

Site Inspection Report

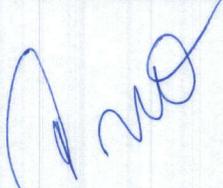
National Green Tribunal (NGT) constituted a committee comprising one member each from Goa Coastal Zone Management Authority (GCZMA); The Ministry of Environment, Forests and Climate Change (MoEF&CC); and The National Institute of Ocean Technology (NIOT) with reference to the "Original application No. 06/2023 (WZ) before the National green Tribunal Western Zone Bench, Pune" to inspect the works being carried out by the Goa State Infrastructure Development Corporation Limited (GSIDCL).

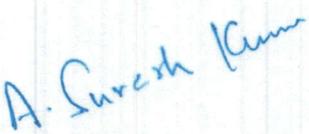
As per the directions of the NGT, Inspection committee visited the site St. Inez creek/nallah, Goa at 11:00 AM on 17 March 2023. Members of the Site Inspection committee are:

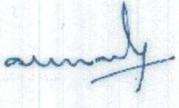
S. No.	Members of the NGT Inspection Committee
1	Mrs. Radha. B. Rao, Member, GCZMA
2	Mr. Suresh Kumar Adapa, Scientist-E/Additional Director, MoEF & CC
3	Mr. Aruna Kumar Avula, Scientist-E, NIOT

During the site visit the following applicants and respondents are present at site:

S. No.	Applicants
1	Patricia Pinto
2	Laura Alvares
3	Runa Aggarwal
4	Jack Ajit Sukhija
5	Ashley Do Rosario
6	Raj Vaidya
7	Vincent Baracho
8	Arnaldo Do Carmo lobo
S. No.	Representatives of Respondent 5
1	Sumeer Sheik, IPSCDCL
S. No.	Representatives of Respondent 7
1	Harish Adconkar, MD, GSIDCL
2	Sandeep Prabhu Chodnekar, GM, GSIDCL


 Radha. B. Rao
 Expert Member, GCZMA


 Suresh Kumar Adapa
 Scientist-E, MoEF&CC

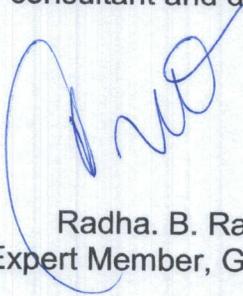

 Aruna Kumar Avula
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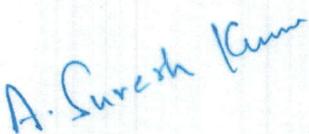
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Committee inspected the bridge over the St. Inez creek, walkway cum cycling track, and river coastline protection works being carried out between St. Inez creek and youth hostel along with applicants and representatives of respondent 5 & 7. CRZ maps received from the GCZMA are provided in **Annexure-I**. Photographs taken during the site inspection are provided in **Annexure-II**. During the site visit, applicants provided few supplementary documents related to project and are enclosed in **Annexure-III**.

The observations made by the committee during the site visit are:

1. Bridge, walkway cum cycling track, and river coastline protection works are in progress.
2. Steel bridge of 8.8 m width and 32.78 m length was constructed over the St. Inez Creek/Nallah. The bridge was supported by 8.8 (width) x 4.5 m (length) x 1.5 m (depth) pile caps on either side. Whereas the GCZMA approved drawing shows RCC arch bridge of 34 m length & 7.5m width.
3. Bottom of the western pile cap is resting on river bed and river side of the pile cap was covered with seawall. (*Photograph 1*)
4. GSIDC officials informed that each pile cap was supported by 4 piles of 1.0 m diameter and 33m length. Whereas the CZMP approved drawing shows each pile cap supported by 6 piles but the dimensions of the pile cap and piles are not available.
5. The present width of the St. Inez creek/nallah at the entrance is around 23.78 m. (the distance between the two pile caps). Whereas actual opening of the St. Inez creek/nallah before construction of the bridge is approximately 32 m.
6. Sand deposition observed beneath the steel bridge and western entrance & rear side of the bridge. (*Photograph 1 and Photograph 2*)
7. Sea wall using granite stones was constructed as river coastline protection measure.
8. Superimposition of project layout on the CRZ map was carried out by EIA consultant and details of the CRZ map approved agency is not available.


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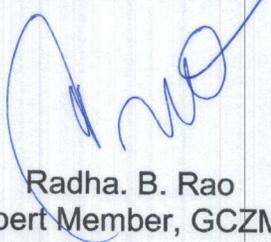

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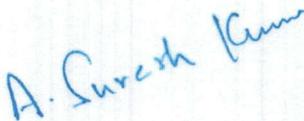
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9. EIA report was prepared based on inferences drawn from the earlier study report of CWPRS. Report didn't cover the impact assessment of the river coastline protection measures, impact of the bridge over the St. Inez creek/nallah and the seawall into river constructing between the chainage 1+570 to 1+650.
10. Steel bridge was constructed at the confluence of river and St. Inez creek/nallah mouth, which is marked as water body (CRZ IV A) in the CRZ map. (CRZ Map - gv 10006.pdf).
11. CRZ map indicated landward area of high tideline as CRZ II. Whereas the river coastline protection and walkway cum cycling track works carried out at site are in intertidal area i.e., CRZ 1B. (chainage 0+280 to 0+624 of CRZ Map - gv 10005.pdf, chainage 0+750 to 1+130 of CRZ Map - gv10007.pdf, and chainage 1+130 to 1+540 of CRZ Map - gv 10006.pdf)
12. Sea wall construction area between Chainage 1+540 and 1+920 is shown as above HTL in the CRZ Map - gv 10006.pdf. whereas high water line marks were observed close to the river bank during the site visit. (Photograph 4, 6 & 7)

Pointwise compliance (wherever applicable) to the issues raised by the applicant is provided in the following table and photographs taken during the site visit are also provided thereon. Representation made by applicants during the site visit and further by mail through GCZMA have been provided as Annexure.

Para No.	Allegation Made against the project	Reply of the Committee
7.	The NOC dated 28/4/2022 is issued by the respondent no. 2 to the respondent no. 7 is without any study concerning its impact on the environment i.e., River Mandovi, the St. Inez Creek and its Biodiversity.	As per the information provided by Goa Coastal Zone Management Authority (GCZMA), EIA study for the project was carried out by M/s. LKS India Pvt.Ltd. EIA report was prepared based on inferences from the report "A. K. Agarwal, (2020) Mathematical model studies on hydrodynamic and sedimentation for demolition of retaining wall at Marriot hotel, department of water resources, river development and ganga

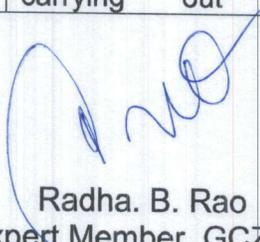

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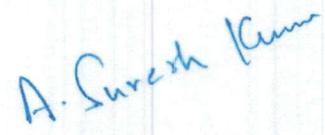

A. Suresh Kumar
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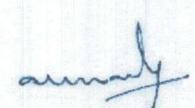

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		<p>rejuvenation, Central Water & Power Research Station, Khadakwasla, Pune”</p> <p>EIA Report didn't cover the impact assessment of construction of river coastline protection measures, walkway cum cycle track, and bridge over the St. Inez creek/nallah.</p> <p>EIA report concludes “In light of the technical, institutional measures recommended it is expected that the project will avoid severe, permanent and regional impacts. There will be no net loss in biodiversity. Tremendous social and economic benefits will be generated in Panaji by the development of promenade creating the reliable, sustainable and safe public activities.”</p>
8.	The minutes of the 299 th GCZMA meeting held on 19/4/2022, where in it was decided to grant the NOC to the Respondent no. 7, but it does not refer to EIA/report submitted by the respondent no.7 nor any independent report/study.	Upon perusal of the Minutes of 299 th meeting it is observed that no mention of EIA report in the minutes.
9.	The project involves construction of a permanent walkway and cycling track along the riverbank and touching the mouth of creek with cement and concrete. This construction is bound to have some environmental impact considering that it will be along the riverine land. There is a potential for erosion taking place along the river which ultimately could affect the geomorphology of the riparian coastline adversely.	EIA report didn't cover the impact assessment, but Chapter 4 of EIA report covers the measures to be taken during the pre-construction, during-construction and post-construction of “Protection & Restoration of Mandovi River Coastline from Miramar Circle to Youth Hostel and from Kala academy to ESG.
10.	The applicant states that the Goa State Infrastructure Development Corporation (respondent no. 7 herein) under the guise of the NOC issued by the Respondent no. 2 is also carrying out an illegal	<p>No mention of bridge construction in the EIA report. But:</p> <ol style="list-style-type: none"> 1. Project layout map superimposed on the CRZ map prepared by M/s. LKS India Pvt. Ltd. Was submitted to GCZMA by the project proponent


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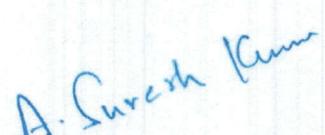

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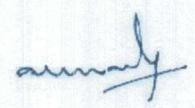

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	<p>construction of a bridge connecting walk way cycling track to footpath on the Dayanand Bandodkar Marg at Campal, Panaji, right on the mouth of the St. Inez Creek, without any permission/NOC/licenses from the respondent no. 2 and without carrying out the Environment Impact Assessment study concerning the said project. The said construction is a new construction which is carried out by the respondent no.7 in the riverine land which is covered with water during the high tide. Such haphazard development along the St. Inez creek, has suffocated the water body.</p>	<p>along with the NOC application shows RCC pedestrian bridge.</p> <p>2. Cross section of the pedestrian bridge (RCC) drawing was also submitted to GCZMA.</p> <p>Superimposition of project layout on the CRZ map was carried out by EIA consultant M/s. LKS India Pvt. Ltd. But as per the CRZ notification 2011 dated 26 April 2022:</p> <p>(e). CRZ map indicating HTL and LTL demarcated by one of the authorised (by MoEF&CC) agency in 1:4000 scale.</p> <p>(f). Project layout superimposed on the above map indicated at (e) above.</p> <p>CRZ map provided by project proponent, bridge layout is in CRZ IV A, but NOC was issued for "Protection & Restoration of Mandovi River Coastline from Miramar Circle to Youth Hostel and from Kala academy to ESG" in CRZ II classification.</p>
11.	<p>The area where the construction of the bridge carried out is the intertidal zone, i.e., in the river itself and is this classified as CRZ- I in the approved Coastal Zone Management Plan for Goa. In this area no new construction shall be permitted except those which are permissible as per the CRZ Regulation 2011.</p>	<p>CRZ map provided by project proponent, bridge layout is in CRZ IV A.</p> <p>CRZ map indicated landward area of high tideline as CRZ II. Whereas the river coastline protection and walkway cum cycling track works carried out at site are in intertidal area i.e., CRZ 1B. (chainage 0+280 to 0+624 of CRZ Map - gv 10005.pdf, chainage 0+750 to 1+130 of CRZ Map - gv10007.pdf, and chainage 1+130 to 1+540 of CRZ Map - gv 10006.pdf).</p>
13.	<p>The applicant states that this new construction of the bridge is also in contravention of the office memorandum issued by the Ministry of Environment Forest and Climate Change IA-III Section (CRZ) dated 29/11/2022. This memorandum dated 29/11/2022 enumerates the procedure to be adopted by the project proponents for clearance of permissible</p>	<p>It is observed that the NOC was issued before the issuance of OM dated 29.11.2022.</p>


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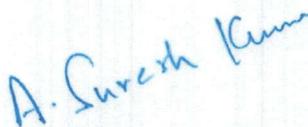

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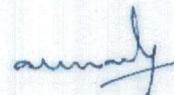
	activities as per CRZ notification 2019/ICRZ notification 2019.	
16.	<p>The applicants states that the respondent no.7 has not complied with regulation 4.2 of the CRZ notification 2011 r/w the office memorandum dated 29/11/2022 issued by the Ministry of Environment Forest and Climate Change, Government of India.</p> <p>The said area is classified as CRZ-I in the CRZ regulations 2011, therefore the procedure for clearance of permissible activities in the CRZ area need to be followed which in this case the respondent no. 7 failed to adhere to, due to which it renders any construction at the site wholly illegal.</p>	<p>It is observed that the NOC was issued before the issuance of OM dated 29.11.2022.</p> <p>Project Proponent submitted Form1 (annexure-IV), EIA report prepared by LKS India Pvt. Ltd., and project layout superimposed on CRZ map indicating HTL and LT prepared by LKS India Pvt. Ltd. to GCZMA for NOC by mentioning the project layout is in the CRZ II.</p> <p>GCZMA issued the NOC accordingly. Whereas some part of the project layout is in CRZ 1B and CRZ IV A.</p> <p>Following observations are made on Form 1 (Annexure-IV):</p> <p>(1)1.28: Stream and River crossings are mentioned as Not Applicable (2) 1.30: Changes in water bodies or the land surface affecting drainage or run-off is mentioned as Not Applicable (3) 2.40: Cement and concrete are not mentioned as construction material (4) 6.40: Generation of Noise and Vibration, and Emissions of Light and Heat From blasting and Piling is mentioned as Not Applicable</p> <p>River coastline protection and walkway cum cycling track works carried out at site are in intertidal area i.e., CRZ 1B. (<i>chainage 0+280 to 0+624 of CRZ Map - gv 10005.pdf, chainage 0+750 to 1+130 of CRZ Map - gv10007.pdf, and chainage 1+130 to 1+540 of CRZ Map - gv 10006.pdf</i>).</p>
17.	<p>The applicants state that the respondent no. 7 has violated the terms and conditions of NOC dated 28/4/2022 issued by the respondent no. 2. The said NOC does not permit the respondent no.7 to carry out any construction of any bridge on the mouth of the St. Inez Creek.</p>	<p>NOC issued by GCZMA for "Protection & Restoration of Mandovi River Coastline from Miramar Circle to Youth Hostel and from Kala academy to ESG" is subjected to:</p> <p>1. All the provisions of the CRZ Notification 2011 as amended should be strictly complied with. In the event of a change in project profile or change</p>



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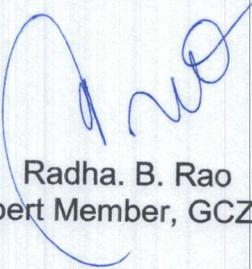
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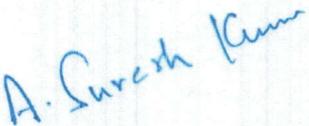


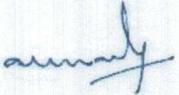
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			<p>in the implementation agency, a fresh reference shall be made to GCZMA.</p> <ol style="list-style-type: none"> 2. This NOC/Approval is issued without prejudice to any other permission as required under the law including that of ownership of house, court case etc As such, prior to the commencement of the aforementioned 'protection & Restoration, work, it will be incumbent upon the law including from the local authority, Town and Country Planning Department, Revenue Authority, Water Resources Department. 3. Traditional access/easement shall not be blocked. 4. The applicant/occupier should ensure that no waste is discharged into the nearest water body from the proposed construction activities. 5. This permission/NOC shall be valid for the period of 5 years from the date of issue. 6. This permission is liable to be revoked, if it is found, at any stage, that the application contained false information/wrong plans/ calculations/ documents/ misleading or false information, etc or account of aforementioned conditions. <p>No clarity on, whether NOC covers the construction of any bridge over the St. Inez creek/Nallah as it was not mentioned in the application, EIA report, GCZMA site inspection report, and NOC. But the layout map submitted by the project proponent along with the NOC application shows RCC pedestrian bridge.</p>
18.	The applicants states that the project in issue is a brain child of respondent no. 5(the Imagine Panaji smart city Development {IPSCDL}), who has adopted a completely different yardstick for this project, as it is commissioned without conducting any EIA. It is		<p>As per the information provided by Goa Coastal Zone Management Authority (GCZMA), EIA study for the project was carried out by M/s. LKS India Pvt.Ltd.</p> <p>EIA report was prepared based on inferences from the report "A. K. Agarwal, (2020) Mathematical model studies on hydrodynamic and sedimentation for demolition of retaining</p>


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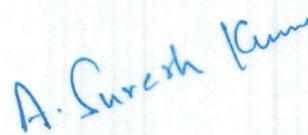

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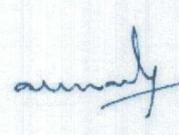

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	<p>pertinent to note that the same respondent no. 5 has commissioned a rapid Environment Impact Assessment for the 2.1 Crore jetty Project at Ribandar. A 3-month timeline has been charted out for the same. Within an aim to benefit the local fishermen, the existing obsolete wooden jetty will be redeveloped into a concrete jetty under the programme.</p>	<p>wall at Marriot hotel, department of water resources, river development and ganga rejuvenation, Central Water & Power Research Station, Khadakwasla, Pune”</p> <p>EIA Report didn't cover the impact assessment of construction of river coastline protection measures, walkway cum cycle track, and bridge over the St. Inez creek/nallah.</p>
19.	<p>The applicant also submits that though the property comes within the jurisdiction of the respondent no.6 i.e. the Corporation of city of Panaji, no approval was sought from the respondent no.6 by the respondent no.7.</p>	<p>GCZMA NOC (2) states that: This NOC/Approval is issued without prejudice to any other permission as required under the law including that of ownership of house, court case etc. As such, prior to the commencement of the aforementioned 'protection & Restoration, work, it will be incumbent upon the law including from the local authority, Town and Country Planning Department, Revenue Authority, Water Resources Department.</p>
20.	<p>The applicants states that the site at which the construction is carried on by the respondent no.7 is an ecologically sensitive area with varied biodiversity such as fish, planktons and other marine species and therefore commencing any construction work in the area there ought to have been environment impact assessment study done of the project. The respondent no. 7 without conducting any study and in a completely blatant manner has started the work of construction of the Bridge and walkway. The river banks are being reclaimed for the walkway which is prohibited under the CRZ regulations and this will affect the tidal flows as the biodiversity of the area.</p>	<p>As per the information provided by Goa Coastal Zone Management Authority (GCZMA), EIA study for the project was carried out by M/s. LKS India Pvt.Ltd.</p> <p>EIA Report didn't cover the impact assessment of construction of river coastline protection measures, walkway cum cycle track, and bridge over the St. Inez creek/nallah.</p> <p>Site Inspection report by GCZMA dated 17 March 2022 states:</p> <ol style="list-style-type: none"> 1. the proposed project area falls within the Mandovi Estuarine zone which is an ecologically sensitive area. 2. At the time of undertaking protection and restoration activities due care must be taken to avoid any irreversible damage to the estuarine zone by following all scientific protocols and material (including construction and

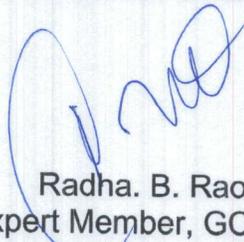

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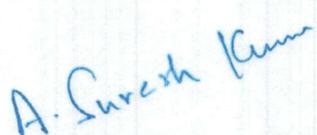

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		restoration) so that no ecological productivity of the area is hampered. 3. Free flow of any influenced water be maintained whatever such streams/drains/nallah/creeks are connecting to the estuary, especially one near the indoor stadium and St. Inez mouth near ESG to avoid upstream flooding.
22.	Applicants have also complained to the respondent no. 2 bringing to its notice the said fact, vide their complaint dated 13/12/2022 but till date no action has been taken by the authorities to stop the said illegal construction of bridge. The respondent no.2 has failed to conduct a site inspection and issue stop work notice to the respondent no.7	During the site inspection, it is observed that construction works are in progress.
23.	The applicants states that without following due process of law, the Respondent no.s 1 to 7 have allowed the construction of the said illegal structures within the ecologically – sensitive areas, without due compliance with in the provisions of the coastal Regulation Zone 2011.	No clarity on the approval of construction of pedestrian bridge over the St. Inez creek/Nallah as it was not mentioned in the application, EIA report, GCZMA site inspection report, and NOC. But the layout map submitted by the project proponent along with the NOC application shows RCC pedestrian bridge. GCZMA NOC (2) states that: This NOC/Approval is issued without prejudice to any other permission as required under the law including that of ownership of house, court case etc. As such, prior to the commencement of the aforementioned 'protection & Restoration, work, it will be incumbent upon the law including from the local authority, Town and Country Planning Department, Revenue Authority, Water Resources Department. Location of bridge is at the confluence of river and St. Inez creek/nallah mouth, is marked as water body (CRZ IV A) in the CRZ map 2011. (CRZ Map - gv 10006.pdf). Whereas the NOC issued by GCZMA only covers CRZ II.

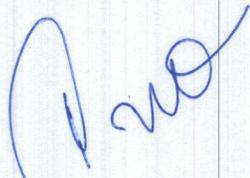

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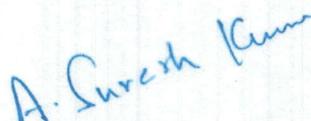

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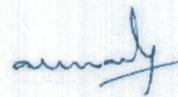
		Project proponent constructed the Steel bridge instead of proposed RCC pedestrian bridge over the St. Inez creek/Nallah.
24.	The applicants state that the illegal construction is being done between the High Tide Line (HTL) and the Low Tide Line (THL) of the river Mandovi as well as in the river which is a CRZ_I area, eco-sensitive and hence needed permission from the concerned authorities after due appraisal of the project impact and study.	<p>Location of bridge is at the confluence of river and St. Inez creek/nallah mouth. It is marked as water body (CRZ IV A) in the CRZ map. (CRZ Map - gv 10006.pdf). Whereas the NOC issued by GCZMA only covers CRZ II.</p> <p>CRZ map indicated landward area of high tideline as CRZ II. Whereas the river coastline protection and walkway cum cycling track works carried out at site are in intertidal area i.e., CRZ 1B between chainages 0+280 to 0+624 of CRZ Map - gv 10005.pdf, 0+750 to 1+130 of CRZ Map - gv10007.pdf, and 1+130 to 1+540 of CRZ Map - gv 10006.pdf.</p> <p>EIA study for the project was carried out by M/s. LKS India Pvt.Ltd.</p> <p>It was observed that Report didn't cover the impact assessment of the construction of river coastline protection measures, and the construction of bridge over the St. Inez creek/nallah.</p>
28.	The applicants submit that the construction work is in progress at site and at present the pillars at both the end have been completed where mud has been dumped in the inter tidal zone for construction of the foundation of the pillars. The applicants are relying upon the photographs taken on 08/01/2023, which are annexed herewith.	<p>During the site inspection, it is observed that:</p> <p>13. Construction of Bridge, Walkway cum cycling track, and River coastline protection works are in progress.</p> <p>14. Location of bridge is at the confluence of river and St. Inez creek/nallah mouth. It is marked as water body (CRZ IV A) in the CRZ map. (CRZ Map - gv 10006.pdf). Whereas the NOC issued by GCZMA only covers CRZ II.</p> <p>15. Steel bridge of 8.8 m width and 32.78 m length construction is in progress over the St. Inez Creek/Nallah supported by pile cap of size 8.8m x 4.5m x 1.5m (each pile cap supported by 6 piles of 1m diameter and 33m length) on either side. Whereas the GCZMA approved drawing shows RCC bridge of 34 m length & 7.5m width supported by two pile cap (each</p>



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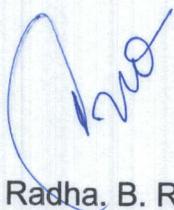
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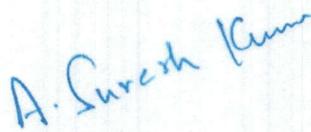
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		<p>pile cap supported by 4 piles) on either side.</p> <p>16. Bottom of the western pile cap is resting on river bed and the river side of the pile cap was covered with seawall. (Photograph 1).</p> <p>17. The present width of the St. Inez creek/nallah at the entrance is 23.78 m. (the distance between the two pile caps). Whereas actual opening of the St. Inez creek/nallah before construction of the bridge is approximately 32 m.</p> <p>18. Sand deposition observed beneath the bridge and western entrance & rear side of the bridge. (Photograph 1 and Photograph 2).</p> <p>19. Construction of River, coastline protection works using granite stones is in progress.</p> <p>20. CRZ map indicated landward area of high tideline as CRZ II. Whereas the river coastline protection and walkway cum cycling track works carried out at site are in intertidal area i.e., CRZ 1B between the chainages 0+280 to 0+624 of CRZ Map - gv 10005.pdf, 0+750 to 1+130 of CRZ Map - gv10007.pdf, and 1+130 to 1+540 of CRZ Map - gv 10006.pdf.</p> <p>21. River, coastline protection works between Chainage 1+540 and 1+920 is shown as above HTL in the CRZ Map - gv 10006.pdf, whereas high water line marks were observed close to the river bank during the site visit. (Photograph 4, 6 & 7).</p>
29.	<p>The applicants submit that this Hon'ble Tribunal in application no. 88 of 2015 (WZ) vide order dated 29/08/2019 has directed the Respondent no.2 to declare the St. Inez water body as Creek, as the St. Inez Creek since historical times has been a tidal creek, having tidal influence felt</p>	<p>Para 10 of NGT order (application no. 88 of 2015) dated 29/08/2019 states that: "However, as it has been submitted by the learned Counsel for the GCZMA that exercise for drawing fresh coastal zone map is presently on and objections are being considered by the authority, the views of Dr. Mascarenhas may be considered and a decision taken thereon"</p>



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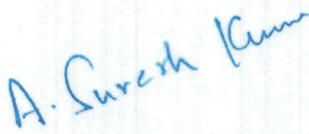


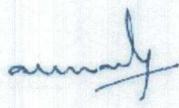
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	up to Tonca about 2km from its mouth where the construction of the bridge is in progress.	
30.	The applicants state that the respondent no.2 has granted the permission to the Respondent no.7 protection and restoration of Mandovi river coastline but infact these hard permanent structures to be constructed as measures of protection may prevent erosion at the said stretch temporarily but the adverse impact of such measures are felt upstream or downstream where erosion starts. There by such hard measures only transfer the problem of shoreline change. Also, there is a need to replace hard structures like seawalls, groynes with softer options such as beach nourishments, sand by passing, dune planning, offshore submerged reefs etc.	Impact of such hard structures are not covered in the EIA report.
32.	In the present case the respondent no.2 before granting the NOC ought to have directed an independent EIA study and report in line with this Hon'ble Tribunals directions supra and as per the CRZ regulations which it failed to do.	As per the information provided by Goa Coastal Zone Management Authority (GCZMA), EIA study for the project was carried out by M/s. LKS India Pvt.Ltd. EIA Report didn't cover the impact assessment of construction of the river coastline protection measures, walkway cum cycle track, and bridge over the St. Inez creek/nallah.
33.	The applicant's states that the CZMP for the state Goa is not yet notified and in the absence of which such permission would not ought to have been granted, as there is not mention/depiction of High, medium and low erosion stretches.	CZMP of Goa is yet to be approved.
34.	On 08/01/2023 the walkway cum cycling track at Campal has been constructed along the riverbank with filing of mud and cement. At	Steel bridge of 8.8 m width and 32.78 m length construction is in progress over the St. Inez Creek/Nallah supported by pile cap of size 8.8m x 4.5m x 1.5m (each pile cap supported


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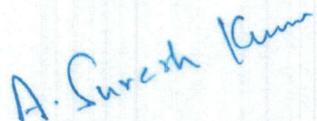

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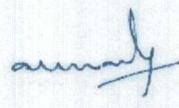

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	the foot of the creek there are two pillar/pile foundations put up of concrete over which the bridge is to be installed.	by 6 piles of 1m diameter and 33m length) on either side.
35.	The applicants state that on 12/01/2023 they received under the right to information Act 2005 from the respondent no.2 copies of the plans submitted for approval along with the site inspection report 17/03/2022. On perusal of the plan, it is seen that there is a pedestrian bridge proposed to be constructed on the walkway/cycling track. The bridge is supposed to have stilts with RCC pile foundation.	Steel bridge of 8.8 m width and 32.78 m length construction is in progress over the St. Inez Creek/Nallah supported by pile cap of size 8.8m x 4.5m x 1.5m (each pile cap supported by 6 piles of 1m diameter and 33m length) on either side. Whereas the GCZMA approved drawing shows RCC arch bridge of 34 m length & 7.5m width supported by two pile cap (each pile cap supported by 4 piles) on either side.
36.	The bridge that is constructed at site is in deviation of this plan. Incidentally the plans are not signed by any office of the respondent. No. 2.	Steel bridge of 8.8 m width and 32.78 m length construction is in progress over the St. Inez Creek/Nallah supported by pile cap of size 8.8m x 4.5m x 1.5m (each pile cap supported by 6 piles of 1m diameter and 33m length) on either side. Whereas the GCZMA approved drawing shows RCC arch bridge of 34 m length & 7.5m width supported by two pile cap (each pile cap supported by 4 piles) on either side.
37.	The site inspection report dated 17/03/2022 states at para 2 to 5 as follows: a) The GSIDC proposed to undertake protection and restoration of Mandovi River Coast Line String from ESG to Miramar approximately covering a length of around 2km. b) The proposed area falls within the Mandovi Estuarine zone which is an ecologically sensitive area. c) At the time of undertaking protection and restoration activities due care must be taken to avoid any irreversible damage to the estuarine zone by following	EIA report didn't cover the impact assessment of the construction of river coastline protection measures, and arch bridge over the St. Inez creek/nallah.

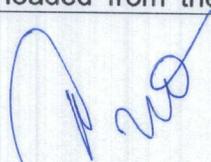

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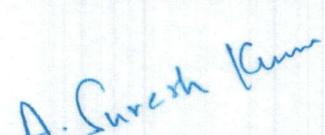

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	<p>all scientific protocols and material (including construction and restoration) so that no ecological productivity of the area is hampered.</p> <p>d) Free flow of any influenced water be maintained whatever such streams/drains/nallah/creeks are connecting to the estuary, especially one near the indoor stadium and St. Inez mouth near ESG to avoid upstream flooding.</p> <p>e) The project proponent has submitted an EIA report undertaken by LKS INDIA PVT, LTD Pune titled "Protection and restoration of Mandovi River coastline from Miramar Circle to Youth Hostel and Kala Academy to ESG which the authority may like to study before decision is made.</p> <p>f) The authority may deliberate and take appropriate decision as per the CRZ regulation in force.</p>	
38.	<p>There is no mention of the bridge, the applicants on 12/01/2023 also obtained the certified copy of the application submitted by the respondent no. 7 wherein they enclosed an EIA report prepared by LKS India Pvt.Ltd. The EIA reports do not refer to the bridge to be constructed at mouth of the creek.</p>	<p>NOC requested for "Protection & Restoration of Mandovi River Coastline from Miramar Circle to Youth Hostel and from Kala academy to ESG"</p> <p>Construction of bridge is not mentioned in the NOC application but the layout submitted by the project proponent shows the RCC pedestrian bridge</p> <p>Construction of RCC pedestrian bridge was not mentioned in the EIA report.</p>
39.	<p>The applicants state that it is shocking to know that LKS India Pvt.Ltd. is also not in the list accredited EIA consultants down loaded from the website of the</p>	<p>CRZ Notification 2011/2019 doesn't specify that EIA report for the project (activity not falling under EIA Notification 2006) needs to be prepared by NABET accredited consultancy.</p>


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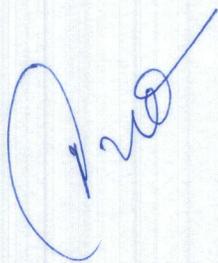

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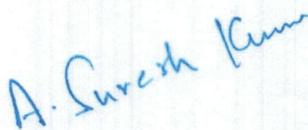
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	<p>Ministry of Environment, Forest and Climate Change, Government of India for the year 2022.</p>	<p>EIA report prepared by the NABET accredited consultancy shall be required for the projects associated with EC.</p> <p>However, CAG in Report no. 4 of 2022 on "Conservation of Marine Ecosystems" raised this observation that clearances were granted for the projects in which EIA reports were prepared by non-Accredited (by NABET, QCI) Consultants.</p>
40.	<p>The respondent no.2 ought to have directed and independent EIA Study for this project considering its potential effects on the coastal environment, the minutes of the 299th meeting wherein the respondent no.2 approved the proposal of the respondent no.7 does not reflect any discussion or consideration of the EIS reports of LKS India Pvt. Ltd.</p>	<p>As per the information provided by Goa Coastal Zone Management Authority (GCZMA), EIA study for the project was carried out by M/s. LKS India Pvt.Ltd.</p> <p>EIA report was prepared based on inferences from the report "A. K. Agarwal, (2020) Mathematical model studies on hydrodynamic and sedimentation for demolition of retaining wall at Marriot hotel, department of water resources, river development and ganga rejuvenation, Central Water & Power Research Station, Khadakwasla, Pune"</p> <p>EIA Report didn't cover the impact assessment of construction of river coastline protection measures, walkway cum cycle track, and bridge over the St. Inez creek/nallah.</p> <p>EIA report concludes "In light of the technical, institutional measures recommended it is expected that the project will avoid severe, permanent and regional impacts. There will be no net loss in biodiversity. Tremendous social and economic benefits will be generated in Panaji by the development of promenade creating the reliable, sustainable and safe public activities."</p>

Photographs taken during the site visit are follows:



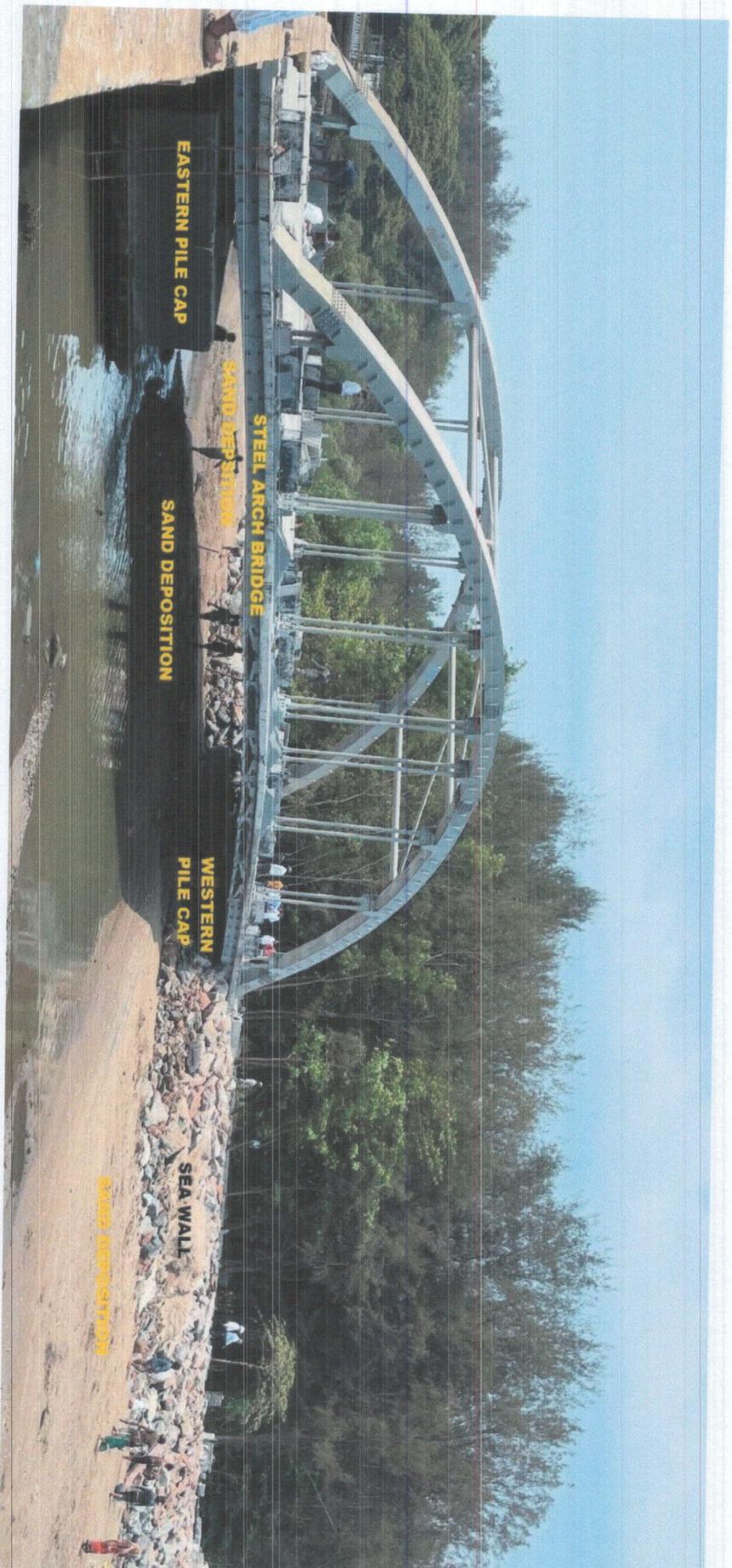
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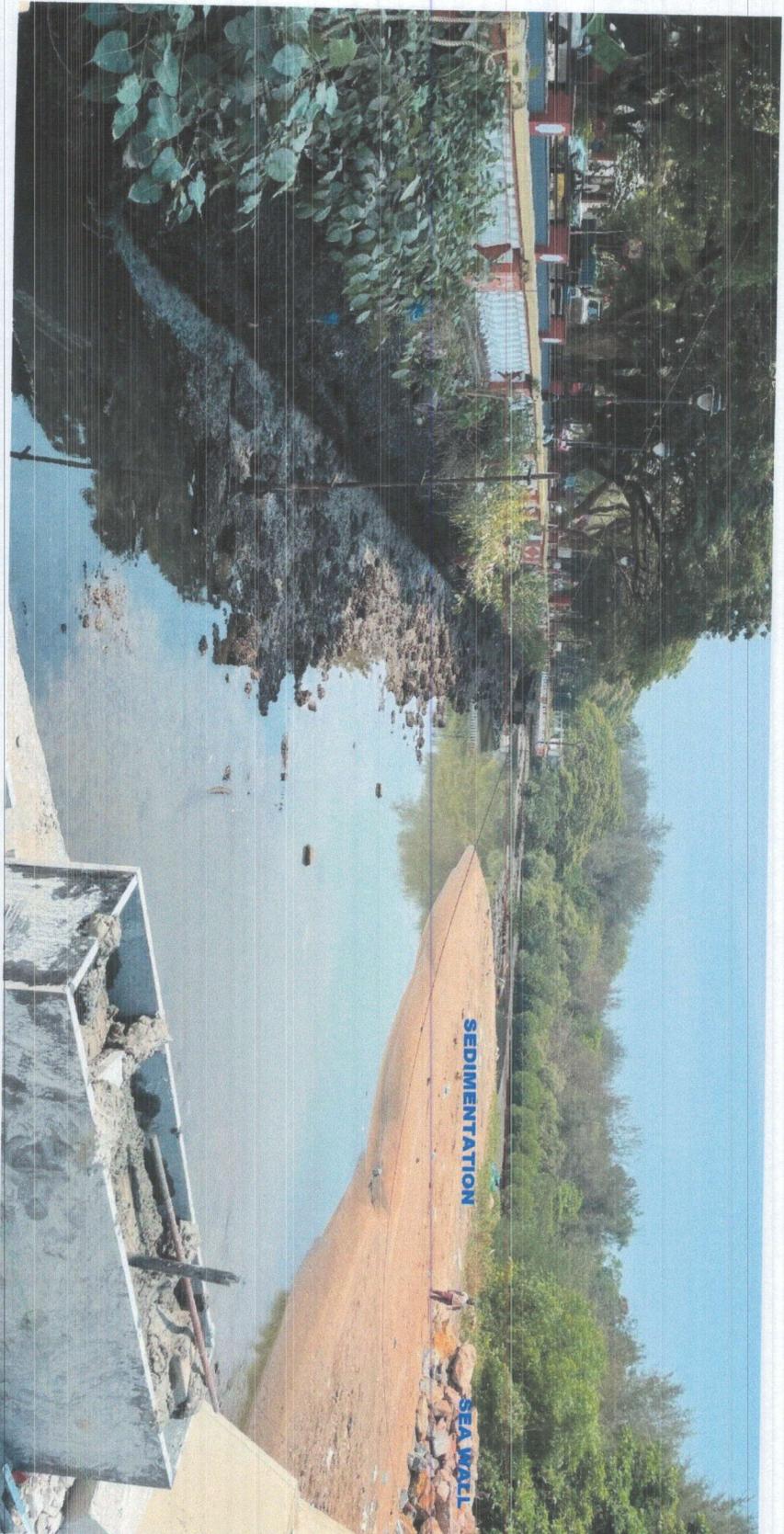


1: Arch Bridge over St. Inez Creek Showing Pile Caps and Sand Deposition

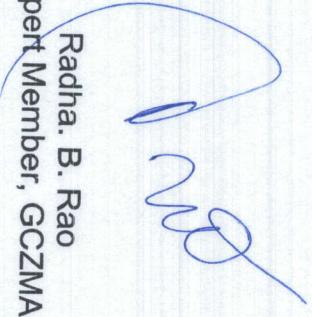
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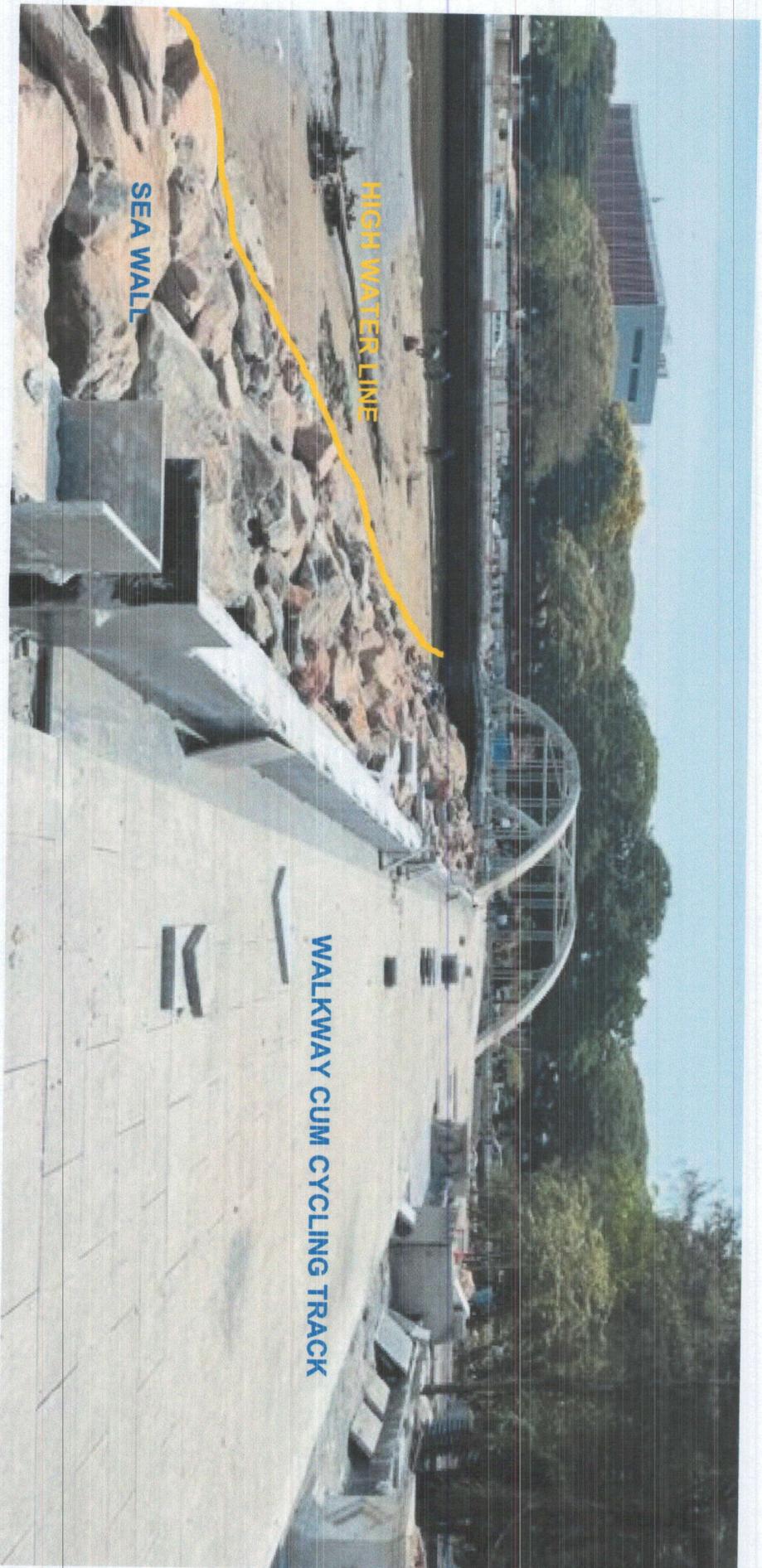


2: Sedimentation along the western bank of St. Inez Creek (rear side of the arch bridge)


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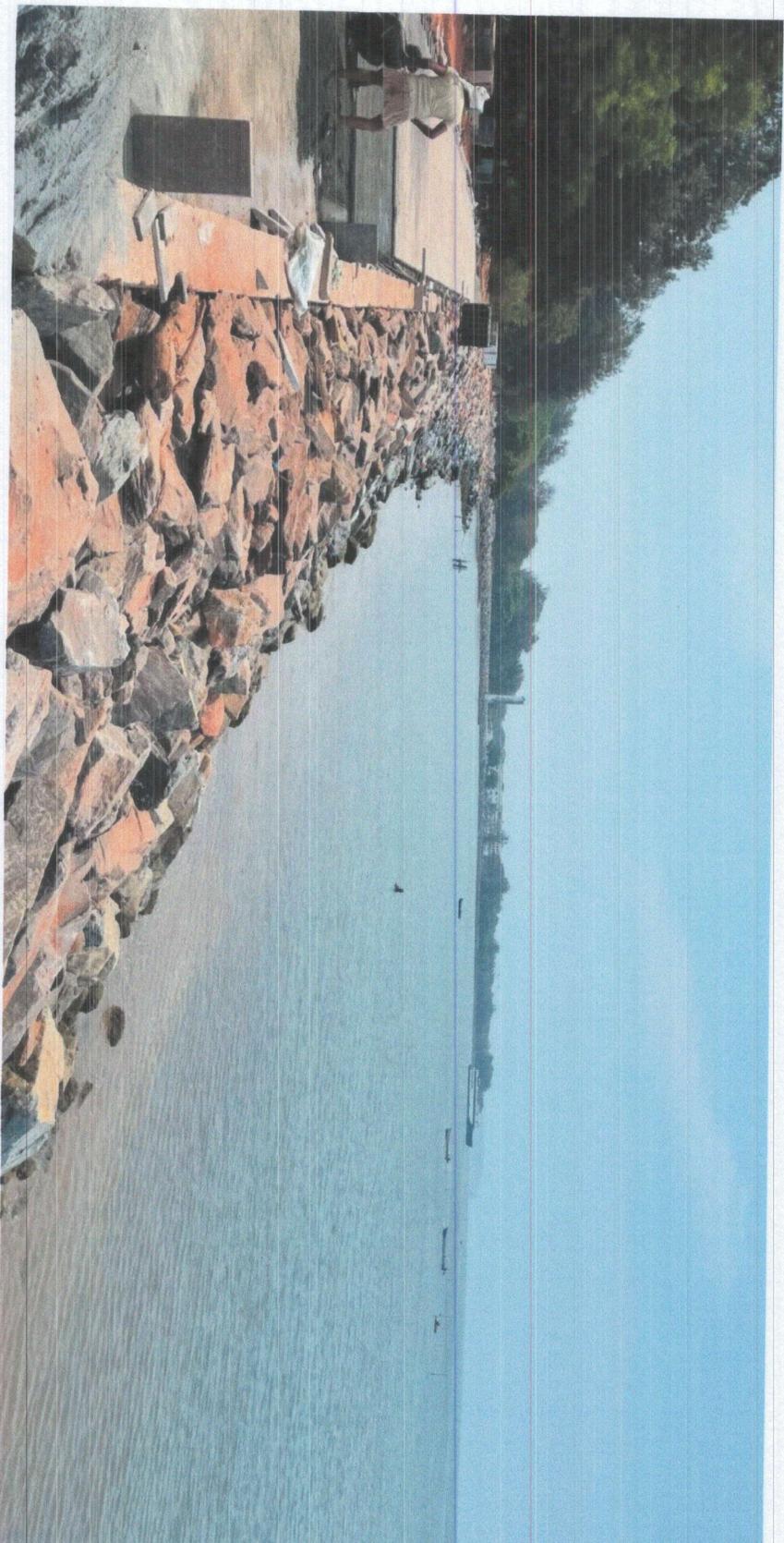


3: waterline, Sea wall and Bridge view from walkway cum Cycling track

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4: Showing Walkway cum Cycling track and Sea Wall, view towards light house

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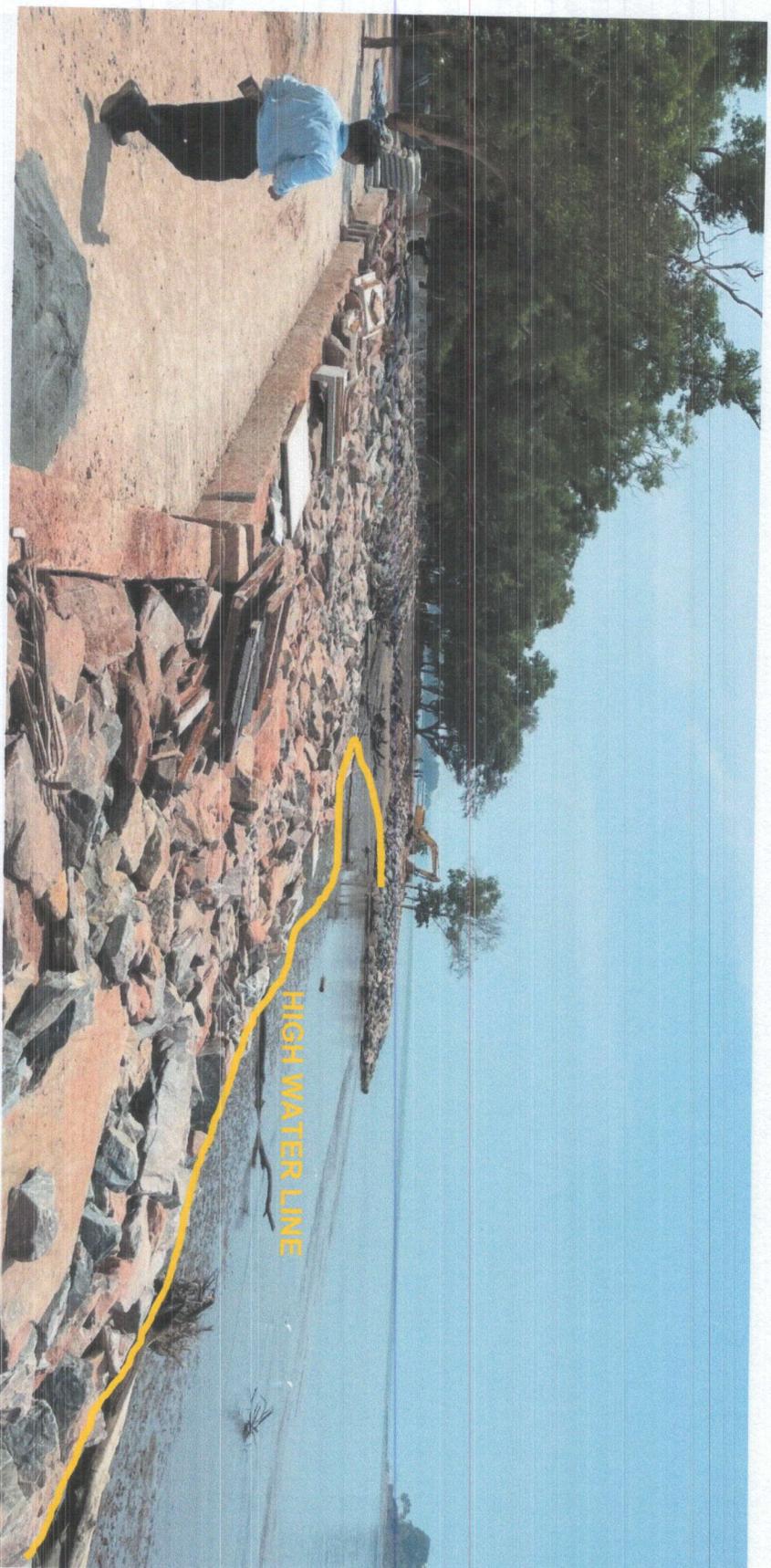
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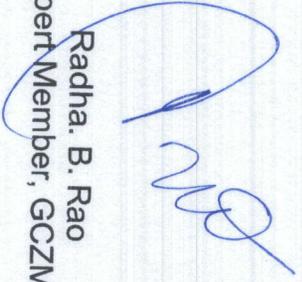
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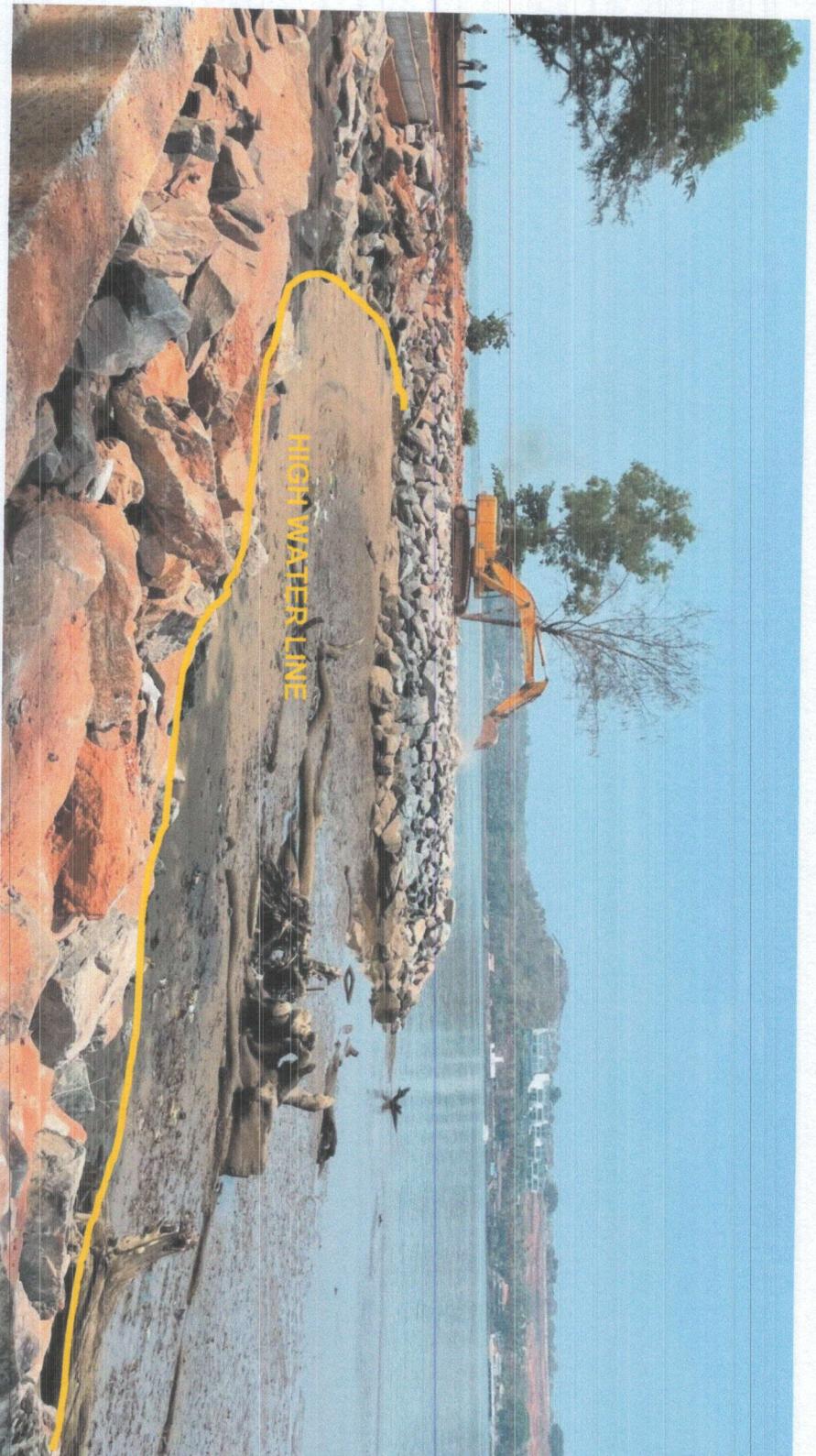


5: Construction of seawall between chainage 1+570 and 1+670


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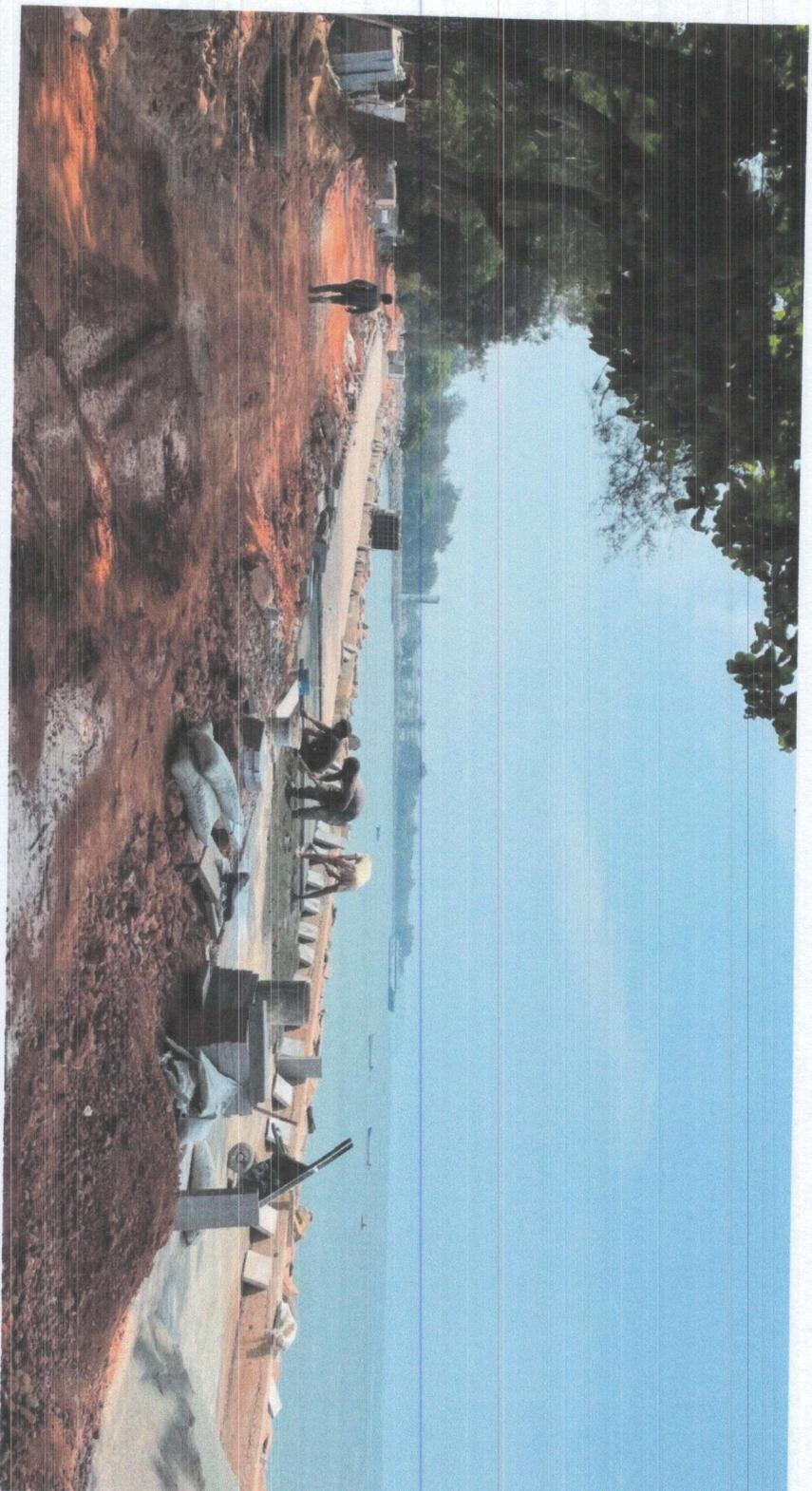


6: Construction of seawall into river with granite stones between chainage 1+570 and 1+650

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7: construction work - Walkway cum Cycling near Children Park

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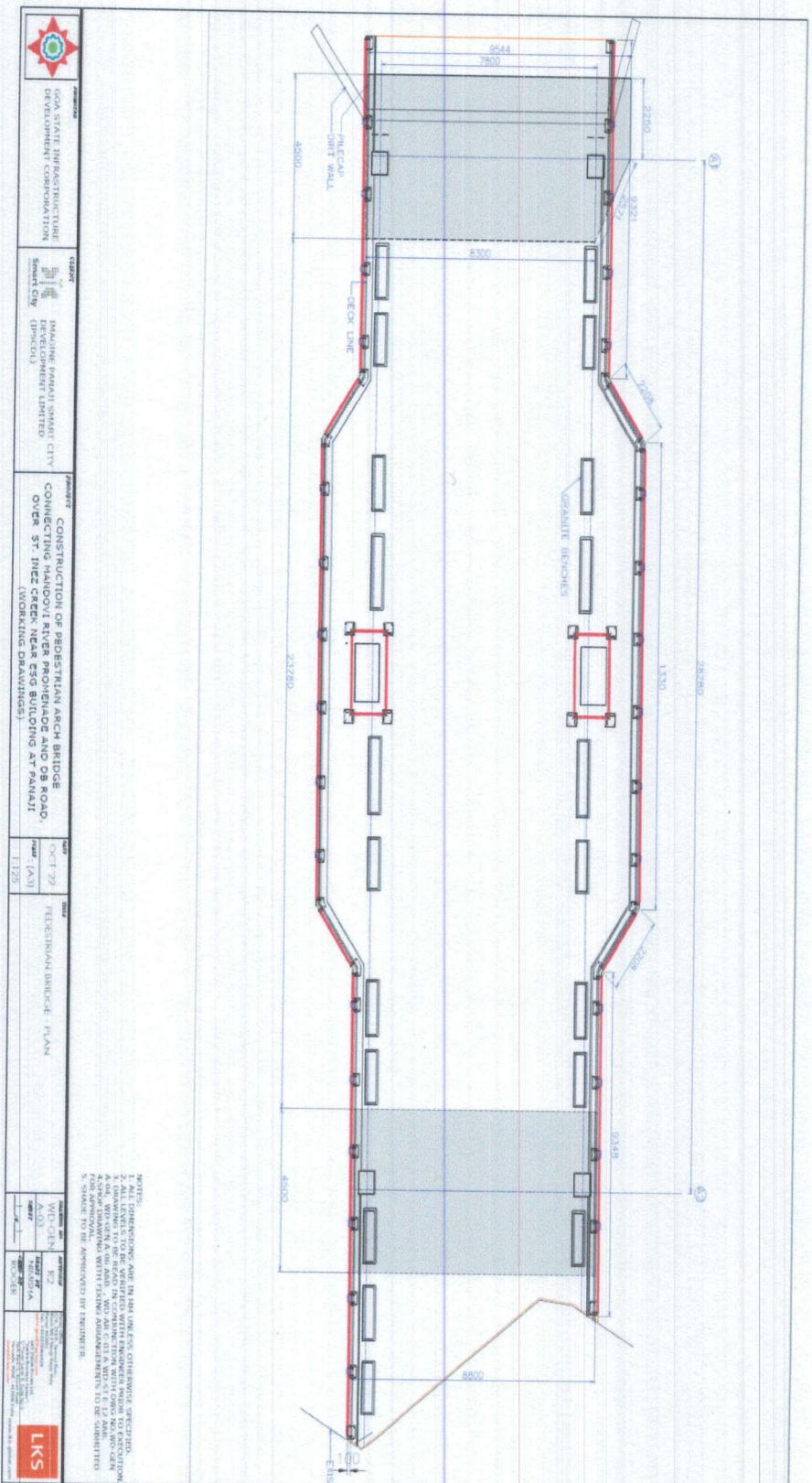


Figure 9: Bridge Plan received from GSIDC

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