

(A Joint Venture of Ministry of Railways and Govt. of Karnataka)  
Regd. Office : MSIL House, 7th Floor, # 36, Cunningham Road, Bangalore - 560 052  
Tel : (91-80-22370581, Fax : 91-80-22370582  
CIN : U60100KA2000PLC028171 Email Id : ceo.kride@gmail.com

K-RIDE/Projects/30/FLS/DKB/2019

10<sup>th</sup> October 2019

**TO WHOMSOEVER IT MAY CONCERN**

Dear Sir/Madam,

**Sub: Tender for “Final Location Survey and preparation of DPR for New Railway Line between Dharwad-Belgaum” from Central/State Govt PSUs**

M/s.Rail Infrastructure Development Company (Karnataka) Ltd., invites tenders from **Central/State Government PSUs** competent to execute the work of “Final Location Survey and preparation of DPR for New Railway Line between Dharwad-Belgaum”.

Interested and eligible firms/companies may apply in prescribed format to M/s.Rail Infrastructure Development Company (Karnataka) Ltd., MSIL House, 7<sup>th</sup> Floor, No.36, Cunningham Road, Bangalore 560052.

The tender documents and the formats can be downloaded from the website: [www.hmrdc.com](http://www.hmrdc.com). You are requested to go through the information and send your tender Quotation in the format prescribed.

Submission of last date for Tender is 25<sup>th</sup> October 2019 at 3.00 PM.

Any corrigendum to this Tender will be only issued in the Website stated above and no paper advertisement will be issued separately.

Thanking you,

Yours faithfully,

**For Rail Infrastructure Development Company (Karnataka) Limited**

  
**(S.N. SRINIVASA)**

Authorised Signatory

Encl: a/a.

# K-RIDE

## RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LIMITED

Regd. Office: MSIL House, 7<sup>th</sup> Floor, #36, Cunningham Road, Bangalore – 560 052  
Tel: +91-80-2237 0581, Fax: +91-80-2237 0582, website : [www.hmrdc.com](http://www.hmrdc.com)  
CIN No. U60100KA2000PLC028171, E-mail: [mdkride@gmail.com](mailto:mdkride@gmail.com)

### TENDER DOCUMENT FOR FINAL LOCATION SURVEY AND PREPARATION OF DPR FOR NEW LINE BETWEEN DHARWAD - BELGAUM

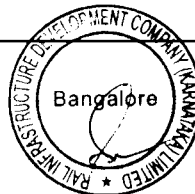
Tender Document No. K-RIDE/Projects/30/FLS/DKB/2019 Dated:10.10.2019

**Last date of Submission of Tender is 25<sup>th</sup> October, 2019  
@ 3.00 pm**

#### ISSUED BY

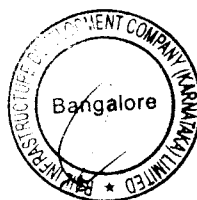
Rail Infrastructure Development Company (Karnataka) Limited  
Regd. Office : MSIL House, 7<sup>th</sup> Floor, #36, Cunningham Road,  
Bangalore – 560 052  
Tel : +91-80-2237 0581, Fax : +91-80-2237 0582,  
website : [www.hmrdc.com](http://www.hmrdc.com)  
CIN No.U60100KA2000PLC028171  
E-mail: [mdkride@gmail.com](mailto:mdkride@gmail.com)

Note: This document contains a total of 55 pages. No change in the document by the tenderer is permissible



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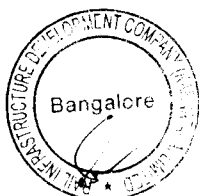
## **SECTION-1**

### **TENDER INFORMATION SHEET**

<b>Document Description</b>	Tender Document for Final Location Survey and preparation of DPR for New Line between Dharwad - Belgaum
<b>Estimated cost work</b>	Rs.50,77,200/-
<b>Tender No.&amp; Date</b>	K-RIDE/Projects/30/FLS/DKB/2019 Dated:10.10.2019
<b>Last date &amp; Time of Submission of Response to Tender Document</b>	25.10.2019 at 1500 hours.
<b>Tender Opening Date</b>	25.10.2019 at 1515 hours
<b>Validity of Tender</b>	45 (Forty Five) days from the date of opening of tender.
<b>Earnest Money Deposit</b>	2% of the estimated cost (Rs.1,01,544/-) in the form of Demand Draft/Payorder favouring M/s. Rail Infrastructure Development Company (Karnataka) Limited payable at Bangalore.
<b>Address for submission of Response to Tender Document</b>	Rail Infrastructure Development Company (Karnataka) Limited MSIL House, 7 <sup>th</sup> Floor, #36, Cunningham Road, Bangalore – 560 052

#### **Important Note:**

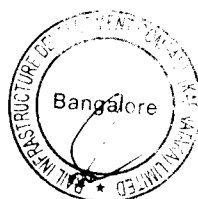
Prospective Tenderers are requested to remain updated for any notices/amendments/clarifications etc. to the Tender Document through the websites [www.hmrhc.com](http://www.hmrhc.com) No separate notifications will be issued for such notices/amendments/clarifications etc. in the print media or individually.



## **SECTION-2**

### **INTRODUCTION**

Rail Infrastructure Development Company (Karnataka) Ltd., was incorporated as a Public Limited Company on 22.11.2000 for carrying on the business of acting as a nodal agency for implementation of infrastructure projects and facilities in Karnataka. The company entered into MoU with Ministry of Railways to expedite development and implementation of railway projects in Karnataka. The Company is empowered to act as a Nodal Agency for ensuring necessary co-ordination and smooth implementation of railway projects in the State of Karnataka.



## **SECTION-3**

### **TENDER INSTRUCTIONS TO TENDERERS**

#### **3.1 Obtaining Tender Document:**

The Tender document can be downloaded free of cost from the website of the company, [www.hmrdc.com](http://www.hmrdc.com).

- a) The Tender shall be submitted in the prescribed form attached to this notice.
- b) Prospective tenderers interested to participate in the tender process are required to submit their competitive quotes in response to this Tender Document.

#### **3.2 Tender Submission date and Opening date**

The Tenderers shall submit their competitive quotation in a sealed envelope in the format enclosed with this Tender Document. The last date for submission of tender is as mentioned in the Tender information Sheet. No tender quotation shall be accepted after the date and time mentioned above. The tender quotations shall be opened on the same day as mentioned in the Tender Information Sheet.

#### **3.3 Documents to be signed and submitted by Tenderers**

The quotation shall be signed by the individual legally authorized to enter into commitments on behalf of the Tenderer. Only one quotation is permitted to be submitted by a person/firm/company.

The Tenderers are advised to examine the various conditions and submit necessary documents accordingly. In case of non-submission of any of the desired information, tenders may not be qualified for which K-RIDE reserves its right to accept or reject.

#### **3.4 Basic documents:**

1. Letter of authorization in favour of the person to sign this tender and represent his/her company for this contract.
2. Duly signed Tender Format by the Authorized signatory.
3. 2% of the estimated cost of the tender towards EMD (Rs.1,01,544/-) in the form of Demand Draft/Pay order favouring M/s. Rail Infrastructure Development Company (Karnataka) Limited payable at Bangalore.

#### **3.5 Documents in Support of Eligibility:**

1. Copy of Certification of Incorporation, Memorandum and Articles of Association / Partnership Deed in case of Company/Partnership firm.
2. Copy of GST registration certificate and PAN.
3. Contact details of the registered office and Branch Office if any in Bangalore.

#### **3.6 Validity of the Response to Tender Document**

The Tenderer shall submit the response to Tender Document which shall remain valid up to 45 (Forty Five) days from the date of opening of tender. K-RIDE reserves the right to reject any response to Tender Document which does not meet the above-mentioned validity requirement.



### 3.7 Selection of successful Bidder

After tender opening, the quotations submitted shall be evaluated by K-RIDE on the basis of the total quote for the above tendered work. The evaluation of tender quotations shall be carried out as described in Section 5.

### 3.8 Earnest Money Deposit (EMD)

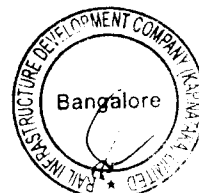
- i) The tenderer shall be required to submit an EMD value of 2% of the estimated cost of the tender (Rs.1,01,544/-) by way of DD/Pay order favouring M/s.Rail Infrastructure Development Company (Karnataka) Limited, Bangalore, for the due performance of stipulation for keeping the offer open till such date as specified in the tender. Tenders not accompanied with earnest money deposit as provided in the Tender Information Sheet shall be summarily rejected.
- ii) It shall be understood by the tenderer that the tenderer is permitted to quote his rate in considerations of the stipulation on his/her part, that after submitting his/her tender, he/she will not hold back from his offer or modify the terms and conditions thereof in a manner not acceptable to K-RIDE.
- iii) Should the tenderer fail to observe or comply with the said stipulation, the EMD amount shall be liable to be forfeited.
- iv) The EMD of the successful tenderer will be returned after submission of Security Deposit upto 5% of contract amount or the EMD will be adjusted against the Security Deposit amount.
- v) The EMD of the unsuccessful tenderers shall be returned to them within one month of issue of LoA to the successful tenderer. But K-RIDE will not be liable to pay any interest thereon.
- vi) In case it is found that, the tenderer/s has furnished misleading/wrong or fraudulent information / documents or information furnished by them is not found to be true, the Earnest Money of the tenderer/s will be forfeited. Such tenderers shall be barred from participating in future tenders of K-RIDE for 5 years.

### 3.9 Security Deposit (SD):

Selected tenderer will have to submit Security Deposit equivalent to 5% (Five percent) of total cost of whole work (Rs.2,53,860/-) as per the LoA in the form of Fixed Deposit Receipt or Bank Guarantee within 15 days of issue of letter for acceptance. The selected tenderer can also confirm in writing authorising the K-RIDE to deduct the amount of security deposit from the 1<sup>st</sup> bill of the successful tenderer. Failure to submit Security Deposit or authorisation to deduct SD from the 1<sup>st</sup> Bill as stated above will result in termination of award of work/contract. Further, Security Deposit shall be valid till the date of completion of the contract. The Security Deposit will be refunded within 60 days after satisfactory completion of the contract. The Security Deposit shall be interest-free and the successful tenderer is not entitled to any interest thereon. The Security Deposit shall be released only after the successful completion of the contract. Security Deposit shall be forfeited by K-RIDE in the event of Successful Tenderer's failure to complete its obligations under the Contract or breach of contract conditions. This may be in addition to the application of Penalties which K-RIDE may recover.

### 3.10 Tender selection process:

The tenderers shall submit their sealed tender quotations in a separate sealed envelope. The tenders not accompanied with EMD will be summarily rejected.



### 3.11 Financial Quote

The prices quoted in the tender should be without any conditions.

- i) The quotation shall be in format prescribed and price quote must be filled in completely, without any error, erasures or alterations as per the specified format given in section 7 Format 1 & 2.
- ii) The Financial quote shall be on a fixed price basis inclusive of all taxes and duties. No price variation should be asked on account of any reasons.
- iii) Price quotation accompanied by vague and conditional expression will be treated as invalid and shall be liable for rejection.
- iv) The envelope containing the tender quotation shall be **superscribed as “Retender for Final Location Survey and Preparation of DPR for New Line between Dharwad - Belgaum”** and handed over at K-RIDE office on or before the last date and time mentioned above. In addition to the above, the envelope shall also contain the name and address of the tenderer.
- v) Prices quoted will be firm for the entire period of Contract.
- vi) It is the responsibility of the Tenderers to clearly identify all costs associated with any item or series of items in this Tender Document and submit the total cost in the tender quotation inclusive of all taxes and duties.
- vii) The tenderer shall ensure that there is no discrepancy in the rates mentioned in figures and words. In case of any discrepancy, the unit rate mentioned in the words shall be taken as final and binding.
- viii) In the event of arithmetic calculation mistake, the individual price in words shall be considered for calculation.
- ix) The tenderer must fill and submit the rates as per instructions given above. If the tenderer does not quote a price/rate for any item in the quotation, his tender may be summarily rejected. The tenderer shall not make any addition or alteration in the tender quotation formats. The requisite details should be filled in by the tenderer wherever required in the tender quotation documents. Incomplete tender or tender not submitted as per instructions is liable to be rejected.

### 3.12 Non-Transferable

Neither the contract nor any rights granted under the contract may be sold, leased/sublet, assigned, or otherwise transferred, in whole or in part, by the successful tenderer, and any such attempted sale, lease, assignment or otherwise transfer shall be void and of no effect. The successful tenderer shall not subcontract or permit anyone other than its personnel to perform any of the work, service or other performance required to be done by the successful tenderer under the contract.

### 3.13 Deviations

The tenderer should clearly read and understand all the terms and conditions, specifications, etc. mentioned in the original tender notice. No deviations of any kind will be entertained in the tender quotation.

### 3.14 Deadline for submission of Tender

The tender duly filled must be received by K-RIDE at the address specified not later than the date and time mentioned in the “Tender Information Sheet”. Tender received later than the deadline prescribed for submission of tender by K-RIDE will be rejected. Tenders can also be accepted by post if received before expiry of time of receipt of tender document. However, K-RIDE will not own any responsibility for delay in postal transit. **Any tender received in person/By post after last date and time notified will**





**not be opened and such tenders will not be considered for evaluation purpose.** If the opening date happens to be a holiday, the tenders will be received and opened on the next working day at the same time. However, there will not be any change in last date of issue of tender document on this account.

### **3.15 Withdrawal of Tender**

No Tender can be withdrawn after submission and during tender validity period. Submission of a tender by a tenderer implies that he had read all the tender documents including amendments if any, has made himself aware of the scope and specifications of the FLS and preparation of DPR for new line between Dharwad- Belgaum and other factors having any bearing on the execution thereof.

### **3.16 Opening of Tender**

Tenders will be opened at the address mentioned in "Tender Information Sheet" in presence of tenderers or authorized representatives of tenderers who wish to attend the opening of tenders.

Tenderers or their authorized representatives who are present shall sign register in evidence of their attendance.

Tenderer's name, presence or absence of requisite documents, total cost of project quoted or any other details as K-RIDE may consider appropriate will be announced and recorded at the time of tender opening.

### **3.17 Clarification of the Tender Quotation**

To assist the examination, evaluation and comparison of the tenders, K-RIDE may at its discretion ask the tenderers for any clarifications as considered essential. All such correspondence shall be in writing and no change in price or substance of the tender shall be sought or permitted. The above clarification for submission of the details shall form part of the tender and shall be binding on the tenderer.

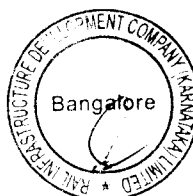
### **3.18 Examination of the Tenders**

K-RIDE shall determine whether each tender is of acceptable quality, is generally complete and is substantially responsive to the tender documents. For purposes of this determination, a substantially responsive tender is one that conforms to all the terms, conditions and specifications of the tender documents without material deviations, objections, conditionally or reservation. If a tender is not substantially responsive, it shall be rejected by the K-RIDE. In case of tenders containing any conditions or deviations or reservations about contents of tender document, K-RIDE may ask for withdrawal of such conditions/deviations/reservations. If the tenderer does not withdraw such conditions/deviations/ reservations, the tender shall be treated as nonresponsive.

K-RIDE's decision regarding responsiveness or non-responsiveness of a tender shall be final and binding.

### **3.19 Canvassing**

No tenderer is permitted to canvass to K-RIDE on any matter relating to this tender. Any tenderer found doing so may be disqualified and his tender may be rejected.



### 3.20 Award of Contract

K-RIDE shall issue LoA (Letter of Award) in token of acceptance of the tender quotation to the successful tenderer in writing by a Registered Letter/Courier/Speed Post or per bearer. This shall constitute a legal and binding contract between K-RIDE and the successful tenderer.

Successful tenderer shall execute a signed and stamped Contract Agreement on stamp paper of requisite value in favour of K-RIDE within 7 days from the receipt of letter of Award and shall commence the work. **The entire work shall be completed within 3 months from the date of entering into contract agreement.**

### 3.21 Method of Submission

The response to Tender Document is to be in the following manner: -

- i) **Covering letter:** - The covering letter shall be in the format 1 as prescribed and placed in the sealed envelope superscribed as "Tender for FLS and preparation of DPR for new line between Dharwad - Belgaum " along with a DD/Pay order towards EMD;

It should be addressed to K-RIDE and shall contain:

**A. Covering Letter as per Format - 1**

**B. DD/Pay order towards the EMD**

- ii) **"Financial Quotation"** – The Financial quotation as per **Format - 2** shall be enclosed to the covering letter as stated above.

**Important note:** The tenderers shall not deviate from the naming and the numbering formats mentioned above, in any manner.

- iii) Schedule of quantities as per Format 3 and
- iv) Certificate of familiarisation as per Format - 4

### 3.22 Clarifications/Enquires/ Amendments

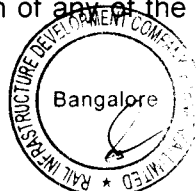
- (i) Clarifications if any, on Tender Document may be sought at the address mentioned in the Tender Information Sheet.
- (ii) Amendment/s if any will be uploaded in the website of HMRDC for information of all concerned i.e. [www.hmrhc.com](http://www.hmrhc.com) All are requested to remain updated with the website. No separate reply/intimation will be given for the above, elsewhere.

### 3.23 Right of K-RIDE to reject a Tender

K-RIDE reserves the right to reject any or all of the responses to Tender Document or cancel the Tender Document without assigning any reasons whatsoever and without any liability.

### 3.24 Cancellation of Contract

- i) The K-RIDE reserves the right to cancel the contract of the successful tenderer and recover expenditure incurred by the K-RIDE on the following circumstances:
- ii) The successful tenderer commits a breach of any of the terms and conditions of the contract.



- iii) The successful tenderer goes into liquidation voluntarily or otherwise.
- iv) The progress regarding execution of the contract, made by the successful tenderer is found to be unsatisfactory.
- v) After the award of the contract, if the successful tenderer does not perform satisfactorily or delays execution of the contract, the K-RIDE reserves the right to get the balance contract executed by another party of its choice by giving 7 days notice for the same. In this event, the successful tenderer is bound to make good the additional expenditure, which the K-RIDE may have to incur to carry out contract process for the execution of the balance of the contract. This clause is applicable, if for any reason, the contract is cancelled.
- vi) K-RIDE reserves the right to recover any dues payable by the successful tenderer from any amount outstanding to the credit of the successful tenderer, under this contract or any other contract/order.
- vii) The Security Deposit will be returned to the successful tenderer without any interest on performance and completion of the contract and on fulfilment of warranty obligations for the complete terms and period of the contract.

### 3.25 Important notes and instructions to Tenderers

- a. Wherever information has been sought in specified formats, the Tenderers shall fill in the details as per the prescribed formats and shall refrain from any deviations and referring to any other document for providing any information required in the prescribed format.
- b. If the Tenderer conceals any material information or makes a wrong statement or misrepresents facts or makes a misleading statement in its response to Tender Document, in any manner whatsoever, K-RIDE reserves the right to reject such response to Tender Document and/or cancel the Letter of Award, if issued and the EMD/SD/PG provided upto that stage shall be en-cashed. Tenderer shall be solely responsible for disqualification based on their declaration in the submission of response to Tender Document.
- c. Response submitted by the Tenderer shall become the property of the K-RIDE and the K-RIDE shall have no obligation to return the same to the Tenderer. However, the EMDs submitted by unsuccessful tenderers shall be returned as specified in Clause 3.8.
- d. All pages of the response to Tender Document submitted must be signed and stamped by the authorized person on behalf of the Tenderer.
- e. Tenderer may carefully note that they are liable to be disqualified at any time during tendering process in case any of the information furnished by them is not found to be true. The decision of K-RIDE in this respect shall be final and binding.
- f. The Tenderer must obtain for itself on its own responsibility and its own cost all the information including risks, contingencies & other circumstances in execution of the contract. It shall also carefully read and understand all its obligations & liabilities given in tender documents.
- g. K-RIDE may at its discretion extend the deadline for submission of the tenders at any time before the time of submission of the tenders.
- h. Tenderers shall mention the name of the contact person and complete address of the tenderer in the covering letter.
- i. Response to Tender Document that are incomplete, which do not substantially meet the requirements prescribed in this Tender Document, will be liable for rejection by K-RIDE.
- j. Tenderers delaying in submission of additional information or clarifications sought will be liable for rejection.
- k. Non submission and/or submission of incomplete data/ information required under the provisions of Tender Document shall not be construed as waiver on the part of



K-RIDE of the obligation of the Tenderer to furnish the said data/information unless the waiver is in writing.

- l. Only Bangalore Courts shall have exclusive jurisdiction in all matters pertaining to this Tender.
- m. K-RIDE reserves the right to delete items from the schedule of requirements specified in the tender. K-RIDE also reserves the right to alter the quantity and vary specifications.
- n. K-RIDE reserves the right to make any changes in the terms and conditions of the tender.
- o. K-RIDE shall be under no obligation to accept the lowest or any other offer, including those received late or incomplete offers, without assigning any reason whatsoever.
- p. K-RIDE will not be obliged to meet and have discussions with any tenderer, and or to listen to any representations.
- q. **Care in Submission of Tenders:** Before submitting a tender, the Tenderer will be deemed to have satisfied himself by actual inspection of the site and locality of the works, that all conditions liable to be encountered during the execution of the works are taken into account and that the rates he enters in the Tender Forms are adequate and all inclusive to accord with the provisions contained in the tender for the completion of works to the entire satisfaction of K-RIDE.
- r. The Tenderer shall quote his rates as a percentage above or below or at par the **Schedule of Rates mentioned** except where he is required to quote item rates/lump sum rates and must tender for all the items shown in the schedule of approximate quantities attached. The quantities shown in the attached schedule are given as a guide and are approximate only and are subject to variation according to the needs of the K-RIDE. The K-RIDE does not also guarantee work under each item of the schedule.



## **SECTION-4**

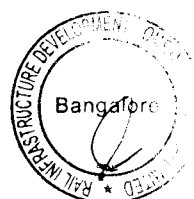
### **General Conditions of Contract (GCC)**

#### **4.1 Application**

These General Conditions shall apply to the extent that they are not superseded by provisions in other parts of the Contract.

#### **4.2 Language of Tender & other documents**

- 1) The tender prepared by the tenderer shall be in the format prescribed and shall be in English language. The tender shall accompany any supporting documents as may be required. The contract shall be written in English language, English language version of the Contract shall govern its interpretation. All correspondence and other documents pertaining to the Contract which are exchanged by the parties shall be written in the same language.
- 2) The Contractor is expected to mobilize within 7 days of award of contract and start the work physically at site.
- 3) Contractor should be in a position to deploy sufficient number of survey teams at a time. The deployment of survey teams and their weekly progress should be adequate to complete the work within the stipulated time-frame.
- 4) A weekly progress report certified by authorized K-RIDE's representative in the format specified shall be sent to K-RIDE's Office positively, by every Monday by fax/courier for the work done during preceding week, with a copy of the same shall be given to the K-RIDE's Representative. The responsibility of fax communication will be entirely of the Contractor. In addition the Contractor shall convey daily progress in the format and mode approved by the Employer.
- 5) Contract Price adjustment is not applicable in this Contract. K-RIDE reserves the right for making payment for any item on reduced rate if in the opinion of K-RIDE, item has not been executed fully as per specifications. The reduced rate shall be determined by Engineer-in- Charge and shall be binding on the Contractor.
- 6) The contractor will not be allowed to further sub contract any part of the work allotted to him.
- 7) K-RIDE reserves the right to reject any or all tenders without assigning any reason.
- 8) All works shall be done to the desired accuracy and standard as per governing specifications and sound professional expertise for engineering surveys.
- 9) Unsatisfactory performance of the contractor or failure to adhere to any of the conditions stipulated in the tender/contract document shall attract forfeiture of the security deposit. In addition, K-RIDE reserves the right to terminate the entire contract or part of it and get work executed through other agencies.
- 10) A weekly progress report certified by authorized K-RIDE representative in the format specified shall be sent to K-RIDE office positively, by every Monday by fax/courier for the work done during preceding week..



#### **4.3 Payment**

- 4.3.1 The Successful Tenderer's request(s) for payment shall be made to K-RIDE in writing, accompanied by an invoice describing, as appropriate, and upon fulfilment of other obligations stipulated in the contract.
- 4.3.2 Payment will be based on the rates quoted by the Successful Tenderer in his quotation & accepted by K-RIDE.
- 4.3.3 Payments shall be made promptly by K-RIDE to the Successful Tenderer subject to verification & approval by K-RIDE upon completion of entire work or at the completion of each stage of work as per the contract.
- 4.3.4 Payment shall be made in Indian Rupees.
- 4.3.5 In the event of excess release of funds to Successful Tenderer, K-RIDE shall demand and recover from Successful Tenderer such excess disbursements and Successful Tenderer would be liable to refund the excess disbursements.
- 4.3.6 Taxes, if any, as applicable shall be deducted at source from all the payments made to the Successful Tenderer.

#### **4.4 Prices**

Price mentioned in the Notification of Award shall be firm and not subject to escalations till the execution of the complete order and its subsequent amendments accepted by the Successful Tenderer.

#### **4.5 Contract Amendments**

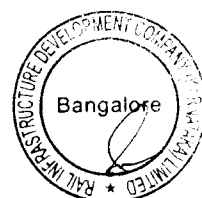
No variation in or modification of the terms of the Contract shall be accepted except by amendment issued by K-RIDE.

#### **4.6 Assignment**

The Successful Tenderer shall not assign, in whole or in part, its obligations to perform under the Contract, except with K-RIDE's prior written consent.

#### **4.7 Default in Contracts obligation**

- 4.7.1 In case of any default or delay in performing any of the contract obligation, K-RIDE reserves the right to recover the actual damages/loss from the successful Tenderer.
- 4.7.2 In addition to the above, K-RIDE may, without prejudice to any other remedy for breach of contract, by written notice of default sent to the Successful Tenderer, terminate the Contract in whole or part under the following circumstances:
  - i) If the Successful Tenderer fails to deliver any or all of the Work as required by K-RIDE.
  - ii) If the Successful Tenderer fails to perform any other obligation(s)/duties under the Contract.
  - iii) If the Successful Tenderer, in the judgment of K-RIDE has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.



#### **4.8 Force Majeure**

- 4.8.1 Notwithstanding the provisions of tender, the Successful Tenderer shall not be liable for Penalties or termination for default, if and to the extent that, its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 4.8.2 For purpose of this clause, "Force majeure" means an event beyond the control of the Successful Tenderer and not involving the Successful Tenderer's fault or negligence and not foreseeable, either in its sovereign or contractual capacity. Such events may include but are not restricted to Acts of God, wars or revolutions, fires, floods, epidemics, quarantine restrictions etc. Whether a "Force majeure" situation exists or not, shall be decided by K-RIDE and its decision shall be final and binding on the Successful Tenderer and all other concerned.
- 4.8.3 In the event that the Successful Tenderer is not able to perform his obligations under this contract on account of force majeure, he will be relieved of his obligations during the force majeure period. In the event that such force majeure extends beyond six months, K-RIDE has the right to terminate the contract.
- 4.8.4 If a force majeure situation arises, the Successful Tenderer shall notify K-RIDE in writing promptly, not later than 14 days from the date such situation arises. The Successful Tenderer shall notify K-RIDE not later than 3 days of cessation of force majeure conditions. After examining the cases, K-RIDE shall decide and grant suitable additional time for the completion of the Work, if required.

#### **4.9 Termination for Insolvency**

K-RIDE may at any time terminate the Contract by giving written notice to the Successful Tenderer, if the Successful Tenderer becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Successful Tenderer, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to K-RIDE.

#### **4.10 Termination for Convenience**

K-RIDE, by written notice sent to the Successful Tenderer, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for K-RIDE's convenience, the extent to which performance of the Successful Tenderer under the Contract is terminated, and the date upon which such termination becomes effective.

#### **4.11 Award Criteria**

K-RIDE will award the Contract on turnkey basis to the Successful Tenderer whose rate has been determined to be substantially responsive and has been determined as the lowest evaluated price.

#### **4.12 Notification of Award/Letter of Award**

Prior to the expiration of the period of Tender validity, K-RIDE will issue Notification of Award of Contract to the Successful Tenderer in writing by letter or by fax/Email, to be confirmed in writing by letter, that its Tender has been accepted.

The Notification of award will constitute the formation of the Contract.



#### **4.13 Successful Tenderer Integrity**

The Successful Tenderer is responsible for and obliged to conduct all contracted activities in accordance with the Contract using state-of-the-art methods and economic principles and exercising all means available to achieve the performance specified in the Contract.

#### **4.14 Successful Tenderer's Obligations**

- 4.14.1 The Successful Tenderer is obliged to work closely with K-RIDE's staff, act within its own authority and abide by directives issued by K-RIDE. The Successful Tenderer will abide by the statutory norms/Govt. rules prevalent in India and will free K-RIDE from all demands or responsibilities the cause of which is the Successful Tenderer's negligence. The Successful Tenderer will pay all indemnities arising from such incidents and will not hold K-RIDE responsible or obligated.
- 4.14.2 The Successful Tenderer will treat as confidential all data and information about K-RIDE, obtained in the execution of his responsibilities, in strict confidence and will not reveal such information to any other party without the prior written approval of K-RIDE.

#### **4.15 Settlement of Disputes**

- 4.15.1 If any dispute of any kind whatsoever shall arise between K-RIDE and Successful Tenderer in connection with or arising out of the contract including without prejudice to the generality of the foregoing, any question regarding the existence, validity or termination, the parties shall seek to resolve any such dispute or difference by mutual consultation.  
If the same is not resolved through mutual consultation, the same shall be referred to the Sole Arbitrator, appointed by K-RIDE. The arbitration shall be conducted in accordance with the provision of the Indian Arbitration and Conciliation Act, 1996.
- 4.15.2 The Arbitrator may from the time to time, with the consent of all parties extend the time in making the award.
- 4.15.3 The cost incidental to the arbitration shall be at the discretion of the Arbitrator. The arbitration shall be conducted at Bangalore.
- 4.15.4 Notwithstanding any dispute between the parties Successful Tenderer shall not be entitled to withhold, delay or defer his obligation under the contract and same shall be carried out strictly in accordance with the terms & conditions of the contract.
- 4.15.5 The arbitrator shall give his speaking or reasoned award with respect to the disputes referred to him by either of the parties.
- 4.15.6 If for any reason an arbitrator is unable to perform its function, the mandate of the Arbitrator shall terminate in accordance with the provisions of applicable laws and a substitute shall be appointed in the same manner as the original arbitrator.
- 4.15.7 Arbitration proceedings shall be conducted with The Arbitration and Conciliation Act, 1996. The venue or arbitration shall be Bangalore.
- 4.15.8 Notwithstanding any reference to the arbitration herein, the parties shall continue to perform their respective obligations under the agreement unless otherwise agreed mutually.

#### **4.16 Applicable Law**

The Contract shall be interpreted in accordance with the laws of the Union of India.





#### **4.17 Notices**

- 4.17.1 Any notice given by one party to the other pursuant to this Contract shall be sent to other party in writing or by email and confirmed in writing to the other Party's address specified in Tender quotation.
- 4.17.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

#### **4.18 Taxes and Duties**

Except as otherwise specifically provided in the Contract, the Successful Tenderer shall bear & pay all taxes, duties, levies and charges including GST if applicable in connection with the completion of the contract. Any taxes & duties shall be to the Successful Tenderer's account and no separate claim in this regard will be entertained by K-RIDE.

#### **4.19 Successors and Assigns**

In case K-RIDE or Successful Tenderer undergoes any merger or amalgamation or a scheme of arrangement or similar re-organization by an order / decree of court & this contract is assigned to any entity (ies) partly or wholly, the contract shall be binding mutatis mutandis upon the successor entities & shall continue to remain valid with respect to obligation of the successor entities.

#### **4.19 (a) Severability:**

It is stated that each paragraph, clause, sub-clause, schedule or annexure of this contract shall be deemed severable & in the event of the unenforceability of any paragraph, clause, sub-clause, schedule or the remaining part of the paragraph, clause, sub-clause, schedule, annexure & rest of the contract shall continue to be in full force & effect.

#### **4.20 Counterparts:**

This contract may be executed in one or more counterparts, each of which shall be deemed an original & all of which collectively shall be deemed one of the same instruments.

#### **4.21 Rights & remedies under the contract only for the parties:**

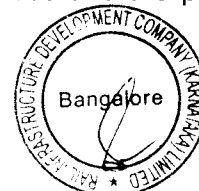
This contract is not intended & shall not be construed to confer on any person other than K-RIDE & Successful Tenderer hereto, any rights and / or remedies herein.

#### **4.22 Statutory Acts**

- 4.22.1 All legal formalities are to be obtained prior to and or during the commencement of work by the Successful Tenderer for the successful execution of the said work.
- 4.22.2 The Successful Tenderer shall comply with all the Acts & rules and regulations, laws and by-laws framed by State/ Central Government/Organization. K-RIDE shall have no liabilities in this regard.

#### **4.23 Tenderer to Inform himself**

The tenderer shall be deemed to have satisfied himself about the detailed job content, the conditions and circumstances affecting the contract prices and the possibility of executing the works as shown and described in the tender.



#### **4.24 Compliance of Govt. Regulations**

The Successful Tenderer should execute and deliver such documents as may be needed by K-RIDE in evidence of compliance of all laws, rules and regulations required for reference. Any liability arising out of contravention of any of the laws on executing this order shall be the sole responsibility of the Successful Tenderer and K-RIDE shall not be responsible in any manner whatsoever.

#### **4.25 Successful Tenderer Liability**

Successful Tenderer hereby accepts full responsibility and indemnifies K-RIDE and shall hold K-RIDE harmless from all acts of omissions and commissions on the part of the Successful Tenderer, his agents, his sub contactors and employees in execution of the work. The Successful Tenderer also agrees to defend and hereby undertakes to indemnify K-RIDE and also hold him harmless from any and all claims arising out of or in connection with the performance of the work under the Notification of Award.

#### **4.26 Indemnity Damages and Insurance**

The tenderer shall indemnify and make harmless the owner or the Officer, their agents or employees from and against all losses and all claims, demands, payments, suits, actions, recoveries and judgments of every nature and description brought or recovered against him or the owner by reason or any act or commission of the said tenderer, his agents or employees in the execution of the work.

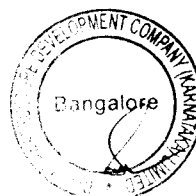
#### **4.27 IPR & OWNERSHIP RIGHTS.**

The entire Final Location Survey developed under this contract shall be property of K-RIDE and it will not under any circumstance be commercially distributed or exploited by the Successful Tenderer in direct or modified form.

All the data, material, information and documents collected / generated during development /implementation of this FLS project and the other materials/data developed/sketch/map/surveys etc., developed under this project by the successful tenderer under this contract shall be exclusive "Intellectual Property" of K-RIDE and shall be vested in K-RIDE. All rights are reserved to K-RIDE.

The successful Tenderer shall handover all data, material, information and documents (including survey maps/documents, design documents, database design / diagrams, sketches, reports etc.,) collected / generated during development/implementation of the project to K-RIDE immediately after development / implementation of project.

The Successful tenderer shall sign the Non- Disclosure Agreement with K-RIDE.



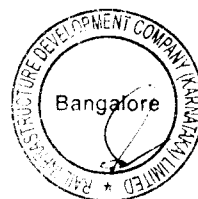
**SECTION - 5**  
**TENDER EVALUATION**

The tenders, which are determined as substantially responsive, shall be evaluated by the K-RIDE for technical compliance and then price aspects. The tenderer must submit all necessary authentic data with necessary supporting certificates, if any, failing which his tender is liable to be rejected.

Representative of qualified tenderers desirous of attending the tender opening may visit on the tender opening date at the office of K-RIDE.

The complete financial proposal as per the format shall be submitted.

Evaluation of the tender will be done on the basis of total price inclusive of all taxes & duties quoted for Final Location Survey and Preparation of DPR for New Line between Dharwad -Belgaum new railway line as per the format prescribed in the tender document. Contract will be awarded to the tenderer, whose commercial offer (TOTAL) as per the quotation has been determined to be lowest. The tenderer shall quote the rates as per the tender format prescribed.



## **SECTION - 6**

### **SPECIAL CONDITIONS OF CONTRACT (SCC)**

#### **6.1 Purpose and Scope of the project**

The scope of the project is Final Location Survey and Preparation of DPR for New Line between Dharwad-Belgaum as described in this tender notice. Some of the important guidelines which the Final Location Survey should meet are:

Name of work: Final Location Survey and Preparation of DPR for New Line between Dharwad-Belgaum

- I. Approximate value : **Rs.50,77,200/-**
- II. Security Deposit : **Rs.2,53,860/-**
- a) EMD will be adjusted towards Security Deposit and the balance of amount will be recovered at the rate of 10% of the bill amount of the running bills till the full Security Deposit is recovered.
- b) The successful bidder should give a performance Guarantee within 30 days of issue of Letter of Acceptance in the form of an irrevocable Bank Guarantee amounting to 5% of the contract value.
- III. Earnest Money Deposit : **Rs.1,01,544/-**
- IV. Completion period : **3 months**
- V. Maintenance period : **NIL**
- VI. Validity of Tender : **45 days**

#### **6.2 Eligibility Criteria**

Tenderers should satisfy the following Eligibility Criteria.

1	Should have physically completed within qualifying period i.e., the last three financial years and in the current financial year..	Atleast one similar nature of work for a minimum value of 35% of the Advertised tender value. The experience certificate is to be attached to the tender document as pre proforma enclosed.
2	Total contract amount received during the last 3 financial years and in the current financial year	Should be a minimum of 150% of the advertised tender value. The certificate (attested) from the employer/client, audited balance sheet duly certified by the CA etc., is to be enclosed along with the tender documents.
3	Similar work:	Preliminary Engineering -cum- traffic survey or Final location survey for any Engineering Project for a value of atleast 35% of the tender value.



## NOTES:

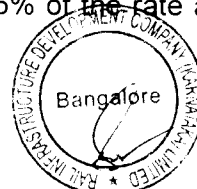
- 1) *For evaluating tenderer's eligibility with regard to work experience, he shall furnish relevant certificates and details of the physically completed work. The total value of similar nature of works completed during the qualifying period, in terms of the Final bill amount, and not the payments received within qualifying period alone, will be considered. In case, final bill of similar nature of work has not been passed and final measurements have not been recorded, the paid amount including statutory deductions (i.e., last CC bill amount) will be considered. However, if the final measurements have been recorded and work has been completed but variation has not been sanctioned, original agreement value or last sanctioned agreement value or the last CC bill amount, whichever is lower, will be considered for judging eligibility.*
- 2) *In support of eligibility condition No. 6.2 and note(1) above, the tenderer shall submit attested copy of certificate from the employer/client or audited balance sheet certified by the Chartered Accountant or attested copy of ITCC. The contractual amount shown in the ITCC certificates for the years prior to three years apart from current year will not be taken into account while calculating total contract amounts received by the tenderer.*
- 3) *The certificate to satisfy similar work covered in para 6.2 and note(2) above should be signed by an officer not lower than Jr. Administrative grade or equivalent grade in the Govt. of India/State Government/ PSUs/Government Universities. Tenderer shall enclose attested certificate copies along with the tender.*

### 6.3 Variation in Quantities

- 6.3.1 The drawings referred to in the list of plans, if any, are intended only to give a rough and general idea of the location and rough details of work to be done. No claim whatsoever will be admissible in respect of any alteration/addition/deletion/change in the type of works/change in locations.
- 6.3.2 The quantities of various items given in the Schedule for the works to be executed are only approximate and are only for the guidance of the tenderer/contractor. As far as possible, they have been assessed correctly but are likely to vary during the execution of the work.
- 6.3.3 Individual NS items in contracts shall be operated with variation of plus or minus 25% and payment will be made as per agreement rates.
- 6.3.4 When the quantity of any item of the work to be executed including foundation items is likely to increase in excess of 25% of the original agreement quantity, the contractor should notify the K-RIDE at least **THIRTY DAYS** before such necessity arises.
- 6.3.5 In the event of any reduction in the quantities to be executed for any reason whatsoever, the contractor shall not be entitled for any compensation but shall be paid only for the actual quantity of work done, at the agreemental rates.

### 6.4 Variation beyond 25%

- 6.4.1 Individual NS items in contracts shall be operated with variation of plus or minus 25% and payment would be made as per the agreement rate.
- 6.4.2
  - a) In case an increase in quantity of an individual item by more than 25% of the agreement quantity is considered unavoidable, the same shall be got executed by floating a fresh tender. If floating a fresh tender for operating that item is considered not practicable, quantity of that item may be operated in excess of 125% of the agreement quantity and payment will be made at the following rate:
    - i) Quantities operated in excess of 125% but upto 140% of the agreement quantity of the concerned item, shall be paid at 98% of the rate awarded to that item in that particular tender.
    - ii) Quantities operated in excess of 140% but upto 150% of the agreement quantity of the concerned item shall be paid at 96% of the rate awarded to that item in that particular tender.



- iii) Variation in quantities of individual items beyond 150% will be prohibited and would be permitted only in exceptional unavoidable circumstances and shall be paid at 96% of the rate awarded for that item in that particular tender.
  - b. The variation in quantities as per the above formula will apply only to the individual items of the contract and not on the overall contract value.
  - c. Execution of quantities beyond +50% of overall value shall not be generally permitted. The rates for quantities in excess of 50% of the items shall be decided between K-RIDE and the contractor in advance of execution of the quantities involved, if in the opinion of the K-RIDE such quantities are also to be executed by the same contractor. In the event of mutually agreed rate not being arrived at, the K-RIDE shall be entitled to execute the excess work by other means and the contractor shall have no claims on this account.
- 6.4.3 The limit for varying quantities for minor value items shall be 100% (as against 25% prescribed for other items). A minor value item for this purpose is defined as an item whose original agreement value is less than 1% of the total original agreement value.
- 6.4.4 No such quantity variation limit shall apply for foundation items.
- 6.4.5 As far as SOR items are concerned, the limit of 25% would apply to the value of SOR schedule as a whole and not on individual SOR items. However, in case of NS items, the limit of 25% would apply on the individual items irrespective of the manner of quoting the rate (single percentage rate or individual item rate).

## 6.5 Vitiating Clause:

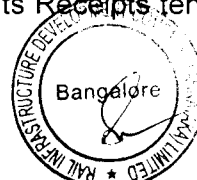
K-RIDE will exercise control over the aspect of vitiation of tender with respect to variation in quantities and take action as under:

In the event of vitiation occurring due to increase or decrease in quantities among the first, second and third lowest valid tenderers, the vitiation shall be to Contractors account. The total value of the work done shall be calculated at the rate offered by those tenderers and the amount payable shall be limited to the lowest aggregate value as worked out.

Vitiating amount shall be worked out for each and every on-account bill when the value of the work executed reaches 50% of the agreement value and the vitiated amount shall be adjusted at every stage.

## 6.6 Performance Guarantee (P.G):

- a) The successful tenderer shall have to submit a Performance Guarantee (PG) within 30 days from the date of issue of Letter Of Acceptance (LOA). However, a penal interest of 15% per annum shall be charged for the delay beyond 30 days i.e., from 31<sup>st</sup> day after the date of issue of LOA. In case the contractor fails to submit the requisite PG even after 60 days from the date of issue of LOA, the contract shall be terminated duly forfeiting the EMD and other dues, if any payable against that contract. The failed contractor shall be debarred from participating in re-tender for that work.
- b) The successful tenderer shall submit the Performance Guarantee (PG) amounting to 5% of the contract value in Format – 5.
  - (i) A deposit of Cash,
  - (ii) Irrevocable Bank Guarantee,
  - (iii) Government Securities including State Loan Bonds at 5 percent below the market value.
  - (iv) Deposit Receipts, Pay Orders, Demand Drafts and Guarantee Bonds. These forms of Performance Guarantee could be either of the State Bank of India or of any of the Nationalized Banks.
  - (v) Guarantee Bonds executed or Deposits Receipts tendered by all Scheduled Banks.



- (vi) A Deposit in the Post Office Saving Bank.
- (vii) A Deposit in the National Savings Certificates.
- (viii) Twelve years National Defence Certificates.
- (ix) Ten years Defence Deposits.
- (x) National Defence Bonds and
- (xi) Unit Trust Certificates at 5 percent below market value or at the face value whichever is less

Also, FDR in favour of K-RIDE (free from any encumbrance) may be accepted.

- c) The Performance Guarantee shall be submitted by the successful bidder after the Letter of Acceptance (LOA) has been issued, but before signing of the contract agreement. This P.G shall be initially valid upto the stipulated date of completion plus 60 days beyond that. In case the time for completion of work gets extended, the contractor shall get that validity of P.G. extended to cover such extended time for completion of work plus 60 days.
- d) The value of PG to be submitted by the contractor will not change for variation upto 25% (either increase or decrease). In case during the course of execution, value of the contract increased by more than 25% of the original contract value, an additional Performance Guarantee amounting to 5% (five percent) for the excess value over the original contract value shall be deposited by the contractor.
- e) The Performance Guarantee (PG) shall be released after physical completion of the work based on 'Completion Certificate' issued by the competent authority stating that the contractor has completed the work in all respects satisfactorily. The Security Deposit shall, however, be released only after expiry of the maintenance period and after passing the final bill based on 'No Claim Certificate' from the contractor.
- f) Whenever the contract is rescinded, the Security Deposit shall be forfeited and the Performance Guarantee shall be en-cashed. The balance work shall be got done independently without risk & cost of the failed contractor. The failed contractor shall be debarred from participating in the tender for executing the balance work. If the failed contractor is a JV or a Partnership firm, then every member / partner of such a firm shall be debarred from participating in the tender for the balance work in his / her individual capacity or as a partner of any other JV / partnership firm.
- g) K-RIDE shall not make a claim under the Performance Guarantee except for amounts to which the K-RIDE is entitled under the contract (not withstanding and / or without prejudice to any other provisions in the contract agreement) in the event of :
  - i. Failure by the contractor to extend the validity of the Performance Guarantee as described herein above, in which even the Engineer may Claim the full amount of the Performance Guarantee.
  - ii. Failure by the contractor to pay K-RIDE any amount due, either as agreed by the contractor or determined under any of the Clauses / Conditions of the Agreement, within 30 days of the service of Notice to this effect by Engineer.
  - iii. The Contract being determined or rescinded under provisions of the GCC, the Performance Guarantee shall be forfeited in full and shall be absolutely at the disposal of the President of India.



## **6.7 Inspection and Maintenance of Site**

- 6.7.1 The Contractor before tendering shall inspect the site of work, examine the nature of soil to be excavated, nature of work to be executed, check up the availability of working space and other constraints if any and also acquaint himself of the available access to the site of work and make due provision in the rate for all such contingencies.
- 6.7.2 The contractor shall make his own arrangement for site clearance, clearance of debris, jungle, bushes etc., without any extra payment. If any heavier materials like Railways sleepers etc., are to be shifted from the site of work, the same should be carried out by the contractor for which separate payment will be made under relevant items of SOR (S.W. Railway) which is applicable. Contractor is also responsible to clear all construction debris, labour camps, surplus materials from site of work without any extra payment as and when these are not required for the progress of the work.

## **6.8 Service Roads**

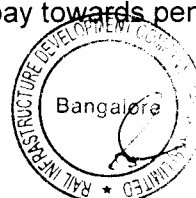
K-RIDE does not undertake to provide any service roads for the movement of the contractor's vehicles. The contractor can however make use of the service roads, where they exist free of charge. However, K-RIDE shall not undertake to maintain them and the contractor shall maintain them at his own cost. In other places, the contractor should make his own arrangements for the movement of the vehicles and no extra rate shall be paid for this. K-RIDE reserves the right to make use of the roads formed and maintained by the contractor, as and when necessary, without any payment to the contractor. In the event of the contractor forming the service roads where Railway land is not available or cannot be given by the Railway for this purpose, it shall be clearly noted that the contractor shall make his own arrangements for obtaining the required land and K-RIDE shall not take any responsibility in this respect and shall not compensate the contractor in any way.

## **6.9 Water and Electricity for works**

- 6.9.1 Water: The Contractor shall make his own arrangements within his quoted rates for necessary water required for the performance of the contract.
- 6.9.2 Electricity: The Contractor shall make his own arrangements at his cost, for the supply of electricity for the works. He shall arrange for source, transformer protection and approval from the concerned authorities at his cost.

## **6.10 Programme of Work**

- 6.10.1 A tentative programme chart and / or a list of mile stones prepared by K-RIDE for the contract to be achieved based on the K-RIDE's needs will be attached along with Acceptance Letter. The contractor shall accept and return a copy of the programme chart to K-RIDE within fifteen days of issue of LOA. The contractor may modify the programme to suit his resources, however, without any change in milestones and submit a modified programme to the K-RIDE duly signed by him within fifteen days of issue of LOA. This is however subject to a condition that such shifting or change shall not affect the completion period of the contract in any manner whatsoever. The modified programme of the contractor shall not be conditional and will not affect the terms and conditions of the contract and if made conditional by the contractor, K-RIDE reserves the right to reject the same and to treat such conditions as breach of contract as agreed to in the contractor's offer and in the LOA issued by the K-RIDE. K-RIDE reserves the right to accept or not the modified programme of the contractor. Contractor shall not have any claim whatsoever in this regard. Further programmes, as per the latest progress of work, will be prepared on similar basis from time to time.
- 6.10.2 If the confirmation of acceptance of programme as above is not received within fifteen days of issue of LOA, the contractor is liable to pay towards penalty upto Rs.50,000/- for delay in submission of the programme.





- 6.10.3 Non-acceptance of K-RIDE Programme or submission of Modified Programme by the contractor which is not acceptable to the K-RIDE, shall also tantamount to breach of contract by the contractor and the K-RIDE shall be entitled to terminate the contract on account of the contractor's default for this lapse alone.
- 6.10.4 The K-RIDE reserves the right of determining the contract at any stage of review of the progress under 6.10.1 to 6.10.3 above, if the above agreed programme(s) are not adhered to within the margin of 10% of the provision in the programme in terms of shifting of individual milestones or the quantum of progress at any stage, as envisaged and the Performance Guarantee will be forfeited without prejudice to other remedies as contemplated under the Conditions of the Contract.

## 6.11 Fixing Milestones

K-RIDE will fix appropriate milestone and monitor the progress from time to time.

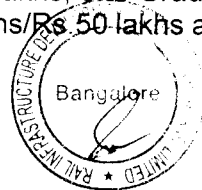
- 6.11.1 IMPOSITION OF FINE, PENALTY AND COST OF DAMAGES FOR DELAY OF WORKS
- 6.11.2 In the event of the contractor not adhering to the agreed programme of work and / or not achieving the milestones or quality of work etc., specified, even if no physical or actual damages have occurred to K-RIDE and even if the currency of the work is not affected, K-RIDE reserves the rights of, with a view to improve, expedite and the make the contractor realise the effects of delays, levying fine or any value as deemed fit on the contractor by K-RIDE based on the merit of the case. The amount of fine will be solely decided by K-RIDE at its discretion and will be based on its assessment of disturbances, difficulties or losses caused by the delay or poor quality of work, etc., including that of the reputation of the K-RIDE. The contractor shall have no claims what-so-ever in this regard. Subsequent to the imposition of the fine, if contractor makes good, the progress / quality and achieves the milestones to the satisfaction of K-RIDE, part or full amount of the fine imposed may be waived and the amount so worked out will be released to the contractor at the sole discretion of K-RIDE duly recording necessary certification to the effect that no damages have occurred. However, in case of actual or anticipated damages occurred or occurring to K-RIDE, the recovery of agreed / liquidated damages will also be imposed and recovered from contractors dues as per provisions in GCC in addition to the above fine.

## 6.12 Engagement Of Technical Staff By The Contractor

- 6.12.1 The contractor shall employ proper managerial and technical personnel during the execution of this work and the personnel deployed shall have adequate experience and thorough knowledge of the works executed including the specifications and proceedings involved. The list of managerial and technical personnel proposed to be engaged by the contractor shall be submitted to K-RIDE along with the programme chart and approval of K-RIDE to be obtained for engaging them for work.

## 6.13 Scale of personnel: Minimum scale of personnel to be engaged by the Contractor shall be as under:-

- 6.13.1 For each contract of value Rs.5 Crore or above, the contractor shall provide a Manager with qualification in Civil Engineering and a minimum of 5 years' experience in Civil Engineering works for the full currency period of the contract. For higher value contracts of Rs.15 Crores or above, the contractor shall engage one senior Manager and one Asst. Manager with 15 years and 5 years' experience respectively.
- 6.13.2 For each contract, the contractor shall provide technical personnel for the full currency period of contract as under:
- For proportionate monthly value of contract (contract value/currency of contract), upto Rs.25 Lakhs, one Diploma Civil Engineer.
  - For proportionate monthly value upto Rs.50 Lakhs, one Graduate Civil Engineer.
  - For proportionate monthly value of Rs.25 Lakhs/ Rs.50 lakhs additionally one additional

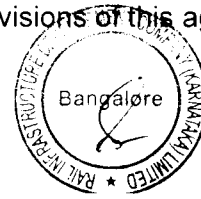


- Diploma/Graduate Civil Engineer respectively.
- 6.13.3 Even if the value of agreement changes due to variations or even if the currency of contract is changed, the scale of personnel will remain same as per the original agreement value.
- 6.13.4 Two Diploma Civil Engineer can be engaged in lieu of one Graduate Civil Engineer. However, for contracts of value 1 Crore or more, atleast one Graduate Civil Engineer is essential.
- 6.13.5 The contractor shall provide the technical personnel continuously on the project and the initially approved personnel should not be changed in the mid-course of the contract, except in exceptional situations and only with the approval of the K-RIDE. Continuous engagement of technical personnel is defined as under:
- Record of engagement of technical personnel shall be maintained by the contractor at each site where his Engineers are deployed. This record will be verified by K-RIDE. In case of non- availability on any single occasion at site, it will be treated as absence for a week.
- 6.13.6 The availability of personnel of the Contractor shall be ensured continuously and regularly by the Contractor. However, whenever the rate of work comes down for any reason at any time for significant duration the scale of personnel can be reduced by the Contractor with the approval of K-RIDE.
- 6.13.7 For failure to provide technical personnel by the contractor, he is liable for recoveries from his dues to an extent of Rs.30,000/- per month per Diploma Civil Engineer and Rs.40,000/- per month per Asst.Manager/Graduate Civil Engineer and Rs.50,000/- per month per Sr.Manager at the discretion of K-RIDE.
- 6.13.8 The decision of K-RIDE regarding scale of Engineers/period to be engaged/recoveries to be made etc shall be final and binding on the contractor.



#### **6.14 Safety Precautions and measures to be observed during execution of Engineering Works**

- 6.14.1 The contractor shall be fully responsible for ensuring safety at all times and shall bear the cost of all damages in cases of accidents/unusual occurrences resulting in damages to Railway property and passengers. Any breach of the safety conditions for precautions and measures as specified hereunder and/or elsewhere in the tender document by the contractor and/or his agents/representatives affecting the safety of movement of trains, engines, or other rolling stock of the Railway, shall constitute a breach of contract by the contractor leading to termination of contract for default on the part of the contractor including recovery of damages.
- 6.14.2 The works required to be done under traffic block shall be carried out only in the presence of Railway officials. The Railway supervisor shall certify safe conditions for passage of trains before resumption of traffic. The works to be done under traffic Block shall be carried out under the provision of banner flag and protection of engineering flagman.
- 6.14.3 Safe practices at all times and non infringement to moving trains shall be ensured. Road vehicles, material trolleys, dollies etc which may have tendency to roll off towards the running lines shall be checked by providing chains, locking arrangements, blocks etc. Site incharge of the contractor shall be primarily responsible.
- 6.14.4 All equipments like cranes, lifting jack etc shall be tested, duly calibrated and certified prior to use at construction site. They shall also have specific indications conforming that the operators handling them are trained in the safety precautions near track.
- 6.14.5 Construction workers at site shall be provided with personal safety gear like reflective vest, helmet, leather shoes, gloves, eye-wear etc as approved as per construction industry standards. For persons working at pier top/girder level, temporary supports, hand railing etc, protection with help of ropes, slings and temporary railings shall be provided.
- 6.14.6 All locations, where construction activity is in progress adjacent to existing railway lines, should be cordoned off with proper barricades. Barricades consisting of bamboo/casuarina poles and supported horizontally by similar bamboo/casuarina poles should be provided. These barricades should be provided at a distance of approximately 3.5m from the centre line of track or as directed by the Engineer-in-charge. All the barricades are to be painted or struck on with red luminous paint/strips at suitable intervals on the barricades. Barricade should be available at every stage of work as directed by the Engineer-in-charge and shall be maintained in perfect condition all the time.
- 6.14.7 Road vehicles employed by the contractor should have the certificate for its road worthiness and each vehicle numbered and the license particulars maintained. Contractors should ensure that the drivers permitted by them to work on such road vehicles are identified, counselled, certified and are provided with photo Identity cards. Wherever the work requires the movement of road vehicle within a distance of 3.5 to 6m from the centre line of the nearest track, such work shall be done only in the presence of Railway's representative. The driver of the vehicle shall always face the track when reversing the vehicle and whenever he cannot face the track, for whatever reason, he shall be invariably assisted by a helper with a whistle who should guide him and ensure safety.
- 6.14.8 The contractor shall execute a Bond undertaking to ply the road vehicles in a safe and satisfactory manner and strictly in accordance with the stipulations and other conditions specified by the Engineer and to engage and retain only the permit holder to be the contractor's agent in charge of the vehicle while driving or at rest. The person in charge of the vehicles and the attendants shall, at all times, be vigilant and on the look out for signals from the lookout men, flagmen or other personnel available at site with a view to stop or regulate the road movement so as to ensure adequate margin of safety for the timely passage of an approaching train or a Railway engine, without any delay or detention. The contractor shall also be bound by the provisions of this agreement to ply



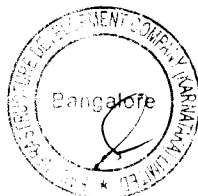
the road vehicles only with adequate margin of safety, well clear of the fixed structure profile of infringements, as stipulated in the rules made under the Indian Railways Act and to seek and be guided by the signals and other directions of any lookout men or other personnel retained for the purpose of ensuring safety and to ensure extra care and vigilance while turning, reversing or moving the road vehicles in any other manner at an inclination to the running railway track or the siding as the case may be. The contractor shall employ necessary look out men also at his own cost, irrespective of any other arrangement that railway may make in this regard.

- 6.14.9 All work sites shall be supervised by the contractor's representative and also a representative of K-RIDE. Whenever work of plying road vehicle within 6m zone is actually in progress, Look-out men should invariably be available. Lookout men will have to be provided by the contractor, from out of the list of persons who are authorised to carry out these duties. Authorisation will be issued to the individuals, by the representative of K-RIDE. K-RIDE's supervisor will monitor the availability and alertness of the lookout men. In case of non- availability of lookout men, the K-RIDE's supervisor shall stop further activities of plying of road vehicles. Even if no work is executed in the night, look-out men shall patrol the beat as identified by the representative of the construction organisation to ensure the safety of the running trains, especially from any infringement.
- 6.14.10 Working along side the track during night hours is normally prohibited. Such work can be done in the night only with the written permission of K-RIDE. Where night working is permitted, lighting of the work site as required should be done.

**6.15** The following activity of work shall be carried out under supervision of K-RIDE:

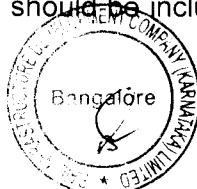
- 6.15.1 Excavation of foundation/Ground level near to Railway track.
- 6.15.2 Concrete casting and/or masonry very close to Railway track.
- 6.15.3 Erection of temporary structures near to running lines.
- 6.15.4 Casting of structures like girder/slab over railway track.
- 6.15.5 Stage-Prestressing of girder when placed across Railway tracks properly supported.
- 6.15.6 Launching of precast/pre-assembled girders across Railway track
- 6.15.7 Any work of lifting, side shifting and slewing of girders over the Railway track.
- 6.15.8 Dismantling of temporary structures, shutters, scaffolding, etc. Adjacent and above the Railway track.
- 6.15.9 Any track work/P&C work on the running line or adjoining to the running line.
- 6.15.10 Platform/structures/FOB/building works adjacent or over the running lines.

**6.16** The contractor will be supplying with necessary plans, specification, details of Special Conditions etc. for execution of work as required by K-RIDE. However, Contractor shall make his own detailed plans, working arrangements, etc., to make smoother and faster construction and get the same approved by K-RIDE at his own cost. For this purpose, he can contact the Office of K-RIDE's office.

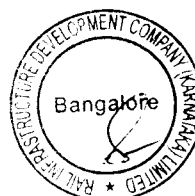


## 6.17 ADDITIONAL SPECIAL CONDITIONS FOR FINAL LOCATION SURVEY FOR RAILWAY PROJECTS

1. Any Temporary Structure required shall be provided by the Tenderer at his own cost, and should be removed after the completion of the work and no longer required. No Survey equipments or any other tools and equipments will be supplied by the K-RIDE.
2. **TERMS OF REFERENCE:** The Final location survey has to be conducted as per the terms of reference specified if any. These terms of reference are tentative and may be modified by the K-RIDE if found necessary during Final location survey.
3. **ROYALTIES AND PATENT RIGHTS:** The contractor shall defray the cost of all royalties, fees and other payments in respect of patents, patent rights and license which can be payable to patentee, licensee or other persons or corporation and shall obtain all necessary licenses. In case of any breach (whether willfully or inadvertently) by the contractor of this provision, the contractor shall indemnify K-RIDE and the officers, servants, representatives, against all claims, proceedings, damages, cost charges, acceptance, loss and liability which they or any of them may sustain/incur or be put to by reason or in consequence of directly or indirectly of any such breach and against payment of any royalty, damages or other moneys which K-RIDE may have to make to any person or paid in total to patent rights in respect of the users of any machine, instrument process articles matter of thing constructed, manufactured, supplied or delivered by the contractor to this order under this contract.
4. **JUNGLE CLEARANCE:** Jungle clearance if any, required for conducting levelling and fixing of pegs etc., is deemed to be included in the rates quoted of the concerned items and no separate payment shall be made for jungle clearance. If standing crops before harvesting or after harvesting are required to be cleared for conducting the levelling the same may have to be cleared on either side of the alignment. If such removal becomes necessary a rate for the same will be fixed by negotiations. Similarly, if any trees are to be cut during the survey operations the rates for the same will be negotiated in case it is decided that Contractor should carry out the work.
5. **PLANS & SECTIONS:** The project sheets, the bridge plans, index plan, index section and yard plans shall be prepared by the contractors and the prints of the same shall be submitted to the K-RIDE for approval. After K-RIDE's approval, the corrections should be carried out in the original tracings and tracing on polythene film shall be submitted to the K-RIDE for record along with 3 prints in general the relevant instructions contained in Paras - 444 to 467 of the Indian Railway Engineering Code shall be followed.
6. **ADDITIONAL ITEMS:** Any item of work which is not provided in the schedule of quantities and rates and for which no rates exist shall be executed only with the prior permission of K-RIDE and at rates and on conditions to be mutually agreed upon and incorporated in a supplementary agreement.
7. Payments for the works included in Schedule will be arranged for the actual quantities of work done at the rates provided in the Schedule, as per stage payments indicated wherever stage payments are not indicated, no stage/part payments are eligible till the final approval of the plans or report. For items under the schedule the quoted rates are deemed to be inclusive of all leads and lifts and no separate payments will be made for extra leads, lifts, crossing of tracks, transport, labour, consumables, equipments, etc., if any. The quoted rates should be inclusive and cover all charges for finished works.



8. **TAXES:** The quoted rates are deemed to include all taxes direct or indirect leviable under central, state or local bodies act or Rules, Octrois, tools, royalties seignorage cess and similar imposts that may be prevailing from time to time. Income tax at 2% & GST at appropriate rates will be deducted at source.
9. **SAFE WORKING METHOD:** The Contractor shall at all times adopt such safe methods work as will ensure safety of structures and labour, if at any time the K-RIDE finds that the safety arrangements made are inadequate or unsafe the Contractor shall take immediate corrective action as directed by K-RIDE representative at site. Any dereliction in the matter shall in no way absolve the Contractor his sole responsibility to adopt safe working methods.
10. **LOSS/DAMAGE TO THE RAILWAY PROPERTY/PRIVATE PROPERTY/ K-RIDE PROPERTY:** Recovery shall be made from the Contractor at twice the issue rate on the cost of the materials lost/unaccounted during handling.
11. **SUPPLY OF MATERIALS BY K-RIDE:** K-RIDE will not supply any materials to the Contractor for carrying out the works specified in the schedule.
12. All initial drawings & reports shall be supplied in 2 copies. On approval all drawings & reports shall be supplied in 8 copies. In addition, soft copies with necessary supporting materials shall be supplied.
13. The field work shall include traversing the alignment proposed including alternatives/diversions, etc., wherever necessary for improvement of alignment and getting approval of K-RIDE and striking on the ground as final alignment. The centre line of the final route shall be staked out for the final alignment.
14. The survey shall include survey of the strip of country for 300 metres on either side of the centre line, along with survey of rivers requiring the provision of a waterway of 100 Sqm and above, survey of station cities, all water ways, power line crossings and telephone/telegraph crossings, village boundaries, structures, field developments, water bodies, drainages, roads, and all other ground features and the working plan prepared with the above details shall be submitted. Para 420 to 474 of Indian Railway Code for Engineering Department shall govern the survey. The final alignment shall be marked in Red.
15. Working Section with ground levels at 25m intervals in the selected alignment with reference to the GTS Bench Mark along with proposed levels shall be submitted.
16. The field work shall also cover a soil survey of soil/rock in the complete alignment and particularly with more details at all cuttings of more than 2m depth and all likely embankments of more than 2m height in order to obtain a fair idea of the soil classification on the proposed route. All formation locations where high level of clay is anticipated shall be investigated irrespective of bank or cutting height required. Information on soil classification and trial bore particulars to be made available in the form of bore charts.
17. Stone pillars or other permanent marks shall be left on the ground and indicated on the plans so that the location can be readily picked up by subsequent survey parties.



18. Stone pillars 150 x 150 x 1200mm or appropriate dimensions shall also be provided at approaches of major bridges/water courses and portal of tunnels, at important road crossings and station sites, with not less than three pillars in any straight, at Tangent Points and Apex of all curves and for the Bench Marks locations. Pillars to be engraved "SWR" on one side of the stone with letters of appropriate size. Alignment pillars, Apex pillars, Tangent pillars and Bench mark pillars are to be supplied by the contractor as per standards or as directed by Engineer in charge and planted with cement concrete of 1:3:6.
19. Bench Marks shall suitably be left at intervals of about 500 metres and at all station sites, bridge sites, tunnel sites, road crossings and all other important locations with values marked in the plan for further reference.

#### **6.18 Engineering Report:**

6.18.1 The report submitted on conclusion of the Final Location Survey for new lines may be compiled under chapters as indicated below:

- i) History of proposal
- ii) Terms of Reference
- iii) Description of Route
- iv) General description of the country, Topographical, Agricultural, Geological, Hydrological, Industrial, Anthropologic and other features.
- iv) Description and location of route.
- v) Stations locations with description.
- vi) Engineering Features, Standard of Construction and Detailed Estimate (Form E 553) including Civil Engineering, Signal & Telecommunications, Electrical (including Power line crossings) and others. Detailed estimate shall be based on detailed quantities supported by line / level measurements & tentative designs.
- vii) Executive Summary & conclusions with specific recommendations on the project.

6.18.2 The report should also be accompanied by the following tabulated details:

- i) Statement of curves & Curve Abstract
- ii) Statement of Gradient & Gradient Abstract
- iii) Statement of Bridges & Bridge Abstract (Major & Minor)
- iv) Statement of Tunnels and Tunnel abstract and list of important Bridges
- v) Station Machineries
- vi) Station and Station sites
- vii) Other relevant abstracts.



- 6.18.3 The report should be accompanied by an estimate of the project surveyed. Detailed estimates, together with Abstract Cost of project including that of junction arrangements in the case of project relating to construction of new line should be prepared and appended to the report.
- 6.18.4 The method adopted for arriving at the figures of cost must be clearly explained in the report. The estimate prepared should under ordinary circumstances be sufficiently accurate (say with + 10%). All basic data used for the estimate shall also be furnished in Annexure to the Detailed Estimate. The soft (e-format) details shall also be furnished separately with necessary software for analyzing it including user manual, if any.
- 6.18.5 The contractor shall also furnish the following certificate of familiarization.
- 6.18.6 The certificate of familiarisation as per Format - 4 shall be enclosed to the tender.





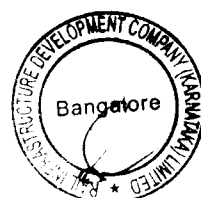
## 6.19 FURTHER SCOPE OF WORK

6.19.1 The work comprises of Carrying out Topographical Survey using DGPS, Total station and Final location survey.

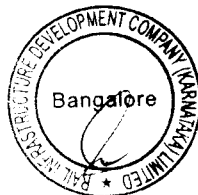
6.19.2 Detailed topographical Survey will be done to represent all the visible details of ground using DGPS and Total Station along the corridor. The work will involve carrying out a detailed Topographic Survey showing all railway yards, building details and other ground features as per project requirement or instructed by Engineer. The corridor shall be surveyed on all across roads each side from centre of corridor showing all details or as directed by Engineer in charge.

6.19.3 The survey shall cover following features:

- All features inclusive of all roads, road/rail track showing important structures with their height and storey's including depth of foundation based upon local inquiry, all bye lanes, footpaths, dividers/central verges, roads, railway tracks, trees, manholes & other structures, nallahs, Storm water drains, H.T., L.T. Transmission lines, Telephone lines, vertical clearance of OH utilities etc. Bridges, ROB/RUBs/FOBs with type and spans, ponds, HFL and bed level of streams/nallahs, level X-ings with their type, traction masts, signal posts, location box etc.
- Location and list of trees with girth more than **300mm** (measured at 1 m height from ground level) shall be indicated. A table showing location, type, their species, girth diameter, reference number duly shown on plan shall be made in separate AutoCAD layer. The trees at site to be **numbered** with paint as directed by K-RIDE.
- Marking outer dimension of all built up area along the corridor, with plot numbers and ownership such as private, Govt, residential and commercial etc. within survey limits.
- The Auto CAD drawings shall have different layers for different entities like Road, Rail, Spot/Ground levels, Drain, Building, Boundary Wall, Over Ground Utility and Ground Utility, Tree, Traverse Station, ROB/RUB etc. as instructed by Engineer-in-charge. X, Y, Z co-ordinates of all spot/ground points shall be provided in CSV file as directed by Engineer-in-charge with point numbers and feature coding as per list of codes given by Engineer-in-charge. Z co-ordinates are to be taken with due care and indicated accordingly.
- Location of approach roads, main roads, lanes etc. showing road / lane name, carriageway, footpaths, central verge, drains and the widths of all the main and approach roads and at locations where there is a sudden change in widths of roads shall be measured physically and marked on the drawings.
- Details of land along the route and their uses such as residential areas, commercial areas, religious, parks, green areas, vacant lands etc.
- Details of open drains, nallahs, with bed levels and HFL's.
- The plan shall show all buildings, type of building, such as temporary, permanent including number of storey and basement details.
- Survey of level crossings with their numbers, class, manned or unmanned, Road-Over- Bridges (ROBs) Road-Under-Bridges (RUBs) and Foot-Over Bridges (FOBs), Railway Bridges, Culverts etc. with their structural details, angle of crossing and road & rail levels and HFL of RUBs.



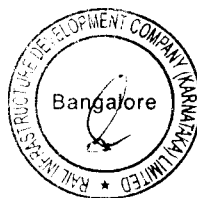
- Details of railway tracks along the proposed alignment including take off points, curves, transitions, crossings, switches and other details including electrical structures with their distances from the existing railway tracks.
  - Details of Religious structures such as Temple, Gurudwara, Mosque, Church, Monuments, Tombs, etc. clearly marking the railway boundary all along the corridor and giving cross reference of these structures with reference to the railway boundary.
  - Traffic signals, light posts, bus stops, junction boxes (telephone and power), fire and water hydrants (fire fighting and others), transformers telephone posts etc.
  - Name of all adjacent colonies including number of houses, Jhuggie clusters with number of jhuggies along the route of the survey.
  - Spot levels of terrain, critical levels including vertical clearances of Road-over-Rail and Road-under-Rail bridges, railway OHE facilities, top levels of (a) railway station buildings, (b) platforms and (c) both rails of each track. Rail levels shall be recorded at **25m** intervals on straight track , at **10m** interval on curves and 50m for cross-sections.
  - Vertical clearances to power line or telephone/telegraph lines at crossings of roads/railway line along with the ownership details.
  - Stones marking the presence of underground utilities.
  - Any other structure or details which the Agency may feel important and or as instructed by Engineer should also be added.
- 6.19.4 Corridor of Topographical survey should be matched with the proposed alignment marked on Map/Google Images. There may be occasion to repeat the topographical survey to match the corridor of the proposed alignment marked on Map/Google images or due to revision of alignment in small patches to avoid the structures coming on the proposed alignment marked on Map/Google images. No extra payment shall be made to the agency for the same.
- 6.19.5 The contractor has to plan survey based on layer concept so as to prepare plan showing all existing and manmade features. All the text size, general layout of drawings, legend, scale etc. shall be as per sample drawing, which will be supplied by K-RIDE during execution of work.
- 6.19.6 It is required to run sub-traverses to cover area of interest for topography. These sub-traverses shall start and end on a control mark already established in previous stage of the survey. Accuracy of this sub-traverse shall also be computed and properly documented. Accuracy of sub-traverses should also be same as required for establishment of total station traverses. However, balancing of error is not required in case of sub-traverses for topographic survey.
- 6.19.7 All measurements and detailing of features shall be taken by using **Total Stations** of minimum **5" (five second)**, accuracy as per DIN standard with data downloading facility of brands as specified above and shall be recorded directly on to it. ***The linear measurements shall have an accuracy of  $\pm (5\text{mm} + 5\text{ppm times base line length})$ .***
- 6.19.8 During topographic survey, all existing topographical details, such as buildings, village boundary, rivers, nallahs, canals, roads, railway lines, electric lines etc. shall be picked up as existing on ground with respect to reference frame established above. Spot levels shall be picked up so as to truthfully depict actual ground with spot level interval of the order of **25m** or lesser. At points where profile is changing, additional levels will be taken. All traverse stations shall be connected with TBM established at site using **Auto levels** with an accuracy of  **$6\sqrt{K}$  mm**, where K is the circuit length in km.



- 6.19.9 The contractor is also required to carry out leveling in isolated ponds or water logged areas or in the existing borrows pits filled with water.
- 6.19.10 Necessary jungle clearance for proper execution of the work, wherever required, shall have to be done by the contractor at no extra cost.
- 6.19.11 A **sketch showing** surveyed points with respect to traverse stations should be prepared in a field register with date of survey. Every page of the field register should be numbered and each page signed by the surveyor.
- 6.19.12 The following documents shall be maintained at site by the contractor and submitted to K-RIDE and will be considered as property of K-RIDE. These books and register shall be photocopied and submitted to K-RIDE along with the part submission. **Original documents will be submitted on completion of work.**
- **Traverse Register** – containing the records of running sub-traverse for topographic survey, sub-traverse stations with their description, calculation of co-ordinates of sub- traverse stations, down loaded data, etc.
  - **Level Books** – containing the records of connecting of level of TBMs/BMs established along the alignment to traverse pillars and leveling along centre line of proposed alignment pegged at site.
  - **Topographical Details Register** – containing details of topography.
- 6.19.13 Contractor shall prepare one set of AutoCAD drawing as per legend on a **1:1000**/appropriate scale showing all man-made and natural features. Soft copies will also be supplied by the contractor. The plan should have enough description of features and annotation so as to suffice the purpose of design of alignment. The contractor shall carryout physical verification of the plan prepared above with the help of hard copies using his own surveyors at site.
- 6.19.14 After making necessary corrections, as may be required, corrected hard copies of the plan shall be jointly (K-RIDE representative and Contractor's surveyor) verified at site. Corrections, if any shall be carried out by the contractor and final drawings in hard copy (duly signed) and soft copy shall be submitted to K-RIDE for design of alignment.
- 6.19.15 Data downloading and plotting of daily work completed by Total Station team shall be done on that very day.
- 6.19.16 In addition, the Contractor shall supply raw data as downloaded from Total station and processed data in **ASCII/GENIO/XML** format compatible with **MX Software** duly checked and verified. The contractor shall follow standardized feature code and level/layer information to ensure standardization; any data incompatible with the same shall not be accepted. This data should be acceptable to MX for designing and processing.

## 6.20 Establishment of “Prime Traverse” through DGPS (As a Whole)

- a) The proposed tentative alignment will be supplied to the contractor for getting an idea of alignment for the purpose of fixing of Control Pillars as per specifications.
- b) Strategic point locations at start, end & intermediately in the area of interest shall be selected in consultation with K-RIDE.
- c) Sufficiently long hour observation with GPS should be done for common period on these point locations.



- d) Recorded data of long hour observation shall be downloaded and processed through software application to establish prime traverse as a whole.
- e) Processed grid coordinates (Cartesian) will be further processed to arrive at ground coordinates.
- f) Values for northing & easting of grid coordinates should be considered as fixed for any DGPS sub-traverse/intra-mediate loops, initiating or passing through these points and the data shall be processed in accordance with fixed values of the grid coordinates.
- g) Similarly, values for northing & easting of ground coordinates should be considered as fixed for any Total station sub-traverse, initiating or passing through these points and the data shall be processed in accordance with fixed values of the ground coordinates.
- h) GPS and Total station instruments used for traversing purpose should possess software qualification to work in both grid and ground coordinate system or else, it should be accompanied by manufacturer supplied software for conversion of data from grid coordinates to ground coordinates and vice versa.

#### 6.21 Establishment of DGPS Controls (Whole to Part)

- a. The pillars/points (henceforth designated as Control Points) for which co-ordinates in line with prime traverse are to be established shall be decided in advance in consultation with K-RIDE.
- b. The Control Point fixing will establish a network along the proposed alignment as marked on the maps provided by K-RIDE.
- c. Horizontal control grid in line with prime traverse will be established using DGPS at **about 5 km along the alignment on a pair of control stations/control points** fixed at a distance of about 250m apart from each other along the proposed alignment.
- d. In addition, contractor has to take GPS observations at existing pillars available en-route and also pillars exist at natural & man-made features like river/nala, road, tunnel etc. as desired by K-RIDE representative at site.
- e. The DGPS sets used shall be with at least **12 channels** having differential post processed accuracy of at least  **$\pm(5\text{mm}+1\text{ppm} \times \text{Baseline Length})$** .
- f. The stations selected shall be obstruction free towards sky at an angle of **15 degree** with horizontal plane.
- g. The control point locations should be selected so as to be :
  - i. Clear of HT/LT lines,
  - ii. Free from multipath problems associated with tall features in the vicinity,
  - iii. Free from foliage,
  - iv. Open to sky with a clear view of the horizon,
  - v. Close to the proposed alignment Where a feature such as rock outcrop, culvert etc. is available, control points may be located there. If such features are not available, pillars may be erected there specifically for this purpose. At least two adjacent control points (i.e. a pair of DGPS control points) shall be inter-visible with reference to each other and shall preferably be fixed on ridge lines, in sections where no field surveys have yet been done.



- vi. The contractor shall plan closed loops consisting of a network of triangles, connecting these control points. He will get this network approved by K-RIDE before proceeding to site. The triangles shall be well formed and preferably not too acute nor obtuse, with sufficient redundancy so that a base line could be confirmed by observations from multiple control points. There may be occasions where due to some specific site constraints, this network may require change. If a K-RIDE representative is available, his concurrence may be taken for this change. If K-RIDE representative is not available, necessary changes may be carried out by the Surveyor himself with reasons recorded by him which may be approved by K-RIDE representative later on. GPS observations shall be taken at control points in differential mode for sufficiently time using at least **5 receivers** forming **5 vertices** of a well formed good triangle.
- vii. carrying out network adjustment, one permanent control point may be fixed for both horizontal and vertical control. Horizontal control may be fixed with long hour GPS observation (**24 Hours**) continuous observation. Minimum common period of observation for other GPS points shall be not less than **four hours**.
- viii. The Surveyor shall also carry out comparative analysis of GPS coordinates obtained by observations from subsequent control points forming redundant triangles. The accuracy of these shall be at least be **1 in 50,000** or better. Measurements taken with Geometric Dilution of Precision (GDOP) exceeding 5 should not be considered for post-processing.
- ix. The Surveyor shall download raw GPS data on a PC/laptop at site itself and thereafter apply suitable projection system so as to arrive at grid coordinates (Northing, Easting and Elevation with reference to Mean Sea Level) from geographical coordinates (Latitude, Longitude & Ellipsoidal Height) observed at site. Horizontal control may be fixed selected from the points of the "prime traverse". Vertical control (i.e. mean sea level height) may be established with reference to known available benchmark(s) in the nearby location. Each day's work shall be compiled and mapped/documented on the same day.
- x. The parameters used for transformation shall be duly documented in the Report provided by the Contractor.
- xi. The co-ordinates for the entire section shall be with reference to single grid in metric system and WGS datum on UTM projection system.
- xii. The GPS work will be followed by Total Station Survey Work. The Contractor will provide the grid and ground coordinates of all Control Points to K-RIDE.
- xiii. Both the Raw Data (in RINEX as well as proprietary formats of GPS manufacturer) as well as the Transformed Data shall be supplied by the Contractor to K-RIDE.
- xiv. All teams shall ensure that details in required format are furnished promptly to K-RIDE representative working near the site, in softcopy and hardcopy forms, duly checked and verified, supported with "not to scale" neat sketches. The Surveyor shall also submit photographs of all control points surveyed by him. The photographs shall indicate the pillars/points and its surrounding areas clearly.
- xv. During survey, careful notes with dates should be made on the ground, from personal enquiry and observations regarding any information likely to be useful in working out details of the project.
- xvi. Necessary jungle clearance and construction of pathway for proper execution of the work, wherever required, shall have to be done by the contractor at no extra cost.

## 6.22 Fixing of Pre-cast RCC Pillars

- 6.22.1 Wherever, control markers and TBMs are not on existing permanent structures, RCC pillars shall be erected in advance as may be required for control markers and TBMs.
- 6.22.2 GPS control points and Bench Marks - shall be made of cement concrete of grade



M-20, rectangular in shape and size of 300mm x 300mm x 600mm and 150mm x 150mm x 700mm. A Mild Steel rod of 20 mm diameter and 350mm long shall be provided at center of pillar to mark location of traverse station. Top of control point shall suitably be projected above adjoining ground level. Each control point shall be painted to mark its number. It is deemed that cost of control points is included in items of BOQ. No extra payment shall be made on this account. Control points shall be maintained until survey is taken over by K-RIDE.

#### 6.23 **Densification of Horizontal Control using Total Stations:**

- a) For densification of horizontal control, the contractor shall use Total Station equipment of LEICA/TRIMBLE/NIKON/SOKKIA/TOPCON make. The Total Station shall be of 1" (one second) accuracy as per DIN standard. Total Stations of 300 and 200 series of TOPCON make are not permitted for traverse work. Horizontal control shall be established by running a closed traverse on DGPS control marks (RCC pillars/permanent structures) along the corridor using Total Stations of 1" accuracy (as per DIN standards). The contractor shall submit a calibration certificate from the manufacturer or his authorized service agent for the total station equipment. The date of calibration certificate shall not be earlier than 3 month from the date of start of work.

Type of Traverse	Angular error of closure	Total linear error of closure
Total Station Traverse for horizontal control and for important and accurate surveys	$6''\sqrt{N}$ N = Number of angles measured	1 in 50,000 (after angular adjustment)

- b) The error within above permissible limits of traverse lines shall be balanced by Transit Method and got approved by K-RIDE. In case, the errors are beyond the above permissible limits, the traverse surveying shall be carried out again to ensure correctness of traversing.
- c) The contractor shall supply adjusted ground coordinates (northing and easting) of all control marks along with raw observations downloaded from the Total Station, calculation sheet and description of all control marks in MS-Excel worksheet. The co-ordinates of all control marks shall be with respect to the co-ordinate system of GPS control marks established for main route alignment. Coordinates of control points fixed by total station should normally match the coordinates of control points fixed by DGPS (after applying factors to convert grid coordinates to ground coordinates), within the permissible error. In that case, contractor may be required to adjust the error with reference to DGPS control points by transit method. In case, the coordinates do not match within the permissible error, the Engineer will issue suitable instructions regarding the control points to be used for further work.
- d) Closing of traverse, error and distribution of error shall be submitted to K-RIDE by the contractor. The vertical control should be planned in tandem with the traversing work.
- e) After submission of final co-ordinates values, K-RIDE engineer may carry out suitable RANDOM CHECK for horizontal control in the field. The contractor has to provide all required men, equipment, and other logistical arrangement for this field check. Cost of this checking is included in the rates of traversing and no extra payment will be made on this account. This checking can be done in patches also.

#### 6.24 **Establishment of Vertical Control**

- a) For leveling work, the contractor shall use Digital Level equipment of **Sokkia/Leica/Nikkon/Trimble**. Digital level must be duly calibrated from the manufacturer or his authorized agent before use on the project.

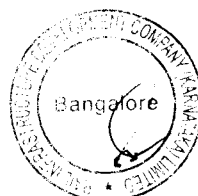


- b) The date of calibration certificate shall not be earlier than 03 months from the date of start of work.
- c) Vertical control shall be established by running a double tertiary level line on GPS control marks (RCC pillars/permanent structures which will act as temporary bench marks for vertical control as well) along the corridor using Digital level. The contractor shall close leveling work on daily basis and find out closing error. Closing would mean that leveling work shall be started from a known point (first point) and closed at a known point (or the first point where known points are not available).
- d) Closing error of daily loop closure should not exceed  $6\sqrt{K}$  mm, where K is the circuit length in kilometer. In case, accuracy of daily loop closure exceeds the limits defined above entire loop should be repeated till desired accuracy is achieved.
- e) Then, level line shall be connected with available GTS bench marks of Survey of India (SOI) preferably at both the ends as well as en-route. Closing error with reference to SOI GTS bench marks would be computed and adjusted, if required. Accuracy limits for this closing also is same as for daily loop closure i.e.  $6\sqrt{K}$  mm.
- f) The contractor will connect new permanent benchmarks and other references established by him with the help of Total Station also. The records for establishment of Bench Marks by leveling instrument as well as connection of the same by Total Station shall be properly maintained for verification at a later date. The contractor will compile and supply detailed sketches, list of benchmarks, and their descriptions, identification numbers, northing, easting and elevation (above Mean Sea Level) with reference to the reference frame of the control points.
- g) Contractor shall supply adjusted reduced levels of all control marks along with raw observations, calculation sheets & description of each control mark in MS Excel worksheet.
- h) After submission of final TBM values, K-RIDE engineer may carry out suitable RANDOM CHECK for Vertical control in the field. The contractor has to provide all required men, equipment, and other logistical arrangement for this field check. Cost of this checking is included in the rates of traversing and no extra payment will be made on this account. This checking can be done in patches also.

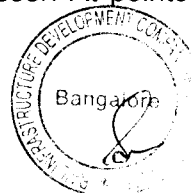
## 6.25 Topographic survey including picking of all details:

Topographic survey shall be carried with total station to pick up all details and features as existing on ground.

- a) Gradient posts, Km posts, Fouling marks, curve details.
- b) Details of Level crossings (LC) with nomenclature,
- c) Details of Culverts, minor bridges, Major Bridges, Flyovers across railway corridor with their details viz. HFL data, no. of span, type, etc. (Centre line of Bridge shall be marked on AutoCAD drg.)
- d) Details of FOB, ROB and RUB with span showing location of piers, columns, abutments.
- e) Any overhead facilities such as telephones/telegraph lines/HT lines / signals & location box / Traction mast, etc. (Implantation of OHE mast with respect to centre line of tracks)
- f) C.Rly. boundary as per site details, such as pillar/ wall if available if not then it should be plotted as per land plans.
- g) All existing details within C.Rly boundary and for a distance of 50 m from the center of the track as specified by Engineer in charge.
- h) Location of trees with girth more than 300mm.
- i) Points & crossings (SRJ & Heel of crossing)
- j) Yard details: Track details from take off point on both ends to C.Rly boundary and Topographic survey of yard including station building, platforms & other structures on the platform within C.Rly boundary.



- 6.26.1 Final location survey needs to be conducted for the approved alignment. In the final location survey, the alignment will be marked, staked and pegged on the ground for DGPS co-ordinates.
- The unit of measurement for the center line should be the chain of 30m. The center line finally located should be marked by pegs at every 25m. At each 100m a large peg should be used. These 100m pegs should have their numbers marked or stamped on them in figures not less than 25mm high. The numbers branded on pegs should indicate hundreds of meter; thus 57 would mean 5700m from zero Chainage.
  - Masonry pillars should be built at tangent point of the curves and along the center line at intervals of not less than 500 meters.
  - At the points of cut and connection, change of alignment, all the proposed tracks should be taken into account in FLS.
  - Any extension or widening of platforms should be ensured in final location survey.
  - All the connection, dead end, proposed siding, crossover, turn out which are proposed should be finally located on ground.
  - Agency will fix wooden pegs at close intervals (25 m). In addition wooden pegs/concrete pillars are invariably required to be fixed at important curve locations (TPI, TP2), and abutment location or as directed by Engineer in charge.
  - The sites for station yards are will be demarcated.
  - Agency should ensure that all the pegs and pillars at ground are in operative condition at the time of joint verification. Agency should deploy one authentic person (expert) at the time of joint verification by K-RIDE and Railways.
- 6.26.2 Preparation and submission of topographical plan in AutoCAD:
- The contractor shall prepare & submit the Topographical plan in AutoCAD in accordance with details collected in the survey on a scale 1:500 He has to show existing yards, track geometries, building, bridges, foot over bridges, tunnels, roads, all existing structure, HT lines, electrical pole etc.
- The contractor has to plan survey based on layer concept so as to prepare plan showing all existing and manmade features. All the text size, general layout of drawings, legend, scale etc. shall be as per sample drawing, which will be supplied by K-RIDE during execution of work.
- 6.26.3 It may be required to run sub-traverses to cover area of interest for FLS. These sub-traverses shall start and end on a control mark already established in previous stage of the survey. Accuracy of this sub-traverse shall also be computed and properly documented. Accuracy of sub-traverses should also be same as required for establishment of total station traverses.
- 6.26.4 All measurements and detailing of features shall be taken by using Total Stations of minimum 1" (One second), accuracy as per DIN standard with data downloading facility of brands as specified above and shall be recorded directly on to it. The linear measurements shall have an accuracy of  $\pm (5\text{mm} + 5\text{ppm times base line length})$ .
- 6.26.5 Spot levels shall be picked up so as to truthfully depict actual ground with spot level interval of the order of 25m or lesser. At points where profile is changing,



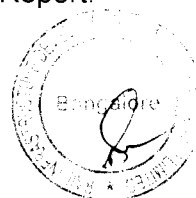


additional levels will be taken. All traverse stations shall be connected with TBM established at site using Auto levels with an accuracy of  $6\sqrt{K}$  mm, where K is the circuit length in km.

- 6.26.6 The contractor is also required to carry out leveling in isolated ponds or water logged areas or in the existing borrows pits filled with water.
- 6.26.7 A sketch showing surveyed points with respect to traverse stations should be prepared in a field register with date of survey. Every page of the field register should be numbered and each page signed by the surveyor.
- 6.26.8 The following documents shall be maintained at site by the contractor and submitted to K-RIDE and will be considered as property of K-RIDE. These books and register shall be photocopied and submitted to K-RIDE along with the part submission. Original documents will be submitted on completion of work.
- 6.26.9 Traverse Register – containing the records of running sub-traverse for topographic survey, sub- traverse stations with their description, calculation of co-ordinates of sub-traverse stations, down loaded data, etc.
- 6.26.10 Level Books – containing the records of connecting of level of TBMs/BMs established along the alignment to traverse pillars and leveling along centre line of proposed alignment pegged at site.
- 6.26.11 After making necessary corrections, as may be required, corrected hard copies of the plan shall be jointly (K-RIDE representative and Contractor's surveyor) verified at site. Corrections, if any shall be carried out by the contractor and final drawings in hard copy (duly signed) and soft copy shall be submitted to K-RIDE for design of alignment.
- 6.26.12 Data downloading and plotting of daily work completed by Total Station team shall be done on that very day.
- 6.26.13 In addition, the Contractor shall supply raw data as downloaded from Total station and processed data in ASCII/GENIO/XML format compatible with MX Software duly checked and verified. The contractor shall follow standardized feature code and level/layer information to ensure standardization; any data incompatible with the same shall not be accepted. This data should be acceptable to MX for designing and processing.

## 6.27 Deliverables

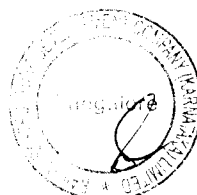
- Survey sketch or map showing independent baselines used to create the network
- Station descriptions
- Field sketch for every DGPS point
- Observation logs
- Photographs of every DGPS point from all directions
- Baseline processing reports
- Loop closure Report
- All Raw dataset of Base and Rover in .dat format
- Final processed data in .shp files with attribute (X, Y, Z) and also in Excel format
- Filled DGPS detail form for every DGPS point with all details.
- Preparation and Submission of Survey Report.



## 6.28 Penalties

If the vendor fails to complete in full, all delivery and implementation according to the project schedule, K-RIDE reserves the right to recover from the successful tenderer any damages/extra expenditures which the Company may incur to cure the failure of the successful tenderer. The K-RIDE will have the right to terminate the contract in case of delay in completing the project by the successful tenderer and get the same executed from market at the risk and cost of the successful tenderer.

K-RIDE would deduct from the amount due for payment to the successful tenderer, the amount charged as penalty for non-compliance of the contract conditions. If the amount of such penalty exceeds the payments due to the successful tenderer, the successful tenderer shall within 15 days make the full payment to K-RIDE. If the successful tenderer fails to pay penalty amounts due to K-RIDE, K-RIDE reserves the right to take legal action on the defaulted tenderer at his risk and cost.



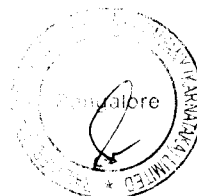
## **SECTION-7**

### **FORMATS FOR TENDER SUBMISSION**

The following formats are required to be submitted as part of the Tender Document. These formats are designed to demonstrate the Tenderer's compliance with the Qualification Requirements other submission requirements specified in the Tender Document.

- i. Format of Covering Letter (Format 1)
- ii. Format of Financial Quotation (Format 2)
- iii. Format for Schedule of Quantities and Rates (Format 3)
- iv. Format of Certificate of Familiarisation (Format 4)
- v. Proforma for Performance Guarantee (Format 5)
- vi. Format of Draft Contract Agreement (Format 6)

The Tenderer may use additional sheets to submit the information for his detailed response.



**FORMAT-1**

**COVERING LETTER**

(The covering letter should be on the Letter Head of the Tenderer)

Date: \_\_\_\_\_

Reference No: \_\_\_\_\_

From: \_\_\_\_\_ (Insert name and address of Tenderer)

Tel.#: Fax#:

E-mail address#

To

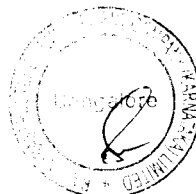
The Company Secretary/Authorised Officer,  
K-RIDE,  
Bangalore.

**Sub: Response to Tender Document No. K-RIDE/Projects/30/FLS/DKB/2019  
Dated:10.10.2019 for "Final Location Survey and Preparation of DPR for New  
Line between Dharwad - Belgaum under K-RIDE."**

Dear Sir,

We, the undersigned ..... [insert name of the Tenderer] having read, examined and understood in detail the Tender Document hereby submit our response to Tender Document. We confirm that in response to the aforesaid Tender Document, we have not submitted more than one response to Tender Document including this response to Tender Document.

1. We have submitted our response to Tender Document strictly as per Tender Document, without any deviations, conditions and without mentioning any assumptions or notes in the said Formats.
2. We hereby unconditionally and irrevocably agree and accept that the decision made by K-RIDE in respect of any matter regarding or arising out of the Tender Document shall be binding on us. We hereby expressly waive and withdraw any deviations and all claims in respect of this process.
3. Familiarity with Relevant Indian Laws & Regulations: We confirm that we have studied the provisions of the relevant Indian laws and regulations as required to enable us to submit this response to Tender Document, in the event of our selection as Successful Tenderer.
4. We are enclosing herewith our response to the Tender Document with formats duly signed as desired by you in the Tender Document for your consideration.



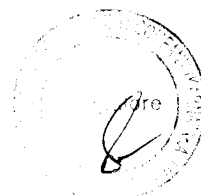
5. It is confirmed that our response to the Tender Document is consistent with all the requirements of submission as stated in the Tender Document and subsequent communications from K-RIDE.
6. The information submitted in our response to the Tender Document is correct to the best of our knowledge and understanding. We would be solely responsible for any errors or omissions in our response to the Tender Document.
7. We confirm that all the terms and conditions of our Tender are valid for a period of forty five (45) days from the date of opening of tender.
8. We enclosed herewith the required Earnest Money Deposit. The full value of the Earnest Money shall stand forfeited without prejudice to any other right or remedies available to K-RIDE in case my/our tender is accepted and if:
  - a. I/we do not execute the Contract Documents as per tender conditions after receipt of notice issued by K-RIDE that such documents are ready; or
  - b. I/we do not commence the work within 7 days after receipt of orders to that effect.
9. Until a formal agreement is prepared and executed acceptance of this tender shall constitute a binding contract between us subject to modifications as may be mutually agreed to between us and indicated in the letter of acceptance of my/our offer for this work.
10. I/we also undertake to carry out the work in accordance with the said plans, specifications and conditions of contract, and to find and provide such of the materials for, and to do all such things which in the opinion of the K-RIDE may be necessary for, or incidental to the construction, completion and maintenance thereof and to complete the whole of the said works in all respects, and hand them over to you or your representative(s) within the period specified, and to maintain the same for the period and in the manner provided in the conditions of contract.
11. We have neither made any statement nor provided any information in this Tender, which to the best of our knowledge is materially inaccurate or misleading. Further, all the confirmations, declarations and representations made in our Tender are true and accurate. In case this is found to be incorrect after our selection as Successful Tenderer, we agree that the same would be treated as a Seller's event of default.

Dated the \_\_\_\_\_ day of \_\_\_\_\_, 20...

Thanking you,

Yours faithfully,

(Name, Designation and Signature of Authorised Person)



## **FORMAT- 2**

### **FINANCIAL QUOTATION**

(On Tenderer's letter head)

[Date and Reference]

To,  
The Company Secretary/Authorised Officer,  
K-RIDE,  
Bangalore

**Sub: Response to Tender Document No. K-RIDE/Projects/30/FLS/DKB/2019  
Dated:10.10.2019 for "Final Location Survey and Preparation of DPR for New  
Line between Dharwad - Belgaum under K-RIDE."**

Dear Sir,

I/ We, \_\_\_\_\_ (Applicant's name) furnish below the Financial Quotation along with schedule of quantities and rates as per Format – 3 and certificate of familiarisation as per Format - 4 for selection of my / our company/firm/proprietor for the Final Location Survey and Preparation of DPR for New Line between Dharwad - Belgaum under K-RIDE as a Tenderer.

I/ We agree that this offer shall remain valid for a period of forty five (45) days from the date of opening of tender or such further period as may be mutually agreed upon.

S.No.	Description	Amount in INR (in figure)	Amount in INR (in words)
1	Final Location Survey and Preparation of DPR for New Line between Dharwad - Belgaum under K-RIDE(cost inclusive of all taxes)		

**Note:**

- 1) In the event of arithmetic calculation mistake, the individual amount in words shall be considered for calculation.
- 2) The Financial Proposal is submitted strictly as per forms given in the Tender Document.

Name  
Authorized Signatory  
Designation  
Name of the Company  
Address



### **FORMAT- 3**

#### **SCHEDULE OF QUANTITIES AND RATES ENCLOSED**

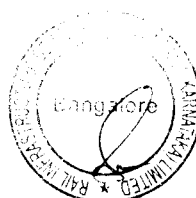
**“Final Location Survey and Preparation of DPR for New Line between Dharwad - Belgaum under K-RIDE.”**

1. The quantities shown in the enclosed schedule are approximate and are as a guide to give the Tenderer(s) an idea of the quantum of work involved. The K-RIDE reserves the right to increase/decrease and/or delete or include any of the quantities given above and no extra rate will be allowed on this account.
2. For schedule A, the tenderer has to quote one consolidated percentage (at par above or below) of the par value given in the schedule of the quantities.
3. For schedule B, the tenderer has to quote individual rates for each items of work as mentioned in the schedule of quantities.

Place:

Date:

.....  
Signature of the Tenderer(s)



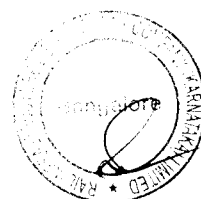
## **FORMAT- 4**

### **CERTIFICATE OF FAMILIARISATION**

I / We hereby solemnly declare that I / We visited the site of the above work have familiarized myself / ourselves of the working conditions there in all respects and in particular the following:-

- i) Topography of the area.
- ii) Soil conditions at the site of work.
- iii) Sources and availability of construction materials.
- iv) Rates for construction materials.
- v) Availability of local labour, both skilled and unskilled and the prevailing labour rates.
- vi) Availability of water and electricity.
- vii) The existing roads and access to the site of work.
- viii) Availability of space for putting labour camps, office, stores, godown, Engineering yard etc.
- ix) Any other matter that may have bearing on work.

**Signature of the Tenderer**





## **FORMAT- 5**

### **PROFORMA FOR PERFORMANCE GUARANTEE**

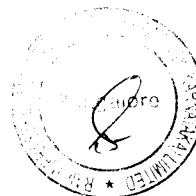
BANK GUARANTEE NO. \_\_\_\_\_  
AMOUNT RS. \_\_\_\_\_  
VALIDITY from \_\_\_\_\_  
Valid upto \_\_\_\_\_  
Last date for lodgement of claim \_\_\_\_\_

#### **PERFORMANCE GUARANTEE IN THE FORM OF BANK GUARANTEE**

In consideration of K-RIDE \_\_\_\_\_, *\*(give full address of the Office)\** (hereinafter referred to 'Company') having accepted tender vide letter No. \_\_\_\_\_ dated \_\_\_\_\_ and the tender submitted by Mr.M/s. \_\_\_\_\_

\_\_\_\_\_ *\*(give full address of the contractor)\** (hereinafter referred to as "the contractor(s), and agreed to grant a Contract for Final Location Survey and Preparation of DPR for New Line between Dharwad - Belgaum under K-RIDE (hereinafter called the 'Contract') and whereas one of the terms agreed by the said Contractor, is that he should give a Performance Guarantee in the form of an irrevocable bank guarantee amounting to 5% of the contract value, ie., Rs.2,53,860/- (Rupees. \_\_\_\_\_ only) *\*(indicate PBG amount)\** valid upto \_\_\_\_\_ *\*(Indicate date - Currency period + 60 days)\**, by way of security for the due observance of the terms and conditions, performance and fulfillment of the said contract, we \_\_\_\_\_, *\*(indicate the name and full address of the bank)\** (hereinafter referred to as the 'the Bank') at the request of the Contractor do hereby irrevocably and unconditionally guarantee to the Company that the Contractor shall duly perform and discharge their obligations under the said contract to the full satisfaction of the Company and render all necessary and efficient services which may be required to be rendered by the Contractor in connection with and/or for the performance of the works as per the specifications stipulated in the tender no. \_\_\_\_\_ dated \_\_\_\_\_ and Letter of Acceptance No. \_\_\_\_\_ dt. \_\_\_\_\_ within the time of \_\_\_\_\_ *\*(Indicate date - Currency period + 60 days)\** reckoned from the date as per the letter of acceptance, and further guarantees that the works which shall be done by the Contractor under the said Contract, shall be actually performed in accordance with terms and conditions of the Contract to the full satisfaction of Company.

2. We, the Bank, do hereby undertake to pay to the Company an amount not exceeding Rs. \_\_\_\_\_ against any loss and/or damage caused to or suffered or would be caused to or suffered by the Company by reason of any breach by the said Contractor(s) of any of the terms or conditions contained in the said Contract.
3. We, the Bank, do hereby undertake to pay the amounts due and payable under this Guarantee without any demur, merely on a demand from the Company stating that the amount claimed is due by way of loss and/or damage caused to or would be caused to or suffered by the Company by reason of any breach by the said Contractor's(s)' of any of the terms or conditions contained in the said Agreement or by reason of the Contractor (s) failure to perform the said Agreement. Any such demand made on the Bank shall be conclusive as regards the amount due and payable by the Bank under this Guarantee. However, our liability under this Guarantee shall be restricted to an amount not exceeding Rs. \_\_\_\_\_



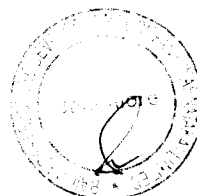
4. We, the Bank, do hereby undertake to pay to the Company any money so demanded notwithstanding any dispute or disputes raised by the Contractor(s) in any suit or proceeding pending before any Court, Tribunal or Arbitrator(s) relating thereto our liability under this present being absolute and unequivocal. The payment so made by us under this Bond shall be a valid discharge of our liability for payment there under and the Contractor(s) shall have no claim against us for making such payment.
5. We, the Bank, do further agree that the Guarantee herein contained shall remain in full force and effect during the period that would be taken for the performance of the said Agreement and that it shall continue to be enforceable till all the dues of the Company under or by virtue of the said Agreement have been fully paid and as its claims satisfied or discharged or till the Company certifies that the terms and conditions of the said Agreement have been fully and properly carried out by the said Contractor(s) and accordingly discharges the Guarantee. Unless a demand or claim under this Guarantee is made on us in writing on or before the....., we shall be discharged from all liability under this Guarantee thereafter.
6. We, the Bank, do further agree with the Company that the Company shall have the fullest liberty without our consent and without affecting in any manner our obligations, hereunder to vary any of the terms and conditions of the said Agreement or to extend time of performance by the said Contractor(s) from time to time or to postpone for any time or from time – to – time any of the powers exercisable by the Company against the said Contractor(s) and to forbear or enforce any of the terms and conditions relating to the said Agreement and we shall not be relieved from our liability by reason of any such variation or extension being granted to the said Contractor(s) or for any forbearance, act or omission on the part of the Company or any indulgence by the Company to the said Contractor(s) or by any such matter or thing whatsoever which under the law relating to sureties would but for this provision have effect of so relieving us.
7. This Guarantee will not be discharged due to the change in the constitution of the Bank or the Contractor(s).
8. We,.....\*(indicate the name of the Bank)\* lastly undertake not to revoke this Guarantee during its currency except with the previous consent of the Company in writing.

Dated the.....day of 2019

For.....

Seal and Signature(s) of the  
authorized Official(s) with  
designation

**Note:- Words appearing between asterisk “\*” marks are for guidance only and not to be typed in the final / fair document of Bank Guarantee**

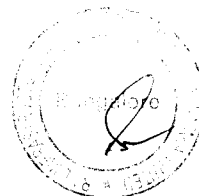


## **FORMAT- 6**

### **DRAFT CONTRACT AGREEMENT**

**(To be executed on requisite value of stamp Papers)**

1. Articles of agreement made this ..... day of ..... of 20.....between the "K-RIDE", herein after called the "Company of the one part and ..... hereinafter called the "Contractor" of the other part.
2. Whereas the Contractor has agreed with the Company for the performance of Final Location Survey and Preparation of DPR for New Line between Dharwad – Belgaum.
  - a. And whereas the Contractor has agreed to carry out the works as detailed in the tender notification read with his quotation as accepted by the company and as may be entrusted to him from time to time during the said contract period and as will be set forth in the Work Orders (which Work Orders shall be deemed and taken to be part of this contract) that will be issued during the said period and as per the Contract Documents complete and whereas the performance of the said works is an act in which the public are interested.
3. And whereas the Contractor has deposited a lump sum of Rs...../- as Earnest Money to cover for tendering against any number of works on the K-RIDE and has agreed to furnish the full Security Deposit as per rules in force and whereas the Security Deposit is at the instance of the Contractor recovered at 10 per cent of the value of the running bills till the amount of Security Deposit of Rs..... is fully recovered.
4. And whereas the Contractor has deposited a sum of Rs...../- towards the Earnest Money and whereas the balance in the Security Deposit after adjustment of Earnest Money of Rs..... originally paid by the Contractor is at the instance of the Contractor recovered at 10 per cent of the value of the running bills till the amount of Security Deposit of Rs..... is fully recovered.
5. The contract shall be in force for the period mentioned above. However, the K-RIDE may at its option and without assigning any reasons for so doing, put an end to this contract at any time.
6. Now this indenture witnesseth that in consideration of the payments to be made by the K-RIDE, the Contractor will duly perform the works set forth in the said Work Orders and will execute the same with great promptness, care and accuracy in a workmanlike manner to the satisfaction of the K-RIDE and will complete the same on or before the respective dates specified therein in accordance with the said specifications and said drawings (if any ) and the said Contract Documents complete, and will fulfill and keep all the conditions therein mentioned (which shall be deemed and taken to be part of this contract as if the same had been fully set forth therein), and the Company do hereby agree that if the Contractor shall duly perform the said works in the manner aforesaid and observe and keep the said terms and conditions, the K-RIDE will pay or cause to be paid to the Contractor for the said works on the completion thereof, the amount due in respect thereof, at the rates specified in the schedule(s) hereto annexed.



7. Entrustment of all or any of the works referred to as above to the Contractor shall be at the option of the K-RIDE.
8. The cost of stamp duty on the agreement shall be borne by the Contractor.
9. The schedule of quantities and rates and the description of the works under this contract are as per the enclosures to this contract.
10. Jurisdiction of Court: The Courts at Bangalore shall have the exclusive jurisdiction to try all disputes arising out this agreement between the parties.

IN WITNESS WHEREOF the parties hereto have caused their respective Common Seals to be hereunto affixed / (or have hereunto set their respective hands and seals) the day and year first above written.

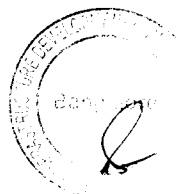
For and on behalf of the Company  
Signature of the authorized official  
Name of the official  
Stamp/Seal of the Supplier

For and on behalf of the Contractor  
Signature of the authorized official  
Name of the official  
Stamp/Seal of the Purchaser

SIGNED, SEALED AND DELIVERED

By the said \_\_\_\_\_  
Name \_\_\_\_\_ on behalf of  
the Company in the presence of:  
Witness \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

By the said \_\_\_\_\_  
Name \_\_\_\_\_ on behalf of  
the Contractor in the presence of:  
Witness \_\_\_\_\_  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



**RAIL INFRASTRUCTURE DEVELOPMENT COMPANY (KARNATAKA) LTD (K-RIDE)**  
**TENDER SCHEDULE OF QUANTITIES**

Name of the Work: FLS and preparation of DPR for New Railway line Between Dharwad - Belgaum

**SCHEDULE - A**

SI no	BSR CODE	DESCRIPTION	UNIT	PART SCOPE FOR DPR		
				RATE	Qty	Amount
1	191011	Exploratory drilling of Boreholes down to required depth, drilling of 150mm diameter boreholes in all type of soils except hard rock and large boulders (boulder core more than 30 cm), including refilling and reinstating surface, and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion / chiselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area: Soil drilling 0-10m	Metre	1,007.02	600	6,04,212.00
2	191012	Exploratory drilling of Boreholes down to required depth, drilling of 150mm diameter boreholes in all type of soils except hard rock and large boulders (boulder core more than 30 cm), including refilling and reinstating surface, and disposing off surplus material including use of mechanical rigs with power operated winches as well as percussion / chiselling tool for advancing through occasional seams of hard strata to be employed, where necessary in Dry area: Soil drilling 10-20m	Metre	1,037.22	150	1,55,583.00
3	191030	Extra for 150mm dia bore in large Boulder at all levels	Metre	4,878.30	75	3,65,872.50
4	191041	Drilling of NX size borehole (75 mm dia) in all types of hard rock (fresh rock) and collection of rock core samples from boreholes and preserving in boxes: 0m to 10m	Metre	3,167.41	100	3,16,741.00
5	191100	Taking out 100mm dia & 450mm long undisturbed samples of soil from bore holes, including provision of air tight containers for packing and, labelling incl. transporting the samples to laboratory. Piston sampler shall be used for extracting undisturbed samples where necessary. Samples shall be collected as per IS 2720	Each	348.45	150	52,267.50
6	191110	Taking out 100mm dia & 450mm long disturbed samples of soil from bore holes, including provision of air tight containers for packing, labelling and transporting the samples to laboratory. Samples shall be collected as per IS 2720	Each	348.45	400	1,39,380.00
7	191120	Conducting standard penetration test as per IS 2131 at approximate 1.5 m intervals in bore holes, as directed by the Engineer in charge	Each	209.07	400	83,628.00
8	191130	Collection of water samples at required intervals	Each	139.38	0	-
9	191141	Conducting laboratory Tests on collected soil samples as per relevant IS code: Moisture contents/ Dry density	Each	290.38	150	43,557.00
10	191142	Conducting laboratory Tests on collected soil samples as per relevant IS code: Atterberg Limit	Each	290.38	150	43,557.00
11	191143	Conducting laboratory Tests on collected soil samples as per relevant IS code: Specific Gravity	Each	232.30	150	34,845.00
12	191144	Conducting laboratory Tests on collected soil samples as per relevant IS code: Grain size analysis including Hydrometer analysis	Each	232.30	150	34,845.00

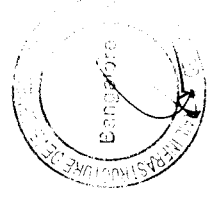


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SI no	BSR CODE	DESCRIPTION	UNIT	RATE	Qty	Amount
13	191145	Conducting laboratory Tests on collected soil samples as per relevant IS code: Direct Shear Test	Each	1,742.25	50	87,112.50
14	191146	Conducting laboratory Tests on collected soil samples as per relevant IS code: Natural density	Each	290.38	150	43,557.00
15	191147	Conducting laboratory Tests on collected soil samples as per relevant IS code: Consolidation test	Each	290.38	150	43,557.00
16	191148	Conducting laboratory Tests on collected soil samples as per relevant IS code: Unconfined compression test	Each	290.38	150	43,557.00
17	191149	Conducting laboratory Tests on collected soil samples as per relevant IS code: Tri-axial test	Each	1,742.25	50	87,112.50
18	191151	Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code: Density test	Each	290.38	50	14,519.00
19	191152	Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code: Water absorption & Porosity	Each	232.30	50	11,615.00
20	191153	Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code: Hardness	Each	290.38	50	14,519.00
21	191154	Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code: Unconfined compression test	Each	232.30	50	11,615.00
22	191155	Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code: Point load test	Each	406.53	50	20,326.50
23	191156	Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code: Modulus of elasticity	Each	406.53	50	20,326.50
24	191157	Conducting Laboratory tests on collected ROCK SAMPLES as per relevant IS code: Abrasion testing	Each	1,161.50	50	58,075.00
25	191180	Preparation and submission of Final report giving complete and comprehensive record of investigations, laboratory test reports and calculations in approved format	Each	2,323.00	50	1,16,150.00
		<b>Total of Schedule-A PAR VALUE</b>				<b>24,46,530.00</b>

CONTRACTOR'S RATE(%age above Par Value or at Par Value or Below the Par Value

SIGNATURE OF THE CONTRACTOR

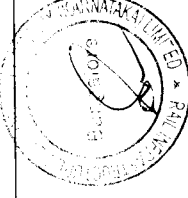


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Sl no	BSR CODE	DESCRIPTION	PART SCOPE FOR DPR		
			UNIT	RATE	Qty Amount

#### SCHEDULE - B

1	FLS-01	Traversing and fixing the proposed alignment/ temporary diversion line in straight and curves and pegging out the centre line in with wooden pegs of size 5x5x30 cm at 25 m intervals and with 10x10x40 cm stone posts at every 100 m intervals to the satisfaction of Engineer in Charge with all contractor's labours, survey equipment like Total station & GPS, wooden pegs, stone posts, tools, plant and conveyance including jungle clearance wherever required as per special conditions and as directed by Engineer in Charge and painting of chainage on stone posts. a) In plain section.	rm		73000
2	FLS-02	Traversing and fixing the proposed alignment/ temporary diversion line in straight and curves and pegging out the centre line in with wooden pegs of size 5x5x30 cm at 25 m intervals and with 10x10x40 cm stone posts at every 100 m intervals to the satisfaction of Engineer in Charge with all contractor's labours, survey equipment like Total station & GPS, wooden pegs, stone posts, tools, plant and conveyance including jungle clearance wherever required as per special conditions and as directed by Engineer in Charge and painting of chainage on stone posts. a) In ghat section)	rm		9000
3	FLS-03	Taking and submitting the precise levels along the centre line of the alignment at 25m intervals for L-section including the bed levels of the nallahs/rivers showing the levels of existing foundations if any and the OGL and taking the cross section at every 25m interval (for min. 50m width on either side of center line of the alignment at 5m interval) and fixing the bench mark at every 500m interval as per Engineering code etc., to the satisfaction of Engineer in charge with all contractors tools, labour, survey equipment and conveyance and as directed by Engineer in charge.	rm		82000
4	FLS-04	Preparation of index plan (500m to 1cm horizontal and 10m to 1cm vertical), index section (500m to 1cm horizontal and 10m to 1cm vertical), index map (topo map in 1 in 50000), detailed plan and section 50m to 1cm horizontal and 5m to 1cm vertical except hills in wider scales) after collecting relevant details and as per standard construction and as per engineering code showing all details of major, minor bridges, road crossings radiant locations, curve details, power lines etc., and DOT line crossing etc., as directed by engineer in charge. The drawing should show also the formation level of the existing bank in case of doubling.	rm		82000
5	FLS-05	Supplying and fixing of ( in 0.5m deep pit) stone pillar of minimum size 1200 X 100 X 100 mm as Apex point tangent point center of the curve bench mark road and Nallah crossings etc. and other location as specified by the engineer in charge duly marking the chainage, centerline reference with all contractors labour, stone pillar, all material tools plants equipments and conveyance etc completed as per specification and as directed by engineer in charge. Note : 1. seporate colouring preferably yellow colour for centerline alignment pillars and red colour for boundary pillar are to be painted for identification. 2.Center point direction has to be painted on alignment pillar with chainage boundary pillar are to be painted with boundary distance and direction of increase/decrease of width. 3.SWR has to be painted with black paint on both sides of stone.	each		200
6	FLS-07	Preparation and submission of hydraulic/hydrological calculations for bridges including waterway and scour depth calculations as per RDSO guidelines and Railway Bridge Substructure Code with all calculations and details in three copies in CD and six sets of booklets, including collection of field details from the site with contractor's men, materials and equipment etc complete and as directed by the Engineer in-charge a) for MAJOR BRIDGES (unit : each bridges)	Each Br.		20
7	FLS-08	Preparation and submission of hydraulic/hydrological calculations for bridges including waterway and scour depth calculations as per RDSO guidelines and Railway Bridge Substructure Code with all details from the site and calculations with contractor's men, materials and equipment etc complete and as directed by the Engineer in-charge a) for MINOR BRIDGES (unit : each bridges)	Each Br.		82
8	FLS-09	Preparation and submission of detailed estimate as per Engineering code and as per Railway Board Guidelines with rates and basis / rate analysis per NS items as directed by Engineer-in-charge with five hard copies and one soft copy after approval of concerned CE/CN.	km		82



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SI no	BSR CODE	DESCRIPTION	PART SCOPE FOR DPR			
			UNIT	RATE	Qty	Amount
9	FLS-10	Collection of existing yard details for junctions, and preparation of yard plans with details of 2.5km track on both sides of station yard as per the procedure prescribed in the P-way manual, works manual etc., with latest survey equipments and transferable machinery, fuel, consumables, technical supervisors, required software's etc. including all leads and lifts etc. as per the instructions of Engineer-in-charge and submission of the detailed drawings with proposals marked in RED ink as per the latest Railway approved method in good quality tracing paper etc., complete and as directed. Yard plan for junction stations (scale 1 : 500) Stage payment : i ) 50% awarded rate on submission of the yard plan for approval of competent authority. ii ) 50% awarded rate on submission of the approved yard plan with good tracing film and soft copy in CD.	each		3	
10	FLS-11	Collection of existing yard details for crossing stations, and preparation of yard plans with details of 2.5km track on both sides of station yard as per the procedure prescribed in the P-way manual, works manual etc. with latest survey equipments, transferable machinery, fuel, consumables, technical supervisors, required software's etc. including all leads and lifts etc. as per the instructions of Engineer-in-charge and submission of the detailed drawings with proposals marked in RED ink as per the latest Railway approved method in good quality tracing paper etc., complete and as directed. Yard Plan for junction stations (scale 1 : 500) Stage payment : i ) 50% awarded rate on submission of the yard plan for approval of competent authority. ii ) 50% awarded rate on submission of the approved yard plan with good tracing film and soft copy in CD.	each		7	
11	FLS-12	Collection of existing yard details for halt stations and preparation of yard plans with details of 2.5km track on both sides of station yard as per the procedure prescribed in the P-way manual, works manual etc. with latest survey equipments, transferable machinery, fuel, consumables, technical supervisors, required software's etc. including all leads and lifts etc. as per the instructions of Engineer-in-charge and submission of the detailed drawings with proposals marked in RED ink as per the latest Railway approved method in good quality tracing paper etc., complete and as directed. Yard Plan for junction stations (scale 1 : 500) Stage payment : i ) 50% awarded rate on submission of the yard plan for approval of competent authority. ii ) 50% awarded rate on submission of the approved yard plan with good tracing film and soft copy in CD.	each		3	
12	FLS-13	Preparation of land plans (three sets in original) for land acquisition after approval of L-section by the Railway marking the relevant details such as survey nos, area, name of village/revenue maps and the owner (Form A to Form D) and submitting to revenue authorities with all details duly colouring the proposed land to be acquired etc complete as per the specification and as directed by engineer in charge. Note : Scanning of village/revenue maps have to be done in presence of railway officials to a maximum accuracy and the soft copy so scanned will be the property of the department. No other copy to be kept with the contractor.	rm		82000	
13	NS	Hydrology parameters of <b>Malaprabha River (Important Bridge )</b>	Each Br.		1	
14	NS	GAD for <b>Malaprabha River (Important)</b>	Each Br.		1	
15	NS	Establishing a TBM value at an interval of every 500m at convenience places in mid sections, where it will not be disturbed during the course of work provided with cement concrete foundation 1:3:6 mix of size 0.45x0.45x0.6m using 20mm graded granite metal, writing the letter 'TBM' on the sides, painting the TBM No. and its value legibly on the top of concrete including connecting the TBMs from the GST bench marks and submitting the level books etc., complete and as directed by the Engineer-in-charge (All labour materials, including cost of stone, cement by the contractor).	each		200	
		<b>Total of Schedule-B</b>				

CONTRACTOR HAS TO QUOTE INDIVIDUAL RATE FOR EACH ITEM OF SCHEDULE B ABOVE

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SIGNATURE OF THE CONTRACTOR