

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI
(PRINCIPAL BENCH)**

OA No. 553 of 2024

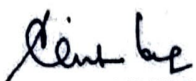
In the matter of

News item titled "From Ropar to Hoshiarpur via HP: 30-km detour as illegal mining damages bridge" appearing in *The Indian Express* dated 10.04.2024.

INDEX

Sr. No.	PARTICULARS	Date	Pg. No.
1.	Affidavit of K A P Sinha, Chief Secretary, Government of Punjab in compliance with order dated 29.10.2025 passed by this Hon'ble Tribunal	29.01.2026	1-12
2.	Annexure R-1 (Copy of Letter to Constitution a Committee by PSWR)	06.02.2024	12-13
3	Annexure R-2 (Copy of the Report)	07.02.2024	14-26
3.	Annexure R-3 (Report by Thapar Institute)	03.04.2024	27-33
4.	Annexure R-4 (Report by CPCB)	23.08.2024	34-39
5.	Annexure R-5 (Letter to PEC)	13.01.2026	40-42

Place: Chandigarh
Dated: 29.01.2026


K A P SINHA
CHIEF SECRETARY
GOVERNMENT OF PUNJAB

283 BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL, NEW DELHI
(PRINCIPAL BENCH)

OA No. 553 of 2024

In the matter of

News item titled "*From Ropar to Hoshiarpur via HP: 30-km detour as illegal mining damages bridge*" appearing in *The Indian Express* dated 10.04.2024.

Versus

Punjab Pollution Control Board and others

Affidavit of K A P Sinha, Chief Secretary,
Government of Punjab; Respondent No. 5 in
compliance with order dated 29.10.2025 passed
by this Hon'ble Tribunal.

I, the above-named deponent do hereby solemnly affirm and state as under:-

Respectfully Showeth

1. That briefly submitted that the present matter relates to *suo-motu* cognizance by this Hon'ble Tribunal on the basis of the news item titled "*From Ropar to Hoshiarpur via HP: 30-km detour as illegal mining damages bridge*" appearing in *The Indian Express* dated 10.04.2024. Mainly, the matter relates to the closure of a bridge on the Swan-river, connecting Nangal with Garhshankar due to indiscriminate sand mining causing residents of at least 200 villages in Ropar, District Rupnagar (Punjab) to take a detour of 30 km.

It is alleged in the article that it has been three months since the bridge was closed, leaving no choice with people living in these villages and Nangal town in Ropar but to cross over to Himachal Pradesh and pay an entry fee, while travelling an extra 30 km, to reach Garhshankar in Hoshiarpur district.

2. That it is further submitted that in the month of July, 2023, the piers of bridge situated in Village Ailgran were damaged. In this regard, the Principal Secretary, Department of Water Resource vide its letter No. 244-



Principal

246/CE/DRG/2024 dated 06.02.2024 had constituted a committee to assess the damage and the requirement of repairs/desilting work required to be carried out on the bridges situated in Village Agampur on the Sri Anandpur Sahib-Garhshankar Road and bridge in village Algaran on Kalma Nagar Road which had got damaged. Pursuant to the said orders, a team inspected the said sites and submitted its report dated 07.02.2024. Copies of the letter dated 06.02.2024 and the report dated 07.02.2024 are annexed as **Annexure R-1 and R-2** respectively.

3. That further, on the directions of Sub Divisional Engineer, Sri Anandpur Sahib, an expert team from Thapar Institute of Engineering and Technology also visited the concerned bridge across Swan River in Nangal near village Algaran on 12.03.2024 and submitted its report dated 03.04.2024; copy of the same is attached as **Annexure R-3**.
4. That it is pertinent to mention here that a team comprising of Sh. Jagdish Prasad Meena, Scientist 'D' and Sh. Pankaj Saini, Office Assistant (Scientific) from Central Pollution Control Board, Regional Directorate, Chandigarh were deployed by the Central Pollution Control Board for site inspection on 02.07.2024. The spot inspection was carried out on 02.07.2024 jointly by the team of Central Pollution Control Board and the Committee constituted by District Administration. The Central Pollution Control Board team was accompanied by the Committee constituted by Deputy Commissioner, Rupnagar under the Chairmanship of ADC (Rupnagar) comprising the Officials from Punjab Pollution Control Board, Regional Office, Rupnagar, Drainage-cum-Mining Division, District Development and Panchayat Officer, Rupnagar, Divisional Forest Officer and Superintendent of Police (D), Rupnagar. Pursuant to the same, the committee submitted its report dated 23.08.2024; copy of the same is attached as **Annexure R-4**.

As per the said report, the joint team inspected the site and observed that significant erosion had occurred in the material surrounding 4 out of 14 pillars under the bridge. It has also been observed that water is flowing through only 4 of the pillars, while the remaining pillars remain intact which increases risk of damage to the bridge. It has been further observed that as per the report provided by Executive Engineer, Construction Division, PWD (B&R), Rupnagar, the bridge sustained damage between July 8 and July 11,



Printed

2023, due to heavy rains and flooding and the floodwaters washed away material around the wells of the High-Level bridge over the Swan river near the village of Algran on the Kalwan to Nangal road. The team has inspected the riverbed of the Swan River beneath the bridge and extended their visit 1000 meters upstream and downstream to check for any illegal mining activities. During the said visit, they did not find any evidence of any recent mining activity near the bridge or within 1000-meter range upstream and downstream, nor did the team observe any deep craters on the riverbed or its banks. As per the report, the team also interacted with local fishermen who were fishing in the area where the water channel flows and the fishermen informed the team that there were no mining activity taking place in that area.

5. That it is submitted that in order to place a factual, scientific and technically verified position before the Hon'ble Tribunal with regard to the report submitted by Punjab Engineering College, Chandigarh in compliance with the directions issued by this Hon'ble court, expert technical assistance has been sought from Punjab Engineering College (PEC), Chandigarh. A formal communication dated 13.01.2026 has been sent to Dr. Amarjeet Singh Sandhu, Assistant Professor, C.E.D., PEC, seeking interpretation and analysis of satellite imagery for mining activities along Algran Bridge, Rupnagar, Punjab. In the said letter, it has been specifically requested to provide the details of estimated quantity of riverbed material extracted at regular intervals of every 30 days alongwith relevant locations, detailed technical assessment regarding possible erosion in river during flood/monsoon season. The copy of the said letter dated 13.01.2026 is attached as **Annexure R-5**.

6. That it is submitted that the State has enacted the Punjab Regulation of Crusher Units, Stockists & Retailers Act, 2025 and notified the Punjab State Minor Minerals (Amendment) Policy, 2025. This act and policy introduce a modern, technology-driven, accountable system for monitoring mining and crusher-related activities. These reforms represent a significant departure from the Mining Policy of 2023, strengthening transparency, monitoring, and compliance. A detailed comparison is placed below:



Handwritten signature/initials

I. 2023 Policy focused primarily on supply and affordability of sand and gravel. Whereas the Punjab State Minor Minerals (Amendment) Policy, 2025 additionally introduced a new category of mining site, i.e., 'Crusher Owner Mining Sites (CRMS)'. These are the licensed gravel sites exclusively for registered crusher owners, wherein registered Crusher Owners can apply and opt to mine the gravel as minor mineral themselves. This reform is directly aimed at:

- i. Enabling crusher owners to secure legal source of raw material.
- ii. Controlling illegal gravel mining.
- iii. Linking crushers with dedicated legal mining areas.
- iv. Reducing dependence on riverbeds.
- v. Eliminating illegal cross-border sourcing.
- vi. Reducing dependence on other States.
- vii. Enhancing monitoring & accountability by correlating supply-demand from crushers.

Till date, applications of 269 Crusher Owner Mining Sites (CRMS) have been received, out of which 30 sites are in the approved DSRs and their Letter of Intent has been issued. For the rest of the 239 sites, they are being included in the new DSRs which are in the process of being finalized. The total area of these 269 sites for which CRMS applications have been received is 1043 Hectares, which signifies the increase in area under legal mining.

II. Strengthening of the Mining Rights Framework

The 2025 Amendment introduces:

- i. Five-year mining rights for CRMS.
- ii. Defines a Strict 'Environmental Clearance' timeline (6 months + 6 months extension with applicable fee).
- iii. Automatic forfeiture of fees on non-compliance.
- iv. Transparent procedure for allotment of Letter of intent to applicants.



Signature

- v. Mandatory inclusion of adjoining land for CRMS so as to prevent illegal untagged mining pockets.

The Department of Water Resources Punjab has identified 85 de-silting sites in the state of which 66 de-silting sites comprising of 6,93,69,948.7 Sq feet area and 51,03,00,227 cft of material, are being auctioned out. This de-silted material shall open one more legal source for sale and processing of minor minerals in the open market.

The additional details of Punjab Regulation of Crusher Units, and Stockists and Retailers Rules, 2025 and monitoring mechanisms are as follows:

- i. That the State of Punjab has undertaken comprehensive regulatory reforms for the scientific, transparent, and accountable regulation of stone crusher units by enacting the Punjab Regulation of Crusher Units, and Stockists and Retailers Act, 2025 and notifying the rules there under on 14.07.2025. These statutory instruments constitute the first dedicated legal framework in the State exclusively governing the establishment, registration, functioning, monitoring, and environmental compliance of crusher units.
- ii. That under the aforesaid Act and Rules, mandatory registration of all crusher units has been introduced, requiring detailed scrutiny of ownership, location, capacity of machinery, environmental consent, and compliance with siting criteria. No crusher unit is permitted to operate without valid registration and annual renewal. Further, as per Rule 3, every Crusher Unit in the State has now been allotted a Crusher Unique Registration Number (CURN). CURN ensures unique identity, scientific record-keeping, and real-time visibility of each crusher's operations. It enables end-to-end monitoring of raw material inflow and outgoing processed material, thereby eliminating scope of unaccounted operations.
- iii. That the Rule 9 mandates verification of both input and output of minor minerals at crusher units through monthly returns filed on the Mining Portal. These returns include details of raw material received, quantity processed, finished material dispatched, and



Handwritten signature

closing stock. The system enables cross-verification with Transit Passes and Interstate Checkpost records, thereby substantially reducing the scope of illegal extraction or undisclosed processing. Further, as per rule 11, every Crusher Unit must maintain daily and monthly stock registers, and departmental officers are mandated to conduct periodic physical verification (monthly by Junior Engineer, quarterly by Assistant District Mining Officer, six-monthly by District Mining Officer, and annually by Superintending Engineer). Any excess, unaccounted or unclaimed material is deemed illegal and liable for seizure and penal action. These provisions ensure continuous monitoring, eliminate scope of manipulation, and enable detection of irregularities.

- iv. That the State has operationalised a fully digital "Crusher Module" on the Mining Portal for automated scrutiny of returns, generation of e-Transit Passes, calculation of Mineral Processing Fee (MPF), and real-time monitoring of material movement. The system generates alerts for mismatch, excess processing, or abnormal stock patterns, enabling immediate field action.
- v. That the Rules further require installation of 'Smart Meters' on crusher units to digitally record the power consumption and thereby calculate the quantum of raw material processed by the crusher. These meters shall transmit real-time data to the server, ensuring transparent monitoring of production and preventing clandestine operations. Material processed by the crusher unit will be matched as per the electricity consumption to avoid any kind of undisclosed processing.
- vi. That the Rules expressly prohibit the use of diesel generators at crusher units. All units are required to shift to electricity supply, thereby eliminating any chance of illegal processing by the crusher units. The State has already issued notices for removal of gensets, and compliance is being enforced in a strict manner.
- vii. That the State has established and further strengthened the interstate check posts along the borders of Punjab. These check posts are equipped with CCTV surveillance systems to monitor the movement of vehicles transporting minor minerals. Furthermore, the Department of Mines and Geology, Punjab, vide



Seal

Notification dated 15.10.2025 (the Punjab Minor Mineral (Third Amendment) Rules, 2025), has mandated that every vehicle transporting minor minerals shall obtain a Confirmation Receipt (CR) Form at the interstate check post, which shall serve as a valid transit pass for movement within the State of Punjab. This mechanism ensures that only legally extracted and duly recorded minor minerals are permitted to enter the State boundaries. The Department also proposes to install Automatic License Plate Recognition (ALPR) cameras and RFID readers at these check posts with the objective of further curbing and eliminating the movement of illegal mineral-laden vehicles. Further, the Department has also made deterrent provision in the Rule 75 of PMMR 2013 vide notification dated 29.10.2022, under which heavy penalty ranging from Rs. 50,000 to Rs. 2,00,000 is being imposed on the illegal transportation of minerals.

- viii. That in exercise of the powers conferred under Section 4(3) of the Punjab Regulation of Crusher Units, Stockists and Retailers Act, 2025, read with Rule 8 of the Rules framed there under, the Government has prescribed a Mineral Processing Fee (MPF) payable by all Crusher Units. The said fee is intended to compensate for the damage caused to roads and public infrastructure due to continuous movement of heavy vehicles engaged in transportation of raw material to the crusher units and processed material there from. The MPF has been made applicable on all Transit Passes generated by crusher units w.e.f. 22.10.2025. It is further submitted that the MPF shall be utilized strictly for restoration, strengthening, and improvement of road and other public infrastructure in and around the crusher zones, so as to mitigate adverse impacts on residents living in the vicinity and to ensure safe and durable public infrastructure. A comprehensive Standard Operating Procedure (SOP) dated 26.11.2025 for the utilization of Mineral Processing Fee (MPF) funds has been duly formulated and issued by the Department. The SOP has been circulated to all stakeholder departments for uniform implementation and for ensuring that expenditure is incurred



Done by

strictly on eligible projects in a transparent and accountable manner.

- ix. That in addition to MPF, an Environment Management Fund (EMF) has been levied on crusher units, as they fall under the 'Orange Category' of industries under the Punjab Pollution Control Board norms. The EMF is being collected for environmental mitigation, pollution control measures, dust-suppression systems, and green-belt development in and around crusher zones. An SOP dated 17.11.2025 has also been issued for uniform, transparent and need-based utilization of EMF funds.
- x. That the Mining Policy was also amended vide Notification dated 30.04.2025 enabling the allotment of "Crusher Owner Mining Sites (CRMS)" exclusively for supply of raw material to crusher units. This policy reform will reduce dependence on unauthorized sources and will significantly curb illegal mining. Till date, 24 Letters of Intent (LoIs) have been issued for such sites, and the applicants are at various stages of obtaining Environmental Clearance. After operationalisation of these sites, the dependence on unregulated sources of raw material will significantly reduce, as crusher owners shall have regulated, compliant and assured sources of supply.
- xi. That under Rule 13, registration of Crusher Units can be suspended for violations, including non-submission of returns, illegal mining notices, breach of statutory provisions, or non-payment of Government dues. Suspension empowers the DMO to seal the premises and halt all operations, preventing continuation of illegal activity. Further, Rule 14 provide for termination of registration in cases of repeated violations, criminal conviction for mining offences, failure to comply with notices, or default in payment of assessed dues. Upon termination, the unit is barred from re-registration for up to three years, thereby permanently dismantling illegal operations. Also rule 26 empowers the District Mining Officer to seize illegally procured minor minerals, along with machinery, tools, and vehicles used for illegal activities. Seized material will be disposed off through public auction in



Signature

accordance with law, ensuring that illegal operations are not financially rewarded.

xii. That the cumulative effect of the above reforms-mandatory registration, digital monitoring, smart meters, elimination of gensets, strengthened checkpoints, MPF and EMF levies, and allotment of Crusher Owner Mining Sites-is the creation of a transparent, traceable, and scientifically regulated regime for the operation of crusher units, thereby substantially minimizing illegal mining and associated environmental damage.

xiii. That the State, through these statutory measures, technological interventions, and policy reforms, has ensured that the functioning of crusher units is environmentally compliant, legally regulated, and aligned with the principles of sustainable mining.

7. That it is submitted that with regard to illegal mining activities, following actions were taken by the department:

- a. During inspections and enforcement drives conducted in connection with incidents of illegal mining, the Department from the year 2016 till date, has lodged approximately 97 FIRs against the persons/entities identified to be involved in such illegal mining activities in Sri Anandpur Sahib and Nangal Tehsil. These FIRs have been registered from time to time on the basis of specific detections made during checking operations and reflect the continuous and consistent action taken by the authorities to curb and penalize unlawful mining.
- b. The checking and inspection of operational crushers is being carried out regularly by the competent authorities. During the course of such inspections, numerous R/S (Demand) Notices have been issued from time to time to those crushers found to be involved in or connected with illegal mining activities, in accordance with the applicable statutory provisions and regulatory framework.
- c. The deterioration in the condition of the bridge is predominantly due to natural erosion processes, such as continuous river flow, bed scouring, and seasonal hydrological variations in the villages of Swara and Baihara, with incidental contribution from illegal mining



Revised

activities. In this context, R/S Notices involving a total quantity of 124.01 lakh tonnes have been issued to the persons/entities as part of regulatory action taken in the area.

- d. Challans have been issued against the vehicles found to be used for the transportation of illegally mined material, in accordance with the applicable statutory provisions and enforcement procedures, as part of the action taken to curb and penalize illegal mining activities. The year wise detail of the challans issued in the District Ropar is as follows:

Challan under Rule 74 & 75 in Ropar District from 2022-2026		
S. No.	Year	Challan under Rule 74 & 75 in Ropar District
1	2022	7
2	2023	95
3	2024	131
4	2025	76
5	2026	2
Total		311

- e. Apart from the actions taken as stated above, the office of Executive Engineer- Sri Anandpur Sahib has been regularly conducting checks and inspections in the areas falling within its jurisdiction and has been taking strict legal action, in accordance with law, against all instances of illegal mining.

- f. Further, the Department has engaged IIT Ropar for scientific and technical monitoring of the river stream during both pre-monsoon and post-monsoon periods, with a view to assess and quantify the material deposited, eroded, or extracted from the riverbed.

8. That the de-silting works in the vicinity of Algran bridge were also carried out by the Water Resources Department, Punjab details of which is given in table below:

Sr.No	Name Of Site	Area (in Ha)	Alloted Quantity (in M.T)	ExtractedQuantity (in M.T)	Length (in Km)	Remarks
1	Bhallan	6.17	376399	167291	2.6 Km Up stream from Algran bridge	These sites were operational till 10/11/2022
2	Sensowal	20.02	1158370	918743	1.5 Km Down stream from Algran	



Handwritten signature


					bridge	
3	Bainhara	7.39	343246	343246	5.5 Km Downstream from Algran bridge	
Total		33.58	1878015	1429280		


9. That it is submitted that as stated above, the technical assistance has already been sought from the Punjab Engineering College and without getting the details of the survey report, supporting their conclusion from the institute and without examining the technical and scientific aspects of the said report, it is not possible to make any comments on the said report. It is thus submitted that on getting the entire details from the PEC and after scientific and technical examination of the report, the State will submit its appropriate response before this Hon'ble Tribunal. However, the deponent submits that the State always remains committed to take every remedial action as advised/suggested by established institutions/expert bodies. It is further added that the State has been taking appropriate steps to curb illegal mining and crushing activities in the State of Punjab and to introduce a modern, technology-driven, accountable system for monitoring mining and crusher-related activities, the State has enacted the Punjab Regulation of Crusher Units, Stockists & Retailers Act, 2025 and the Punjab State Minor Minerals (Amendment) Policy, 2025.

In view of above, it is respectfully submitted that the present affidavit may kindly be taken on record in compliance with the order dated 29.10.2025 passed by this Hon'ble Tribunal, in the interest of justice.

Place: Chandigarh

I identified the deponent
who has Signed/Thumb
Marked in my presence


29/01/2026
Signature:-


K A P SINHA
CHIEF SECRETARY
GOVERNMENT OF PUNJAB

Verified that the contents Para 1 to 9 of my affidavit are true and correct to the best of my knowledge as per information derived from the record. No part of it is false and nothing material has been kept concealed therein.

Place: Chandigarh

Dated: 29.01.2026

18
Certified that above Statement made on
Oath/S.A. Before me at Chandigarh

By KAP SINHA CHIEF SECRETARY
Designation CHIEF SECRETARY GOVERNMENT OF PUNJAB

Department of _____

Identified by Tushal Kumar Clerk

Who is personally known by

Date _____

Executive Magistrate
Chandigarh

29.01.26

ATTESTED


(Manpreet kaur)
Executive Magistrate
Union Territory, Chandigarh

Annexure R-1

ਨਿਗਰਾਨ ਇੰਜੀਨੀਅਰ, ਪਟਿਆਲਾ ਜਲ ਨਿਕਾਸ-ਕਮ-ਮਾਈਨਿੰਗ ਅਤੇ ਜਿਆਲੇਜੀ ਸਰਕਲ,

ਜਲ ਸਰੋਤ ਵਿਭਾਗ, ਪੰਜਾਬ

sedtainagecirclepatiala@gmail.com

ਵੱਲੋਂ

ਨਿਗਰਾਨ ਇੰਜੀਨੀਅਰ, ਪਟਿਆਲਾ
ਜਲ ਨਿਕਾਸ-ਕਮ-ਮਾਈਨਿੰਗ ਅਤੇ ਜਿਆਲੇਜੀ ਸਰਕਲ,
ਜਲ ਸਰੋਤ ਵਿਭਾਗ, ਪੰਜਾਬ।

ਵੱਲ

ਪ੍ਰਮੁੱਖ ਸਕੱਤਰ,
ਜਲ ਸਰੋਤ ਵਿਭਾਗ, ਪੰਜਾਬ,
ਚੰਡੀਗੜ੍ਹ।

ਵਿਸ਼ਾ:-

ਨੰ. 163 /234-ਡਬ. ਮਿਤੀ 12-02-2024
Report regarding damage and requirement of repair/desilting works required to be carried out on bridges situated in Agampur on Sh. Anandpur Sahib-Garhshankar Road and bridge in village Algran on Kamla Nangal.

ਹਵਾਲਾ:-

ਆਪ ਜੀ ਦੇ ਦਫਤਰ ਦਾ ਪਿੱਠ ਅੰਕਣ ਨੰ. 244-246/CE/DRG/2024, ਮਿਤੀ 06/02/2024.

ਉਪਰੋਕਤ ਵਿਸ਼ਾ ਅੰਕਿਤ ਸਾਈਟ ਦਾ ਸਰਵੇ ਕਰਨ ਲਈ ਹਵਾਲੇ ਅਧੀਨ ਪੱਤਰ ਰਾਹੀਂ ਆਪ ਜੀ ਵੱਲੋਂ 4 ਮੈਂਬਰੀ ਕਮੇਟੀ ਦਾ ਗਠਨ ਕੀਤਾ ਗਿਆ ਸੀ। ਕਮੇਟੀ ਵੱਲੋਂ ਇਨ੍ਹਾਂ ਜਾਰੀ ਹੁਕਮਾਂ ਦੀ ਪਾਲਣ ਵਿੱਚ ਮਿਤੀ 07/02/2024 ਨੂੰ ਸਾਈਟ ਇੰਸਪੈਕਸ਼ਨ ਕੀਤੀ ਗਈ, ਜਿਸ ਦੀ ਸਰਵੇ ਰਿਪੋਰਟ ਨਾਲ ਨੱਥੀ ਆਪ ਜੀ ਨੂੰ ਅਗਲੇਰੀ ਕਾਰਵਾਈ ਹਿੱਤ ਭੇਜੀ ਜਾਂਦੀ ਹੈ ਜੀ।

ਨੱਥੀ/- ਇੰਸਪੈਕਸ਼ਨ ਸਰਵੇ ਰਿਪੋਰਟ।


ਨਿਗਰਾਨ ਇੰਜੀਨੀਅਰ, ਪਟਿਆਲਾ

ਜਲ ਨਿਕਾਸ-ਕਮ-ਮਾਈਨਿੰਗ ਅਤੇ ਜਿਆਲੇਜੀ ਸਰਕਲ,
ਜਲ ਸਰੋਤ ਵਿਭਾਗ, ਪੰਜਾਬ।

Government of Punjab
Department of Water Resources

Chain.....
Next Chain.....

ORDER

1.0 During the floods of July 2023, the piers of the bridges situated in village Agampur on the Shri Anandpur Sahib - Garhshankar Road and bridge in village Algaran on Kalma Nangal Road got damaged. In order to access the damage and the requirement of repair/desilting works required to be carried out on these bridge sites, a Committee of the following officers is hereby constituted:

- A. Sh. Manoj Bansal, Superintending Engineer
- B. Sh. Harshant Kumar, Executive Engineer, Ropar Drainage-cum-Mining Division.
- C. Sh. Davinder Mal, Executive Engineer, Construction Division, Ropar, PWD B&R Department, Punjab.
- D. Sh. Mandeep Singh, Executive Engineer, Design & Systems

2.0 The committee shall submit its report within 3 days, i.e. by 9.02.2024.

ਸ/ਵਕਤਲ ਸ/ਈ ਮੀ.ਸੀ./ਪਿ.ਐੱਚ ਟੀ.

ਸੁਖ: ਚੈਰੀ/ਆਈ.

ਸ/ਈ ਮੀ.ਸੀ./ਪਿ.ਐੱਚ ਟੀ.
ਸ/ਈ ਮੀ.ਸੀ./ਪਿ.ਐੱਚ ਟੀ.
ਸ/ਈ ਮੀ.ਸੀ./ਪਿ.ਐੱਚ ਟੀ.
ਸ/ਈ ਮੀ.ਸੀ./ਪਿ.ਐੱਚ ਟੀ.

Principal Secretary Water Resources

Endst. No. 244-246/CE/ORG/2024

Dated: 06/02/2024

A copy of the above is forwarded to the following for information and further necessary action:

- (i) Chief Engineer, Drainage, Water Resources Department, Punjab.
- (ii) Chief Engineer (South), Punjab Public Works Department (B&R), Punjab.
- (iii) All Concerned.

Principal Secretary Water Resources

Annexure R-

Superintending Engineer, Patiala Drainage –cum-Mining & Geology Circle, Water Resources Department, Punjab.

From

Superintending Engineer,
Patiala Drainage –cum-Mining & Geology Circle,
Water Resources Department,
Punjab.

To

The Principal Secretary,
Water Resources Department, Punjab,
Chandigarh.

No. 163/234-DB

Date: 12.12.2024

Subject: Regarding regarding damage and requirement of repair/desilting works, required to be carried out on bridges situated in Agampur on Sri Anandpur Sahib – Garhshankar Road and bridge in village Algran on Kamla Nangal.

Reference: Your office letter No. 244-246/CE/DRG/2024 dated 6.2.2024.

With regard to subject cited above, a 4-member Committee was formed by you for conducting survey of subject cited site. Hence in compliance to said order, site inspection has been conducted by the Committee on 7.2.2024, survey report regarding which is being sent to you with this letter, for conducting further proceeding in the matter.

Encl: Inspection Survey Report.

Sd/-
Superintending Engineer,
Patiala Drainage –cum-Mining & Geology Circle,
Water Resources Department,
Punjab.

Annexure R-2

INSPECTION NOTE

Subject: - Report regarding damage and requirement of repair/desilting works required to be carried out on bridges situated in Agampur on Sh. Anandpur Sahib-Garhshankar Road and bridge in village Algaran on Kamla Nangal

Ref: - PSWR Govt. of Punjab office order no. 244-46/CE/DRG/2024 dated 06/02/23

In compliance to the office order mentioned under reference above, the Committee members Superintending Engineer/Patiala drainage circle, Executive Engineer/ Ropar drainage cum mining division, Executive Engineer/ Construction division Ropar, PWD B&R & Executive Engineer/Design Water system visited the bridge sites on dated 07/02/24 to assess the damage and the works required to be carried out.

Observations taken at siteBridge situated in Agampur village

1. The multispan Bridge of B&R department is spanning over the Satluj River and Swan River. The substructure of bridge is well foundation.
2. The well caps of five piers from Agampur side of bridge spanning over Satluj river has been exposed and there is no backfill material left around well caps and steining portion of well foundation is also exposed up to a depth of approximate 6 m for all six spans as visible at site and further investigation by filed staff in the water has found that left most pier is exposed up to 12.8 m (42 feet) from well cap i.e.

up to level of 286.45 m. From the data provided by XEN/ B&R PWD, the top of well cap is 299.25 m and scour level is 286.50 m. It needs immediate attention as scouring is endangering the safety of bridge.

3. The water was not uniformly passing through all the piers / spans. Due to presence of deposited RBM material and stones in upstream side of bridge, Sutlej River was following a meandering action and was flowing near its left embankment and in between these piers whose well steining portion has been exposed.

4. For the bridge portion spanning over Swan River, it was also observed that well steining portion of well foundation has been exposed up to 6m from well cap and no back backfill material left around well caps. The further investigation by field staff in the water has found that pier is exposed up to approximate 10m (32.8 feet) from well cap.

Remedial Measure:

1. There is immediate need to arrest the further scouring of the bed of the river near the well caps. There should be adequate embedded length of well called the grip length below the designed scour level. Hence the further scouring of bed needs to be prevented by creating the bed bars having top level at 6 m from top of well cap (by placing the stone in wire crates) as due to

residential development on u/s side It is not advisable to raise the top of bed bar up to well cap level.

2. There is no need of desilting of material as it will further expose the foundation of piers. But to make the equal uniform flow of water through the piers the meandering action of river needs to be eliminated by uniformly spreading the deposited material on u/s side in the area having scoured portion in the upstream side.
3. The left bank of the bridge was also eroded during recent floods, and to arrest further erosion stone revetment and studs shall be raised. The same can be done by using the locally available material as huge RBM is available near the side.

Bridge situated in Algaran village

1. This multispans Bridge of B&R department is spanning over the Swan River. The substructure of this bridge is also well foundation.
2. As informed by the Executive Engineer/ Construction division Ropar, PWD B&R the pier no.7 of this bridge has been tilted and settlement of superstructure has taken place.
3. Widening of joints on the road slab over the piers P7, P6 & P8 has also been observed.

4. The well caps of piers on the left side of bridge namely P9, P8, P7, P6 & P5 spanning over Swan river has been exposed and there is no backfill material left around Well Caps and steining portions of well foundation is also exposed which has endangered the safety of bridge.
5. As intimated by Executive Engineer/ Construction division Ropar, PWD B&R, the designed foundation level of the well foundation is 298.55 m and designed top of well cap level is 311.00m. As per levels taken by the field staff the existing water level is 304.18m which means that that back fill material around well cap has been eroded up to 6.82 m which has cause the damage to structure.
6. Upon further field investigation by field staff, it is observed that bed level near the piers P-5 to P-9 is as follows:


Sr no.	Location	Bed level
1	P-5	303.650
2	P-6	302.600
3	P-7	300.320
4	P-8	304.500
5	P-9	306.800

7. The cross sections taken by field staff are also attached. The same shows that only 4 spans have shown scouring over the years. (Annexure A). Photographs are attached at Annexure B.

Remedial Measure


1. In this bridge also, there is immediate need to arrest the further scouring of the bed of the river near the well caps. There should be adequate embedded length of well called the grip length below the designed level. Hence the further scouring of bed needs to be prevented by creating the bed bars having top level at 3 m from top of well cap (by placing the stone in wire crates).
2. The well foundation of pier no 7 has experienced some settlement and it should be immediately got repaired or re - constructed after assessing the tilt of pier.
3. There is no need of desilting of material as it will further expose the foundation of piers.

Report is submitted for your kind perusal please.


Er. Manoj Kumar Bansal
SE/ Patiala Drainage Circle


Er. Mandeep Singh
XEN/Design Water systems

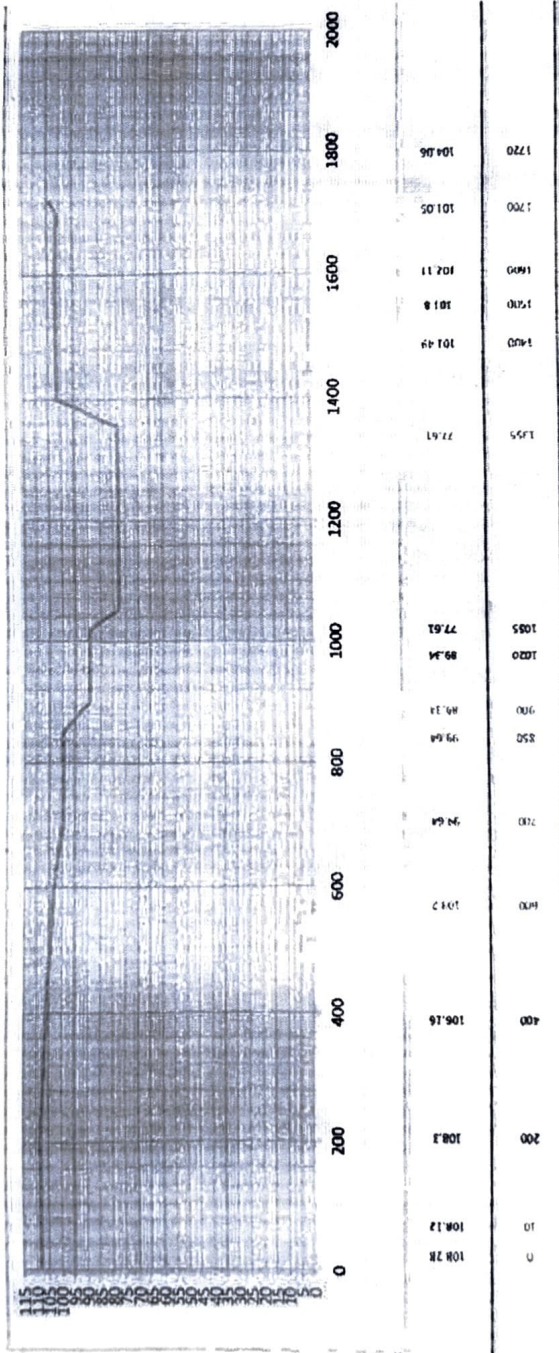

Er. Harshant Verma
XEN/ Ropar cum drainage
division

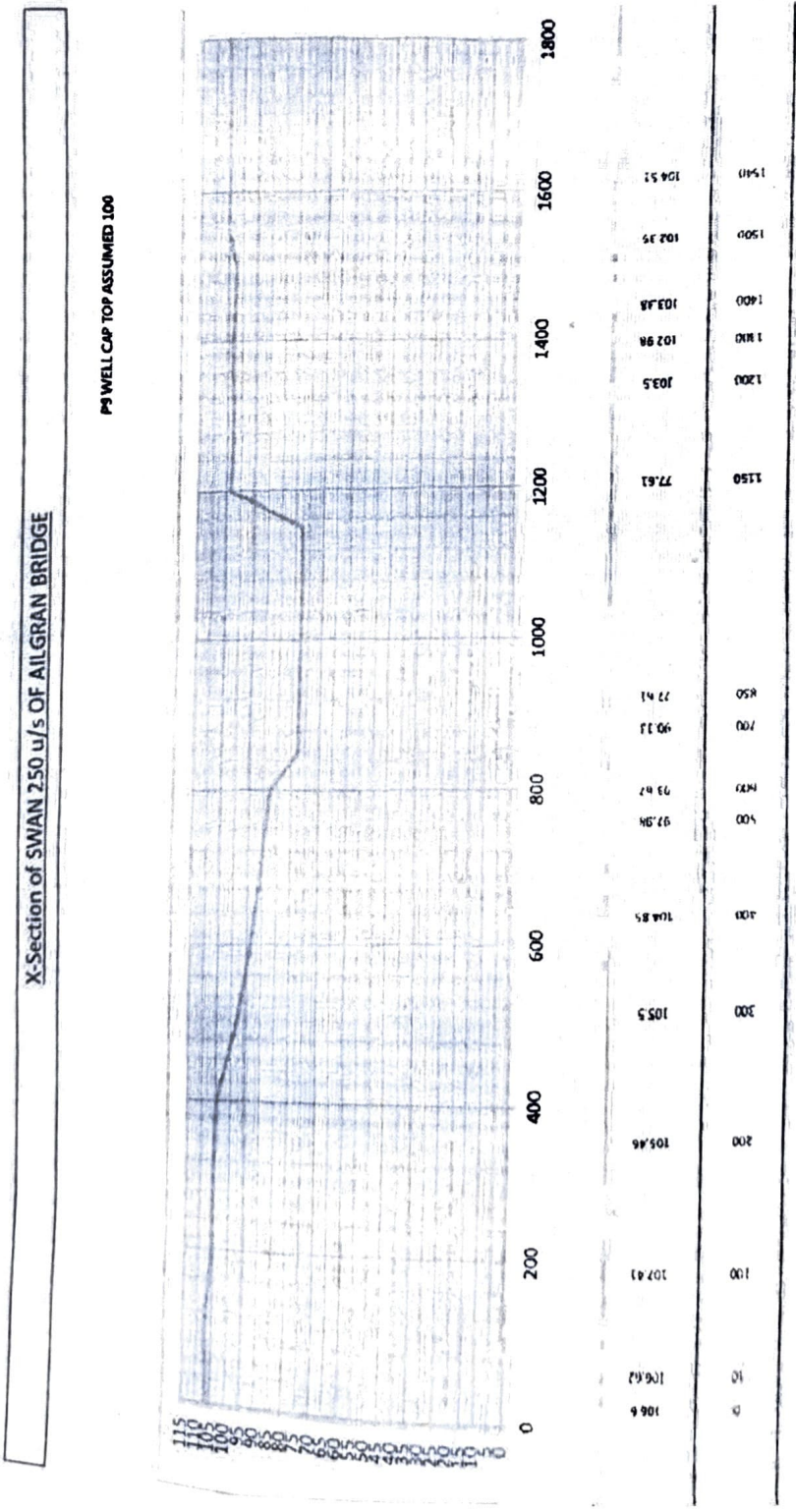

Er. Davinder Mal
XEN/Construction
division Ropar, PWD
B&R

Annexure A

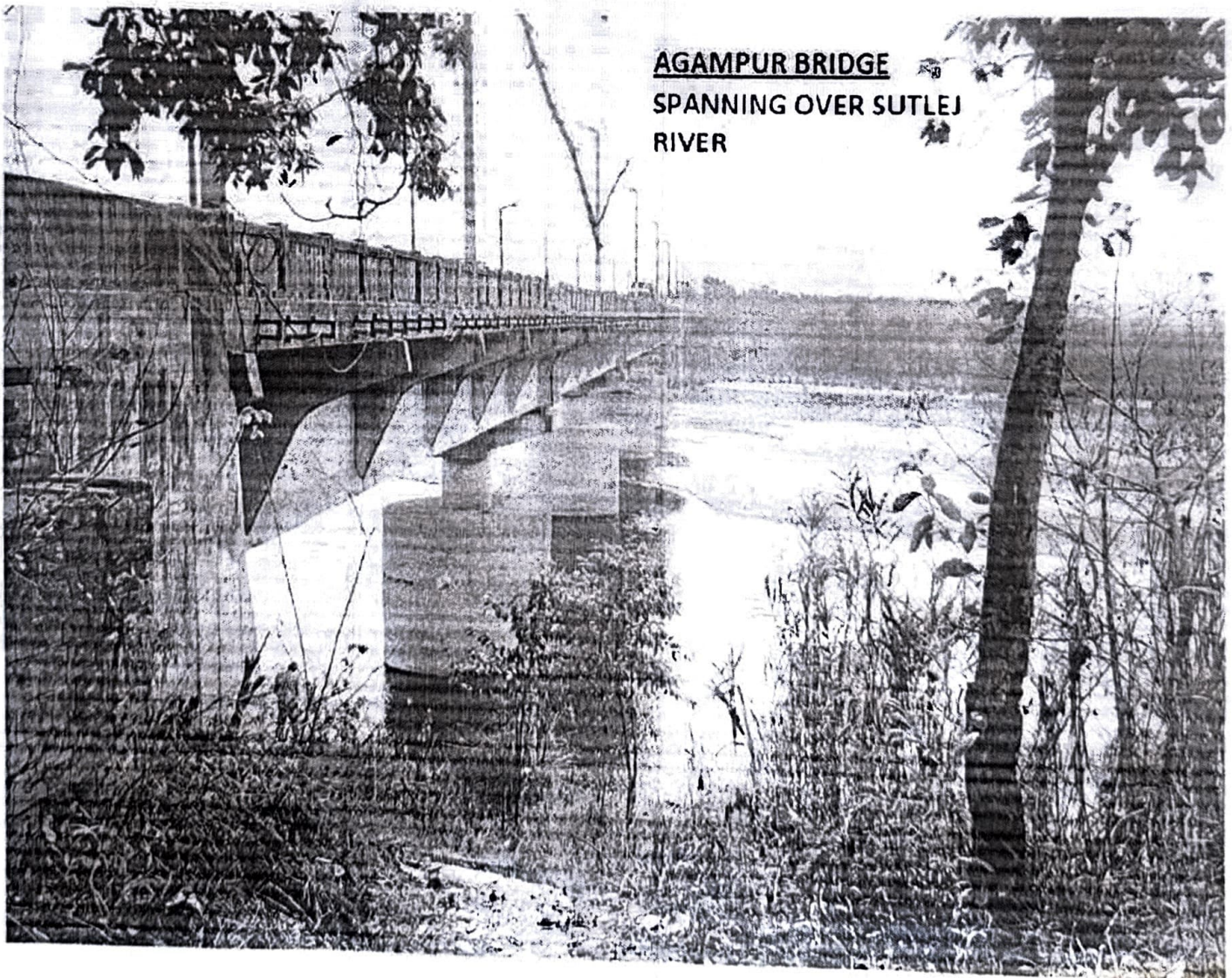
X-Section of SWAN just u/s of AILGRAN BRIDGE

PS WELL CAP TOP ASSUMED 300

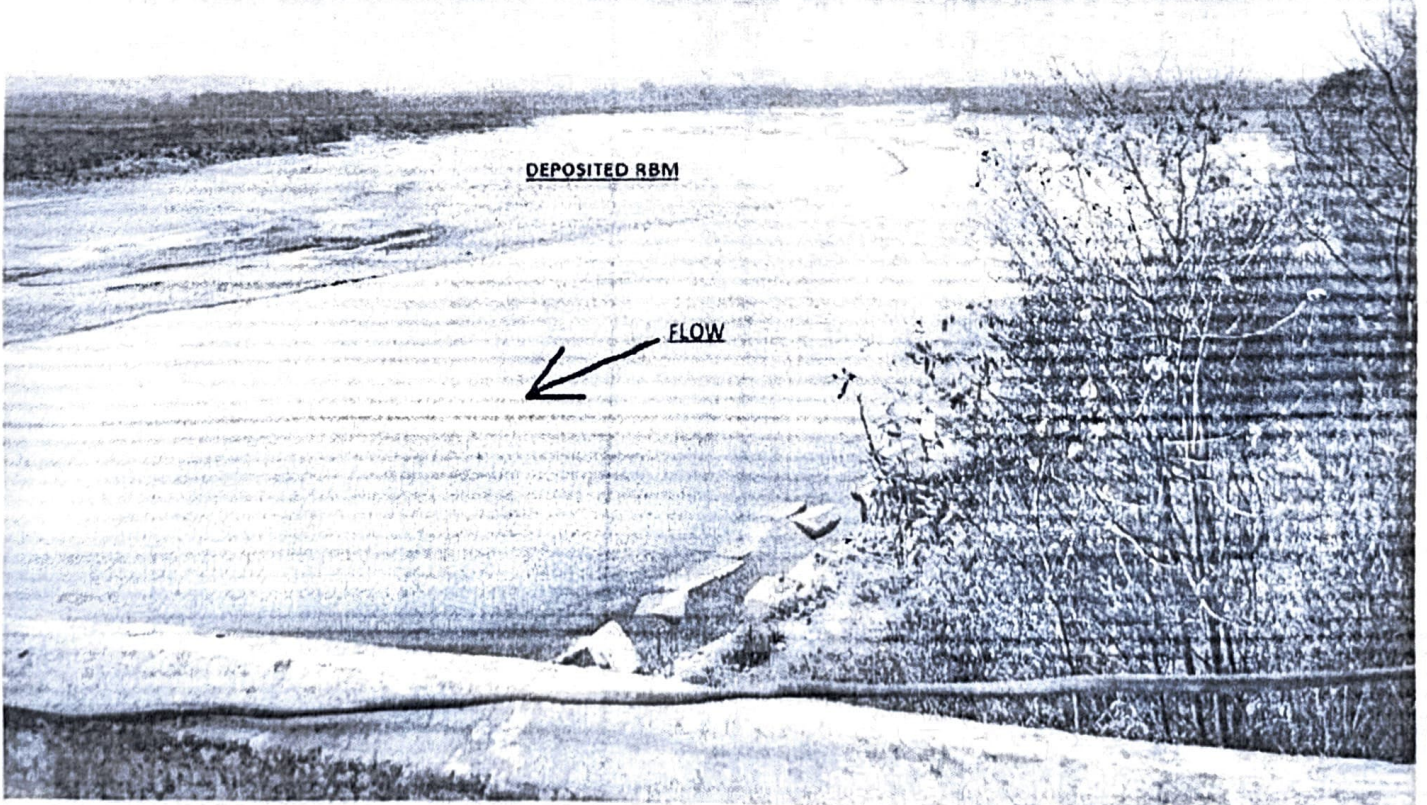




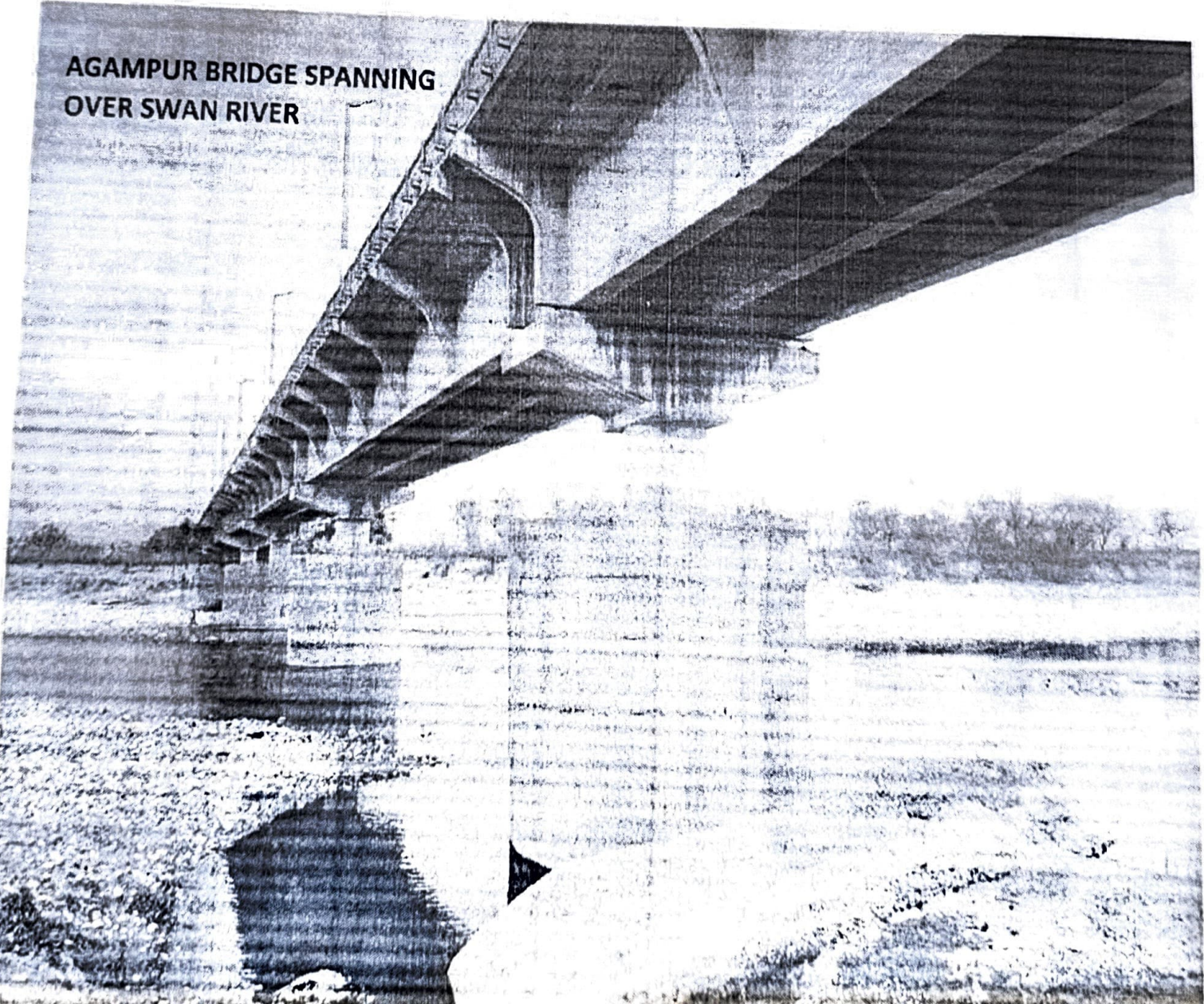
Annexure B

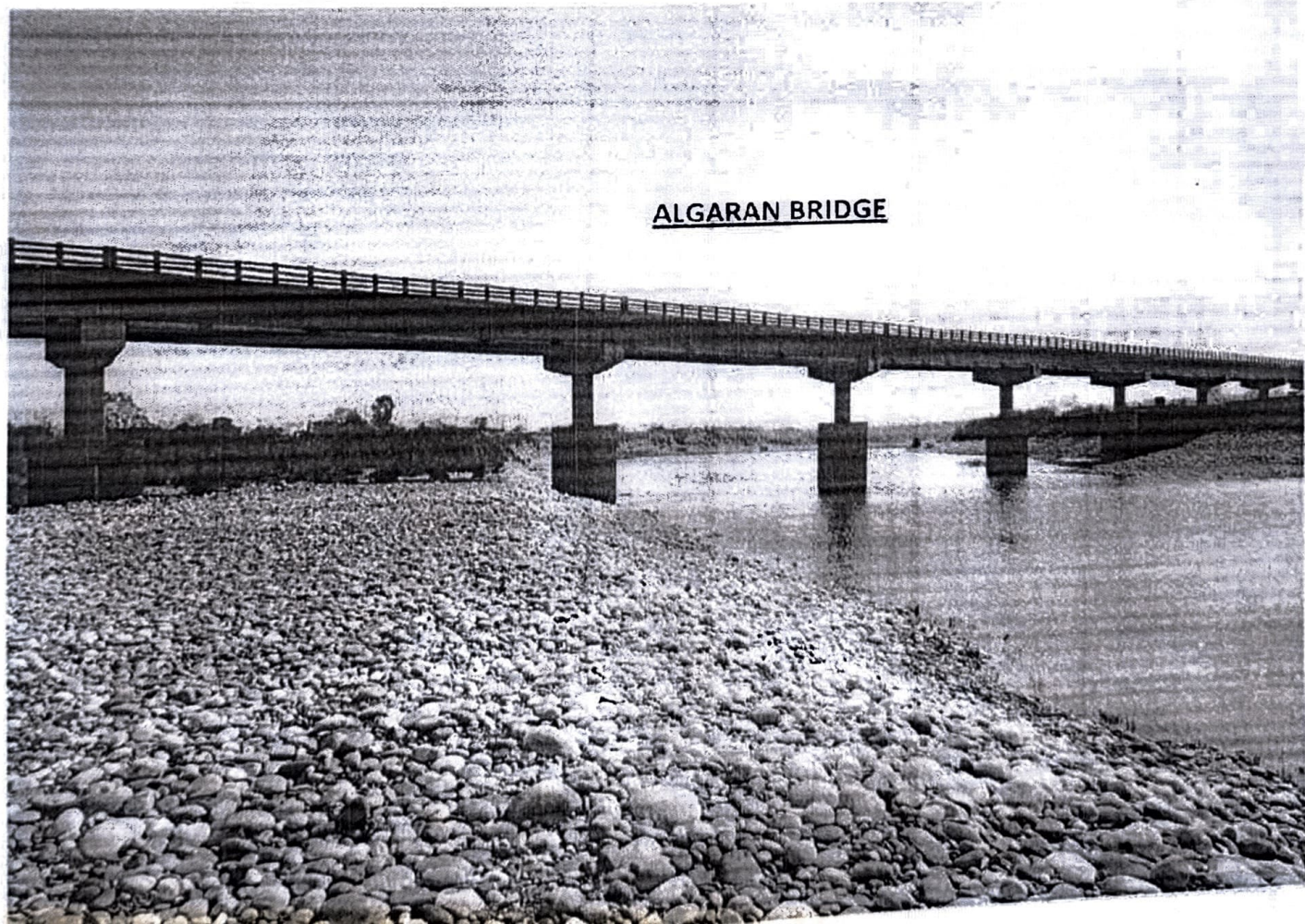


MEANDERING OF SUTLEJ RIVER
AT LEFT EMBANKMENT (U/S OF
AGAMPUR BRIDGE)



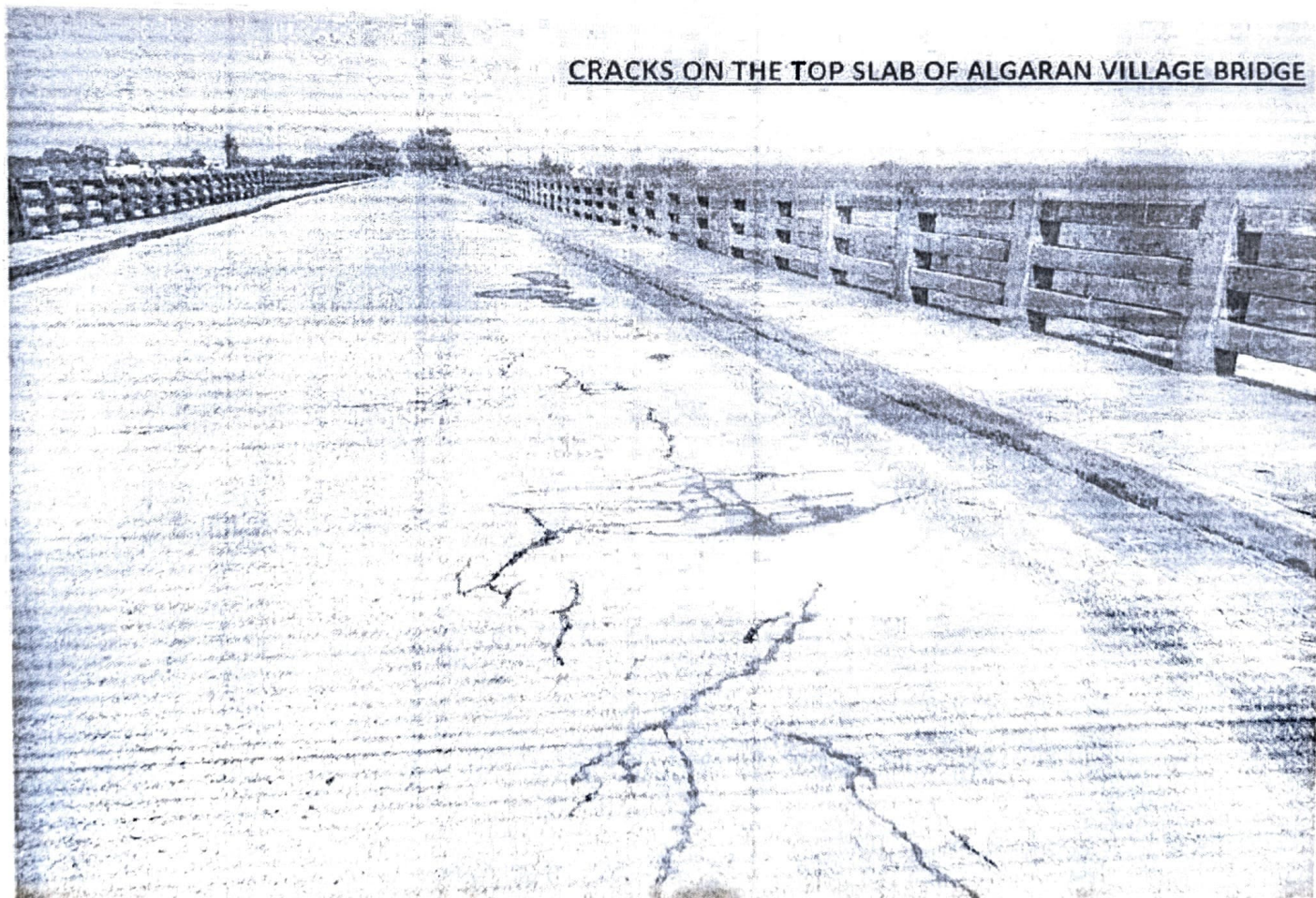
**AGAMPUR BRIDGE SPANNING
OVER SWAN RIVER**



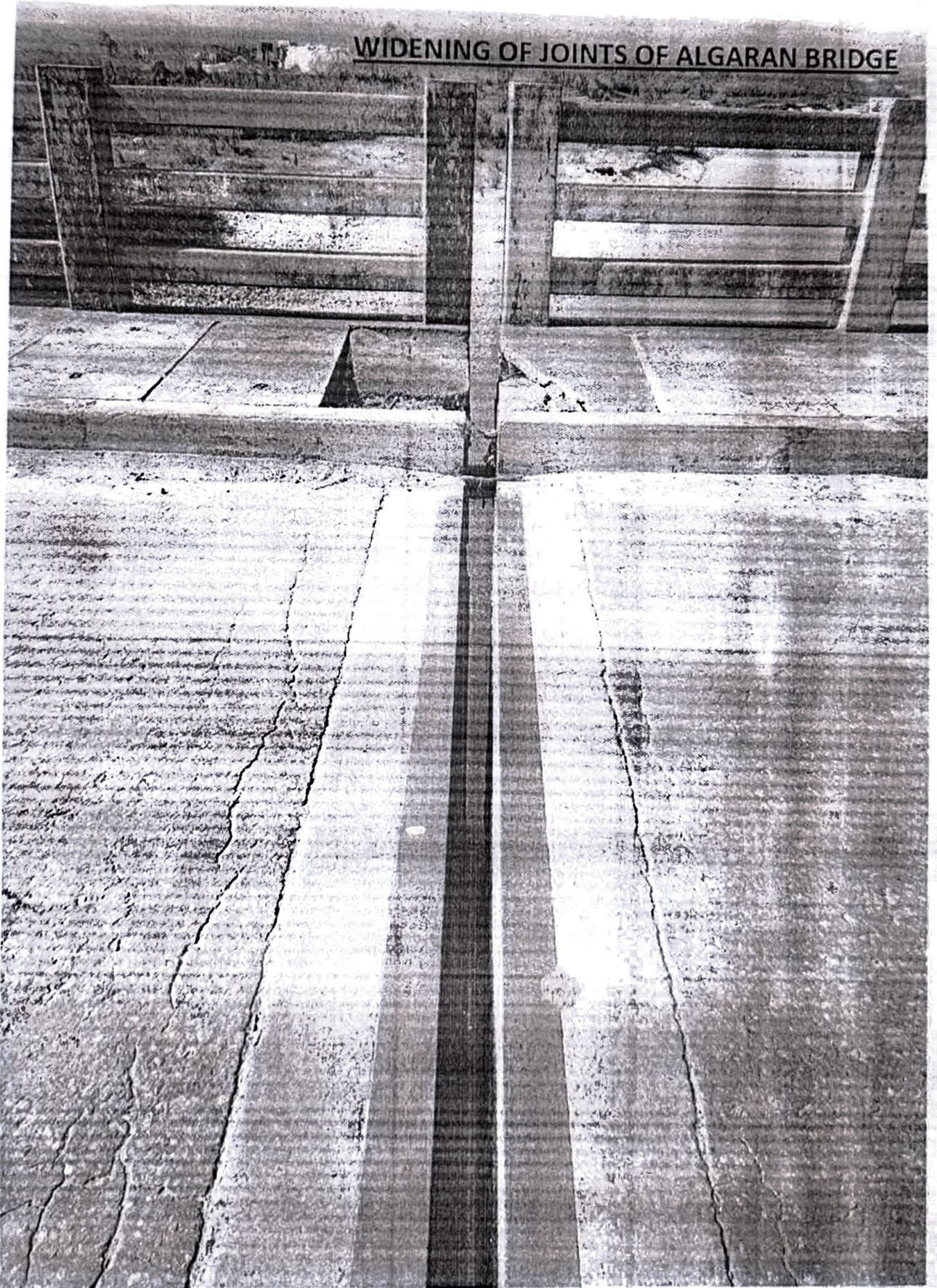


ALGARAN BRIDGE

CRACKS ON THE TOP SLAB OF ALGARAN VILLAGE BRIDGE



WIDENING OF JOINTS OF ALGARAN BRIDGE



Annexure R-3

ti

THAPAR INSTITUTE
OF ENGINEERING & TECHNOLOGY
(Awarded as an Institute of Technology by the UGC Act, 1956)

Dr. Shruti Sharma

Professor & Head

B.E.(Gold Medallist, NIT, Jalandhar),

M.E.(Structures; Gold Medallist, PEC Chandigarh)

Ph.D. (INAE Award, TIET, Patiala)

Department of Civil Engineering

Tel: 0175-2393920, 94178-29341

E-mail: hced@thapar.edu, shrutisharma.ced@thapar.edu

Ref. No. CED/524/1950
Dated: 3rd April, 2024

Sub Divisional Engineer

Const S/d PWD B&R

Sri Anandpur Sahib

Subject: Visit report related to condition assessment of bridge over River Swan

Dear Sir

This is with reference to your letter No nil, dated nil regarding the above subject.

The expert team from Thapar Institute of Engineering and Technology, comprising of Prof. Shweta Goyal and Prof. Naveen Kwatra, visited the concerned bridge across Swan Nadi on Nangal Algaran Kalwan Maur Road near village Algaran on 12/3/2024. Following observations are made regarding the bridge:

1. The bridge consists of 14 simply supported spans, with each span length of 31.85 m. The total span is 445.9m. The bridge consists of 14 piers (marked as P1 to P14). The width of carriage way is of 7.5 m.
2. The first soil investigation at the bridge site was carried out in year 2001 with an average Ground Level of 312+175 (Total Six numbers of Bores have been carried out). Based on the report, well foundation had been recommended with 16 mts of depth from Ground level of 311+000 in the year 2001.
3. Originally the Bridge had been constructed on the uniform waterway width confirms by the original General arrangement drawings (DRG.No. 187/E-1 dated 16/11/2001) and the Ground levels recorded at the time of Soil exploration.
4. Based on the soil exploration report done in the year 2001 (Point No 12 Page no 16 of Soil Exploration report done by Dr Guman and Gupta Geo tech Consultant), the proposed dimensions of the well foundation are of 16 mts depth and 6 mts diameter. However, the Well foundation that is provided at the site location (as mentioned in the drawings 187/E-2 dated 19/11/2001) is with the well diameter of 5 mts and depth of 12.5 mts in the natural ground.

Thapar Institute of Engineering and Technology, Patiala - 147 004, Punjab (India)

(Deemed to be University)

Phone: +91 1752393021 Email: registrar@thapar.edu Website: www.thapar.edu

5. The bridge is showing the serious signs of distress, typically on Pier locations P5, P6 and P7. The designed expansion joint (Strip Seal Type Expansion joint) has a gap of 50 mm at all the locations (Fig. 1). However, the gap has either increased or decreased at the damaged pier locations. In Pier P6, the expansion joint has widened to nearly 75 mm (Fig. 2). Pier P7 is the most damaged pier, the expansion joint on this pier has opened up on one side with 130 mm; while it has closed on the other side, clearly showing the settlement and twisting of the span (Fig. 3).



Fig. 1: Typical details of Strip Seal Type Expansion Joint at all locations

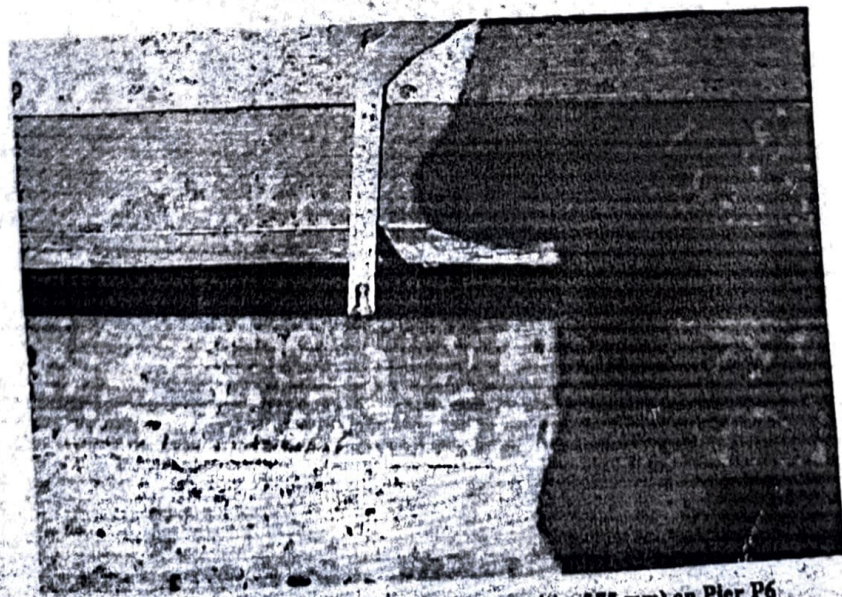


Fig. 2: Widened expansion joint (approximate width of 75 mm) on Pier P6

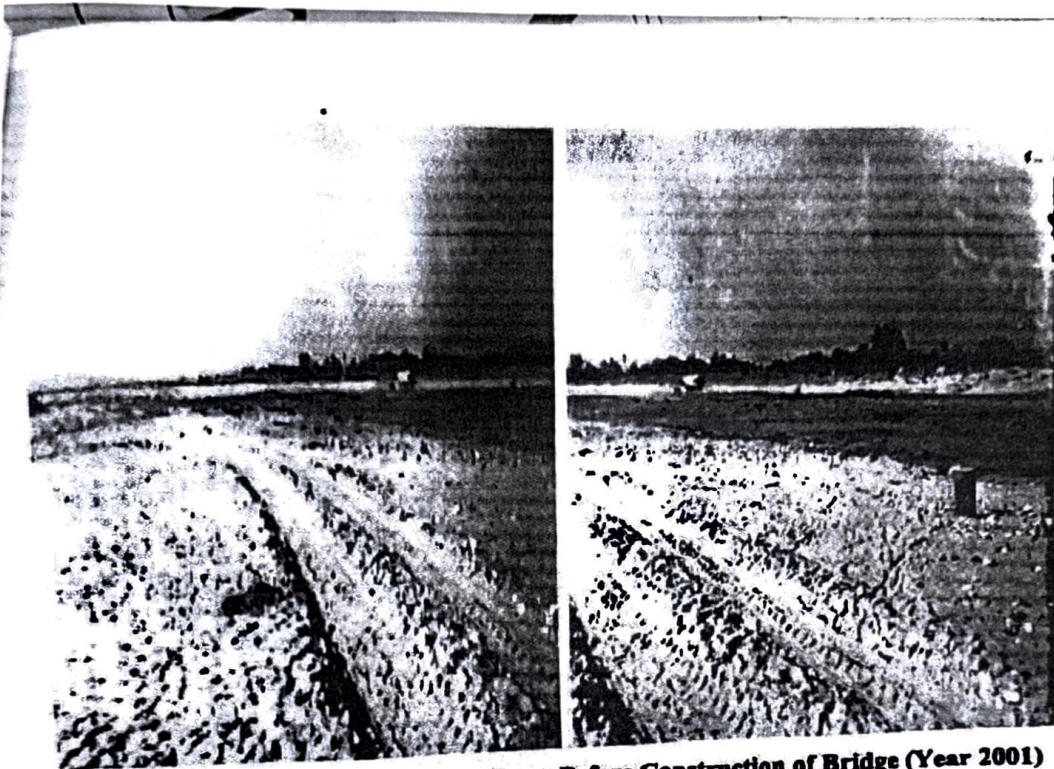


Fig. 5: View of River Swan Before Construction of Bridge (Year 2001)
Figure as per Soil Exploration Report Year 2001

7. Due to the reason of the excessive erosion/scouring area, the grip length of Well foundation has been considerable reduced, made one foundation to tilt and deviate from its original axis of loading, thereby leading to differential settlement and twisting of two spans of the superstructure.
8. This need immediate treatment by providing arresters along the circumference of the well foundation periphery for all the exposed wells. Further, as the bed level of River Swan has been modified at the scoured location by flow of water, floor treatment at the same bed levels is needed that can be undertaken by making aprons though out the scoured width of the River from Upstream to Down Stream and along the centre line of the Road by confining the area with the help of permanent Sheet Piling.
9. Also, an immediate attention is required to rectify for the settled spans attached to Pier P7. The loading on the affected well foundation at P7 need to be eliminating immediately by providing two separate piers resting on Pile Foundations below the span p6-p7 (P7A) and p7-p8 (P7B). These pile foundation has to rest at 1/3rd span length away from P7 on P6 and P8 side. Further the super structure which is RCC T- beam slab need to be reconstructed by dismantling approximately one-third of the girder on one side from P7 end towards P6 and P8 and make new girders with slab in such a way

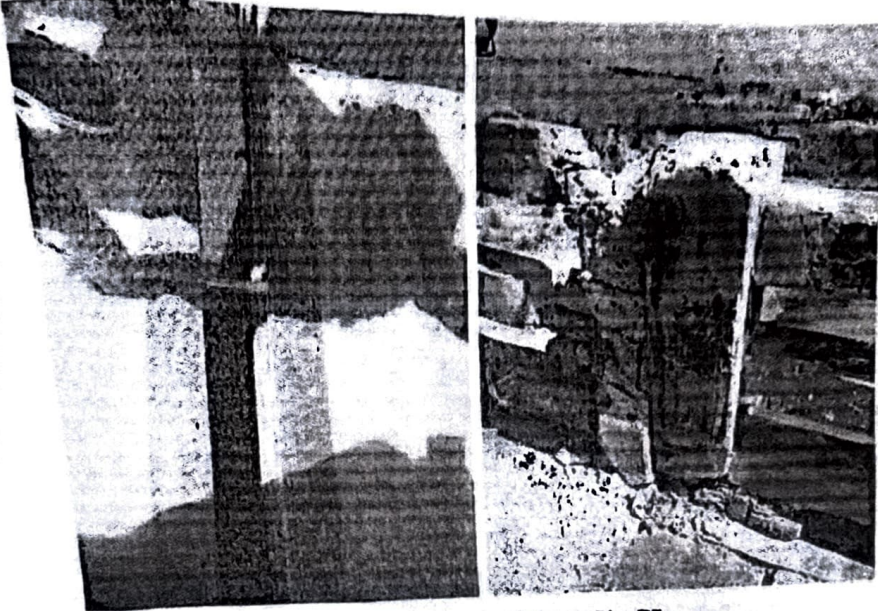


Fig. 3: Details of expansion joint on Pier P7
(With a width of 130 mm at one end and almost closed at other end)

6. In the past subsequent years, the River Swan has undergone huge scouring/ erosion, resulting in the washout of the peripheral strata, further reducing the grip lengths of the Well foundations for at least 7 well foundations. The scouring of upto nearly 6 to 7 mts is clearly visible (Fig. 4). Whereas Fig 5 clearly indicates that the River had no scouring before construction of the Bridge in year 2001.

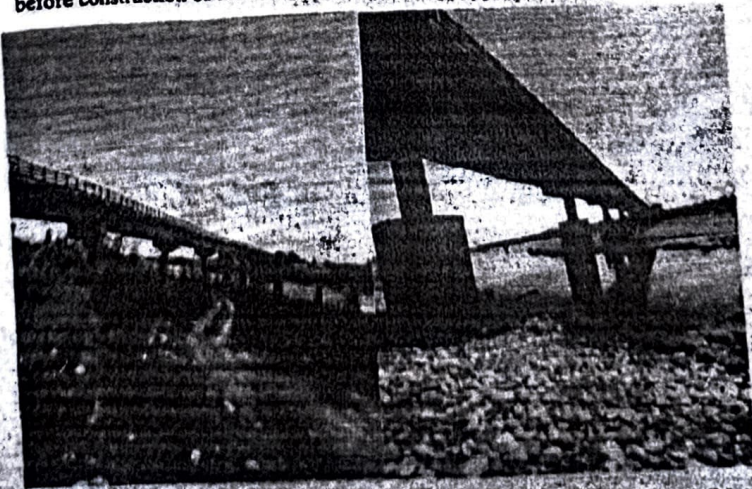


Fig. 4: View of River Swan where the scouring is completely visible

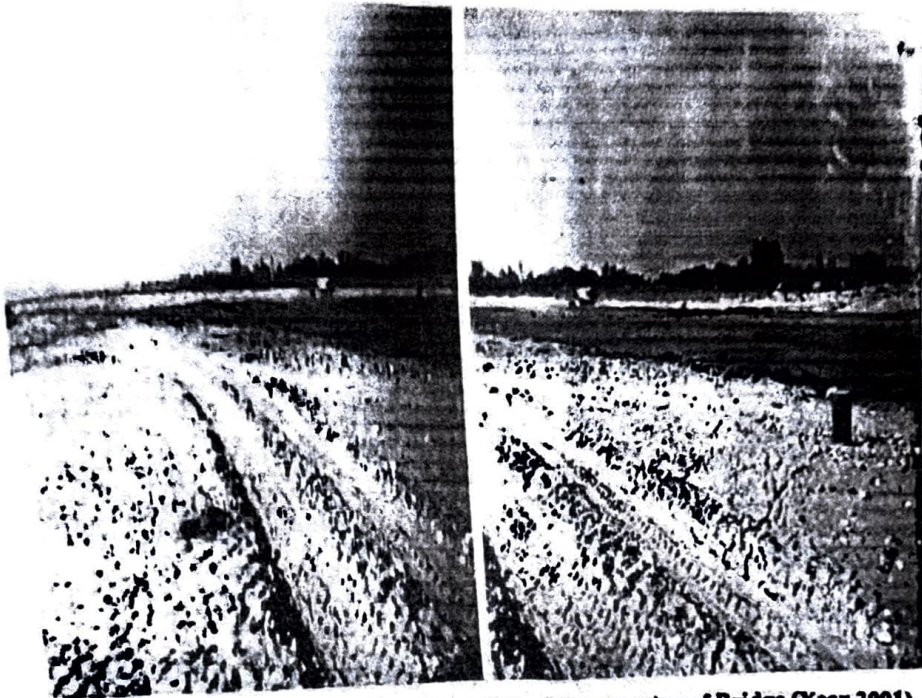


Fig. 5: View of River Swan Before Construction of Bridge (Year 2001)

Figure as per Soil Exploration Report Year 2001

7. Due to the reason of the excessive erosion/scouring area, the grip length of Well foundation has been considerable reduced, made one foundation to tilt and deviate from its original axis of loading, thereby leading to differential settlement and twisting of two spans of the superstructure.
8. This need immediate treatment by providing arresters along the circumference of the well foundation periphery for all the exposed wells. Further, as the bed level of River Swan has been modified at the scoured location by flow of water, floor treatment at the same bed levels is needed that can be undertaken by making aprons though out the scoured width of the River from Upstream to Down Stream and along the centre line of the Road by confining the area with the help of permanent Sheet Piling.
9. Also, an immediate attention is required to rectify for the settled spans attached to Pier P7. The loading on the affected well foundation at P7 need to be eliminating immediately by providing two separate piers resting on Pile Foundations below the span p6-p7 (P7A) and p7-p8 (P7B). These pile foundation has to rest at 1/3rd span length away from P7 on P6 and P8 side. Further the super structure which is RCC T-beam slab need to be reconstructed by dismantling approximately one-third of the girder on one side from P7 end towards P6 and P8 and make new girders with slab in such a way

so as to achieve a continuous span from P6 to P8 (P6-P7A-P7B-P8). The complete change of superstructure is not necessary as the RCC beam and slabs are in good condition. Dismantling will be done on only affected and required length which is needed.

After the construction period up to new piers and pier caps (at P7A & P7B), both spans P6-P7 and P7-P8 to be lifted by jacks on temporary staging for the construction of new extension of superstructure from both side Pier P7. All these procedures require detailed static tests (health monitoring), orientation evaluations (positions) with respect to the original design of super structure and detailed calculations, which can be undertaken after due discussions.

Assuring you of our best attention at all times.

Santhosh Kumar
5/4/2017
(H.C.E.D.)
Shiv

Note:-

The institute undertakes the Testing / Consultancy without any legal implications.

U.
10
41



THAPAR INSTITUTE
OF ENGINEERING & TECHNOLOGY
(Deemed to be University vide J of the UGC Act, 1986)

Dr. Shruti Sharma

Professor & Head

B.E.(Gold Medallist, NIT, Jalandhar).

M.E.(Structures; Gold Medallist, PEC Chandigarh)

Ph.D. (INAE Award, TIET, Patiala)

Department of Civil Engineering

Tel: 0175-2393920, 94178-29341

E-mail: hced@thapar.edu, shrutisharma.ced@thapar.edu

Ref. No.CED/524/1
Dated: 15th April, 2024

Sub Divisional Engineer
Const S/d PWD B&R
Sri Anandpur Sahib

Subject: Recommendations related to condition assessment of bridge over River Swan

Dear Sir

This is with reference to your letter No nil, dated nil regarding the above subject. An expert team from Thapar Institute of Engineering and Technology, comprising of Prof. Shweta Goyal and Prof. Naveen Kwatra, visited the concerned bridge across Swan Nadi on Nangal Algaran Kalwan Maur Road near village Algaran on 12/3/2024. A detailed visit report highlighting the present condition of the bridge and repair recommendations were submitted to your office on 3rd April, 2024. Further, a clarification is sent from your office vide Letter No. 322, dated 09/04/2023. In this letter, your office is confirming that the superstructure is PSC T-Beam slab, instead of RCC T-beam girder mentioned in the drawings supplied by your office. Based on this and other points highlighted in your letter, the repair recommendations are modified as follows:

- Dismantle the old prestressed concrete girder and scilfed slab connected to Pier 7. Provide two new foundations (deep foundation) at 1/3rd span length from Pier 7 on either side of the Span (span P6-P7 and P7 - P8) and provide new superstructure as RCC Girder with slab after dismantling the old PSC girders and slab.
- It is to further mention that the well foundation of Pier 7 cannot be utilized in any manner as it has been exposed to almost 95% of its depth. The existing sub structure should be dismantled with a pneumatic hammer upto well cap bottom.

Assuring you of our best attention at all times.

Shruti Sharma
(H.C.E.D.) 14/4/24

Note :- The Institute undertakes the Testing / Consultancy without any legal implication

Thapar Institute of Engineering and Technology, Patiala - 147 004, Punjab (India)
(Deemed to be University)

Phone: +91 1752393021 | Email: registrar@thapar.edu | Website: www.thapar.edu

Annexure R-4

Central Pollution Control Board
Regional Directorate
BSNL Telephone Exchange,
2nd Floor, Sector 49-C, Chandigarh

Report submitted in compliance to the orders of Hon'ble National Green Tribunal dated 20.05.2024 in Original Application No. 553/2024; News item titled "From Ropar to Hoshiarpur via HP: 30-km detour as illegal mining damages bridge" appearing in The Indian Express dated 10.04.2024.

1.0 Background and the Orders of National Green Tribunal:

The matter in Original Application No. 553 / 2024, pertains to a News item titled "From Ropar to Hoshiarpur via HP: 30 km detour as illegal mining damages bridge" published in the Indian Express dated April 10, 2024, which was registered suo-moto by the Hon'ble national Green Tribunal.

The Hon'ble National Green Tribunal (PB) vide order dated 20.05.2024 (Annexure-1) had observed as follows:

Para 02: The matter relates to the closure of a bridge on the Swan River, connecting Nangal with Garhsiankar due to indiscriminate sand mining causing residents of at least 200 villages in Ropar, district Rupnagar (Punjab) to take a detour of 30 km. The article alleges that it has been three months since the bridge was closed, leaving no choice with people living in these villages and Nangal town in Ropar but to cross over to Himachal Pradesh and pay an entry fee, while travelling an extra 30 km, to reach Garhsiankar in Hoshiarpur district.

Para 03: The article further alleges that upon a visit to the span of Swan, a tributary of the Sutlej, it was found that the traffic has found a way to bypass the bridge by driving through the river bed. It also claims that the authorities were informed several times about the mining taking place in the area that is way above the permissible limit and can threaten the pillars of bridge and that craters more than 30 meters deep were formed on the river bank. However, no action was taken. According to the article, the foundation of the bridge was also exposed due to mining and subsequent corrosion of the bank. Finally, the foundation suffered damage towards the Garshiankar site.

Para 04: According to the article, illegal mining was going on in some villages at odd hours, with the list of villages in Gurdaspur, Pathankot, Jalandhar, Tarn Taran, and Hoshiarpur districts. The article alleges that as per the residents, floodwater enters their villages as the river embankments have weakened due to mining. The groundwater level has gone down from 20 feet to 100 feet. Water seepage is damaging their properties. Besides, houses sink in now and then. It further claims that the physical effects are to be seen by everyone, but psychological effects are not visible. The very sight of huge machines quarrying sand and strange people involved in the business taking sand away has its own psychological effects.

Para 05: The above news item indicates violation of the Sand Mining Guidelines, 2016 and the provisions of Environment Protection Act, 1986.

While impleading PPCB, CPCB, MoEF&CC and Deputy Commissioner/District Magistrate, Rupnagar, for filing their response, the following directions were also issued by Hon'ble National Green Tribunal:

Para 10: Respondent No. 2, Member Secretary, CPCB is directed to get the spot inspection done and ascertain the extent of illegal mining in the area concerned and submit the report before the Tribunal at least one week before the next date of hearing by e-mail at judicat-nga@gov.in.

2.0. Compliance of the Orders of Hon'ble National Green Tribunal by CPCB:

2.1. Site Visit:

Central Pollution Control Board (CPCB) Regional Directorate was requested by IPC-II Division, CPCB, Head Office Delhi on June 03, 2024 to get the facts in this matter verified and also to ascertain the extent of illegal mining in the area referred in the News, in compliance to the directions of Hon'ble NGT.

Accordingly, a team comprising Sh. Jagdish Prasad Meena, Scientist 'D' and Sh. Pankaj Saini, Office Assistant, (Scientific) from CPCB, RD, Chandigarh was deployed for site inspection on July 02, 2024. CPCB team was also accompanied by a Committee constituted under the Chairmanship of ADC (Rupnagar) comprising Officials from PPCB, RO Rupnagar, Drainage cum Mining Division, District Development and Panchayat Officer, Rupnagar, Divisional Forest officer and Superintendent of Police (D) Rupnagar. The spot inspection was carried out jointly by the CPCB Team and the Committee constituted by District Administration on July 02, 2024.

3.0. Observations made by the CPCB team during the site visit on 02.07.2024:

1. Kalwa Nangal Bridge on River Swan situated at village Algran has a total length of 420m and was constructed in the year 2002-2003 by Project Division P.I.D.B Chandigarh, as informed by the Construction Division (B & R Branch) Rupnagar.
2. As per the report provided by the Executive Engineer, Construction Division PWD (B&R) Rupnagar, the bridge sustained damage between July 8 and July 11, 2023, due to heavy rains and flooding. The floodwaters washed away material around the wells of the High-Level Bridge over the Swan River near the village of Algran on the Kalwan to Nangal road (Annexure-2). The report further indicates that five wells of the bridge have been exposed, and Pier No. 7 has tilted. Consequently, the gap in the expansion joints has widened at several locations, and a portion of the bridge slab has also settled.

9. The visiting team observed a thick layer of water hyacinth floating beneath the bridge, which had covered the channel through which water flows. The team also interacted with local fishermen who were fishing in the area where the water channel flows. The fishermen informed the team that there were no mining activities taking place in that area.
10. The news article has also raised concerns about the groundwater level declining from 70 feet to 100 feet due to illegal mining. The CPCB team requested groundwater level data for the area from the Punjab Water Regulatory and Development Authority (PWRDA). However, in response, PWRDA reported on July 16, 2024, that the issue is not within their jurisdiction (Annexure-6). Additionally, the Ropar Canal and Groundwater Division of the Water Resource Department, Punjab, reported that, according to their records, no studies have been conducted on the depletion of the water table due to mining. Furthermore, no complaints have been filed with their office regarding the impact of illegal mining on the water table. (Annexure-7)
11. Photographs taken during visit is attached as (Annexure-8)

4.0. Conclusion and Suggestions:

- I. Although no mining activity was observed within 1000 meters of the bridge, nor were any deep craters found on the riverbed or its banks during site visit, the report from the Department of Drainage, Mining, and Geology, Shri Anandpur Sahib, reveals that eight FIRs were filed between 2015 and 2020 for illegal mining within 1000 meters upstream and downstream of the bridge. Additionally, 11 tippers and 06 excavators were confiscated in connection with these FIRs. No data was provided to CPCB team with regards to illegal mining for the period of 2021-2024. Therefore, the possibility of illegal mining activities in the past occurring near the bridge may not be ruled out.

In view of above, the Enforcement & Monitoring Guidelines for Sand Mining (EMGSM), 2020, may be rigorously enforced by the Geology and Mining Department. This includes ensuring that sand and gravel extraction is prohibited within 1000 meters of major bridges and highways on both sides. All mining sites beyond 1000 meters of the bridge under reference, if any, may also be inspected to verify compliance with these guidelines. Additionally, strict monitoring may be conducted by involving the Police, Forest, and Transportation departments. Adequate check posts should be established across the district, the operation hours of quarries and depots should be limited to 7 AM

3. Additionally, the PWD Construction Division (B&R) reported that a joint committee conducted a safety audit of the bridge. Following the audit, the committee recommended the closure of the bridge to prevent any potential accidents. As a result, the bridge is currently closed to vehicular traffic for safety reasons.
4. The joint team observed during site inspection that significant erosion had occurred in the material surrounding 4 out of the 14 pillars under the bridge. It was also observed that water is flowing through only 4 of the pillars, while the remaining pillars remain intact, which increases the risk of damage to the bridge. Further, it was informed by the PWD Department that no mining activity has occurred within 1000 meters above or below the bridge, and no complaints of illegal mining have been registered by the department. An estimate of ₹17.56 crore has been prepared by the concerned department for repairing the bridge and has been sent to higher authorities for approval (Annexure-3). The team inspected the riverbed of the Swan River beneath the bridge and extended their visit to 1000 meters upstream and downstream to check for any illegal mining activities. During the visit, they did not find any evidence of recent mining activity near the bridge or within the 1000 meter range upstream or downstream, nor did the team observe any deep craters on the riverbed or its banks.
5. During visit, the joint team observed that the joints on the road slabs above pillars P7, P6, and P8 had widened, and cracks were present on the top slabs of the bridge. It was informed that the bridge has been closed to traffic since December 21, 2023. The concerned department has also requested the police department to close the bridge, divert traffic, and issue necessary safety instructions to prevent any potential accidents.
6. A public notice board in both local and English languages was observed installed at the entry and exit points of the bridge, stating that "This Bridge is unsafe for traffic."
7. The team inspected the riverbed of the Swan River beneath the bridge and extended their visit 1000 meters upstream and downstream to check for any illegal mining activities. During the visit, they did not find any evidence of recent mining activity near the bridge or within the 1000 meter range upstream or downstream, nor did the team observe any deep craters on the riverbed or its banks.
8. The report from the Department of Drainage, Mining, and Geology, Shri Anandpur Sahib indicates that eight FIRs were filed between 2015 and 2020 for illegal mining within 1000 meters upstream and downstream of the bridge (Annexure-4). Additionally, a total of 11 tippers and 5 excavators were confiscated in connection with these FIRs (Annexure-5).

to 6 PM, and the parking of sand-transporting vehicles within quarry or depot sites during night or odd hours may be restricted.

2. Given that the PWRDA and the Canal and Groundwater Division of the Water Resource Department do not have data on the impact of mining on the groundwater level in the area, *it is suggested that the local administration get a study conducted on the hydro-geological regime of the surrounding area.* The data obtained in this study may be compared with baseline data to assess the impact on the groundwater level.
3. During the site inspection, the joint team observed significant erosion around 4 of the 14 pillars under the bridge, with water flowing through only these 4 pillars while the others remain intact, which increases the risk of damage to the bridge. Therefore, it is suggested that concerned department may refer to "National Framework for Sediment Management, October, 2022" published by the Ministry of Jal Shakti, Government of India, for managing the sediments giving due consideration to environment and ecology.

Names and Signatures of CPCB Team:

Name & Designation	Regional Directorate	Signature
Sh. Jagdish Prasad Meena, Scientist-'D'	Central Pollution Control Board, Regional Directorate, Chandigarh	Jagdish 23/08/24
Sh. Pankaj Saini, Office Assistant (Scientific)	Central Pollution Control Board, Regional Directorate, Chandigarh	Pankaj 23/08/2024

Annexure R-5

Water Resources Department
Office of Executive Engineer, Drainage -cum- Mining &
Geology Division, Sri Anandpur Sahib.

No. 11195

Date:13.01.2026

To

Dr. Amarjit Singh Sandhu
Assistant Professor, C.E.D.,
Punjab Engineering College,
Chandigarh.

Subject: Regarding interpretation and Analysis of
Satellite imagery for Mining activities along
Algran Bridge, Rupnagar (Pb.).

Sir,

It is submitted that matter regarding environmental effects relating to extracting of riverbed material in river area and compliance of legal provisions is pending before Hon'ble National Green Tribunal (NGT) in Application No. 553 of 2024. There is need to explain various points on scientific and technical basis before the Tribunal. In this connection, the survey and assessment reports, drafted by a leaving technical institute alike Punjab Technical College (PEC), have been sent by PPCB & CPCB to N.G.T. You are, therefore, requested to provide the following information and reports according to your report.

1. Information regarding extracting river bed material with a gap of 30 days:-

Detailed particulars about extracting river bed material, conducted with regular interval of 30 days, may be supplied. It may contain the information regarding quantity of extracted river bed material and concerned spot, showing the quantity of extracting, conducted from which spot, so that further proceeding may be conducted as per relevant law and rules.

2. Survey regarding probable erosion during flood season:

Detailed technical survey report or assessment regarding probable erosion in river belt during flood season may be drafted and submitted, as not only illegal mining is liable for deep water level in river bed, but erosion is also caused by water emerging from the floods/monsoon season, which results in depth of river level.

3. Legal Mining sites:

During the above noted period, river bed material also extracted from legal mining sites of Department, which remained operational. It is also necessary to examine the quantity of material, extracted from said

mining sites, so that survey of actual total quantity of river bed material may be conducted from time to time.

You are, therefore, again requested to provide the above noted information and survey reports at an early date within stipulated period, so that the department may perform its legal and environmental liabilities in proper way and in time bound manner.

Thanking you,

Sd/-
Executive Engineer,
Drainage -cum- Mining
& Geology Division,
Sri Anandpur Sahib.

Certified to be true & correct translation

Advocate