



Government of West Bengal
Irrigation & Waterways Department
Jalasampad Bhavan, 1st Floor, Salt Lake City, Kolkata 700 091
Ph : 033 2321 6980 ; Fax : 033 2321 5210, Email ID : secy@wbiwd.gov.in

ole

Memo No. 373-I
I-4M-85/2012(Pt)

Dated: 27.09.2018

MEMORANDUM

Irrigation & Waterways Department maintains 3584 no. of bridges over irrigation canals, drainage channels and rivers. These bridges play an important role in establishing connectivity in rural areas in particular. Many of these bridges are quite old. Ensuring safety of all such bridges is being given great importance by the State Government. A safety audit of 32 important bridges of Irrigation & Waterways Department is being carried out by WAPCOS Ltd engaged since August-2017 and detailed health check-up of three bridges in the Kolkata Corporation area etc is also being carried out by engaging a separate consultant .

It has now been decided to constitute zone-wise Bridge Inspection & Monitoring Units within the Irrigation & Waterways Department under overall supervision of an Apex Committee at the Head Quarter, to carry out regular inspection of the departmental bridges within their assigned jurisdiction and also to conduct detailed health check-up of the identified distressed bridges as per priority to be fixed up during periodic inspections. In view of above, the following 4 zone-wise Bridge Inspection and Monitoring Units and an Apex Supervising Committee are formed with their composition & terms of reference as stated below:

A. Zonal Units:

1. **Unit-1:** Head quarter at Jalasampad Bhavan, Salt Lake

Composition:-

Superintending Engineer, Investigation & Planning Circle-II	Chairman
Deputy Director, Central Design Office	Member
Executive Engineer, Baharampur Investigation Division under Investigation & Planning Circle-I	Member
One Assistant Engineer of Baharampur Investigation Division to be decided by the Chairman of the Unit.	Member
One Junior Engineer of Baharampur Investigation Division to be decided by the Chairman of the Unit	Member

Jurisdiction of the Unit-1 : The bridges in Kolkata, South 24 Parganas, North 24- Parganas, Howrah, Hooghly & Nadia under the jurisdictions of Chief Engineer (South) & Chief Engineer (West).

2. **Unit-2:** Head quarter at the office of the chief Engineer (West), Kanainatshal, Purba Bardhaman.

Composition:-

Superintending Engineer, attached to Chief Engineer (West)	Chairman
Executive Engineer, Bardhaman Investigation & Planning Division under Investigation & Planning Circle-II	Member
One Assistant Engineer of Bardhaman Investigation & Planning Division to be decided by the Chairman	Member
One Junior Engineer of Bardhaman Investigation & Planning Division to be decided by the Chairman	Member

Jurisdiction of the Unit-2 : The bridges in Paschim Bardhaman, Purba Bardhaman, Birbhum, Murshidabad under the jurisdiction of Chief Engineer (West) & Chief Engineer (North).

3. **Unit-3:** Head quarter at the office of the Chief Engineer (South-West) at Abas, Paschim Medinipur

Composition:-

Superintending Engineer, attached to Chief Engineer (South-West)	Chairman
Executive Engineer, Bankura Design Division	Member
One Assistant Engineer of Bankura Design Division to be decided by the Chairman of the unit	Member
One Junior Engineer of of Bankura Design Division to be decided by the Chairman of the unit	Member

Jurisdiction of the Unit-3: The bridges in Purulia, Bankura, Paschim Medinipur, Jhargram and Purba Medinipur under the work jurisdiction of Chief Engineer (South-West).

4. **Unit-4:** Head quarter at the office of the Chief Engineer, Teesta Barrage Project at 2nd Mile, Sevoke Road, Siliguri

Composition:-

Superintending Engineer, attached to Chief Engineer (Teesta Barrage Project & In-Charge of Teesta Design Monitoring and Quality Control Units)	Chairman
Executive Engineer, Teesta Design Division	Member
One Assistant Engineer of Teesta Design Division to be decided by the Chairman of the unit	Member
One Junior Engineer of Teesta Design Division to be decided by the Chairman of the unit	Member

Jurisdiction of the Unit-4: The bridges in Coochbehar, Alipurduar, Jalpaiguri, Darjeeling, Uttar Dinajpur & Dakshin Dinajpur under the work jurisdiction of Chief Engineer (North-East), Chief Engineer (Teesta Barrage Project), Chief Engineer (North).

The Chairmen of the Zonal Units may co-opt any other member in the rank of Assistant Engineer or Junior Engineer for discharging assigned responsibilities.

B. Apex Committee having its head quarter at Jalasampad Bhawan, Salt Lake.

Composition:

Chief Engineer (Design & Research)	Chairman
Director, Central Design Office	Member Secretary
Deputy Director (Structure), Central Design Office	Member
Deputy Director (Hydrology), Central Design Office	Member
Deputy Director (C&FC), Central Design Office	Member

C. Terms of reference of the Zonal Units:


- i. The Units will collect the list of departmental bridges from the concerned Chief Engineers categorized in compliance to the directive of the Secretary conveyed vide Department's Memo No-353(6)-I dated 17.09.2018
- ii. The Units will fix up the planning from the list of bridges collected in the manner stated at-1 after interaction with the concerned Chief Engineer & Superintending Engineers.
- iii. The Units will inspect at least **10 bridges in a month**, as per the guidelines set out in the manual issued by Director/Dam Safety Organization/Irrigation & Waterways Department and relevant I.S. Codes.
- iv. The Units will take up detailed health check-up of at least **two priority bridges in a month**. Such Detailed health check-up is to be carried out following the guidelines fixed up by the Apex Committee and should include the following:
 - a. Checking and identification of cracking, spalling, honeycombing, leaching, loss of material or lamination of concrete members in super structure and sub structure.

- b. Identification of corrosion of re-bars, exposure of re-bars, corrosion in structural steel members.
- c. Settlement, deformation or rotation producing redistribution of stress or instability of the structure by visual inspection.
- d. Determination of the in-situ strength of concrete by hammer test.
- e. Condition of the expansion joints, bearings and articulation hinges if any.
- f. Estimation of load carrying capacity of the bridges through instrumentation and load testing as per relevant IRC standards. The instrumentation shall include measurement of deflection using LVDT and strain/stress at selected locations.
- g. Invasive investigation based on the present structural condition, by cutting cores.
- h. Monthly reports on inspection and reports of detailed health check-up of each bridge are to be sent to the Apex Committee within 10 days from the end of each month.
- i. In the monthly inspection reports and in the reports of detailed health check-up the Zonal units will clearly mention their views on the immediate replacement, major rehabilitation or minor works as may be required to ensure safety of inspected bridges.

D. Terms of reference of the Apex Committee:

- a. The Apex Committee will prepare and circulate a guideline to be followed by the Zonal Units to carry out the detailed health check-up in line with the relevant IRC standards.
- b. The Apex Committee will also prepare a list of instruments to be procured by each Zonal Units to carry out the detailed health check-up and periodical inspections.
- c. The Apex committee will also engage a suitable consultant to train the Zonal Units to carry out the detailed health check-up with instruments for one year.
- d. The Apex Committee, having reports on detailed health check-up collected from the Zonal Units, will suggest to the concerned Chief Engineer to take up required rehabilitation or replacement of distressed bridges.

This order is issued with immediate effect.



 Gautam Chattopadhyay
 Secretary to the
 Government of West Bengal

Memo No. 373/1(2)-I
I-4M-85/2012(Pt)

Dated: 27.09.2018

Copy forwarded for necessary information to:

1. P.S to Hon'ble Minister-in-Charge, Irrigation & Waterways Department 1st floor, Jalasampad Bhavan, Salt lake, Kolkata- 91
2. Senior P.A to Additional Chief Secretary, Irrigation & Waterways Department 1st floor, Jalasampad Bhavan, Salt lake, Kolkata- 91

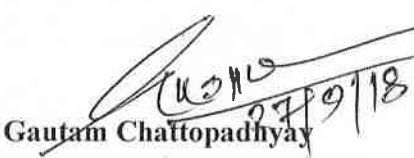

Gautam Chattopadhyay
Secretary to the
Government of West Bengal

Memo No. 373/2(4)-I
I-4M-85/2012(Pt)

Dated: 27.09.2018


Copy submitted for kind information to:-

1. Principal Secretary, Public Work Department, Government of West Bengal, 8th floor, Nabanna Howrah 711102. List of bridges proposed to be handed over to the Public Work Department is being provided separately.
2. The Principal Secretary, Urban Development & Municipal Affairs Department, Government of West Bengal, Nagarayan , Sector-I, Block-DF/8, Bidhannagar, Kolkata-700064, secy.ma-wb@gov.in
3. Commissioner, Kolkata Municipal Corporation, S.N. Banerjee Road, Kolkata 700013
4. Chief Executive Officer, Kolkata Metropolitan Development Authority, Unnayan Bhawan, DJ-II, Sector-II, Salt Lake, Kolkata-700091


Gautam Chattopadhyay
Secretary to the
Government of West Bengal

Copy forwarded for necessary information to:

1. Chief Engineer (South), Irrigation & Waterways Directorate, 1st floor, Jalasampad Bhavan, Salt Lake, Kolkata-91
2. Chief Engineer (West), Irrigation & Waterways Directorate, P.O. Sadhanpur (Near Polytechnic), District-Burdwan, Pin - 713101
3. Chief Engineer (South West), Irrigation & Waterways Directorate, Khusjungle, P.O Abas, District Paschim Medinipur, Pin 721 102
4. Chief Engineer (North), Irrigation & Waterways Directorate, Green Park, P.O. Mokdumpur, District-Malda, Pin 732103.
5. Chief Engineer (North East), Irrigation & Waterways Directorate, Club Road, P.O & District Jalpaiguri, Pin 735 101.
6. Chief Engineer, Teesta Barrage Project, Irrigation & Waterways Directorate, Teesta Sech Bhavan, 2nd Mile, Sevoke Road, Siliguri, District: Darjeeling, Pin: 734 001
7. Director of Personnel & Ex-officio Chief Engineer, Irrigation & Waterways Directorate, 1st floor, Jalasampad Bhavan, Salt Lake, Kolkata-91
8. Chief Engineer (Design & Research), Irrigation & Waterways Directorate, 1st floor, Jalasampad Bhavan, Salt Lake, Kolkata-91
9. Superintending Engineer, attached to Chief Engineer (Teesta Barrage Project & In-Charge of Teesta Design Monitoring and Quality Control Units), Irrigation & Waterways Directorate
10. Superintending Engineer, attached to Chief Engineer (South-West), Irrigation & Waterways Directorate
11. Superintending Engineer, Investigation & Planning Circle-II, Irrigation & Waterways Directorate, 3rd floor, Jalasampad Bhavan, Salt Lake, Kolkata -700091
12. The Director/CDO, Irrigation & Waterways Directorate, 1st floor, Jalasampad Bhavan, Salt Lake, Kolkata - 700091
13. The Director, Dam Safety Office, Irrigation & Waterways Directorate, Jalasampad Bhavan, Salt Lake, Kolkata -700091


Biplab Mukherjee
Deputy Secretary to the
Govt. of West Bengal