

ABSTRACT

Highways Department – Construction and Maintenance Wing - Trichy (Highways) Circle and Division - Work of "Rehabilitation of Reinforced Cement Concrete T-beam bridge across Cauvery river at km 315/6-316/2 of Chennai – Trichy – Dindigul road (State Highways Urban-9) in Trichy city" at a cost of Rs.650.99 Lakh – Administrative Sanction - Accorded – Orders – Issued.

Highways & Minor Ports (HP2) Department

G.O.(Ms).No.96

Dated: 26.10.2021

பிலவ, ஜப்பசி 09, திருவள்ளுவர் ஆண்டு 2052

Read:

From the Chief Engineer (Highways) Construction and Maintenance Letter No.14426/Thittam/2020 dated 28.12.2020

ORDER:-

The Chief Engineer (Highways) Construction and Maintenance in the letter read above, has stated that the bridge is located at km 315/6-316/2 of Chennai -Trichy - Dindigul road (SHU-9) in the heart of Trichy City between Srirangam and Chathiram Bus stand. SHU-9 is an important State Highway branching from National Highways-45. This road connects important tourist places, marketing centres and also connects Trichy district with other districts such as Karur, Namakkal, Ariyalur, Perambalur, Tanjavur and Dindigul. This bridge was constructed in the year 1976 across river Cauvery. This bridge provides main connectivity between Srirangam and Trichy City and the Passenger Car Unit at this location is 21472. This is a High Level Bridge across Cauvery River with four laning facility without centre median. The bridge was constructed with 16 spans of RCC T beam cum deck slab superstructure, 15 piers and 2 abutments. Total width of the span is 20.00m and length of span is 33.30m each in 2 spans at ends and 14 spans of 34.10m each at the middle. The superstructures are rested on the piers and abutments over elastomeric bearing, which is mainly used to smooth transfer the load of traffic plying over the superstructure to the ground through piers and foundation of piers. Type of foundation is well foundation.

2. The Chief Engineer (Highways) Construction and Maintenance has also stated that due to heavy and continuous traffic in the bridge over 44 years, damages are found in dirt and wing wall of abutments, scouring of piers and elastomeric bearings in all supports are damaged due to fatigue wear and tear and aging. Because of damages in bearing, it fails to provide a smooth transfer of load to the substructures. This causes vibration in bridge structure during vehicular movement and it damages the wearing coat. Public and social activists have represented several times through social media to repair the distressed bridge in war footing

manner. The Director, Highways Research Station, has also inspected the site and observed as follows:-

- A deep and wide crack was developed in the junction of dirt wall and return wall of this bridge. The crack has further propagated into the cut water portion of the abutment. The width of the crack has been measured and it was varying from 14 mm to 30 mm.
- The Central intermediate gap supporting system has damaged in 12 piers.
- The river bed around the foundation has undergone scouring, thereby exposing the well cap for its full depth. Scouring occurred in 9 piers. Particularly in Pier No-1, well exposed on entire foundation and well foundations are partly exposed for 6 piers. And also suggested that the scoured portion of the river bed adjacent to well foundation shall be made up and covered with suitable non erodible material. Protection to well foundation would prevent tilting of well foundation.
- 3. The Chief Engineer (Highways) Construction and Maintenance has also stated that, as per Ministry of Road Transport and Highways (MORTH), an elastomeric bearing in a bridge may have a life of 15 years under normal loading, normal traffic and routine maintenance and from which it is well known that elastomeric bearings are to be replaced. After taking into account of the corrective measures, an estimate is prepared for Rs.695.00 Lakh adopting the current Schedule Of Rates 2020-21 to rehabilitate the above bridge. If rehabilitation is done, the life of the bridge will be enhanced. Hence, the rehabilitation is very essential.
- 4. The Chief Engineer (Highways) Construction and Maintenance has therefore requested orders of the Government to accord Administrative Sanction for a sum of Rs.695.00 Lakhs for the work of "Rehabilitation of RCC T-beam bridge across Cauvery river at km 315/6-316/2 of Chennai Trichy Dindigul road (SHU-9) in Trichy city" and allotment of Rs.100.00 Lakh for the current financial year.
- 5. The Government after careful examination, accept the proposal of the Chief Engineer (Highways) Construction and Maintenance and accord Administrative Sanction for a sum of Rs.6,50,98,853/- (Rupees Six Crore Fifty Lakh Ninety Eight Thousand and Eight Hundred and Fifty Three only) for the work of "Rehabilitation of Reinforced Cement Concrete T-beam bridge across Cauvery river at km 315/6-316/2 of Chennai Trichy Dindigul road (SHU-9) in Trichy City". The expenditure shall be met out from the allocation of CRIDP 2021-2022.
- 6. The expenditure sanctioned in para 5 above shall be debited to the following head of account:-

5054 Capital Outlay on Roads and Bridges -03. State Highways-337. Road Works- State Expenditure-JI – Comprehensive Road Infrastructure Development Programme (CRIDP) State Highways -416 – Major Works-01. Major Works". (IFHRMS Code: 5054-03-337-JI-41601)

- 7. The Chief Engineer (H) Construction and Maintenance is authorized to incur the expenditure sanctioned in para 5 above.
- 8. This order issues with the concurrence of Finance Department vide its U.O.No.41460/PWI/2021, dated 19.10.2021

(By order of the Governor)

Dheeraj Kumar, Principal Secretary to Government

To

The Chief Engineer (Highways) Construction and Maintenance, Chennai-25 The Accountant General, Chennai-18/35.
The Pay and Accounts Officer (South) Chennai-35

Copy to

The Finance (PW1/BG-I/BG-II/W&M-I) Department, Secretariat, Chennai-9
Office of the Hon'ble Chief Minister, Secretariat, Chennai-9
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The Private Secretary to Principal Secretary to Government,
Highways and Minor Ports Department, Secretariat, Chennai-9
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//Forwarded by order//

Section Officer