

Lessee: M/s. Maruthi Infrastructure & Developers

EXECUTIVE SUMMARY

INTRODUCTION

M/s. Maruthi Infrastructure & Developers has applied for TOR in order to prepare EIA report for grant of Environmental Clearance as per MOEF Notifications S.O. 1533(E) dated 14-09-2006 for extraction of River Sand Quarry having leases area of 25-00 Acres located adjacent to survey no 191 in Karichedu - Village, Bellary – Taluk & District, Karnataka, Karnataka.

As the proposed project is coming under cluster situation and in the cluster as the total area extent is greater than 5 Ha as per the Hon'ble NGT order dated 13th September 2018 and 11th December 2018 it is considered as "B1" category. The application to grant prior Environmental Clearance for the proposed project was considered by the KSEAC in its 236th SEAC meeting held on 17th December 2019, for determination of the Terms of Reference (ToR) for preparation of the Environmental Impact Assessment (EIA) report. The Committee has suggested specific Terms of Reference (ToR) for preparation of the EIA report and Environmental Management Plan and for conducting public hearing vide its letter No. SEIAA 798 MIN 2019.

Location of the Project

The Sand Block with an extent of 25-00 Acres of quarrying lease area located adjacent to survey No. 191 in Karichedu - Village, Bellary – Taluk & District, Karnataka, Karnataka State.

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TABLE 1: SALIENT FEATURES OF THE PROJECT SITE

Sr. No.	Particulars	Details		
1.	Project Location	Survey No. 191 Of Karichedu Village, Bellary Taluk, Bellary District, Karnataka State		
2.	Latitude/Longitude	Latitude/Northing: 15° 19' 33.9" N to 15° 19' 17.3" N Longitude/Easting: 77° 03' 48.6" E to 77° 03' 35.4" E		
		Corner Point No	Latitude	Longitude
		BP-1	N 15° 19' 33.9"	E 77° 03' 39.2"
		BP-2	N 15° 19' 32.7"	E 77° 03' 42.6"
		BP-3	N 15° 19' 27.6"	E 77° 03' 41.7"
		BP-4	N 15° 19' 27.5"	E 77° 03' 43.2"
		BP-5	N 15° 19' 24.8"	E 77° 03' 42.1"
		BP-6	N 15° 19' 23.2"	E 77° 03' 45.0"
		BP-7	N 15° 19' 25.3"	E 77° 03' 45.9"
		BP-8	N 15° 19' 27.3"	E 77° 03' 45.9"
		BP-9	N 15° 19' 32.6"	E 77° 03' 42.9"
		BP-10	N 15° 19' 30.5"	E 77° 03' 48.6"
		BP-11	N 15° 19' 20.8"	E 77° 03' 47.2"
		BP-12	N 15° 19' 21.2"	E 77° 03' 46.3"
		BP-13	N 15° 19' 17.7"	E 77° 03' 45.6"
		BP-14	N 15° 19' 20.7"	E 77° 03' 42.9"
		BP-15	N 15° 19' 20.9"	E 77° 03' 38.2"
BP-16	N 15° 19' 17.3"	E 77° 03' 37.4"		
BP-17	N 15° 19' 17.8"	E 77° 03' 35.4"		
3.	Toposheet No	57E/3		
4.	Climatic Conditions	<ul style="list-style-type: none"> Ambient air temp 45.6°C to 10.0°C Avg. annual rainfall 633 mm Source: CGWB, Bellary		
5.	Site elevation above MSL	394m to 392m MSL		
6.	Land use at the proposed project site	Type of land use	Existing / present (Ha)	End of lease (Ha)
		Area under mining	--	8.89
		Overburden dump	--	0.05
		Buffer Zone	--	1.14
		Screening area		0.04
		Unutilized area	10.12	--
		Total	10.12	10.12
7.	Site topography	The terrain is almost flat with very slight undulation due		

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Sr. No.	Particulars	Details
		North.
8.	Nearest roadway	National Highway NH 63 – 19.80 Kms (S) (Ballari to Guntakal Road) SH 132 – 6.30 Kms (SE) (Ballari to Arikera road) Major District road – Karichedu to Basarakodu road – 0.40 Kms(W)
9.	Nearest Railway Station	Hagari Railway Station – 18.85 Kms (S).
10.	Nearest Railway line	Hagari Railway Station – 18.85 Kms (S)
11.	Nearest Air Port	Bellary Airport - 23.6km, towards Southwest
12.	Nearest village/major town	Karichedu Village – 0.90 kms (SE)/Ballari – 20.30 Kms (SW)
13.	Hills/valleys	No major hills and valleys within 10 km radius
14.	Ecologically sensitive zone	None within 10 kms.
15.	Reserved/ Protected forests	Jangamarahosahalli Reserved Forest – 1.70 kms(NE)
16.	Historical/tourist places	None within 5 km radius area
17.	Nearest Industries	Patil Industries – 11.76 (SW)
18.	Nearest water bodies	The site is in Hagari River bed
19.	Seismic zone	Seismically, this area is categorized under Zone-II as per IS-1893 (Part-1)-2016. Hence, seismically the site is Low Damage Risk Zone. With MSK scale of VI or Less.

PROJECT DESCRIPTION

Method of Quarrying

An open cast method semi mechanized method will be adopted to operate the area. Since, the annual production is about 99,000 Tons per annum for five years; the Open cast method semi mechanized method will be followed during the plan period.

Anticipated life of the quarry

Life of the mine in this case is for 5 year or till the reserves get exhausted.

Conceptual Quarry Plan

Based on reserves of River Sand as Production capacity of 99,000 Tons per annum for the 5 years plan period, thus the anticipated life of the will be till the reserves get exhausted.

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Waste Generation & Disposal

There is no such reduction of waste / mineral reject processing possibilities are proposed during plan period. There is no proposal of dumping during the proposed ensuing quarrying period, & concurrent backfilling is proposed.

Water Requirement & Source

Total water requirement for the project will be 8.0 KLD, Requirement is met by procurement of water from the bore well nearby Tankers.

Manpower Requirement

The said quarry provides direct employment to 22 people and generate indirect employment for 44 more people. Most of the directly employed manpower falls under skilled category Preference will be given to the local people as per their eligibility.

Site Infrastructure

The Quarry will have its own office premises, canteen, first-aid center etc. Quarry office is well connected with wireless and telephone, internet & e-mail facilities for communication. The Quarry is provided with a workshop to undertake repairs and regular maintenance of quarrying machinery deployed.

EXISTING ENVIRONMENTAL SCENARIO

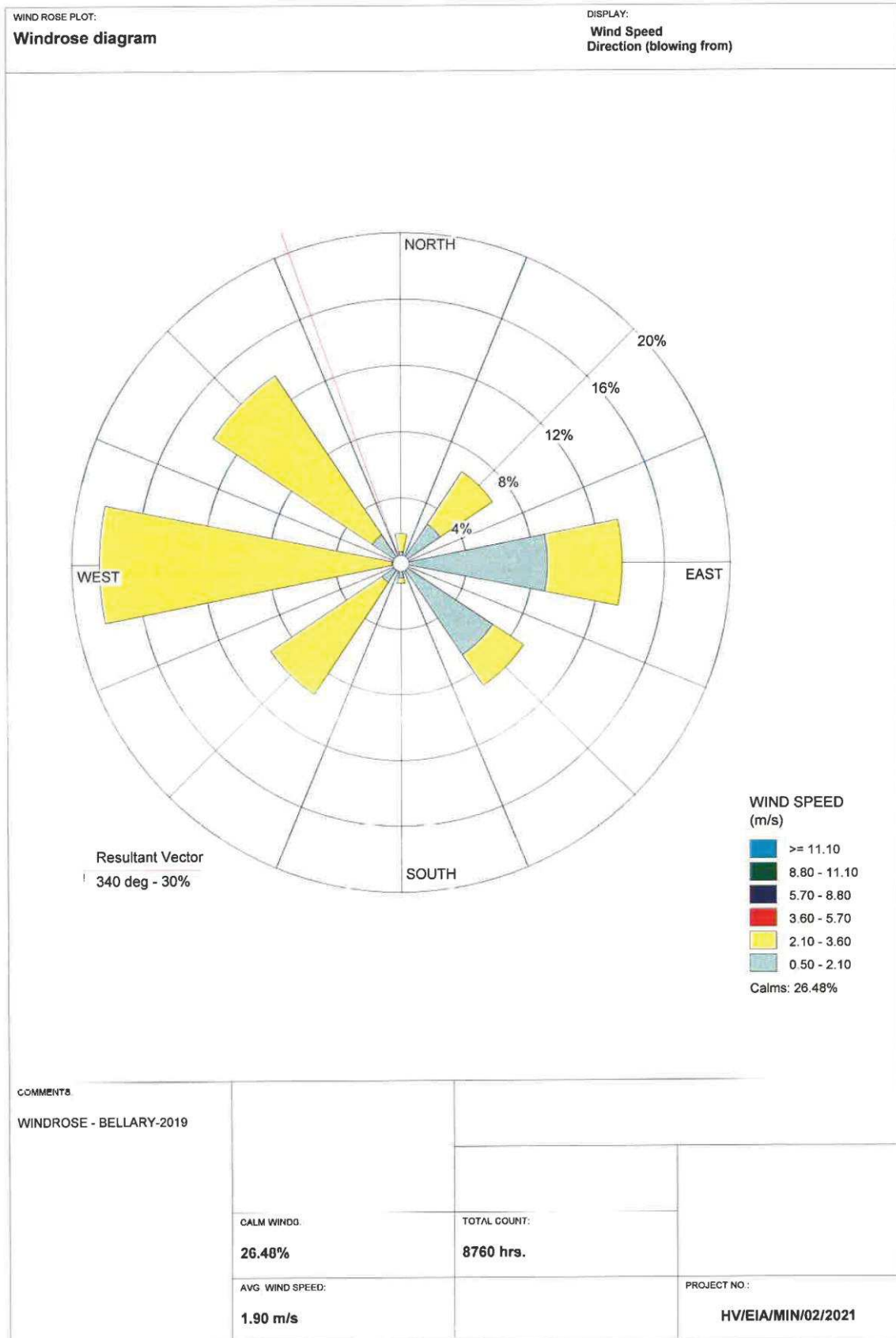
Baseline Environmental Studies

Meteorology & Ambient Air Quality

Summary of Meteorological data generated at site (January 2020 to December 2020)

Temperature (°C)	15.6 to 31.3°C
Relative Humidity (%)	44% to 75%
Wind Direction	w
Calm wind %	26.55%

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Ambient Air Quality Status

From the results, it is observed that the ambient air quality with respect to PM₁₀, PM_{2.5}, SO₂, and NO_x at all the monitoring locations is within the permissible limits specified by CPCB.

Ambient Noise Levels

Ambient noise level monitoring was carried out at the 9 monitoring locations; those were selected for ambient air quality monitoring. The monitoring results are within limits.

Biological Environment

There is no National Park, Wildlife Sanctuary and Biosphere Reserve within 10 km radius.

Proposed Biological Environment Conservation Measures

- Thick Green belt will be developed around Quarry lease area and along transport road.
- Periodic maintenance of mineral transport road
- Regular sprinkling of water through mobile tanker on mineral transport road
- Mineral carrying trucks are loaded with only the stipulated quantity to avoid overloading and covered with tarpaulin to avoid spillage.

Socio-economic Environment

- There is no habitation or private land in the River Sand. There is no rehabilitation and resettlement involved in the project.
- The said Quarry provides direct employment to 22 people and generates indirect employment for 44 more people. Most of the directly employed manpower falls under skilled category and the respective distribution / numbers is follows. Preference will be given to the local people as per their eligibility.
- The existing infrastructure facilities are sufficient to cater the needs of the Sand Block. However, the Quarry management will take efforts as a part of CER for improvement in civic amenities like sanitation, drinking water facilities, transport road, etc in the nearby villages.

ENVIRONMENTAL MONITORING PROGRAM

An Environmental Management Cell (EMC) will be established in the Quarry under the control of Quarry Manager. The EMC will be headed by an Environmental Officer having adequate qualification and experience in the field of environmental management regular and periodic. Environmental monitoring of Ambient Air Quality, Water table depth, Water quality, Ambient Noise Levels, Soil Quality, CSR activities etc will be carried out through MOEF accredited agencies and reports will be submitted to KSPCB/ Regional office of MoEF&CC.

RISK ASSESSMENT & DISASTER MANAGEMENT PLAN

The assessment of risk in the Sand Blocking project has been estimated for Slope failure, Movement of HEMM, Inundation due to surface water, Dust hazards, Hazards associated with use of Diesel Generator Sets and flooding of lower benches and corresponding mitigation measures are suggested in the EIA/EMP report.

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PROJECT BENEFITS

The Sand Blocking project would generate additional employment opportunities which would finally result in improvement in the quality of life of people of the nearby villages. In line with this CER policy, M/s. Maruthi Infrastructure & Developers. will carry out community welfare activities in the following areas:

- Community development
- Education
- Health care
- Drainage and sanitation
- Roads

A budget of Rs. 0.57 Lakh per annum as recurring expenses has been proposed for implementation of Socio-economic welfare activities in the nearby villages.

ENVIRONMENTAL MANAGEMENT PLAN

Judicious use of the environmental management plan addresses the components of environment, which are likely to be affected by the different operations in the project. The capital cost of the project is approx. Rs 192 Lakhs. It is proposed to provide an amount of Rs. 3.84Lakhs per annum as recurring expenses towards implementation of the environmental action plan.

CONCLUSION

The Sand Block project of M/s. Maruthi Infrastructure & Developers. will be beneficial for the development of the nearby villages. Some environmental aspects like dust emission, noise, siltation due to surface run-off, etc. will have to be controlled within the permissible limit to avoid impacts on the surrounding environment. Necessary pollution control equipment like water sprinkling, plantation, personal protective equipment's etc., will form regular practice in the project. Additional pollution control measures and environmental conservation measures will be adopted to control/minimize impacts on the environment and socio-economic environment of the area. Measures like development of thick green belt and plantation within quarry lease area and along transport road, adoption of rainwater harvesting in the quarry etc. will be implemented. The CSR measures proposed to be adopted by the quarry management will improve the social, economic status of the nearby villages.

The overall impacts of the Sand Block will be positive and will result in overall socio-economic growth of nearby villages.