

SOUTHERN RAILWAY

Name of work: Shoranur-Mangaluru section: (1) Proposed re-construction of Br. No. 904 (proposed DN line) at km 636/100-300 as 5x18.0m effective span PSC I girder & slab and 1x6.1m clear span PSC slab between Tanur & Parappanangadi stations (2) Proposed reconstruction of Br. No. 1085 (proposed UP line) at KM 735/000-200 as 3x18m effective span PSC I girder & slab between Thalassery & Etakkot stations including earthwork & blanketing for formation on approaches, collection of ballast, linking of track and other miscellaneous works in Palakkad Division of Southern Railway under DyCE/CN-I/TVC.

I. SCOPE OF WORK:

The contractor has to execute the following works.

1. Reconstruction of Br. No. 904 as 5x18.0m effective span PSC I girder & slab and 1x6.1m clear span PSC slab super structure & bridge foundation with 1000 mm dia. bored piles.
2. Reconstruction of Br. No. 1085 as 3x18m effective span PSC I girder & slab super structure & bridge foundation with 1000 mm dia. bored piles.
3. Construction of RCC Pile cap cum trestle beam, Pedestal, precast abutment cap, dirt wall trestle column, trestle beam, pedestal and other connected works.
4. Linking of track over newly constructed bridges, bridge approaches, providing guard rails over bridges, providing cut and connection to the existing track etc.
5. Transportation of P way and other materials to site from various places over Southern Railway.
6. Protective works in track viz. drainages and other miscellaneous works connected to protection of track, bank, cutting etc.
7. Supply of stainless steel reinforcement for Br No. 904, 1085, 1177 & 1188.

II.SCHEDULE DETAILS

1. The Tender Schedule consists of FOURTEEN SCHEDULES i.e. SCHEDULE A, B, C, D, E, F, G, H, I, J, K, L, M & N as under.
 - i) SCHEDULE -A: Items of works that are covered by the Southern Railway USSOR, 2021 as corrected by up to date applicable to TRIVANDRUM & PALAKKAD DIVISION for earthwork in filling using Contractor's earth & miscellaneous works for Br No. 904 & 1085.

- ii) SCHEDULE -B: - Items of works that are covered by the Southern Railway USSOR, 2021 as corrected by up to date applicable to TRIVANDRUM & PALAKKAD DIVISION for blanketing of formation for Br No. 904 & 1085
- iii) SCHEDULE -C: - Items of works that are covered by the Southern Railway USSOR, 2021 as corrected by up to date applicable to TRIVANDRUM & PALAKKAD DIVISION for soil exploration, concrete works, protection works & miscellaneous works for Br No. 904 & 1085
- iv) SCHEDULE -D: -Items of works that are covered by the Southern Railway USSOR, 2021 as corrected by up to date applicable to TRIVANDRUM & PALAKKAD DIVISION for piling work including permanent casing, load testing etc. for Br No. 904 & 1085
- v) SCHEDULE -E: - Items of works that are covered by the Southern Railway USSOR, 2021 as corrected by up to date applicable to TRIVANDRUM & PALAKKAD DIVISION for works related to PSC slab, HTS slab, staging, bearing work & miscellaneous works or Br No. 904 & 1085
- vi) SCHEDULE -F: Items of works that are covered by CPWD DSR 2023 as corrected by up to date for retaining wall & miscellaneous works for Br No. 904 & 1085
- vii) SCHEDULE -G: - Items of works that are covered by the Southern Railway USSOR, 2021 as corrected by up to date applicable to TRIVANDRUM & PALAKKAD DIVISION for P-way works Br No. 904 & 1085
- viii) SCHEDULE -H: - Items of works that are NOT covered by the Southern Railway USSOR, 2021 for P-way works for Br No. 904 & 1085
- ix) SCHEDULE -I: - Items of works that are NOT covered by the Southern Railway USSOR, 2021 for conducting CHUM test including supply of MS access tube, casting & launching of precast RCC slab, coating with epoxy IP net paint, conducting RSI analysis & miscellaneous work for Br No. 904 & 1085
- x) SCHEDULE -J: Items of works that are NOT covered by the Southern Railway USSOR, 2021 for supply of ballast for Br No. 904 & 1085
- xi) SCHEDULE -K: -Items of works that are covered by the Southern Railway USSOR, 2021 as corrected by up to date applicable to TRIVANDRUM & PALAKKAD DIVISION for supply of cement for Br No. 904 & 1085
- xii) SCHEDULE -L: - Items of works that are covered by the Southern Railway USSOR, 2021 as corrected by up to date applicable to TRIVANDRUM & PALAKKAD DIVISION for supply of steel reinforcement for Br No. 904 & 1085

- xiii) SCHEDULE -M: Items of works that are NOT covered by the Southern Railway USSOR, 2021 for supply of stainless steel reinforcement for Br No. 904 & 1085.
- xiv) Schedule- N: List of drawings.

NOTE:-

1. By submission of the tender, it shall be deemed that the Tenderer / Contractor has examined the drawings and inspected the site conditions, including approachability, floods in the rivers, seepage, rains, availability of manpower, water, electricity, materials etc., and understood the scope and nature of work, etc.
2. The rate quoted includes cutting of jungles, bushes, rank vegetation benching and small trees of girth upto 30cm clearing after site etc.
3. Locations wherever the contractors vehicle have to move close to the track, should be cordoned off with proper barricades of not less than 1.2m height above ground level, consisting of rail poles. These barricades should be provided at a distance of approximately 3.50m from the centre line of track as directed by the engineer in charge.
4. For all RCC works or any other works binding wire will have to be arranged at contractors cost and no separate payment will be made for this supply.
5. Unless otherwise specified, percentage quoted for all Annexures except Annexure F shall not include any cost element of Cement as they will be paid separately based on the rates quoted under relevant Annexures.
6. Unless otherwise specified, percentage quoted for all Annexures shall not include any cost element of reinforcement steel as they will be paid separately based on the rates quoted under relevant Annexures.
7. The contractor has to get necessary permission from the Mines and Geological Departmental or other agencies for transporting the earth to the locations wherever necessary and no extra payment will be made for the same.
8. Girders are to be erected in position duly obtaining limited hours of line block. However, due to some unavoidable circumstances the line/power block may have cancelled without prior notice and may lead to idling of crane and other

equipment for which no extra payment will be made. Also line block may be permitted during night hours should be utilized for the same purpose duly providing lighting arrangements by the contractor at his own cost.

9. Earthwork compaction shall be done with vibratory rollers.
10. For transportation items, the shortest and feasible route distances assessed will be taken.
11. The cables and other utilities of Railways/State Governments will be met with during the course of work. The same shall be removed by the respective departments. However, care should be taken to avoid any cable cut or disruption to the facilities by way of the work of the intended bidder. Suitable fines will be levied based on extant rules.
12. The item related to piling under hard rock is already covered under relevant items under Annexure D. Before submitting a quote, the contractor must thoroughly assess the soil condition i.e., presence of soft rock/hard rock/boulders etc. and can quote accordingly.
13. Provision of permanent liner/casing with bore pile, if any, should not be left to the discretion of field engineer, it should be incorporated in drawing itself.
14. A 'Method Statement should be prepared by the contractor for the pile foundation work detailing the sequence of operations, tools and equipment, roles and responsibilities of contractor's personnel, risk assessment etc. and approved by Dy CE before start of work. The method statement of integrity testing should also include equipment, specialized technical person and witnessing of Railway officials.
15. The record of piling work should be maintained through pour card and stored in cloud-based storage for posterity. The report of integrity testing should be in specified format, maintained log wise and stored as permanent record.
16. It is necessary that field engineers (XEN/AXEN & SSE/SE/JE) engaged in piling work should be imparted necessary training in execution of pile foundation including Pile Integrity Test. The contractor should deploy skilled, trained and experienced manpower for execution and supervision of piling work.
17. Wherever necessary pucca shoring arrangements as directed by the Engineer in charge will have to be provided during execution of work to safe guard cutting sides, existing track, trench sides etc. by the contractor.
18. The rate quoted for earth work includes computer aided plotting of earth work profile including initial/proposed/work done profile, classification, levels of cutting in various colors duly computing earthwork quantities in all soils,

ordinary rock, hard rock and bank including blanketing and submission of the abstract of quantities etc., and as directed.

19. The contractor should be ready to carry out all work under block in the night according to availability of block (Between 19.00hr and 06.00hrs and if block time is minimum one hour in the night time entire block will be given extra rate for night). For the work to be done under block in the night, additional rate as per relevant item will be paid. The rate given is combined extra rate for carrying out work under block and also for carrying out in the night time. Extra rate for carrying out in night is not applicable for cutting and drilling holes in Rails.
20. In manual linking, drilling holes will be paid separately.
21. The tentative drawings (GAD's) of proposed structures are given under Annexure 'N'. All the Drawings of the proposed structures as shown in this list are tentative indicative/reference drawings based on Preliminary Surveys by Railways.
22. Under line block for all works, cutting & drilling should be using abrasive cutting machine & drilling machine respectively and will be paid separately.
23. For transportation, the distance from different sleeper factories /Depot (Thirumangalam, Gangaikonda, Ambattur, Tambaram, Arakkonam, GOC, Bommidi etc,) to the station nearest to unloading spot are specified in tender. The payment for transportation will be based on this distance only.

| DISTANCES TO BE CONSIDERED FOR TRANSPORTATION ITEMS | | | | | |
|---|---|--------------|-----------------|--------------------|--------------------|
| Supply From | Bridge No, Nearest Satation yard and Distance | | | | |
| | 829 Kuttipuram | 904 Tanur | 1085 Ettakot | 1177 Bekal Fort | 1188 Bekal Fort |
| Thirumangalam | 313 km | 340 km | 443 km | 528 km | 528 km |
| Gangaikonda | 435 km | 462 km | 565 km | 651 km | 651 km |
| Ambattur | 630 km | 657 km | 653 km | 692 km | 692 km |
| Tambaram | 606 km | 633 km | 635 km | 674 km | 674 km |
| Arakkonam | 607 km | 634 km | 611 km | 650 km | 650 km |
| GOC | 340 km | 368 km | 471 km | 556 km | 556 km |
| Bommidi | 347 km | 374 km | 464 km | 502 km | 502 km |
| Tiruvalam | 535 km | 562 km | 539 km | 578 km | 578 km |

24. Break up details of rates:

While quoting the rate for the collection of ballast as required in the schedule the Tenderer/Contractor should indicate break up particulars as detailed

below (for the purposed of deduction of Income Tax at source).

i) Cost at quarry. : Rs.

ii) Cost of transporting to the
site of work, unloading and : Rs..
stacking for measurements. -----

Total cost of ballast as quoted : Rs.
for the item of schedule. -----

25. The supply of ballast shall be as per the latest specifications for track ballast with salient features as detailed below.

(a) No ballast samples are required to be submitted along with the tender.

(b) The test reports of the ballast for the Abrasion value, Impact value, and water absorption from the approved laboratory/institution are to be enclosed along with the tender as per provisions of "Specification of track ballast IRS – GE- 1- June 2016 corrected up to date, failing which the offer shall be summarily rejected.

NOTE:

(i). For pure ballast supply tenders, this test report be included in the list of mandatory documents to be submitted along with the tenders.

(ii). For tenders of mixed works and EPC tenders, the above condition for submission of ballast test report is dispensed with.

(c) The tenderer/Contractor along with their offer should furnish an under taking that the ballast supply at all times will conform to specifications for track ballast as specified by the Railways.

(d) Payment shall be made for the gross measurements of stacks. No deduction will be made for shrinkage/voids.

26. The maximum permissible impact value of ballast for this work is 20%.

27. Before stacking the ballast Ground level certificate to be obtained from the Officer concerned.

28. All works and materials shall conform to Indian Railways Unified Standard Specification (Formation Works, Bridge Works and P. Way Works) 2021/CPWD DSR specification 2019 Vol. 1 & 2 as corrected and up to date in respect of items in relevant Annexures.

29. Tenders while quoting their rates shall take the above aspects in to account.