

**NATIONAL GREEN TRIBUNAL EASTERN ZONE BENCH, KOLKATA**

**ORIGINAL APPLICATION No. 169/ 2023/EZ**

(Jinti Deka and Another - *Versus*- The State of Assam and Others )

**I N D E X**

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SHAH SYED SAMADUR RAHMAN  
NOTARY  
Guwahati, Kamrup  
Regd. No.-KAM.03  
Expiry Date:06-03-2027

Filed by:

Santanu Bora, Advocate

E mail: [advocatesbora@gmail.com](mailto:advocatesbora@gmail.com)

Ph. No. 9864176825

**NATIONAL GREEN TRIBUNAL EASTERN ZONE BENCH,  
KOLKATA**

**ORIGINAL APPLICATION No. 169/2023/EZ**

**IN THE MATTER OF :**

Jinti Deka and Another

**..... Applicants**

**-Versus-**

State of Assam and Others

**..... Respondents**

**AFFIDAVIT ON BEHALF OF RESPONDENT No. 6 .**

I, Sri Natarajan Anand, IFS, son of M Natarajan, aged about 52 years, presently holding the post of Director of Geology and Mining, Assam, Kahilipara, Guwahati -19, in the district of Kamrup (M), Assam, do hereby solemnly affirm and state as follows:

1. That I am presently holding the post of Director of Geology and Mining, Assam, Kahilipara,



*(Handwritten signature)*

SHAH SYED SAMADUR RAHMAN  
NOTARY  
Guwahati, Kamrup  
Regd. No.-KAM.03  
Expiry Date:06-03-2027

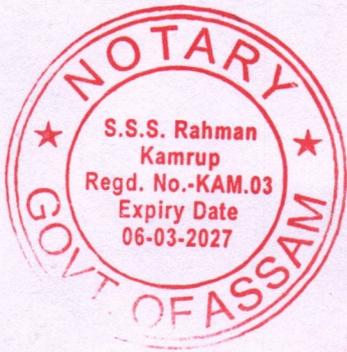
Filed by —  
Respondent no. 6  
Through: Shantanu Borah  
Advocate

*(Handwritten signature)*  
Director  
Geology & Mining, Assam  
Kahilipara, City-19

Guwahati -19, in the district of Kamrup (M), Assamas its official is being arrayed as respondent No. 6 in the instant Original Application (Suo Motu) and being well conversant with the facts and circumstances of the case, I am competent to swear this affidavit. A copy of the Original Application (Suo Motu) filed by the applicants was served upon the answering respondent and after going through the same and having understood the contents thereof and I swear this instant affidavit – in- opposition.

2. That saves and except the statements, which are matters of records and specifically admitted, all other averments made in the Original Application (Suo Motu) be treated as denied and disputed by the answering deponent.

3. That the answering deponent categorically and emphatically denies the allegations of violating any Act, guidelines in allowing the sand mining by respondent No. 7 (Jugal Bharali) at Nakhula Beat Sand Arae No. 3. That it is a fact, that sand mine at



SHAH SYED SAMADUR RAHMAN  
NOTARY  
Guwahati, Kamrup  
Regd. No.-KAM.03  
Expiry Date:06-03-2027

Director  
Geology & Mining, Assam  
Nahilpara, City-19

Nakhula Beat Sand Aree No. 3, village Bhakatgaon under Morigaon district is undertaken by respondent No. 7 (Jugal Bharal) covering an area of 4.1 hector within the GPS location given below:

- (1)  $26^{\circ} 10' - 33.74 \text{ N} - 92^{\circ} 12' 49.2 \text{ E}$
- (2)  $26^{\circ} 10' 35.12 \text{ N} - 29^{\circ} 12' 48.32 \text{ E}$
- (3)  $26^{\circ} 10' 31.32 \text{ N} - 29^{\circ} 12' 34.57 \text{ E}$
- (4)  $26^{\circ} 10' 35.11 \text{ N} - 29^{\circ} 12' 34.79 \text{ E}$
- (5)  $26^{\circ} 10' 42.36 \text{ N} - 29^{\circ} 12' 22.60 \text{ E}$
- (6)  $26^{\circ} 10' 42.12 \text{ N} - 29^{\circ} 12' 24.06 \text{ E}$

That the allotment was subsequent to certificate 25.12.22 issued by on Dr.Moloy Bora (Recognised Qualified Person) baring Reg No. DGM/RQP/18/2017, followed by approved mining plan and Environmental Clearance Certificate dated 10.04.23 by SEIAA.

A copy of the certificated dated 25.12.22, approved mining plan dated and Environmental Clearance Certificate dated 10.04.23 by SEIAA is annexed and marked as **ANNEXURE**



SHAH SYED SAMADUR RAHMAN  
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Guwahati, Kamrup  
Regd. No.-KAM.03  
Expiry Date:06-03-2027

Director  
Geology & Mining, Assam  
Kamrup, Chy-19

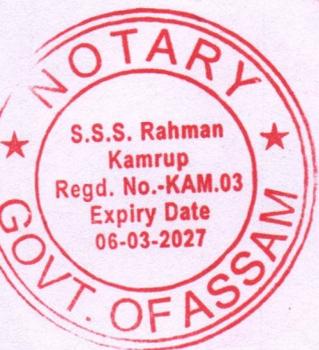
– **I,II** and **III** respectively

4. That the answering deponent begs to state that, only after following all required formalities as required under the law, the site of the sand mahal was handed over to respondent No. 7 (Jugal Bharali) on 28.08.23.

A copy of the declaration of handing over of site is annexed and marked as

**ANNEXURE - IV**

5. That the answering deponent begs to state that, mining plan was approved by the Directorate of Geology and Mining, Assam for Nakhula Beat sand Mining Permit Area No. 3 (Government Land), Bhakatgaon (Area 4.1 Hector) in Morigaon district, Assam for a total of 27,000cm sand for a period of 2 years as per as per Enforcement and Monitoring Guideline for Sand Mining 2020. The river bed mining shall be restricted within the central 3/4<sup>th</sup> width of the river / rivulet or 7.5 meters (inward) from river bank but up to 10 % of the width of the river, as the case may be and decided by the



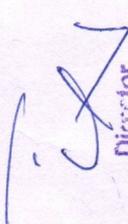
*(Handwritten Signature)*

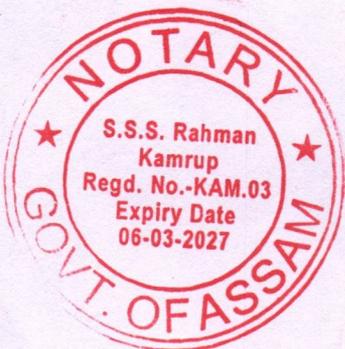
SHAH SYED SAMADUR RAHMAN  
NOTARY  
Guwahati, Kamrup  
Regd. No.-KAM.03  
Expiry Date:06-03-2027

*(Handwritten Signature)*  
Director  
Geology & Mining, Assam  
Kahilipara, Ghy-13

regulatory authority while granting environmental clearance in consultation with the irrigation department, which clearly speaks about mining activity would be done inside the river and away from the active banks keeping a distance of 7.5 meters or 10% of the total width of the river. The mining plan of Nakhula Beat Sand Mining Permit Area No. 3 was approved vide letter No. GM/MM/86-B(40) Pt V/6196-6200 dated 19.01.23 and the zone approved for mining has been demarcated at the centre  $\frac{3}{4}$  of the Kopili River Bed at Nakhula, Morigaon. The distance between the active bank of Kopili river and approved mining zone at the location is 10 meters from each bank i.e 25% of the total width of 80 meters of the river at the location, which is in compliance of the Enforcement and Monitoring Guidelines for Sand Mining, 2020.

That the Directorate of Geology and Mining, Assam also constituted a 2 member team of Senior Geologist to inspect the Nakhula Beat sand Mining Permit Area No. 3 for onsite verification of facts. That report of the 2 member team of Senior

  
Director  
Geology & Mining, Assam  
Kahilipara, Ghy-19



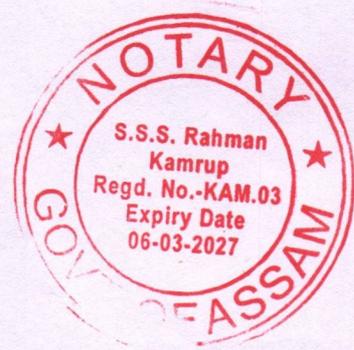
  
SHAH SYED SAMADUR RAHMAN  
NOTARY  
Guwahati, Kamrup  
Regd. No.-KAM.03  
Expiry Date:06-03-2027

Geologist afteronsite visit on 05.10.23 altogether reveals different facts as presently there is no miming going on.

A copy of the letter dated 19.01.23 and 2 member fact finding report are annexed and marked as **ANNEXURE – V** and **VI** respectively.

6. That answering deponent categorically denies the allegations of violation of Guidelines as reported by the Committee constituted by the State Pollution Control Board, which undertook the site inspection in absence of any representation from the office of the Directorate of Geology and Mining, Assam at a different location not allotted to respondent No. 7 (Jugal Bharali)i.eNakhula Beat Sand Mining Permit Area No. 3.That the photographs enclosed itself in the Inspection Report before the Hon'ble National Gren Tribunal writ large that the site visited is Dimoruguri village and Chatabari village of different GPS locations, whereas the respondent No. 7 (Jugal

  
Director  
Geology & Mining, Assam  
Kahilipara, Chy-19



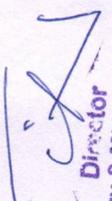
  
SHAH SYED SAMADUR RAHMAN  
NOTARY  
Guwahati, Kamrup  
Regd. No.-KAM.03  
Expiry Date:06-03-2027

Bharali) is allotted Nakhula Beat sand Mining Permit Area No. 3 at a different location.

7. That the answering deponent most respectfully submits that, respondent No. 7 (Jugal Bharali) shall be allowed to operated only within the allotted area of 4.1 hector strictly in compliance law and guidelines within the GPS area mentioned below i.e

- (1)  $26^{\circ} 10' - 33.74 \text{ N}$  -  $92^{\circ} 12' 49.2 \text{ E}$
- (2)  $26^{\circ} 10' 35.12 \text{ N}$  -  $29^{\circ} 12' 48.32 \text{ E}$
- (3)  $26^{\circ} 10' 31.32 \text{ N}$  -  $29^{\circ} 12' 34.57 \text{ E}$
- (4)  $26^{\circ} 10' 35.11 \text{ N}$  -  $29^{\circ} 12' 34.79 \text{ E}$
- (5)  $26^{\circ} 10' 42.36 \text{ N}$  -  $29^{\circ} 12' 22.60 \text{ E}$
- (6)  $26^{\circ} 10' 42.12 \text{ N}$  -  $29^{\circ} 12' 24.06 \text{ E}$

8. That the statements made in paragraph 1 , 2 of this affidavit are true to my knowledge and belief, those made in paragraph 3,4,5,6 and 7 being matters of records which I believe to be true and rest are my humble submission before this Hon'ble Court.

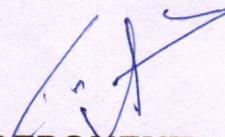
  
Director  
Geology & Mining, Assam  
Kahilipara, Chy-13



  
SHAH SYED SAMADUR RAHMAN  
NOTARY  
Guwahati, Kamrup  
Regd. No.-KAM.03  
Expiry Date:06-03-2027

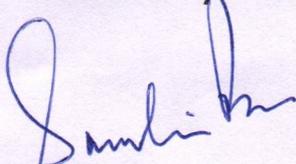
That the declarations made in the above paragraphs are true and it conceals nothing and that no part of it is false, so help me God.

And I sign this affidavit on this the 21<sup>st</sup> day of February 2024 at Guwahati.

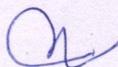
  
**DEPONENT**

Director  
Geology & Mining, Assam  
Kahilipara, Chy-19

Identified by me:

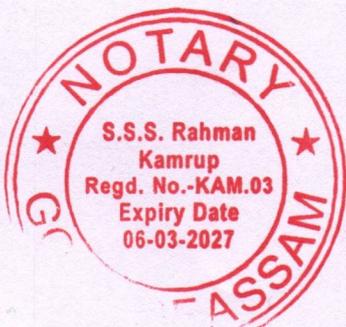
  
Advocate

Solemnly affirmed before me this day, I certify that I read over and explained the contents to the declarant and that the declarant seemed perfectly to understand them.



11  
21-03-2024

SHAH SYED SAMADUR RAHMAN  
NOTARY  
Guwahati, Kamrup  
Regd. No.-KAM.03  
Expiry Date:06-03-2027



# ANNEXURE - I

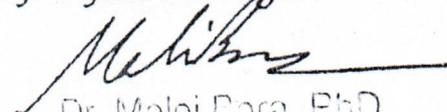
## CERTIFICATE

-9-

This Mining Plan is prepared under the provision of Rule 52 (i) of the Assam Minor Mineral Concession Rules, 2013 in respect of Jugal Bharali, Vill- Barjari, P.O- Barpak, P.S- Jagiroad, District- Morigaon (Assam) for "Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)", Mining Contract Area (Govt. Land), under Nagaon Forest Division, Nagaon, District Nagaon, Assam, for the extraction and transportation to various construction sites. Total land for the proposed Mining Contract Area is 4.10 hectares (area calculated as per GPS Coordinates), and the total proposed quantity of Sand is 27,000 m<sup>3</sup> (Mining Contract Quantity 20,000 m<sup>3</sup>, and Govt. Permit Quantity 7,000 m<sup>3</sup>) for two (2) years. The reserve is located under the jurisdiction of Mayong Revenue Circle and Morigaon Range, Morigaon, of Nagaon Forest Division, Nagaon, Nagaon District, Assam. The project proposal is duly forwarded from Divisional Forest Officer (DFO), Nagaon Forest Division, Nagaon, District of Nagaon, Assam (Letter No. FNGT/B/74 (Part I)/Nakhula Beat SPA No. 3/2022/9453-55, Dated, 17/12/2022) to the Director, Department of Geology and Mining, Dakhingaon, Kahilipara, Guwahati-781019, Assam.

The Applicant/Mining Contract holder shall approach authorities concerned for any other permission, if required, during the process of the Mining Operation.

It is further certified that the information furnished in the Mining Plan is true and correct to the best of my knowledge.

  
Dr. Moloi Bora, PhD  
(Dr. Moloi Bora)

Place: Guwahati,

Date: 25/12/2022,

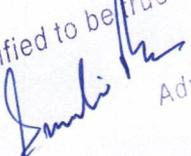
Recognized Qualified Person (RQP),

Regd. no. - DGM/RQP/18/2017

Directorate of Geology and Mining,  
Valid up to: 10-12-2027

Government of Assam, Kahilipara,  
Guwahati-781019

Addresses: House No. 12, Santi Dan Path,  
Rupalim Nagar, Lankeswar, Jalukbari,  
Guwahati- 781014, Assam

Certified to be true copy  
  
Advocate

4097

# MINING PLAN

**NAKHULA BEAT SAND PERMIT AREA NO. 3,**

(Mining Contract Area, Govt. land),

Village- Bhakatgaon/Barjari, P.O- Bhakatgaon, P.S- Jagiroad,

District of Morigaon, Assam

Area allotted: 4.1 hectares (area calculated as per GPS Coordinates)

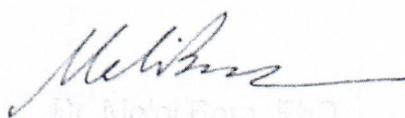
Mining Plan is Approved

  
Joint Director  
Directorate of Geology & Mining, Assam  
Gowhatati-19

Submitted under Rule 52 (1) of the Assam Minor Mineral

Concession Rules, 2013

(Approval from Directorate of Geology & Mining, Assam)



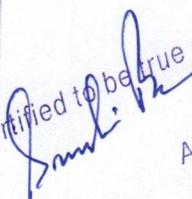
Dr. Mohit Barua, Ph.D.  
Regional Director

**Submitted By:**

Jugal Bharali,

Vill- Barjari, P.O- Barpak, P.S- Jagiroad,

District- Morigaon (Assam)

Certified to be true copy  
  
Advocate

11/11/2023

**DECLARATION BY THE APPLICANT**

This Mining Plan is prepared under the provision of Rule 52 (1) of the Assam Minor Mineral Concession Rules, 2013 in respect of **Sri Jugal Bharali**, Vill- Barjari, P.O- Barpak, P.S- Jagiroad, District- Morigaon (Assam) for "Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)", under Morigaon Range, Morigaon, District- Morigaon (Assam), for the extraction and transportation from Kapili Riverbed Mining Contract Area. The land area is a Govt. Land, for the mining permit period of two (2) years. Total land area for the proposed mining Permit area is 4.10 hectares, and the total proposed quantity is 27,000 Cum (Mining Contract Quantity 20,000 Cum and Govt. Permit Quantity 7,000 Cum). The reserve is located under the jurisdiction of Morigaon Range, Morigaon, District- Morigaon (Assam), of Nagaon Forest Division, Nagaon, District- Nagaon, Assam.

I understand its content and hereby agree to implement the collection work of the Sand in accordance with the prevailing provisions of law.

If any other permission is needed, I shall approach the appropriate authority, before commencement of the extraction work.

*Jugal Bharali*

Place: Morigaon,  
Date: 19/12/2022,

**Sri Jugal Bharali,**  
Vill- Barjari, P.O- Barpak, P.S- Jagiroad,  
District- Morigaon (Assam)  
Contact No.- 8638114576

Certified to be true copy  
*Sankar*  
Advocate

- 12 -

### CONSENT LETTER FROM THE APPLICANT

This Mining Plan is prepared under the provision of Rule 52 (1) of the Assam Minor Mineral Concession Rules, 2013 in respect of **Sri Jugal Bharali**, Vill- Barjari, P.O- Barpak, P.S- Jagiroad, District- Morigaon (Assam) for "Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)", under Morigaon Range, Morigaon, District- Morigaon (Assam), for the extraction and transportation from Kapili Riverbed Mining Contract Area. The land area is a Govt. Land, for the mining permit period of two (2) years. Total land area for the proposed mining Permit area is 4.10 hectares, and the total proposed quantity is 27,000 Cum (Mining Contract Quantity 20,000 Cum and Govt. Permit Quantity 7,000 Cum). The reserve is located under the jurisdiction of Morigaon Range, Morigaon, District- Morigaon (Assam), of Nagaon Forest Division, Nagaon, District- Nagaon, Assam, of Nagaon Forest Division, Nagaon, District- Nagaon, Assam, has been prepared by Dr. Mloi Bora, Santi Dan Path, House no.12, District of Kamrup (M), P.O. Gauhati University, under P.S.- Jalukbari, Lankeswar, Guwahati-781014, Assam, and a RQP with Registration no. DGM/RQP/18/2017 from Directorate of Geology and Mining, Government of Assam, Kahilipara, Guwahati-781019, Assam with validity up to 10-12-2027, on behalf of the undersigned.

I hereby undertake that the Mining Plan so prepared by the said RQP has been made with my knowledge and consent and shall be acceptable and binding on me in all respect.

*Jugal Bharali*

**Sri Jugal Bharali,**

Vill- Barjari, P.O- Barpak, P.S- Jagiroad,  
District- Morigaon (Assam)

Contact No.- 8638114576

Place: Morigaon,  
Date: 19/12/2022,

Certified to be true copy  
*Smiti*  
Advocate

- 13 -

## CERTIFICATE

This Mining Plan is prepared under the provision of Rule 52 (1) of the Assam Minor Mineral Concession Rules, 2013 in respect of Jugal Bharali, Vill- Barjari, P.O- Barpak, P.S- Jagiroad, District- Morigaon (Assam) for "Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)", Mining Contract Area (Govt. Land), under Nagaon Forest Division, Nagaon, District Nagaon, Assam, for the extraction and transportation to various construction sites. Total land for the proposed Mining Contract Area is 4.10 hectares (area calculated as per GPS Coordinates), and the total proposed quantity of Sand is 27,000 m<sup>3</sup> (Mining Contract Quantity 20,000 m<sup>3</sup>, and Govt. Permit Quantity 7,000 m<sup>3</sup>) for two (2) years. The reserve is located under the jurisdiction of Mayong Revenue Circle and Morigaon Range, Morigaon, of Nagaon Forest Division, Nagaon, Nagaon District, Assam. The project proposal is duly forwarded from Divisional Forest Officer (DFO), Nagaon Forest Division, Nagaon, District of Nagaon, Assam (Letter No. FNGT/B/74 (Part I)/Nakhula Beat SPA No. 3/2022/9453-55, Dated, 17/12/2022) to the Director, Department of Geology and Mining, Dakhingaoon, Kahilipara, Guwahati-781019, Assam.

The Applicant/Mining Contract holder shall approach authorities concerned for any other permission, if required, during the process of the Mining Operation.

It is further certified that the information furnished in the Mining Plan is true and correct to the best of my knowledge.

Place: Guwahati,

Date: 25/12/2022,

  
Dr. Moloji Bora, PhD  
(Dr. Moloji Bora) 017

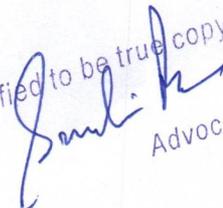
Recognized Qualified Person (RQP),

Regd. no. - DGM/RQP/18/2017

Directorate of Geology and Mining,  
Valid up to: 10-12-2027

Government of Assam, Kahilipara,  
Guwahati-781019

Addresses: House No. 12, Santi Dan Path,  
Rupalim Nagar, Lankeswar, Jalukbari,  
Guwahati- 781014, Assam

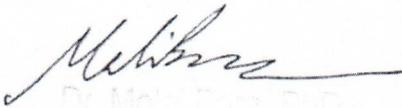
Certified to be true copy  
  
Advocate

-14-

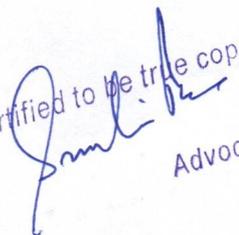
## Particulars of the RQP preparing the Mining Plan:

1.	Name of the RQP	Dr. MOLOI BORA
2.	Address	House Number 12, Santi Dan Path, Rupalim Nagar, Lankeswar, Jalukbari, Guwahati- 781014, Assam
3.	Registration Number and office address	DGM/RQP/18/2017 Directorate of Geology and Mining, Government of Assam, Dakhingaon, Kahilipara, Guwahati-781019
4.	Validity of registration	Up to 10 <sup>th</sup> December 2027
5.	Contact number	9864358767
6.	Email ID	<u>moloibora2006@yahoo.co.in</u>

Mining Plan is Approved

  
Dr. Mohi Bora, D.D.  
Regd. No. W2/10/18/2017

Joint Director  
Directorate of Geology & Mining, Assam  
Kahilipara, Guwahati-19

Certified to be true copy  
  
Advocate



## Mining Plan

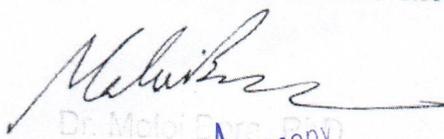
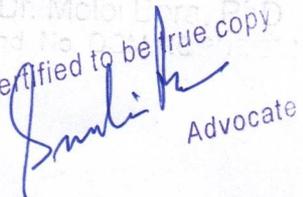
### INTRODUCTION:

This Mining Plan is prepared under the provision of Rule 52 (1) of the Assam Minor Mineral Concession Rules, 2013 in respect of **Jugal Bharali**, Vill-Barjari, P.O- Barpak, P.S- Jagiroad, District- Morigaon (Assam) for "**Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)**", **Mining Contract Area (Govt. Land)**, under Nagaon Forest Division, Nagaon, District Nagaon, Assam, for the extraction and transportation to various construction sites. Total land for the proposed Mining Contract Area is 4.10 hectares (area calculated as per GPS Coordinates), and the total proposed quantity of Sand is 27,000 m<sup>3</sup> (Mining Contract Quantity 20,000 m<sup>3</sup>, and Govt. Permit Quantity 7,000 m<sup>3</sup>) for two (2) years. The reserve is located under the jurisdiction of Mayong Revenue Circle and Morigaon Range, Morigaon, of Nagaon Forest Division, Nagaon, Nagaon District, Assam. The project proposal is duly forwarded from Divisional Forest Officer (DFO), Nagaon Forest Division, Nagaon, District of Nagaon, Assam (**Letter No. FNGT/B/74 (Part I)/Nakhula Beat SPA No. 3/2022/9453-55, Dated, 17/12/2022**) to the Director, Department of Geology and Mining, Dakhingaon, Kahilipara, Guwahati-781019, Assam.

This is a Mining Contract is awarded to **Jugal Bharali**, for extraction of Sand against their contract for a period of two (2) years, as recommended by the Department of Environment & Forest, Government of Assam. The Sand Mahal "**Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)**", Mining Contract area, has been proposing to extract Sand from Kopili Riverbed, located at Morigaon District, Assam, measuring Mining Contract area allotted is 4.10 hectares laying in Village- Morigaon under Morigaon Range, Morigaon of the Nagaon Forest Division, District of Nagaon, Assam.

This Sand quarry will surely meet the partial requirement of the River Sand. The proposed quarry site is under the jurisdiction of Mayong Revenue Circle, Morigaon District, and under Morigaon Range, Morigaon of the Nagaon Forest Division, Nagaon, District of Nagaon, Assam. The proposed site is not within any protected area under Archaeological, Religious, Cultural heritage or Defence establishments. By opening a Sand quarry as proposed, this area will be benefited by generation of employment opportunities to the local people as well as growth of economic activities.

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Dr. Mohd. Durr  
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Advocate

  
Joint Director  
Directorate of Geology & Mining, Assam  
Kahilipara, Guwahati-19

**THE STUDY AREA AND FIELD WORK:**

I have visited the proposed site of jointly with the official group of **Jugal Bharali**, as mentioned above for field work and details Geo-scientific ground investigation on the dated 21<sup>st</sup> December 2022. Based on the fieldwork done, Sketch map, Location Map and Base Map has been prepared from Google Earth Image.

The study area is covered by the **Survey of India Toposheet No. 84 B/4 and 84 B/8** and in 1:50,000 scale (Fig-Base Map and Google Earth Image). The total mining area 4.10 hectare in single block within four (1, 2, 3, 4, 5 & 6) GPS coordinates and are as follows-

1. N=26°10'33.74" E=92°12' 49.02"
2. N=26°10'35.12" E=92°12' 48.32"
3. N=26°10'31.32" E=92°12' 34.57"
4. N=26°10'33.11" E=92°12'34.79"
5. N=26°10'42.38" E=92°12' 22.60"
6. N=26°10'42.12" E=92°12' 24.06"

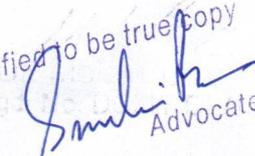
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Directorate of Geology & Mining, Assam  
Kahilpara, Guwahati-19

The present Morigaon district of Assam lies in the Central part of Assam on the southern bank of the Brahmaputra River. The district is bounded by the mighty Brahmaputra on the North, Karbi Anglong district on the South, Nagaon District on the East, and Kamrup District on the West. The district occupies part of the Brahmaputra valley and the mighty river Brahmaputra flows on westerly direction along its northern boundary. The district is drained by several perennial rivers flowing from south to north. Rivers Kalong and Kopili are two most important rivers. The total population as per 2011 Census is 957853, out of which 1,28,075 are farmer families. The density of population is 618/sq. km. The district has total geographical area of 1551 sq. km. out of which 3174.87 hectares occupied by forest. Gross cropped area is 1516.42 hectares and net area sown 92011 hectares.

Physiographically the study area is a Riverbed of Kopili River. The study area of Morigaon district is located on the south bank of the Brahmaputra River. The greater part of the district is an alluvial plain, criss-crossed with numerous rivers and water ways and dotted with many beels and marshes. The mighty Brahmaputra flows along with the northern boundary of the district. Kopili, Kollong and Kapili rivers flow through the southern part of of the district. The Kopili meets the Kapili at the Matiparbat where from Kapili moves westward.

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The Kollong joins Kapili at the Jagi Dui Khuti Mukh and from here they jointly fall into the Brahmaputra.

The general appearance of the district is extremely picturesque. On a clear day in the winter the view to the north is bounded by the blue ranges of the outer Himalayas, behind which snowy peaks glisten brightly in the sun, while to the west and the south of the district lie range upon range of lower hills, whose sides are covered with luxuriant vegetation of the tropical forest. There are three Reserved Forest constituted under Assam Forest Regulation Act, 1891. These are Sunaikuchi, Khulahat, and Bura Mayong. There is also one wildlife Sanctuary, named Pabitara, which is famous for the Indian one horned Rhinoceros.

The Kopili River flow (South to North) through the south-eastern part of the district and fall into the Kopilli River. The Kopili River has a variation of its width, the average width in proposed Mining Contract area is 80 m. So, minable width of the river is central  $80 \text{ m} \times \frac{3}{4} = 60 \text{ m}$  (Fig- Sketch Map).

Geologically, the district comprises two distinct Geological formations. The oldest Archaean rocks comprising Biotile-Hornblende gneisses and schist are intruded by granite with pegmatite veins. The rocks mass forms remnant hills highly weathered and isolated hills among the alluvial sediments as inselbergs. The unconsolidated alluvial sediments occupy a major part of the district. On northern part along the river Brahmaputra, the sediments comprise fine grained nature with occasional gravel beds with pebbles and represent its silty nature. It represents younger alluvial sediments. They comprise sands of various grades with bands of silt and clay along the river Kalong and Kopili representing older alluvial sediments.

The distinct hydro geological set-ups prevail in the Morigaon district – the older alluvium and younger alluvium. The first set up is older alluvium surrounding inselbergs and along the foot hill part on south. It comprises clay, silt, and various grades of sand. The second set up is younger alluvium with freshness in colour and grain size covers major part of the district on north. It consists of sand, fine to coarse grained in texture with intermixed gravels and pebbles along with clay and silt. The depth to ground water level is less than 1 m in the valley portion of Gerua, Lalijan, pakaria and Sonai River in the north-eastern part of the district. This area is chronically waterlogged. In 53 per cent valley side area, the depth to ground water level is 1 – 2 metres. In and around the inselbergs and the upland areas comprising 26 per cent of the district area, the water level is around 2 meters and more. Central Ground Water Board has

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established 13 numbers of National Hydrographic Network Stations to monitor the rise and fall of the water level in the district throughout the year.

The soil of the district is very suitable for production of all seasonal paddy and other Rabi and Horticultural crops. Production of summer paddy, autumn paddy and winter paddy are extremely high. Among the crops, various food crops, fibre crops, pulse, oil seeds, spices, horticultural crops and almost all types of vegetables are produced in the adjoining areas. The soil of the district has been classified based on chemical composition as follows: - 1. Strongly acidic to alkaline, 2. Low to medium content of total soluble salts, 3. Medium to high phosphate, 4. Low to medium inorganic carbon percentage, and 5. Medium to high in Potash content.

The investigated area is accessible only by motorable road (from NH-27), just after crossing Jagiroad Town travelling traveling from Guwahati, Mining Contract area exist and is near to Morigaon Range, Morigaon, District- Morigaon, Assam; and approximate motorable distance is 7.0 Kms from National Highway 27 (new NH-27/Old NH-37).

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Joint Director  
Directorate of Geology & Mining, Assam  
Kahilipara, Guwahati-19

*Dr. Maiti Bora, PhD*  
Repd. No. DG-202/18-2017

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*Jugal Bharali*  
Advocate

## Mining Plan

-20-  
Jugal Bharali

## GENERAL INFORMATION:

## THE APPLICANT:

1.	Name	<b>Jugal Bharali,</b>
2.	Office Address	<b>Jugal Bharali, Vill- Barjari, P.O- Barpak, P.S- Jagiroad, District- Morigaon (Assam)</b>
3.	Site Address	"Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)", Village- Bhakatgaon/Barjari, P.O- Bhakatgaon, P.S- Jagiroad, District- Morigaon, Assam,
4.	Status of Applicant	Proprietorship,
5.	Mineral occurring in the area and its use	Sand to be mined, for extraction and transportation from Nakhula Beat Sand Permit Area No. 3 (Rev. Portion) of Kopili Riverbed to various construction sites.
6.	Name of the quarry	Nakhula Beat Sand Permit Area No. 3 (Rev. Portion),
7.	Quantity recommended for extraction	<b>27,000 Cubic meters Sand m<sup>3</sup> for two (2) years (maximum).</b>
8.	Permit period	Two (2) years,
9.	Forest Range & Division	Morigaon Range, Morigaon & Nagaon Forest Division, Nagaon, District Nagaon, Assam
10.	Survey of India Toposheet number involved	<b>84 B/4 &amp; 84 B/8</b>
11.	Latitude/ Longitude	<b>The GPS Coordinates are as follows-</b> 1. N=26°10'33.74" E=92°12' 49.02" 2. N=26°10'35.12" E=92°12' 48.32" 3. N=26°10'31.32" E=92°12' 34.57" 4. N=26°10'33.11" E=92°12'34.79" 5. N=26°10'42.38" E=92°12' 22.60" 6. N=26°10'42.12" E=92°12' 24.06"
12.	Nearest Railway station	Jagiroad Railway station, Jagiroad, Morigaon District, Assam
13.	Nearest Airport	LGBI Airport, Borjhar, Guwahati, Assam
14.	Nearest Highway	NH 27 (Old NH-37),

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## Mining Plan

## SECTION-A

## LOCATION OF THE PROPOSED CONTRACT AREA:

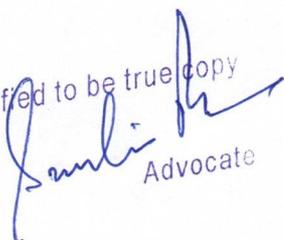
The location of the proposed quarry site is close to NH-27 (Old NH-37), which is about 7 Km away from National Highway-27 (Jagiroad Township) by PWD Road (715A). The road connected with National Highway is a seasonal road. The location map of the proposed mining area has shown in the photographs and Google Earth Image. The proposed site is a Riverbed, under the jurisdiction of Morigaon Range, Morigaon of the Nagaon Forest Division, Nagaon, District of Nagaon, Assam.

1.	Site Address: Village- P.O.- Police Station- District- State-	Nakhula Beat Sand Permit Area No. 3 (Rev. Portion), Bhakatgaon/Barjari, Bhakatgaon, Jagiroad, Morigaon, Assam
2.	Term of the Mining Contract	2 (two) years,
3.	Validity of Mining Contract	2 (two) years,
4.	Total area	4.10 hectares,
5.	Mifiable area	4.10 hectares, area calculated as per GPS Coordinates,
6.	Ownership/Occupancy	Divisional Forest Officer (DFO), Nagaon Forest Division, P.O- Nagaon, P.S- Nagaon, District- Nagaon, Assam.
7.	Land use pattern	The core zone consists of Sand and Clayey Riverbed mainly covered with Sand, Silt, Clay, Earth, Organic materials, etc.



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**GEOLOGY OF THE ALLOTTED AREA:**

**A. REGIONAL GEOLOGY:**

The Assam Plateau lies along the continuation of the Archean's of Bihar and comprises Garo, Khasi, Jayantia Hills and to its North-East is the detached areas of Mikir Hills. The Tertiary rocks are well developed in the North-Eastern and South-Eastern part where they exhibit a complete geological succession of Assam is as follows (Table-1).

Table-1: Regional Geology is based on Miscellaneous Publication No.1 of Directorate of Geology & Mining, Government of Assam

Age	Group	Formation	Description	
Quaternary	Recent	Khadar-newer alluvium	Clay, Sand, Silt, etc.	
	Unconformity			
Tertiary	Pleistocene	Bhanger- Older alluvium	Clay, coarse Sand, Gravel & Boulder	
	Pliocene	Dihing	Dihing	Pebble bed, Sand y Clay, Clay, Conglomerate, and Sandstone
			Dupitila (Surma Vally) & Namsang (Upper Assam)	Sandstone, Mottled clay, Grit, Conglomerate Bed.
	Unconformity			
	Miocene	Tipam	Girujan	Mottled clay, Sand y Shale & Sandstone
			Tipam	Bluish Grey to Greenish Sandstone, Clay, Shale, Conglomerate, etc.
		Surma	Bokabil	Shale, Sand y Shale, Sandstone, etc.
			Bhuban	Alternation of Sandstone, Sand y Shale & Conglomerate
	Unconformity			
	Oligocene	Barail	Tikak Parbat	Banded Sandstone with thick coal seams
Bogolai			Sandstone with numerous thin coal seams, Carbonaceous Shale, Sandstone, etc.	
Karbi Anglong			Thin bedded hard Sandstone with shale.	
Eocene	Disang Jayantia		Dark grey Shale and Sandstone	
		Kopili	Shale and Sandstone, etc.	
		Sylhet Sandstone	Sandstone, Coal, Clay, and Shale	
		Sylhet Limestone	Fossiliferous Limestone	
Unconformity				
Mesozoic	Jurassic	Volcanic	Trap, Basaltic & Doleritic rock	
Unconformity				
Paleozoic	Permian	Gondwana	Singimari	Buff colored fine-grained Sandstone, Shale, Carbonaceous Shale with Coal & Conglomerate, etc.
Unconformity				
Proterozoic	Precambrian	Shillong		Granite, Pegmatite, alternating beds of clay, Quartzite, Phyllite, Basalt, Conglomerate, etc.
Unconformity				
Azoic	Archean	Gneissic		Granite, Pegmatite, Metadolarite, Amphibolite, Biotite, Hornblende, Gneiss, Calc-granulite, Pyroxenite, etc.

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 Advocate

*Jugal Bharali*  
 Joint Director  
 Directorate of Geology & Mining, Assam  
 Kahilpara, Guwahati-781019

**B. GENERAL GEOLOGY OF THE AREA:**

The proposed mining area allotted to Government of Assam, Department of Environment & Forest, Divisional Forest Officer, Nagaon Forest Division, District of Nagaon, Assam. The geology of the proposed mining area is mainly medium to coarse grained Sand, pebbly, in nature (Fig- Field Photographs, Google Earth Image, and Base Map).

**THE ALLOTTED LAND AND THE TYPE OF SAND:**

The total area proposed for grant of Mining Permit to **Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)**, for collection of Sand from Mineable area is 4.10 hectares, it is a Sand Mahal of Kopili River Mining Contract Area. The available mineral of the Mining Contract area i.e., 'SAND' must be extracted following the simple open cast quarrying practice as explained in subsequent chapters.

**PROPERTIES OF THE SAND:**

The Sand available is grey to greyish-brown colour, medium to coarse grained, mixed with medium to coarse Sand cobble, Pebble, and Gravel, clay, soil, and organic materials.

**USES OF THE SAND:**

The minerals so available are useable for filling and construction purposes.

**MINEABLE RESERVE OF THE MINERAL (SAND):**

The Mining Permit proposed to be granted to the applicant, Nakhula Beat Sand Permit Area No. 3 (Rev. Portion), in the Sand Mahal for extraction of Sand manually. As per the **Letter No. FNGT/B/74 (Part I)/Nakhula Beat SPA No. 3/2022/9453-55, Dated, 17/12/2022**, from the Office of the Divisional Forest Officer, Nagaon Forest Division, Nagaon, Nagaon District, Assam to the Director, DGM, Kahilipara, Guwahati-19, Assam. As stated in the chapter at on Mineable Reserve of mineral, the total proposed quantity of Sand is 27,000 m<sup>3</sup> for two (2) years. Considering a maximum depth of three (3) meters allowed for extraction. The proposed area is 4.10 ha in the Kopili Riverbed, Mineable area is 4.10 ha. The reserve calculation of Sand available for extraction can be estimated as stated below-

The calculated mineral reserves of the Mining Contract area to be available for extraction are as stated below. The area of the allotted site = 4.10 hectares (Area calculated as per GPS Coordinates) = 41,000 m<sup>2</sup> (1 hectare area = 10,000 m<sup>2</sup>). The maximum depth allowed for extraction of the mineral is 3 meters. So the total reserve of the minerals available would be-

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$$= 41,000 \text{ m}^2 \times 3 \text{ m} = 123,000 \text{ m}^3$$

The above quantity may be termed as '**Inferred Reserve**' of the mineral and the actual mineral reserve will be less than the inferred reserve as a considerable volume of the minerals will have to be left unmined for preparation of the benches (B1 & B2) as per **Manual opencast mining practice**. This has been explained separately in the later chapters.

The void occurring due to removal of Sand from the riverbed is gradually filled up with sand, silt and earth carried by the river current. This replenishment process is rapid during rainy season because of high gradient, and hence river sediments replenishment factor is roughly 2 of the estimated quantity of the reserve of the mineral (Sand). As there will be accumulation of sand and silt and clay to a considerable extent during the rainy season, can be roughly be assess those 2 times of the estimated quantity of the minerals, i.e.,  $123,000 \text{ m}^3 \times 2 = 2,46,000 \text{ m}^3$

For extraction and transportation of the Sand under the opencast mining method, three numbers of benches each of 1 meter depth and 1.5 meter width may be maintained as indicated in cross section of Mining block along A-B (Fig- Model Scheme of Sand Mining Contract area). Since the total period of the Mining Contract would be for two (2) years, the reserve of Sand available for extraction per year would be  $= (2,46,000 \text{ m}^3 / 2) = 123,000 \text{ m}^3$

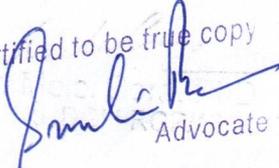
Mining Loss being assumed as 10% during the extraction operation would be  $(123,000 \times 10\%) \text{ m}^3 = 12,300 \text{ m}^3$ , The mineable reserve of Sand per year  $= (123,000 - 12,300) \text{ m}^3 = 110,700 \text{ m}^3$  So, **mineable reserve** of Sand during the awarded Mining Contract period of two (2) years  $= 110,700 \text{ m}^3 \times 2 = 2,21,400 \text{ m}^3$ .

Extraction/collection work of Sand is normally carried out for Eight (8) months in a year. The work remains suspended for the rest four (4) months in a year due to seasonal monsoon rainfall and other related problems. Considering the number of working days, in a month to be 25 days, the total working days in a year would be  $= (25 \times 8) = 200$  days.

So, the extraction of Sand in a year (i.e., for 200 days) would be about  $= (110,700 / 365) \times 200 = 60,657 \text{ m}^3$

Therefore, maximum allowable quantity under the mining contract of Sand in two (2) years is  $60,657 \text{ m}^3 \times 2 = 1,21,314 \text{ m}^3$

The aforesaid quantity of  $60,657 \text{ m}^3$  of Sand per year has been estimated considering extraction up to the maximum permissible depth of 3 metres in the form the ground level/top surface. The mineable reserve of Sand available for extraction per year up to different depth is assessed as shown below-

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 Directorate of Sand  
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<u>Depth</u>	<u>Mineable reserve of Sand available per year (approx.)</u>
3 metres	60,657 m <sup>3</sup>
2 metres	40,438 m <sup>3</sup>
1 metre	20,219 m <sup>3</sup>

However, the Competent Authority may prescribe the quantity of Sand to be extracted by the Mining Contract holder as per the terms and conditions of the Contract considering the impact on the ecology and environment of the surrounding areas.

However, the quantity of Sand allotted for extraction under the Mining Contract will be within the mineable reserve of Sand available per year as depicted above.

**CLIMATE AND RAINFALL:**

The average annual rainfall of the district is 1770 mm out of which monsoon contribution is 83%. The maximum temperature is 29.5°C (average) while minimum temperature is 17.5°C (average). The numbers of rainy days are 24 from May to September. Like the climate of other districts of Assam, the climate of Morigaon district is characterized by a highly humid atmosphere with abundant rains and general coolness. The cold season is from December to February of each year. This follows by the season of thunderstorms from April to June. The southwest monsoon season begins from the month of October. October and November comprise the post monsoon season.

The cold season starts in the district by about the end of November like other districts of Assam. In this period both day and night temperature begin to fall rapidly. January is the coldest month of the year with the mean daily maximum temperature at about 24° c and the mean daily minimum temperature at about 10° c. Temperature begins to rise from about the beginning of March. The atmosphere over the district is highly humid throughout the year. In the period of February to April relative humidity is comparatively low, especially in the afternoon. Skies remain cloudy and over-cast during monsoon season but with the withdrawal of the southwest monsoon, the cloudiness however decreases. Winds are generally light throughout the year. Cyclonic storm and depression move into Assam during May and June from Bay of Bengal. Thus, it affects this district also. Morigaon district has sub-tropical and humid type of climate. The humidity data reveal that the air is humid throughout the year. It has the value of 67 to 79 % during dry period (Table-3, Fig2 & Fig3).

Highest Temperature

Lowest Temperature

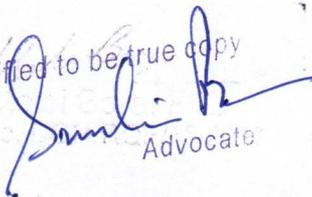
: 38 °C

: 6 °C

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Average Annual Relative Humidity : 70% to 80%  
Average Annual Rainfall : 1770 mm

Table 3: Climate Table/Historical weather Data of Morigaon District, Assam

Temperature/ Rainfall	January	February	March	April	May	June	July	August	September	October	November	December
Avg. Temperature (°C)	17.3	19.5	23.3	26.1	26.7	28.0	28.7	29.2	28.5	26.1	22.4	18.8
Min Temperature (°C)	11.2	13.1	16.6	20.2	22.7	24.7	25.8	25.8	25.2	22	17.3	12.5
Max Temperature (°C)	24.2	26.5	30.1	31.6	32	31.5	32.1	32.2	32	30.5	27.8	24.10
Avg Temperature (°F)	63.6	67.1	73.9	78.8	80.2	82.6	84.0	84.2	83.5	79.2	72.5	65.7
Min Temperature (°F)	51.8	55.0	61.9	68.7	72.9	76.5	78.4	78.4	77.4	71.6	63.1	54.5
Max Temperature (°F)	75.2	79.3	86.2	88.9	87.8	88.7	89.8	90.0	89.6	86.9	82.0	76.8
Precipitation / Rainfall (mm)	12	16	60	141	278	315	313	261	181	100	15	6
Avg Temperature (°C)	17.5	19.5	23.3	26	26.8	28.1	28.9	29	28.6	26.2	22.5	18.7

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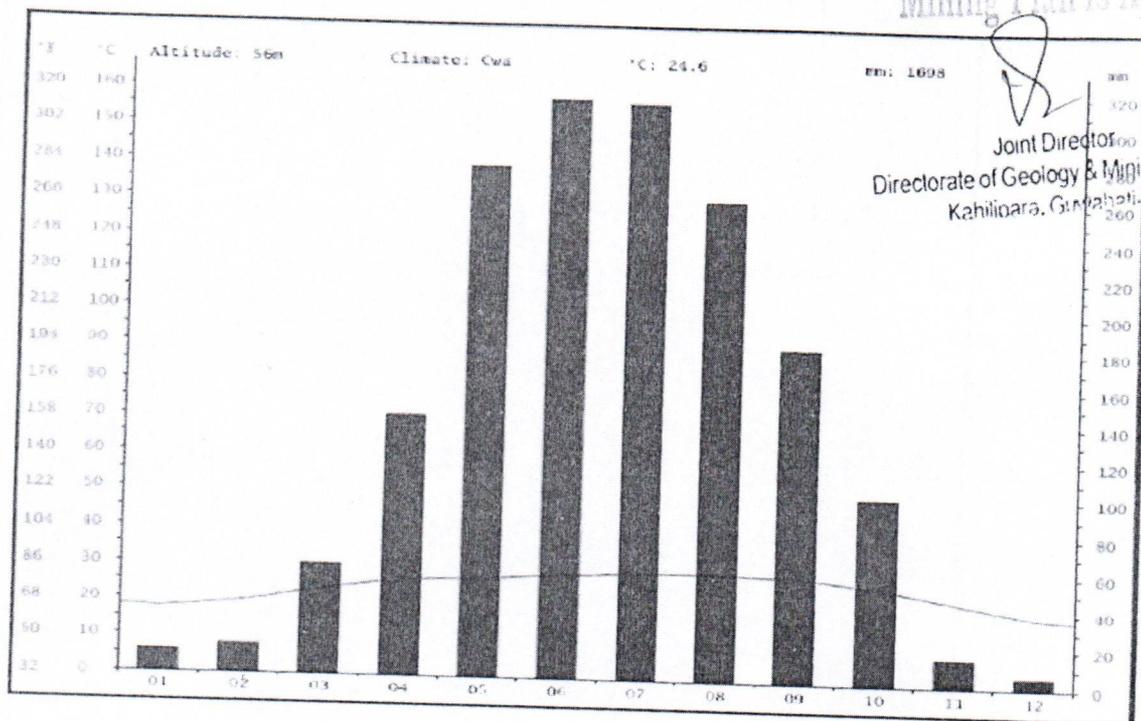


Fig-1: Climate Graph of Morigaon District, Assam

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Advocate

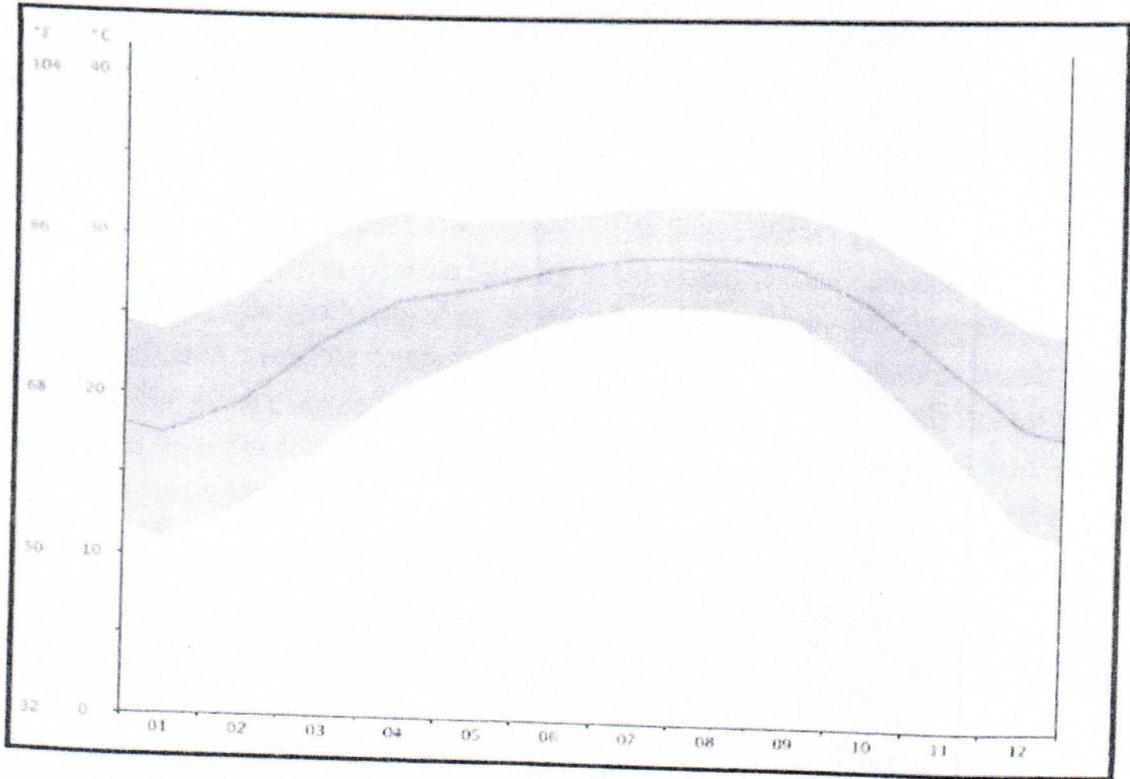


Fig-2: Temperature Graph of Morigaon District, Assam

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## Mining Plan

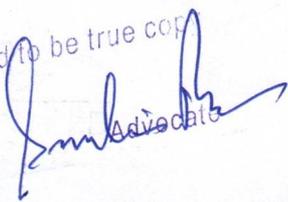
SECTION- B  
MINING:

In order to ensure mineral conservation, systematic mining and protection of environment, the Assam Minor Mineral Concession Rules (AMMCR), 1994 has been replaced by AMMCR, 2013 and it has been made mandatory to prepare Mining Plan and progressive Mine Closure Plan for grant of any mineral concessions like "Mining Lease", "Mining Contract" or "Mining Permit" in respect of minor minerals for systematic and scientific development of all mines, quarries as well as riverbed mining. In the present case, it is proposed to allow the Mining Permit holder to extract Sand from the Kopili Riverbed. The Mining Contract area being a compact deposit of Sand and to extract the same from this deposit, **manual open cast method of mining is suggested**. The holder will adopt the following-

1. The entire boundary of the Mining Contract area will be marked with boundary lines and pillars in all the corner points. The boundary pillars are to be numbered and marked with GPS coordinate there on. Extraction of Sand is to be carried out with a bench height of one (1) meter for the whole area.
2. No mining shall be permissible in an area up to a width specified by the competent authority from the active edges of embankments; as per rule 39 (v) of AMMCR, 2013.
3. There is no cutting of trees, and no blasting is carried out under this Mining Contract.
4. Use of explosives for mining is not advisable, and not related to Riverbed Sand Mining.
5. The Sand extracted and stacked by the Mining Contract holder will not exceed twice the average monthly production.
6. The Kopili River has a variation of its width, the Average width is 80 m, so the Movable width of the river is central  $80 \text{ m} \times \frac{3}{4} = 60 \text{ m}$  (Fig- Sketch Map).
7. A minimum of 500 meters mining restriction on the downstream side from the Bhakatgaon RCC Bridge, near Bhakatgaon village over Kopilli River must be maintain as described in the special conditions for riverbed mining, AMMCR, 2013.
8. The depth of the mining will not any ways exceed three (3) meters at any point, in the Contract area from the top of the unmined surface of riverbed as per rule 39(iii) of AMMCR 2013 (as showing in the Cross Section of Mining Contract area along A-B)
9. After completion of the Bench 1 (B1), minerals are to be extracted up to a depth of 1.0 m and 1.5 m width, similarly Bench 2 (B2) will mined. This will be the final and last bench (B2) because a maximum depth of three (3) metres is allowed from the top level/riverbed as per rule.

Mining Plan is Approved

  
 Joint Director  
 Directorate of Geology & Mining, Assam  
 Kahilipara, Guwahati-19

Certified to be true copy  
  
 Advocate

## Mining Plan

**PRODUCTION OF SAND:**

The Mining Permit proposed to be granted to the applicant, Jugal Bharali, in the Sand Mahal for extraction and transportation manually. as per the **Letter No. FNGT/B/74 (Part I)/Nakhula Beat SPA No. 3/2022/9453-55, Dated, 17/12/2022** from the Office of the Divisional Forest Officer, Nagaon Forest Division, Nagaon District, Assam to the Director, DGM, Kahilipara, Guwahati-19, Assam. As has been estimated and stated in the chapter at on Mineable Reserve of mineral, the total quantity of the Sand available for extraction in a year up to a depth of 3 metres would be 60,657 m<sup>3</sup>, But the proposed quantity is 27,000 m<sup>3</sup> Sand for two (2) years at the rate of 13,500 m<sup>3</sup> per year. Considering total working days in a year for transportation of the Sand as 200 days, maximum daily transportation of the minerals would be =  $13,500 \text{ m}^3 / 200 = 67.5 \text{ m}^3$ , Considering the carrying capacity of the Trucks/Dumpers to be deployed is of 5m<sup>3</sup> average, the total trips to be made by the Trucks/Dumpers would be about =  $67.5 / 5 = 13.5$  **(thirteen to fourteen) trips per day**. The quantity of Sand stated above is an estimated quantity that may be available for extraction considering the extent of the area of the Mining Contract Site. **However, the competent authority shall decide and fix the quantity (daily limit) of Sand to be lifted by the Mining Permit holder as per terms and conditions of the Mining Permit with due emphasis on the impact on environment and ecology of the surrounding areas.**

Mining Plan is Approved

**PROGRESSIVE MINE CLOSURE PLAN:**

The "Assam Minor Mineral Concession Rules 2013" published in March 2013, has made it mandatory to incorporate "Progressive Mine Closure Plan" in the Mining Plan vide Rule 52(5)(VIII) of the said rules. Such a Mine Closure Plan is useful in case of opencast mines or quarries only wherein the question of phased restoration, reclamation and rehabilitation of land affected by mining operation is involved. Here in the present case, mining is to be done for production of Sand from Riverbed. As described earlier, mining of minerals must be carried out by maintaining three numbers of benches up to a maximum depth of 3 metres. Under the provision of Mine Closure Plan, it is essential to undertake phased restoration and reclamation of the void created in the mined-out area. But, in this case, restoration and reclamation of the voids by Sand is not suggested which is not economically viable. The boundary of the area shall have to be planted by suitable plantation for control of erosion as well as will be economically beneficial.

  
Joint Director

 Directorate of Geology & Mining, Assam  
Kahilipara, Guwahati-19

 Certified to be true copy  
  
Advocate

## Mining Plan

## CONCLUSION:

The proposed Mining Permit for Sand covering a minable area is 4.10 ha. to **Jugal Bharali**, Village- Barjari, P.O- Barpak, P.S- Jagiroad, District- Morigaon (Assam), is meant for extraction/collection of Sand from the "Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)", Mining Contract area, within a period of two (2) years. The area is a riverbed and will have mined for Sand in a **manual opencast method of mining** as explained in the previous chapters. The following conclusions are drawn below-

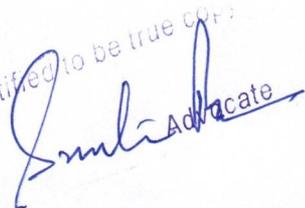
1. The Mining Permit involves collection of Sand from Nakhula Beat Sand Permit Area No. 3 (Rev. Portion), Mining Contract areas, has covers Kopili Riverbed, under Morigaon Range, Morigaon of Nagaon Forest Division, Nagaon, District Nagaon, Assam, **within a period of two (2) years at the rate of  $(27,000 \text{ m}^3/2) = 13,500 \text{ m}^3$  per year for Sand.**
2. There is not any rare, endangered species of flora and fauna found in this area as per record of Forest Department.
3. There is no cutting of trees, and no blasting is carried out under this Mining Permit.
4. Use of any kind of explosives for this Mining Permit is not advisable under this Mining Permit.
5. Adverse impact on the surrounding environment due to mining, extraction and Transportation operation of the Mining Permit will be negligible.
6. A detailed programme for reclamation of the area has been described in the "Progressive Mine Closure Plan" to combat the ecology of the area.
7. The Sand collection from the Sand Mahal would be utilized for Sand manufacturing works only.
8. The operation of the Mining Permit would help in the development of socio-economic scenario of the locality.

Mining Plan is Approved



Joint Director  
Directorate of Geology & Mining, Assam  
Kahilipara, Guwahati-19

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Advocate

Field Photographs:

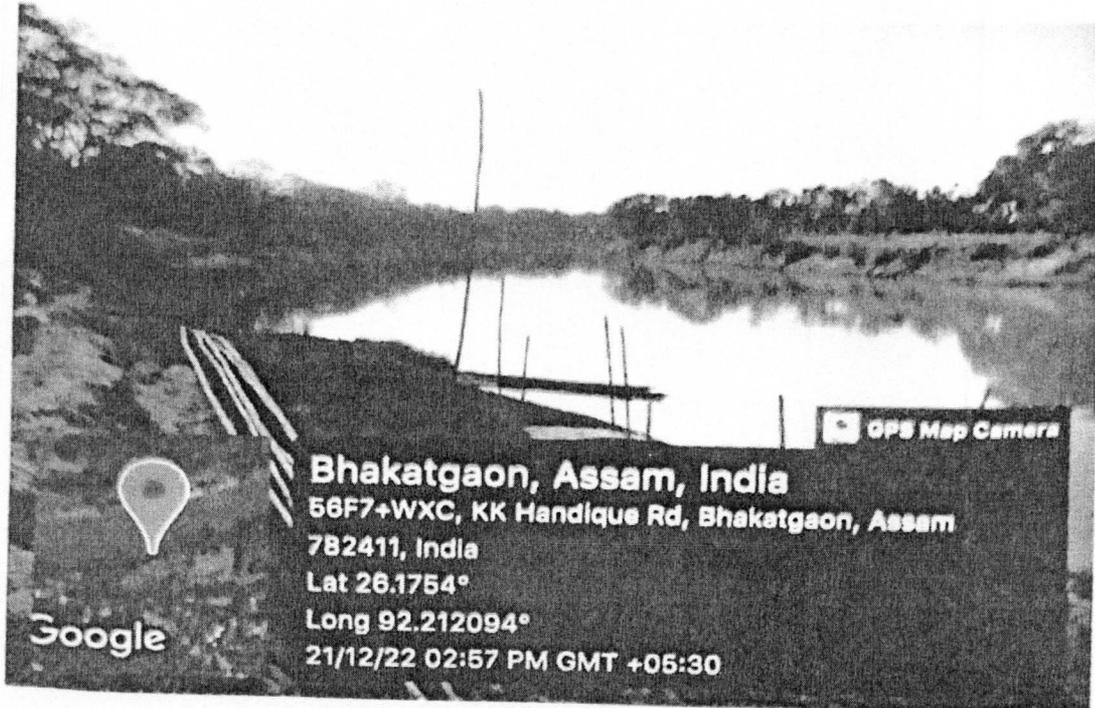
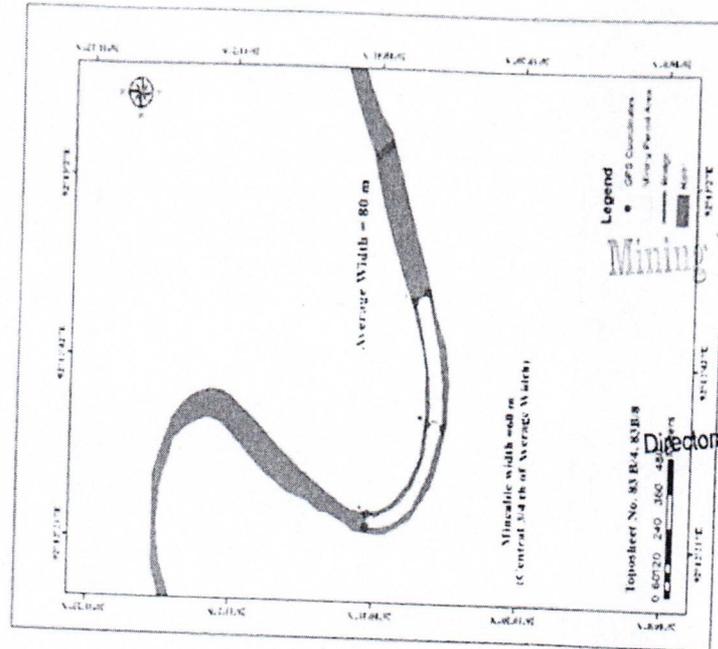
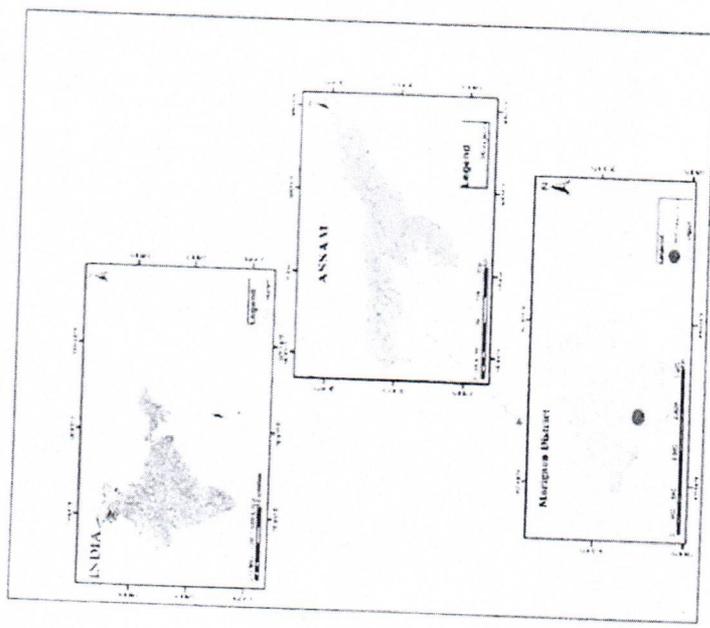


Fig 3: Photographs taken during our field verification, showing a portion of Mining Contract area in the Kopili River during our field visit on 21<sup>st</sup> December 2022, Nakhula Beat Sand Permit Area No. 3 (Rev. Portion), land leased by **Jugal Bharali**, Barjari Village, under the jurisdiction of Morigaon Range, Morigaon of the Nagaon Forest Division, Nagaon, District- Nagaon (Assam).

Certified to be true copy  
*Jugal Bharali*  
 Advocate

Location Map showing Nakhula Beat Sand Permit Area No.3, Morigaon District, Assam



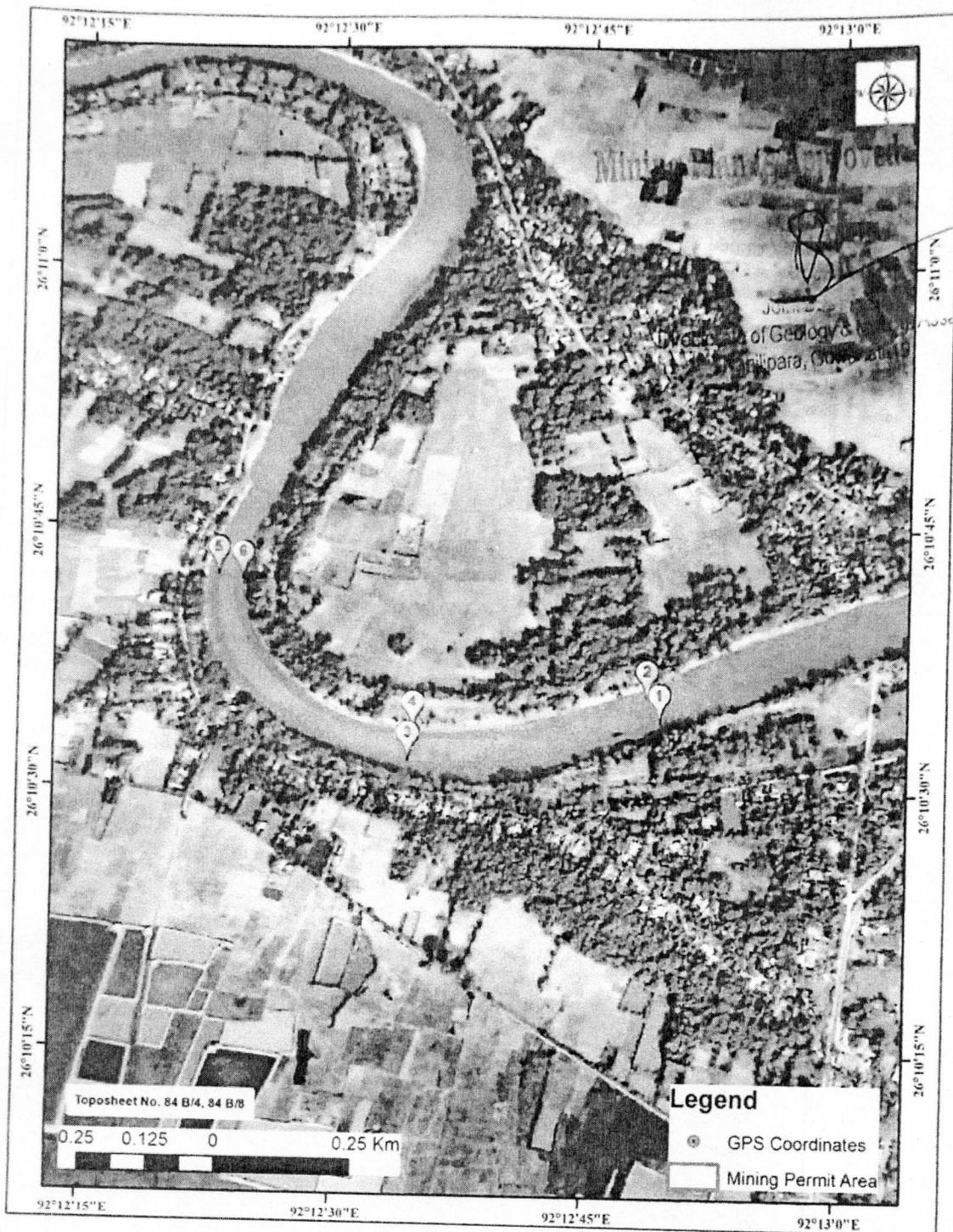
Mining Plan is Approved

*[Signature]*  
 Joint Director  
 Directorate of Geology & Mining, Assam  
 Kahilipara, Guwahati-19

Certified to be true copy  
*[Signature]*  
 Advocate

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### Google Earth Map showing Mining Permit area at Nakhula Beat Sand Permit Area No. 3, Morigaon district,, Assam



Certified to be true copy

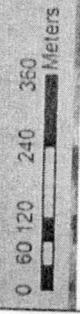
*[Signature]*  
Advocate

# Base Map of Nakhula Beat Sand Permit Area No.5 and its surroundings



**Legend**

- GPS Coordinates
- Roads
- Bridge
- Mining Permit Area
- Paddy Field
- River
- Settlement
- Tree Clad Closed



Mining Plan is Approved  
 Director of Land & Survey  
 Jharkhand, Sunderbani 75

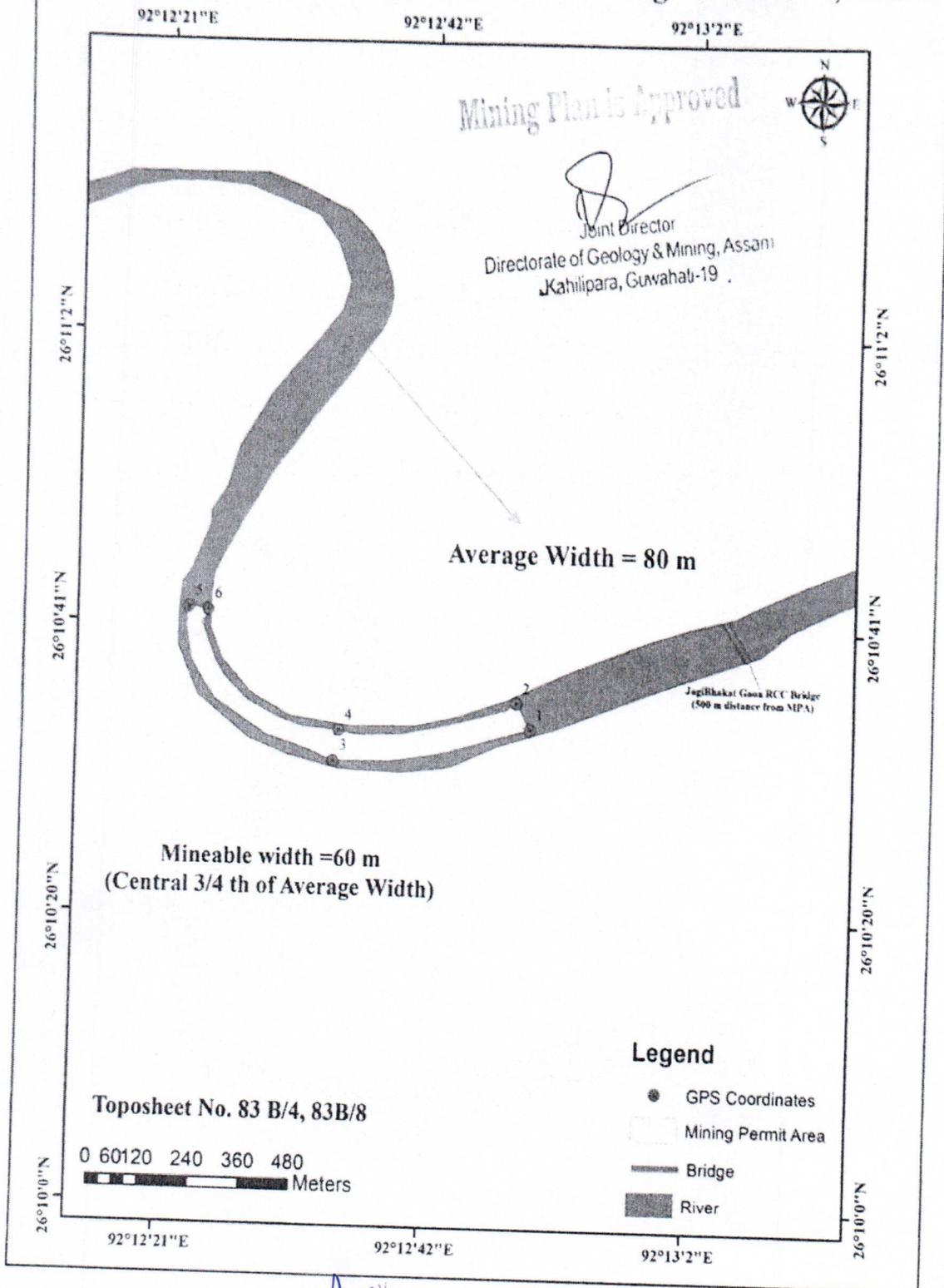
Dr. M. K. Das, P.O.  
 Raed, Jharkhand

Certified to be true copy

*Sanku Advocate*

-35-

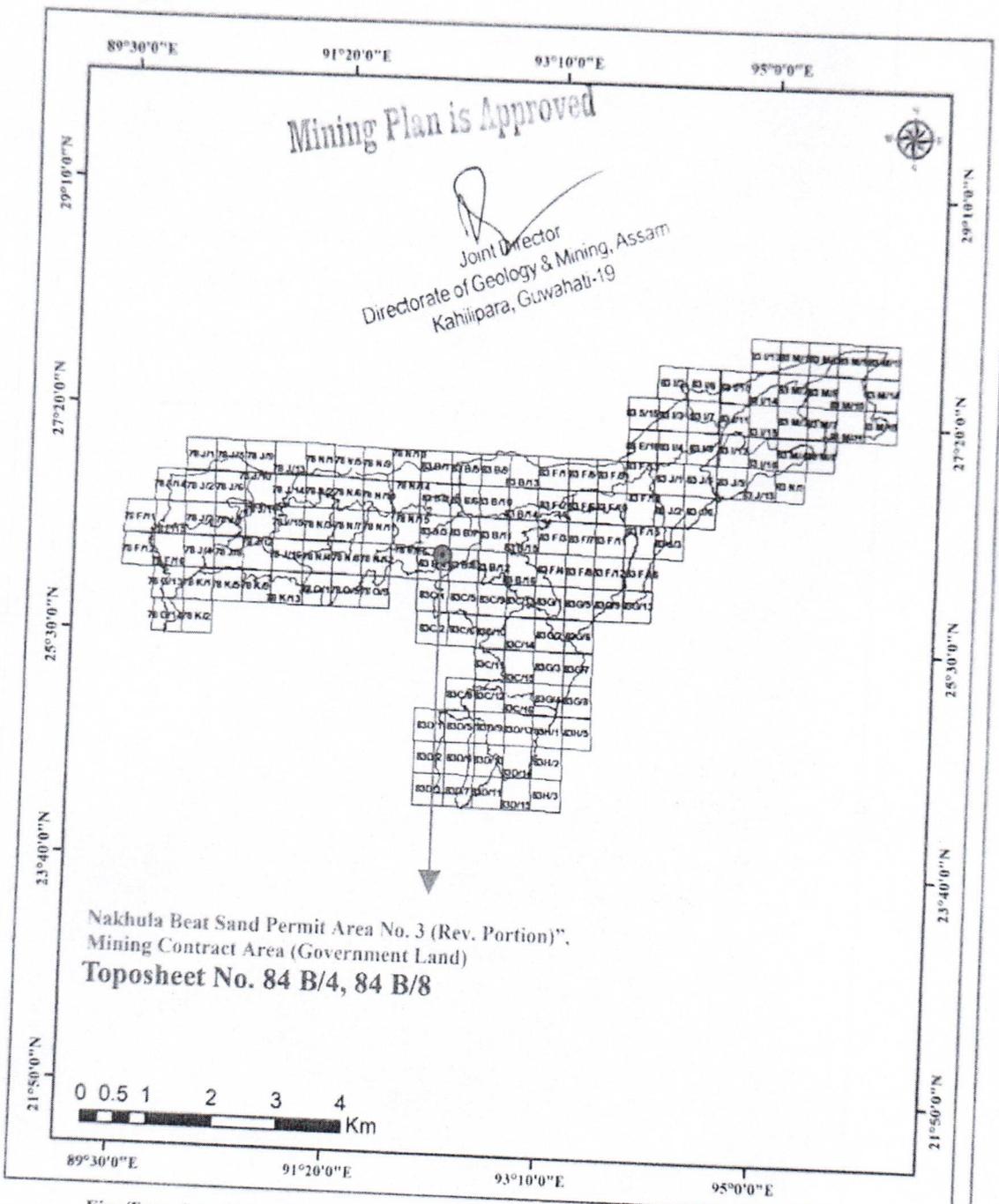
### Sketch Map showing mining contract area at Nakhula Beat Sand permit Area No.3, Morigaon District, Assam



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*[Signature]*  
 Advocate

- 36 -

# Toposheet Index Map of Assam



Mining Plan is Approved

*[Signature]*  
 Joint Director  
 Directorate of Geology & Mining, Assam  
 Kahilipara, Guwahati-19

Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)",  
 Mining Contract Area (Government Land)  
**Toposheet No. 84 B/4, 84 B/8**

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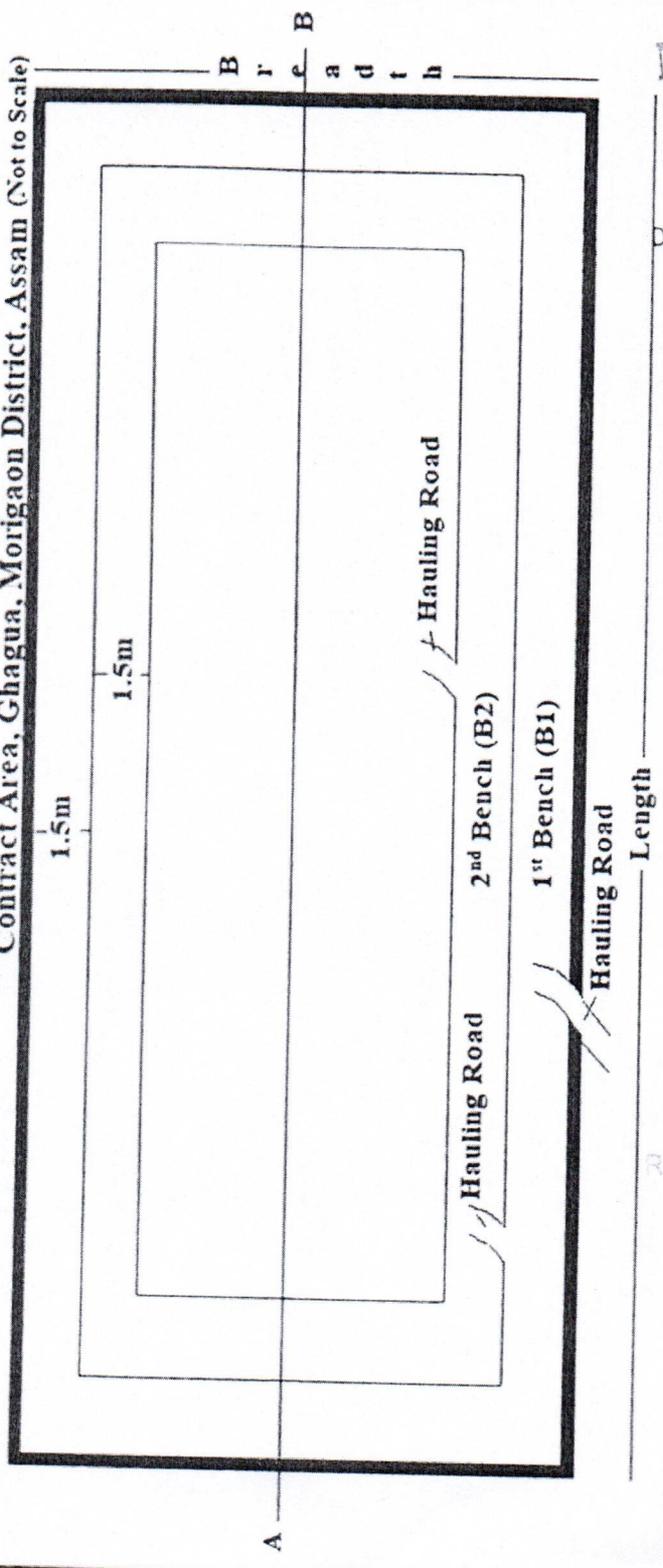
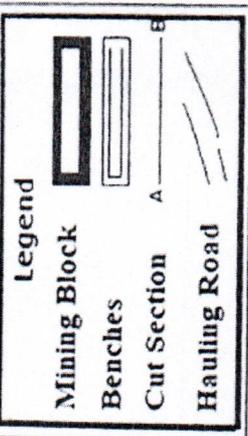
Fig: Toposheet Index Map of Assam Showing Nakhula Beat Sand Permit Area No. 3 (Rev. Portion) of 2022-24", Mining Contract Area (Government Land), Morigaon District, Assam

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*[Signature]*  
 Advocate

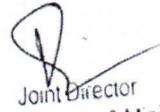
-37-

**Model scheme of extraction of Sand from Nakhula Beat Sand Permit area No.2 of 2022-24 (Rev. Portion), Mining Contract Area, Ghagua, Morigaon District, Assam (Not to Scale)**

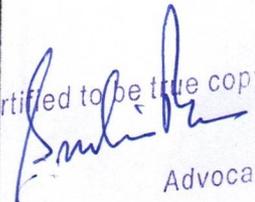
This Mining Plan is prepared in respect of Sri Bihya Ram Bordoloi, Vill. Ghagua, P.O. Morigaon (Ghagua), P.S. Morigaon, District, Morigaon (Assam) for "Nakhula Beat Sand Permit Area No. 2 of 2022-24 (Rev. Portion) of 2022-24 (Rev. Portion)". Mining Contract Area (Government Land) under Nagaon Forest Division, Nagaon, District Nagaon, Assam, for the extraction and transportation to various construction sites. Total land for the proposed Mining Contract is 4.20 hectares (area calculated as per GPS Coordinates), and the total proposed quantity of Sand is 20,000 Cubic meters (m<sup>3</sup>) for two (2) years



*Mining Plan is Approved*

  
 Joint Director  
 Directorate of Geology & Mining, Assam  
 Kahilipara, Guwahati-19

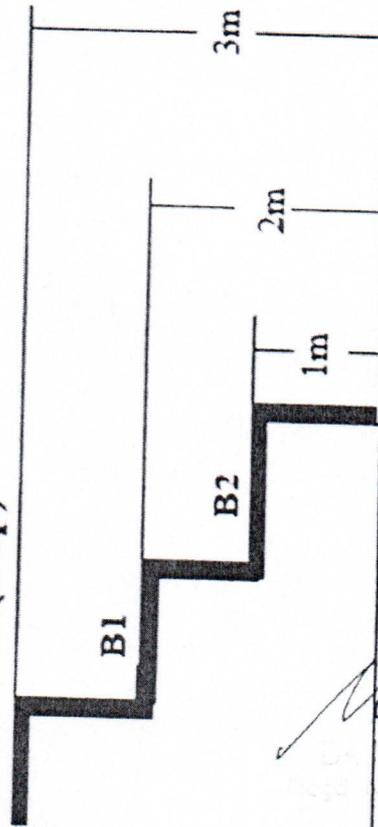
*Mohai Bora*  
 D. Mohai Bora, IAS  
 Reg. No. DGM/PQP/12/17

Certified to be true copy  
  
 Advocate

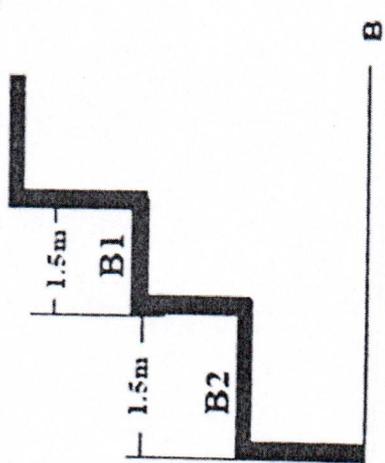
# CROSS-SECTION OF MINING BLOCK ALONG A-B (NOT TO SCALE)

This Mining Plan is prepared in respect of Sri Bidya Ram Bordoloi, Vill- Ghagua, P.O- Morigaon (Ghagua), P.S- Morigaon, District- Morigaon (Assam) for "Nakhula Beat Sand Permit Area No. 2 of 2022-24 (Rev. Portion) of 2022-24 (Rev. Portion)", Mining Contract Area (Government Land), under Nagaon Forest Division, Nagaon, District Nagaon, Assam, for the extraction and transportation to various construction sites. Total land for the proposed Mining Contract is 4.20 ha.

Unmined Bed (Top)



Unmined Bed (Top)



Maximum limit (depth)

Bench Height	1.0 m
Bench Width	1.5 m
Cut Section	A ——— B

Mining Plan is Approved

Joint Director  
Directorate of Geology & Mining, Assam  
Kahilipara, Guwahati-781 009

A Certified to be true copy  
*[Signature]*  
Advocate

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**GOVERNMENT OF ASSAM**  
**DEPARTMENT OF ENVIRONMENT & FORESTS, ASSAM**  
**OFFICE OF THE DIVISIONAL FOREST OFFICER, NAGAON DIVISION NAGAON**  
Phone & Fax No. 03672-233610 Email ID- dfonagaont@gmail.com.

Letter No. FNGT/B/74(Part-I)/Nakhula Beat SPA No.3/2022 9458-55 dt 17/12/2022

To: The Director,  
 Geology & Mining Assam  
 Govt. of Assam, Kahilipara, Guwahati-19.

Subject: Preparation and approval of Mining Plan against Nakhula Beat Sand Permit Area No.3  
 In (Rev. Portion)

Ref: Addl PCC (I) UAZ letter No FGT.24/Nakhula Beat Sand Permit Area No.3  
 (Rev. Portion) of 2022-24 dtd.17/12/2022. And This office Letter No.  
 FNGT/B/74(Part-I)/Nakhula Beat SPA No.3/2022 dtd 17/12/2022.

Sir,

With reference to the subject cited above, I am to request you to kindly prepare a Mining Plan against **Nakhula Beat Sand Permit Area No.3** (Rev. Portion) in favour of Jugal Bharali Contract holder of Mining Contract Area for two years. The relevant GPS coordinates, maps and Schedule A of the proposed area are enclosed for favour of you needful action.

It is to be mentioned here that, as per our field assessment, the quantity of minor mineral found is **Total = 27,000m<sup>3</sup>** (Mining contract quantity 20,000m<sup>3</sup> and Govt. permit quantity 7,000m<sup>3</sup>) But I would like to request your honour at the preparation of mining plan, the actual field verification quantity may be given as per rule. So that actual quantity of minor mineral could be extracted.

This is for favour of your kind information and necessary action.  
 Enclose:- As stated above.

Yours Faithfully

*[Signature]*  
 17/12/2022

(B.Deka, AFS)  
 Divisional Forest Officer,  
 Nagaon Division, Nagaon

Copy forwarded for information and necessary action to:-

1. The Range Officer, Morigaon Range, Morigaon for information.
2. Sri Jugal Bharali, Vill- Barjari, P.O- Barpak, P.S- Jagiroad, Dist.- Morigaon (Assam) for information and necessary action. He is requested to pursued on the matter and arrange for submission of Mining Plan at the earliest.

(B.Deka, AFS)  
 Divisional Forest Officer,  
 Nagaon Division, Nagaon

Contd. ... 2

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*[Signature]*  
 Advocate

- 40 -

Memo No. FNGI/A/74(Part-I)/Nakhula Beat SPA No.3/2022/4163-65

Date: 17/12/2022

Copy to:-

1. The Principal Chief Conservator of Forests and Head of Forest Force, Assam, Assam, Panabari, Guwahati for his kind information and necessary action.
2. The Addl. Principal Chief Conservator of Forests (I) Upper Assam Zone, Jorhat-1 for his kind information and necessary action.
3. The Conservator of Forests, Northern Assam Circle, Tezpur for information for his kind information and necessary action.

(B Deka, AFS)  
Divisional Forest Officer,  
Nagaon Division, Nagaon

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Advocate

-41-

SCHEDULE- A.

**Details information of the Nakhula Beat Sand Permit Area No.3  
in (Rev. Portion), under Morigaon Range, Morigaon of the  
Nagaon Forest Division, Nagaon.**

- |   |  |
|---|--|
| 1. Name of Mineral Concession Area                              | Nakhula Beat Sand Permit Area No.3.<br>(Rev. Portion)                          |
| 2. Name of User agency  | : Jugal Bharali, Vill- Barjari, P.O- Barpak,<br>P.S- Jagiroad, Dist- Morigaon. |
| 3. Area in Hect. Bigha  | 4.10 hect.   |
| 4. Stipulated Quantity of<br>Minor Minerals in contract<br>Area | 270000 m <sup>3</sup> of Sand. (Our Field assessment<br>Only)                  |
| 5. Mining Contract quantity                                     | : 20,000m <sup>3</sup>   |
| 6. Gov. Permit quantity   | : 7,000m <sup>3</sup>  |

Boundary Description	Sl. No	GPS Co- ordinates
North- NH-37. South-Killing River & Nakhula Beat Sand Permit Area No.1. East- Palahguri Village. West- Debarghat Village.	1	N = 26°10'33.74" E = 092°12'49.02"
	2	N = 26°10'35.12" E = 092°12'48.32"
	3	N = 26°10'31.32" E = 092°12'34.57"
	4	
		N = 26°10'33.11" E = 092°12'34.79"
		5 N = 26°10'42.38" E = 092°12'22.60"
	6 N = 26°10'42.12" E = 092°12'24.06"	

Submitted,

17/12/2022

(B. Deka, AFS)  
Divisional Forest Officer,  
Nagaon Division, Nagaon

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Advocate

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**Schedule A**  
**"Information Memorandum"**

1. Name of the Mineral Concession Area: Nakhula Beat Sand Permit Area No.3(Revenue Portion) of 2022-24.
2. Status of Land: **Non-Forest**
3. Grant of Mining Contract for collection of Sand in the mining area.
  - (a) Area and Estimated Reserves = **4.10 Ha with 27000 cu.m sand.**
  - (b) Mahal quantity = 20,000m<sup>3</sup>
  - (c) Stipulated quantity in Govt. Permit= 7,000 m<sup>3</sup> of Stone.
  - (d) Total Quantity= **27,000m<sup>3</sup>.**
  - (e) Period of Lease Contract = **2 years from date of possession.**
  - (f) Reserve Price: **Rs. 37,40,000.00 (Rs. Thirty seven Lakhs forty thousand) only.**
  - (g) Earnest Money  
10% on reserve price, i.e., **Rs 3,74,000.00**(Rs. Three lakhs seventy four thousand only).However, 50% of this amount if bidder is an individual and belongs to S.T/S.C/OBC, i.e.,**Rs. 1,87,000.00**(Rupee One lakh eighty seven thousand only).
  - (h) G.P.S Coordinates of the corners of mine area: The boundary pillars shall be installed on site by the successful bidder at these and other intermediate locations, as per the directions of competent authority, before start of mining operation.

**North- NH-37.**

**South-Killing River &Nakhula Beat Sand Permit Area No.1.**

**East- Palahguri Village.**

**West- Debarghat Village.**

SL No	Ha	LAT/LONG
1	4.10	N = 26°10'33.74" E = 092°12'49.02"
2		N = 26°10'35.12" E = 092°12'48.32"
3		N = 26°10'31.32" E = 092°12'34.57"
4		N = 26°10'33.11" E = 092°12'34.79"
5		N = 26°10'42.38" E = 092°12'22.60"
6		N = 26°10'42.12" E = 092°12'24.06"

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*[Signature]*  
Advocate

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(i) Google Earth image of the Mineral Concession Area-



(j) Representative photograph of the mineral concession area-



Certified to be true copy  
*Janti*  
Advocate

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## (k) Applicable Clearances:

- No Objection Certificate from Deputy Commissioner in case of Mineral concession Area is Revenue land (non-forest land): Existing Mining Area
- Mining will be prepared by successful bidder after LoI.
- The successful highest bidder shall have to obtain Environment Clearance from the SEIAA, Govt. of Assam after prepared Mining Plan. Terms and condition as per AMMC Rules 2013.
- In case of Mineral concession Area is a Forest land, the Forest Clearance to be obtained under Forest Conservation Act, 1980 from the Ministry of Env., Forests & Climate Change, Govt. of India by Successful Bidder shall be transferred to him on payment of Net Present Value-Rs..... Cost of Compensatory Afforestation -Rs. .... Overhead cost-Rs..... etc.(Total Rs.....)

(l) Quota for Govt permits: Excess of Mining Plan Quantity over the bid quantity in case of Contract and Permit. However, for lease, maximum quota for govt. works as specified by the competent authority.

17/12/2022  
 DIVISIONAL FOREST OFFICER,  
 NAGAON DIVISION, NAGAON

Certified to be true copy  
 Advocate

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## GOVERNMENT OF ASSAM

## DEPARTMENT OF ENVIRONMENT &amp; FORESTS, ASSAM

## OFFICE OF THE DIVISIONAL FOREST OFFICER, NAGAON DIVISION NAGAON

Phone &amp; Fax No. 03672-233610

Email ID- dfonagaont@gmail.com.

Letter No. FNGI/B 74 (Part- I) Nakhula Beat SPA No. 3 2022 3493-49 Dated- 17/12/2022

To,

Sri Jugal Bharali,  
Vill - Barjari,  
P.O. - Barpak, P. S. - Jagiroad,  
Dist - Morigaon (Assam).

Subject: Provisional letter of Intent (LoI) Granting Mining Permit to allow Minor Mineral in respect of the Mining Area- Nakhula Beat Sand Permit Area No. 3 of 2022-24 (Rev. Portion).

Reference: The Addl. P. C. C. F (T), UAZ, Assam vide Memo No. FGT. 24/Nakhula Beat Sand Permit Area No. 3 (Rev. portion) of 2022-24, dttd. 17/12/2022.

Subject to the appeal provision and other provisions of the Assam Minor Mineral concession Rules, 2013 and other applicable laws, and on approval received from the Addl. Principal Chief Conservator of Forests (T), Upper Assam Zone, Jorhat-1, of your bid amount of **Rs. 41,10,000/- (Rupees Forty one lakhs ten thousand)** only, for Mining of **20,000 m<sup>3</sup>** of Sand for a period of **2 (Two) years** from "Nakhula Beat Sand Permit Area No. 3" of 2022-24 (Rev. Portion) under Morigaon Range, Morigaon of the Nagaon Forest Division, you are requested to **deposit the following amount within 15 (Fifteen) days from the date of issue of this provisional letter of Intent (LoI) and obtain an approved Mining Plan/Pre-feasibility report and Form I M along with FIA Clearance from the competent authority within 45 (Forty Five) days for signing of Permit Agreement in FORM- MPS- I, as per provisions of AMMC Rule's 2013. An additional amount 10% on bid value has to be deposited towards "Mines-Minerals, Rehabilitation Dev. & Restoration Fund" & 10% District Mineral Foundation (DMF), Nagaon on the actual royalty at the time of depositing the kist money. Failing to comply with the above directions within the stipulated period, the provisional letter of Intent (LoI) will be cancelled without assigning any reason.**

Details of Deposit:-

(a) 25% of annual dead rent as security deposit on bid value	= Rs.	5,13,750/-
(b) An additional amount equal 1 month's dead rent on bid value	= Rs.	1,71,250/-
<b>Total</b>	<b>= Rs.</b>	<b>6,85,000/-</b>

(Rupees Six Lakhs eighty five thousand) only.

(The amount to be deposited through Online Revenue Collection System.

17/12/2022  
Divisional Forest Officer,  
Nagaon Division, Nagaon

Contd...2

Certified to be true copy  
Advocate

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Copy along with the required documents i.e. GPS Co-ordinates, Google Map (Schedule- A) forwarded to:-

1. The Director, Directorate of Geology & Mining Assam, Kahilipara, Guwahati- 19, for favour of kind information and necessary action, with a request to accord necessary approval of the Mining Plan, along with Pre-feasibility report & Form I M at an early date.

17/12/2022  
 Divisional Forest Officer,  
 Nagaon Division, Nagaon

Memo No. FNGT A 74 (Part- I) Nakhula Beat SPA No. 3/2022 4195-50  
 Copy forwarded for favour of kind information and necessary action to:-

Dated- 17/12/2022

1. The Principal Chief Conservator of Forests & Head of Forest Force, Assam, Panjabari, Guwahati- 37
2. The Addl. Principal Chief Conservator of Forests (I), Upper Assam Zone, Panjabari, Jorhat- 1.
3. The Conservator of Forests, Northern Assam Circle, Tezpur, Assam.

17/12/2022  
 Divisional Forest Officer,  
 Nagaon Division, Nagaon

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 Advocate

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भारत सरकार  
Government of India

Download Date: 10/11/2020



Jugal Bharali  
Date of Birth/DOB: 28/12/1981  
Male/ MALE

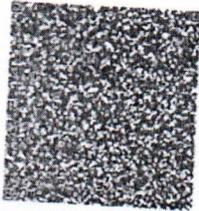
Issue Date: 08/10/2020

9421 2612 8426  
VID : 9144 5217 9249 6599

मेरा आधार, मेरी पहचान

भारतीय विलिफ्ट पहचान प्राधिकरण  
Unique Identification Authority of India

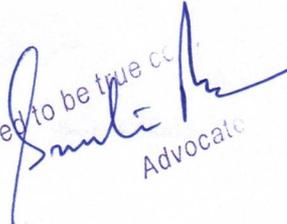
Address:  
C/O: Hem Chandra Bharali, KHANAJAN,  
Borjari No.1, Marigaon,  
Assam - 782411



9421 2612 8426  
VID : 9144 5217 9249 6599

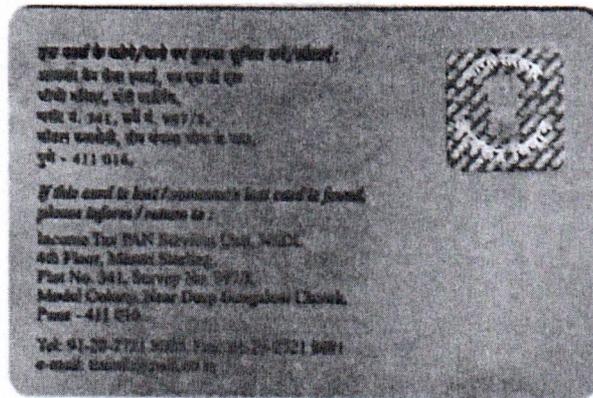
1847 | help@uidai.gov.in | www.uidai.gov.in

Jugal Bharali.

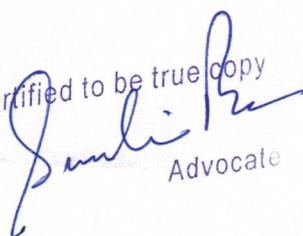
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 Advocate



-49-



Jugal Bharali

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 Advocate

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## FORM-A

INFORMATION REQUIRED FOR THE MINING PLAN

1. Name of the Applicant: Sri Jugal Bharali,
2. Address: Village- Barjari,  
P.O.- Barpak,  
P.S- Jagiroad,  
District: Morigaon, Assam  
PIN:782411  
Phone Number: 8638114576
3. Site Address: "Nakhula Beat Sand Permit Area No. 3 (Rev. Portion)", Mining Contract Areas,  
Village: Bhakatgaon to Barjari,  
PO: Bhakatgaon,  
PS: Jagiroad,  
District: Morigaon (Assam)
4. Class of Land: R.F./U.S.F./Rev. Land: Govt. Land,  
Name of the Revenue Circle: Mayong,  
Name of the Forest Range: Morigaon Range,  
Name of the Forest Division: Nagaon Division, Nagaon,  
District: Morigaon (Assam)
5. Mineral to be Mined: Sand,
6. Recommended Quantity: 27,000 Cum (m<sup>3</sup>) for two (2) years.
7. Total area: 4.10 Ha,
8. Nature of Settlement: Contract,
9. Location: Sketch map showing main roads, approach roads and description of nearby areas with the names of villages and other features etc.

Date: 19/12/2022

Jugal Bharali

Signature of the Applicant

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Advocate



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**CHALLAN**  
TR Form -5(a)



GRN	AS00464163920223E	BARCODE	[Barcode]		Date	02/01/2023-19:37:53	Form ID	
Department	Geology and Mining		Payer Details					
Type of Payment	Non-ferrous Mining and Metallurgical Industries102		TAX ID (if Any)					
Office Name	DIRECTORATE OF GEOLOGY and MINING		PAN No.(if Applicable)					
Location	Kamrup Metro		Full Name	MOLOI BORA				
Year	2022-2023 One Time		Flat/Block No.					
Account Head Details			Amount In Rs.	Premises/Building				
0853-00-102-7079-000	Approval Of Mining Plan		5000.00	Road/Street				
				Area/Locality				
				Town/City/District				
				PIN				
				Remarks (If Any)				
				Nakhula Beat Sand Permit Area No 3 Revenue Portion Mining Contract				
				Area Jugal Bharali Village Barjari Barpak Jagiroad District Morigaon Assam				
				Amount In				
Total			5,000.00	Words				
				Five Thousand Rupees Only				
Payment Details	STATE BANK OF INDIA		FOR USE IN RECEIVING BANK					
Cheque/DD Details			Bank CIN	Ref. No.	00030302023020194799	IK0CAUZFV4		
Cheque/DD No.			Bank Date	RBI Date	02/01/2023 19:39:06	Not Verified with RBI		
Name of Bank			Bank-Branch	STATE BANK OF INDIA				
Name of Branch			Scroll No. . Date	Not Verified with Scroll				
Department ID			Mobile No. : 9435355907					

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 Advocate

ENVIRONMENTAL  
CLEARANCE

Government of India  
Ministry of Environment, Forest and Climate Change  
(Issued by the State Environment Impact Assessment  
Authority (SEIAA), ASSAM)

To,

The -1  
JUGAL BHARALI  
Vill. Barjari, P. O. Barpak, P.S. Jagiroad -782411

**Subject:** Grant of Environmental Clearance (EC) to the proposed Project Activity under the provision of EIA Notification 2006-regarding

Sir/Madam,

This is in reference to your application for Environmental Clearance (EC) in respect of project submitted to the SEIAA vide proposal number SIA/AS/MIN/425258/2023 dated 07 Apr 2023. The particulars of the environmental clearance granted to the project are as below.

1. EC Identification No.	EC23B001AS131863
2. File No.	SEIAA. 3443/2023
3. Project Type	New
4. Category	B
5. Project/Activity including Schedule No.	1(a) Mining of minerals
6. Name of Project	Nakhula Beat Sand Permit Area No. 3
7. Name of Company/Organization	JUGAL BHARALI
8. Location of Project	ASSAM
9. TOR Date	N/A

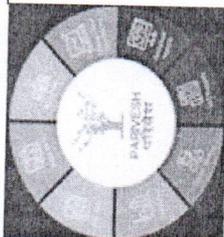
The project details along with terms and conditions are appended herewith from page no 2 onwards.

Date: 23/06/2023

(e-signed)  
Indreswar Kalita  
Member Secretary  
SEIAA - (ASSAM)

*Note: A valid environmental clearance shall be one that has EC identification number & E-Sign generated from PARIVESH. Please quote identification number in all future correspondence.*

*This is a computer generated cover page.*



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This has reference to your application for Prior Environmental Clearance **proposal no. SIA/AS/MIN/425258/2023 dated 07/04/2023** along with Form-1, Mining Plan, D.F.O. letter, Google map with G.P.S. Co-ordinates and other relevant documents for Collection of Sand from "Nakhula Beat Sand Permit Area No. 3" under Nagaon Forest Division, Dist. Nagaon, Assam.

**The quantity Sand to be collected is:**

**Sand:** 27,000cu.m. (Twenty Seven Thousand) within a period of 2 (Two) years @ 13,500c.m. (Thirteen Thousand Five Hundred) only for per year.

**Allotted Area:** 4.1 Ha.

The Sand and Gravel shall be extracted from the area of the GPS Co-ordinates mentioned below as per mining plan:

<u>Longitude (East)</u>	<u>Latitude (North)</u>
1. E- 92°12'49.02"	N- 26°10'33.74"
2. E- 92°12'48.32"	N- 26°10'35.12"
3. E- 92°12'34.57"	N- 26°10'31.32"
4. E- 92°12'34.79"	N- 26°10'33.11"
5. E- 92°12'22.60"	N- 26°10'42.38"
6. E- 92°12'24.06"	N- 26°10'42.12"

**The Sand and Gravel shall be extracted manual (as per Mining Plan)** from "Nakhula Beat Sand Permit Area No. 3" under Nagaon Forest Division, Dist. Nagaon, Assam.

The proposal was examined and processed in accordance with EIA Notification 2006 and its amendment thereof. The State Level Expert Appraisal Committee (SEAC), Assam examined the documents of the proposal for Collection of Sand and Gravel at its meeting held on 03/06/2023. Accordingly the application was discussed and thoroughly scrutinized by the SEAC and found that the project falls under 1(a) and considered as B<sub>2</sub>Category of EIA Notification 2006 and subsequent amendments. The Committee recommended the project to the SEIAA, Assam for issuance of Environmental Clearance.

Based on the recommendation of the SEAC, the State Environment Impact Assessment Authority, Assam (SEIAA) considered the proposal in its meeting held on 16/06/2023 and accords Prior Environmental Clearance to the project as mentioned above under the provision of EIA notification 2006 and its subsequent amendments issued under Environment Protection Act 1986 subject to compliance of following specific and general conditions.

**The operational area must be confined to the given 4.1 Ha proposed area bound by the coordinates mentioned above and there shall not be any other area of extraction contiguous to this. The project proponent is to submit a declaration in writing to this effect before commencement of the work.**

**I. Specific Conditions**

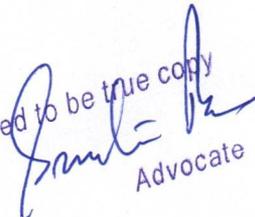
1. The legal status of the mining area remains unchanged.

Member Secretary  
SEIAA, Assam

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Advocate

2. The lease holder shall undertake adequate safeguard during extraction of Sand and Gravel and ensure that due to this activity, the hydro geological and ecological regime of the surrounding area shall not be affected. Regular monitoring of ground water level and quality shall be carried out around the mine lease area during the mining operation. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.
3. Manual (*as per Mining Plan*) low impact extraction of Sand and Gravel shall be undertaken.
4. Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter as at loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard. The status of implementation of measures taken shall be reported to SEIAA and work shall be completed before the start of mining.
5. Quarrying shall be restricted within the area as per GPS Co-ordinates mentioned above.
6. There shall be stockyard to stock mining material outside the quarry site. Parking shall not be made on public road.
7. The following measures are to be further implemented to reduce air pollution during transportation of mineral:
  - i. Roads shall be graded to mitigate the dust emission.
  - ii. Over filling of tippers and consequent spillage on the roads shall be avoided.
8. Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010 issued by the MoEF, Govt. of India.
9. Mining shall be limited to day time only.
10. No mining shall be carried out in the safety zone of any bridge and / or embankment.
11. No mining shall be carried out in the vicinity of natural / manmade archaeological sites.
12. No wildlife habitat will be disturbed and also aquatic Flora & Fauna of the river.
13. Green belt development shall be carried out in 20% of total mine area either on river bank or along road side considering CPCB guidelines with native tree species in the mining area.
14. User agency shall not make any fresh approach road over any part of the forest land but may use existing forest road only.
15. Transport of materials shall be done by covering the trucks/tractors with tarpaulin or other suitable mechanism so that no spillage of mineral/dust takes place.
16. Appropriate mitigation measures shall be taken to prevent any kind of pollution. It shall be ensured that there is no leakage of oil and grease from the vehicles used for transportation.
17. Special Measures shall be adopted to prevent the nearby settlement from the impacts of mining activities.
18. Dispensary facilities for first-aid shall be provided at site.
19. Occupational health surveillance program of the workers should be undertaken periodically.
20. Conservation measures shall be taken for protection of Flora & Fauna in the core and buffer zone.

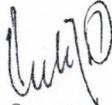
  
 Member Secretary  
 SEIAA, Assam

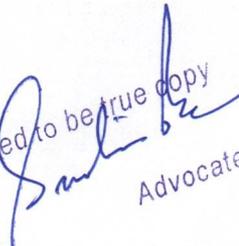
Certified to be true copy  
  
 Advocate

- 55-
21. It shall be ensured that collection of mining materials does not disturb or change the underlying soil characteristic of river bed/basin, where mining is carried out.
  22. It shall be ensured that mining does not in any way disturb the turbidity, velocity and flow pattern of the river water.
  23. Conservation measures shall be taken for protection of flora & fauna in the core and buffer zone.
  24. The fauna nesting area shall not be used for mining.
  25. This Environmental Clearance is applicable only subject to receipt of mining permit by the project proponent from the Competent Authority as per AMMC Rule, 2013 and subsequent amendment.
  26. Measures for prevention & control of Soil erosion & management of site shall be undertaken.
  27. No river/Stream should be diverted for the purpose of Sand and Gravel mining. No natural water course and/or water resources are obstructed due to mining operation.
  28. No extraction of Sand and Gravel in landside prone area.
  29. **The proposed mining area approved subject to the condition that**
    - a. **The maximum mining depth is recommended up to 2 (two) meters from the unmined ground surface.**
    - b. **5 (five) meters gap between the left bank of the river and the proposed mining boundary shall have to be kept to guard against probable river bank erosion.**
    - c. **Active bank of the river should not suffer damaged due to proposed mining activities and transportation of mining materials thereon.**
    - d. **The proponent shall have to strictly follow all other terms and condition laid down in the approved mining plan during the mining period.**
  30. Controlled clearance of riparian vegetation to be undertaken.
  31. Vehicles used for transportation of Sand and Gravel are to be permitted only with of fitness & PUC certificates.
  32. Health & safety of workers should be taken care of spring sources should not be affected due to mining activities necessary protection measures are to be submitted.
  33. The critical parameters such as  $PM_{10}$ ,  $NO_x2$ ,  $SO_4$  in ambient air within the impact Zone shall be monitors periodically and analysis report shall be submitted to SEIAA, Assam.

## II. General Conditions

1. All necessary statutory clearance shall be obtained from competent authority in connection with mining operation and copies of the same shall be submitted to SEIAA, Assam.
2. Special measures shall be adopted to prevent nearby settlements from the impacts of mining activities, maintenance of roads through which transportation of minor mineral is to be undertaken shall be carried out regularly.
3. User agency shall comply with the provisions framed under Assam Minor Mineral concession Rule 2013 and subsequent amendment.
4. The SEIAA Assam may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

  
 Member Secretary  
 SEIAA, Assam

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 Advocate

5. Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawals of this clearance and attract action under the provisions of Environment Protection Act. 1986.
6. The SEIAA, Assam may revoke or suspend the order, if implementation of any of the above conditions is not found satisfactory. SEIAA, Assam will monitor the operation area from time to time and the project proponent shall extend full cooperation for the same.
7. The above conditions will be enforced inter-alia under the provision of water (Prevention & Control of Pollution) Act 1974, the air (Prevention & Control of Pollution) Act 1981, the Environment Protection Act 1986 and the public liability Insurance Act 1991 along with their amendments & rules.
8. The Environmental Clearance is valid for a period of 2 (Two) years from the date of issue of this order.
9. Under Corporate Environment responsibility (CER), appropriate budgetary provision shall be made as per MoEFCC OM F. No. 22-65/2017-IA.III dated 01/05/2018 and 19/06/2018 commensurate with the total value of the work and to be spent for health improvement, education, drinking water facilities, and other socio-economic upliftment in and around the project area (radius of 10 KM from the project site) in consultation with a Committee having representatives from all sections of the population in the nearby villages and with information to the SEIAA on biannual basis.
10. **The project proponent shall submit half yearly compliance reports in respect of the terms & conditions stipulated in this order to the SEIAA, Assam in PARIVESH PORTAL through individual User Id to the SEIAA. The Compliance Report should also include the work done under CER as in 9 above and also under Green Belt development in the project area (to be supported with photographs and other documentary evidences in both cases).**
11. The Divisional Forest Officer, Nagaon Forest Division, Dist. Nagaon, Assam shall realize the Royalty as per existing rate & ensure due surveillances against occurrence of irregularities during the period of mining operation. He will further ensure demarcation of mining area with pillars and Geo referencing prior to start actual mining operation as mining is not permitted beyond the limit of the same. The DFO is also requested to ensure necessary compliance of all the terms and condition laid down in the EC be duly complied by the proponent in course of mining operation.

*19.06.2023*  
Member Secretary  
SEIAA, Assam  
Bamunimaidam, Guwahati-21.

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*[Signature]*  
Advocate

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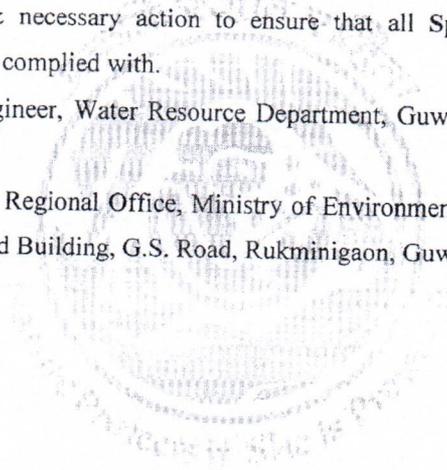
Memo No. SEIAA.3440/2023/EC/ 2144

- A

Dated: 19/6/2023

Copy to:

1. The Joint Secretary, Ministry of Environment, Forest and Climate Change, Government of India, MoEF, Indira Paryavaran Bhawan, Jorbagh Rd, New Delhi-110003.
2. The Secretary to the Govt. of Assam, Environment & Forest Department, Dispur, Guwahati-6 Cum Member Secretary, SEIAA, Assam for favour of kind information.
3. The P.C.C.F, HoFF, Govt. of Assam, Panjabari, Guwahati-37 for favour of kind information.
4. The Divisional Forest Officer, Nagaon Forest Division, Dist. Nagaon Assam for information & necessary action to ensure that all **Specific Conditions & General Condition** are complied with.
5. The Chief Engineer, Water Resource Department, Guwahati, Assam for favour of kind information.
6. The Integrated Regional Office, Ministry of Environment, Forest & Climate Change, 4<sup>th</sup> Floor, Housefed Building, G.S. Road, Rukminigaon, Guwahati-22 for information.
7. Office Copy.



Handwritten signature and date: 19.06.2023

Member Secretary  
SEIAA, Assam

Bamunimaidam, Guwahati-21.

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Handwritten signature  
Advocate

Validity unknown

Digitally signed by Shri Indreswar Kalita  
Member Secretary  
Date: 6/23/2023 9:05:25 PM  
Page 6 of 6

ANNEXURE - IV - 178

GOVT. OF ASSAM  
OFFICE OF THE DIVISIONAL FOREST OFFICER, NAGAON DIVISION, NAGAON.

Letter No. FNGT/B/74 (Part- I)/Nakhula Beat Sand Permit Area No. 3/2023/ 4057-59 Dated - 27/04/2023

To,

The Range Forest Officer,  
Morigaon Range, Morigaon.

Subject: - Final settlement of Nakhula Beat Sand Permit Area No. 3 for the period 2022-24 (Rev. Portion) and adjustment of 1<sup>st</sup> Installment (Kist) thereof.

In pursuance of the Clause I (ii) of the guideline vide No. J-13012/12/2013-I of II (I) dtd. 24/12/13, issued by Director, MoEF, Govt. of India and AMMC Rules' 2013, I am to inform you that Sri Jugal Bharali, S/o- Sri Hem Ch. Bharali, Vill.: Barjari, P.O.: Barpak, P.S.: Jagiroad, Dist.: Morigaon (Assam) has deposited the 1<sup>st</sup> Installment (kist) for 1<sup>st</sup> quarter and other taxes/security deposit money as shown below for operation of above mentioned Permit Area (river bed) and signed necessary Agreement in Form No. MPS - 1 as required.

You may allowed to operate of the Sand Permit Area after obtaining required possession certificate duly signed by him, as per enclosed proforma, stating that he has taken over possession of the permit area. The possession certificate should be sent to this office immediately and a copy of the same shall be retained in your Range.

For allowing operation of the permit area, a permit may be issued for collection of the following quantity of mining materials (Sand) from Nakhula Beat Sand Permit Area No. 3 after strictly adhering to the terms and conditions of the Agreement as signed by the permit holder.

Sl. No. of the Kist	Kist Amt. (in Rs.)	GST 5%	Income Tax (in Rs.) 2.55 %	To be deposited within	Quantity allowed to be extracted (in cum)	10% Rehabilitation on Fund	10% District Mineral Foundation (DMF)
					Sand		
1 <sup>st</sup>	5,13,750/-	25,688/-	13,101/-	27/04/2023	2500 m3	51,375/-	51,375/-
2 <sup>nd</sup>	5,13,750/-	25,688/-	13,101/-	27/07/2023	2500 m3	51,375/-	51,375/-
3 <sup>rd</sup>	5,13,750/-	25,688/-	13,101/-	27/10/2023	2500 m3	51,375/-	51,375/-
4 <sup>th</sup>	5,13,750/-	25,688/-	13,101/-	27/01/2024	2500 m3	51,375/-	51,375/-
5 <sup>th</sup>	5,13,750/-	25,688/-	13,101/-	27/04/2024	2500 m3	51,375/-	51,375/-
6 <sup>th</sup>	5,13,750/-	25,688/-	13,101/-	27/07/2024	2500 m3	51,375/-	51,375/-
7 <sup>th</sup>	5,13,750/-	25,688/-	13,101/-	27/10/2024	2500 m3	51,375/-	51,375/-
8 <sup>th</sup>	5,13,750/-	25,688/-	13,101/-	27/01/2025 to 26/04/2025	2500 m3	51,375/-	51,375/-

Enclosed :- As stated.

27/04/2023  
Divisional Forest Officer,  
Nagaon Division, Nagaon

Copy to:-

1. Sri Dipankar Deb, ACF for his information and necessary action. He is directed to attend the possession over of the permit area by the permit holder and report compliance.
2. Sri Jugal Bharali, S/o- Sri Hem Ch. Bharali, Vill.: Barjari, P.O.: Barpak, P.S.: Jagiroad, Dist.: Morigaon (Assam), for information.

27/04/2023  
Divisional Forest Officer,  
Nagaon Division, Nagaon

Memo No. FNGT/A/74 (Part- I)/ Nakhula Beat Sand Permit Area No. 3/2023/ 1549-1601

Dated - 27/04/2023

Copy to:-

1. The Principal Chief Conservator of Forests & Head of Forest Force, Assam, Panjabari, Guwahati- 37 for favour of his kind information.
2. The Addl. Principal Chief Conservator of Forests (T), Upper Assam Zone, Jorhat- 1, for favour of his kind information.
3. The Conservator of Forests, Northern Assam Circle, Tezpur, Assam, for favour of his kind information.

27/04/2023  
Divisional Forest Officer,  
Nagaon Division, Nagaon

Certified to be true copy  
Advocate



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জি.এম.বি.এছ.

GOVERNMENT OF ASSAM  
DIRECTORATE OF GEOLOGY AND MINING  
BHU-BIGYAN BHAWAN  
DAKHINGAON,KAHILIPARA,GUWAHATI-19  
Email: [dgmassam@gmail.com](mailto:dgmassam@gmail.com)  
[dgm.assam@gov.in](mailto:dgm.assam@gov.in)

No GMMM/S6-B (40)/PI V/6176-6200 Dtd Guwahati, the 19<sup>th</sup> Jan., 2023

From

- Sn Ananda Kumar Das ACS,  
Director,  
Directorate of Geology & Mining, Assam,  
Kahilipara Guwahati-19

To

- The Divisional Forest Officer,  
Nagaon Division Nagaon

Sub

- Approval of Mining Plan alongwith progressive Mine Closure Plan  
in respect of Nakhula Beat Sand Permit Area No.3 (Govt. land)  
Bhakatgaon( area 4.1 hec.) in Morigaon Dist of Assam State submitted  
under Rule 51 & 52 of Assam Minor Mineral Concession Rules 2013  
GPS locations are

- 1) 26°10'33'74"N - 92°12'49'02"E
- 2) 26°10'35'12"N - 92°12'48'32"E
- 3) 26°10'31'32"N - 92°12'34'57"E
- 4) 26°10'33'11"N - 92°12'34'79"E
- 5) 26°10'42'38"N - 92°12'22'60"E
- 6) 26°10'42'12"N - 92°12'24'06"E

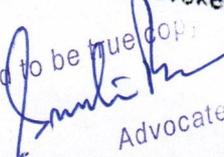
Ref

- Your letter No FNGT/ B/74(pt I)Nakhula Beat SPA No 2/ 2022/9453-55  
dtd 17/12/2022 The Mining Plan No. is 4097

Sr.

In exercise of the power conferred under under Rule 51 & 52 of Assam Minor Mineral Concession Rules 2013 I hereby approved the aforesaid Mining Plan (including Progressive Mine Closure Plan) prepared by R.Q.P. Moloi Bora. This approval is subjected to the following conditions

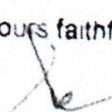
- 1) The Mining Plan alongwith Progressive Mine Closure Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction
- 2) The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the lessee and is applicable from the date of approval
- 3) It is clarified that the approval of aforesaid Mining Plan along with Progressive Mine Closure Plan does not in any way imply the approval of the Government & Regulation) Act 1957 or the Minerals (Other than Atomic & Hydro Carbon Energy Minerals) Concession Rules 2016 and any other laws including Forest (Conservation) Act,1980, Environment (Protection) Act,1986 or the rules made there under Mines Act 1952 and Rule & Regulation made there under
- 4) Directorate of Geology & Mining Assam has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the precise area as furnished by the lessee
- 5) At any stage if it is observed that the information furnished data incorporated in the documents are incorrect or misrepresent facts the approval of the document shall be revoked with immediate effect

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Advocate

- 6) This approval is restricted in respect of the proposals contained therein within mining lease area and is applicable from the date of approval and maximum quantity of Sand recommended for extraction is 27,000 cubic metre for two years to be used for construction purposes subject to all statutory compliance and clearances for the mining activities to be carried out within the mining leasehold
- 7) Adequate number of check dams and retaining walls shall to made & maintained in good conditions to prevent any anticipated detrimental impact on water regime
- 8) "Safety Berm" of adequate dimension shall be kept at all the places in the vicinity of statutory barrier, high bench/escarpment. It shall also be ensured that no excavation is to be made in the vicinity of any high side wall/escarpment. Stability of benches, escarpments shall be closely monitored. It is the responsibility of the lessee to ensure the stability of all the escarpments/side/benches. Lessee shall take all necessary steps time to time so as to ensure the stability of ground which includes but not limited to reduction of the high side wall to safe and stable condition within first year itself
- 9) Sufficient safety Berm shall be maintained with respect to public road/village road
- 10) In case of patta land a certificate from Revenue Authority should be obtained that the mining area is a non agricultural land
- 11) Violation of the provision of the Mining Plan including Progressive Mine Closure Plan shall liable to cancel the Mining Plan
- 12) Environmental clearance must be obtained from the competent authority before execution except certain cases mentioned in Appendix IX of MOEF & CC Notification S O 1224(E) dated 28<sup>th</sup> March, 2020
- 13) Divisional Forest Officer should confirm that the lease area does not fall in the National Park, Wild Life Sanctuary, Game Sanctuary, Bird Sanctuary etc including ecosensitive zone and does not affect the animals, birds and biodiversity in anyway
- 14) There are no any provision of mechanized or semi mechanized mode of extraction in case of river sand mining
- 15) Blasting is not allowed
- 16) The Divisional Forest Officer should ensure that no additional quantity is to be extracted
- 17) NOC from DC is needed to obtain in case of earth cutting.

Encls: Approved Mining Plan alongwith Progressive Mine Closure Plan

Yours faithfully,

  
 Director  
 Directorate of Geology & Mining, Assam  
 Dtd Guwahati, the Jan 2023

No. GMM/M/85-B (40)/Pl V/

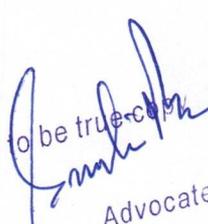
Copy to - 1) The Deputy Commissioner, Mongaon

2) The Superintendent of Police, Mongaon

3) Sri Jugal Bharati, Vill: Barjari P O: Barpak P S, Jagiroad, Dist. Mongaon

4) Office copy

-for kind information and necessary action  
 - for kind information and necessary action

  
 Certified to be true copy  
 Advocate  
 Director  
 Directorate of Geology & Mining Assam

A. Phukan  
Put up 6/176  
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ANNEXURE - VI

REPORT ON INSPECTION OF SAND MINING ACTIVITIES IN  
NAKHULA MINING PERMIT AREAS OF MORIGAON DISTRICT

**1.0 Introduction:**

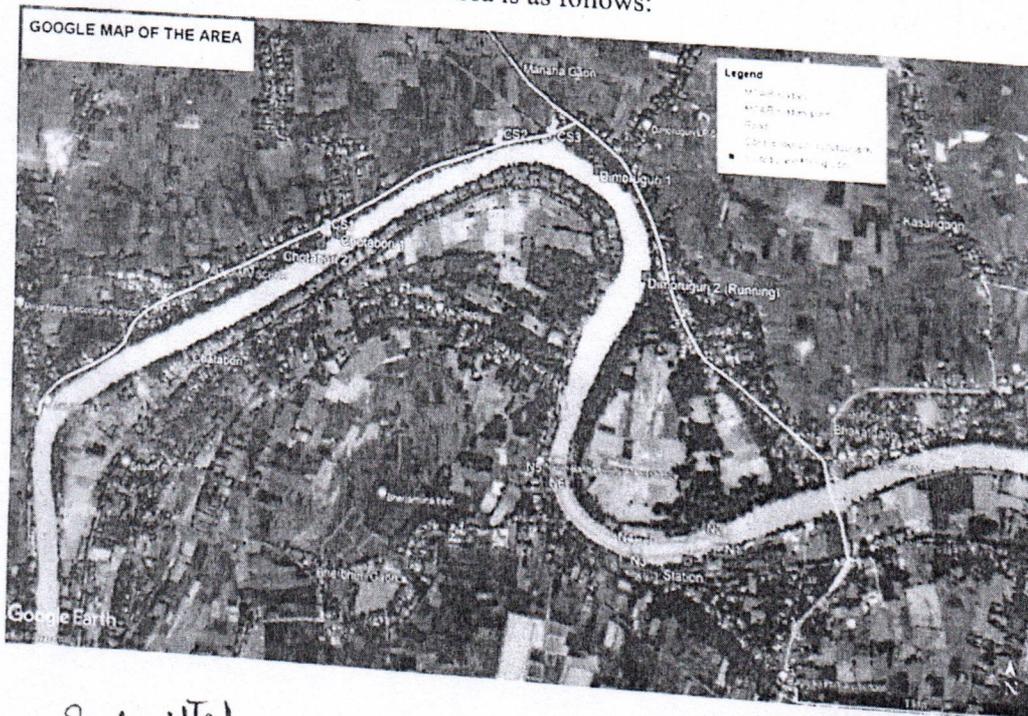
In pursuance of letter No. GM/O/159 dated Guwahati, the 3<sup>rd</sup> of October a team of Directorate of Geology and Mining, Assam carried out Field Inspection at Nakhula Mining Permit Area and adjacent sites along Kopili River of Morigaon District, Assam. The team consisting of Monoj Gogoi Senior Geologist, Parkash Borah Senior Geologist Dibakar Das, Assistant Geologist, and Anupam Dutta Surveyor, had carried out the field inspection on dated 5<sup>th</sup> of October under. The team was accompanied by staffs from the Forest Department and local villagers during inspection. The area is under Morigaon Forest Range under Nagaon Forest Division.

As per official instruction the purpose of visit was mainly inspection of the area viz. Nakhula Mining Permit areas to check the adherence rules to be followed during mining and extraction of sand as per approval of Mining Plan and to verify the legitimacy of the Public Complaint submitted by the villagers of Chotabori Area, Morigaon District.

As the river Brahmaputra flows along with the northern boundary of the Morigaon District, while the major rivers like Killing, Kollong and Kopili rivers flow through the southern part of the district. The river Killing meets Kopili at the Matiparbat where from Kopili moves westward. Kollong joins Kopili at the Jagi Dui Khuti Mukh and from here they jointly flow into the Brahmaputra. The area under inspection is near Bhakatgaon River Bridge over Kopili River, which is main source of sand mining under Morigaon Forest Range.

**2.0 Field Observations:**

1. The Google map of the inspection area is as follows:



Submitted

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Senior Geologist  
G.M. Assam Ghy-19

[Signature: Borah]

Senior Geologist  
G.M. Assam Ghy-19

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Advocate

- No mining or extraction of sand presently going on within the Mining Concession Area. As sand is included in Y-Schedule of the AMMCR-2013, the Forest Department and the (Divisional Forest Officer) DFO is the controlling authority and the Range Officer Morigaon informed that the sand mining has been stopped in the Nakhula Sand Mahal .

**3.0 Recommendation and Conclusion:**

- As revealed from Google Earth Images of 2022 and images of 2002 that the river had shifted about 10 -12 meters towards the roadside within this area. The concave bank of the meander (road side bank) is the zone of erosion due to the dynamic factors of the river morphology and the convex bank of the meander is the zone of deposition (opposite bank).



**Map: Historical Google map showing shifting of river towards the road side.**

- As informed by local villagers and Forest Officials the Bhakatgaon bridge over Koplil River is too narrow and weak to heavy loaded vehicle, therefore the movement of heavy vehicle are prohibited across this bridge
- No sign of Mining Activity was visible within the Mining Concession Area.

Submitted

*[Signature]*  
 Senior Geologist  
 DGM, Assam, Ghy-19

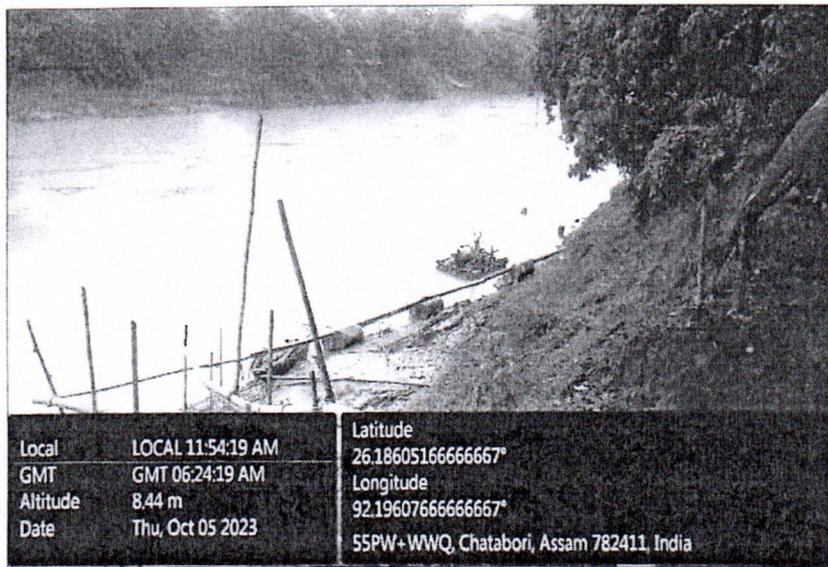
Senior Geologist  
 DGM, Assam, Ghy-19

Certified to be true copy  
*[Signature]*  
 Advocate

**FIELD PHOTOGRAPHS**



**Photograph 1 : Bank erosion in Dimoruguri Area**



**Photograph 2 : Steep erosion prone bank and mining equipment in Chotabori 2 area**

Submitted

*[Handwritten signature]*

Senior Geologist  
DGM, Assam. Ghy-19

*[Handwritten signature]*

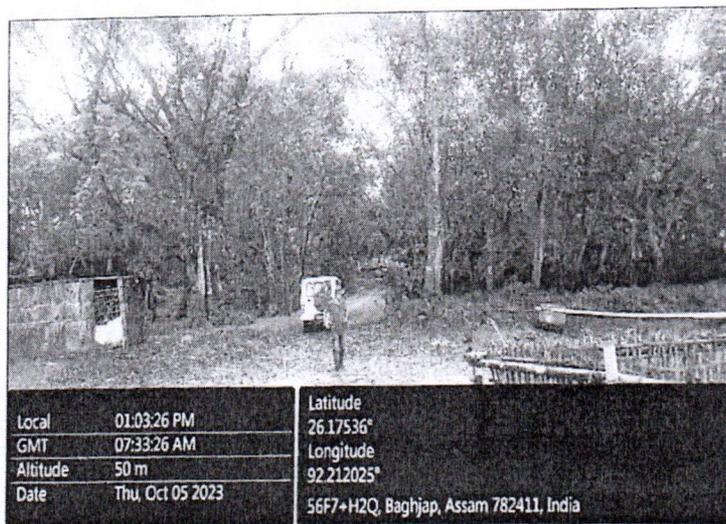
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Ghy-19

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Advocate

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Photograph 3 : Abandoned mining near Baghjap (Mining concession area)



Photograph 4 : Abandoned Mining equipment and sand dumps in Baghjap (Mining concession area)

\*\*\*\*\*

Submitted

Senior Geologist  
 DGM Assam. Ghy-19

Senior Geologist  
 DGM Assam. Ghy-19

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Advocate