

SCOPE OF WORK

1. INTRODUCTION

The work is for the supply and delivery of concrete sleepers and fastening material in the Gauteng Region.

The Gauteng Region is a network of commuter rail services in Gauteng province in South Africa, servicing the Johannesburg and Tshwane metro areas. It is operated by Metrorail, a division of the Passenger Rail Agency of South Africa (PRASA).

Metrorail routes spread out across the province from three main hubs: Park Station in Johannesburg, Germiston Station on the East Rand, and Pretoria Station. Routes service central Johannesburg, the East Rand, Soweto, the Vaal Triangle, the West Rand, central Pretoria, and suburbs to the north, east and west of Pretoria.

Gauteng Region consists of the following corridors:

- Johannesburg – Leralla / Pretoria: services Johannesburg, Germiston, Kempton Park, Kaalfontein, Tembisa, Oakmoor – Olifantsfontein - Pretoria
- Johannesburg–Daveyton: services Johannesburg, Germiston, Boksburg, Dunswart, Avenue, Northmead and Daveyton.
- Johannesburg–Springs: services Johannesburg, Germiston, Boksburg, Benoni, Brakpan and Springs
- Germiston–Kwesine: services Elsburg, Wadeville, Katlehong, Lindela and Pilot
- Germiston–Kliprivier–Vereeniging: services Germiston, Natal Spruit, Meyerton and Vereeniging
- Germiston–New Canada: services Germiston and the Reef south of central Johannesburg
- Johannesburg–New Canada–Vereeniging: services Johannesburg, Orlando, Lenz, Stretford and Houtheuwel
- Johannesburg–Oberholzer: services Johannesburg, Orlando, Westonaria and Carletonville
- George Goch–Naledi: services Booysens, New Canada, Dube and Naledi
- Johannesburg–Randfontein: services Langlaagte, Westbury, Maraisburg, Florida, Roodepoort, Krugersdorp and Randfontein
- Pretoria–Saulsville: services Pretoria, Pretoria West and Atteridgeville

- Pretoria/Belle Ombre–De Wildt/Mabopane: services Pretoria, Pretoria North, Ga-Rankuwa and Soshanguve
- Pretoria–Pienaarspoort: services Pretoria, Hatfield and Mamelodi
- Hercules–Capital Park–Pienaarspoort: services Pretoria North and Mamelodi

2. BACKGROUND INFORMATION

2.1. STATUS QUO

The Perway components has been affected by severe acts of theft and vandalism resulting in a number of lines across the region being closed to the movement of trains. Gauteng Region is one of the most affected regions from the acts of theft and vandalism. Perway infrastructure is stripped off sleepers, fastenings, rail lubricators coupled with illegal trenching that left ballast excavated from railway track and contaminated.

2.2. PROBLEM STATEMENT

Sleepers and fastenings form an integral part of the Perway track structure; the main functions include to provide safe passage of trains used to transport passengers/ goods. Majority of the concrete sleepers in various section of the lines are very old reaching end of maintenance life cycle.

Rail to sleeper fastenings – use e clips and fist springs, these fastenings or springs offer a constant clamping force to fasten rail to concrete sleepers.

Welding portions are used to join rails and turnout components to improve rail-wheel interaction and to repair broken rails.

Sleepers are showing serious signs of deterioration, cracked and some have concrete spalling. Broken concrete sleepers and rotten wooden sleepers contribute to the deterioration of the rail tracks as well as the non-compliance with track standards (Vertical alignment and wide gauge).

In some areas theft and vandalism has left the infrastructure paralysed completely where even rails and fastenings have been stolen.



Figure 2: Criminal caught in act of theft and vandalism of rails and fastenings

2.3. PICTORIALS



Fig 2.1: Stolen fastenings and other rail components



Fig 2.2: Stolen turnout components and sleepers



Fig 2.3: Stolen wooden sleepers at Residensia



Fig 2.4: Stolen sleepers at Stretford – Residensia bridge

3. OBJECTIVES OF THE PROPOSED PROJECT

3.1 DESIRED OUTCOMES FOR CARRYING OUT THE PROPOSED PROJECT

3.1.1. The project aims to restore the Perway infrastructure to enable the resumption of the train service. The strategy will be to appoint a contractor/s for the supply and installation of the Perway system on the identified section. Sections which are critical will be addressed first and the rest will be delivered according to priority.

3.2 PROJECT BENEFITS TO PRASA

3.2.1. The Project will assist the organisation to reinstate lines and corridors that have been closed due to the theft and vandalism of Perway system. This will therefore assist PRASA in achieving its primary mandate of providing a reliable rail transport service to Gauteng commuters and enable the business to collect fare revenue.

3.3 CURRENT MECHANISMS IN PLACE TO ADDRESS THE PROBLEM

3.3.1. In all the sections the in-house teams are busy repairing track gauge by replacing sleepers and fastenings to enable the region to run the passenger service.

All previous attempts to restore the network by PRASA teams have come to nought as thefts continued unabated, in the most recent incidents even rails have been cut and stolen by the vandals.

4. SCOPE OF WORK AND AREAS OF FOCUS

4.1 SCOPE OF THE DESIRED SOLUTION

The Supply and delivery of:

- 4.1.1. F4, FY, P2, PY concrete sleepers
- 4.1.2. Wooden sleepers on turnouts
- 4.1.3. Fist and e Clip fastenings.

4.2 DETAILS ON THE PREFERRED SOLUTION

4.2.1. The preferred solution in addressing the corridor recovery challenge is by appointing the service providers to supply material for the maintenance of Perway.

4.3 AREA TARGETED BY THIS PROJECT

4.3.1. The supply will cover the delivery of the required material to the below stated depots and sites. The scope of supply for Perway material is to cover the designated locations:

4.3.1.1. Gauteng South - Driehoek material store, corner Branch and Junction Road, Germiston.

4.3.1.2. Gauteng North – Infrastructure material stores, Rebecca Street Depot, Pretoria west.

4.4 EXTENT AND COVERAGE OF THE PROPOSED PROJECT

4.4.1. The project will cover the Johannesburg – Houtheuwel line.

4.5 OTHER RELATED PROJECTS

4.5.1. National supply, delivery and handover of 48kg/m and 57 kg/m rails

4.5.2. National supply of sleepers.

4.5.3. National procurement of a Flash butt on-track welding machine

5. SPECIFICATION OF THE WORK OR PRODUCTS OR SERVICES REQUIRED

5.1 SLEEPERS AND FASTENINGS

5.1.1 TECHNICAL SPECIFICATION

5.1.1.1 Sleepers to comply with specifications referred to in the schedule of prices. Specification PWM 2/5 and drawings E3303 sheet 1 and 2, E3318 sheet 1 and 2 are attached to this document. Anti-theft (A/T) fastening system to comply with specifications referred to in the schedule of prices.

5.1.1.2 The sleepers and fastening system consist of the following components:

Item Images	Item Description	Qty. per sleeper
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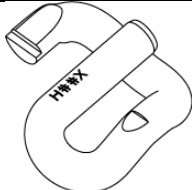
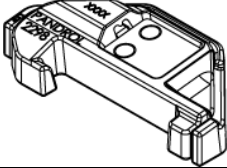
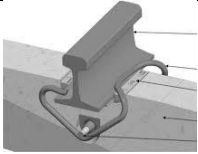
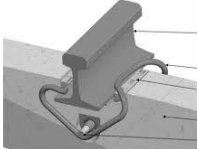
	e2005 Anti-theft Clip	4
	e2006 Anti-sabotage Clip	4
	Sleeve for Anti sabotage clip	4
	T6 insulator	4
	A11/A17	4
	P2 HDPE Pad	2
	F4 Concrete Sleeper	1
	F4 Fist clip	2
	Fist Pin	2



Figure 5: Sleepers and fastening system, material item numbers are for internal purpose.

5.1.2 SHAPE AND SIZE OF SLEEPER AND FASTENINGS

5.1.2.1 The sleeper and fastenings shall be of the shape and configuration as indicated on the below table and indicated on PWM2/5 drawings:

5.1.2.2 The Fist rail fastening system comprises of a spring steel clip, rail pad and insulated retaining pin.

Table 1: “Fist” clip Fastening system

Sleeper	Rail kg/m	Fastening components		
F4	SAR 48	Clip spring	E – Base plate	Fist Pin
	SAR 57	Clip spring	E – Base plate	Fist Pin
FY	UIC60	Clip spring	E – Base plate	Fist Pin

Table 2: “e”- type clip fastening gauge plate combination for different gauges

Sleeper	Rail kg/m	Outer	Inner	Gauge	Inner	Outer
PY	UIC 60	UIC60/06/09	UIC60/06/09	1066	UIC60/06/09	UIC60/06/09
	SAR 57	T14	T11	1065	T11	T14
	SAR 48	T23	T17	1067	T17	T23
P2	SAR 57	T6	T6	1064	T6	T6
	SAR 48	T17	T11	1064	T11	T17
	SAR 57	A11	A17	1064	A11	A17
	SAR 48	A11	A17	1064	A11	A17

Figure 6: Sleepers and fastening system combination

5.1.3 ACCEPTANCE TESTS

5.1.3.1 Factory acceptance test certificate to be submitted; strength defects or other defects, with classifications on bending tests and concrete quality tests as described in PWM 2/5, shall be measured with respect to specification.

5.2 PRICES

Prices quoted must be in South African currency and fixed for the duration of the contract, inclusive of transport to the point of delivery at PRASA Gauteng Region Driehoek material store, and PRASA sites between Johannesburg and Houtheuwel line inclusive of loading and off-loading.

5.3 DISTRIBUTION

Prices tendered shall be the ex-works, loaded onto road trucks and Rail wagons. Transport cost will be borne by the supplier.

5.4 NEGOTIATION

PRASA reserves the right to negotiate prices and commercial aspects after the closing date of the tender.

5.5 INCREASE OR DECREASE IN COSTS

5.5.1 This is an as and when required basis contract, and no contract price adjustment will be applied to allow for all increases or decreases in production costs of a product, from any cause whatsoever, which may occur after the closing date of the submission of tenders and before the date of completion.

5.5.2 Price shall be firm for the duration of contract.

5.6 EXCHANGE RATE

The contract price payable to the Contractor will not be adjusted for increases and decreases in costs of imported materials, machines and spare parts, due to fluctuations in foreign currency exchange rates after the conclusion of the Contract and for the duration thereof.

5.7 PLACING OF ORDERS AND DELIVERY OF GOODS

5.7.1 The Parties shall meet monthly for the purposes of-

5.7.1.1 Planning

5.7.1.2 Placing of orders and delivery of goods.

- 5.7.1.3 Amending, revising, updating and finalising the twelve-month forward delivery schedule.
- 5.7.1.4 To re-plan previous plans where there have been mismatches or discrepancies.
- 5.7.2 The Supplier shall, on a monthly basis, furnish the Project Manager with a written report on the production of the Goods to be supplied.
- 5.7.3 PRASA will provide the Supplier, in advance, over the duration of the contract period, with a written document regarding requested deliveries for each product, taking the necessary lead-time into consideration. Such document must be accepted and signed by the Supplier who thereby binds himself or herself to the delivery times therein stated.
- 5.7.4 Orders for each month will be placed at one instance. Any extraordinary factors surrounding the required goods, lead time, expected delivery date, price in relation to forward cover influences, place of delivery and production capacity, which may influence price or performance are to be brought to the attention of the Project Manager immediately upon receipt of an order by the Supplier.
- 5.7.5 Orders shall be placed as follows:
 - 5.7.5.1 Orders will be placed at the Supplier.
 - 5.7.5.2 The Supplier will check the required goods, based on projections, the lead times, expected delivery date and place of delivery and adjust, if necessary and notify the Project Manager of the adjustment.
 - 5.7.5.3 The Supplier shall confirm the order with the Project Manager.
 - 5.7.5.4 The Supplier shall issue an order confirmation, to be handed to the Project Manager, which order confirmation shall be fixed.

5.8 DISPATCHING OF MATERIAL

The Supplier shall do all necessary to acquire transportation for the goods, in the form of "road or rail transport", in order to dispatch such goods to the various places of delivery. Transport of the material will be to the supplier's account. Transportation rates to be included on the tender.

5.9 ACCEPTANCE OF GOODS

5.9.1 Final acceptance of goods is the Project Manager's responsibility (with support from the relevant technical expert) and shall be in the form of a Quality Assurance Final Release Certificate to be issued by the Supplier to the Project Manager on presentation of the goods.

5.9.2 The Project Manager shall inform the Supplier in writing within a reasonable period from date of receipt of the goods if the goods are found to be defective or not strictly in accordance with specifications.

5.9.3 The Supplier shall upon handing over the goods to a cartage agent to transport the goods to the PRASA's sites or transport the good themselves (based on the applicable incoterms), issue a certificate confirming that quantities correspond to the accompanying waybills.

5.10 QUALITY ASSURANCE

5.10.1 The manufacturer/supplier shall be ISO9001 accredited and shall make available its quality plan for the manufacture of all components. These quality plans will be audited by PRASA/Metrorail every six months.

5.10.2 The Supplier shall keep quality assurance records for a period of at least 36 (thirty-six) months from the date of final delivery of the goods in a safe place. These records must be made available to the Project Manager for inspection on his or her request.

5.11 SUPPLIER'S WARRANTY FOR GOODS

5.11.1 The Supplier hereby warrants that the Goods he or she shall provide to the PRASA in terms of this Agreement are suitable for the purpose for which they are intended, the prices are fair and market related and that they shall adhere to the delivery times as stipulated in the specifications.

5.11.2 If within 18 (eighteen) months after delivery of the goods, or 12 (twelve) months after being placed into service, whichever expires first, any defects, whether patent or latent, are found in the goods due to improper workmanship or defective material, excluding fair wear and tear, rough handling or improper use, such defects will be rectified by the

Supplier at no extra cost, upon receiving written notification from the Project Manager of such defects within a reasonable time.

5.12 PERFORMANCE LEVELS

5.12.1 The Supplier shall perform strictly in accordance with the levels required by this Agreement and any other specifications emanating there from and accept the penalties which will be instituted for non - performance.

5.12.2 When goods are delivered late, early delivered, on time but not in accordance with specification it will be regarded as non-performance. Delivery is deemed to be early if it arrives at the destination more than 4 (four) weeks prior to the expected delivery date, and it is considered late if it arrives at the destination after the delivery date stipulated in the order.

5.12.2.1 The delivery lead time key milestones for this project are outlined in figure below.

Item No.	Description	Anticipated delivery lead time
1	Sleepers	3 months
2	Fastenings	1 month

Figure 8: Planned project delivery lead time

5.12.3 Should there be non-performance, the Supplier shall inform the Project Manager immediately of such an event, stating the reasons and remedial action the Supplier intends taking.

5.13 OTHER SPECIFIC PERFORMANCE REQUIREMENTS

5.13.1 The Supplier shall, provide the Goods in the quantity, on or before the due date determined in accordance with the technical specification, tender specification and written Purchase order issued by PRASA,

5.13.2 All Goods shall be packaged in accordance with the provisions of the technical specification. Where no provisions are made in the technical specification for packaging, the Goods shall be properly packed for long term storage suitable to protect the contents against damage through rough handling and over-storage in transit or whilst in store.

- 5.13.3 Unless otherwise stated, all containers (including packing cases, boxes, pallets, tins drums and wrappings) supplied by the Supplier shall be considered as non-returnable, and their cost having been included in the price of the Goods.
- 5.13.4 The Supplier shall clearly mark the outside of each consignment or package with the Supplier's name and full details of the destination in accordance with the PRASA's order and include a packing note stating the contents thereof.
- 5.13.5 On despatch of each consignment, send to PRASA at the address for delivery of the Goods, an advice note specifying the means of transport, weight, number or volume as appropriate, the point and date of despatch.
- 5.13.6 Send to PRASA a detailed priced invoice as soon as is reasonably practical after despatch of the Goods, and state on all communications in the relevant order number and code number (if any).
- 5.13.7 Goods shall be delivered on working days, between working hours of 08:00 am to 15:00 pm to Driehoek material store, corner, Branch and Junction road, Germiston via road; between Johannesburg and Houtheuwel via rail.
- 5.13.8 Should the Supplier have reason to suspect delays in delivery, the Supplier shall advise the Project Manager upon receipt of the purchase order (PO) in writing of any anticipated delays citing reasons therefore and put forward a new anticipated delivery date. PRASA may then extend the delivery date if and as it seems fit. Unless and until the Supplier receives a notification of the new, extended delivery date, there shall be no extension to delivery dates. Should delivery delays lead to cost implications, the supplier will be held liable for the cost incurred.
- 5.13.9 All Goods supplied shall comply with the requirements of the Scope of Work or shall conform in all respects to the technical and tender specification in Annexure 3, respectively.
- 5.13.10 All Goods supplied shall be the subject of the Project Manager's inspection and test at all times before, during or after manufacturing. The Supplier shall furnish without extra charge all reasonable facilities and assistance for the safe and convenient inspection or

test required by appointed inspectors. Such inspections may be carried out on the Supplier's premises or at another place as deemed appropriate by inspectors.

5.13.11 If the Supplier fails to supply Goods, materials, workmanship or services in accordance with the provisions of the Contract, the Project Manager may reject any part of the Goods by giving written notice to the Supplier specifying the reason for rejection and whether replacement Goods are required and within what time.

5.13.12 The Supplier warrants that the goods will remain free from defects for a period of three years (unless otherwise stated in the Contract Data) from acceptance of the Goods by the Project Manager.

5.14 BOND AND GUARANTEES

5.14.1 Surety in the amount equal to ten percent (10%) of the contract price, as elected by the Contractor, shall be provided by the Contractor for the due and faithful performance by him or her in terms of the Contract. Such security shall be in the form of:-

5.14.2 Government or approved Municipal stocks in negotiable form, or

5.14.2.1 A deed of suretyship furnished by an approved bank, insurance or guarantee corporation in such form as may be prescribed by PRASA, provided however that the Project Manager may, upon written application by the Contractor, return to the Contractor the whole or part of such security held by PRASA

5.15 PAYMENT CERTIFICATE

5.15.1 On or after the assessment date, the Project Manager and the Supplier will together assess the quantities of the progress on each item in the Bill of Quantities and complete the Progress Assessment Detail form, where after the Progress Assessment Certificate will be issued.

5.15.2 The Supplier shall then submit a VAT invoice and attach the above Progress Certificate for payment by the Employer.

5.15.3 Supplier to provide the Employer with the necessary details regarding banking details to enable the Employer to make electronic payments.

5.16 PRICING OF THE WORKS

5.16.1 The contractor is required to provide firm prices/ rates for material and labor for the duration of the contract.

5.16.2 The contractor shall make provision for the costs (direct or otherwise) associated with works on, over or adjacent to railway lines. The Contractor is advised to study the requirements of the SPK 7/2 and ensure that all works can be completed in accordance with these requirements.

5.17 PENALTIES

5.17.1 If the Contractor fails to complete the Services within the time stipulated in this Contract for completion of Services or a part or portion of Services, the Contractor shall be liable to the Employer for an amount calculated at 0.05% of the Contract Price per delayed Day per order, which shall be paid for every day which shall elapse between the time for due completion and completion of the relevant Services. However, the total amount due under this sub-clause shall not exceed the maximum of 10% of the Contract Price.

5.17.2 The imposition of such penalty shall not relieve the Contractor from its obligation to complete Services or from any of the obligations and liabilities under the Contract,

5.17.3 PRASA may set off or deduct from the fees due to the Contractor any penalty amounts due and owing by the Contractor in terms of clause 5.17.1

6. TECHNICAL SPECIFICATIONS RELATED TO THE PROJECT

The documents forming the contract are to be taken as complimentary to each other. In case of any discrepancy or inconsistency between contract documents, the order of precedence will be:

SANS 3000-1 to 2,	Railway Safety Management
SABS 1200NB	Railway Sidings (Track work)
EN13674-1	Specification for new Railway Rails or the latest equivalent standard
UIC 860-0, UIC 8610-1	UIC Codes or the latest equivalent standard
EN13848	Railway applications – Track geometry quality standard
EN 13481- Part 1	Performance requirements for fastening systems
EN 13146	Test methods for fastening systems
EN 10089	Hot rolled steels for quenched and tempered springs
EN ISO 6506-1	Brinell hardness test method for rails

CCE 1/57/2	Specification for concrete sleepers to standard dimensions 1065mm gauge track
PWM 2/5	Specification for prestressed concrete sleepers used on 1065mm gauge Railway track
E3303 sheet 1	P2 Concrete sleepers drawing
E3303 sheet 2	F4 Concrete sleepers drawing
E3318 sheet 1	PY Concrete sleepers drawing
E3318 sheet 2	FY Concrete sleepers drawing
Z1153 Sheets 1 & 2	Drawing for normal rolling and straightness tolerances laid down in the EN13674 Specification for new railway rails
ASTM	American (USA) standards
SABS 1083:2013	Ballast specification (latest revision for Railway lines)
S406 (1998)	Transnet specification for supply of ballast stone
EN13674	Specification for new Railway Rails
CP1/1	Exothermic welding portions packaging specification
SABS 1431	Grade 300wa for weldable structural steel
E10	General Specifications for Railway Track work (1996)
Track Manual	Manual for Track Maintenance (2000)
Track Manual	Manual for Track Welding (2007)

6.1 LIST OF ANNEXURES/SHEETS AND APPENDIX

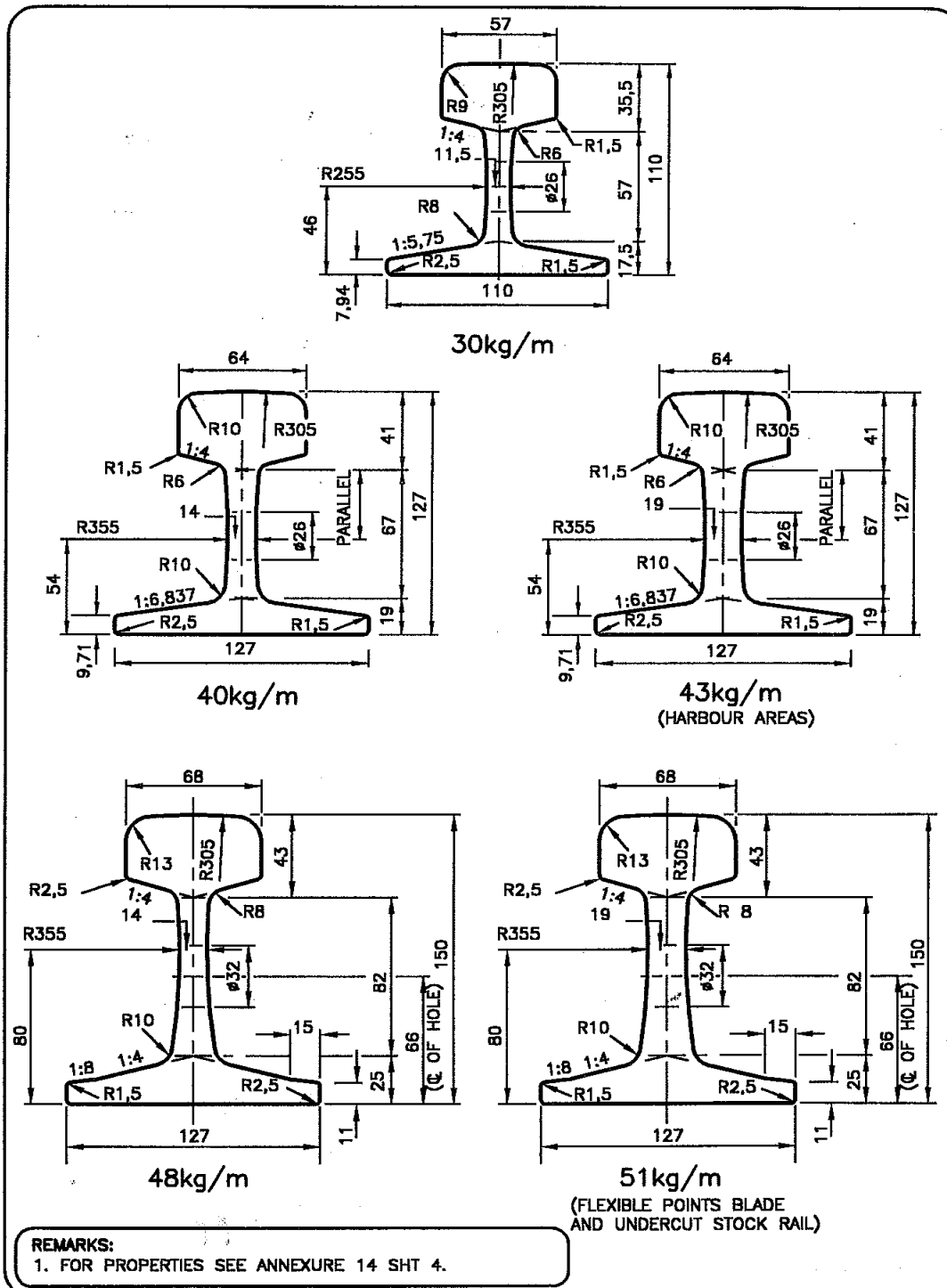
Annexure/Appendix	Document Name Reference
Rail profiles	Manual for Track Maintenance (2000)
Turnout drawings	Manual for Track Maintenance (2000)
E3303 sheet 1 & 2	PWM 2/5 specification for prestressed concrete sleepers
E3318 sheet 1 & 2	PWM 2/5 specification for prestressed concrete sleepers
Concrete sleepers Annexure A drawing	PWM 2/5 specification for prestressed concrete sleepers
Alumino -Thermic Welding Tests Appendix A	Manual for Track Welding (2007)
Drawings Z1153 Sheets 1 & 2	Manual for Track Welding (2007)

Test for soundness of stone Appendix A	Transnet S406 (1998)
Durability Test for Ballast stone Appendix B	Transnet S406 (1998)
Mill Abrasion Test Appendix C	Transnet S406 (1998)

6.2 EXTRACT FROM MANUAL FOR TRACK MAINTENANCE 2000

ANNEXURE 14
SHEET 1 of 4
AMENDMENT

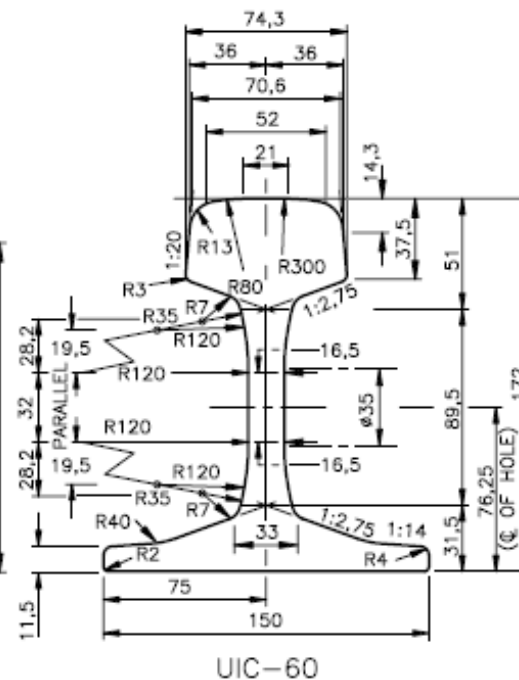
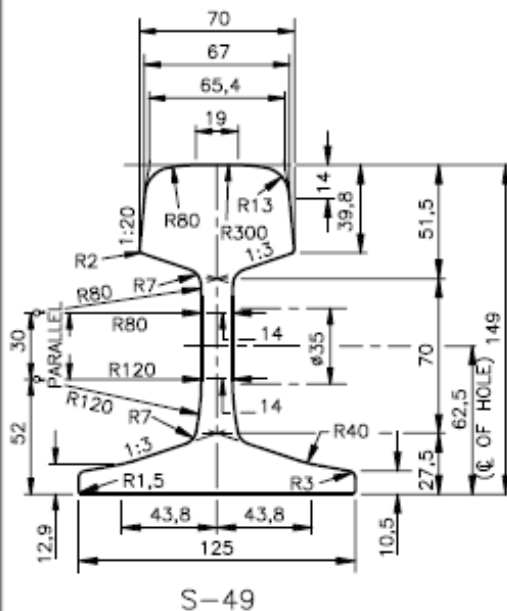
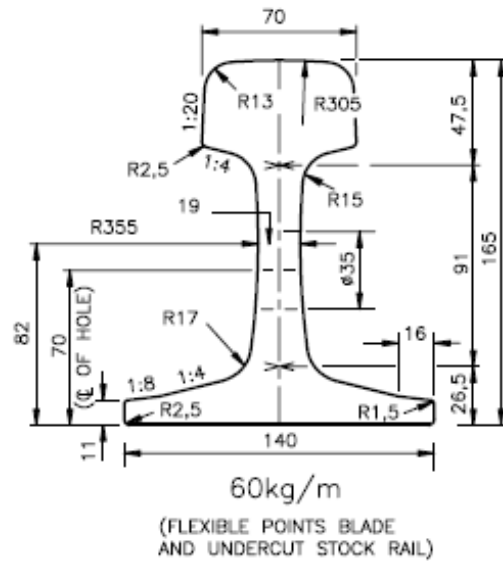
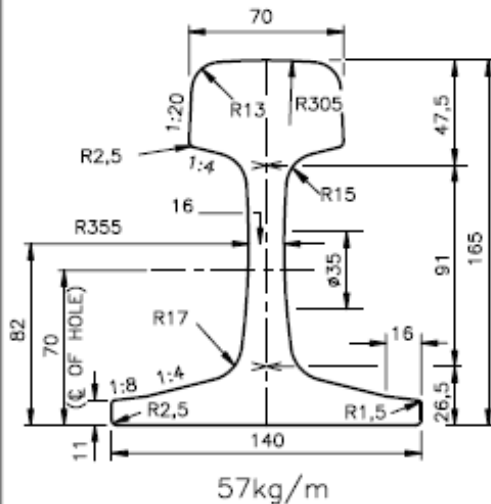
RAIL PROFILES



BE 97-14 Sht 1 of 4. DATE : JUNE 2000

ANNEXURE 14
SHEET 2 of 4
AMENDMENT

RAIL PROFILES



REMARKS:

1. FOR PROPERTIES SEE ANNEXURE 14 SHT 4.

7. Is this a CIDB-related project? (Yes / No)

No

If YES, what is the applicable Class of Work & Grade?

Class of Work: N/A

Minimum Grade: N/A

8. PROJECT SPECIFIC TERMS AND CONDITIONS

8.1 INCREASE OR DECREASE IN COSTS

8.1.1 This is as and when required basis contract, and no contract price adjustment will be applied to allow for all increases or decreases in production costs of a product, from any cause whatsoever, which may occur after the closing date of the submission of tenders and before the date of completion.

8.1.2 Price shall be firm for the duration of contract.

8.2 EXCHANGE RATE

The contract price payable to the Contractor will not be adjusted for increases and decreases in costs of imported materials, machines and spare parts, due to fluctuations in foreign currency exchange rates after the conclusion of the Contract and for the duration thereof.

8.3 ACCEPTANCE OF GOODS

8.3.1 Final acceptance of goods is the Project Manager's responsibility (with support from the relevant technical expert) and shall be in the form of a Quality Assurance Final Release Certificate to be issued by the Supplier to the Project Manager on presentation of the goods.

8.3.2 The Project Manager shall inform the Supplier in writing within a reasonable period from date of receipt of the goods if the goods are found to be defective or not strictly in accordance with specifications.

8.3.3 The Supplier shall upon handing over the goods to a cartage agent to transport the goods to the PRASA's sites or transport the good themselves (based on the applicable incoterms), issue a certificate confirming that quantities correspond to the accompanying waybills.

8.4 QUALITY ASSURANCE

8.4.1 The manufacturer/supplier shall be ISO9001 accredited and shall make available its quality plan for the manufacture of all components. These quality plans will be audited by PRASA/Metrorail every six months.

8.4.2 The Supplier shall keep quality assurance records for a period of at least 6 (six) months from the date of final delivery of the goods in a safe place. These records must be made available to the Project Manager for inspection on his or her request.

8.5 SUPPLIER'S WARRANTY FOR GOODS

8.5.1 The Supplier hereby warrants that the Goods he or she shall provide to the PRASA in terms of this Agreement are suitable for the purpose for which they are intended, the prices are fair and market related and that it shall adhere to the delivery times as stipulated in the specifications.

8.5.2 If within 18 (eighteen) months after delivery of the goods, or 12 (twelve) months after being placed into service, whichever expires first, any defects, whether patent or latent, are found in the goods due to improper workmanship or defective material, excluding fair wear and tear, rough handling or improper use, such defects will be rectified by the Supplier at no extra cost, upon receiving written notification from the Project Manager of such defects within a reasonable time.

8.6 PERFORMANCE LEVELS

8.6.1 The Supplier shall perform strictly in accordance with the levels required by this Agreement and any other specifications emanating there from and accept the penalties which will be instituted for non - performance.

8.6.2 When goods are delivered late, early delivered, on time but not in accordance with specification it will be regarded as non-performance. Delivery is deemed to be early if it arrives at the destination more than 4 (four) weeks prior to the expected delivery date, and it is considered late if it arrives at the destination after the delivery date stipulated in the order.

8.6.2.1 The delivery lead time key milestones for this project are outlined in figure below.

Item No.	Description	Anticipated delivery lead time
1	Sleepers	3 months
2	Fastenings	1 month

8.6.3 Should there be non-performance, the Supplier shall inform the Project manager immediately of such an event, stating the reasons and remedial action the Supplier intends taking.

Prices remain fixed for the duration of the contract.

9. PROJECT SPECIFIC SAFETY RELATED REGULATIONS

12.1. The contractor shall comply with requirements of safety legislations and regulations in all respects.

12.2. It is the requirement of this contract that the contractor should provide PRASA with a detailed safety plan prior to being issued with a site access certificate, in accordance with the latest version of the Occupational Safety Act, 1993 (Act No: 85 of 1993) and the SPK7, PRASA SHE Specification and National Environmental Management Act 107 of 1997

12.3. All drivers shall be in possession of valid driver's licenses and Public Drivers Permits (PDP) where applicable. Crane operators will be required to have a valid Crane Operator's certificate. All vehicles shall be road worthy.

- 12.4. The contractor shall be responsible for all protective clothing and equipment for his or her employees.
- 12.5. All work shall at all times comply with the SPK7/2 Specification attached hereto.
- 12.6. Normal protection measures in accordance with the Protection Manual shall apply.
- 12.7. 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. This procedure shall be updated whenever the need arises and any changes shall be communicated to all employees on a works site before work proceeds.