

**Site inspection Report Maxem
Original Application No. 97/2019 (WZ)**

25th September, 2021

Pursuant to the site inspection notice No. GCZMA/NGTMATTER/OApplInp-97/2019/20-21/06/933 dated 22/09/2021. The undersigned along with Mr. Devendra Gaonkar, Field Surveyor GCZMA visited the site to carry out site inspection.

Mr. Subhash Pagui, Assistant Engineer, PWD and Mr. Denis Fernandes, representative of Mr. Dattaprasad Prabhu Gaonkar were present during the site inspection.

The site inspection started at 02:00 PM and completed at 05:30 PM.

Mr. Denis informed that at 2 PM, since there is high tide hence it is difficult to see the compliances of mud removal. Therefore, requested to continue inspection till the water subsides. The same was accepted and the inspection continued till 05:30 pm

All the photographs attached with the report have been taken during the low tide.

Observations and recommendation

Observations at loco:

1. Mud deposits in Galgibaga River: Accumulation of mud under three pillars in the riverine area of Galgibaga has been observed.



2. Earth filling in Maxem creek: Mud filling exists under the Maxem Bridge.



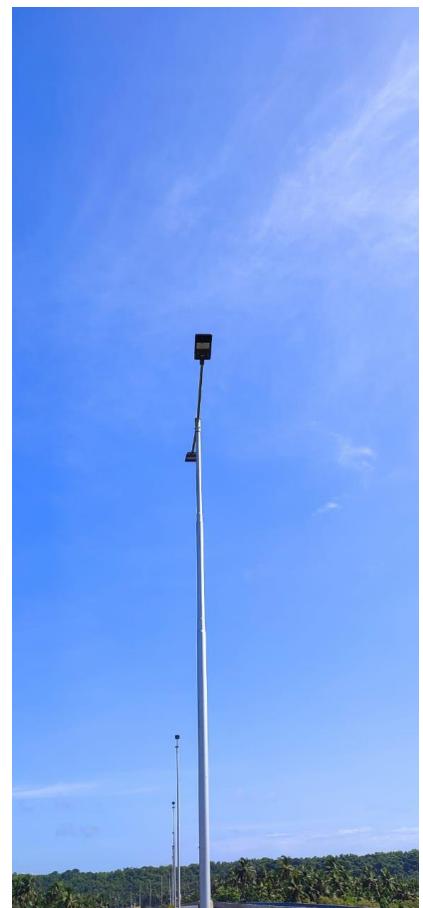
3. No Horn Zone: The PWD has placed No Horn Zone signs on both Galgibaga and Maxem bridge.



4. Mangrove plantation: PWD has undertaken required plantation in association with the Goa Forest Department. Both sides of the bridge has good and luxuriant growth of mangrove. Natural regeneration has also been observed.



5. Lights on the bridge: As suggested, the PWD has changed the direction of the light panel on the bridge. Directional lightings are a standard practice being followed to avoid distraction of turtle movement. The light fixtures have been painted with a black colour in order to reduce the brightness and light intensity. This safety measure will reduce the light impact on the turtle movement.



6. Sand bar formation at the river mouth: Sand bar formations has been observed at the mouth of Galgibaga River and Maxem creek.



Both river banks under the Galgibaga bridge are being used for parking and unloading of fish catch by the traditional fishing community. Both sides have a mangrove cover and growth has been satisfactory.



Laterite mud has been observed in between T10 and T11 these pillars. However, Mr. Pagui informed that during the time of Ganesh Visarjan, locals have put a mud and partly concrete pathway to access the water for Ganesh immersion.



Recommendations:

1. Formation of sand bar at the river mouth of Galgibaga and Maxem Creek may be due to large scale bank erosion as a result of exceedance of carrying capacity (probably due to heavy rains coupled with high tide) and its deposition of the mouth region as a result of wider width at the confluence of estuary to Arabian Sea. Further, location of bridge pillar would also aid/aggravate due to scouring of bottom sediment as a result of gushing of river-water flow downstream. However, this aspect needs a further assessment by an expert agency/institution involved in coastal protection.
2. The mud deposited under the Maxem bridge has been compacted and is serving as a protection wall to the life and properties on the landward side from the tidal effect. At the time of inspection, the villagers residing there informed the undersigned that the mud is helping them as a protection barrier from the tidal influence and also from ingress of saltwater. They also informed that the matter of mud removal is in the Hon. High Court of Bombay at Goa.
3. Removal of mud from Galgibaga River and beneath the Maxem bridge must be done after a detailed scientific assessment by an expert institution. This is because, the sediment movement within the given stretch is dynamic in nature as it is constantly influenced by the intervals of low tide and high tide. Otherwise, it may have consequential ecological impact of getting other areas either eroded or accreted.

Sujeetkumar Dongre
Member
GCZMA