to the above or required of the Supplier for the proper completion of the Agreement in accordance with the true meaning and intent of the Agreement documents.
- 1.1.6. The Agreement will only be awarded to a tenderer who has the required experience in the application of herbicides in Southern Africa as stipulated in terms of the Fertilizers, Farm Feeds, Agricultural Remedies and Stock Remedies Act, Act 36 of 1947.

1.2. OVERVIEW OF THE WORKS

The Agreement covers the control of vegetation in mainly yards including declared weeds and declared invader plants, by means of chemical herbicides on Transnet property, to the extent that areas treated chemically or otherwise in terms of this Agreement are rendered and maintained free from obstructing vegetation as defined for the periods specified herein.

1.3. LOCATION OF THE WORKS

- 1.3.1. The location of the works is as indicated in the Schedule of Requirements and is in the geographical area controlled by the Depot Engineering Manager, Port Elizabeth.
- 1.3.2. Transnet Freight Rail's representative will provide one-copy schematic diagrams to the successful tenderer, indicating the areas to be treated.

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1.4. DURATION OF AGREEMENT

The work provides for the control of vegetation for commencement on the date of notification of acceptance of tender with Transnet Freight Rail for a period of **3 annual rainy seasons not exceeding 36 months**. The start date and completion date of the contract must be aligned with the annual rainy season to ensure optimal results.

2. GENERAL MAINTENANCE ASPECTS

2.1. PLANT AND MATERIAL

- 2.1.1. Any plant and/or equipment provided to the Supplier at the beginning of the Agreement shall be returned to Transnet Freight Rail in the same condition, normal wear and tear accepted. Any loss or damage shall be made good by the Supplier, or the value thereof will be deducted from moneys falling due to him/her.
- 2.1.2. The Supplier shall provide written certification of compliance with specification of any materials (chemical) or equipment supplied by him / her.

2.2. CONSTRUCTION EQUIPMENT

All equipment necessary to execute the works shall be supplied by the Supplier.

2.3. EXISTING SERVICES

- 2.3.1. Reinstatement of services and property damaged during execution of the work.
- **2.3.2.** Any damages caused by the Supplier to Transnet property and services shall be rectified by the Supplier at his own cost and to the full satisfaction of the Transnet Freight Rail's representative.

2.4. SITE ESTABLISHMENT

2.4.1. SERVICES AND FACILITIES PROVIDED BY THE EMPLOYER:

- 2.4.1.1. In the case of an agreement for vegetation control the following may be provided where available:
- 2.4.1.2. Any water as required from Transnet Freight Rail's existing points of supply; such water may be untreated, chemically treated or borehole water. The Supplier shall be responsible for all work and equipment needed to fill the water trucks or spray units from the water points provided and to ensure that the water is suitable for its intended use. These water points may be up to 200km apart, or more. There is no guarantee of water availability at all stations or yards due to the closure of some infrastructure and also on-going drought in the region.
- 2.4.1.3. Road vehicle accessibility via service roads to the work site is not always possible.
- 2.4.1.4. Inspections of the areas of work by motor trolley may be arranged with the Project Manager's Deputy, but will have to coincide with normal track inspections carried out by the inspection /

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technical staff of the Depot. The Project Manager's Deputy shall be given timeous notice (4 calendar weeks) of the Supplier's intention to inspect.

2.4.2. TO BE PROVIDED BY THE SUPPLIER

- 2.4.2.1. In addition to all labour materials, plant, equipment, and incidentals needed to complete the work, the Supplier shall provide all accommodation and toilet facilities for his/her employees.
- 2.4.2.2. The Supplier 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.
- 2.4.2.3. The Supplier 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 Agreement area.
- 2.4.2.4. The personnel of the Supplier shall at all times, while on Transnet Freight Rail property and during vegetation control operations, wear reflective safety jackets. These jackets must either be yellow or light blue and preferably bear the name of the Supplier's company. Should the Supplier wish to use another colour this must first be cleared with the Project Manager's Deputy.
- 2.4.2.5. An effective safety procedure to be followed by all personnel on any Transnet Freight Rail work site shall be compiled by the Supplier 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.
- 2.4.2.6. The supplier is to always provide suitable accommodation for his/her employees. **No** facilities exist within TFR for accommodation.
- 2.4.2.7. The supplier is to provide a program for upliftment of local communities in the areas where work will be carried out. Where possible, the Supplier will make use of the community members for slashing and removal of overgrown vegetation.

3. MANAGEMENT OF THE WORKS

3.1. SITE MEETINGS

The Supplier shall attend site meetings when required. These meetings will be held under the chairmanship of Transnet's representative. These meetings will be conducted to monitor progress and discuss agreed issues when required. A register will be kept of attendance and a minute of the proceedings will be recorded and distributed afterwards. When subsuppliers are required to attend, the Supplier shall ensure their attendance.

3.2. SITE BOOKS

- 3.2.1. A Site Instruction Book, A4 size, with triplicate pages shall be provided by the Supplier. The format for written communication on site shall be the Site Instruction Book. The site instruction shall have numbered sheet for receiving and recording instructions by the Employer's representative and shall be clearly marked "Site Instruction Book".
- 3.2.2. A Daily Diary Book with triplicate pages shall be provided by the Supplier and be available on site at all times. The number of staff and plant on site for every day shall be recorded. The hours of actual work and the accurate amount of work measured per item as in the Project Specification updated 9 March 2016

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Schedule of Requirements completed for each day shall also be recorded and signed off by both Transnet Freight Rail (TFR) and the Supplier at the end of each day. This site diary shall also serve as a daily record of all relevant information concerning herbicide application and site conditions prevailing on site and as required in terms of section 16 of Act 36 of 1947.

3.2.3. Only persons authorised in writing by the Project Manager or Supplier may make entries in the site books.

3.3. PROGRAMME OF WORK

- 3.3.1. The Supplier shall undertake the detailed planning and programming of the entire vegetation control operation and shall submit this with the tender document. The programme shall be aligned with the commencement of the annual rainy season as the case may be.
- 3.3.2. The particulars to be provided in respect of the Supplier's vegetation control programme shall include but not be limited to the following:
- 3.3.3. An assessment, based on a proper site investigation of the nature and types of vegetation to be controlled in the Agreement area,
- 3.3.4. The appropriate methods and procedures to be implemented by him/her to achieve the standards of vegetation control required in terms of the Agreement,
- 3.3.5. The chemicals to be applied, design mixes, rates of application and the timing and number of applications.
- 3.3.6. The methods and procedures to be implemented in mixing of chemicals pertaining to health and safety, quality control, protection of third parties and security,
- 3.3.7. The Supplier shall conduct regular site investigations and monitoring procedures for the purpose of:
 - Ascertaining the nature of weed infestation and factors that could influence the work,
 - monitoring the standard of weed control achieved,
 - identifying any damage or hazards which may have been caused by the weed control
 operation, and
 - planning of timeous execution of remedial work where control is not being achieved.
- **3.3.8.** The Supplier's programme shall allow for the initial application of herbicides to coincide with the rainy season, for achieving maximum success. The programme shall be completed in the shortest possible time not exceeding eight, (8) weeks.
- 3.3.9. If the Supplier uses different herbicides from those approved by the Project Manager's Deputy, approval shall first be obtained in writing for use of other herbicides.
- 3.3.10. The programme shall be based on the quantities and numbers of worklots shown in the Schedule of Requirements.
- 3.3.11. In addition to the annual programme provided the Supplier shall submit daily working programmes to the Project Manager's Deputy, 7 days in advance of the next working week, indicating the specific areas where the Supplier will be working each day of the week. Failure by the Supplier to submit a daily programme and/or deviating from it without notifying the

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Project Manager's Deputy, preventing him/her from monitoring the Supplier's performance, may result in payment for such work being withheld.

3.3.12. It is required that for the duration of the contract that the supplier shall base his / her work programme on the provision of at least **two fully operational teams**, consisting of 8 - 10 persons per team, to commence work at different locations as will be indicated by the Technical Officer.

3.4. PERFORMANCE MONITORING AND EVALUATION / INSPECTIONS

- 3.4.1. The Supplier 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.
- 3.4.2. The Project Manager's Deputy shall at any time during the application periods carry out inspections of the Supplier'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 supplier and he/she may be ordered by the Project Manager's Deputy to re-treat entire worklots or sections where such chemicals were applied.
- 3.4.3. The Project Manager's Deputy will during the contract period, carry out **twelve** official inspections for the entire duration of the contract namely, **four** inspections in each season of the work. For the purpose of measuring progress and evaluating whether control, as defined, has been achieved. The inspections shall be performed visually, and the Supplier shall be present or forfeit his/her right to dispute the measurements and evaluation of the Project Manager's Deputy.
- 3.4.4. The first inspection shall comprise of several visits by the Project Manager's Deputy with the aim of measuring and evaluating work done during the initial spraying programme. With each visit the site diaries will be signed by the Project Manager's Deputy and the Supplier's Supervisor on site, namely the Pest control Operator.
- 3.4.5. The second inspection shall be done at [7] weeks after completion of the Supplier's initial spraying programme for the 1st season and after he/she has notified the Project Manager's Deputy that he/she has inspected the work and that control as specified has been achieved or clear signs are evident that control is in the process of being achieved.
- 3.4.6. The third inspection shall be done at, or within [20] weeks after completion of the Supplier's initial spraying programme for the 1st season and after he/she has notified the Project Manager's Deputy that he/she has inspected the work and that control as specified has been achieved. This inspection may be brought forward but not by more than four (4) weeks.
- 3.4.7. The fourth inspection shall be done at, or within [36] weeks after completion of the Supplier's initial spraying programme for the 1st season and after he/she has notified the Project Manager's Deputy that he/she has inspected the work and that control has been achieved. This inspection may be brought forward but not by more than four (4) weeks.

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- 3.4.8. The fifth inspection shall comprise of several visits by the Project Manager's Deputy with the aim of measuring and evaluating work done during the initial spraying programme for the 2nd season. With each visit the site diaries will be signed by the Project Manager's Deputy and the Supplier's Supervisor on site, namely the Pest control Operator. The final visit for this inspection shall be done after completion of the entire agreement area and after the Supplier has notified the Project Manager's Deputy that he/she has completed the work and that control as specified has been achieved as per but not restricted to clause 5.1.2.2 and 5.7 (95% overall ongoing control).
- 3.4.9. The sixth inspection shall be done at [7] weeks after completion of the Supplier's initial spraying programme for the 2nd season and after he/she has notified the Project Manager's Deputy that he/she has inspected the work and that control as specified has been achieved or clear signs are evident that control is in the process of being achieved.
- 3.4.10. The seventh inspection shall be done at, or within [20] weeks after completion of the Supplier's initial spraying programme for the 2nd season and after he/she has notified the Project Manager's Deputy that he/she has inspected the work and that control as specified has been achieved. This inspection may be brought forward but not by more than four (4) weeks.
- 3.4.11. The eighth inspection shall be done at, or within [36] weeks after completion of the Supplier's initial spraying programme for the 2nd season and after he/she has notified the Project Manager's Deputy that he/she has inspected the work and that control has been achieved. This inspection may be brought forward but not by more than four (4) weeks.
- 3.4.12 The ninth inspection shall comprise of several visits by the Project Manager's Deputy with the aim of measuring and evaluating work done during the initial spraying programme for the 3rd season. With each visit the site diaries will be signed by the Project Manager's Deputy and the Supplier's Supervisor on site, namely the Pest control Operator. The final visit for this inspection shall be done after completion of the entire agreement area and after the Supplier has notified the Project Manager's Deputy that he/she has completed the work and that control as specified has been achieved as per but not restricted to clause 5.1.2.2 and 5.7 (95% overall ongoing control).
 - 3.4.13 The tenth inspection shall be done at [7] weeks after completion of the Supplier's initial spraying programme for the 3rd season and after he/she has notified the Project Manager's Deputy that he/she has inspected the work and that control as specified has been achieved or clear signs are evident that control is in the process of being achieved.
- 3.4.14 The eleventh inspection shall be done at, or within [20] weeks after completion of the Supplier's initial spraying programme for the 3rd season and after he/she has notified the Project Manager's Deputy that he/she has inspected the work and that control as specified has been achieved. This inspection may be brought forward but not by more than four (4) weeks.
- 3.4.15 The twelfth inspection shall be done at, or within [36] weeks after completion of the Supplier's initial spraying programme for the 3rd season and after he/she has notified the Project Manager's Deputy that he/she has inspected the work and that control has been achieved. This inspection may be brought forward but not by more than four (4) weeks.

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- 3.4.16 During each of these inspections the worklots treated will each be measured and evaluated. A worklot that does not comply with the specified level of control will be recorded as a "rejected worklot".
- 3.4.17 The rejection of worklots that do not comply with the standard of control for individual worklots will be final and valid for that inspection in that particular year.

The rejection by the Project Manager's Deputy of work performance may be contested by the Supplier only at the time and place of rejection.

The rejection of a worklot at a particular inspection shall remain final for that inspection for payment purposes, notwithstanding the fact that the Supplier may execute further remedial work in order to achieve control at further and final inspections.

3.4.18 In the case where the Project Manager's Deputy and the Supplier fail to agree on whether a worklot has failed, the worklot shall be recorded as a "disputed worklot" and the Supplier shall prepare an appropriate record of all disputed worklots in order that such disputes may be resolved by way of the disputes resolution procedures stipulated in the clause 25 of the standard terms and conditions of contract for the provision of services to Transnet (form US7-Services).

4 ENVIRONMENTAL REQUIREMENTS

4.4 COMPLIANCE WITH STATUTES

- 4.4.12 The Supplier's procedures for the procurement, storage, handling, transportation, application and general use of chemicals shall comply with all applicable legislation, Codes of Practice and Local, Regional or Provincial Authorities, including but not restricted to:
 - 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 National Environmental Management Act (Act 107 of 1998).
 - e) The National Environmental Management Biodiversity act (Act 10 of 2004).
 - f) SABS Code of Practice No. 0206-1985 "Safety procedures for the disposal of surplus pesticide and associated toxic waste".
 - g) Conservation of Agricultural resources Act (Act 43 of 1983) as amended.
 - h) Common law of nuisance.
 - i) Mountain Catchment Area Act (Act 63 of 1970).
 - j) The National Veld and Forest Fire Act (Act 101 of 1989)
- 4.4.13 The Supplier's authorised representative on site shall be a **registered Pest Control Operator**, specialising in the field of **industrial weed control** and registered in terms of the Farm Feeds Agricultural and Stock Remedies Act, Act 36 of 1947 as amended. A registered Pest Control Operator shall be in direct control of work taking place on site.

In the event of work taking place on numerous sites at the same time, the Supplier must ensure that there is a registered Pest Control Operator on each site.

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If a different Pest Control Operator from the one provided in the tender document is allocated to a specific team the Project Manager's deputy must be notified in writing together with a copy of a valid Pest control Operator certificate.

4.5 DAMAGE TO FAUNA AND FLORA

- 4.5.12 The Supplier 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.
- 4.5.13 The Supplier shall not apply any chemicals of an explosive, inflammable, highly volatile or corrosive nature, which may damage crops vegetation or property or be hazardous to humans or animals. The Supplier shall assume full responsibility for the efficiency and safety of whatever chemicals are used.
- 4.5.14 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 Supplier 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.

4.5.15 The Supplier shall take particular note of environmentally sensitive areas and shall plan and execute his/her work with the utmost care and responsibility.

5 PARTICULAR SPECIFICATIONS

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 Agreement.

5.4 DEFINITIONS

5.4.1Project Manager's Deputy. Any person appointed by the Employer to deputise for him / her in supervising and carrying out the Agreement.

5.4.2 CONTROL

- **5.4.2.1** Control is achieved when all existing or potential growth of vegetation is permanently impaired or destroyed by the application and effects of chemical herbicides, to the extent that:
 - The constituent parts of all plants occurring within the area of treatment (worklots) cease to exist as living organisms or entities; and
 - the development of new growth of plants from dormant seeds is effectively counteracted or suppressed, for at least the growing season of the year in question; and
 - there are no dead or dry remains of any vegetation within the treated area (worklot), which may constitute a hazard, danger, or hindrance to Transnet Freight Rail personnel, equipment trucks or operations.

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

5.4.3 WORKLOTS

- **5.4.3.1** A WORKLOT is a subdivision of any area on which the Supplier shall control vegetation.
 - In the case of yards and areas of a worklot will be areas of 300m² each.
 - Worklots in yards, depots/areas are not demarcated individually. The number of worklots within any area to be treated is calculated by dividing the total surface area by the surface area of single worklot i.e. 300 square metres.
 - In yards, depots/areas where control is required worklots may be irregular in shape. For inspection and payment purposes, worklots shall be physically measured where necessary. In such instances the Project Manager's Deputy shall decide in advance and advise the Supplier accordingly, of the method of measurement to be adopted in any particular area.
 - In yards, depots/areas worklots will normally be measured parallel to the main direction of the track work present, or parallel to the main axis of any other area. Worklots will not be measured individually in different directions but will form part of a pattern of continuous and parallel worklots covering, in the most effective manner possible, the surface of any particular area.
 - A worklot for cable routes will normally be areas of 0.75m wide on both sides and parallel to the cable route and 200m long.
- 5.4.3.2 However, if any provisional worklot has been sprayed under this Agreement the previous year and the same worklot is again sprayed the next year, payment for the second and consecutive years sprayed would be at the normal rate applicable for that area and the work would be considered as additional work to the Schedule of Requirements.

5.4.4 SEASON

- **5.4.4.1** A season is a division of the year and for the purpose of this document the first and second season falls into two different years and coincides with the rainy season for that year for the area as specified.
- **5.4.4.2** The rainy season is the time of the year when most of the specified area's average rainfall occurs.
- **5.4.5** Formation is the finished earthworks surface upon which the track is laid.
- **5.4.6** Ballast means that part normally consisting of crushed stone, gravel, ash or muck, (the material placed on the formation to support the track superstructure).

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- **5.4.7** 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.
- **5.4.8** Spraying means the even and uniform application of chemical herbicides at the rate specified and applies to liquid, granular or any other formulation.

5.5 METHOD OF VEGETATION CONTROL

- **5.5.1** The Supplier'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 Supplier shall carry out immediate treatment of growth in all instances where rapid and effective control is not achieved during any period of the Agreement.
- **5.5.2** Where a chemical approach to vegetation control is adopted, hoeing (skoffel) will not be allowed as method of achieving control. Herbicides which act as a scorching agent (e.g. with Paraquat or similar active ingredient) are incapable of meeting the definition of control and shall not be used. Scorching of canopy growth only shall not constitute control of vegetation as defined. Slashing of dead material to below the height specified in **5.3.3.** will be permitted.
- **5.5.3** Vegetation control in terms of the Agreement will normally be required in respect of the yards. The type of herbicides and the methods of application to be employed are as specified in the applicable returnable documents (clause 8.2) and are subject to the approval of, and monitoring by the Project Manager's Deputy.
- **5.5.4** The Project Manager's Deputy's approval shall first be obtained for use of other herbicides.
- **5.5.5** Application methods shall, however, be entirely in accordance with the manufacturer's specifications and recommendations for safe and effective use of the herbicides or herbicide mixtures concerned.
- **5.5.6** Any deviation from the method of work submitted as per the applicable returnable document (Clause 8.2) by the Supplier shall be subject to the approval of the Project Manager's Deputy.

5.6 STANDARDS OF WORKMANSHIP

- **5.6.1** Standard of vegetation control for individual worklots.
- **5.6.2** Vegetation control shall be such that there is no live vegetation growth (including creepers) exceeding 150mm in any dimension, occurring in the worklot, nor more than fifteen (15) live plants of any lesser size.

This excludes overhanging canopy growth of plants: -

- (a) with rootstock established entirely outside the worklot.
- (b) with rootstock established on the boundary of the worklot, provided that:
 - control was achieved over the remainder of the worklot.
 - a clear spray line is visible, showing that herbicide was effectively applied over the entire surface of the worklot.
 - the Supplier took the presence of such growth into account and that the choice of herbicides and chemical use was adjusted accordingly.

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The boundary concerned is not the boundary of an adjoining worklot.

This exception does not apply in the case of creeping grasses (e.g. Cynodon) with nodal rooting within the worklot even though such growth may originate from a plant outside the worklot.

5.6.3 In addition, there shall be no dry or dead remains of vegetation within the worklot greater than 150mm in height and of a density such that it constitutes a hazard, hindrance or danger to Transnet Freight Rail operations, trucks or equipment in the area.

The evaluation to what density of dry or dead growth constitutes a hazard, hindrance or obstruction shall be made by the Project Manager's Deputy.

5.7 MANUAL REMOVAL OF VEGETATION

No felling or hoeing of vegetation will be allowed during the two months preceding final inspection. Herbicides may not be applied 2 weeks preceding final inspection for a season or a year's program. All lots where such hoeing and felling or herbicides application were done will be rejected.

For this Agreement, the Supplier should timeously acquaint him/herself with the existing conditions of the sites and ensure that his/her tender prices for the **first year only**, includes all work necessary to achieve the required control, e.g. slashing and removal of debris before or just after spraying. The intention to slash and remove should be cleared with the Project Manager's Deputy prior to work starting.

5.8 REMEDIAL WORK

- **5.8.1** The Supplier shall carry out remedial work to all worklots where control has not been achieved, prior to the official inspections taking place. Such remedial work shall include the removal of dry or dead growth with any dimensions in excess of 150mm and forming a nuisance or hazard to Transnet Freight Rail operations, from the treated worklots.
- **5.8.2** The Project Manager's Deputy may, at any time after the first measurement order the Supplier 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 Project Manager's Deputy for his/her approval. Failing to do so the Project Manager's Deputy may arrange for such action to be carried out by others at the cost of the Supplier.
- 5.8.3 Hoeing (skoffel) will not be allowed on its own as a remedial action.
- **5.8.4** Fire may not be used as a method of vegetation control or as a method of remedial action.
- **5.8.5** In the instance of resistance build-up to herbicides, particularly Glyphosate in Conyza species, The supplier is to indicate at time of tender what chemical herbicides they propose using and at what rates to achieve the desired overall control of vegetation.

5.9 OVERALL CONTROL

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5.10.1 The overall standard of control to be achieved by the Supplier over the Agreement area, defined as "Overall Control" and expressed as a percentage, will be determined by application of the following formula;

 $Overall Control = \frac{(Worklots treated - Worklots rejected)}{Worklots treated} x 100$

5.10.2 The standard of "Overall Control" (service level table) to be provided on each district by the Supplier shall be:

YEAR	1	2 and Consecutive years
Minimum % of the total work, which shall comply, with		
the standard of control for individual work-lots.	92	96

5.10.3 Failure by the Supplier to achieve the standard of "Overall Control" shall constitute a material breach of Agreement by the Supplier, which will entitle the Employer to act in terms of the standard terms and conditions of contract for the provision of services to Transnet (form US7- Services).

6 **GENERAL SPECIFICATIONS**

6.10 WORK SPECIFICATIONS

6.10.1 Standard Specifications. The following standard Specifications will be applicable to this Agreement:

- SANS 1200A General
- SABS Code of Practices no 0206-1983" Safety procedures for the disposal of surplus pesticides and associated toxic waste."
- 6.10.2 The Supplier shall at all times comply with the Basic Conditions of Employment Act as well as all other relevant labour legislation. The Supplier must conduct his own formal risk assessment to identify all risks. The Supplier is to clearly indicate in his tender submission the processes and procedures he intends implementing to mitigate the total of all these risks: e.g.
 - Working with herbicides
 - live OHTE
 - Executing work on one line while a normal train service is running on adjacent line/s
 - Sanitation and refuse disposal as a threat to the environment.

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6.11 HEALTH AND SAFETY

- 6.11.1 The Supplier shall at all time comply with safety rules, regulations and legislation, as well as Transnet Freight Rail (TFR) Safety Guidelines for Infrastructure (Latest Edition).
- 6.11.2 The Supplier shall be responsible to ensure the use of only technically competent trained staff on all types of work. The Supplier will have to ensure that the Supplier's personnel operating his/her own locomotives, haulage equipment, road rail vehicles or any other track vehicles on Transnet Freight Rail lines undergo a Transnet Freight Rail Operating course and also receive a certificate of track section competency. This cost is to be borne by the Supplier.
- 6.11.3 The Supplier shall ensure that all workers are appropriately equipped and wearing Personal Protective Equipment (PPE) and that Safety Talks are conducted and noted in the Site Diary before the start of every shift.
- 6.11.4 The Supplier shall be responsible to ensure that site staff are always competently trained with regards to Electrical Awareness Training.
- 6.11.5 The Supplier shall be responsible to ensure that workers working on machines (high risk areas), operators, machine fitters, area Project Manager's Deputies and Agreement 'supervisors' site staff are always competently trained with regards to PWC Electrical Educational Training.
- 6.11.6 The Supplier shall also be responsible to ensure that Agreement managers in charge of sites are always competently trained with regards to COM Competency Electrical Training (to follow PWC Training).
- 6.11.7 The Supplier shall ensure that all his employees undergo medical surveillance where required by legislation.
- 6.11.8 Non-compliance with safety requirements will result in an immediate suspension of work without payment.
- 6.11.9 Where training is required by the Supplier, Transnet Freight Rail (TFR) is committed to provide training, the Supplier shall qualify his tender as to what and how many staff, training will be required for. After award of the Agreement, the Supplier shall then arrange with the appropriate Transnet Freight Rail (TFR) representative, through the Project Manager's Deputy, for this training / testing.

Awareness (Electrical)Suppliers staff working near aand training.working on the Accredited Electrical trainer /Awareness (Electrical)Suppliers staff working near aand training.working on the Agreement	Course	Objective	Duration & trainer	Grade to attend
line on electrified sections of the	Áwareness	Suppliers staff working near a machine and on the line on electrified	and training.	 All workers and staff working on the Agreement

The following training shall be arranged for the following Suppliers staff:

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	dangerous situations of high voltage OHTE		
B) COM Competency (Electrical) (To follow A)	Work permits safe working procedures under the direct supervision of a responsible representative.	Lecture room training = 0,25 d On-the-job training = 0,25 d Criterion test = 0,5 days Total = 1 day Accredited Electrical trainer	Supervisor (Responsible person in charge at machine working)

- The electrical awareness training must be arranged for beforehand on-the-job.
- The electrical educational and competency training may be arranged for at either a depot's lecture room's (Transnet Freight Rail (TFR) property), or at a venue of the Suppliers choice (Suppliers cost).

6.3 Health, Risk and safety plan required

The respondents tendering for this project shall take note of the following when compiling Safety, health and environmental plan. Specification for works on, over, under or adjacent to railway lines and near high voltage equipment. (E7/1 July 1998) and shall have part A and B of Health and safety Plan as outlined below.

- Part A: Health and safety Plan
- 6.3.1. SHE Management Structure
- 6.3.1.1. Construction Work Supervisor (Construction Regulation 6)
- 6.3.1.2 Subordinate Construction Work Supervisor (Construction Regulation 6)
- 6.3.1.3. Construction Safety Officer (Construction Regulation 8).
- 6.3.1.4. List of Respondents already appointed List to be revised at least monthly.
- 6.3.1.5. Health and Safety Representative (Section 17 of OHS Act).
- 6.3.2 SHE Organisation
- 6.3.2.1 Health and Safety Committee.
- 6.3.2.2 Composition.
- 6.32.3 Frequency of Meetings.
- 6.32.4 Minutes of meeting.
- 6.3.2.5 Legal Compliance Audits.
- 6.3.2.6.Audit Report.

6.3.2.7 Frequency of Audits. Project Specification updated 9 March 2016 Control of vegetation in yards



6.3.2.8 Findings and Analysis.

- 6.3.2.9 Corrective Action.
- 6.3.3. Risk Assessment/Management
- 6.3.3.1. Task descriptions.
- 6.3.3.2. Risk Identification, Analysis, Mitigating Steps, Monitoring Steps and Review Plan.
- 6.3.3.3. Risk Assessment (Construction Regulation 7)
- 6.3.4. Education and Training
- 6.3.4.1. Induction training (Construction Regulation 7(9)
- 6.3.4.2. Site Specific Training.
- 6.3.4.3. Certificate of Competence.
- 6.3.5. Emergency Planning Evacuation plan
- 6.3.5.1. Client procedure.
- 6.3.5.2. Site Procedure.
- 6.3.6. Health and Safety Communications
- 6.3.6.1 Safety/Toolbox talks.
- 6.3.6.2 Incident Recall.
- 6.3.7. Safe Working Procedures and Methods
- 6.3.7.1 Method Statements.
- 6.3.7.2 Safe Operating Procedures.
- 6.3.7.3 Task /Job observations.
- 6.3.8. Personal Protective Equipment and Clothing
- 6.3.8.1 PPE required after all other controls have been considered.
- 6.3.8.2 PPE proof of issue.
- 6.3.9. Project security
- 6.3.9.1 Security risks identified.

6.3.9.2 Access control. Project Specification updated 9 March 2016 Control of vegetation in yards



Part B. Environmental Management Plan

Note: TFR will obtain Environmental authorisation (EIA and EMP) and permits from the relevant authority (when necessary) prior to commencement of the project (e.g. Construction)

- 1. Waste management.
- 2. Environmental Incident Management (Sect 28 NEMA and Sect 20 National Water Act).
- 3. Contamination of surface and underground water.
- 4. Soil Contamination.
- 5. Storm Water Drainage.
- 6. Environmental Clean-up and Rehabilitation.

1.3 MINIMUM PLANT AND EQUIPMENT REQUIRED

- 1.3.1 Knapsack Sprayers
- 1.3.2 Van or 1 ton Truck
- 1.3.3 Safety boots, goggles, jackets, gloves
- 1.3.4 Water tank for mixing chemicals

7 PRICING INSTRUCTIONS

7.10 GENERAL

- 7.10.1 Measurement and payment shall be in accordance with relevant provisions of clause 8 of each of the SANS 1200 Standardised Specifications for Civil Engineering Construction referred to in the Service Information.
- 7.10.2 The units of measurement described in these Schedule of Requirements are metric units. Abbreviations used in the Schedule of Requirements are as follows:

%	=	percentage
h	=	hour
ha	=	hectare
kg	=	kilogram
kl	=	kilolitre
km	=	kilometre
I	=	litre
m	=	metre
No.	=	number
Prov sum	=	Provisional sum
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Sum	=	Lump sum
W/day	=	Work day
R/only	=	Rate only
Worklot	=	area totalling 300m ²

- 7.10.3 For the purpose of these Schedule of Requirements, the following word shall have the meanings assigned to them:
 - Unit: The unit of measure for each item of work as defined in the COLTO Standard specification.
 - Quantity: The number of units of works for each item.
 - Rate: The agreed payment per unit measurement.
 - Amount: The product of the quality and the agreed rate for an item.
- 7.10.4 No allowance is made for waste on items in the Schedule of Requirements.
- 7.10.5 It will be assumed that the prices included in the Schedule of Requirements are based on Acts, Ordinances, regulations, By-laws, International Standards and National Standards that were published 28 day before the closing date for tenders.
- 7.10.6 Such prices and rates cover all costs and expenses that may be required for the execution of the works described in accordance with the provisions of the Service Information, and shall cover the cost of all general risks, liabilities and obligations set forth or implied in the Agreement Data, as well as overhead charges and profit.
- 7.10.7 The quantities set out in the Schedule of Requirements are estimated and may be more or less than stated. The Supplier shall submit with his/her tender a complete and detailed priced Schedule of Requirements (prepared in black ink) for the Works.
- 7.10.8 Each item shall be priced by the Tenderer. If the Supplier has omitted to price any items in the Schedule of Requirements, 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.
- 7.10.9 Payment for this Agreement shall be based on the Schedule of Requirements and the payment will be made in accordance with the rates tendered in the Schedule of Requirements.

The absence of stated quantities in the Schedule of Requirements 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.

The short descriptions of the items in the Schedule of Requirements are for identification purposes only.

Items classified as "provisional worklots" in the Schedule of Requirements indicate that there is no certainty about the amount of work, which will be required. In this Agreement the provisional items, where applicable, are for the treatment of areas, which are not necessarily treated annually.' These areas will be measured per provisional worklot as defined in 5.1.3

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and stated in the Schedule of Requirements. The standard of control for individual worklots shall apply.

7.11 PAYMENT

- 7.11.1 Payment will be based on the numbers of worklots treated as instructed by the Supervisor and to which the Supplier successfully applied the vegetation control measures and has achieved the standard of control defined in clause 5.3.
- 7.11.2 No payment will be made for rejected worklots where control achieved does not meet the standards of control specified.
- 7.11.3 Measurement and payment for the work completed will be made in [12] stages. Four payments will be made per growing season.
- 7.11.4 After completion of the initial spraying of the entire Agreement area the Supervisor or his deputy and the Supplier will measure the work performed (number of worklots sprayed). The Supplier will thereafter receive payment at [30%] of the rates tendered for all of the completed work.
- 7.11.5 A second measurement and evaluation will be made in season **1** concurrent with the first official inspection conducted in accordance with clause 3.4.4. The Supplier will thereafter receive payment at [20%] of the rates tendered for all worklots where control as specified has been achieved or clear signs are evident that control is in the process of being achieved.
- 7.11.6 A third measurement and evaluation will be made in season **1** concurrent with the second official inspection conducted in accordance with clause 3.4.5. The Supplier will thereafter receive payment at [30%] of the rates tendered for all worklots where control has been achieved.
- 7.11.7 A fourth measurement and evaluation will be made in season **1** concurrent with the third official inspection conducted in accordance with clause 3.4.6. The Supplier will thereafter receive payment at [20%] of the rates tendered for all worklots where control has been achieved.
- 7.11.8 In season 2 after completion and spraying of the entire Agreement area the Supervisor or his deputy and the Supplier will measure the work performed (number of worklots sprayed). A fifth measurement and evaluation will be made concurrent with clause 3.4.7. The timing of this spray will be dependent on the Service Provider and the Technical officer being in agreement of the time of spraying. The Service Provider will thereafter receive payment at [30%] of the rates tendered for all of the worklots sprayed, where the required standard of control is achieved.
- 7.11.9 In season **2** a **sixth** measurement and evaluation will be made in season **2** concurrent with the first official inspection conducted in accordance with clause 3.4.4. The Service Provider will thereafter receive payment at [20%] of the rates tendered for all worklots where control as specified has been achieved or clear signs are evident that control is in the process of being achieved.
- 7.11.10 In season **2** a **seventh** measurement and evaluation will be made concurrent with the second official inspection conducted in accordance with clause 3.4.5. The Service Provider

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will thereafter receive payment at [30%] of the rates tendered for all worklots where control has been achieved.

- 7.11.11 In season **2** an **eighth** measurement and evaluation will be made concurrent with the third official inspection conducted in terms of clause 3.4.5. The Service Provider will thereafter receive payment for the season at [20%] of the rates tendered for all tendered worklots where control has been achieved.
- 7.11.12 In season 3 after completion and spraying of the entire Agreement area the Supervisor or his deputy and the Supplier will measure the work performed (number of worklots sprayed). A nineth measurement and evaluation will be made concurrent with clause 3.4.7. The timing of this spray will be dependent on the Service Provider and the Technical officer being in agreement of the time of spraying. The Service Provider will thereafter receive payment at [30%] of the rates tendered for all of the worklots sprayed, where the required standard of control is achieved.
- 7.11.12 In season **3** a **tenth** measurement and evaluation will be made in season **2** concurrent with the first official inspection conducted in accordance with clause 3.4.4. The Service Provider will thereafter receive payment at [20%] of the rates tendered for all worklots where control as specified has been achieved or clear signs are evident that control is in the process of being achieved.
- 7.11.13 In season **3** an **eleventh** measurement and evaluation will be made concurrent with the second official inspection conducted in accordance with clause 3.4.5. The Service Provider will thereafter receive payment at [30%] of the rates tendered for all worklots where control has been achieved.
- 7.11.14 In season **3** a **twelfth** and final measurement and evaluation will be made concurrent with the third official inspection conducted in terms of clause 3.4.5. The Service Provider will thereafter receive payment for the season at [20%] of the rates tendered for all tendered worklots where control has been achieved.

8 LIST OF DOCUMENTS REQUIRED FROM SUCCESSFUL BID FOR SAFETY FILE

The successful supplier will be required to submit a complete Safety file including but not necessarily limited to the documents listed below before any site access certificate will be awarded.

- Safety Plan in accordance with the Construction Regulations, 2003 (refer to the E4E (August Transnet 2006)
- A health and safety file consisting of but not restricted to:
 - HEALTH AND SAFETY PLAN
 - Completed Risk Assessment with regards the above works (identification & evaluation)
 - Documented plan of safe work procedures to mitigate, reduce or control risks.
 - Fall protection plan (where applicable)
 - A complete H&S plan

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- WSWP AND JOB OBSERVATIONS
 - Specific safe working procedures for all safety critical tasks.
- APPOINTMENTS
 - Trained and certified first aiders for the above works
 - SHE Rep's for the above works.
 - Documented Health and Safety organigram (including sub-contractors where applicable)
- CERTIFICATES
 - Site access certificate (Annexure 4 of E4E)
 - Machine operators.
 - Copies of medical surveillance records for personnel on this work site
 - Fitness certificates "e.g. working at heights .
- AUDITS AND INSPECTIONS
 - Record of site inspections.
 - Applicable Checklist completed e.g. ladders, scaffolding, etc
 - Documented emergency procedures
 - Reports on condition of plant /equipment (in site diary)
- TRAINING
 - Copies of Certificates of other training (Eg. Flagmen, technical training etc.)?
- GENERAL
 - Notice of construction work to Dept. of Labour (where applicable)
 - Notices served by Dept. of Labour
- Environmental Plan
- Work programme
- Method and detail of process including but not restricted to -
 - List of registered herbicides to be used in the work, supported by full specimen labels indicating trade name, generic name, registration number, ingredients (type and content) and application rates
 - Application rates of herbicides to be applied by the Supplier
 - Product mixtures
 - Detail and function of personnel to carry out operation
 - List of support resources to carry out operation
- Proposed Amendments and Qualifications
- Proposed Organization and Staffing structure including quantity of personnel to be trained in aspects of safety.
- Certified copies of valid Pest Control Operators registration certificates of the supervisory staff that **are accountable for the works in this tender**. The name of the Pest Control Operator must be linked in the staffing structure to a specific team responsible for spraying.

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