

GOVERNMENT OF TAMILNADU WATER RESOURCES DEPARTMENT

From
Er. S. MANMATHAN, B.E.,
Engineer-in-Chief &
Chief Engineer (General), WRD,
Chepauk, Chennai – 600 005.

To
**Additional Chief Secretary to
Government,**
Water Resources Department,
Secretariat, Chennai – 600 009.

Letter No.S7(2) / 29147 / MR-NOC-Highways Department /
Vaigai River North Bank Road near Samayanallur / OT4/ 2024,
Dated: 23.08.2024

Sir,

Sub: Madurai Highways Construction & Maintenance Division- Madurai (H) C&M West Sub Division – “Construction of Vaigai River North Bank Road Km 0/0 – 8/0 from Kamarajar Bridge to Varanasi – Kanniyakumari Road (NH 44) near Samayanallur” - NOC Proposal sent – Recommended – Regarding.

- Ref.: 1. G.O. (Ms). No.125, Highways and Minor Ports (HS1) Department, Dated 12.07.2022.

2. G.O. (2D) No.68, Public Works (P1) Department, Dated 27.09.2019.

3. The Superintending Engineer, WRD., Periyar Vaigai Basin Circle, Madurai Letter No.DB/D1/78M/C.NOC/2023, Dated 28.02.2023.

4. G.O. (Ms). No. 32, Highways & Minor Ports (H1) Department, Dated 04.03.2024.

5. The Divisional Engineer, (H) Construction and Maintenance, Madurai Letter No.Sa.Na./2022-2023/JDO-2, Dated 24.07.2023.

6. The Chief Engineer, WRD, Madurai Region, Madurai Letter No.DB/Sr.DO/F-12119/2024, Dated 18.03.2024.

7. The Superintending Engineer, WRD., Periyar Vaigai Basin Circle, Madurai Letter No.D1/251M/C.NOC. (Kamarajar Salai)/2024, Dated 12.07.2024.

8. The Hon'ble High Court of Madras Madurai Bench Order Dated 07.03.2024.

9. The Additional Chief Secretary to Government, WRD., Secretariat, Chennai Letter No.2539/R2/2024-3, Dated 27.06.2024 and Minutes of the meeting 07.06.2024.

10. The District Collector, Madurai District Inevitability Certificate dated 18.07.2024.
11. The Executive Engineer, WRD., Periyar Vaigai Basin Division, Madurai Letter No.58SE/DB/JDO3/2024/C. 30(A-Palam), Dated 12.08.2024.
12. The Superintending Engineer, WRD., Periyar Vaigai Basin Circle, Madurai Letter No.112CE/D1/C.NOC/2024, Dated 20.08.2024.
13. The Chief Engineer, WRD, Madurai Region, Madurai Letter No.DB/SGDO/C.12119/2024, Dated 21.08.2024.

கோர்வை

In the reference 13th cited, the Chief Engineer, WRD, Madurai Region have recommended the proposal for obtaining necessary approval from the Government for granting NOC to the Highways Department for the work of "Construction of Vaigai River North Bank Road Km 0/0 – 8/0 from Kamarajar Bridge to Varanasi – Kanniyakumari Road (NH 44) near Samayanallur" based on the requisition of Highways Department by stating the following importance of this project.

- Madurai the ancient temple city is the second largest city in the state of Tamil Nadu.
- The river Vaigai splits the city as northern and southern Madurai.
- Most of the traffic in northern part and southern part of Madurai city easily access to the Chennai - Tuticorin and Varanasi - Kanniyakumari National Highway (NH 44).
- All the Government offices, Hospitals, Colleges are situated in northern Madurai and all the ancient temples, market centers, residential areas are situated in southern Madurai. Hence this bank road makes easy access.
- During the famous Chithirai festival of Lord Kallalagar, pilgrims throughout the Vaigai River Bank road plays a vital role in Madurai traffic management system.
- The traffic congestion is heavy in Madurai city in recent years. Hence it is necessary to continue the Vaigai river North Bank road to Varanasi- Kanniyakumari National Highway (NH 44).

- In order to avoid accidents occurring due to heavy traffic congestion especially during the peak hours.
- In connection with this, the Highways department has proposed to continue the Vaigai river North Bank road from Kamarajar Bridge to Varanasi- Kanniyakumari National Highway (NH 44) near Samyanallur in order to reduce traffic congestion in the existing road.

The details furnished in the proposal are as follows:

- Based on the requisition of Highways department, a joint inspection was conducted by the Superintending Engineer W.R.D, Executive Engineer W.R.D, Assistant Executive Engineer W.R.D, Assistant Engineer W.R.D on 21.02.2023 along with the Superintending Engineer (Highways), Divisional Engineer (H), Assistant Divisional Engineer (H), Assistant Engineer (H) & the Consultant.
- In connection with this project proposal, the Honorable Ministers for Finance Department and Highways Department inspected the site on 05.03.2023 along with the officials of Highways and Water Resources Departments.
- A review meeting headed by the Honorable Chief Minister of Tamilnadu has been conducted at District Collector office Madurai on 06.03.2024 and instructed to take necessary action to execute the said work quickly.
- The Superintending Engineer, W.R.D., Periyar Vaigai Basin Circle, Madurai made the following observation based on the site inspection:

The road in the left side Bank of Vaigai River for the length of 8.00 km is to be laid over the Earthen bund formed to the required level above M.F.L with 1:1½ slope.

Newly formed Earthen bund may not withstand heavy floods that occur in the Vaigai River with the maximum discharge of 1,08,000 cusecs.

- The Superintending Engineer, WRD, has given suggestions to the Highways Department vide reference 3rd cited to modify and design the proposal by considering the Maximum Flood Discharge of 1,08,000 cusecs in Vaigai River with necessary RCC retaining wall.
- Based on the suggestion, the Highways department revised the proposal and have obtained the Revised Administrative Sanction for the above work for an amount of Rs.176.00 crore under Comprehensive Road Infrastructure Development Programme (CRIDP) vide reference 4th cited.
- Meanwhile, the Hon'ble High Court vide its judgement dated 07.03.2024 in WP(MD)Nos.31214 & 31221 of 2023 and WMP(MD) Nos.26742, 26743, 26745 & 26752 of 2023, has given direction that, the "Development Projects will be conceived and implemented in a manner not to affect the integrity of the water bodies in any manner. The water bodies including tank bunds shall be maintained intact and proper distance shall be reserved".
- In continuation of that, decisions were taken during the meeting chaired by the Chief Secretary to Government on 07.06.2024 for issuing NOC for Developmental Projects.
- Construction of North Bank road in Vaigai river, will not affect the Maximum Flood discharging capacity, since the proposed road level is above the Maximum Flood Level and also the road is to be formed along the river bank without encroaching the existing waterway.
- Formation of this road on the river bank will prevent the waterbodies being encroached and also the bank will get strengthened.
- The Detailed Project Report has been prepared and Administrative Sanction, Revised Administrative Sanction have been accorded for the above said work had been obtained well before the direction issued by the Hon'ble Madurai Bench of Madras High Court on 07.03.2024.

- The District Collector had issued the inevitability certificate for the above work and the Divisional Engineer (H), Construction and Maintenance, Madurai have submitted the same and have requested NOC for the Project at the earliest.
- The Divisional Engineer (H), Construction and Maintenance, Madurai has given assurance vide reference 5th cited and stated that there will not be any obstructions to the flow of water during the execution. Hindrance if any occurs, that will be rectified by the Highways department immediately.
- As per Minutes of the meeting of the Chief Secretary to Government held on 07.06.2024, the DPR should contain the study report on impact of the project on Hydrology, Geomorphology, Functionality, water quality, Environmental, Sociology and Ecology of the water body and various mitigation measures to be undertaken to ensure the integrity of the water body.
- Regarding the ESG framework to monitor health and hydrology of water body and to maintain integrity of water body, the Highway Department officials have been instructed to follow the guidelines issued by Chief Secretary Minutes of meeting to conduct the study and submit the report.
- While constructing the North Bank road of Vaigai river care should be taken that the work will not deviate the hydrology, integrity and health of the water body and should be restored to the original position and leave without any Damages to the Environmental and Social Impacts.
- It is also affirmed that Hydrology of the River and also integrity and Health of the Water Body is not affected by carrying out this work.

- As part of road construction work on the bank of Vaigai river for a distance of 8.00 km and also by constructing RCC wall on the inner bank of the river, it is mandatory to ensure the maximum flood discharge of the river.
- Since the river has a steep bed fall of 1 in 1000, the trickled down river meanders inside the river forming deep ravines. For making the river to convey Maximum Flood discharge the bed of the river should be regraded and stabilized.
- More over at some stretches only 150m of river width is available and hence at these stretches the maximum depth of flow during maximum floods will be 4.50m height and the velocity generated will be in the order of 2.83 m/s to 3.77 m/s if the width available is calculated as 150m and 200m respectively for a Maximum flood discharge of 90,000 Cusecs which is highly undesirable and critical.
- Certainly, corrective measures has to be taken in this regard. Even without considering this project, this issue is present as per the existing field conditions. Presently in case of flood, the Vaigai River falling with in these 8 Km stretch and particularly in certain vulnerable stretches, the river does not have the maximum flood carrying capacity.
- In order to carry out the remedial measures at vulnerable locations and to ensure the carrying capacity of the river, an amount of Rs.10.00 crores is required which is nearly 5% of the Project cost.
- Further, the amount required for remedial measures should be deposited by Highways Department to Water Resources Department.

Based on the details furnished above, the Chief Engineer, WRD, Madurai have recommended the proposal subject to the following terms and conditions.

Terms and Conditions:

1. The boundaries of the banks of the Vaigai River should be measured by the Highways department along with revenue officials and boundary stones should be erected.
2. If there are any encroachments identified on the left bank of vaigai river up to the boundary, they should be removed by the Highways department.
3. No road should be constructed inside the Vaigai River for any reason and road should be only for a width of 17m from the extreme river boundary.
4. No damages to be caused to the banks.
5. During the construction of Vaigai River North Bank road, the Highway departmental officials should maintain the quality of water in the river and ensure that it is not affected in any manner.
6. After the construction of the Vaigai River North Bank road and also during utility if any hazardous pollutant is accidentally spilled by any vehicles, the responsibility lies with Highways department to clear the Pollutant from the water body to maintain water quality.
7. During construction the safety of workers and the responsibility of safety issues lies with the Highways Department.
8. No Objection Certificate may be recommended on the receipt of assurance to deposit Rs.10.00 Crores by the Highways Department to Water Resources Department, for the remedial measures in the right side River bank and River bed.
9. The Linear water way of Vaigai river should not be affected and the maximum flood discharge should not be affected.
10. The Bed Level of Vaigai River should be maintained.
11. Cost for remedial measures should be borne by the Highways Department
12. Highways Department should take responsibility regarding Design, Construction and Durability of the Vaigai North Bank road.

13. Highways Department should maintain continuously this Vaigai North Bank road.
14. If any Encroachment is identified, it should be removed at the banks of Vaigai River before commencing the work of Vaigai river North Bank road.
15. Water Resources Department will not take responsibilities, if Natural calamities occur during construction and any loss of Construction materials.
16. Construction materials should not be stocked in the River Course during the construction of Vaigai river North Bank road.
17. Supply of water in river should not be affected during the construction of Vaigai river North Bank road.
18. The Water Resources Department officials have right to enter any area which is proposed for Vaigai river North Bank road.
19. Highways department should clear all the construction wastes / Debris after the completion of Vaigai river North Bank road.
20. Irrigation structures should not be damaged. If any damages occurs , it should be rectified by highways department in line with the guidance of Water Resources Department officials.
21. During Construction of Vaigai river North Bank road ,Sand/ Soil should not be taken from the river.
22. The Vaigai river North Bank road Construction work should be started after giving prior information to the Water Resources Departmental officials.
23. If any dispute or court case arises regarding this project, Highways Department will be responsible for settling the issues / cases.
24. Solid and Liquid effluents from residences shall not be discharged in to the Vaigai river under any circumstances.
25. Work should be allowed only during the period, when the river is almost dry or the water should be diverted to the other side of river where work is not in progress.

26. The Highways department is fully responsible for untoward incidents and related legal issues if any arises.
27. All cross Drainage structures should be properly constructed for inlet streams/odai and surplus channels joining vaigai river.
28. The Estuary of Vaigai river joining natural odai should be maintained for free flow.
29. The use of Vaigai river North Bank road Should not deviate the hydrology, integrity and health of the water body and should be restored to the original Position and level after completion of works without any damages to the environment and Social impacts
30. The applicant should study the impact of the project on Hydrology, Geomorphology, Functionality, Water Quality, Environmental, Sociology and Ecology of the water body, owing to the execution of Development Project and various mitigation measures to be undertaken to ensure the integrity of the Water Body and submit the report.
31. The applicant should carry out the remedial measures or should make provision of necessary fund to carry out the remedial measures based on the study, if any arises.

On scrutiny of the proposal from the Chief Engineer, WRD, Madurai Region, it is learnt that although the Highways Department has submitted the inevitability certificate obtained from the District Collector, Madurai. But there exists non-compliance of first two guidelines stipulated in the Chief Secretary's meeting.

By considering the importance of completing the project, which is proposed for the benefit of the public, the proposal for granting NOC to the Highways Department for the "Construction of Vaigai River North Bank Road Km 0/0 – 8/0 from Kamarajar Bridge to Varanasi – Kanniyakumari Road (NH 44) near Samayanallur" is recommended to the Government for consideration, subject to the compliance of the following by the Highways Department.

1. To Agree to the terms and conditions stipulated above.

2. To study the impact of the project on Hydrology, Geomorphology, Functionality, Water Quality, Environmental, Sociology and Ecology of the water body, owing to the execution of Development Project and various mitigation measures to be undertaken to ensure the integrity of the Water Body and submit the report.
3. To carry out the remedial measures or shall make provision of necessary fund to carry out the remedial measures based on the study, if any arises.

Encl: 1. Copy of references cited.
2. Inevitability Certificate from the District Collector.

S. Unni 27/8/2024
**for Engineer-in-Chief &
Chief Engineer (General), WRD**

5.3.
27/08/2024.

Copy to the Chief Engineer, WRD., Madurai Region, Madurai – 2 for favour of information.

Copy to the Divisional Engineer, (H) Construction and Maintenance, Madurai for favour of information.