

1799

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

EXECUTION APPLICATION NO. 41 OF 2023
(OLD M.A. NO. 16 OF 2023)
IN
O.A. NO. 94 OF 2021

IN THE MATTER OF:

HAIDER ALI

APPLICANT

VERSUS

UNION OF INDIA & ORS

RESPONDENTS

**SUPPLEMENTARY REPLY ON BEHALF OF THE CRICKET ASSOCIATION
OF BENGAL ['CAB'], THE ADDED RESPONDENT NO. 5/THE
RESPONDENT NO. 12 ALONG FILED PURSUANT TO THE ORDERS
DATED DECEMBER 7, 2023: FEBUARY 21. 2024 AND MAY2,2024
PASSED BY THIS HON'BLE TRIBUNAL WITH SUPPORTING AFFIDAVIT**

FOR INDEX PLEASE SEE INSIDE

Through:-



PRIYATA CHAKRABORTY,
Advocate for Added Respondent No.5
16/12, Semal Road, Shipra Suncity,
Indirapuram, Gaziabad, U.P-201014.
Email-priyatachakraborty1992@gmail.com
Mob-8777346969.

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

EXECUTION APPLICATION NO. 41 OF 2023
(OLD M.A. NO. 16 OF 2023)
IN
O.A. NO. 94 OF 2021

IN THE MATTER OF:

HAIDER ALI

APPLICANT

VERSUS

UNION OF INDIA & ORS

RESPONDENTS

INDEX

S.NO.	PARTICULARS	PAGE NO.
1.	Memo of Parties	1-5
2.	SUPPLEMENTARY REPLY ON BEHALF OF THE CRICKET ASSOCIATION OF BENGAL ['CAB'], THE ADDED RESPONDENT NO. 5/THE RESPONDENT NO. 12 ALONG FILED PURSUANT TO THE ORDERS DATED DECEMBER 7,2023: FEBUARY 21. 2024 AND MAY2,2024 PASSED BY THIS HON'BLE TRIBUNAL WITH SUPPORTING AFFIDAVIT.	5-11
3.	<u>ANNEXURE 'I'</u> A true copy of the email dated 24 September 2024 of the Evaluation Report send M/s Deloitte Touche Tohmatsu Ltd.	12-13
4.	<u>ANNEXURE 'J'</u> A true copy of the Letter of Intent dated 22 October, 2024 by the 'CAB' in the favour of M/s Pollucon Technologies Ltd.	14-16
5.	<u>ANNEXURE 'K'</u> A true copy of the email dated 23, October 2024	17

	from the M/s Pollucon Technologies Ltd acknowledging the Receipt of the above letter to the 'CAB'.	
6.	<u>ANNEXURE 'L'</u> The true copies of the Letter dated 9 November 24, 2024 and the all the annexed documents collectively sent by the M/s Pollucon Technologies Ltd to 'CAB'	18-31
7.	<u>ANNEXURE 'M'</u> The true copies of the email dated 12, November, 2024 and 30 April, 2024 send by the 'CAB' to The Col. Land, HQ Bengal Area.	32-33
9.	Proof of Service	34

PLACE:- New Delhi

DATE:-25.11.2024

Through:-



PRIYATA CHAKRABORTY,
Advocate for Added Respondent No.5
16/12, Semal Road, Shipra Suncity,
Indirapuram, Gaziabad, U.P-201014.

[Email-priyatachakraborty1992@gmail.com](mailto:priyatachakraborty1992@gmail.com)

Mob-8777346969.

**IN THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

**EXECUTION APPLICATION NO. 41 OF 2023
(OLD M.A. NO. 16 OF 2023)
IN
O.A. NO. 94 OF 2021**

IN THE MATTER OF:

HAIDER ALI

APPLICANT

VERSUS

UNION OF INDIA & ORS

RESPONDENTS

MEMO OF PARTIES

HAIDER ALI

PRESIDENT

AAM YUVA JAN KALYAN SANSTHA, ALWAR

R/O 35, SAIN ENSLAM SCHOOL,

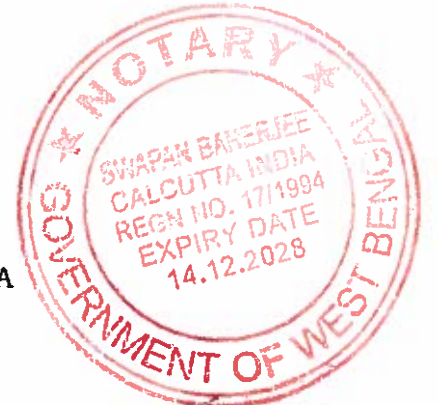
BACKSIDE, MUNGDA, ALWAR,

RAJASTHAN-301001

...APPLICANT

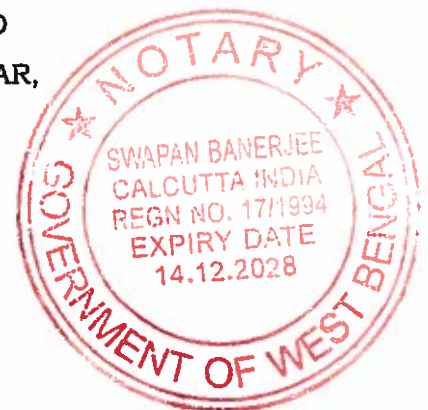
VERSUS

- 1. SH. PANKAJ KUMAR
SECRETARY,
MINISTRY OF WATER RESOURCES
627, SHRAM SHAKTI BHAWAN,
RAFI MARG, NEW DELHI-110001**
- 2. SH. SHARATH SRIDHARAN
CHAIRMAN,
BOARD OF CONTROLS FOR CRICKET IN INDIA**



4TH FLOOR, CRICKET CENTRE,
WANKHEDE STADIUM
D ROAD, CHURCHGATE
MUMBAI-400020
INDIA

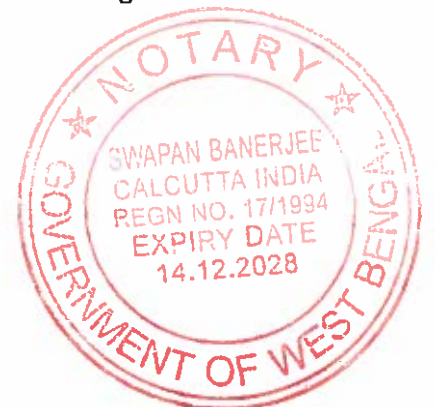
3. SHRI NARESH KUMAR
CHIEF SECRETARY,
GOVERNMENT OF NCT OF DELHI
SECRETARIAT, IP ESTATE,
NEW DELHI-110002
4. SH. MANU KUMAR SRIVASTAVA
CHIEF SECRETARY,
GOVERNMENT OF MAHARASHTRA
CS OFFICE, MAIN BUILDING,
MANTRALAYA, 6TH FLOOR,
MADAME CAMA ROAD,
MUMBAI, MAHARASHTRA
5. SHRI RAJ KUMAR
CHIEF SECRETARY,
GOVERNMENT OF GUJARAT,
SACHIVALAYA,
GANDHI NAGAR,
GUJARAT
6. PRASHANT GARGAVA
MEMBER SECRETARY,
CENTRAL POLLUTION CONTROL BOARD
PARIVESH BHAWAN, EAST ARJUN NAGAR,
DELHI-110032
7. SHRI NITESH KUMAR MISHRA



JOINT SECRETARY,
MINISTRY OF YOUTH AFFAIRS AND SPORTS,
413, C WING, SHASTRI BHAWAN,
NEW DELHI.

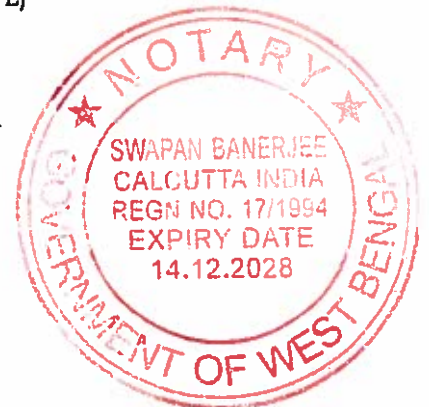
...RESPONDENTS/CONTEMNORS

- 8) ACA Stadium
C/o Barsapara Assam Cricket Association,
Through Pritam Mahanta, Chief Executive Officer,
E-mail: assamca@rediffmail.com
- 9) Saurashtra Cricket Association Stadium,
C/o Saurashtra Cricket Association ,
Through Himanshu P Shah, Hon. Secretary,
E-mail: saucricket@gmail.com
- 10) Shaheed Veer Narayan Singh International Stadium
C/o Chhattisgarh State Cricket Sangh, maintenance of the stadium is
under PWD
Through Dinesh Ready Sub Engineer,
E-mail: dkroy16.71@gmail.com
- 11) Dr. Y.S. Rajasekhara Reddy ACA VDCA Cricket Stadium,
C/o Andhra Cricket Association,
Through K K Srinivas Prasad, Project Management Consultant,
E-mail: srinivas1029@gmail.com
- 12) Eden Gardens,
C/o the Cricket Association of Bengal,
Through Naresh Ojha, Honorary Secretary,
E-mail: cab@bengacricket.com
oihal@me.com
- 13) VCA Stadium, Civil Lines,
C/o Vidarbha Cricket Association,
Through Paresh Douthkhani, General Manager,
E-mail: admin@vca.co.in
- 14) Arun Jaitley Stadium
C/o Delhi and District Cricket Association,
Through Ajay Kumar Chaurasia, Chief Engineer (Civil)
Email: akc1967@gmail.com
- 15) MCA Cricket Stadium, Gahunje,
C/o. Maharashtra Cricket Association
Through Shri Manohar R. Bhaysar, Store and Purchase Manager
E-mail: cricketmaharashtra@yahoo.com
- 16) Sawai Mansingh Stadium
C/o Rajasthan Cricket Association
Through Bhawanishankar Samota, Secretary, RCA



Email: rca@cricketrajasthan.in

- 17) Holkar Stadium
C/o Madhya Pradesh Cricket Association
Through Rohit D Pandit, CAO, MPCA,
Email: cricket.operations@mpcaonline.com
- 18) Dr. DY Patil Stadium,
C/o. Dr. D.Y. Patil Stadium
Through Shri SanjivDongre, Professor of Architecture,
Email: sanjiv.dongre@dypatil.edu;
- 19) Brabourne Stadium Cricket,
C/o. Club of India (Brabourn Stadium)
Through Shri Dushyant Patel Estate Manager,
Email: estate@cciclub.in
- 20) Wankhede Stadium
C/o. Mumbai Cricket Association, Wankhede Stadium
Through Shri Jaykrishna Pete Maintenance in -charge
Email: jalkrishnapatie@yahoo.in
- 21) Green Park Stadium
C/o. Department of Sports Uttar Pradesh (UPCA)
Through Smt. Mudrika Pathak Dy. Director
Email: dydirectorsports@gmail.com
- 22) Bharat Ratna Shri Atal Bihari Vajpayee Ekana Cricket Stadium
C/o Not Provided,
Through Pradeep Singh Liaising Officer,
Email: Not given
- 23) M A Chidambaram Stadium
C/o the Tamil Nadu Cricket Association
Through R.I Palani, Honorary Secretary,
Email: office@tnca.in
- 24) Rajiv Gandhi International Stadium
C/o Hyderabad Cricket Association
Through A. Srinivas Goud, Chandra Shekar, Srikanth Reddy Civil
Engineer, Chief Curator, Estate Manager
Email: srinivasankamgari@gmail.com, chandu_cricket30@gmail.com,
srikanth.oiadri@gmail.com
- 25) Sports Hub International Cricket Stadium
C/o. Kariavattom Sports Facilities Limited (KSFL)
Through Ram Gopal, Manager
Email: ram.varma@ilfsindia.com
- 26) Himachal Pradesh Cricket Association Stadium
C/o Himachal Pradesh Cricket Association
Through Mr. Avnish Parmar Secretary, HPCA
Email: secretary@hPCA.cricket

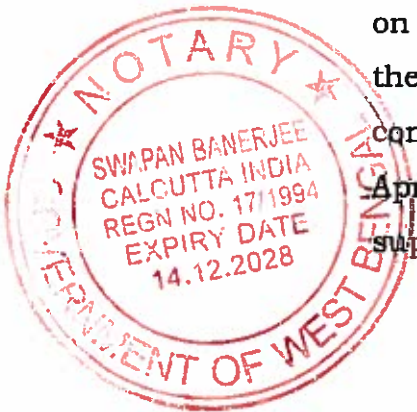


- 27) Chaudhry Bansi Lal Cricket Stadium
C/o Haryana Cricket Association
Through Anuj Sharma General Manager (Admin and Operations)
Email: hca@haryanacricket.com
- 28) IS Bindra Cricket Stadium, PCA
C/o Punjab Cricket Association
Through Akshoy Biswal Manager Maintenance,
Email: engrs.pcastadium@gmail.com.
- 29) Barabati Stadium
C/o Odisha Olympic Association
Through Subrat Kumar Behera CEO
Email: ceo@odishacricket.in

...ADDED RESPONDENT

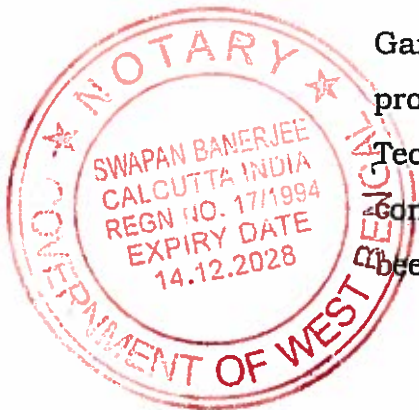
**SUPPLEMENTARY REPLY ON BEHALF OF CRICKET
ASSOCIATION OF BENGAL [CAB], THE ADDED RESPONDENT
NO. 5/ THE RESPONDENT NO. 12 FILED PURSUANT TO THE
ORDERS DATED DECEMBER 7, 2023; FEBRUARY 21, 2024 AND
MAY 2, 2024 PASSED BY THIS HON'BLE TRIBUNAL**

1. The instant execution application [EA No.41 of 2023] arises out of OA No. 94 of 2021.
2. Pursuant to orders dated December 7, 2023, February 21, 2024 and May 2, 2024 passed by this Hon'ble Tribunal in the instant proceeding, CAB has already filed a reply dated May 23, 2024. The same is supported by an affidavit affirmed by one Naresh Ojha, the Honorary Secretary of CAB. The contents of the reply are absolutely true and correct.
3. The present supplementary reply is being filed by CAB to put on record subsequent developments that has occurred after the filing of the reply dated May 23, 2024 with regard to compliance with the directions contained in the order dated April 15, 2021 passed by this Hon'ble Tribunal. The present supplementary reply and the documents annexed hereto are



extremely imperative for the fair and just adjudication of the present matter. In such view of the matter, CAB prays for leave of this Hon'ble Tribunal to put on record the said subsequent developments and documents in connection thereto before this Hon'ble Tribunal.

4. CAB had issued an Expression of Interest [EOI] for appointment of a vendor for installation of Rain Water Harvesting System [RWH] and STP on its official Website on June 7, 2023. CAB also ran an exercise to identify prospective bidders and emailed such documents to the prospective bidders on June 12, 2024.
5. M/s. Deloitte Touche Tohmatsu Ltd. submitted an Evaluation Report relating to the bid submitted by M/s. Pollucon Technologies Ltd. by its email dated September 24, 2024, a copy of which is annexed hereto and marked as Annexure I. M/s. Deloitte Touche Tohmatsu Ltd. is the Evaluation and Monitoring Partner of CAB engaged especially for the purposes of ensuring compliance with the directions issued by this Hon'ble Tribunal.
6. CAB, after scrutinising and determining the eligibility of the bidders, awarded the contract for survey, design, construction and installation including commissioning of Sewage Treatment Plant and Rain Water Harvesting at Eden Gardens Stadium, Kolkata as per approved design to be provided by the EPC Contractor in favour of M/s. Pollucon Technologies Ltd. of Sector-VII, Noida, Uttar Pradesh. In this connection, a provisional LOI dated October 22, 2024 has been issued by CAB in favour of Pollucon. The provisional



LOI, inter alia, specifies the broad stages/ phases in which the services were to be performed in the following manner:

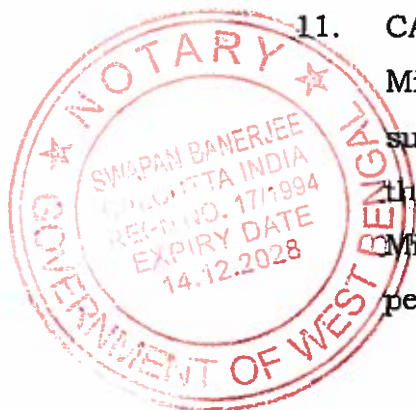
- a) Site surveying and feasibility phase;
- b) Design and cost estimation approval phase;
- c) Approval of GFC drawings phase;
- d) Construction and coordination phase;
- e) Testing and commissioning phase;

A copy of the provisional LOI dated October 22, 2024 is annexed hereto and marked as Annexure J.

7. By an email dated October 23, 2024, the said M/s. Pollucon Technologies Ltd. acknowledged the receipt of LOI and undertook to send a team for survey. A copy of the email dated October 23, 2024 is annexed hereto and marked as Annexure K.
8. On November 9, 2024, M/s. Pollucon Technologies Ltd., after conducting a thorough survey has forwarded the following documents to CAB, under cover of its letter dated November 9, 2024:
 - a) Sewage Quality and Characteristics of Raw Sewage;
 - b) Treatment Process;
 - c) Process Design and Unit sizing;
 - d) Area Survey Drawing Eden Gardens;
 - e) Hydraulic Flow Diagram;
 - f) Layout Drawing;
 - g) Process Flow Diagram;

A copy of the said email dated November 9, 2024 along with its annexures are annexed hereto and collectively marked as Annexure L.

9. CAB has also issued a letter dated November 12, 2024 in favour of Col. Land HQ Bengal Area (making a reference to a previous letter dated April 30, 2024), whereby the addressee was informed about the latest developments relating to construction of RWH and STP to ensure sustainability of water resources and also praying for an approval from the local Defence Authorities in respect of the concerned Project. In this connection, copies of the letters dated April 30, 2024 and November 12, 2024 are annexed hereto and collectively marked as Annexure M.
10. CAB, through its reply dated May 23, 2024 filed before this Hon'ble Tribunal had prayed for leave to disclose further documents in order to explain and elucidate on the steps taken by CAB after filing of the said reply. CAB once again highlights that the updates provided through the instant supplementary reply and the documents annexed hereto shall demonstrate the efforts that are being made by CAB towards compliance of the various directions issued by this Hon'ble Tribunal in OA No. 94 of 2021, especially, through the order dated April 15, 2021.
11. CAB operates the Eden Gardens Stadium as lessee under the Ministry of Defence, Government of India. It is respectfully submitted that this Hon'ble Tribunal may be pleased to direct the Union of India Through the Defence Estate Officer, Ministry of Defence to forthwith grant the requisite permission/consent to CAB to carry out the work of



construction of the STP and Rain Water Harvesting storage and recycling system.

12. It is humbly prayed that this Hon'ble Tribunal may be pleased to take the instant supplementary reply filed by CAB on record and consider the same while adjudicating the present proceeding, in the interest of justice.

naresh ojha.

Added Respondent No.5/Respondent No.12
HONY. SECRETARY
THE CRICKET ASSOCIATION OF BENGAL

PLACE:- KOLKATA

DATE:-20.11.2024

Through:-

Identified by me

[Signature]
Amitava Mitra, Advocate
Regn. No. WB/1887/1995

PRIYATA CHAKRABORTY,
Advocate for Cricket Association of Bengal
16/12, Semal Road, Shipra Suncity,
Indirapuram, Gaziabad, U.P-201014.
Email-priyatachakraborty1992@gmail.com
Mob-8777346969.

VERIFICATION

I, Naresh Ojha, son of Mr. Prabhulal Ojha, aged about 66 years, working for gain with the Cricket Association of Bengal ['CAB'], do hereby verify that the statements made in paragraphs 1 to 4 and 10 of the foregoing Reply are true to my knowledge, those contained in paragraphs 5 to 9 are based on my information derived from the official records, which I verily believe to be true and those made in paragraphs 11 and 12 are my respectful humble submissions and that I have not suppressed any material facts before this Hon'ble Tribunal.

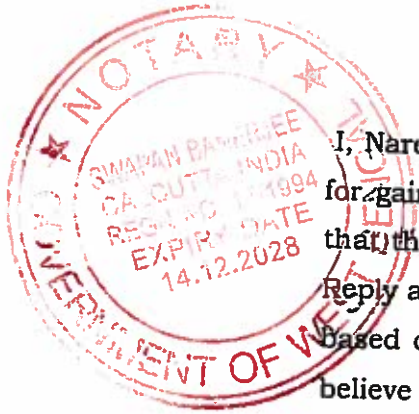
Identified by me

[Signature]
Amitava Mitra, Advocate
Regn. No. WB/1887/1995

naresh ojha.

HONY. SECRETARY
THE CRICKET ASSOCIATION OF BENGAL

Added Respondent No.5/Respondent No.12



**IN THE HON'BLE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

EXECUTION APPLICATION NO. 41 OF 2023

(OLD M.A. NO. 16 OF 2023)

IN

O.A. NO. 94 OF 2021

IN THE MATTER OF:

HAIDER ALI,

...APPLICANT

VERSUS

UNION OF INDIA AND ORS.

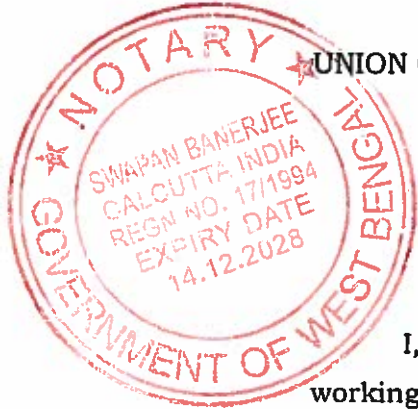
...RESPONDENTS/CONDEMNERS

AFFIDAVIT

I, Naresh Ojha, son of Mr. Prabhulal Ojha, aged about 66 years, working for gain with the Cricket Association of Bengal ['CAB'], the Added Respondent No. 5/the Respondent no. 12 at Kolkata do solemnly affirm and state as follows:

1. I am the Hony. Secretary of the CAB. I am and have made myself well and fully acquainted with the facts and circumstances of the instant case. I have been authorized by the CAB to make and affirm the instant affidavit for and on its behalf. As such, I am competent to affirm the instant affidavit for and on behalf of the CAB.
2. That I have read and understood the contents of the accompanying Application. I state that the facts stated in the Application are true and

5
ON 15



correct to my knowledge based on records. The legal submissions are based on advise received and believed by me to be correct.

3. That the annexures are true copies of their respective originals.

Identified by me

[Signature]
Amitava Mitra, Advocate
Regn. No. WB/1887/1995

Naresh Ojha,

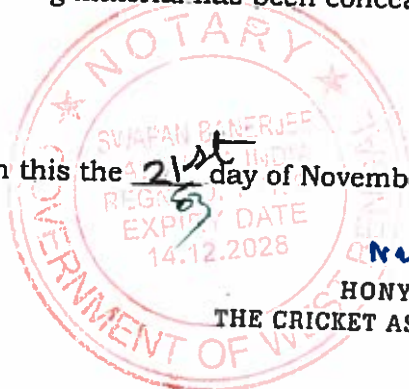
HONY. SECRETARY
THE CRICKET ASSOCIATION OF BENGAL

DEPONENT

VERIFICATION

I, Naresh Ojha, the deponent above named, do hereby verify that the contents of my foregoing affidavit are true and correct, that no part of it is false or incorrect and that nothing material has been concealed therefrom.

Verified by me at Kolkata on this the 21st day of November., 2024.



Naresh Ojha,

HONY. SECRETARY
THE CRICKET ASSOCIATION OF BENGAL

DEPONENT

Identified by me

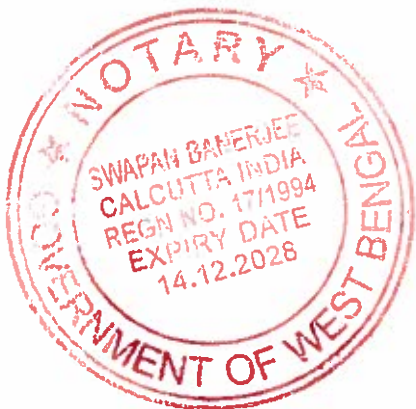
[Signature]
Amitava Mitra, Advocate
Regn. No. WB/1887/1995

21 NOV 2024

Solemnly affirmed and declared before me on identification

Swapan Banerjee

SWAPAN BANERJEE
Notary, Calcutta, India
Govt. of W.B. Regn. No. 17/1994
Calcutta City Courts' Bar
Association (2nd Floor)
Calcutta-700 001





Evaluation Note - CAB/2023/Eden2026/003

Das, Arnab <adas3@deloitte.com>

Tue, Sep 24, 2024 at 8:04 AM

To: "cab@bengalcricket.com" <cab@bengalcricket.com>

Cc: "Chinmay@bengalcricket.com" <Chinmay@bengalcricket.com>, "ojha1@icloud.com" <ojha1@icloud.com>,

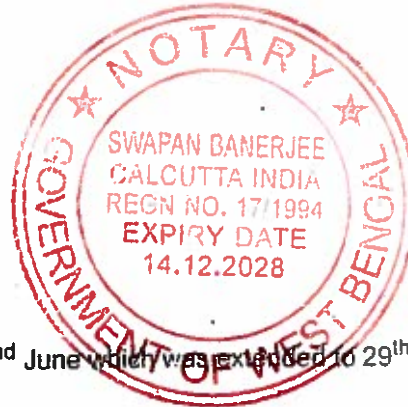
"Pandit, Nishant" <npandit@deloitte.com>, "Gupta, Mayank" <mgupta29@deloitte.com>

EOI Ref No: CAB/2023/Eden2026/002 & 003

EXPRESSION OF INTEREST (EOI) FOR SELECTION OF CONTRACTOR FOR THE PROPOSED SURVEY, DESIGN, CONSTRUCTION AND INSTALLATION INCLUDING COMMISSIONING OF SEWAGE TREATMENT PLANT AND RAINWATER HARVESTING AT EDEN GARDENS STADIUM, KOLKATA

The Cricket Association of Bengal released an EOI for appointment of vendor for RWH and STP on their official website on 07th June 2023. In order to ensure maximum participation, CAB also ran an exercise to identify prospective bidders and emailed the EOI documents on 12th June. The prospective bidders invited were :

1. Aqua Flow Systems
2. Sauber Environmental Solutions Private Limited
3. SPML Infra Ltd
4. EMS Limited
5. Vishvaraj Environment Pvt. Ltd.
6. Tata Steel
7. Envicore Systems
8. WAPCOS
9. POLLUCON TECHNOLOGIES LIMITED



The last date of submission as per original EOI was 22nd June which was extended to 29th July 2024.

Only Pollucon Technologies had submitted their bid.

Owing to the single bid submitted, the Association re-released the EOI on 21 August 2024 with due date of submission on 5th September 2024. In spite of the extension, no fresh bids were received,

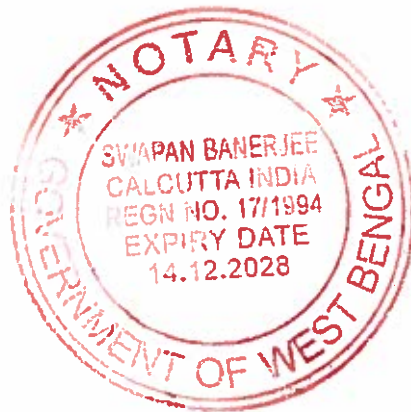
Based on the facts presented and the available information, CAB extended the timeline multiple times to encourage participation, but ultimately only Pollucon Technologies submitted a bid. Additionally, Clause 8.7 mentions that – 'CAB reserves the right to proceed with the selection process regardless of the number of EOIs that are received and/or shortlisted. CAB reserves the right to determine the eligibility of and/or shortlist any Interested Party based on the information submitted in its EOI and/or any information from other sources.'

Owing to the urgency and criticality of the requirement, CAB may proceed to have further discussion with the

bid received from the sole bidding party, i.e., Pollucon Technologies Ltd.

This message (including any attachments) contains confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message and are hereby notified that any disclosure, copying, or distribution of this message, or the taking of any action based on it, is strictly prohibited. When addressed to our clients any opinions or advice contained in this email are subject to the terms and conditions expressed in the governing client engagement letter.

This message (including any attachments) contains confidential information intended for a specific individual and purpose, and is protected by law. If you are not the intended recipient, you should delete this message and are hereby notified that any disclosure, copying, or distribution of this message, or the taking of any action based on it, is strictly prohibited.



THE CRICKET ASSOCIATION OF BENGAL

DR. B. C. ROY CLUB HOUSE, EDEN GARDENS, KOLKATA-700 021

Ref. No. 163(4)/21389/2024

October 22, 2024

LETTER OF INTENT (PROVISIONAL)

To,
 M/s Pollucon Technologies Limited
 D-39 D Block, Sector 7, Noida, Uttar Pradesh,
 +91-9212526704
 Date 22-10-2024

Kind Attn : Mr SK Singh, Director-Pollucon Technologies Limited

Dear Mr Singh,

With reference to your Offer against our EOI and all subsequent correspondences till date and in continuation of our Fax/Communication we are pleased to award the subject works highlighting the following salient features:

SUBJECT : Provisional LOI for the proposed Survey, Design, Construction and Installation including Commissioning of Sewage Treatment Plant & Rainwater Harvesting at Eden Gardens Stadium, Kolkata as per approved design to be provided by EPC Contractor.

SCOPE OF WORKS/SERVICE :

The proposed Sustainable development at 'Eden Gardens' shall be at least at par with the best International cricket constructed across the globe in respect of its design parameters, commercial viability, operational efficiency and energy efficiency, and additionally, shall be capable of multi-purpose use i.e.: use for other sporting and non-sporting social events throughout the year.

Below are the broad phases/stages in which the Service shall be performed.

- Site Surveying and Feasibility Phase
- Design and Cost Estimation Approvals Phase
- Approvals on GFC Drawings Approvals Phase
- Construction and Coordination Phase
- Testing and Commissioning Phase

All Designs, Drawings and Testing should be reviewed as per all relevant Bureau of Indian Standards, National Building Code, local by laws, any other regulations and accepted Industry practices.

PROJECT PRICE DETERMINATION :

The final contract price will be established after the completion of the site survey and the submission of the report. The final price will be subject to negotiations based on the scope of work and material/labor costs. Any price adjustments will reflect the changes in scope after mutual agreement.



THE CRICKET ASSOCIATION OF BENGAL

DR. B. C. ROY CLUB HOUSING ESTATE GARDENS, KOLKATA-700 021

COMMERCIAL TERMS :

Provisional Price: The exact contract value is to be determined after the survey. The pricing will be negotiated based on the survey findings and mutually accepted adjustments to the project scope.

PAYMENT TERMS

Payments will be made as follows, contingent upon finalization of the contract terms:

Payment Schedule	%
End of Site Surveying and Site Feasibility Report Phase	10
End of Design and Cost Estimation(BOQ) Approvals Phase	15
End of Approvals on GFC Drawings	15
Construction and Coordination Phase (Monthly Billing Breakup)	50
Testing and Commissioning Phase	10
Total	100

CONDITIONS FOR COMMENCEMENT :

This LOI is issued under the following conditions:

Commencement of Work: The service provider is authorized to mobilize resources and commence preliminary work immediately upon receipt of this LOI.

Survey Report Submission: The site survey and detailed report must be completed within 10 days from the date of this LOI.

Price Finalization: The final contract price will be agreed upon after the survey report submission and negotiation of any scope modifications.

Execution of Final Contract: A formal contract shall be executed based on the finalized scope of work, price, and other terms agreed upon during negotiations. This contract will supersede the terms of this provisional LOI.

VALIDITY :

This LOI will remain valid until 90 Days or until the formal contract is executed. Either party may extend the validity by mutual consent if required.

CONFIDENTIALITY :

All information exchanged in relation to this LOI, the site survey, and negotiations shall be treated as confidential. Neither party shall disclose the details of this project to any third party without prior written consent from the other party.

NEXT STEP :

We request M/s Pullocon Technologies Limited to acknowledge receipt of this LOI and commence the necessary work at the earliest. The site survey and report submission should be completed as per the timeline agreed upon. Further discussions regarding the final scope and pricing will follow upon completion of the survey.



THE CRICKET ASSOCIATION OF BENGAL

DR. D.C. ROY CLUB HOUSE, DEN GARDENS, KOLKATA-700021

Please acknowledge receipt of this LOI and confirm your acceptance by signing below.

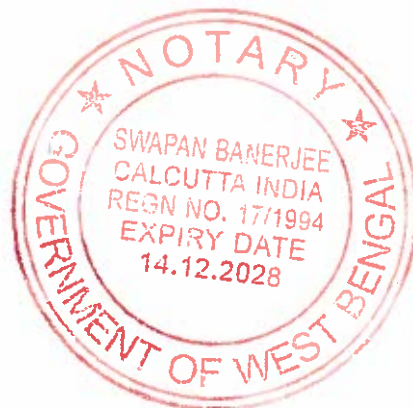
Kindly, provide the team deployment list and project Calendar to us immediately. The service provider shall commence the deployment of the team promptly, within 48 hours of the date of issuance of provisional LOI.

Should you have any queries or require any further clarification, please do not hesitate to contact Mr. Chinmay Nayak at or + 91- 7044071592.
We look forward to collaborating with you on this project and ensuring its successful and timely completion.

Thanking You

Yours sincerely,


Naresh Ojha
Hon. Secretary





LOI : Pollucon Technologies Limited

Shailender Singh <pollucon_noida@yahoo.in>

Wed, Oct 23, 2024 at 6:29 AM

Reply-To: Shailender Singh <pollucon_noida@yahoo.in>

To: "info@pollucon.org" <info@pollucon.org>, Chinmay Nayak <chinmay@bengalcricket.com>

Cc: The Cricket Association of Bengal <cab@bengalcricket.com>, ratnesh singh <ratnesh.singh10@gmail.com>, Naresh Ojha <ojha1@me.com>, Snehasish Ganguly <snehasish.ganguly@gmail.com>, "Gupta, Mayank" <mgupta29@deloitte.com>, "Das, Amab" <adas3@deloitte.com>

Dear Sir,

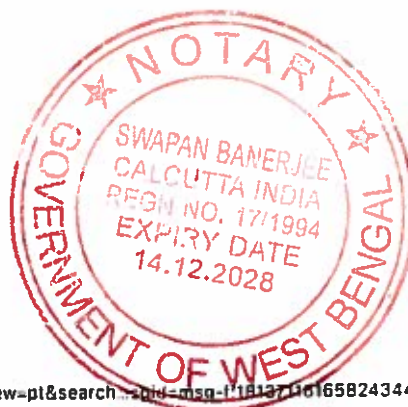
With Thanks we acknowledge the receipt of LOI. Very shortly we are sending the team for survey

Thanking you

For Pollucon Technologies Ltd

Namrata

9212509063





Re: Regarding submission of Design and Drawing

Shailender Singh <pollucon_noida@yahoo.in>

Sat, Nov 9, 2024 at 5:25 AM

Reply-To: Shailender Singh <pollucon_noida@yahoo.in>

To: Chinmay Nayak <chinmay@bengalcricket.com>

Cc: "info@pollucon.org" <info@pollucon.org>, The Cricket Association of Bengal <cab@bengalcricket.com>, ratnesh singh <ratnesh.singh10@gmail.com>, Naresh Ojha <ojha1@me.com>, Snehasish Ganguly <snehasish.ganguly@gmail.com>, "Das, Amab" <adas3@deloitte.com>

Name of Project- Selection of EPC Contractor for the proposed Survey, Design, Construction and Installation including Commissioning of Sewage Treatment Plant & Rain Water Harvesting at Eden Gardens Stadium, Kolkata as per approved design to be provided by CAB

Dear Sir,

We are enclosing herewith following document-

- 1.Sewage Quantity and Characteristics of Raw Sewage
- 2.Treatment Process
- 3.Process Design and Unit sizing
- 4.Area survey Drawing Eden Garden
- 5.Hydraulic Flow diagram
- 6.Layout Drawing
- 7.Process Flow Diagram

further documents will be send shortly

Thanking you

For Pollucon Technologies Ltd
Namrata
9212509063

On Sunday 3 November, 2024 at 03:57:54 pm IST, Chinmay Nayak <chinmay@bengalcricket.com> wrote:

Dear Team,

This is a reminder to submit the survey report please

Regards
Chinmay

On 23-Oct-2024, at 6:59 PM, Shailender Singh <pollucon_noida@yahoo.in> wrote:

Dear Sir,
With Thanks we acknowledge the receipt of LOI. Very shortly we are sending the team for survey

Thanking you

For Pollucon Technologies Ltd
Namrata
9212509063

On Wednesday 23 October, 2024 at 06:28:32 pm IST, Chinmay Nayak
<chinmay@bengalcricket.com> wrote:








Dear Mr Singh,

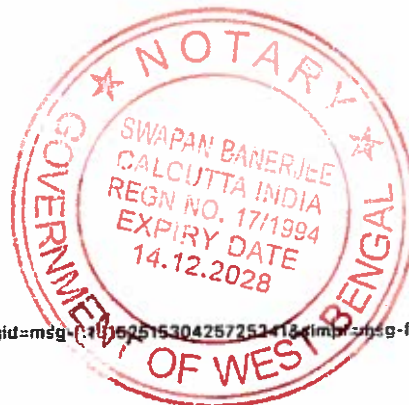
We are Pleased to issue the LOI in favour of Pollucon Technologies Limited for the construction of STP & RWH at Eden Gardens.

Please go through the attached LOI and do the needful.

Regards
Chinmay

7 attachments

-  **1.3 - Process Design and Unit sizing.pdf**
329K
-  **Area survey Drawing Eden Garden.pdf**
1610K
-  **Hydraulic Flow diagram.pdf**
442K
-  **Layout Drawing.pdf**
245K
-  **Process Flow Diagram.pdf**
504K
-  **1.1 Sewage Quantity and Characteristics of Raw Sewage.pdf**
297K
-  **1.2 Treatment Process.pdf**
211K



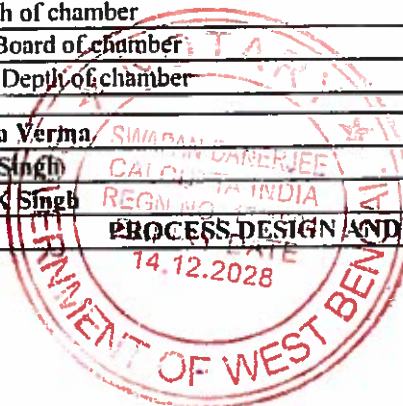
POLLUCON TECHNOLOGIES LIMITED

D-39, Sector-7, NOIDA-201301 (U.P.)

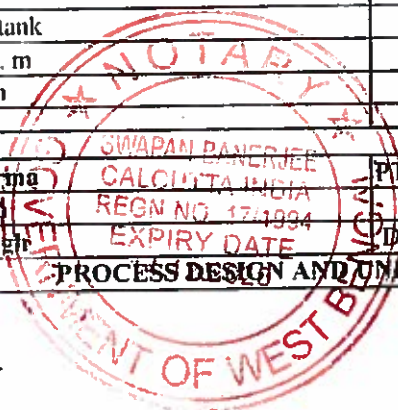
Phones : 0120-4570780, 120-4504247, Mob No : 9212509062/63

Email : pollucon_noida@yahoo.com, info@pollucon.org

Project	500 KLD Capacity Sewage Treatment Plant based on SBR Technology at Eden Gardens Stadium, Kolkata,			
Title	1.3 - Process Design and Unit sizing			
	INFLUENT CHARACTERISTICS			
	Average Flow		500	KLD
	Peak Factor (As per CPHEEO recommendation)		3.0	
	Peak Flow		1500	KLD
	Min. Flow		250	KLD
	BOD		250	mg/l
	COD		500	mg/l
	Suspended Solids		300	mg/l
	N-Total		45	mg/l
1	RAW SEWAGE TRANSFER PUMP			
	From Existing sump to fine screen chamber			
	Required static Head		11	m
	Friction Loss		1	m
	Proposed head of Pump		12	m
	No. of Pumps (2working+1 stand by)		3	Nos.
	Minimum Pumping Capacity		31.25	m ³ /hr.
2	Fine Screen Channel			
	No. of Screen (1 Manual +1 Mechanical)		2	Nos.
	Peak Flow (Design)		0.017	m ³ /sec
	Average (Design)		0.006	m ³ /sec
	Velocity at max. Flow		1.2	m/sec
	Velocity at ave. Flow		0.6	m/sec
	Inclination of Screen, deg		75	Deg
	Clear Opening between two bar		10	mm
	Bar Width		5	mm
	Cross Section of each Bar		30 X 5	mm x mm
	Screen Area, Required		0.014	m ²
	Hence, Screen Co- eff.		0.667	
	Thus corrected channel area at screen		0.02	m ²
	Note- Calculated both screens area are very small			
	Hence we propose sizes			
	Depth of chamber		0.7	m
	Width of chamber		0.6	m
	Length of chamber		3.5	m
	Free Board of chamber		0.5	m
	Total Depth of chamber		1.2	m
Prepared By: Neha Verma		PTL Doc No : PTL.S* P.PDUS.001		
Checked By: S K Singh		Revision : 0		
Approved By: S. K Singh		Date : 09.11.2024	Page No. 1	
PROCESS DESIGN AND UNIT SIZING OF STP				

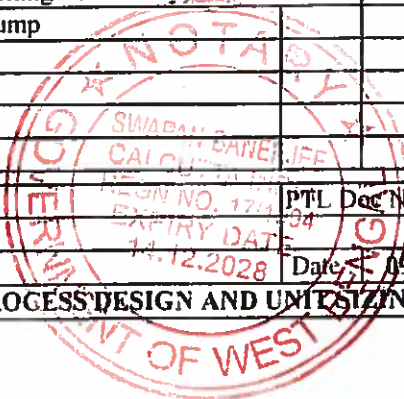


3	GRIT CHAMBER				
	No. of units			2	Nos.
	Sp. Gravity of particles			2.65	
	Size of particle			0.15	mm
	SOR			959	m ³ /m ² /d
	Detention Period			60	sec
	Grit storage depth			0.1	m
	Free Board			0.5	m
	Area of unit			1.6	m ²
	Volume			1.0	m ³
	Assume width of section			0.6	m
	Required Length			2.6	m
	Depth of Liquid			0.7	m
	Total Depth			1.2	m
	Check for Horizontal Velocity			0.043	m/sec
	< 0.30 m/s , Hence O K				
	Note- Calculated both screens area are very small				
	Hence we propose sizes				
	Depth of chamber			0.9	m
	Width of chamber			0.6	m
	Length of chamber			2.6	m
	Free Board of chamber			0.5	m
	Total Depth of chamber			1.4	m
4	EQUALIZATION TANK				
	No. of Unit			1	Nos.
	Average flow			500	kld
	Proposed capacity of Equalization Tank (one			125.00	m ³
	Proposed Size - Depth			2.85	m
	Dia			7.5	m
	Free Board			0.5	m
	Total Depth			3.35	m
4.1	AIR REQUIREMENTS FOR MIXING IN ET :				
	Air Requirement @ 12 cfm/1000 cf of tank volume			53.0	cfm
5	ANOXIC TANK				
	No. of Unit			1	Nos.
	Flow rate			20.8	m ³ /hr
	We Proposed Detention time			2.0	hr
	Capacity of Anoxic tank			41.7	m ³
	Depth			4.6	m
	Dia of the tank			3.40	m
	Free board, m			0.4	m
	Total depth			5	m
Prepared By: Neha Verma		PTL Doc No : PTL.STP.PDUS.001		Revision : 0	
Checked By: S K Singh		Date : 09.11.2024		Page No. 2	
Approved By: S. K Singh		PROCESS DESIGN AND UNIT SIZING OF STP			

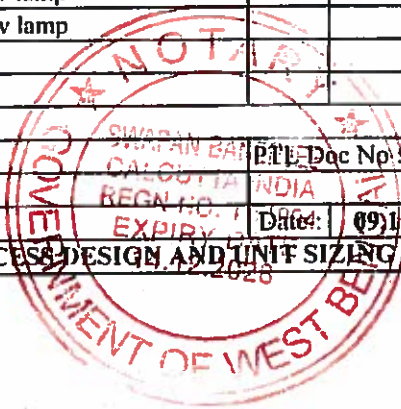


6	SBR				
	No. of units		2	Nos.	
	BOD load in kg/d		125	kg day	
	Volumetric loading(Average day basis)		0.375	kg BOD/m ³	
	Volume of SBR		333	m ³	
	Volume of each SBR		167	m ³	
	Proposed liquid depth of the tank		4.5	m	
	Free board		0.5	m	
	Dia of Tank		6.87	m	
	Say Dia of Tank		6.90	m	
	Total depth		5.0	m	
6.1	DESIGN OF DECANTER				
	Nos. of Decanter (1 Working + 1 Stand by)		2.00	Nos.	
	Type of Decanter		Moving Weir	Arm type	
	Time of aeration including filling		2.25	hr	
	Time of settling		0.75	hr	
	Time of decantation (Downward movement)		0.5	hr	
	Time of decantation (Upward movement)		0.5	hr	
	Total Time		4.0	hr	
	Time of feeding of each SBR(max)		2.0	hr	
	Rate of feeding of each SBR		21	m ³ /hr	
	Rate of decantation		83	m ³ /hr	
	Required Length of wier		0.33	m	
6.2	Excess Sludge Generation				
	Excess biological Sludge		62.5	kg	
	Non volatile component of suspended solids		75	kg	
	Total sludge		137.5	kg	
	Consistency of sludge,		1	% w/w	
	Therefore sludge volume		13.75	m ³ /d	
6.3	Oxygen Requirements:				
	Rate of oxygen required per Kg BOD		1.20		
	Total BOD load		125.00	kg day	
	BOD load of each SBR		62.50	kg day	
	Oxygen Requirement		75	kg d	
	Oxygen Requirement		3.13	kg/hr	
	Air requirement @ 21% O ₂ available in air		12	m ³ /hr	
	% of oxygen transfer by diffused aeration		10		
	Air requirement		122.0	m ³ /hr	
	Air requirement in each SBR Tank		216.8	m ³ /hr	
			127.6	cfm	
	Air requirement in Equalization Tank		53.0	cfm	
	Total Air requirement		180.6	cfm	
	Nos. of Air Blower (1 Working +1 Stand by)		2.00	Nos.	
	Capacity of each Blower		180.63	cfm	
	Proposed head of blower		5000	mmwc	
Prepared By: Neha Verma		PTL Doc No : PTL.STP.PDUS.001			
Checked By: S K Singh		Revision : 0			
Approved By: S. K Singh		Date: 09.11.2024	Page No. 3		
PROCESS DESIGN AND UNIT SIZING OF STP					

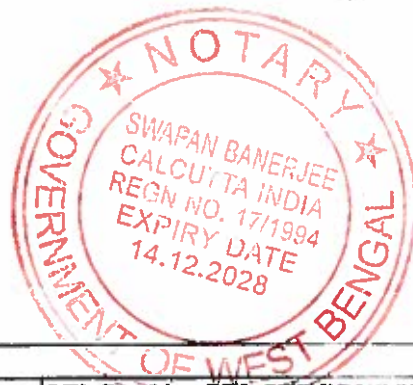
7	DISINFECTION/CHLORINATION CONTACT TANK		
	No. of units		1 Nos.
	Avg. Flow		20.8 m ³ /hr
	Detention Period		4 hr
	Volume of unit		83 m ³
	Depth of tank		2.85 m
	Free board		0.5 m
	Dia of Tank		6.10 m
	Say Dia of Tank		6.1 m
	Total depth		3.35 m
8	HYPO SOLUTION QUANTITY		
	Avg. Chlorine dosage		2 mg/l
	Total quantity of chlorine required		1 kg/d
	Total quantity of chlorine required		0.04 kg/hr
	Strength of bleaching powder solution		7 % w/w
	Qty of Solution		14 litres
	Capacity of tank		100 litres
8.1	DOSING PUMP		
	No of Pump (1 working + 1 standby)		2 Nos
	Pumping hrs		6 hrs
	Capacity of each pump		2.4 liters/hr
9	SLUDGE SUMP		
	No. of Unit		1 Nos
	Detention Period		16 hr
	Volume		9.2 m ³
	Liquid Depth of tank		1.2 m
	Free board		0.5 m
	Dia of Tank		3.1 m
	Total depth		1.7 m
10	RAW SEWAGE TRANSFER PUMP		
	From Equalization Tank to SBR Tank		
	Required static Head		9 m
	Friction Loss		1 m
	Proposed head of Pump		10 m
	No of Pump (1 Working +1 stand by)		2 Nos.
	Minimum Pumping Capacity of each pump		20.83 m ³ /hr
11	RAS PUMP/SAS PUMP		
	No of Pump (1 Working +1 stand by)		2 Nos
	Capacity of each pump		10.42 m ³ /hr
	Static head		8 m
	Friction		1 m
	Residual head		1 m
	Total head		10.0 m
Prepared By: Neha Verma		PTL Doc No : PTL.STP.PDUS.001	
Checked By: S K Singh		Revision : 0	
Approved By: S. K Singh		Date: 09.11.2024	Page No. 1
PROCESS DESIGN AND UNIT SIZING OF STP			



12	FILTER FEED PUMP				
	From Disinfection tank to filters				
	Required static Head		2	m	
	Friction Loss		23	m	
	Proposed head of Pump		25	m	
	No. of Pumps (1 working+1 stand by)		2	Nos.	
	Minimum Pumping Capacity		20.8	m ³ /hr	
13	SLUDGE FEED PUMP				
	No of pumps (1 W + 1 S)		2	Nos.	
	Operating hrs of pump		12	hr	
	Rating of pump		1.15	m ³ /hr	
	Proposed head of Pump		8	m	
14	PRESSURE SAND FILTER				
	Qty		1	Nos.	
	Rate of Hydraulic Loading		16	m ³ /m ² .h	
	Filtration Area		1.30	m ²	
	Dia of filter		1.3	m	
	Hight of Filter		1.5	m	
15	ACTIVATED CARBON FILTER				
	Qty		1	Nos.	
	Rate of Hydraulic Loading		16	m ³ /m ² .h	
	Filtration Area		1.30	m ²	
	Dia of filter		1.3	m	
	Hight of Filter		1.5	m	
16	UV SYSTEM				
	Quantity		1	Nos	
	Flow Rate		20.8	m ³ /Hrs	
	Radiation of 20 W UV lamp (UV C)		6	W	
	Radiation of 20 W UV lamp (UV C)		6000	mW	
	Exposer time		25	sec	
	Total Radiation of 1 UV Lamp		150000	mJ	
	Volume of disinfection chamber		0.1447	m ³	
	Depth of disinfection chamber		1.5	m	
	Dia of disinfection chamber		0.35	m	
	Surface Area of disinfection chamber		16510	cm ²	
	Total flurence of 1 UV lamp of 20 W		9.09	mJ/cm ²	
	Required flurence for disinfect E-coil		18.00	mJ/cm ²	
	Required number of uv lamp		1.98	nos.	
	Proposed number of uv lamp		4.00	nos.	
	Total UV Dosage		36	mJ/cm ²	
<p>Prepared By: Neha Verma Checked By: S K Singh Approved By: S. K Singh</p>					
			Doc No: PTL.STP.PDUS.001	Revision: 0	
			Date: 09/11/2024	Page No: 5	
PROCESS DESIGN AND UNIT SIZING OF STP					

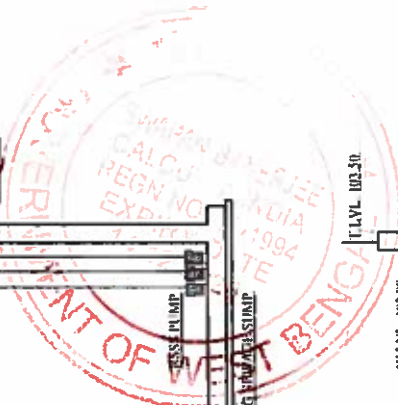
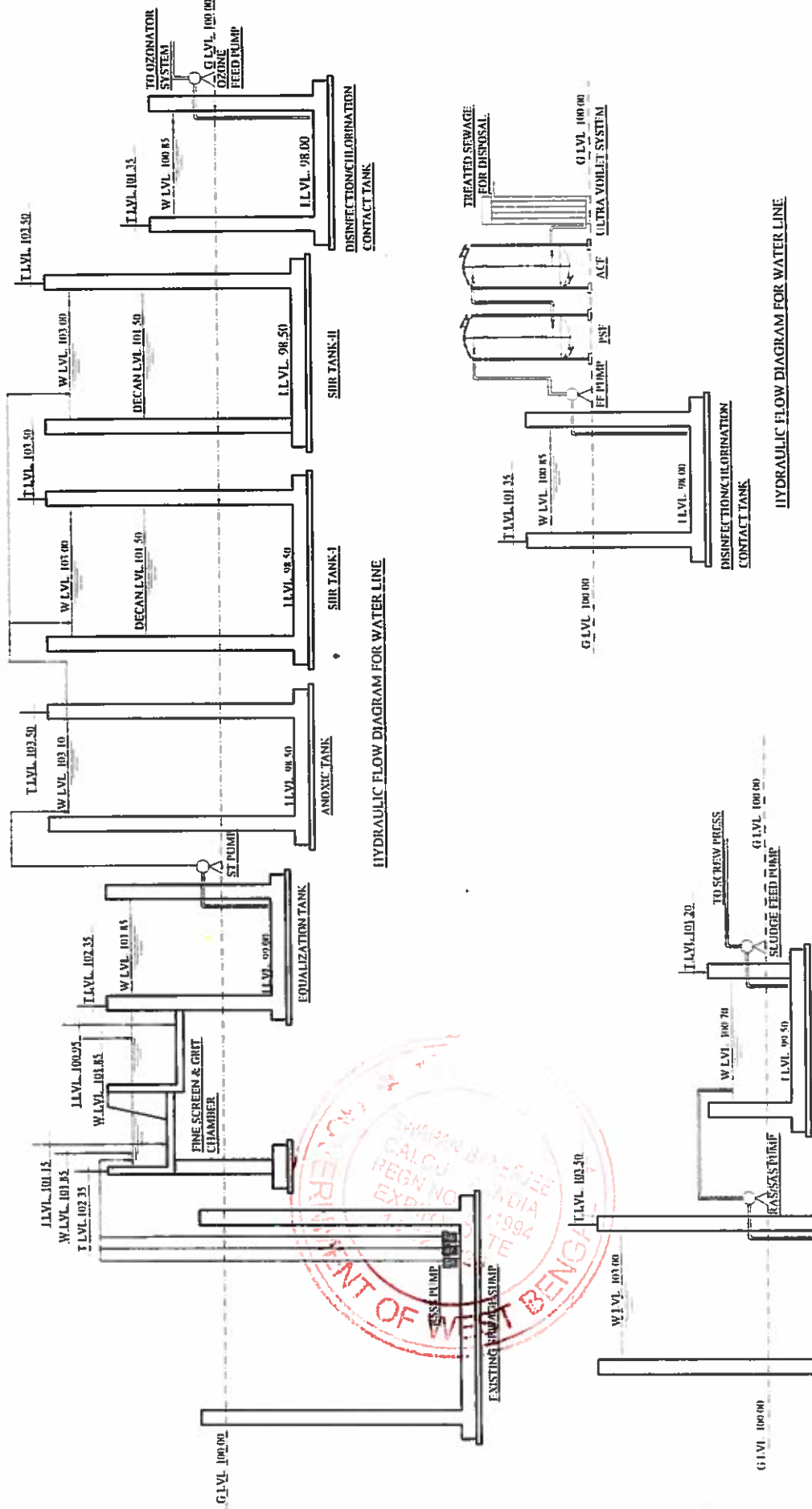


17	PIPING AND VALVES				
	Velocity for pumping flow			1.5	m/sec
	Size of pipe			0.070	m
	Velocity for gravity flow			1	m/sec
	Size of pipe			0.086	m
18	Ozonator				
	Ozone dosing rate at Treated water tank			4	ppm
	Quantity of Ozone required			2	kg/d
				0.083	kg/hr
				83.33	g/hr
	Say capacity of Ozonator			100	g/hr



Prepared By: Neha Verma	PTL Doc No: PTL STP.PDUS.091
Checked By: S K Singh	Revision: 0
Approved By: S. K Singh	Date: 09.11.2024 Page No. 6
PROCESS DESIGN AND UNIT SIZING OF STP	

THIS DRAWING CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION OF POLLUTION TECHNOLOGIES LTD. AND MUST NOT BE PASSED ON TO ANY PERSON OR COMPANY FOR USE OR PART WITHOUT OUR PRIOR PERMISSION BY WRITING



HYDRAULIC FLOW DIAGRAM FOR WATER LINE

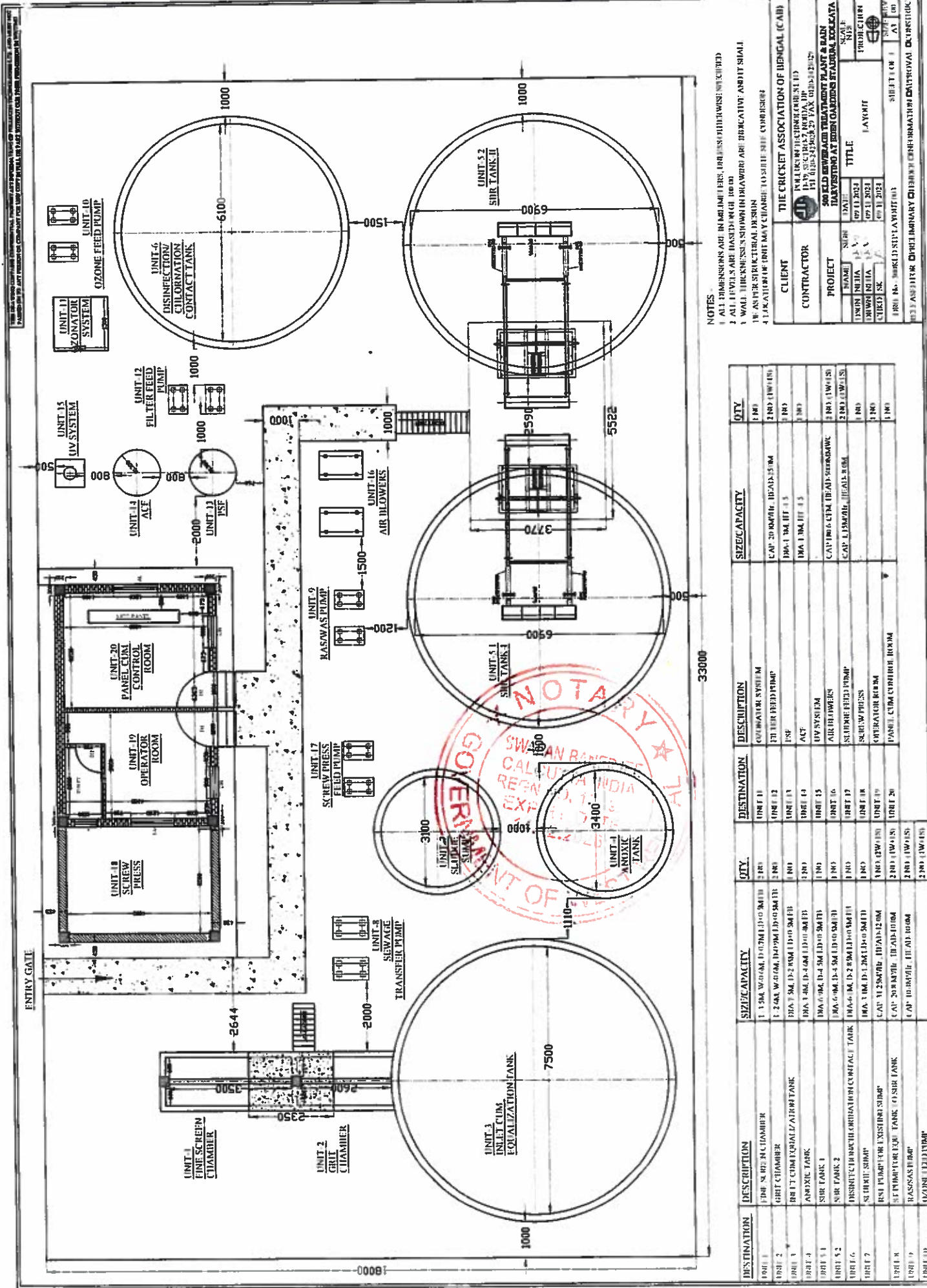
HYDRAULIC FLOW DIAGRAM FOR SLUDGE LINE

CLIENT	THE CRICKET ASSOCIATION OF BENGAL (CAB)		
CONTRACTOR	POLLUCON TECHNOLOGIES LTD. D-39, SECTOR-7, NOIDA, UP PH: 0120-2425000 FAX: 0120-2425029		
PROJECT	500 KLD SEWAGE TREATMENT PLANT & RAIN HARVESTING AT EDEN GARDENS STADIUM, KOLKATA		
SCALE	NTS		
NAME	SIGN	DATE	TITLE
DESIGN	DR.	09.11.2024	HYDRAULIC FLOW DIAGRAM
DRAWN	DR.	09.11.2024	PRODUCTION
CHECK	DR.	09.11.2024	
DRG. No. -	S00CLD.STP.HFD.002		SHEET 1 OF 1
			A3 0

ABBREVIATION
 RS PUMP - RAW SEWAGE SUMP PUMP
 ST PUMP - SEWAGE TRANSFER PUMP
 SBR - SEQUENTIAL BATCH REACTOR
 FF PUMP - FILTER FEED PUMP
 PSP - PRESSURE SAND FILTER
 ACF - ACTIVATED CARBON FILTER

- NOTES -
- 1 ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED
 - 2 ALL LEVELS ARE BASED ON N.G.L.VL. 100.00
 - 3 WALL THICKNESS SHOWN IN DRAWING ARE INDICATIVE AND IT SHALL BE AS PER STRUCTURAL DESIGN
 - 4 LOCATION OF UNIT & DEPTH OF ANY TANK MAY CHANGE TO SUITE SITE CONDITION KEEPING THE VOLUME SAME
 - 5 THIS DRAWING IS INDICATIVE ONLY FOR TENDER PURPOSE

RELEASED FOR APPROVAL BY CLIENT FOR INFORMATION CONFIRMATION & APPROVAL FOR CONSTRUCTION

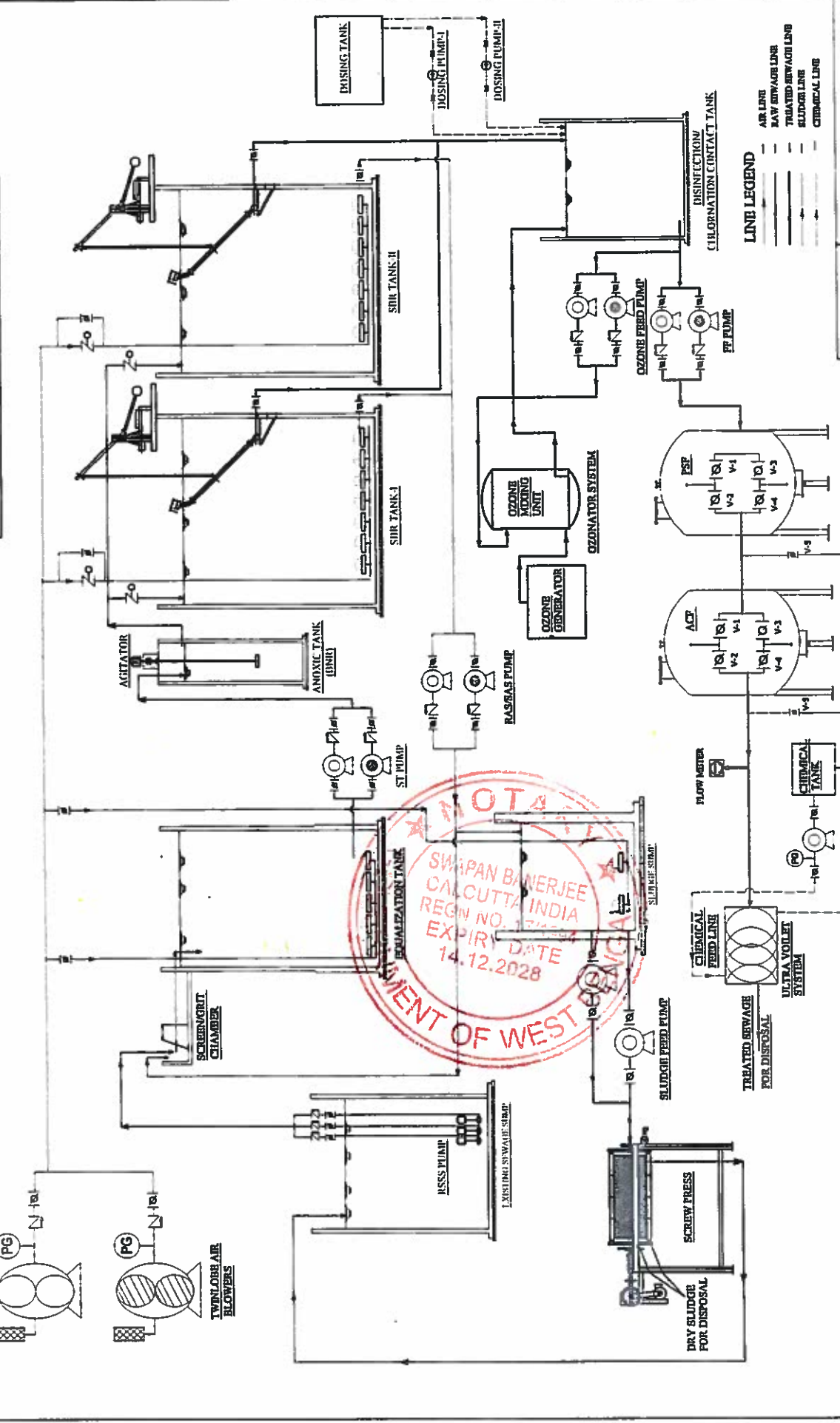


NOTES
 1 ALL DIMENSIONS ARE IN MILLIMETERS, UNLESS OTHERWISE SPECIFIED
 2 ALL LEVELS ARE BASED ON CH B.M.
 3 WALL THICKNESS SHOWN IN DRAWING ARE INDICATIVE AND IT SHALL BE AS PER STRUCTURAL DESIGN
 4 LOCATION OF UNIT MAY CHANGE TO SUITE THE CONSUMER

CLIENT	THE CRICKET ASSOCIATION OF BENGAL (CAB)
CONTRACTOR	KALKAJI ENGINEERING & CONSTRUCTION PVT. LTD. 14/9, SIKHARA 7, MEDIA, 1P 11, 10/10-13/9/2023 FAX 022-423222
PROJECT	500 KLD WATER TREATMENT PLANT & RAIN HARVESTING AT BOBOI GARDENS STADIUM, KOLKATA
SCALE	AS SHOWN
DATE	07.11.2023
BY	AS PER
CHECKED	AS PER
DATE	07.11.2023
TITLE	LAYOUT
SHEET NO.	01 OF 01

DESTINATION	DESCRIPTION	SIZE/CAPACITY	QTY.	DESTINATION	DESCRIPTION	SIZE/CAPACITY	QTY.
UNIT 1	FINE SCREEN CHAMBER	1.5 M X 3.0 M X 0.6 M (1.50 X 3.00 X 0.60) SM (F)	2 (R)	UNIT 11	COAGULANT SYSTEM		1 (R)
UNIT 2	GRIT CHAMBER	1.2 M X 3.0 M X 0.6 M (1.20 X 3.00 X 0.60) SM (F)	2 (R)	UNIT 12	3RD FILTER FEED PUMP	CAP: 20.000 LTR (0.250 M ³)	2 (R)
UNIT 3	INLET CHAMBER	1.2 M X 3.0 M X 0.6 M (1.20 X 3.00 X 0.60) SM (F)	1 (R)	UNIT 13	UV SYSTEM	100.1 M (H) X 1.5	1 (R)
UNIT 4	AEROBIC TANK	10.0 M X 10.0 M X 4.0 M (10.00 X 10.00 X 4.00) SM (F)	1 (R)	UNIT 14	AIR BLOWERS	100.1 M (H) X 1.5	1 (R)
UNIT 5	SBR TANK 1	10.0 M X 10.0 M X 4.0 M (10.00 X 10.00 X 4.00) SM (F)	1 (R)	UNIT 15	UV SYSTEM	CAP: 100.000 LTR (1.000 M ³)	2 (R)
UNIT 5.1	SBR TANK 1	10.0 M X 10.0 M X 4.0 M (10.00 X 10.00 X 4.00) SM (F)	1 (R)	UNIT 16	AIR BLOWERS	CAP: 1.000 M ³ (10.000 LTR)	2 (R)
UNIT 5.2	SBR TANK 2	10.0 M X 10.0 M X 4.0 M (10.00 X 10.00 X 4.00) SM (F)	1 (R)	UNIT 17	SCREW PRESS	CAP: 1.000 M ³ (10.000 LTR)	1 (R)
UNIT 5.3	SBR TANK 3	10.0 M X 10.0 M X 4.0 M (10.00 X 10.00 X 4.00) SM (F)	1 (R)	UNIT 18	SCREW PRESS	CAP: 1.000 M ³ (10.000 LTR)	1 (R)
UNIT 6	DISINFECTION/CHLORINATION CONTACT TANK	10.0 M X 10.0 M X 4.0 M (10.00 X 10.00 X 4.00) SM (F)	1 (R)	UNIT 19	OPERATOR ROOM		1 (R)
UNIT 7	SBR TANK 2	10.0 M X 10.0 M X 4.0 M (10.00 X 10.00 X 4.00) SM (F)	1 (R)	UNIT 20	PANEL CONTROL ROOM		1 (R)
UNIT 8	3RD FILTER FEED PUMP	CAP: 20.000 LTR (0.250 M ³)	2 (R)				
UNIT 9	RAS WAS PUMP	CAP: 10.000 LTR (0.100 M ³)	2 (R)				
UNIT 10	OPERATOR ROOM		2 (R)				

THIS DRAWING CONTAINS CONFIDENTIAL PROPRIETARY INFORMATION OF POLLUTION TECHNOLOGIES LTD. AND MUST NOT BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT OUR PRIOR PERMISSION IN WRITING.



NOTA

SWAPAN BANERJEE
CALCUTTA INDIA
REGN NO. 12345
EXPIRE DATE
14.12.2028
DEPARTMENT OF WEST BENGAL

LINE LEGEND

- AIR LINE
- RAW SEWAGE LINE
- TREATED SEWAGE LINE
- SLUDGE LINE
- CHEMICAL LINE

CLIENT	THE CRICKET ASSOCIATION OF BENGAL (CAB)	
CONTRACTOR	POLLUTION TECHNOLOGIES LTD. D-39, SECTOR-7, NOIDA, UP TEL: 91-20-2435011 FAX: 91-20-243509	
PROJECT	300 KLD SEWAGE TREATMENT PLANT & RAIN HARVESTING AT BISHNUPUR STADIUM, CALCUTTA	
NAME	SRIN	DATE
DESIGN	SRIN	DATE
DRAWN	SRIN	DATE
CHECK	SRIN	DATE
TITLE	PROCESS FLOW DIAGRAM	
DATE	09.11.2024	PROJECTION
SCALE	AS SHOWN	NO. OF SHEETS
DRG. No.	300KLDSTP-PT.001	SHEET 1 OF 1
RELEASED FOR	OPERATION	DATE
BY		

FOR BACKLASH CORRECTION OF FILTER

- UNDER WORKING
- UNDER BACK WASHING

V1 & V4 ARE OPEN
V2, V3 & V5 ARE OPEN

ABBREVIATION

- AS PUMP - RAW SEWAGE PUMP
- BT PUMP - SEWAGE TRANSFER PUMP
- SR - SEQUENTIAL BATCH REACTOR
- FF PUMP - FILTER FEED PUMP
- PF - PRESSURE BAND FILTER
- ACF - ACTIVATED CARBON FILTER

LEGEND

- AIR BLOWER WORKING
- AIR BLOWER STAND BY
- FLOW METER
- PRESSURE GAUGE
- BUTTERFLY VALVE
- MOTOR
- AUTORIZED VALVE
- SLUDGE VALVE
- NON RETURN VALVE
- REMEDIABLE PUMP WORKING
- REMEDIABLE PUMP STAND BY
- CENTRIFUGAL PUMP WORKING
- CENTRIFUGAL PUMP STAND BY

NOTES:-

- WALL THICKNESSES SHOWN IN DRAWING ARE INDICATIVE.
- LOCATION OF UNIT MAY CHANGE TO SUITE SITE CONVENIENCE.

POLLUCON TECHNOLOGIES LIMITED

D-39, Sector-7, NOIDA-201301 (U.P.)

Phones : 0120-4570780, 120-4504247, Mob No . 9212509062/63

Email . pollucan_noida@yahoo.com . info@pollucan.org.

Design for 500 KLD Capacity Sewage Treatment Plant based on SBR Technology at Eden Gardens Stadium, Kolkata.			
Sewage Flow			
	Detail	Capacity	Remarks
A	Sewage Generation during Mega events	490 KLD	Provided by City
B	Design Capacity of Sewage Treatment Plant	500 KLD	Proposed
1.1 Sewage Quantity and Characteristics of Raw Sewage			
1	Input Data of Raw Sewage		
	Design Flow	500 KLD	
A	PHYSICAL PROPERTIES		
	Colour	Mixed Colour	
	Odour	Mild Odour	
	Turbidity	Turbid	
B	CHEMICAL PROPERTIES		
	pH	6.5 to 8.5	
	BOD	250 mg/l	
	COD	500 mg/l	
	Total Suspended Solids	300 mg/l	
	Total Coliform Count	1.1X10 ⁷ MPN/100ml	
1.1 Sewage Quantity and Characteristics of Treated Sewage			
2	Output Data of Treated Sewage		
	Treated Sewage Discharge	500 KLD	
A	PHYSICAL PROPERTIES		
	Colour	Colourless	
	Odour	Odourless	
	Turbidity	Clear	
B	CHEMICAL PROPERTIES		
	pH	7.0 to 8.5	
	BOD	<10 mg/l	
	COD	< 20 mg/l	
	Suspended Solids	< 10 mg/l	
	Fecal Coliform	< 1000 MPN/100ml	
Prepared By: Neha Verma		PTL Doc No : PTL.STP.IODATA.001	
Checked By: S K Singh		Revision : 0	
Approved By: S. K Singh		Date : 09.11.2024 Page No. 1	
PROCESS DESIGN AND UNIT SIZING OF STP			



POLLUCON TECHNOLOGIES LIMITED

D-39, Sector-7, NOIDA-201301 (U.P.)

Phones : 0120-4570780, 120-4504247, Mob No : 9212509062/63

Email : pollucon_noida@yahoo.com , info@pollucon.org.

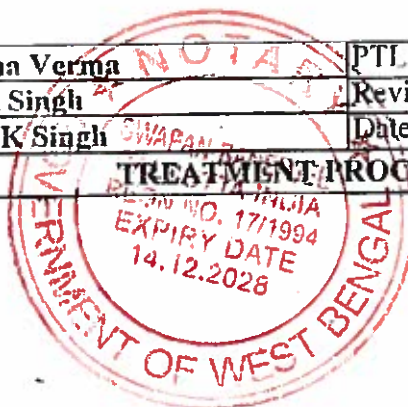
1.2 TREATMENT PROCESS

Sewage is generated at different sources in varied quantity and quality get mixed and forms a common composite Sewage. The pollutants are mainly biodegradable organic compounds in the form of soluble and insoluble inorganic compound like dirt and mud.. Inorganic compounds settles at settler by its own and does not require any treatment. However organic compounds are treated in aerobic process. Treatment passes starts from screening to remove any floating coarse particle. A Coarse size screen is provided at the Raw Sewage Sump. Sewage further get collected in receiving and pumped to Screened Chamber where medium size screen is proposed. Further Sewage passes through Grit/ Silt separation chamber. Grit/Silt get separated by gravity in the bottom.

Further Sewage shall be treated in aeration system (SBR) by providing suitable size/capacity of diffuse aeration. Optimum type of bio-mass will be added into aerobic tank to start sludge mass growth. BOD/COD get digested in this process and forms sludge mass. A part of BOD also get converted into carbon dioxide. Mixing of bulk is also provided by selecting suitable type of diffusers. However, diffuser performs dual function (i.e. transfer of atmospheric oxygen and mixing of aerated mass). Continuous growth of sludge mass concentration up to 3000 to 5000 ppm is required and excess sludge is subjected to rejection. Aeration and Settling both processes happens in one tank in sequence and this sequence is controlled by PLC. Most of the biomass gets settled into bottom. It further get collected into the bottom and to be pumped out for further treatment into Screw Press..

Clear water from the Decanter is further chlorinated to PSF and ACF followed by UV treatment and it will be suitable for final disposal and recycling for horticulture, cooling tower, flushing and misc uses. Excess Sludge from the SBR is subjected to be dried in screw press. The dried cake from the screw press shall be used as manure.

Prepared By: Neha Verma	PTL Doc No : PTL.STP.TP.001
Checked By: S K Singh	Revision : 00
Approved By: S. K Singh	Date :09.11.2024 Page No.1
TREATMENT PROCESS OF STP	





THE CRICKET ASSOCIATION OF BENGAL
DR. B.C. ROY CLUB HOUSE, EDEN GARDENS, KOLKATA-700 021

Ref. No. 164/3/473/2024

November 12, 2024

The Col. Land
HQ Bengal Area
246, AJC Bose Road
Alipore,
Kolkata - 700 027

Sub: Approval required for Construction of RWH & STP at Eden Gardens as per directions of National Green Tribunal

Dear Sir,

Refer our letter no. 164/14/2731/2024 dt. 30 Apr 24 regarding NGT directions w.r.t. construction of RWH & STP to ensure sustainability of water resources.

This is to keep you updated that next hearing of N.G. T. is scheduled on 26th of November, 2024 and we have the following updates to make our representation in the subject matter at the Tribunal.

- 1) Expression of Interest was floated by CAB inviting potential parties to come forward for construction and RWH & STP at Eden Gardens.
- 2) Evaluation Report of submitted EOI and recommendations from Deloitte (Evaluation and Monitoring Partner of NGT Case).
- 3) Letter of Intent to Pollucon Technologist Limited that was short listed for the above work based on recommendations from Deloitte.
- 4) Site Survey and submission of Drawings by Pollucon Technologist Limited for construction of 500 KLD capacity STP at Eden Gardens.
- 5) Approval status on the project from Local Military Authority - Awaited from LMA.

We seek your support in obtaining necessary approval for point no.(5) in respect to construction of STP & RWH at Eden Gardens as per directions of National Green Tribunal.

We appreciate an early response from your end to help us file the affidavit to the National Green Tribunal in respect of the progress of the project.

Thanking you,

Yours faithfully,


Naresh Ojha
Hony. Secretary

Encl: All relevant documents.



THE CRICKET ASSOCIATION OF BENGAL
 DR. B.C. ROY CLUB HOUSE, EDEN GARDENS, KOLKATA - 700 021

Ref. No. 164/14/2731/2024

April 30, 2024

The Col. Land
 HQ Bengal Area
 246, A.J.C. Bose Road
 Alipore
KOLKATA - 700 027.

Sub: N.G.T Directions w.r.t construction of R.W.H. and S.T.P. to ensure sustainability of water resources.

Sir,

Enclosed please find the National Green Tribunal's Order dated 21st February 2024 which instructs to install and commission R.W.H. and S.T.P. to ensure optimal usage of water resources and minimizing the ground water usage for maintenance of cricket playgrounds. This is for your kind perusal and necessary approval please.

We will keep updating you with the Plan and Designs from time to time.

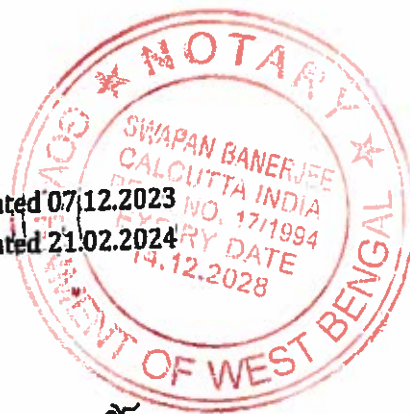
Thanking you and request support from your end.

With regards,


 Naresh Ojha
 Hony. Secretary

Encl:

- N.G.T PRINCIPAL BENCH Order dated 07.12.2023
- N.G.T PRINCIPAL BENCH Order dated 21.02.2024



on 02/05/24 at 1600h

