

Consultancy Services for Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Bangladesh Regional Waterway Transport Project-1
BRWTP-S1A



Government of the People's Republic of Bangladesh
Ministry of Shipping



Bangladesh Inland Water Transport Authority



The World Bank



MONTHLY PROGRESS REPORT JUNE 2024



Jurutera Perunding Zaaba
SDN.BHD, Malaysia (JPZ)



Demas Dredging Consultants BV,
the Netherlands (DEMAS)



JPZ Consulting Ltd., Bangladesh
(JCL)

EXECUTIVE SUMMARY

Background

The Bangladesh Regional Waterway Transport Project-1 (Chittagong-Dhaka-Ashuganj Corridor of the Government of Bangladesh (GoB) is to develop the Inland Water Transport (IWT) sector and related infrastructure between Dhaka-Chittagong and Dhaka-Ashuganj River corridors and linked corridors. The Project has three major components. Component 1 includes dredging and maintaining the river corridors and ferry routes within the Project area through a performance-based contract. JPZ-DEMAs-JCL, the consulting firm referred to as S1A has started the supervision and monitoring work under this component since December 2022. The project is financed by the World Bank (WB) and implemented and administered by the Bangladesh Inland Water Transport Authority (BIWTA), under the Ministry of Shipping (MoS).

The works package on dredging shall operate for 66 (Sixty-six) months on the river routes 3, 4, 5, 6, 7 & 8, 9, 10, and 11 by Contractor GULF-COBLA KARNAFULY JV herein referred to as Lot-2, and 12, 13 & 13a, 15 & 16, 17 and 21 by Contractor DHARTI-BANGA JV herein referred to as Lot-3; under Bangladesh Regional Waterway Transport Project -1 (BRWTP-1), Contract Number BRWTP, W1A-02 and BRWTP W1A-03 respectively.

Progress of the Contractors during the reporting period – June 2024

Lot-2 Contractor

The Phase-1 capital dredging, initially scheduled to be completed by June 5, 2024, involved an estimated BoQ volume of 1,209,060 cubic meters over 18 months. The Lot-2 contractor has completed approximately 63.4% of this volume, facing delays due to several factors such as local community issues regarding land requisition for dredged material disposal, government administrative embargoes to address these local issues, mechanical breakdowns of dredgers and other machinery, manpower and logistics shortages, delayed surveys, among other reasons. The contractor has requested an extension until September 30, 2024, to complete the remaining work under Phase-1, and this request is currently under approval. On June 30, 2024, the contractor completed the intermediate hydrographic survey on Route 9. Additionally, a joint field visit was conducted to observe the installation of 100 P.C. Poles along Inland Waterway Routes 3&4, 05, 06, 07&08, 09, 10, and 11, as required by contract BRWTP-W1A Lot 02.

Lot-3 Contractor

The Lot-3 contractor successfully completed the Phase-1 capital dredging within the stipulated timeframe (June 5, 2024). The total estimated BoQ volume was 1,398,600 cubic meters, with an actual dredged volume of 1,347,267 cubic meters. The Lot-3 contractor is now preparing to start the Phase-2 capital dredging. Due to strong currents and rising water levels during the monsoon season, no dredging was conducted on the River Routes of Lot-3 in June. However, three Cutter Suction Dredgers (CSD), along with ancillary crafts and equipment, were kept on standby at Route 21 for any emergency work. Contractor representatives have indicated that dredging activities on all routes (12, 13, 13a, 15, 16, 17, and 21) will resume immediately after the monsoon. Additionally, Dharti-Banga JV has informed that they will submit the Dredged Materials Management Plan, including the ESHS Implementation Plan, to the Project Manager before resuming operations.

There were no issues regarding traffic or safety measures, with fire extinguishers and first aid boxes well-maintained. Grievances about dike location selection were resolved with the local community, contributing to a positive work environment. New employees were recruited to expedite the completion of work on time and to implement safety procedures during the reporting month. Overall, no significant environmental impacts have been detected.

The Consultant's activities during the Reporting Period

The consultant conducted routine monitoring surveys on the Lot-2 and Lot-3 river routes and participated in joint monitoring surveys with clients and contractor representatives. Due to delays in completing the Phase-1 capital dredging by the Lot-2 contractor, the consultant visited the site and recommended increasing manpower, logistics, and production hours by reducing downtime. Meetings were held with the PIU, World Bank, government

administration, local community leaders, and residents to expedite Phase-1 activities at Lot-2 and address issues. The consultant also emphasized the importance of accelerating financial progress for both lots, considering the upcoming June closing, to maintain healthy cash flow before funds for the next invoices become available.

In June 2024, environmental monitoring was conducted at Lot-2 sites, including Hasnabad Daudkandi (Route-11), Char Modhua, Nabinagar Loop (Route-6), and Salimganj, Bancharampur/Homna Loop (Route-9). No significant air pollution or ambient noise issues were found during dredging. Observations included 25 fish species and 4 crustacean species, with no fish mortality detected. One Ganges River Dolphin was spotted near Char Modhua during monitoring. No freshwater turtles were observed, and locals confirmed their absence in recent months. No significant negative environmental impacts on air, noise, water quality, or occupational health and safety were detected during June 2024.

For Lot-3, environmental monitoring in June 2024 was conducted at Routes 12 and 13 (Chandpur Boro station, Alu Bazar), with samples collected at two locations. No dredging activity or dredgers were present on Routes 12, 13, and 13a, and no new dikes were constructed during this period. Noise levels complied with IFC guidelines (2007), with the highest recorded at 71.09 dBA (Chandpur Boro station) and the lowest at 59.24 dBA (Alu Bazar). Observations included 27 fish species and 6 crustacean species, with no fish mortality detected. No Ganges River Dolphins or freshwater turtles were observed, and locals confirmed their absence. There were no significant impacts on ambient air quality, noise levels, water quality, sediment, or health and safety factors from the project during June 2024.

Table of Contents

Background.....	2
Progress of the Contractors during the reporting period – June 2024.....	2
Lot-2 Contractor	2
Lot-3 Contractor	2
The Consultant's activities during the Reporting Period.....	2
LIST OF FIGURES.....	6
List of Tables.....	6
Abbreviation.....	7
CHAPTER 01:.....	8
PROJECT DESCRIPTION IN A BRIEF	8
1.1 Basic Information	8
1.2 Location of the Project.....	9
CHAPTER 02:.....	11
SALIENT FEATURES & MONTHLY PROGRESS	11
2.1 PROGRESS OF BRWTP-S1A:.....	11
2.1.1 : Development and Maintenance Dredging Works:.....	11
Lot-2:	11
Lot-3:	12
Updated information on Navigational Aids in June 2024:.....	12
2.1.2 Environmental Quality Assessment:.....	13
2.1.3 Social and Resettlement Aspects:	13
2.1.3.1 Land Acquisition/Requisition/Good Faith Agreement/Charity:.....	13
2.1.3.2 Communication and Public Consultation:.....	13
2.1.3.3 : Progress and Coordination Meetings of S1A Consultant in June 2024:.....	14
2.1.4 Grievance Redressal Mechanism (GRM):	14
2.1.4.1 GBV/SEA/SH by workers and enforcement of the CoC.....	14
2.1.5 ESHS, Worker Employment, and OHS Status:	14
2.2 PROGRESS OF LOT-2 (GULF COBLA-KARNAFULY JV) CONTRACTOR:	15
2.2.1 Development and Maintenance Dredging Works:.....	15
2.2.3 Social and Resettlement Aspects at Lot-2 Site:	17
1.3 PROGRESS OF LOT-3, (DHARTI-BANGA JV) CONTRACTOR:.....	18
1.3.1 Development and Maintenance Dredging Works:.....	18
1.3.2 Environmental Quality Assessment of Lot-3 Site:.....	18
1.3.3 Social and Resettlement Aspects at Lot-3 Site:	20
Lot-03:	20
CHAPTER 03:.....	21
ACHIEVEMENT OF LAST MONTH'S PLAN AND NEXT MONTH'S PLAN	21
3.1 ACHIEVEMENT OF REPORTING MONTH:	21
3.2 NEXT MONTH PLAN:.....	21

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

CHAPTER 04:.....	23
CONCLUSION AND RECOMMENDATIONS	23
CHAPTER 05: ANNEXURE.....	24
ANNEX I:.....	25
The Progress of Dyke and Good Faith Agreement	25
ANNEX II:	32
Photos of Project Activities	32
ANNEX III:	35
Laboratory Test Results of Environmental Parameters, June, 2024	35
Laboratory Test Result of Lot-2:	35
ANNEX IV:	46
Location of Environmental Sample Collection.....	46
ANNEX V: Dredging Activity at a Glance up to June 2024	50
ANNEX VI: Checklists of June 2024.....	51

LIST OF FIGURES

Figure 1: River Boundary Lot-2.....	9
Figure 2: River Boundary, Lot-3.....	10

LIST OF TABLES

Table 1: River Routes Lot-2.....	9
Table 2: River Routes Lot-3.....	10
Table 3: Field Activity of BRWTP-S1A at Lot-2 Site.....	11
Table 4: Field Activity of BRWTP-S1A at Lot-3 Site, June 2024.....	12
Table 5: Consultation with Local Stakeholders, Lot-2 site, June 2024.....	13
Table 6: Consultation with Local Stakeholders, Lot-3 site, June-2024.....	14
Table 7: Interaction with Client/Contractors and another Stakeholder (June 2024).....	14
Table 8: ESHS Status at a Glance in June 2024.....	15
Table 9: Description of dredging work for the month of June 2024, Lot-2 Site.....	15
Table 10: Environmental Quality Assessment for June 2024 for Lot-2.....	16
Table 11: Compliance Status for June 2024 for Lot-2.....	16
Table 12: Environmental Quality Assessment for June 2024 for Lot-3.....	18
Table 13: Compliance Status for June 2024 for Lot-3.....	18
Table 14: The progress of Dikes and Good Faith Agreements (GFA) for Lot-2 during this reporting period.....	25
Table 15: GFA, Lot-03 (District: Barishal, Bhola, Sariatpur and Chandpur).	30
Table 16: Final Dredging Activity Schedule on 30 th June 2024.....	50

ABBREVIATION

AILA	Association of International Lighthouse Authorities
ASCII	American Standard Code for Information Interchange
BIWTA	Bangladesh Inland Water Transportation Authority
BM	Bench Mark
BRWTP	Bangladesh Regional Waterway Transport Project I
BWDB	Bangladesh Water Development Board
CD	Chart Datum
CEAP	Contractor's Environmental Action Plan
CSD	Cutter Suction Dredger
DC	District Commissioner
EIA	Environmental Impact Assessment
EMP	Environment Management Plan
ESHS	Environment, Social, Health and Safety
ESMP	Environment and Social Management Plan
GBV	Gender-Based Violence
GIS	Geographic Information System
GPS	Global Positioning System
GRC	Grievance Redress Committee
GRM	Grievance Redressal Mechanism
HSE	Health and Safety Expert
IALA	International Association of Marine Aids and Lighthouse Authorities
IBC	Idle Berthing Centre
ID	Identity
IHO	International Hydrographic Organization
IWT	Inland Water Transport
JPZ	Jurutera Perunding Zaaba
JV	Joint Venture
LAD	Least Available Depth
LLW	Lowest Low Water
MOEF	Ministry of Environment, Forest and Climate Change.
MSL	Mean Sea Level
NID	National Identity
OPBC	Output and Performance-Based Contract
PC Poles	Pre-Stressed Concrete Poles
PIU	Project Implementation Unit
RAP	Resettlement Action Plan
RCC	Reinforced Cement Concrete
RTK-GPS	Real-Time Kinematic- Global Positioning System
SOB	Survey of Bangladesh
TBM	Temporary Bench Mark
UTM	Universal Transverse Mercator
VSS	Vessel Storm Shelter
WB	World Bank
WGS	World Geodetic System

**CHAPTER 01:
PROJECT DESCRIPTION IN A BRIEF**

1.1 Basic Information

Project Name	Consultancy Services for Supervision and Monitoring of Performance- Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract
Source of Funding	The World Bank
Contract No.	BRWTP-S1A
Employer	Bangladesh Inland Water Transport Authority (BIWTA)
Consultant	JPZ-DEMAS-JCL JV
Date of signing the contract	21 st December 2022; 66 months
Date of Commencement	6 th December 2022; 66 months
Phases	Phase I: 18 Months, Phase II: 12 Months, Phase III: 36 Months
Total Routes	12
Route Nos. under dredging activities	Lot-2: 3 & 4, 5, 6, 7 & 8, 9, 10, 11 Lot-3: 12, 13 & 13a, 15 & 16, 17, 21

1.2 Location of the Project

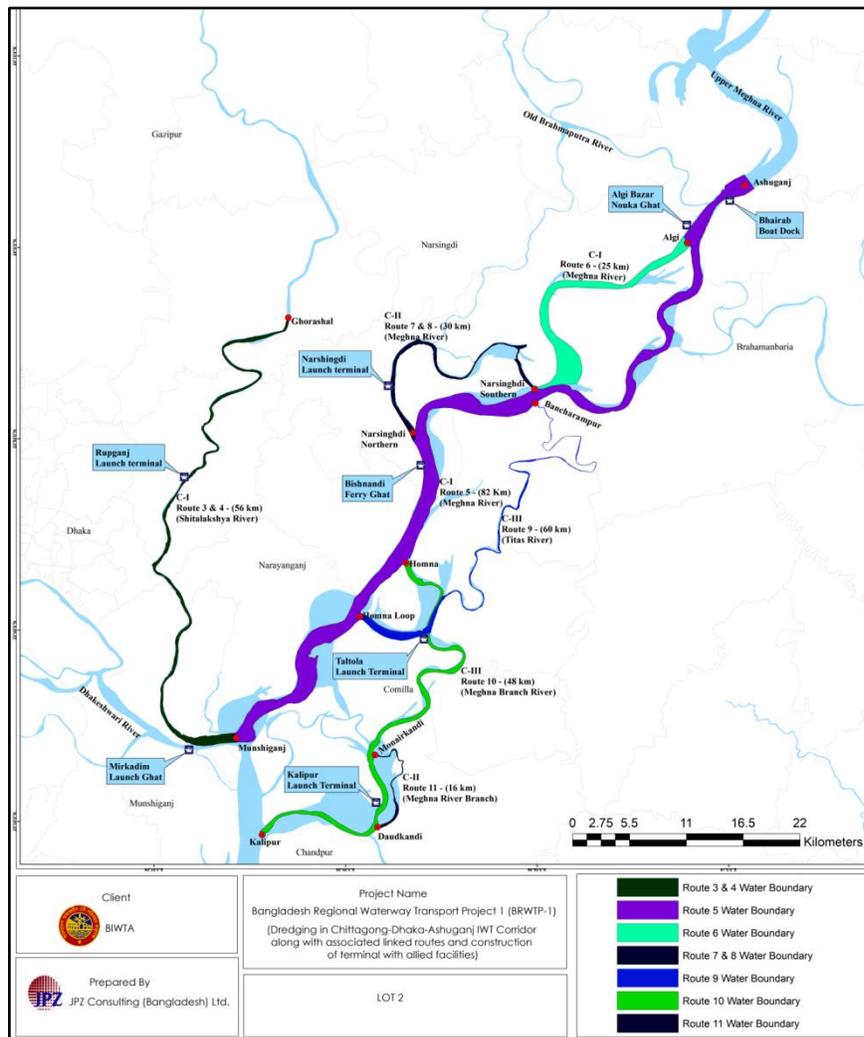


Figure 1: River Boundary Lot-2

Table 1: River Routes Lot-2

Class	Route No	River/location	Length (Km)	Average width (m)	Shoal Length Approx. (km)
I	3 & 4	Shitalakshya (From Ghorashal to Munshiganj)	56	400	0.2
I	5	Meghna (From Ashuganj to Munshiganj)	82	1200	-
I	6	Meghna (Nabinagar Loop joining route-5)	25	850	1.5
II	7 & 8	Meghna (Narsingdi Northern & Southern approaches)	30	450	5.8
III	9	Meghna (Bancharampur - Homna Loop)	60	180	19.5
III	10	Meghna (Hona-Doudkandi approach)	48	400	-
II	11	Gumti (Meghna loop approaching Dautkandi)	16	300	10.6
Total			317		27

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

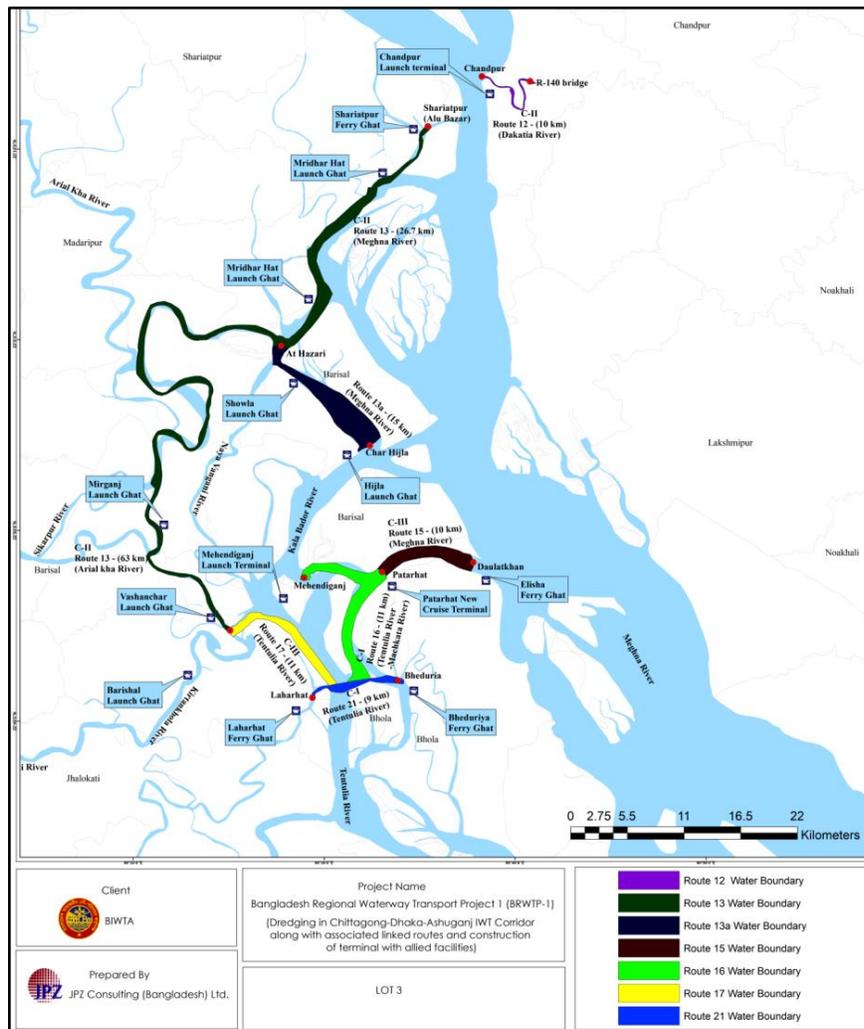


Figure 2: River Boundary, Lot-3

Table 2: River Routes Lot-3

Class	Route No	River/location	Length (Km)	Average width (m)	Shoal Length Approx. (km)
II	12	Dakatia (Chandpur to Gastola Bridge)	10	400	1
II	13	Meghna and Arial Khan (Shariatpur-Bheduria)	89.7	1200	1.4
II	13a	Meghna (Looping root Inside Char Hisla)	15	850	-
III	15	Meghna/ Tentulia (Patarhat-Daulatkhan)	10	450	-
I	16	Meghna/Tentulia (Mehendiganj-Bheduria)	19.6	180	2.1
III	17	Tentulia (Bheduria - Vashanchar)	11	400	-
I	21	Tentulia (Bheduria -Laharhat)	9	300	2.3
Total			164.3		6.8

CHAPTER 02: SALIENT FEATURES & MONTHLY PROGRESS

2.1 PROGRESS OF BRWTP-S1A:

2.1.1 : Development and Maintenance Dredging Works:

Lot-2:

In this reporting month, dredging work on Route 09, spanning from Ch0+000 to Ch8+860 on the Titas River, has achieved a current average depth of 2.388 m. Conducted by seven dredgers: Pranto-01, MCD-01, Karnophuly-03, Karnophuly-05, Karnophuly-07, Reve-03, and Maa-01, the cumulative cutting length is 1,138 m with a volume of 62,018 m³ as of June 30, 2024.

In the Monipura Bazar/Baharnagar area, dredging work on Routes 07 & 08 by Kafela-01 and Karnophuly-02 covered 314 m and 34 m, respectively. The Meghna/Nabinagar loop Route 06, dredged by MBDDL Craft-01, covered 301 m. Route 11 in Daudkandi/Cumilla, dredged by Shah Yuvraj-01, covered 410 m. As of June 30, 2024, the total cumulative cutting length is 2,197 m with a volume of 111,944 m³.

In this month, the disposal areas utilized include Dikes D36, D41, D56, D57, D60, D61, and D62 for Route 09, Dike D1 for Route 06, Dike D2 for Route 11, and D5 and D6 for Route 07&08. Additionally, bathymetric pre-work monitoring surveys by BIWTA at Solimongj-Homna Route 09 and Narsingdi Northern and Southern approach Route 07&08 commenced on June 27, 2024.

Table 3: Field Activity of BRWTP-S1A at Lot-2 Site.

Sl. No	Date	Activity	Route name & Route number	Remarks
1.	01.06.2024	Inspection of dike 62 and dredging alignment.	Route 09 (Bancharampur - Homna Loop).	BRWTP-S1A team. Tejkhali, Baherchar Union Bancharampur Upazilla in Brahmanbaria
2.	03.06.2024	To observe ongoing Dredging work by the dredger Karnaphully -07 at Anarpar	Route 09 (Bancharampur - Homna Loop).	
		To observe ongoing Dredging work by the dredger Reve at Hasan Nagar	Route 09 (Bancharampur - Homna Loop).	
		Engineering survey. Chainage 7+900~8+850 at Kadur	Route 09 (Bancharampur - Homna Loop).	
		To visit ongoing dredging at Baherchar, Khalla, and Kadur.	Route 09 (Bancharampur - Homna Loop).	
3.	05.06.2024	Site visit for getting updated views of dredging activities of Lot 2.	Lot-2, Route -9 (Bancharampur - Homna Loop).	WB, BIWTA, PIU, and S1A Consultant representatives.
4.	06.06.2024	Fixed the starting point of the dredging area and check the centerline area.	Narshindi northern and southern approaches, route 06, 07 and 08, Lot-02	
5.	10.06.2024	Fixed the starting point of the dredging area and check the center line area.	Titas River. BRWTP-S1A, Route-09 Lot_2.	
6.	21.06.2024 & 22.06.2024	A joint field visit to observe installed 100 P.C. Poles along Inland waterway routes 3&4, 05, 06, 07&08, 09, 10, 11 to meet the requirement as per contract BRWTP-W1A Lot 02.	All River Routes under Lot-2 commenced on 21-06-2024 at 05-30 AM & completed on 22-06-24 at 05 PM after traveling a total of 317 Kilometers by speedy speed boat.	PIU and S1A Consultant representatives.
7.	23.06.2024	Inspection of dyke 36 62, 63 and dredging alignment.	BRWTP-S1A, Route-09 Lot_2	
8.	24.06.2024	Dike and Dredger Inspection	Route No. 6 Raipura Narsingdi.	
9.	26.06.2024	Inspection of dyke 6 and dredging alignment.	BRWTP-S1A, Route-7&8 Lot_2	
10.	28.06.2024	Sampling the Environmental data like as: 1. Inspection of air- noise monitoring. 2. Observation of air noise level. 3. Underwater noise monitoring. 4. Inspection of Dissolved oxygen, Water pH, temperature, etc. 5. Sample collection upstream and downstream of the dredger for water quality analysis. 6. Soil sample collection from the disposal area and the riverbed for lab test.	Route-7 & 8 Meghna River (Narsingdi Northern & Southern approaches)	Jointly with contractors' representatives and S1A consultant

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Sl. No	Date	Activity	Route name & Route number	Remarks
11.	29.06.2024	Water Level gauge Connection.	Route-09 (Bancharampur-Homna loop).	
		Hydrographic post survey.	Route-09 (Bancharampur-Homna loop).	
		Environmental Parameter sample collection (Water, Soil, Noise, etc.), fisheries survey, dolphin and turtle observation, fauna & fish mortality observation, and dike supervision	Route- 09, Titas River	Jointly with contractor's representatives and S1A consultant
12.	30.06.2024	Hydrographic post survey.	Route- 09 (Bancharampur-Homna loop).	Jointly with contractor and S1A consultant
		Environmental Parameter sample collection	Route- 09, Titas River	Jointly with contractor's representatives and S1A consultant

Lot-3:

No dredging activities were conducted at the River Routes of Lot-3 during June due to the monsoon season. Three Cutter Suction Dredgers (CSD) along with ancillary crafts and equipment were kept on standby at Route 21 for any emergency work. The contractor's representatives have indicated that dredging activities on all routes (12, 13, 13a, 15, 16, 17, and 21) will resume immediately after the monsoon. Navigational aids are ready to be placed

Table 4: Field Activity of BRWTP-S1A at Lot-3 Site, June 2024

Sl. No	Date	Activity	Route name & Route number	Remarks
1.	01.06.2024	Level checking & multi-beam survey started.	Route: 13, from North Athazar to Alubazar- Horina of Lot-3 site	Jointly with BIWTA and S1A consultant
2.	02.06.2024	Single-beam survey.	Route: 13, from North Athazar to Alubazar- Horina of Lot-3 site	Jointly with BIWTA and S1A consultant
		Post-Cyclone old dyke Inspection	Route: 21, Bheduria, Barishal of Lot-3 site.	S1A consultant
3.	03.06.2024	Level checking survey Continued.	Route: 13, from North Athazar to Alubazar- Horina of Lot-3 site	Jointly with BIWTA and S1A consultant
4.	04.06.2024	Multi-beam survey and processing & level checking.	Route 13 (North Athazar to Alubazar- Horina).	Jointly with BIWTA and S1A consultant
5.	05.06.2024	Multi-beam data processing & level checking.	Route 13 (North Athazar to Alubazar- Horina).at Lot-3.	Jointly with BIWTA and S1A consultant
6.	06.06.2024	Multi-beam survey.	At route 13 (North Athazar to Alubazar- Horina).	Jointly with BIWTA and S1A consultant team
7.	07.06.2024	Multi-beam survey data processing.	At route 13 (North Athazar to Alubazar- Horina).	Jointly with BIWTA and S1A consultant team
8.	08.06.2024	Multibeam survey data processing at route 13 (North Athazar to Alubazar- Horina).	Route 13 (North Athazar to Alubazar- Horina).	Jointly with BIWTA and S1A consultant
9.	09.06.2024	Multibeam survey & data processing.	Route 13 (North Athazar to Alubazar- Horina).	Jointly with BIWTA and S1A consultant.
10.	09.06.2024	Multibeam survey & data processing.	Route 13 (North Athazar to Alubazar- Horina).	Jointly with BIWTA and S1A consultant.
		Hydrographic line survey and Hydrographic post survey. Last day of the survey.	Route 13 and 12 (Chandpur- Alubazar).	Jointly with BIWTA and S1A consultant
11.	26.06.2024	Sample collection for Environmental parameters Quality Assessment. And Fisheries survey Boat to Boat & Market survey. Dolphin and turtle observation, Fauna & fish mortality observation in the dike.	Route 12 and Route 13 (Chandpur- R140 bridge).	Jointly with Contractor's and S1A consultant's representatives.

Updated information on Navigational Aids in June 2024:

All Project Coordination Meetings attended by the Navigational Aids Expert highlighted issues related to navigational aids. As per the project team's decisions, contractors for Lots 02 and 03 expedited the installation of Aids to Navigation during this reporting period.

On June 21, 2024, the Consultant Team BRWTP-S1A, along with representatives from the PIU Team, conducted a visit to observe the installation of 100 P.C. Poles along Inland Waterway Routes 3, 4, 5, 6, 7, 8, 9, 10, and 11, following contract BRWTP-W1A Lot 02. The visit concluded on June 22, 2024, at 5 PM after covering a total distance of 317 kilometers by speed boat.

2.1.2 Environmental Quality Assessment:

Environmental monitoring data for June 2024 indicate that the dredging work has not had any significant negative impact on any parameters. All laboratory data show values within the standard range and close to the baseline data.

Although the first phase has ended, several environmental and social aspects gaps remain incomplete during this reporting period. For example, the Biodiversity Management Plan, prepared by EQMS and approved by the PIU, has not yet been implemented. Lot 3 has not provided the sediment sample test report for the baseline. Additionally, a worn cardboard box is used as a complaint box and is located on a houseboat, making it inaccessible to residents. To effectively receive complaints, the complaint box needs to be properly located, well-constructed, and regularly maintained, along with raising awareness among the community for both the contractors of Lot-2 and Lot-3

2.1.3 Social and Resettlement Aspects:

During this period, steps were taken to accelerate the selection of dikes with the assistance of local administration. Regular meetings were held with various stakeholders at the site, with a particular focus on selecting the dikes in Lot 2.

During this reporting period, 68 disposal sites have been chosen within the Lot-2 and Lot-3 areas. The process of selecting dikes is in progress, with involvement from representatives of local governments and community members. To facilitate smooth execution, the project authority has applied to local government representatives, requesting their support and informing them of the project details. However, progress in June 2024 has been minimal, with no land lease agreements finalized during this time.

2.1.3.1 Land Acquisition/Requisition/Good Faith Agreement/Charity:

In Lot-2 and Lot-3, a total of 79 dredged material disposal areas have been selected. The GRM expert of S1A is working on setting up the protocols for reporting the GRM issues at different levels in a structured way based on CEAP and Contractual responsibilities.

Information regarding river dredging, dredged material dumping, and agreements made in good faith are disseminated to the general population through various consultation meetings held in local bazaars, Union Councils, villages, and local schools. The progress of Dikes and Good Faith Agreements for Lot-2 and Lot-3 during this reporting period is detailed in Table 10 and Table 14-15&16 respectively.

2.1.3.2 Communication and Public Consultation:

The social and safeguard team has communicated with local people, local administration, and local elites and conducted consultation meetings regularly. The local administration was requested to assist in identifying land to dispose of the dredged soil. Moreover, the S1A team hoped for the assurance of all kinds of cooperation from the locals.

Table 5: Consultation with Local Stakeholders, Lot-2 site, June 2024

Sl. No.	Date	Meeting Agenda and Location/Venue	Participants
1.	04.06.2024.	Meeting for new disposal area Route 11,06, 7 & 8 and Route 09	BRWTP-S1A and Lot-2 representatives
2.	08.06.2024	Meeting for selecting new disposal area. Tejkhali, Baherchar Union under Bancharampur Upazilla in Brahmanbaria district.	BRWTP-S1A Team, Lot-2 Contractor's representatives and Local People, Land Owner.
3.	20.06.2024	Stakeholder Meetings to manage the conflicts regarding the disposal area and continuing dredging work. Route-09	Local Chairman and other political persons, BRWTP-S1A Team, Lot-2 Contractor's representatives and

Sl. No.	Date	Meeting Agenda and Location/Venue	Participants
			Local People, Land Owner
4.	22.06.2024	Stakeholder Meeting with local Chairman and influential for conflict management at Route 09 site.	LG Representatives, Local elites and BRWTP-S1A Team, Lot-2 Contractors team, PIU.
5.	24.06.2024	Discussion with the Chairman, Char Madhua. UNO instructed that before dredging an engineer from BWDB should visit the site, and to further task for getting permission from the DC, Narsinghdi.	Union Parishad Chairman, Upazila Nirbahi Officer, PIU representatives, S1A Team

Table 6: Consultation with Local Stakeholders, Lot-3 site, June-2024

Sl. No.	Date	Meeting Agenda and Location/Venue	Participants
1.	25.06.2024	FGD with fishermen and Local people to collect information at the Route-13 site.	Fisherman, Local People, and S1A Consultant representatives, Lot-3 Contractor's data collectors group.
2.	26.06.2024	Consultation with local people and Boat to Boat Fisheries survey, Market survey near the River Routes 12, 13 Chandpur.	Fisherman, Local People at the marketplace, S1A Consultant representatives, Lot-3 Contractor's data collectors.

2.1.3.3 : Progress and Coordination Meetings of S1A Consultant in June 2024:

Table 7: Interaction with Client/Contractors and another Stakeholder (June 2024)

SN	Date	Venue	Meeting Agenda	Participants
1.	02.06.2024	Conference room of S1A.	Submission of dredged material disposal site management plans, dike management, mitigation measures for benthos, and no use of polythene sheets on the dikes	S1A Team and the Environmental team of Lot-3 contractor.
2.	04.06.2024	Conference room of S1A.	Progress review meeting with Third Party External Monitoring Team Social Safeguards (Package 12/2) at S1A Office.	Third Party Social Monitoring team S12/2 along with PIU and S1A experts.

2.1.4 Grievance Redressal Mechanism (GRM):

Two Grievance Redress Committees (GRC) have been formed in the Lot-2 and Lot-3 project areas respectively, with one committee addressing site/local level issues and the other focusing on contractor-level gender-based violence (GBV) issues. Contractors, supported by S1A, conducted regular consultations to inform locals about reporting mechanisms. Grievance boxes were installed at project offices and dredging sites for people to submit their complaint letters and hotline numbers were provided for immediate contact. However, it was observed that one complaint box was placed on a houseboat without any directions for filing complaints. Additionally, the "complaint box" was a torn cardboard box and was not securely locked. Overall, the monitoring team observed a lack of proper maintenance.

Furthermore, the PIU, S1A, and senior project management of the government administration, along with all project officials, maintained contact with the local people during the reporting period, including holidays, to expedite the dredging activities of Lot 2. They were able to resolve obstacles through negotiation.

2.1.4.1 GBV/SEA/SH by workers and enforcement of the CoC

The local people have reported that the dredging workers/ laborers have no congenial or illicit sexual relationship with local inhabitants. No sexual exploitation, sexual violence, or gender-based violence was reported at work sites.

2.1.5 ESHS, Worker Employment, and OHS Status:

The S1A team assessed the ESHS situation, Worker Employment, and Working conditions, Occupational Health and Safety (OHS) status during the reporting period. Considering the safety of workers and the public during the dredging process, data were collected through field observation during site visits. The collected data is shown in the table below.

Table 8: ESHS Status at a Glance in June 2024

ESHS Issues	Parameters	Lot-2	Lot-3
Occupational Health and Safety(OHS)	Set up a first aid clinic room, equipped with a medical treatment registration card for each employee.	First aid facilities were available at the project sites.	First aid facilities were available at project sites.
	Kitchen sanitation and cleanliness and food quality	Satisfactory	Satisfactory
	Sewage and wastewater discharge and Solid Waste Management	Good arrangements were kept in the Houseboat	Good arrangements were kept in the Houseboat
	Gas cylinder storage and maintenance	Maintained	Maintained
	Fire Extinguisher	Available	Available
	Safe Drinking Water	Accessible. Freshwater is collected daily from tube wells of nearby villages	Accessible. Freshwater is collected daily from tube wells of nearby villages
	Toilet facilities	Good	Good
Workers' Condition and Employment Situation	Total Employment (person) for all routes	38	60
	Male Female Ratio	All employees are Male	No Female Employee
	Wage Status	Good arrangements were kept in the Houseboat	Good arrangements were kept in the Houseboat
	Force Labor/ Child Labor	Not Applicable in this month	Not Applicable in this month
Personal Protection Equipment (PPE) for all staff/workers working on the site.	Wearing appropriate PPE like helmets, safety goggles, hand and arm protection, elbow protection gloves, safety shoes, life jacket/vests for protection while working in the river, use of hearing protection in case of loud noise for all officers/employees and laborers engaged in project work.	Safety helmet, Safety vest, safety shoes, Hand gloves, etc., observed at the site. But not adequate. All workers are not using PPEs.	Available at site level but needs awareness and monitoring for using PPEs
Traffic management	Provision for preventing accidents including nighttime.	The contractors' ESHS team visited the site and met all concerned manpower	The contractors' ESHS team visited the site and met all concerned staff
	Dredging sites were demarcated and protected to ensure community safety.	Hundred (100) navigational PC Poles with top marks installed satisfactorily along the river routes	Seventy-five (75) PC Poles were installed with top marks satisfactorily along the river routes. Partly installation of lighted beacons.

2.2 PROGRESS OF LOT-2 (GULF COBLA-KARNAFULY JV) CONTRACTOR:

2.2.1 Development and Maintenance Dredging Works:

The dredging depth and dredging volume in June are changed from time to time based on the hydrographic survey. The dredge volumes depend on route centerline, quality of MB/SB data, spacing of survey lines, and interpolation between these. The dredge volume for June 2024 is shown below.

Table 9: Description of dredging work for the month of June 2024, Lot-2 Site

Sl. No.	Dredger Name	Time Period	Route No.	Place	Cutting Length(m)	Cutting Volume (cum.)
01.	Kafela 01	01 to 31 June	7&8	Khodalila	314	16649
02.	Karnafuly 02	01 to 31 June	7&8	Khodalila	34	1723
03.	Karnafuly 03	01 to 31 June	09	Bariachar	0	0
04.	Karnafuly 05	01 to 31 June	09	Kadur	291	14321
05.	Karnafuly 07	01 to 31 June	09	Bishnurampur	147	6921
06.	Reve 05	01 to 31 June	09	Kadur	46	5341
07.	Pranto 01	01 to 31 June	09	Nayachar	63	1471
08.	Reve 03	01 to 31 June	09	Hasannagar	551	20503
09.	MCD 01	01 to 31 June	09	Moddonagar	310	12134
10.	Shah Yuvraj -09	01 to 31 June	11	Hasnabad	410	11878
11.	MBDDL Craft -01	01 to 31 June	06	Char Madhua	301	21248

The total estimated BoQ volume is 12,09,060 cubic meters for Phase I (18 months). The Lot-2 contractor dredged 52% (628,700 cubic meters) approximately of the estimated BoQ Volume of Phase-I capital dredging. This volume has been calculated based on the engineering/ manual survey and the exact volume will be found after the completion of the hydrographic survey, which is to be done.

The average dredged volume per day, considering the last 7 (Seven) days data, is 6,064 cubic meters. If this trend continues it will take approximately 3.4 to 3.8 months to complete Phase-I dredging. This means the Phase-I dredging will be completed approximately between 11-Sep-2024 to 23-Sep-2024.

2.2.2 Environmental Quality Assessment of Lot-2 Sites:

In June 2024, environmental monitoring at Lot-2 sites took place at Hasnabad Daudkandi (Route-11), Char Modhua, Nabinagar Loop (Route-6), and Solimganj, Bancharampur/Homna Loop (Route-9). During this reporting period, no significant environmental pollution or issues were detected during dredging.

Lot 2 collected monitoring data on June 30. However, monitoring data is required to be collected before the 15th of each month, as decided in a previous meeting. Due to this time difference, the results may not be comparable with the previous month's data.

Table 10: Environmental Quality Assessment for June 2024 for Lot-2

Sl No.	Item	Parameters	Baseline Data of	Route-9	SIA Remarks June 2024
			Route 09	June 2024	
			January 2023		
1	Air Quality	SPM	140.34	148.07	*WAL
		PM10	58.34	70.01	WAL
		PM2.5	31.43	38.6	WAL
		SO2	15.29	13.07	WAL
		NO2	12.75	26.09	WAL
2	Noise Level	CO	1.3	0.8	WAL
		LEQ day	61.6	53.1	WAL
		Lmax	76	64.8	WAL
3	Underwater Noise Level	Lmin	42.8	31.3	WAL
		LAvg [dB (A)]	-	No data collected from R09	WAL
4	Surface Water Quality	Temperature	22.1	27	WAL
		EC	170	480	WAL
		pH	7.20	7.66	WAL
		TDS	160	234	WAL
		DO	4.5	5.7	WAL
		BOD5	10	No Data	WAL
		TSS	83	208	WAL
5	Riverbed Sediment	Lead (Pb)	9.79	15.01	WAL
		Cadmium (Cd)	0.054	0.071	WAL
		Chromium(Cr)	15.94	14	WAL
		Zinc (Zn)	26.32	18.01	WAL
		Arsenic (As)	1.96	1.4	WAL
6	Dredged Material Dike no 64	Lead (Pb)	-	17.07	WAL
		Cadmium (Cd)	-	0.09	WAL
		Chromium (Cr)	-	23.84	WAL
		Zinc (Zn)	-	29.69	WAL
		Arsenic (As)	-	1.91	WAL

*WAL=Within Approved Limit; - = Sample was not collected; Detail remarks are in Chapter 2

Table 11: Compliance Status for June 2024 for Lot-2

Visual Monitoring Compliance								
Potential Aspects	Description	EMP Measures (Proposed in the EIA)	Measures Already Implemented	Compliance Status			Remarks/ Recommendation	Recommended deadline for implementing the corrective measures
				C	P	N		
Aquatic Flora & Fauna including Plankton, Benthos, fish, dolphin	Observations included 25 fish species and 4 crustacean species, with no fish mortality recorded. One Ganges River Dolphin was sighted near Char Modhua during the monitoring period. No freshwater turtles were observed, and locals confirmed their absence in recent months.	Mitigation measures not required During the SIA Environment Team's visit, destructive fishing gear like monofilament nets, and "china dohair" were seen to be used.	No mitigation measure was suggested by the Lot 2 monitoring team. The DOF will be informed to take appropriate measures	-	P	-	Common fishes and crustaceans have been recorded; one endangered fish species- Mud Perch (<i>Nandus nandus</i>) was recorded according to the IUCN Red List-Bangladesh, 2015.	DOF will be informed in due course.

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Visual Monitoring Compliance								
Potential Aspects	Description	EMP Measures (Proposed in the EIA)	Measures Already Implemented	Compliance Status			Remarks/ Recommendation	Recommended deadline for implementing the corrective measures
				C	P	N		
Sediment Dispersion	Not measured	-	-	-	-	N	Contractors were notified to measure sediment plume on the 1st of March 2023, followed by verbal instruction and reminder emails	No action taken or data provided by the contractors yet. Will be reminded again.
Riverbank Erosion	There were no issues regarding riverbank erosion or flooding.	Dredger stopped and relocated	Dredger stopped and relocated some protection measures taken	C	-	-	Stop dredging and relocate	Recommended reporting to the authorities and stop dredging
Hydrological Conditions	Surveyed before dredging			C				
Drainage Congestion	No remarkable congestion was observed at the dredged material disposal sites.			-	P	-	No reports of any drainage congestion. Regular monitoring	Keep clear all drainage channels. Regular monitoring
River Traffic/ Transport	River traffic-related signboards have already been fixed to ensure a safe river traffic movement		No mitigation measure is required		P	-	Install river traffic and navigation-related signboards	Advised to install aids to navigation as per the contract.
Accidental Spillage	No reports yet	Oil spill emergency plan. 24/7 ready plan	-		P	-	Logbook to be maintained, in case, of any incident, report to the authority	No action taken yet
Sediment leakages from pipes and sediment disposal	No significant leakages were observed with the floater and/or delivery pipe	Maintain pipes	Pipes regularly checked	-	P	-	Stop dredging, fix the problem before resumption; and report to the authority	
Drinking water & sanitation	Safe drinking water is being supplied	Source to be mentioned	-	-	C	-	-	Source of drinking water to be mentioned
Safety of workers	Occupational safety		PPEs provided	-	-	P	Monitor the use of PPEs	Regular monitoring, punitive measures for not using PPEs, or Awareness programs for using PPEs. Besides, need to provide an adequate number of PPEs.
Waste management	Waste bins have been placed on the houseboat as well as in the dredger and maintained		-	-	C	-	Colored collection bins for organic and non-organic solid wastes; no wastes in the river	Mention later stages, what happens after collection from waste bins
Cultural and archeological Sites	Preservation of such sites		x	-	x	x	Stop dredging, report to the authorities	-
Wastewater	Drained properly		-	-	-	P	-	-

Note: The table was prepared based on observations from the field visit.

2.2.3 Social and Resettlement Aspects at Lot-2 Site:

Lot-02

At present 57 agreements were completed. In most places, people willingly agreed to allow the use of their lands. General people of the project sites got the news of river dredging, dredged materials disposal, and good faith agreements through consultation meetings with local people in local Bazaars, Union Councils, villages, and the local Schools. Progress of Dikes and Good Faith Agreements during this reporting period of Lot-02 is illustrated and attached herewith as Annexure I.

1.3 PROGRESS OF LOT-3, (DHARTI-BANGA JV) CONTRACTOR:

1.3.1 Development and Maintenance Dredging Works:

No dredging activities were conducted at the River Routes of Lot-3 during June due to the monsoon season. Three Cutter Suction Dredgers (CSD) along with ancillary crafts and equipment were kept on standby at Route 21 for any emergency work. The contractor's representatives have indicated that dredging activities on all routes (12, 13, 13a, 15, 16, 17, and 21) will resume immediately after the monsoon. Navigational aids (PC Poles) installation completed with top marks.

1.3.2 Environmental Quality Assessment of Lot-3 Site:

There was no dredging activity on-site during the monthly site visit in June 2024. No dredgers are placed on Routes 12, 13 and 13a. No new dikes were constructed for dredged material disposal in this reporting month. This month, environmental quality assessments were conducted at two locations along Routes 12 & 13. Since no dredging operations took place during the reporting month, there was no significant impact on terrestrial fauna, aquatic fauna, or fisheries from dredging and disposal activities.

During the June 2024 field visit, 27 fish species and six (6) crustacean species (prawn) were observed in river Routes 12 and 13, with no visible fish mortality around the Lot-3 dredging sites. The monitoring team did not observe any Ganges River Dolphins within 500m upstream or downstream of the dredging site, nor any freshwater turtles in the dredging or adjacent areas.

Table 122: Environmental Quality Assessment for June 2024 for Lot-3

Sl No.	Item	Parameters	BaselineData of Route 12	Route 12	BaselineData of Route 13	Route 13	S1A Remarks June 2024
				June 2024		June 2024	
1	Ambient Air Pollutants' Concentration in µg/m ³	SPM	189.34	95.38	181.92	62.59	WAL
		PM10	104.36	52.30	92.79	35.63	WAL
		PM2.5	58.93	27.91	51.34	20.88	WAL
		SO2	28.51	18.12	24.66	14.76	WAL
		NO2	39.60	23.38	32.92	18.96	WAL
		CO	1.6	0.6	1.2	0.5	WAL
2	Noise Level	LEQ day	51.3	71.09	62.3	59.24	WAL
		Lmax	86.4	85.31	84.0	73.46	Mixed Area.
		Lmin	30.9	38.15	35.2	36.41	WAL
3	Under Water Noise Level	LAvg [dB (A)]	-	75.5	-	63.9	WAL
4	Surface Water Quality	Temperature	22.4	27.5	22.3	28.1	WAL
		EC	280	185	300	227	WAL
		pH	6.67	8.57	7.57	8.89	WAL
		TDS	150	82	140	112	WAL
		DO	4.4	8.2	6.3	8.9	WAL
		BOD5	2.1	1.9	0.5	1.7	WAL
		TSS	30	39	39	45	WAL
5	Riverbed Sediment	Lead	8.10	11.56	10.91	10.98	WAL
		Cadmium	0.078	0.061	0.037	0.068	WAL
		Chromium	25.03	19.49	21.35	16.19	WAL
		Zinc	46.14	23.06	28.02	18.20	WAL
		Arsenic	3.83	1.89	2.48	1.95	WAL

*WAL=Within Approved Limit; Detail remarks are in Chapter 2.

Table 133: Compliance Status for June 2024 for Lot-3

Visual Monitoring Compliance								
Potential Aspects	Description	EMP Measures (Proposed in the EIA)	Measures Already Implemented	Compliance Status			Remarks/ Recommendation	Recommended deadline for implementing the corrective measures
				C	P	N		
Aquatic Flora and Fauna including Plankton, Benthos, fish,	27 fish species and 6 crustacean species (prawn) were observed in river routes 12 and	Mitigation measures not required	No mitigation measure is required in the reporting period	-	P	-	Advised to give more effort, and to spend more time for regular monitoring of the habitat and	To be practiced every month

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Visual Monitoring Compliance								
Potential Aspects	Description	EMP Measures (Proposed in the EIA)	Measures Already Implemented	Compliance Status			Remarks/ Recommendation	Recommended deadline for implementing the corrective measures
				C	P	N		
dolphin	13, with no visible fish mortality around the dredging site. The monitoring team did not observe any Ganges River Dolphins within 500m upstream or downstream of the dredging site, nor any freshwater turtles in the dredging or adjacent areas.						biodiversity.	
Sediment Dispersion	Not measured	x	No mitigation measure is required in the reporting period	-	-	N	Contractors were notified to measure the sediment plume on the 1st of March 2023. Reminders were given verbally and by email	No action taken or data provided by the contractors yet. Will be reminded again
Riverbank Erosion	No reports of riverbank erosion or flooding occurred during the reporting month.	Regular monitoring		-	P	-		Regular monitoring
Hydrological Conditions	Surveyed before dredging							
Drainage Congestion	No drainage congestion was observed during this month.				P	-	No reports of any drainage congestion	To be monitored regularly, early mornings and evenings
River Traffic/Transport	No traffic-related problems were identified	Appropriate aids to navigation to be installed	Procurement of aids to navigation under process	-	P	-	River traffic-related sign boards observed	Appropriate aids to navigation to be installed soon, some.
Accidental Spillage	No reports yet	Monitoring and preparedness to handle any accidental spillage	No spills from chemical storage	-	P	-	Emergency oil spill management plan	Emergency Plan in place, to be updated if necessary
Sediment leakages from pipes and sediment disposal	No reports of any leakage	Maintain pipes, regular checking	During this reporting month, no leakage was found in the dredge pipe. Pipes regularly checked	-	P	-	No reports of leakage	Stop dredging, fix the problem before resumption; and report to the authority
Drinking water & sanitation	Safe drinking water is being supplied			C	-	-		Drinking water source to be mentioned
Safety of workers	Occupational safety		PPEs provided	-	-	N	Awareness of using PPEs	-
Waste management	Waste bins have been placed on the houseboat as well as in the dredger and maintained		-	C	-	-	Colored collection bins for organic and non-organic solid wastes; no wastes in the river	Mention the end process where does the waste go from the bins?

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Visual Monitoring Compliance								
Potential Aspects	Description	EMP Measures (Proposed in the EIA)	Measures Already Implemented	Compliance Status			Remarks/ Recommendation	Recommended deadline for implementing the corrective measures
				C	P	N		
Cultural and archeological Sites	Preservation of such sites		x	-	x	x	Stop dredging, report to the authorities	-
Wastewater	From houseboats, dykes, etc.	Treated, release after settling	Not described	-	-	N	To be treated before release	-

1.3.3 Social and Resettlement Aspects at Lot-3 Site:

Lot-03:

At present **22** agreements are on process. Most of the places people have willingly agreed to allow using their lands. General people of the project sites can get the news of river dredging, dredged materials dumping and good faith agreements through several consultation meetings with local people in local Bazars, Union Council, villages and the local Schools. Progress of Dykes and Good Faith Agreements during this reporting period of Lot-03 is illustrated and attached herewith as Annexure I.

CHAPTER 03:

ACHIEVEMENT OF LAST MONTH'S PLAN AND NEXT MONTH'S PLAN

3.1 ACHIEVEMENT OF REPORTING MONTH:

S1A

- a) Submitted Daily Survey and Dredging Monitoring Sheet to PIU and WB.
- b) Supervision and Monitoring Surveys of Dredging activities were carried out for Route 7&8, 9 and 11 under Lot-2.
- c) Reviewing and assessing volume for Routes 7&8, 9 and 11 under Lot-2.
- d) Lot 2 dredging expedited for S1A coordination efforts and continuous monitoring.
- e) The Aid to Navigation expert of S1A consultant visited lot-2 and lot-3 site along with the committee formed by PIU including user's representation from BIWTA. He recommended expediting the work so that it gets completed prior to the starting of phase-2 activities.
- f) Field visits conducted by the S1A-ESHS team.

LOT-2

- a) The total revised estimated BoQ volume is 12,09,060 cubic meters for Phase I (18 months). The Lot-2 contractor dredged 63.4% approximately 767,413 cubic meters of the estimated BoQ Volume of Phase-1 capital dredging. They are continuing dredging to complete the remaining volume under phase-1 capital dredging. They requested for time extension until 30-Sep-2024 to complete phase-1 dredging.
- b) Related Environmental, Social and GRM Activities have been conducted.
- c) One hundred (100) PC Poles installed with top marks as a part of navigational aids along all designated river routes.
- d) Field visits were carried out by the S1A-ESHS team.

LOT-3

- a) Hydrographic Survey carried out along Routes 13, 13a, 15, 16, and 21.
- b) Related Environmental, Social and GRM activities have been conducted
- c) Field visits were carried out by the S1A-ESHS team.
- d) Seventy-five (75) PC Poles installed with top marks as a part of navigational aids along all designated river routes.

3.2 NEXT MONTH PLAN:

S1A

- a) Post intermittent survey will be conducted in Route 9 under Lot-2
- b) Review the volume data with the submitted data by the contractor and assess the volume for Route 9 under Lot-2.
- c) Supervision and Monitoring of dredging activities and environmental quality, ESHS and GRM activities of Lot-2 and Lot-3.
- d) Conducting Good Faith Agreement of the remaining six (6) under Lot 3.
- e) To expedite navigational aid installation work plan from the Lot-2 and Lot-3 contractors.
- f) To expedite the dredging activity of Lot-2 for completing 100% of dredging work under Phase-1.
- g) To organize meetings with the Lot 2 and Lot 3 contractor's environment team.

LOT-2

- a) Lot-2 contractor will expedite the dredging activities to achieve the phase-1 capital dredging.
- b) Lot-2 contractor will expedite the Aid to Navigation activities.
- c) The recommended field visits to be carried out by the Lot-2 contractor ESHS team.

LOT-3

- a) Lot-3 contractor will submit all the pre and post survey data for all the routes along with relevant chart and volume calculation as a part of their completion documentation of phase-1.
- b) Lot-3 contractor will expedite the Aid to Navigation activities.
- c) The recommended field visits to be carried out by the Lot-3 contractor ESHS team.

CHAPTER 04:

CONCLUSION AND RECOMMENDATIONS

- Lot 2 completed approximately 63.4% of the BoQ volume during Phase-1, which means that they could not complete the phase-1 capital dredging within the stipulated time. The Lot-2 contractor requested for time extension till 30-Sep-2024 which is under approval process. They are continuing the dredging activities to complete the remaining volume of phase-1. The progress of Lot-3 dredging activities was found satisfactory. They have finished their Phase-1 activities within the stipulated time. Installation of aids to navigations is progressing well.
- As this is the end of Phase-1 activities, both the contractors of Lot-2 and Lot-3 need to start their handover procedure and the pertinent post-survey as well.
- Dredged material to be monitored for any benthos during and after the dredging operation.
- Regular habitat monitoring and intensive, repeated field visits are recommended by both the contractors of lot-2 and lot-3 to establish a comprehensive inventory of flora and fauna species.

CHAPTER 05: ANNEXURE

ANNEX I: The Progress of Dyke and Good Faith Agreement

Table 144: The progress of Dikes and Good Faith Agreements (GFA) for Lot-2 during this reporting period

Dyke no.	Route No	Land Owner		Land			GFA
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	
D1	9	Md. Monir Hossain NID: 6447046241	Village: Joy Nagar Upazila: Bancharampur	Plot No: 1117.1118, 10, 65, 1016, Mouza: Jay Nagar	95	Agriculture Land (Two Crops)	Done
D2	9	Siblu Mia NID:1210488091772	Village: Imam Nagar Upazila: Bancharampur	Plot No:158, 155, 166, 147. Mouza: Imam Nagar	270	Agriculture Land (Two Crops)	Done
D3	9	Md. Afzal Hossain NID:1210488092232	Village: Joy Nagar Upazila: Bancharampur	Plot No: 461, 711, 712, 713, 714, 715 1016. Mouza: Jay Nagar	150	School and School Field	Done
D4	9	Md. Monzur Mahabub NID: 1210488092428	Village: Imam Nagar Upazila: Bancharampur	Plot No:3473, 3474 Mouza: Imam Nagar	55	Agriculture land (One crop)	Done
D5	9	Jharna Begum NID:5546582981	Village: Barail Upazila: Nabinagar	Plot No: 316, 318, 397, 399, 314, 315, 401 Mouza: Borail.	132	Agriculture land (Two Crops)	Done
D6	9	Md. Dostogir NID:7813941536	Village: Barail Upazila: Nabinagar.	Plot No: 326, 353,314, 622, 312, 126, 319, 320, 321, 334 Mouza: Borail,	141	Agriculture land (Two Crops)	Done
D7	9	Monir Hossain NID:12104880921009	Village: Imam Nagar Upazila: Bancharampur	Plot No.127 Mouza: Imam Nagar.	40	Agriculture land (Two Crops)	Done
D8	9	Abdus Salam NID: 1210488089240	Village: Aka Nagar Upazila: Bancharampur	Plot No.6021, 5622, 5627, 6620, 3277 Mouza: Aka Nagar.	90	Agriculture land (Two Crops)	Done
D9	9	Md. Zakir Hossain NID: 2693016135957	Village: Aka Nagar Upazilla: Bancharampur	Plot No. 2611, 2612, 6036 Mouza: Aka Nagar.	139	Agriculture land (Two Crops)	Done
D10	9	Md. Alamgir Kabir. NID: 1218575059084	Village: Nilukhi Upazila: Nabinagar	Plot no. 455. Mouza: Borail	52	Agriculture land (Two Crops)	Done
D11	9	Md. Kabir Hossain. NID: 10488088336	Village: Aka Nagar Upazilla: Bancharampur	Plot no. 5972/ 5380/5984 Mouza: Aka Nagar, Bancharampur,	139	Agriculture land (Two Crops)	Done
D12	9	Md. Nazrul Islam. NID: 8705507518	Village: Aka Nagar Upazila: Bancharampur	Plot no. 3053, Mouza: Aka Nagar.	50	Agriculture land (One Crop)	Done
D13	9	Md. Monirul Islam. NID: 8672153577	Village: Aka Nagar Upazila: Bancharampur	Plot no. 2422, 2423, 2412, 2417, 2424, 2425 Mouza: Aka Nagar.	190	Agriculture land (Two Crops)	Done
D14	9	Md. Salek Mia. NID: 7385849111 Mbl:01985708570	Village:Akanagar Union: Salimganj Upazila:Bancharampur District: Brahman Baria	Mouza: Akanagar, Plot no. 2948/2149/2150/ 2151/2152, BS-642; JL no. 13.	24	Agriculture land (One Crop)	Done
D15	9	Abdul Halim NID: 2366199863 Mbl: 01819160113	Village: Akanagar Union: Tezkhali Upazila: Bancharampur District: Brahman Baria	Mouza: Akanagar, Plot no. 3395,3396 BS-Khaitan no. 496 JL no. 13.	67	Agriculture land (One Crop)	Done
D16	9	Md. Riazul Islam NID: 5533130141	Village: Joykalipur Upazila: Bancharampur	Plot no. CS 1370, BS 3002-3003, mouza: Borail	52	Agriculture land (One Crop)	Done
D17	9	1.Babuk Mia NID:5546760314 2.Rakat Ali NID:9132515710 3.Nobi Mia NID:5996942016	Village: Nilukhi Union: Solimgonj Upazila:Nabinagar District: Brahman Baria	Plot no. CS/SA 1373/1374, BS 3007, Mouja: Borail	90	Agriculture land (One Crop)	Done
D18	9	Kader Miah NID: 1210488088731 Mbl: 01712830171	Village:Akanagar, Union: Tejkhali Upazila:Bancharampur District: Brahman Baria	Mouza: Akanagar, Plot no. 2948/2149/2150/ 2151/2152, BS 650-JL no. 13.	192	Agriculture land (One Crop)	Done
D19	9	Md. Kabir Hossain NID: 1210488087685 Mbl: 01789160113	Village:Akanagar Union: Tejkhali Upazila:Bancharampur District: Brahman Baria	Mouza: Akanagar, Plot no. 2948/2149/2150/ 2151/2152, BS-642;JL no. 13.	32	Agriculture land (One Crop)	Done
D20	9	1.Jasim Uddin NID: 7798370685 Mbl: 01717531207 2.Oli Mia NID: 9152173382 Mbl: 01720322353	Village: Bishnursmpur Union: Bishnursmpur Upazila:Bancharampur District: Brahman Baria	Mouza: Bishnursmpur SA Khatian: 11, Plot no: 1298,1428,1646,1655,1654 JL No 43	59	Agriculture land (One Crop)	Done
D21	9	Safar Ali NID: 2398388328 Mbl: 0191438148	Village:Akanagar Union: Tejkhali Upazila:Bancharampur District: Brahman Baria	Mouza: Akanagar, SA Khatian: 3610, Plot no: 3456,3460 JL No. 13	75	Agriculture land (One Crop)	Done

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Dyke no.	Route No	Land Owner		Land			GFA
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	
D22	9	Md. Milon Mia NID: 7348365565 Mbl: 01321822727	Village: Bahir char Union: Tejkhali Upazila: Bancharampur District: Brahman Baria	Mouza: Bahir char SA Khatian: 556, Plot no: 613, 857 JL No. 41	84	Agriculture land (One Crop)	Done
D23	9	1. Alomgir Hossain NID: 1978121048800039; Mbl: 01741735087 2. Md. Borhan Uddin; NID: 1210488095770 Mbl: 01794735283	Village: Bishnurampur Union: Tezkhali Upazila: Bancharampur District: Brahman Baria	Mouza: Bahirchar SA Khatian: 860,380 Plot no: 821,621,711,622,624,810,1070,623,626,7 10,711,1179 JL No. 41	119	Agriculture land (One Crop)	Done
D24	9	Aminul Islam (Liton) NID: 9917405796 Mbl: 01310822838	Village: Bishnurampur Union: Bishnurampur Upazila: Bancharampur District: Brahman Baria	Mouza: Bishnurampur SA Khatian: 92 Plot no: 1209,1205,1439,1430 JL No. 40	120	Agriculture land (One Crop)	Done
D25	9	Ilias Miazzi NID: 19921216488000130 Mbl: 01985728652	Village: Bishnurampur Union: Tezkhali Upazila: Bancharampur District: Brahman Baria	Mouza: Bishnurampur SA Khatian: 172, Plot no: 1308,1497,1448,427,1105 JL No 43	174	Agriculture land (One Crop)	Done
D26	9	1. Gazi Kawsar NID: 3298455597 Mbl: 01713685001 2. Gazi abdu Salam NID: 2398479119 Mbl: 01740956081 3. Md. Zakir Hossain NID: 7348561049 Mbl: 01713585112 4. Chandra Kumar Das NID: 1210488090007 Mbl: 01740968121	Village: Aka Nagar Union: Tezkhali Upazila: Bancharampur District: Brahman	Mouza No: Aka Nagar SA Khatian: 3921,4096,3941 Plot No: 5760,5705,5707,5790,6370,6698,5744,57 11,5384,5715 J L No 13	310	Agriculture land (One Crop)	
D27	9	Md. Hanif NID: 5501395304 Mbl: 01717531207	Village: Bishnurampur Union: Bishnurampur Upazilla: Bishnurampur District: Brahman Baria.	Mouza: Bishnurampur SA Khatian: 894, Plot no. 108,111 Khatian No. 860/380; JL No. 41	154	Agriculture land (One Crop)	Done
D28	9	Habib Ulla NID: 2398391876 Mbl: 1817506254	Village: Bahirchar Union: Bishnurampur Upazila: Bancharampur District: Brahman Baria	Mouza. Bahirchar Plot no. 603,714,1152,1545 Khatian No: 92; JL No: 41	79	Agriculture land (One Crop)	Done
D29	9	Abu Kalam NID: 1948451222 Mbl: 01985708523	Village: Bahirchar Union: Tezkhali Upazila: Bancharampur District: Brahman Baria.	Mouza. Bahirchar Plot no. 904, 608, 752, 1227 Khatian No: 617, 1487 JL No: 41	89	Agriculture land (One Crop)	Done
D30	9	1. Md. Farid Mia NID: 3298435581 Mbl: 01317622313 2. Abdul Wahab NID: 6894609699 Mbl: 01735786521	Village: Bahirchar Union: Tezkhali Upazila: Bancharampur District: Brahman Baria.	Mouza. Bahirchar Plot no. 119,1084,415 Khatian No: 551,61,108 JL No: 41	88	Agriculture land (One Crop)	Done
D31	9	Moin Uddin NID: 3748368614 Mbl: 01817506254	Village: Bahirchar Upazila: Bancharampur District: Brahman Baria.	Mouza. Bahirchar Plot no. 1134,1138,1135,18,1052 Khatian No: 217,541 JL No: 41	85	Agriculture land (One Crop)	Done
D32	9	Ali Ahammad Sarker NID: 3747074718 Mbl: 01715046233	Village: Nilokhi Union: Salimganj Upazila: Nabinagar District: Brahman Baria.	Mouza. Nilokhi Plot no. 1134,1138,1135,18,1052 Khatian No: 24/1, 106/1 JL No: 236	214	Agriculture land (One Crop)	Done
D33	9	1. Rasel Mia NID: 1947127799 Mbl: 01738424077 2. Parul Begum NID: 1210488095296 Mbl: 01735786521 3. Sova Akter NID: 8707793660 Mbl: 01735786521	Village: Nilokhi Union: Salimganj Upazila: Nabinagar District: Brahman Baria.	Mouza. Nilokhi Plot no. 1172,1208,1209,1199,1163,1198,1170,12 00,1232 Khatian No: 950, 992 JL No: 05	170	Agriculture land (One Crop)	Done
D 34	9	1. Md. Billal NID: 2398523114 Mbl: 01725835721 2. Arfat Ali NID: 8257731771 Mbl: 01985789351	Village: Bahir Char Union: Tezkhali Upazila: Bancharampur District: Brahman Baria.	Mouza. Bahirchar Plot no. 25/400,217/652,268/418,628,708 Khatian No: 209,74 JL No: 41	84	Agriculture land (One Crop)	Done

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Dyke no.	Route No	Land Owner		Land			GFA
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	
D 35	9	1.Abdul Awal NID: 3746376999 Mbl: 01918578062 2.Abul Kalam NID: 8695983695 Mbl:01716592411 3.Abu Ishaq NID: 3712971580 Mbl: 01719834733 4.Nasir Uddin NID: 5546582717	Village: Barail Upazila:Nabinagar District: Brahman Baria.	Mouza. Barail Plot no. 1590,3267,3144,3274,3515,1802,1803 Khatian No: 544,163,1560 JL No: 04	113	Agriculture land (One Crop)	Done
D 36	9	1.Abdul Mannan NID: 8248455720 Mbl: 01738424077 2.Md. Jalal Mia NID: 4648465153 Mbl: 01735786521 3. Tazul Islam NID: 9173793036 Mbl: 01735786521	Village: Bahir Char Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza. Bahirchar Plot no. 1286,1351,1649,144,1563,127 Khatian No: 549,600,996 JL No: 41	140	Agriculture land (One Crop)	Done
D37	9	Md. Swapon Mia NID: 8248495528 Cel: 01753828096	Village: Bahirchar Union: Tezkhali Upazila:Bancharampur, District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 530/616/1464 Plot: 553/552/554 JL No:41	60	Agriculture land (One Crop)	Done
D38	09	1.Md. Nazim NID: 2421516085 Mbl: 01733123741 2. Apel Mahmud NID: 4201400373 Mbl: 01958705623 3. Aynal Hoque NID: 5554116691 Mbl: 01815237615 4. Abu Musa NID: 6448345691 Mbl: 01712578351 5. Mst. Razia khatun NID: 2848376618 Mbl: 01735892711 6. Marfot Ali NID: 1976121048800018 Mbl: 01928705721 7. Abdul Mannan NID: 7812888217 Mbl: 01789256722	Village: Bahirchar Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 751/439/120/889/743/70 Plot: 1282/1284/1285/1283/957/1641/2221/955 /1502/985/984 JL No:41	173	Agriculture land (One Crop)	Done
D39	9	Abu Sayem NID: 6890355958 Mbl: 01712853510	Village: Kadoir Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Kadoir Khatian No: 591 Plot: 421 JL No:63	50	Agriculture land (One Crop)	Done
D40	09	Md. Jalu Mia NID: 4155505789 Mbl: 01712892751	Village: Bahirchar Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 709 Plot: 440 JL No:41	100	Agriculture land (One Crop)	Done
D 41	09	1.Md. Kamal Mia NID: 7347275260 Mbl: 01724532687 2.Abdul Karim NID: 2397556354 Mbl: 01716161185	Village: Kadoir Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 706 Plot: 486/350/352 JL No:10	111	Agriculture land (One Crop)	Done
D 42	09	1.Mst. Jahanara NID: 1210488096760 Mbl01986218781	Village: Nilokhi Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Nilokhi Khatian No: 262 Plot: 1129/1 JL No:05	31	Agriculture land (One Crop)	Done

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Dyke no.	Route No	Land Owner		Land			GFA
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	
D 43	09	1.Shakel Ahmed NID: 2397009727 2. Sazzad Ahmed NID: Mbl: 3. Md. Alomgir NID: 2397009727 4. Rezaul Karim NID: 6455341013 5. Ziaul Karim NID: 5983496109 Mbl: 6. Fazlul Karim NID: 9132487969	Village: Badda Dakkhin Para Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Char Badda Khatian No: 1154/191/986 Plot: 486/350/352 JL No:14	197	Agriculture land (One Crop)	Done
D 44	09	1. Md. Alomgir NID: 2397009727 2. Rezaul Karim NID: 6455341013 3. Ziaul Karim NID: 5983496109 Mbl: 01713018040 4. Fazlul Karim NID: 9132487969	Village: Badda Dakkhin Para Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Jolli Khatian No: 175/1453 Plot: 122/233/325/ JL No:16	140	Fallow Pond	Done
D 45	09	1. Md. Alomgir NID: 2397009727	Village: Badda Dakkhin Para Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Jolli Khatian No: 1657 Plot: 291 JL No:16	22	Agriculture land (One Crop)	Done
D 46	09	Md. Jalu Mia NID: 4155505789 Mbl: 01712892751	Village: Bahirchar Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza No. Bahirchar Khatian No: 111 Plot: 222/223/577/496 JL No:41	97	Agriculture land (One Crop)	Done
D 47	09	Md. Abu Hanif NID: 7305030772 Mbl: 01712892751 Sohrab Hossain NID: 1975871797 Mbl: 01728356911	Village: Kadoir Union: Salimganj Upazila:Nabi Nagar District: Brahman Baria.	Mouza No. Kadoir Khatian No: 342 Plot: 438 JL No:10	68	Agriculture land (One Crop)	Done
D 48	09	Kamrul Hasan NID: 19791218575000030 Mbl: 01716161185 Jaman Uddin NID: 2361962059 Mbl: 01859278912 3.Moshen Mia NID: 5107234883 Mbl: 01713925813 4.Dulal Mia NID: 7347018397 Mbl: 01712830195 5.Baijid Hasan NID: 5107234883 Mbl: 01915830112 6.Abdul Motin NID: 1218588035697 Mbl: 01913592311 7.Hanif Mia NID: 19701218575000009 Mbl: 01713925813	Village: Char Badda Union: Salimganj Upazila:Nabi Nagar District: Brahman Baria.	Mouza No.Char Badda Khatian No: 404/344/160/606/557/605 Plot: 1531/1502/1537/860/941/1282/1530/1531 /1551/288/289/316/493/1567 JL No:14	200	Agriculture land (One Crop)	Done
D 49	09	1.Kamal Uddin NID: 9148394498 Mbl: 01602208686 2.Forkan uddin NID: 1948433175 Mbl: 01711180780 3.Abdul Hashim NID: 8248455555 Mbl: 01733113742 4.Parul Begum NID: 4201436906 Mbl: 01716497968	Village: Bahir Char Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza No. Bahir Char Khatian No: 392/320/707/273/514/1071 Plot: 1105/617/1104/411/496/1111/1110 JL No:41	179	Agriculture land (One Crop)	Done

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Dyke no.	Route No	Land Owner		Land			GFA
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	
		5.Ismail Mia NID: 1523786984 Mbl: 01913777071 6.Amir Hossain Passport:0538242 Mbl: 01712835771 7.Farid NID: 3322198205 Mbl: 01852892821					
D 50	09	1.Abul Kashem NID: 2398411542 Mbl: 01708665453 2.HuJuneun Kobir NID: 1210436157748 Mbl: 01983460221	Village: Moddho Nagar Union: Choyfullah Kandi Upazila:Nabinagar District: Brahman Baria.	Mouza No. Moddho Nagar Khatian No: 1054/1485 Plot: 1105/617/1104/411/496/1111/1110 JL No:38	193	Agriculture land (One Crop)	Done
D 51	09	1.Murshid Mia NID: 3296986155 Mbl: 01852897257 2.Dulal Mia NID: 1218575054223 Mbl: 01719835021 3.Lal Chand Passport: 0363728 Mbl: 01719478351	Village: Char Badda Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Char Badda Khatian No: 525/263/675 Plot: 210/211/39/68 JL No:68	130	Agriculture land (One Crop)	Done
D 52	09	Shahin NID: 19821218575000021 Mbl: 01734532462	Village: Bandey Bahir char Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Char Badda Khatian No: 1118 Plot: 26 JL No:14	32	Agriculture land (One Crop)	Done
D 53	09	Md. Monirul Islam NID: 8672153577 Mbl: 01711175171	Village: Joy Nagar Union: Salimganj Upazila:Nabinagar District: Brahman Baria.	Mouza No. Joy Nagar Khatian No:1154 Plot: 2374 JL No:11	75	Agriculture land (One Crop)	Done
D 54	09	Abdur Razzak NID: 9574183696 Mbl: 01747343757	Village: Bishnurampur Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza No. Bishnurampur Khatian No:1154 Plot: 1594 JL No:01	86	Fallow Land	Done
D 55	09	Shahjalal NID: 8242023813 Mbl: 01625888695	Village: Bishnurampur Union: Tezkhali Upazila:Bancharampur District: Brahman Baria.	Mouza No. Bishnurampur Khatian No:386 Plot: 1550 JL No:40	73	Fallow Land	Done
D 01	7&8	1.Hanif Mia NID: 6816020733136 2.Abu Kashed Mia NID: 6816020432149 3.Abul Kashem NID: 5501734684 4.Nuru Mia NID: 8218914904 5.Sushil Chandra Sutradhar NID: 6816020732471 Mbl: 01794391918, 01712766109	Village: Birgaon Union: Alokbali Upazila:Narsingdi Sadar District: Narsingdi	Mouza: Char Madhobpur SA Khatian No: 425/2010/2051 CS Plot No: 4212, 4219, 4262, 4341, 10070, 10037, 13062, 10064, 10062, 10061, 10091, 10204, 9689, 9690, 9653, 10079, 10056, 10205, 9798, 10118, 10111, 10114 JL No: 73, 62, 52	677	About 70% Fallow Land and 30% Agriculture land (One Crop)	Done
D 02	7&8	Md. Delwar Hossain NID: 9550769062 Mbl: 01712766109	Village: Bakhor nagar Union: Alokbal Upazila:Narsingdi Sadar District: Narsingdi	Mouza: Char Madhobpur SA Khatian No: 8723/4356/4126/4247 SA Plot No: 7879,7915,7880,8793,7891,7960,7961,97 30,9731,9732,8730,896,7496,7494,9756, 9757, 9727,9730, 9731, 9732,8726, 8743, 7891, 8793,7886, JL No: 62	328	Fallow Land	Done

Table 155: GFA, Lot-03 (District: Barishal, Bhola, Sariatpur and Chandpur).

Dyke No.	Route No	Land Owner		Land			Good Faith Agreement
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	
D1	21	Md. Salam Fakir NID:8223014047	Village: Ghagoria Upazila: Mehendiganj	Plot no. 1901/56 Mouza: Ghagoriya.	200	Agriculture Land (Two Crops)	Under Process
D2	21	Md. Mizan Fakir NID:6860475422	Village: Bheduria Upazila: Bhola Sadar	Plot no. 1901/28 Mouza: Bheduria	121	Agriculture Land (Two Crops)	Under Process
D3	21	Md. Salam Fakir NID:8223014047	Village: Ghagoria Upazila: Mehendiganj	Plot no. 1901/56 Mouza: Ghagoriya.	224	Agriculture Land (Two Crops)	Under Process
D4	21	Md. Jahangir Hossain NID:	Village: Sreepur Upazila: Mehendiganj	Plot no. 1501 Mouza: Ghagoriya.	80	Fallow Land	Under Process
D5	21	Md. Mizanur Rahman NID: 6860475422	Village: Shampur Upazila: Bhola Sadar	Plot no. 1107,1181,1182, 2123,2124,2119,2125 Mouza: Ghagoriya.	355	Agriculture Land (Two Crops)	Under Process
D6	21	Md. Nur Nabi Vhuya NID: 0616213050970	Village: Sreepur Upazila: Mehendiganj	Plot no. 1468 (DP Khotiyan-385, DP Plot: 4662) Mouza: Ghagoriya.	355	Agriculture Land (Two Crops)	Under Process
D7	21	Md. Nur Nabi Vhuyia NID: 0616213050970	Village: Shreepur Upazila: Mehendiganj	Plot no. 1479 (DP Khotiyan-385, DP Plot: 4662) Mouza: Ghagoriya.	195	Agriculture Land (Two Crops)	Under Process
D8	21	Johurul Islam NID:4192286039 Mbl: 01711320785	Village: Bheduriya Union: Bhola Sadar Upazila: Bhola Sadar District: Bhola.	Mouza No. Char Bheduriya Khatian No: 1319 JL No: 56	405	Agriculture Land (Two Crops)	Under Process
D9	21	Md. Kabir Hossain Mridha NID:6878485082 Mbl: 01735802399	Village: Sreepur Union: Mehendiganj Upazila: Mehendiganj District: Barishal.	Mouza No. Ghagoria Khatian No: 296 JL No: 118	700	Agriculture Land (Two Crops)	Under Process
D10	21	Md. Hakim uddain NID: 1928737947	Village: Bheduria Union: Bhola Sadar Upazila:Bhola Sadar District: Bhola	Did not collect yet	768	Agriculture land (Two Crops)	Under Process
D11	21	I.Rahul Amin NID: 0616213050968 Mbl # 01762-447287 (Mrs.Rina, Headmaster) NID: Did not collect yet Mbl# 01795-831831	Village: Shreepur Union: Mehendiganj Upazila: Mehendiganj District: Barishal	Mouza. Shreepur Survey no. 47 Khatian No: 502,525,526 JL No: 120	444	Govt. primary school and Fallow land	Under Process

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Dyke No.	Route No	Land Owner		Land			Good Faith Agreement
		Name and NID	Address	Description	Quantity (Decimal)	Quality of Land	
D1	16	Monir Jomaddar NID: Did not collect yet Mbl # 01735167927	Village: Sadequepur Union: Mehendiganj Upazila: Mehendiganj District: Barishal	Did not collect yet	435.6	Agriculture land (One Crop)	Under Process
D2	16	1.Adv. Md Khorshed NID: 7328539411 2.Adv.Md Jakir Hossain NID: 0616213038313 Mbl # 01770198608	Village: Char Mitua Union: Alimabad Upazila: Mehandiganj District: Barishal	Mouza: Char mohisa. Plot no. 324, 325, 326, 344, 345, 346	287	Agriculture land (One Crop)	Under Process

ANNEX II: Photos of Project Activities

Progress and Coordination Meetings:



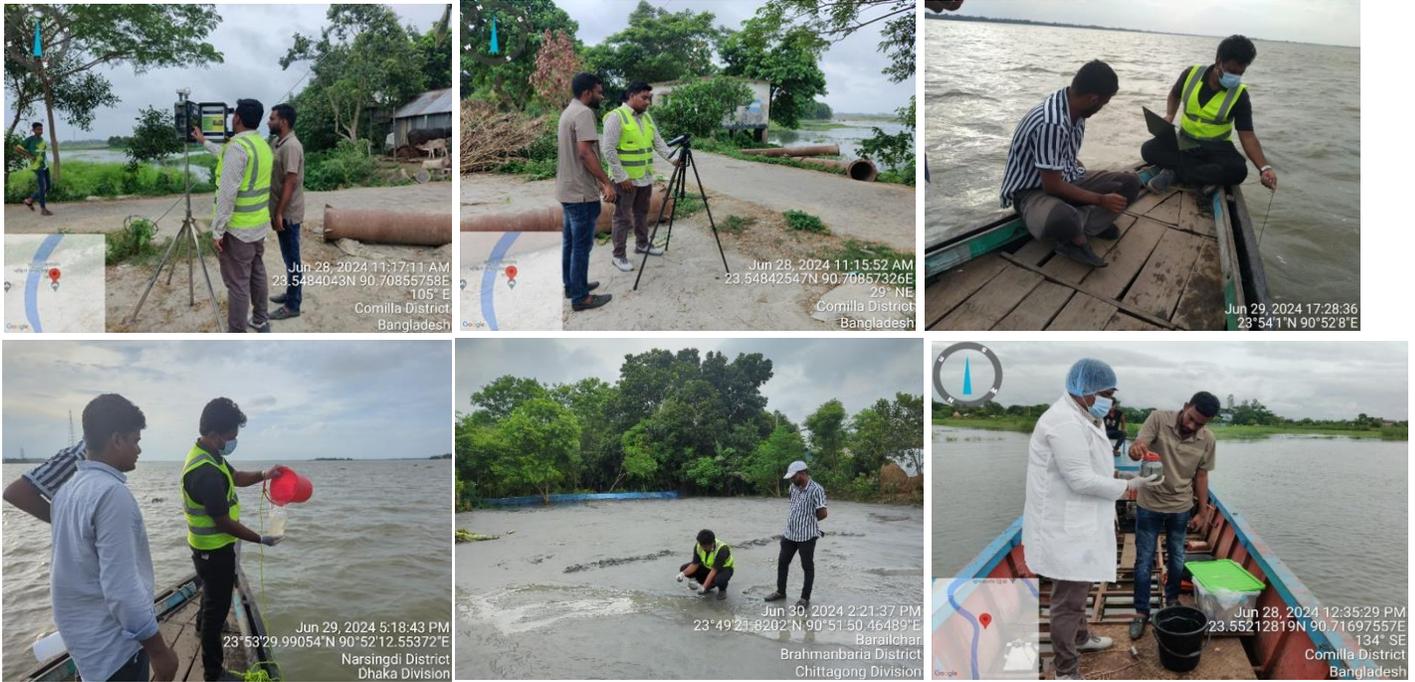
Local Level Stakeholder Communication and Consultation



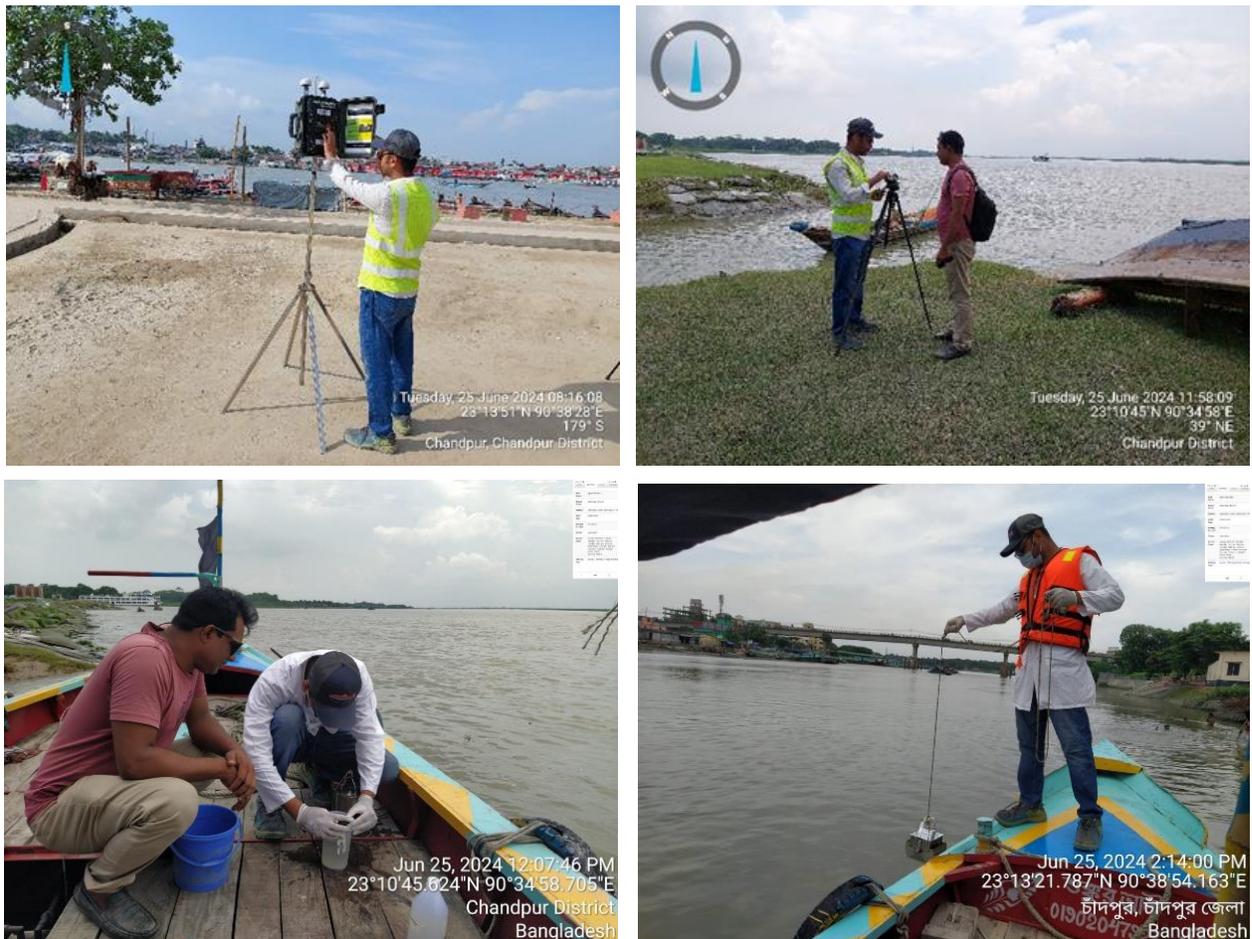
Field Visit June, 2024



Monthly Environmental Sample Collection at Lot-2 sites:



Monthly Environmental Sample Collection at Lot-3 sites:



Laboratory Test Results of Environmental Parameters, June, 2024

Laboratory Test Result of Lot-2:



Ref: ELRC/Air Quality/2024307912

Project Name	:	BRWTP-1, LOT-2: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 3 & 4, 5, 6, 7 & 8, 9,10, and 11
Monitoring Activity	:	Ambient Air Quality
Location	:	AQ1: Near Natun Hasnabad Fajeri Bari Jame Masque; Route-11 (23°32'54.37"N 90°42'30.83"E)
	:	AQ2: Near Choromdhuya Moriuam Govt. Primary School; Route-6 (23°54'10.85"N 90°52'32.27"E)
	:	AQ3: Near Tejkhali Modhopara Billpara Jame Mosque; Route-9 (23°49'27.69"N 90°51'46.22"E)
Monitoring Date	:	28.06.2024-30.06.2024
Reporting Date	:	03.07.2024

Description of Analysis:

Location	Sampling Date	Ambient Air Pollutants' Concentration in µg/m3					CO mg/m3
		SPM	PM10	PM2.5	SO2	NO2	
AAQ1	28.05.2024	161.25	77.06	43.97	24.09	32.17	0.7
AAQ2	29.06.2024	131.07	58.01	36.1	11.01	23.01	0.6
AAQ3	30.06.2024	148.07	70.01	38.6	13.07	26.09	0.8
Air Pollution (control) rules, 2022*		-	150	65	80	80	5
Method of Analysis Instrument Use: Haz-Scanner TM (HIM, 6000)		Particulates Sensor Light Scattering Nephelometer			High Sensitivity Electrochemical		

Note: * Air Pollution (Control) Rules, 2022

Legend: PM10 -Particulate Matter of a diameter of 10 microns or less. PM2.5 -Particulate Matter of a diameter of 2.5 microns or less, SO2 -Sulphur Dioxide; NO2 -Nitrogen-Dioxide; CO -Carbon Monoxide



Office Address:
Flat #F1, House # Ta-134/A
Baishakhi Sarani, Gulshan-Badda
Link Road, Dhaka-1212, Bangladesh

Tel: +(880) 248810789-90
+88(02) 9884077
Mobile: +(880) 1911702074
Email: info@elrcbd.com, elrcbd@gmail.com
www.elrc.com.bd



Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract



Ref: ELRC/Noise Level/2024307913

Project Name	:	BRWTP-1, LOT-2: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 3 & 4, 5, 6, 7 & 8, 9,10, and 11.
Monitoring Activity	:	Noise Level
Location	:	NL1: Near Natun Hasnabad Fajeri Bari Jame Masque; Route-11 (23°32'51.06"N 90°42'31.84"E)
	:	NL2: Near Choromdhuya Moriuam Govt. Primary School; Route-6 (23°54'10.85"N 90°52'32.27"E)
	:	NL3: Near Tejkhali Modhopara Billpara Jame Mosque; Route-9 (23°49'28.46"N 90°51'50.07"E)
Monitoring Date	:	28.06.2024-30.06.2024
Reporting Date	:	03.07.2024

Description of Analysis:

Location	Noise level (dB(A))			Bangladesh Standard (dB(A)) *	IFC EHS Guideline (2007)	Location setting
	Leq _{day}	L _{max}	L _{min}	Day	Day	
NL1	52.1	66.9	34.7	60	70	Mixed area
NL2	44.1	58.9	29.1	60	70	
NL3	53.1	64.8	31.3	60	70	

Note:

*Ministry of Environment, Forest, and Climate Change. (2006). Noise Pollution (Control) Rules, 2006 (S.R.O. No. 212-Law/2006). The People's Republic of Bangladesh.

A-weighted decibel, abbreviated dB(A), is an expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system, the decibel values of sounds at low frequencies are reduced, as the ear is less sensitive to low audio frequencies, especially below 1000 Hz, than to high audio frequencies.



Office Address:

Flat #F1, House # Ta-134/A
Baishakhi Sarani, Gulshan-Badda
Link Road, Dhaka-1212, Bangladesh

Tel: +(880) 248810789-90
+88(02) 9884077
Mobile: +(880) 1911702074
Email: info@elrcbd.com, elrcbd@gmail.com
www.elrc.com.bd



Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract



Ref: ELRC/Underwater Noise Level/2024307914

Project Name	:	BRWTP-1, LOT-2: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 3 & 4, 5, 6, 7 & 8, 9,10, and 11.
Monitoring Activity	:	Noise Level
Location	:	UWNL1: Meghna River; Route-11 (23°32'48.37"N 90°42'20.94"E) UWNL2: Meghna River; Route-6 (23°54'19.83"N 90°51'41.92"E)
Monitoring Date	:	28.06.2024-30.06.2024
Reporting Date	:	03.07.2024

Description of Analysis:

Code	Location	L _{Avg} [dB (A)]	*Standard
UWNL1	Meghna River; Route-11	57.4	No International/ GoB Standard
UWNL2	Meghna River; Route-6	52.3	



Office Address:
Flat #F1, House # Ta-134/A
Baishakhi Sarani, Gulshan-Badda
Link Road, Dhaka-1212, Bangladesh

Tel: +(880) 248810789-90
+88(02) 9884077
Mobile: +(880) 1911702074
Email: info@elrcbd.com, elrcbd@gmail.com
www.elrc.com.bd





Ref: ELRC/Surface Water Quality/2024307915

Project Name	:	BRWTP-1, LOT-2: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 3 & 4, 5, 6, 7 & 8, 9,10, and 11.
Description of Sample	:	Surface Water – Lot 2
Location	:	SW1: Gomati River; Route-11 (23°33'19.71"N 90°42'37.21"E) SW2: Meghna River; Route-11 (23°32'55.00"N 90°42'22.61"E) SW3: Meghna River; Route-6 (23°57'59.03"N 90°52'16.59"E) SW4: Meghna River; Route-6 (23°53'31.81"N 90°52'12.16"E) SW5: Titas River, Bancharampur; Route-9 (23°49'23.21"N 90°52'6.90"E) SW6: Titas River, Bancharampur; Route-9 (23°48'46.41"N 90°52'4.26"E)
Sampling Date	:	28.06.2024-30.06.2024
Reporting Date	:	03.07.2024

Description of Analysis:

Parameters	Unit	Concentration Present						Bangladesh Standard
		SW1	SW2	SW3	SW4	SW5	SW6	
Temperature	°C	26.6	27.1	24	24.7	27.4	27	-
EC	µS/cm	470	477	459	461	484	480	-
Turbidity	NTU	4.3	5	3	3.7	4.7	4.1	-
pH	-	7.51	7.63	7.19	7.21	7.58	7.66	6-9
TDS	ppm	230	237	213	219	239	234	1000
DO	mg/L	5.9	6	5	4.8	5.5	5.7	5 of more
Potassium	mg/L	31	27	23	25	33	33	-
Calcium	mg/L	32	30	26	27	34	34	-
Magnesium	mg/L	19	20	20	19	16	20	-
Phosphate	mg/L	1.1	1.3	1	1.1	1.4	1	-
Chloride	mg/L	23	27	21	19	24	24	-
Fluoride	ppm	0.7	0.8	0.6	0.7	0.8	0.8	-
Nitrate	mg/L	0.6	0.7	0.6	0.5	0.8	0.7	7
BOD5 (at 20°C)	mg/L	Will be added in the revised report						6 of less
Sulfate	mg/L	17	19	16	17	19	21	-
TSS	mg/L	199	203	177	281	204	208	-

Note: Bangladesh Environment Conservation Rules, 1997- Schedule 3 (Standards for Inland Surface Water). DO: Dissolved Oxygen; BOD: Biological Oxygen Demand; EC: Electric Conductivity; TDS: Total Dissolved Solids; TSS: Total Suspended Solids

Office Address:
Flat #F1, House # Ta-134/A
Baishakhi Sarani, Gulshan-Badda
Link Road, Dhaka-1212, Bangladesh

Tel: +(880) 248810789-90
+88(02) 9884077
Mobile: +(880) 1911702074
Email: info@elrcbd.com, elrcbd@gmail.com
www.elrc.com.bd





Ref: ELRC/Surface Water Quality/2024307915

Project Name	: BRWTP-1, LOT-2: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 3 & 4, 5, 6, 7 & 8, 9,10, and 11.
Description of Sample	: Surface Water – Lot 2
Location	: DW1: Sample From Houseboat; Route-9 (23°50'15.71"N 90°50'43.47"E)
Sampling Date	: 30.06.2024
Reporting Date	: 03.07.2024

Description of Analysis:

Parameter	Unit	DW1	Bangladesh Standard*
Temperature	oC	22.7	20-30
Electric Conductivity	µS/cm	751	--
pH	-	6.64	6.5 – 8.5
TDS	ppm	388	1000
Arsenic	mg/L	<0.01	0.05
Potassium	mg/L	7.1	12.0
Calcium	mg/L	12.9	75
Magnesium	mg/L	6	30–35
Chloride	mg/L	17	150 – 600*
Fluoride	ppm	0.3	1.0
Bromine	mg/L	--	--
Sodium	mg/L	--	200
Sulfate	mg/L	7	250
Iron	mg/L	0.05	0.3 – 1.0
Manganese	mg/L	0.01	0.4

Note: Bangladesh Environment Conservation Rules, 1997- Schedule 3 (Standards for Inland Surface Water). DO: Dissolved Oxygen; BOD: Biological Oxygen Demand; EC: Electric Conductivity; TDS: Total Dissolved Solids; TSS: Total Suspended Solids



Office Address:
Flat #F1, House # Ta-134/A
Baishakhi Sarani, Gulshan-Badda
Link Road, Dhaka-1212, Bangladesh

Tel: +(880) 248810789-90
+88(02) 9884077
Mobile: +(880) 1911702074
Email: info@elrcbd.com, elrcbd@gmail.com
www.elrc.com.bd





Ref: ELRC/Surface Water Quality/2024307915

Project Name	: BRWTP-1, LOT-2: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 3 & 4, 5, 6, 7 & 8, 9,10, and 11.
Description of Sample	: Surface Water – Lot 2
Location	: SedQ1: Meghna River; Route-11 (23°32'55.00"N 90°42'22.61"E)
	: SedQ2: Meghna River; Route-6 (23°54'50.38"N 90°51'12.13"E)
	: SedQ3: Titas River, Bancharampur; Route-9 (23°48'51.21"N 90°52'3.22"E)
Sampling Date	: 28.06.2024-30.06.2024
Reporting Date	: 03.07.2024

Description of Analysis:

Testing Specification	Method	Unit	SedQ1	SedQ2	SedQ3	Dutch Environmental Standard (mg/kg)
Pb	Inductively Coupled	mg/kg	14.03	11.12	15.01	85
Cadmium	Coupled	mg/kg	0.066	0.049	0.071	0.8
Cr	Plasma	mg/kg	13	10.09	14	100
Zn	Mass	mg/kg	17.01	13.01	18.01	140
As	Spectrometry (ICPMS)	mg/kg	1.2	0.09	1.4	29

Note: Bangladesh Environment Conservation Rules, 1997- Schedule 3 (Standards for Inland Surface Water). DO: Dissolved Oxygen; BOD: Biological Oxygen Demand; EC: Electric Conductivity, TDS: Total Dissolved Solids; TSS: Total Suspended Solids



Office Address:
Flat #F1, House # Ta-134/A
Baishakhi Sarani, Gulshan-Badda
Link Road, Dhaka-1212, Bangladesh

Tel: +(880) 248810789-90
+88(02) 9884077
Mobile: +(880) 1911702074
Email: info@elrcbd.com, elrcbd@gmail.com
www.elrc.com.bd



Laboratory Test Result of Lot-3:



Ref: EQMS/Air Quality/ 202401070749

EQMS ENVIRONMENTAL LABORATORY
Monitoring Results of Ambient Air Quality

Project Name : BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 &16, 17 and 21

Monitoring Activity : Ambient Air Quality

Monitoring Personnel : K.M. Shakik ahmed walid

Monitoring Date : 25.06.2024

Monitoring Location : Route 12; (AQ-1)- 23°13'51.02"N 90°38'28.38"E
 : Route 13; (AQ-2)- 23°10'45.17"N 90°34'58.45"E

Description of Analysis:

Location	Sampling Date	Ambient Air Pollutants' Concentration in µg/m ³					CO mg/m ³
		SPM	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	
AQ-1 Route 12	25/06/2024	95.38	52.30	27.91	18.12	23.38	0.6
AQ-2 Route 13	25/06/2024	62.59	35.63	20.88	14.76	18.96	0.5
Air Pollution (control) rules, 2022*		-	150	65	80	80	5
Method of Analysis Instrument Use: Haz-Scanner TM (HIM, 6000)		Particulates Sensor Light Scattering Nephelometer			High Sensitivity Electrochemical		

Note: * Air Pollution (Control) Rules, 2022

Legend: PM₁₀-Particulate Matter of a diameter of 10 microns or less. PM_{2.5}-Particulate Matter of a diameter of 2.5 microns or less, SO₂-Sulphur Dioxide; NO₂-Nitrogen-Dioxide; CO -Carbon Monoxide

Received By:

Shihabuddin Ahmed Imran
 Consultant
 EQMS

Analyzed By:

Ahmed Jubaer
 Technical Manager
 EQMS

Checked By:

Md. Jahidul Islam
 Quality Manager
 EQMS



Head Office: H # 53, R # 04, B # C, Banani, Dhaka -1213, Bangladesh
Lab Office: Flat # F1, House # Ta-134/A, Boishakhi Sarani, Gulshan-Badda Link Road, Dhaka - 1212
Toronto Office: 7 Arnot Street, Scarborough Ontario, M1K4B5 Canada





Ref: EQMS/Noise Level/ 202401070750

EQMS ENVIRONMENTAL LABORATORY
Monitoring Results of Noise Level Measurement

Project Name : BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 &16, 17 and 21

Monitoring Activity : Noise Level

Monitoring Personnel : K.M. Shakik ahmed walid

Location : **NL1** 22°42'27.05"N 90°33'18.77"E, **(Route-12)**
NL2 22°42'19.33"N 90°33'44.12"E, **(Route-13)**

Monitoring Date : 25.06.2024

Description of Analysis:

Location	Noise level (dB(A)) ¹			Bangladesh Standard (dB(A)) ²	IFC EHS Guideline (2007) ³	Location setting
	Leq _{day}	L _{max}	L _{min}	Day	Day	
NL1	71.09	85.31	38.15	60	70	Mixed Area
NL2	59.24	73.46	36.41	-	-	-

Received By:

Shihabuddin Ahmed Imran
 Consultant
 EQMS

Analyzed By:

Ahmed Jubaer
 Technical Manager
 EQMS

Checked By:

Md. Jahidul Islam
 Quality Manager
 EQMS

¹ A-weighted decibel, abbreviated dB(A), is an expression of the relative loudness of sounds in air as perceived by the human ear. In the A-weighted system, the decibel values of sounds at low frequencies are reduced, as the ear is less sensitive to low audio frequencies, especially below 1000 Hz, than to high audio frequencies.

²Ministry of Environment, Forest, and Climate Change. (2006). Noise Pollution (Control) Rules, 2006 (S.R.O. No. 212-Law/2006). The People's Republic of Bangladesh.

³ Guidelines values are for noise levels measured out of doors. Source: Guidelines for Community Noise, World Health Organization (WHO), 1999



Head Office: H # 53, R # 04, B # C, Banani, Dhaka -1213, Bangladesh
Lab Office: Flat # F1, House # Tg-134/A, Bolshakhi Sarani, Gulshan-Badda Link Road, Dhaka – 1212
Toronto Office: 7 Arnot Street, Scarborough Ontario, M1K4B5 Canada



Ref: EQMS/Surface Water Quality/ 202401070751

EQMS ENVIRONMENTAL LABORATORY

Test Results of Surface Water Quality

Project Name : BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 &16, 17 and 21

Description of Sample : Surface Water

Monitoring Personnel : K.M. Shakik ahmed walid

Location : SW1 - 22°42'22.12"N 90°33'20.05"E, Route 12
SW2 - 22°42'1.37"N 90°33'46.04"E, Route 13

Sampling Date : 25.06.2024

Description of Analysis:

Parameters	Unit	Concentration Present (Route – 12 & 13)		Bangladesh Standard
		SW1	SW2	
Temperature	°C	27.5	28.1	-
EC	µS/cm	185	227	-
Turbidity	NTU	11.8	13.8	-
pH	-	8.57	8.89	6 - 9
TDS	ppm	82	112	1000
DO	mg/L	8.2	8.9	5 or more
Potassium	mg/L	8.9	9.2	-
Calcium	mg/L	<0.01	<0.01	-
Magnesium	mg/L	17	19	-
Phosphate	mg/L	<0.01	<0.01	0.05
Chloride	mg/L	6.9	5.5	-
Fluoride	ppm	0.16	0.12	-
Nitrate	mg/L	0.4	0.7	7.0
BOD5 (at 20°C)	mg/L	1.9	1.7	6 or less
Sulfate	mg/L	14	17	-
TSS	mg/L	39	45	-

Note: * Bangladesh Environment Conservation Rules-2023, Schedule 2(Ka) (Water Usable for Fisheries). DO: Dissolved Oxygen; BOD: Biological Oxygen Demand; EC: Electric Conductivity, TDS: Total Dissolved Solids; TSS: Total Suspended Solids



Head Office: H # 53, R # 04, B # C, Banani, Dhaka -1213, Bangladesh
 Lab Office: Flat # F1, House # Ta-134/A, Boishakhi Sarani, Gulshan-Badda Link Road, Dhaka – 1212
 Toronto Office: 7 Arnot Street, Scarborough Ontario, M1K4B5 Canada





Ref: EQMS/Underwater Noise Level/ 202401070752

EQMS ENVIRONMENTAL LABORATORY

Monitoring Results of Underwater Noise Level Measurement

Project Name : BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 & 16, 17 and 21

Monitoring Activity : Underwater Noise Level

Monitoring Personnel : K.M. Shakik ahmed walid

Location : **UWNL1** 22°42'20.89"N 90°33'24.37"E, **Route-12**
UWNL2 22°42'15.65"N 90°33'46.22"E, **Route-13**

Monitoring Date : 25.06.2024

Description of Analysis:

Code	Location	L _{Avg} [dB (A)]	*Standard
		[dB (A)]	
UWNL1	Route 12	75.5	No standard of International / GoB
UWNL2	Route 13	63.9	

Received By:

Shihabuddin Ahmed Imran
 Consultant
 EQMS

Analyzed By:

Ahmed Jubaer
 Technical Manager
 EQMS

Checked By:

Md. Jahidul Islam
 Quality Manager
 EQMS



Head Office: H # 53, R # 04, B # C, Banani, Dhaka -1213, Bangladesh
 Lab Office: Flat # F1, House # Ta-134/A, Boishakhi Sarani, Gulshan-Badda Link Road, Dhaka – 1212
 Toronto Office: 7 Arnot Street, Scarborough Ontario, M1K4B5 Canada





Ref: EQMS/Riverbed sediment/ 202401070753

EQMS ENVIRONMENTAL LABORATORY

Test Results of Riverbed sediment

Project Name : BIWTP -1, LOT-3: OPBC Works of Development Dredging with maintenance and Aids to Navigation with installation along inland waterway Routes- 12,13,13a, 15 &16, 17 and 21

Description of Sample : Riverbed sediment – Lot 3

Monitoring Personnel : K.M. Shakik ahmed walid

Sampling Date : 25.06.2024

Location Details:

Code	Route No.	GPS Location
SedQ1	Route 12	23°13'21.56"N 90°38'55.60"E
SedQ2	Route 13	23°10'38.84"N 90°35'2.94"E

Description of Analysis:

Parameter	Unit	Riverbed sediment – Lot 3		Methodology	Dutch Environmental standard (mg/kg)
		SedQ1	SedQ2		
Lead	mg/kg	11.56	10.98	ICPMS	85
Cadmium	mg/kg	0.061	0.068	ICPMS	0.8
Chromium	mg/kg	19.49	16.19	ICPMS	100
Zinc	mg/kg	23.06	18.20	ICPMS	140
Arsenic	mg/kg	1.89	1.95	ICPMS	29

Note: ICPMS - Inductively coupled plasma mass spectrometry

Received By:


 Shihabuddin Ahmed Imran
 Consultant
 EQMS

Analyzed By:


 Ahmed Jubayer
 Chemist
 EQMS

Checked By:


 Md. Jahidul Islam
 Quality Manager
 EQMS

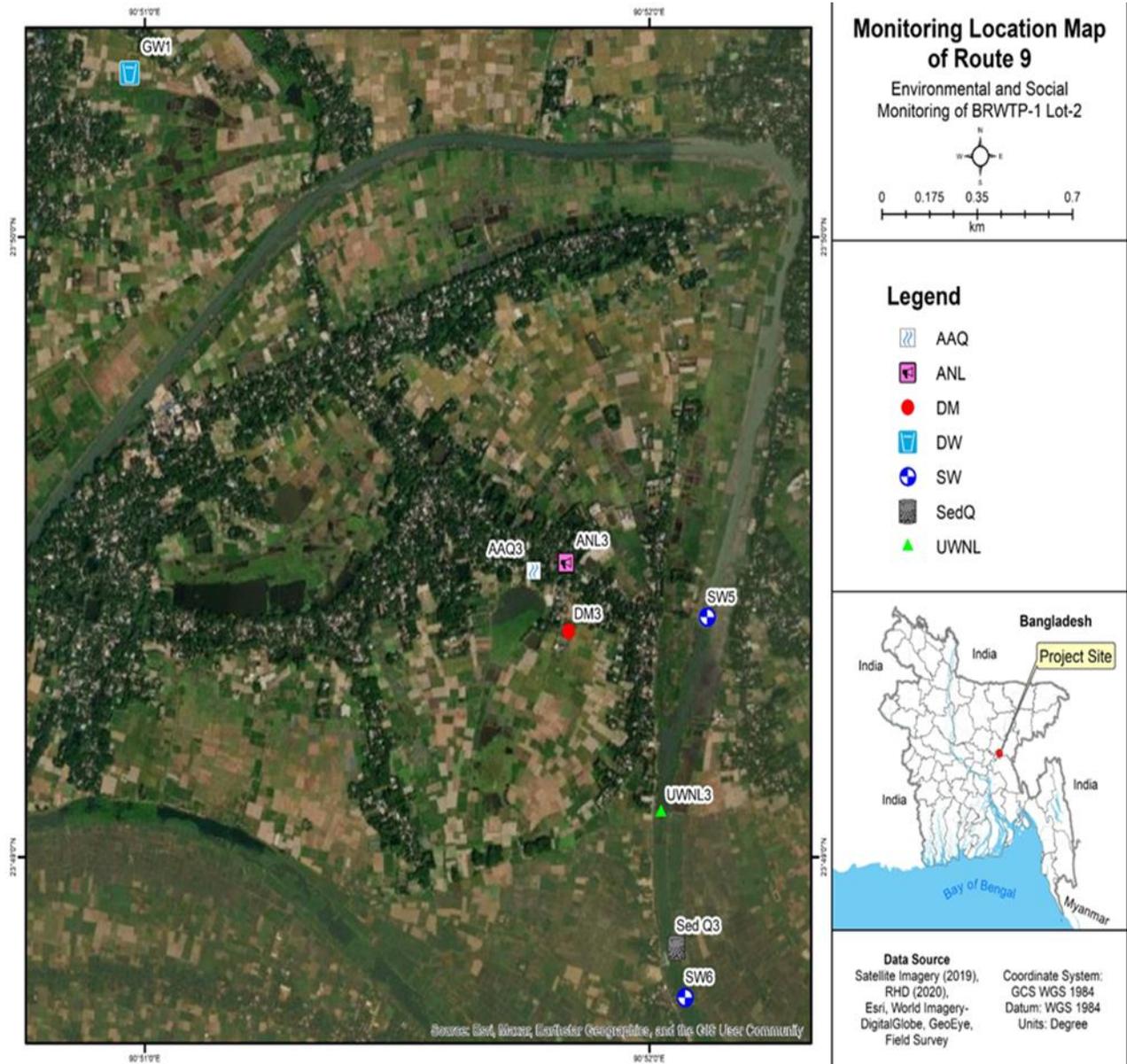


Head Office: H # 53, R # 04, B # C, Banani, Dhaka -1213, Bangladesh
 Lab Office: Flat # F1, House # Ta-134/A, Boishakhi Sarani, Gulshan-Badda Link Road, Dhaka – 1212
 Toronto Office: 7 Arnot Street, Scarborough Ontario, M1K4B5 Canada

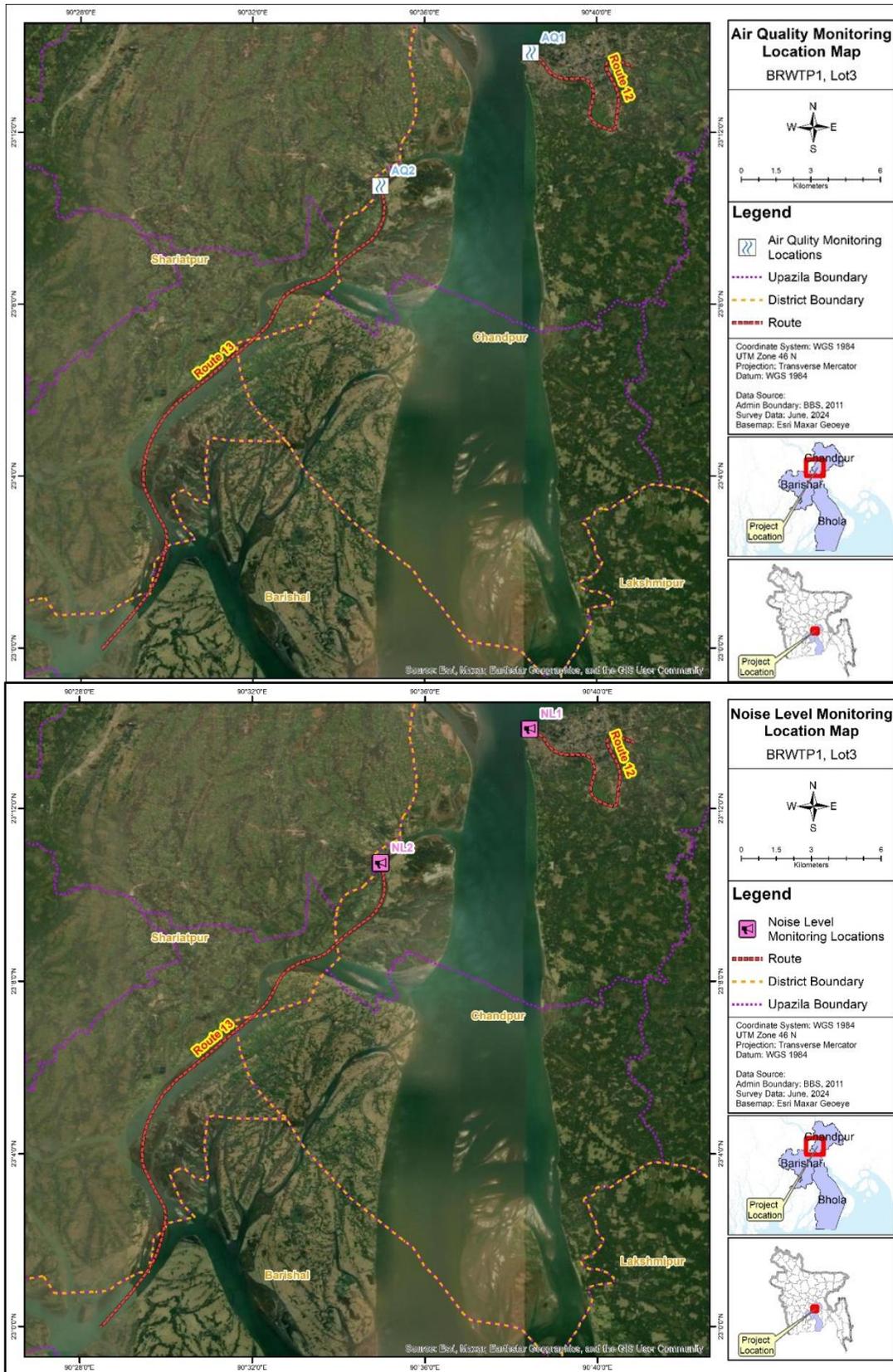


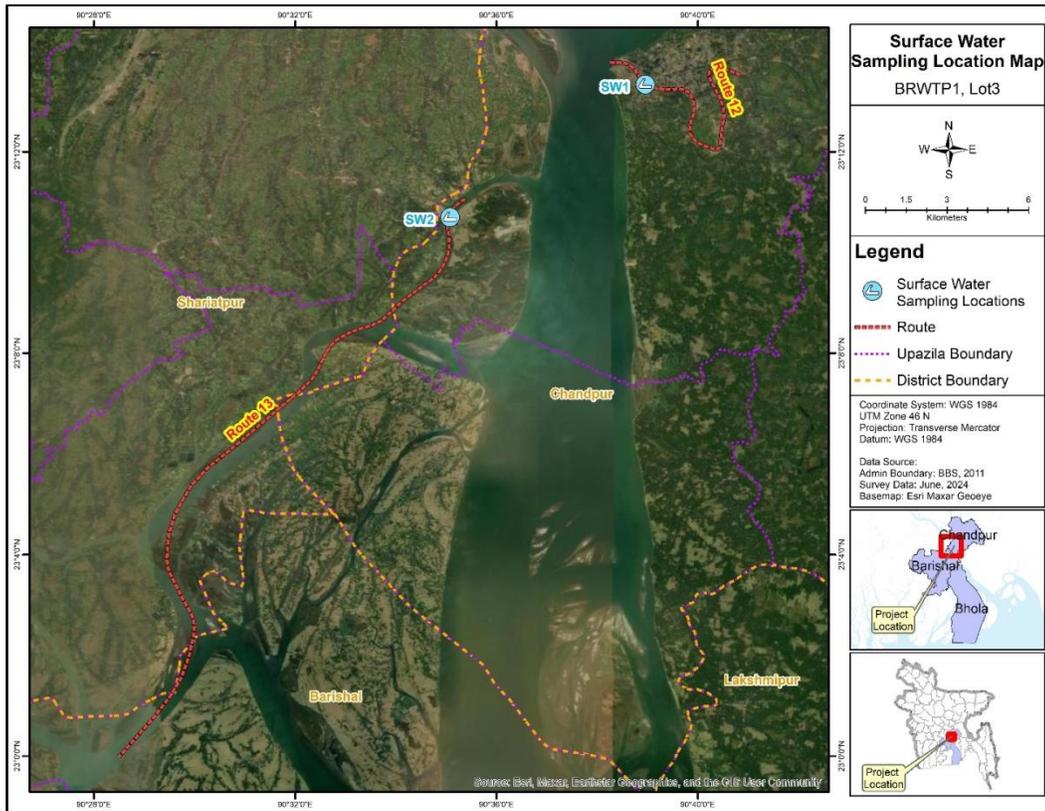
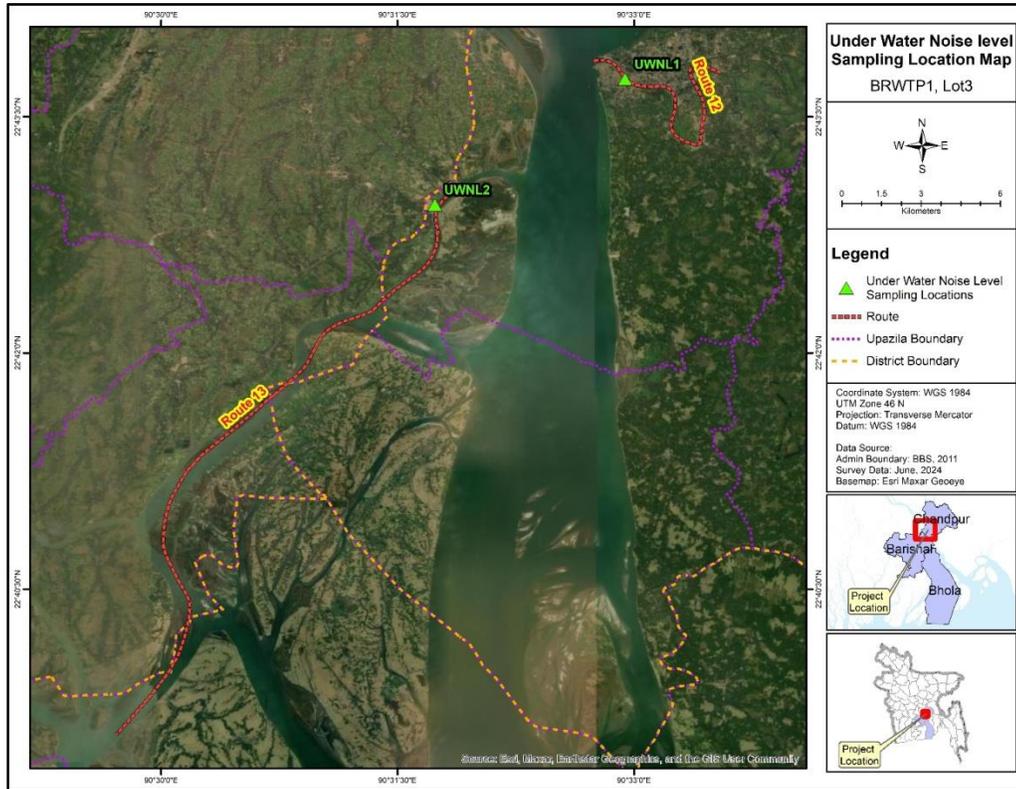
ANNEX IV: Location of Environmental Sample Collection

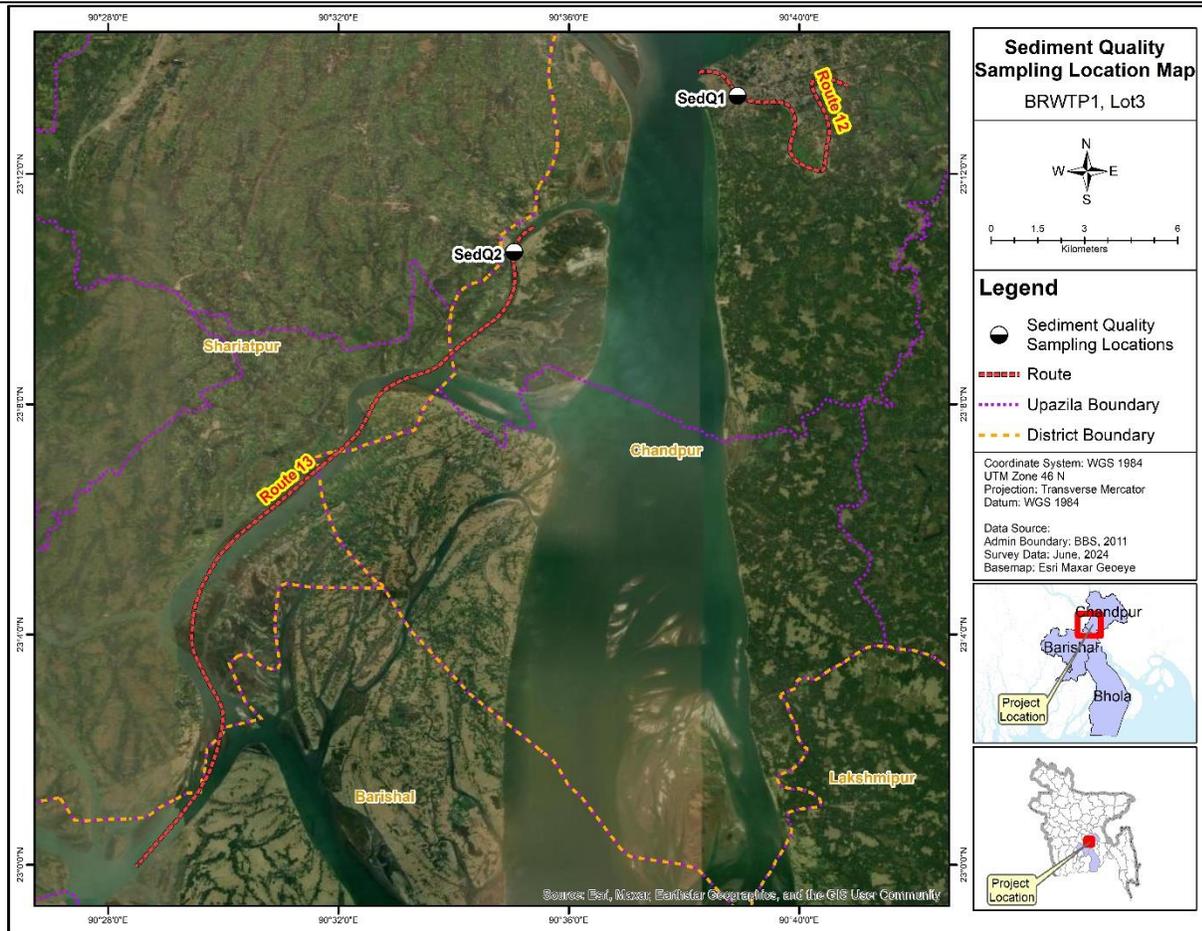
Location Map Environmental Sample Collection at Lot-2 sites:



Location Map Environmental Sample Collection at Lot-3 sites:







ANNEX V: Dredging Activity at a Glance up to June 2024

Table 166: Final Dredging Activity Schedule on 30th June 2024

SL No.	River Name River No.	Dredger Size	Dredger Name	Location	GPS (Starting)	GPS (Ending)	Dredger No	Pipe Length (m)	R. Length in (m)	Dredge Length (m)	Dredge Length to day (m)	Cumulative Length (m)	Remaining length (m)	Dike Status	Start Dredging time	End Dredging time	Approved BOQ Qty (m ³)	Daily Progress (m ³)	Cumulative Qty (m ³)	Adjusted dredging volume	Remaining dredging volume
1	River Route 09 Brahmanbaria	18	Karnafuly-03	BaherchorBancharampur	E=N=	E=N=	7	650	60000	19500	0	1,782	4,863	0	0:00	0:00	1,27,000	0.00	0.00	752702.00	366667.15
2		18	Karnafuly-05	BaherchorBancharampur	E=283089, N=2637654	E=283094, N=2637652		716			7	820		Dyke-36	7:30	12:35		314.00	107153.00		
3		18	Karnafuly-07	Hanarpar, Bancharampur	E=N=	E=N=		1,581			0	989		Dyke-57	0:00	0:00		0.00	154671.65		
4		16	Parnto-01	Kadur Nabinagar	E=N=	E=N=		866			0	864		Dyke-61	0:00	0:00		0.00	28724.18		
5		16	MCD-01	Khalla Bancharampur	E=N=	E=N=		1,054			0	312		Dyke-62	0:00	0:00		0.00	24735.02		
6		16	Reve-03	Hasonnagar Bancharampur	E=282716, N=2635591	E=282720, N=2635570		716			13	2,191		Dyke-60	9:10	4:15		494.00	57231.00		
7		14	Reve-05	Kadur Nabinagar	E=282736, N=2635552	E=282730, N=2635560		800			9	679		Dyke-41	0:00	0:00		376.00	13520.00		
8	R-07&08 Nars hindi	18	Karnafuly-02	Khudazilla, Narsingdi Sadar	E=N=	E=N=	2	900	30000	5,800	0	334	2,448	Dyke-06	18:00	20:30	3,70,000	0.00	12357.07	253416.00	92034.93
9		20	Kafela-01	Khudazilla, Narsingdi Sadar	E=283039, N=2637644	E=283034, N=2637647		1,818			12	3,018		Dyke-05	16:10	22:23		361.00	149024.00		
10	R-11 Cumi lla	20	Shah Yuvraj	Hasnabad Daudkandi	E=N=	E=N=	1	1688	16000	10,600	18	609	9,991	Dyke-01	0:00	0:00	1,32,000	1286.00	33830.00	93436.97	59606.97
11	R-06 Nars hindi	20	MBDDL - Craft - 1	Charmadua Raipura	E=282736, N=263545	E=282739, N=263549	1	1,463	25000	1,500	0	465	1,035	Dyke-01	12:50	23:36	1,01,500	0.00	29667.00	99504.72	69837.72

Checklist of Lot-2

Grievance Redressal Mechanism (GRM) Checklist, BRWTP-S1A

SI no.	Factors	Checklist Items	Dredging Activity				Comments/Compliance	
			Daily	Weekly	Monthly	Quarterly		
1	Legal and Regulatory Compliance	1	The contractors communicate to all the stakeholders regarding GRM processing and lodging complaints.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	There are GRM committees with 5 persons here.
		2	Contact details for lodging grievance easily accessible.	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
2	Community Engagement	1	Consultations/ FGD have been conducted with local communities, dredging contractors to collect their input on the GRM design.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
3	Grievance Channels	1	The multiple accessible channels available for the stakeholders to submit their grievances. (e.g., toll-free hotline, online platform, drop box, post, landline/mobile phone and e-mail).	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
4	Processing of GFA (Good Faith Agreement)	1	Dyke/Land selection survey.	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Survey in every week.
		2	Opinion meeting with land owner along with inform to the contractor and S1A team for justifying land as dyke.	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Survey in 15 days a month.
		3	GFA documentation collection.	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Collection the document 15 days a month.
		4	GFA will be submitted to S1A.	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	
		5	FGD on GFA with the Locals	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
5	Constitution of GRM Protocol	1	Preparation of GRM Protocol and Grievance Redres Committee (GRC) will be Constituted by the Contractors.	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	
6	Establish a Complaint Box	1	For receive feedback, suggestions and complain letters.	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	There are 3 complain box in site. One box is in office, one box in houseboat and another is open road site.
7	Establish a Signboard	1	The size of Bill board will be 5/15. The bill board should contain: name, mobile number and email of the focal person.	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	There is a signboard in front of office.
8	3 (three) tyers of the GRM Committee will be formed	1	Local level GRC (Committee members 05, quorum fullfill at least 03) -Project related issues.	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	
		2	Contractor level GRC (Committee members 03, quorum fullfill at least 03)- GBV, CoC, Contractors workers occurance etc. related issues.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
		3	Project level GRC (Committee members 03, quorum fullfill at least 03)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
9	Capacity Building	1	Project staffs and local institutions have received training on the GRM, GBV related issues and its operation.	<input type="radio"/>	ON/A	<input type="radio"/>	<input type="radio"/>	
10	Leaflet/ Brochure	1	The Leaflet/ Brochure will be published for dissemination to all the stakeholders.	<input type="radio"/>	ON/A	<input type="radio"/>	<input type="radio"/>	There is no liflat in the site.
11	Monitoring, Reporting & documentation	1	The regular reports generated to document the number, nature, and resolution of grievances (Registration Book, Resolution book / Decision book & Closing book)	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	
12	Social Consultation	1	Local Community	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	
		2	Land Owner	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	
		3	Local Government Authority	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	
13	Gender-Based Violence	1	Sex Violence by an intimate partner	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
		2	Sexual violence by a non-peer	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

	(GBV)	3	Child sexual abuse & forced marriage	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
		4	Sexual exploitation & abuse	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
		5	Sexual harassment	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	
		6	In case of emergency, the local level GRC will address the matter within 04 -12 hours.	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	

Dredging Activity

Checklist Items		Dredging Activity			Comments/Compliance
		Daily	Monthly	When and As Required	
1	Gauge reading & Water level (WL)	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Average water level is 0.914 m
2	Connectivity with BM & TBM	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
3	Study Hydrographic Chart	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	Chart is prepared for route 09, 06 route 7 &8 and route 11
4	Fixing Cutting Depth respect to existing WL as per design depth	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Average cutting depth is 2.388 m
5	Checking Dredging Alignment	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
6	Checking Dredged Activities as below;				
a	Dredging Hours	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
b	Cutting Length	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Total cutting length 4760 m
c	Cutting Depth	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Average cutting depth is 2.388 m
d	Cutting Width	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	30~35 m
e	Dredged Volume	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Total volume 613014.586 m3
7	Supervising Dredged Material Disposal Area whether the Dykes are designed as per Design	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
8	Supervising Dredged Material Disposal Area whether the Dykes are capable to resist the pressure of disposed materials	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
9	Checking outlet of the compartment	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
10	Check whether the dykes are being constructed at safe distance from river bank	<input type="radio"/>	<input checked="" type="checkbox"/>	<input type="radio"/>	
11	Check construction of the pipe line whether there is any leakage in the Joints of Floating Pipe/Shore pipe lines	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	
12	Check whether dredging work exacting Keeping Safety distance of River side installations like Road/houses/buiding.	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	
13	Check Survey Activities	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	

Environmental Factors and Dredging Activity

Factors	Checklist Items		Dredging Activity			Comments/Compliance
			Daily	Monthly	Quarterly	
1. Permits and Explanation	1	EIA and Environmental Permits	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	2	Explanation to the Local Stakeholders	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	3	Signboards, Notice Boards	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
2. Physical Environmental Parameters Monitoring	1	Air Quality	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
	2	Surface Water Quality	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
	3	Solid Wastes	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
	4	Liquid Wastes	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
	5	Soil Contamination	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
	6	Noise and Vibration	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
	7	Underwater Noise	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
	8	Odor	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
	9	Riverbed Sediment	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
	10	Groundwater	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Supervised in 26 & 27 June at Norshingdi site and 28 and 29 June at solimgonj site.
3. Natural Environment	1	Protected Areas	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Route no. 07&08 and 09
	2	Habitat Type	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Route no. 07&08 and 09
	3	Hydrology	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Route no. 07&08 and 09
	4	Topography and Geology	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Route no. 07&08 and 09
	5	Dolphin Observation	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Route no. 07&08 and 09
	6	Fish Catch Examination	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Route no. 07&08 and 09
	7	Flora (Aquatic & Terrestrial)	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Route no. 07&08 and 09
	8	Benthos (Micro & Macro)	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Route no. 07&08 and 09
	9	Phyto- & Zoo-planktons	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Route no. 07&08 and 09
4. Social Environment	1	Resettlement	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	2	Living and Livelihood	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	3	Heritage	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	4	Landscape	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	5	Ethnic Minorities and Indigenous Peoples	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
5. Occupational Health Safety	1	Work Permit/Contract	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	2	Daily Toolbox Meeting - OHS	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	3	Working Conditions		<input checked="" type="checkbox"/>		Fair
	4	Impact/Precaution during Dredging	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	Not any major issue observed
	5	Accident Prevention Measures	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	Contractors ESHS team visiting site and concerning all the Manpower
	6	Working Condition	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Fair
	7	Accommodation	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	House Boat

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Factors	Checklist Items		Dredging Activity			Comments/Compliance
			Daily	Monthly	Quarterly	
	8	Personal Protection Equipment	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Safety helmet, Safety vest, safety shoes, Hand gloves etc observed at site.
	10	Sanitary Condition	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	<input type="radio"/>	Good arrangement kept in House boat
6. Dredged Material Disposal Area	1	Agreement with Land Owner	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	2	Land Use Type	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
	3	Dyke Design Approval	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
	4	Dyke Setback Distance	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
	5	Disposal Area Dyke Height	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	<input type="radio"/>	
	6	Dyke Strengthened/Material Used*	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	When required then used.
7. Dredger	1	Carbon Emission	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	Not found/observed at site for all route in lot-2
	2	Leakage	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	3	Oil Spill	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	4	Onboard Waste Management	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/> <input type="checkbox"/>	
	5	Noise and Vibration	<input type="radio"/>	<input type="radio"/>	<input checked="" type="checkbox"/>	

ESHS Activity

Category	Environmental Item	Main Check Items	Yes: Y No: N
1. Permits and Explanation	(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process?	Y
		(b) Have EIA reports been approved by authorities of the host country's government?	Y
		(c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied?	Y
		(d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	Y
	(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders?	Y
	(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	Y
	2. Physical Environmental Parameters Monitoring	(1) Air Quality	(a) Do air pollutants, such as sulfur oxides (SOx), nitrogen oxides (NOx), soot and dust emitted from the ships, vehicles and the facilities like docs comply with the country's emission standards? Are any mitigating measures taken?
(2) Water Quality		(a) Do pollutants, such as Suspended Solids (SS), oils/fats and other toxicants contained in effluents comply with the country's effluent standards (BOD, COD, ph, etc)? Is there a possibility that the effluents from the project will cause areas not to comply with the country's ambient water quality standards?	Y

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Category	Environmental Item	Main Check Items	Yes: Y No: N
		(b) Are adequate measures taken to prevent contamination of surface water, groundwater and soil by the effluents from storage areas, including raw materials, chemicals, and wastes?	N
	(3) Wastes	(a) Are wastes (including hazardous wastes and other industrial wastes) generated from the project facilities properly treated and disposed of in accordance with the country's regulations?	N
		(b) Are adequate measures taken to prevent contamination of soil and groundwater by leachates from the waste storage/disposal sites?	N
	(4) Noise and Vibration	(a) Do noise and vibrations comply with the country's standards?	N
	(5) Subsidence	(a) In the case of extraction of a large volume of groundwater, is there a possibility that the extraction of groundwater will cause subsidence?	N
	(6) Odor	(a) Are there any odor sources? Are adequate odor control measures taken?	N
	(7) Riverbed Sediment	(a) Sediment collection in presence of SIA team members/staff?	Y
		(b) Samples sent to the laboratory within 12 hours?	Y
		(c) If sample results showed presence of heavy metal, treatment measures like separate compartment for disposal of dredged material taken by the Contractor	N
	(8) Groundwater	Samples collected and analyzed	N
3. Natural Environment	(1) Protected Areas	(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	N
	(2) Ecosystem/Habitat Type	(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., Char land, reedland, mangroves, or tidal flats)?	N
		(b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions?	N
		(c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem?	N
		(d) Is there a possibility that the amount of water (e.g., surface water, groundwater) used by the project will adversely affect aquatic environments?	N
		(e) Are adequate measures taken to reduce the impacts on aquatic environments, such as aquatic organisms?	N
	(3) Topography and Geology	(a) Is the stability of the existing topographic conditions adequately considered for alteration of topographic features, such as cut and fill operations?	N
		(b) Is there a possibility that soil runoffs will result from cut and fill areas, waste soil disposal sites, and borrow sites?	N
		(c) Are adequate mitigation measures taken to prevent soil runoffs?	N

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Category	Environmental Item	Main Check Items	Yes: Y No: N
		(d) Is there any possibility that the project will erode natural river bank, forshore area, beaches?	N
	(4) Dolphin Observation	(a) Exclusive time spent for observing dolphins?	N
	(5) Fish Catch Examination	(a) Fishermen upstream and downstream of dredging site interviewed and catch examined? Types of gears used?	Y
	(6) Flora (Aquatic & Terrestrial)	(a) Flora surveyed around the dredging and dredged material disposal sites	N
	(7) Benthos (Micro and Macro)	(a) Sampling done and analyzed, report submitted	Y
	(8) Phyto- & Zoo-Planktons	(a) Sampling done and analyzed, report submitted	Y
4. Social Environment	(1) Resettlement	(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?	N
		(b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement?	N
		(c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement?	N
		(d) Are the compensations going to be paid prior to the resettlement?	N
		(e) Are the compensation policies prepared in document?	N
		(f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples?	N
		(g) Are agreements with the affected people obtained prior to resettlement?	N
		(h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan?	N
		(i) Are any plans developed to monitor the impacts of resettlement?	N
		(j) Is the grievance redress mechanism established?	N
	(2) Living and Livelihood	(a) Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary?	N
		(b) Is sufficient infrastructure (e.g., hospitals, schools, and roads) available for the project implementation? If the existing infrastructure is insufficient, are any plans developed to construct new infrastructure or improve the existing infrastructure?	N
		(c) Is there a possibility that large vehicles traffic for transportation of materials, such as raw materials and products will have impacts on traffic in the surrounding areas, impede the movement of inhabitants, and cause any risks to pedestrians?	N
		(d) Is there a possibility that diseases, including infectious diseases, such as HIV, will be brought due to the immigration of workers associated with the project? Are adequate considerations given to public health, if necessary?	N

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Category	Environmental Item	Main Check Items	Yes: Y No: N	
	(3) Heritage	(a) Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage sites? Are adequate measures considered to protect these sites in accordance with the country's laws?	N	
	(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	N	
	(5) Ethnic Minorities and Indigenous Peoples	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples?	N	
		(b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources respected?	N	
	(6) Working Conditions	(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project?	N	
		(b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials?	N	
		(c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public sanitation) for workers etc.?	N	
		(d) Are appropriate measures being taken to ensure that security guards involved in the project do not violate safety of other individuals involved, or local residents?	N	
	5. Others	(1) Impacts during dredging/construction	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)?	N
			(b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce the impacts?	N
(2) Accident Prevention Measures		(a) Does the project have any accident prevention equipment and scheme to store, emit and transport toxic and hazardous materials?	N	
(3) Monitoring		(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts?	N	
		(b) What are the items, methods and frequencies of the monitoring program?	N	
		(c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)?	N	
		(d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?	N	

Checklist of Lot-3

Dredging June 2024

Checklist Items		Dredging Activity			Comments/Compliance	
		Daily	Monthly	When and As Required		
1	Gauge reading & Water level (WL)	<input type="radio"/>	<input type="radio"/>	√		
2	Connectivity with BM & TBM	<input type="radio"/>	<input type="radio"/>	√		
3	Study Hydrographic Chart	<input type="radio"/>	<input type="radio"/>	√		
4	Fixing Cutting Depth respect to existing WL as per design depth	<input type="radio"/>	<input type="radio"/>	√		
5	Checking Dredging Alignment	<input type="radio"/>	<input type="radio"/>	√		
6	Checking Dredged Activities as below;				Dredged Activities for the month of June, 2024	
	a	Dredging Hours	<input type="radio"/>	√	<input type="radio"/>	Total Dredging Hours 633.15 hrs (Route 21 is 578.3hrs, Route 16 is 54.85 hrs & Route 13 is 0hrs)
	b	Cutting Length	<input type="radio"/>	√	<input type="radio"/>	Total length is 3088m Route 21 length total 2583m (here length 2583m for 38m width). Route 16 length 505m (here length 505m for 38m width) Route 13 length 0.00 m(due to previous month work finished)
	c	Cutting Depth	<input type="radio"/>	√	<input type="radio"/>	Average Cutting Depth for Route 21 is 1.98m, route 16 is 2.023m & route 13 is 0.00m)
	d	Cutting Width	<input type="radio"/>	√	<input type="radio"/>	Cutting Width Route 21 & 16 is 76m and Route 13 is 76m
	e	Dredged Volume	<input type="radio"/>	√	<input type="radio"/>	Total Dredged Volume 2,05,319.32 cum (Route 21 is 1,86,844.1cum, Route 16 is 18,475.22cum & Route 13 is 0.00 cum)
7	Supervising Dredged Material Disposal Area whether the Dykes are designed as per Design	<input type="radio"/>	√	<input type="radio"/>	Supervised together with dredging experts during the new dyke construction and it is observed that Dykes are maintained as per Design	
8	Supervising Dredged Material Disposal Area whether the Dykes are capable to resist the pressure of disposed materials	<input type="radio"/>	√	<input type="radio"/>	It is observed that new dyke boundary wall maintained proper design thickness, slope, layer of compaction, 20m/30m safe distance from river bank.	
9	Checking outlet of the compartment	<input type="radio"/>	√	<input type="radio"/>	Using 5rs/4hrs of outlet of this compartment	
10	Check whether the dykes are being constructed at safe distance from river bank	<input type="radio"/>	√	<input type="radio"/>	644m, 1067m, 1343m and 762m safe distance from the river bank	
11	Check construction of the pipe line whether there is any leakage in the Joints of Floating Pipe/Shore pipe lines	<input type="radio"/>	√	<input type="radio"/>	No leakage observed in the Joints of Floating Pipe/Shore pipe lines	
12	Check whether dredging work exacting Keeping Safety distance of River side installations like Road/houses/building.	<input type="radio"/>	√	<input type="radio"/>	It is observed that contractor maintained 100m from safe distance from Road/Houses/building and 20m-30m safe distance maintained from river Bank	
13	Check Survey Activities	<input type="radio"/>	√	<input type="radio"/>	1. Hydrographic Post details survey work done on dated 21.04.2024 to 22.04.2024 for lot 3 Route number 16(Patarhat-Bheduria) 2. Hydrographic Post details survey work done on dated 24.04.2024 to 25.04.2024 for lot 3 Route 21(Laharhat-Bheduria)	

ESHS

Checklist Items		Dredging Activity			Comments/Compliance
		Daily	Monthly	Quarterly	
1	EIA and Environmental Permits	<input type="radio"/>	<input type="radio"/>	√	
2	Explanation to the Local Stakeholders	<input type="radio"/>	<input type="radio"/>	√	
3	Signboards, Notice Boards	<input type="radio"/>	<input type="radio"/>	√	Not found/observed at site for all route in lot_3
1	Air Quality	<input type="radio"/>	√	<input type="radio"/>	All Test done for Route no. 21 only
2	Surface Water Quality	<input type="radio"/>	√	<input type="radio"/>	
3	Solid Wastes	<input type="radio"/>	√	<input type="radio"/>	
4	Liquid Wastes	<input type="radio"/>	√	<input type="radio"/>	
5	Soil Contamination	<input type="radio"/>	√	<input type="radio"/>	
6	Noise and Vibration	<input type="radio"/>	√	<input type="radio"/>	
7	Underwater Noise	<input type="radio"/>	√	<input type="radio"/>	
8	Odor	<input type="radio"/>	√	<input type="radio"/>	
9	Riverbed Sediment	<input type="radio"/>	√	<input type="radio"/>	
10	Groundwater	<input type="radio"/>	√	<input type="radio"/>	
1	Protected Areas	<input type="radio"/>	√	<input type="radio"/>	

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Checklist Items		Dredging Activity			Comments/Compliance
		Daily	Monthly	Quarterly	
2	Habitat Type	○	√	○	
3	Hydrology	○	√	○	
4	Topography and Geology	○	√	○	
5	Dolphin Observation	○	√	○	
6	Fish Catch Examination	○	√	○	
7	Flora (Aquatic & Terrestrial)	○	√	○	
8	Benthos (Micro & Macro)	○	√	○	
9	Phyto- & Zoo-planktons	○	√	○	
1	Resettlement	○	○	√	
2	Living and Livelihood	○	○	√	
3	Heritage	○	○	√	
4	Landscape	○	○	√	
5	Ethnic Minorities and Indigenous Peoples	○	○	√	
1	Work Permit/Contract	○	○	√	
2	Daily Toolbox Meeting - OHS	○	○	√	
3	Working Conditions	○	√	○	Fair
4	Impact/Precaution during Dredging	○	○	√	Not any major issue observed
5	Accident Prevention Measures	○	√	○	not found
6	Working Condition	√	○	○	Fair
7	Accommodation	√	○	○	House Boat
8	Personal Protection Equipment	√	○	○	Safety helmet, Safety vest, safety shoes, Hand gloves etc store at site but do not wear or maintain properly
9	Drinking Water	√	○	○	Freshwater daily collect from tube well of nearby village
10	Sanitary Condition	√	○	○	Good arrangement kept in House boat
1	Agreement with Land Owner	○	○	√	Process on going
2	Land Use Type	○	√	○	Once or twice cultivated land in a year and also some non-cultivated fellow land
3	Dyke Design Approval	○	√	○	Dyke no.7 (extension), Dyek no. 16, Dyke no.17 and Dyke no.18 for route 21 constructed. (Not any new dyke constructed for route 16 & route 13)
4	Dyke Setback Distance	○	√	○	640m, 1067m, 1632m and 1343m safe distance from the river bank
5	Disposal Area Dyke Height	○	√	○	Height 1.875m (avg) for Route no.21, Height 2.0m for Route no.16 and Height 1.8m for Route no.13
6	Dyke Strengthened/Material Used*	○	○	√	When required then used
1	Carbon Emission	○	○	√	Very low by dredgers
2	Leakage	○	○	√	Not observed or not found in lot 3
3	Oil Spill	○	○	√	Visibly very less observed from dredgers and oil tanker
4	Onboard Waste Management	○	○	√	Not satisfactory or poor management
5	Noise and Vibration	○	○	√	Very low by dredgers

Environmental Item	Main Check Items	Yes: Y No: N
(1) EIA and Environmental Permits	(a) Have EIA reports been already prepared in official process?	Y
	(b) Have EIA reports been approved by authorities of the host country's government?	Y
	(c) Have EIA reports been unconditionally approved? If conditions are imposed on the approval of EIA reports, are the conditions satisfied?	Y
	(d) In addition to the above approvals, have other required environmental permits been obtained from the appropriate regulatory authorities of the host country's government?	Y
(2) Explanation to the Local Stakeholders	(a) Have contents of the project and the potential impacts been adequately explained to the Local stakeholders based on appropriate procedures, including information disclosure? Is understanding obtained from the Local stakeholders?	Y
(3) Examination of Alternatives	(a) Have alternative plans of the project been examined with social and environmental considerations?	Y
(1) Air Quality	(a) Do air pollutants, such as sulfur oxides (SOx), nitrogen oxides (NOx), soot and dust emitted from the ships, vehicles and the facilities like docs comply with the country's emission standards? Are any mitigating measures taken?	Y

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Environmental Item	Main Check Items	Yes: Y No: N
(2) Water Quality	(a) Do pollutants, such as Suspended Solids (SS), oils/fats and other toxicants contained in effluents comply with the country's effluent standards (BOD, COD, ph, etc)? Is there a possibility that the effluents from the project will cause areas not to comply with the country's ambient water quality standards?	Y
	(b) Are adequate measures taken to prevent contamination of surface water, groundwater and soil by the effluents from storage areas, including raw materials, chemicals, and wastes?	N
(3) Wastes	(a) Are wastes (including hazardous wastes and other industrial wastes) generated from the project facilities properly treated and disposed of in accordance with the country's regulations?	N
	(b) Are adequate measures taken to prevent contamination of soil and groundwater by leachates from the waste storage/disposal sites?	N
(4) Noise and Vibration	(a) Do noise and vibrations comply with the country's standards?	Y
(5) Subsidence	(a) In the case of extraction of a large volume of groundwater, is there a possibility that the extraction of groundwater will cause subsidence?	N
(6) Odor	(a) Are there any odor sources? Are adequate odor control measures taken?	N
(7) Riverbed Sediment	(a) Sediment collection in presence of S1A team members/staff?	Y
	(b) Samples sent to the laboratory within 12 hours?	Y
	(c) If sample results showed presence of heavy metal, treatment measures like separate compartment for disposal of dredged material taken by the Contractor	N
(8) Groundwater	Samples collected and analyzed	N
(1) Protected Areas	(a) Is the project site located in protected areas designated by the country's laws or international treaties and conventions? Is there a possibility that the project will affect the protected areas?	N
(2) Ecosystem/Habitat Type	(a) Does the project site encompass primeval forests, tropical rain forests, ecologically valuable habitats (e.g., Char land, reedland, mangroves, or tidal flats)?	N
	(b) Does the project site encompass the protected habitats of endangered species designated by the country's laws or international treaties and conventions?	N
	(c) If significant ecological impacts are anticipated, are adequate protection measures taken to reduce the impacts on the ecosystem?	N
	(d) Is there a possibility that the amount of water (e.g., surface water, groundwater) used by the project will adversely affect aquatic environments?	N
	(e) Are adequate measures taken to reduce the impacts on aquatic environments, such as aquatic organisms?	N
(3) Topography and Geology	(a) Is the stability of the existing topographic conditions adequately considered for alteration of topographic features, such as cut and fill operations?	N
	(b) Is there a possibility that soil runoffs will result from cut and fill areas, waste soil disposal sites, and borrow sites?	N
	(c) Are adequate mitigation measures taken to prevent soil runoffs?	N
	(d) Is there any possibility that the project will erode natural river bank, forshore area, beaches?	N
(4) Dolphin Observation	(a) Exclusive time spent for observing dolphins?	Y
(5) Fish Catch Examination	(a) Fishermen upstream and downstream of dredging site interviewed and catch examined? Types of gears used?	Y
(6) Flora (Aquatic & Terrestrial)	(a) Flora surveyed around the dredging and dredged material disposal sites	N
(7) Benthos (Micro and Macro)	(a) Sampling done and analyzed, report submitted	Y
(8) Phyto- & Zoo-Planktons	(a) Sampling done and analyzed, report submitted	Y
(1) Resettlement	(a) Is involuntary resettlement caused by project implementation? If involuntary resettlement is caused, are efforts made to minimize the impacts caused by the resettlement?	N
	(b) Is adequate explanation on compensation and resettlement assistance given to affected people prior to resettlement?	N

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Environmental Item	Main Check Items	Yes: Y No: N
	(c) Is the resettlement plan, including compensation with full replacement costs, restoration of livelihoods and living standards developed based on socioeconomic studies on resettlement?	N
	(d) Are the compensations going to be paid prior to the resettlement?	N
	(e) Are the compensation policies prepared in document?	N
	(f) Does the resettlement plan pay particular attention to vulnerable groups or people, including women, children, the elderly, people below the poverty line, ethnic minorities, and indigenous peoples?	N
	(g) Are agreements with the affected people obtained prior to resettlement?	N
	(h) Is the organizational framework established to properly implement resettlement? Are the capacity and budget secured to implement the plan?	N
	(i) Are any plans developed to monitor the impacts of resettlement?	N
	(j) Is the grievance redress mechanism established?	N
(2) Living and Livelihood	(a) Is there a possibility that the project will adversely affect the living conditions of inhabitants? Are adequate measures considered to reduce the impacts, if necessary?	N
	(b) Is sufficient infrastructure (e.g., hospitals, schools, and roads) available for the project implementation? If the existing infrastructure is insufficient, are any plans developed to construct new infrastructure or improve the existing infrastructure?	N
	(c) Is there a possibility that large vehicles traffic for transportation of materials, such as raw materials and products will have impacts on traffic in the surrounding areas, impede the movement of inhabitants, and cause any risks to pedestrians?	N
	(d) Is there a possibility that diseases, including infectious diseases, such as HIV, will be brought due to the immigration of workers associated with the project? Are adequate considerations given to public health, if necessary?	N
(3) Heritage	(a) Is there a possibility that the project will damage the local archeological, historical, cultural, and religious heritage sites? Are adequate measures considered to protect these sites in accordance with the country's laws?	N
(4) Landscape	(a) Is there a possibility that the project will adversely affect the local landscape? Are necessary measures taken?	N
(5) Ethnic Minorities and Indigenous Peoples	(a) Are considerations given to reduce impacts on the culture and lifestyle of ethnic minorities and indigenous peoples?	N
	(b) Are all of the rights of ethnic minorities and indigenous peoples in relation to land and resources respected?	N
(6) Working Conditions	(a) Is the project proponent not violating any laws and ordinances associated with the working conditions of the country which the project proponent should observe in the project?	N
	(b) Are tangible safety considerations in place for individuals involved in the project, such as the installation of safety equipment which prevents industrial accidents, and management of hazardous materials?	N
	(c) Are intangible measures being planned and implemented for individuals involved in the project, such as the establishment of a safety and health program, and safety training (including traffic safety and public sanitation) for workers etc.?	N
	(d) Are appropriate measures being taken to ensure that security guards involved in the project do not violate safety of other individuals involved, or local residents?	N
(1) Impacts during dredging/construction	(a) Are adequate measures considered to reduce impacts during construction (e.g., noise, vibrations, turbid water, dust, exhaust gases, and wastes)?	N
	(b) If construction activities adversely affect the natural environment (ecosystem), are adequate measures considered to reduce the impacts?	N
(2) Accident Prevention Measures	(a) Does the project have any accident prevention equipment and scheme to store, emit and transport toxic and hazardous materials?	N

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Environmental Item	Main Check Items	Yes: Y No: N
(3) Monitoring	(a) Does the proponent develop and implement monitoring program for the environmental items that are considered to have potential impacts?	N
	(b) What are the items, methods and frequencies of the monitoring program?	N
	(c) Does the proponent establish an adequate monitoring framework (organization, personnel, equipment, and adequate budget to sustain the monitoring framework)?	N
	(d) Are any regulatory requirements pertaining to the monitoring report system identified, such as the format and frequency of reports from the proponent to the regulatory authorities?	N

GRM

Sl no.	Factors	Checklist Items		Dredging Activity				Comments/Compliance
				Daily	Weekly	Monthly	Quarterly	
1	Legal and Regulatory Compliance	1	The contractors communicate to all the stakeholders regarding GRM processing and lodging complaints.	○	○	○	√	
		2	Contact details for lodging grievance easily accessible.	○	○	○	√	
2	Community Engagement	1	Consultations have been conducted with local communities, dredging contractors to collect their input on the GRM design.	○	○	○	√	
		2	The preferences of social customs and cultural sensitivities of the project affected communities taken into consideration.	○	○	○	√	
		3	FGD on GRM with the Project Affected Persons (PAPs)	○	○	○	√	
3	Grievance Channels	1	The multiple accessible channels available for the stakeholders to submit their grievances. (e.g., toll-free hotline, online platform , drop box, post, landline/mobile phone and e-mail).	○	○	○	√	
4	Processing of GFA (Good Faith Agreement)	1	Dyke/Land selection survey.	○	○	√	○	Route no.21 & 16
		2	Opinion meeting with land owner along with inform to the contractor and S1A team for justifying land as dyke.	○	○	√	○	
		3	GFA documentation collection.	○	○	√	○	
		4	GFA will be submitted to S1A.	○	○	√	○	
		5	FGD on GFA with the Locals	○	○	○	√	
5	Constitution of GRM Committee	1	Preparation of GRM Committee Constituion by the Contractors.	○	○	○	√	
6	Establish a Complaint Box	1	Nos. of Feedback, concerned, suggestions and complain letters.	○	○	√	○	Not found/observed at site for all route in lot_3
7	Establish a Signboard	1	The size (5/15) of Bill board will according the BOQ	○	○	√	○	Not found/observed at site for all route in lot_3
		2	Name, Mobile number and email of the focal person will be included in the Bill board.	○	○	√	○	Not found/observed at site for all route in lot_3
8	3 (three) tiers of the GRM Committee will be formed	1	Local level GRC [In a five (5) members committee meeting Three (3) members participation will be the quorum]	○	○	○	√	Local level GRC committee formed by Banga contractor on dated 14th October,2023
		2	Contractor level GRC [In a five (3) members committee meeting Three (3) members participation will be the quorum]	○	○	○	√	Local level GRC committee formed by Banga contractor on dated 14th October,2023
		3	Project level GRC [In a five (3) members committee meeting Three (3) members participation will be the quorum]	○	○	○	√	Local level GRC committee formed by Banga contractor on dated 14th October,2023
9	Capacity Building	1	Project staffs and local institutions have received training on the GRM and its operation.	○	○	○	√	
10	Leaflet/ Brochure	1	The Leaflet/ Brochure will be published for dissemination to all the stakeholders.	○	○	○	√	
11	Monitoring, Reporting & documentation	1	The regular reports generated to document the number, nature, and resolution of grievances (Registration Book, Resolution book or Decision book & Closing book)	○	○	√	○	Route no.21 & 16
12	Social Consultation	1	Local Community	○	○	√	○	Route no.21 & 16
		2	Land Owner	○	○	√	○	Route no.21 & 16
		3	Local Government Authority	○	○	○	√	no
13	Gender-Based	1	Sex Violence by an intimate partner	○	○	○	√	None of these has been

Consultancy Services for: Supervision and Monitoring of Performance-Based Dredging Contracts with Maintenance Dredging and Installation and Maintenance of Navigational Aids along the Navigational Routes under the Contract

Sl no.	Factors	Checklist Items		Dredging Activity				Comments/Compliance
				Daily	Weekly	Monthly	Quarterly	
	Violence (GBV)	2	Sexual violence by a non-peer	○	○	○	√	found/observed for the month of June, 2024
		3	Child sexual abuse& forced marriage	○	○	○	√	
		4	Sexual exploitation & abuse	○	○	○	√	
		5	Sexual harassment	○	○	○	√	
		6	In case of emergency, the local level GRC will address the matter within 4 -12 hours.	○	○	○	√	When required