PREFEASIBILITY STUDY

FOR

SHREE. PRAMOD S. KAMBLI

Executive summary

Shree. Pramod S. Kambli., has laterite stone quarry in an area 2.61 Ha in the survey No. 1091 With quarrying capacity of **10259.31 TPA**.

The major highlights of the project are:

- The project comes under non agriculture land.
- The proposed quarrying activity is for cutting of laterite stone.
- Ideally located at a distance of 6.15 km from NH-17 for proper road accessibility.
- The site is a barren land devoid of any vegetation.
- No National park or wildlife sanctuary lies within the buffer zone or nearby this region.
- Located in Main Village which is a village listed as ESA Village as per the draft notification S.O.2435 (E) dated 04th September 2015.
- Letter of Intent obtained from DMO, Sindhudurg attached as **Annexure - 1**
- The quarry falls in a cluster of 7 quarries in Main (I) Cluster.
- Certificate obtained from DCF, Sawantwadi attached as **Annexure – 2.**
- Cluster Certificate has been obtained from Collector, Sindhudurg stating the presence of other quarries in 500 m distance. Attached as **Annexure – 3.**

Project Description

Location: The site is located at Gut. No. 1091, Main, Kankavali, District Sindhudurg, Maharashtra. The site is accessible from National highway no 17 (Edapally – Panvel Highway) at a distance of 6.15 Kms.

Land: There is no human settlement around the quarry hence no human displacement is needed. The land provided for stone mining is 2.61 hectare to the project proponent.

Co-ordinate: The coordinates of the plant site are as follows

Points	Latitude	Longitude
D	N 16°18′59.7″	E 73°39″34.2″
E	N 16°18′59.2″	E 73°39″34.4″
F	N 16°18′55.9″	E 73°39″32.1″
G	N 16°18′56.0″	E 73°39″31.3″
H	N 16°18′56.5″	E 73°39″30.8″
I	N 16°18′56.6″	E 73°39″30.1″
J	N 16°18′57.8″	E 73°39″30.1″
K	N 16°18′58.7″	E 73°39″30.4″
L	N 16°18′59.8″	E 73°39″32.6″
M	N 16°19′00.0″	E 73°39″33.1″
N	N 16°19′00.5″	E 73°39″32.8″
O	N 16°19′01.2″	E 73°39″32.9″
P	N 16°19′01.6″	E 73°39″33.4″
Q	N 16°19′02.4″	E 73°39″33.0″
R	N 16°19′02.4″	E 73°39″31.0″
S	N 16°19′02.5″	E 73°39″28.9″
T	N 16°19′03.6″	E 73°39″29.8″
U	N 16°19′04.1″	E 73°39″32.7″

Water: Water requirement of the project will be met through the water tankers and water collected in quarry pits. Proponent does not exploit any other water resources or ground water; therefore no adverse impact is anticipated on water environment. The water requirement is estimated to be maximum of **7.3 CMD**

Electric Supply: Electricity requirement: 35 KVA. Electricity will be supplied by MSEB. In case of power failure D.G Sets wil be used. Diesel requirement will be 12 L/Hr.

Project Cost: The total cost of the project including all facilities is estimated to be INR 8.0 Lacs.

Topography: There is gradual slope towards the east direction. There is a maximum contour difference of 5 m in the lease area. There are no undulations in the quarry site.

Soil Quality: The Laterite soils are not fertile at all and are not suitable to agriculture. They are coarse in texture and poor in nitrogen, phosphoric acid, potash and urea. These soils are red in colour as it is mixed with iron oxides. Plants like cashew, mango and coconut grow well in these soils. These soils are also used as building materials in India. But agriculture can be practiced with the addition of fertilizers.

Meteorology: The average annual rainfall within the district is heavy and is about 3000-3500 mm in Sindhudurg district. The minimum temperature is the lowest and it ranges from about 16^{o}C to 22^{o}C. There is a rapid rise in temperature in March to May ranges from about 30^{o}C to 38^{o}C. The mean maximum temperature in the area goes up to 38°C. In all season relative humidity is between 61 to 90%as reported by Indian meteorological center.

Water: Water requirement shall be fulfilled from water tankers and water collected in quarry pits for wet cutting and sprinkling on haul roads. No effluent generation is expected due to the quarrying activity.

Ecology: The area is entirely barren with sporadic cashew and mango plantations. No rare or endangered species of flora and fauna are present in the immediate vicinity as well as the study area. No blasting activity is involved for laterite stone. The stones are cut in desired sizes as per manually operated cutting machines. There is one Schedule I species (Leopard) as per Wild Life Protection Act 1972 found within the study area. Certificate obtained from DCF, Sawantwadi Sindhudurg is attached as **Annexure - 2.**

Socio-economic: The project will provide positive impact on the economic development of the region in terms of employment opportunities. Locals will be employed for semi skilled and unskilled labour requirements.

Risk assessment plan:

Fire: - No risk of fire is envisaged at the quarry site as there aren't any flammables stored at site.

Dust: - The generation of dust during the operations exists. Hence the control of dust/ dust suppression is done by periodic sprinkling of water and regular maintenance of the machine

tools. Further the persons who are likely to be subjected for the dust shall be provided with the dust masks.

Others: - The first aid injuries like cuts, bruises are likely to occur as there will be handling of the material and tools; hence the supervisor at the quarry is trained in administrating the first aid to the injured. First aid boxes are kept with the supervisor. Further one vehicle always kept ready in case the causality is required to refer for the further medical treatment to the hospital/ clinic. All site staff shall be made aware of safety precautions to be taken in case of any mishap in project site. Adequate provisions to control any emergency situation will be made available.

Conclusion

The minor mineral project of stone extraction will not have minimal negative impact on the environment. Dust pollution to some extent is anticipated which will be controlled by sprinkling water and wet cutting. Thick green belt will be maintained around the quarry site. The transportation will be carried in tarpaulin covered trucks. Altogether the project will have a positive impact on social environment by providing employment opportunity for the skilled and unskilled labors living in the surrounding villages.

Considering all the above facts, the project will generate minimal adverse impact on the environment by providing appropriate mitigation measures.

Prefeasibility Report

1. INTRODUCTION OF THE PROJECT

1.1 Identification of the project proponent

Shree. Pramod S. Kambli, has laterite stone quarry in an area 2.61 Ha In the survey No. 1091 With quarrying capacity of **10259.31 TPA**

The major highlights of the project are:

- The project comes under non agriculture land.
- The proposed quarrying activity is for cutting of laterite stone.
- Ideally located at a distance of 6.15 km from NH-17.
- The site is a barren land devoid of any vegetation.
- No National park or wildlife sanctuary lies within the buffer zone or nearby this region.
- Located in Main Village which is a village listed as ESA Village as per the draft notification S.O.2435 (E) dated 04th September 2015.
- Letter of Intent obtained from DMO, Sindhudurg attached as **Annexure - 1**
- The quarry falls in a cluster of 7 quarries in Main (I) Cluster.
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1.1 Description of Nature of the Project

Over the last 10 years, the construction sector has been registering strong growth rates in the range of 7-8%. Housing and construction is one of the major drivers of growth in more Than 40 allied industries including laterite stone extraction. Several projects are in progress and are being commenced shortly which will have high demand of laterite stone all over the Sindhudurg district and nearby goa state. In order to make up the backlog and meet the projected requirements for the next 20 years, overall housing construction has to raise 50,000

facts and statistics provide enough evidences, assuring a steep and continuous growth vis a vis investment opportunity in the stone extraction business.

1.2 Need of the Project

The project proponent has proposed inclusion of Stone Extraction in the barren land as explorations have shown that these deposits occur in the subject area. The proposed mining production is covered under the Ministry of Environment & Forests Notification 2006. This report of Prefeasibility & Environmental Management Plan is given here as a part of the information to be furnished to theMoEF, Govt of India for obtaining Environmental Clearance as per office Memorandum No. L-11000/47/2011/IA-II(M) dated 18.05.2012 .To meet the ever-increasing local demand for laterite stone by the building industry and construction company the project proponent intends to produce the following quantities of laterite stones by Manual method of quarry activity. The year wise production and development details for the five years plan period are summarized in the table below.

Table No. 1

Production Plan for Five years

Year	Laterite Stone
I	10259.31 Tonnes
II	10259.31 Tonnes
III	10259.31 Tonnes
IV	10259.31 Tonnes
V	10259.31 Tonnes
Total	**51296.58 Tonnes**

1.3 Demand Supply Gap

Since it is an allied industry of the construction sector, growth in construction sector may be considered as proxy for the growth in laterite stone extraction sector, i.e. around 2 – 3 %. It is observed that total export volume of the laterite stone has been almost nil, whereas, Marble has the highest share and remained at the top. The market scope for laterite stone is

found to be encouraging in local market with the increased demand from building industry & construction fields. There is also a sufficient demand from Govt. Contractors for construction of industries etc. The entry in the target market is easy and there is a narrow gap in the supply and demand, which is expected to grow in the coming years. The business opportunity to fill the demand and supply gap would be quite profitable.

1.4 Employment Generation

The establishment of this project will improve the socio-economic status of the surrounding area by way of direct & indirect employment. The Employment opportunity will be created for skilled and mainly unskilled people.

2. PROJECT DESCRIPTION

2.1 Location:

The project is located on a plot of land measuring 2.61 Hectare at Village Main, Taluka Kankavali, District Sindhudurg , Maharashtra. Proposed project involve stone quarry of the capacity 10259.31 TPA.

Table No.2 SALIENT FEATURES OF LOCATION

Salient Features Of Location			
Project Site	Sr.No. 1091 Main Village, Taluka - Kankavali, District - Sindhudurg, Maharashtra		
Co-ordinates	**Points**	**Latitude**	**Longitude**
	A	N 16°19′05.3″	E 73°39″34.4″
	B	N 16°19′00.7″	E 73°39″36.4″
	C	N 16°19′00.2″	E 73°39″34.3″
	D	N 16°18′59.7″	E 73°39″34.2″
	E	N 16°18′59.2″	E 73°39″34.4″
	F	N 16°18′55.9″	E 73°39″32.1″
	G	N 16°18′56.0″	E 73°39″31.3″
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	I	N 16°18′56.6″	E 73°39″30.1″
	J	N 16°18′57.8″	E 73°39″30.1″

Salient Features Of Location				
		K	N 16°18′58.7″	E 73°39″30.4″
		L	N 16°18′59.8″	E 73°39″32.6″
		M	N 16°19′00.0″	E 73°39″33.1″
		N	N 16°19′00.5″	E 73°39″32.8″
		O	N 16°19′01.2″	E 73°39″32.9″
		P	N 16°19′01.6″	E 73°39″33.4″
		Q	N 16°19′02.4″	E 73°39″33.0″
		R	N 16°19′02.4″	E 73°39″31.0″
		S	N 16°19′02.5″	E 73°39″28.9″
		T	N 16°19′03.6″	E 73°39″29.8″
		U	N 16°19′04.1″	E 73°39″32.7″
Nearest Highway	National highway No.17 from the site is 6.15 Kms			
Nearest City	Kankavali 6.83 Kms from the site			
Nearest Railway station	Kankavli Railway Station 9.10 Kms from the site.			
Water bodies	Belna River –2.95 km away from project site in north Otav Dam – 4.08 km away from project site in north Tarandale Dam – 1.1 km away from project site in south			
Average rainfall	3000-3500 mm			
Average temperature	16°C to 22°C in winter and 30°C to 38°C in			
	summer			
Average humidity	61 to 90%			
Archaeological monument	Not present in the 10 km radius of the site.			
Human settlement	Tarandale Village is beyond 1.28 Km from quarry area.			
Shed Provided	Temporary shed for the workers are provided.			

Method of mining: Quarry will be worked by open cast manual workings.

Mine Life: The anticipated life of the quarry would be about (29714/2014) 15 years minimum.

Geological Reserve:

Total geological reserve (Brass)	Mineable reserve (Brass)	Extractable reserve (Brass)	Per cent (%) of extraction	Range of ground water level
75230	**29714**	**10070**	**33.88 %**	10-12 mts below ground level

Details of Deposits:

Depth of over burden	Grade of ore	Stripping ratio
--	Not applicable as it is laterite	Not applicable as it is laterite

Fig 1: Google Earth Image of the project site

Toposheet

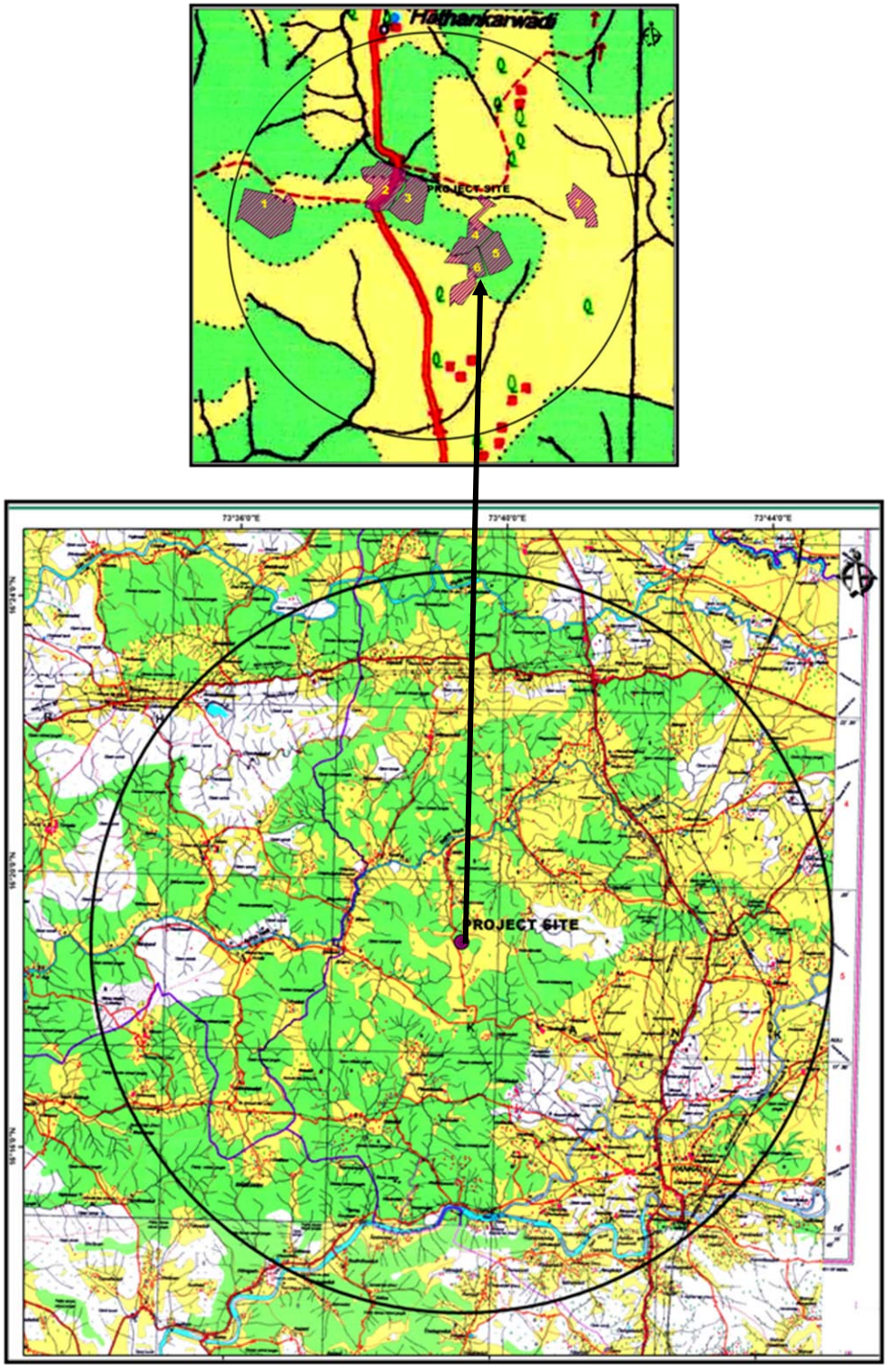


Fig 2: Topo sheet Image of the project site

2.2 Land Distribution around Site

The project site is having quarry area, green belt area, Material storage area, office area and shelter provided for the workers.

Details of Land usage

Particulars	Present Scenario (Ha)	Post mine (Ha)
1. Area excavated	0.4810	0.956
2. Storage for top soil	-	
3. Overburden dump	-	
4. Mineral storage	-	
5. Infrastructure/ Workshop, Admin.	-	
6. Roads	0.0300	0.0300
7. Railways	-	
8. Green Belts	-	0.7275
9. Others to specify- Protective measures	-	
10.Virgin area	2.0990	0.8965

2.3 Size and Magnitude of Operation

The estimated cost of the project is going to be INR 8.0 Lacs, including a capital expenditure of INR 42.25 lakh on environmental matters. It is expected that the recurring costs on environmental matters would be INR 13.30 lakh for 7 quarries in the cluster. The EMP cost specific to the quarry will be beared by the quarry owner, the cost for common facilities like black topping of the approach roads & its maintenance will be distributed equally amongst them.

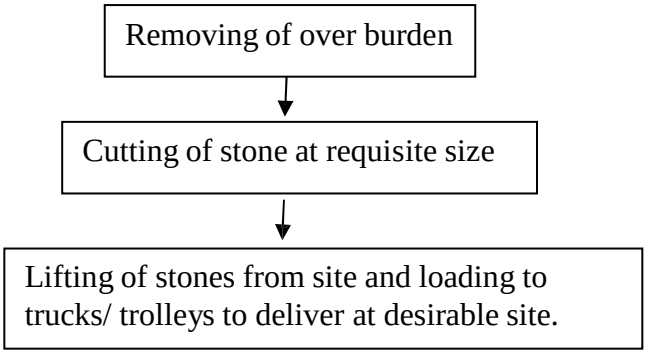
2.4 Process Details

The laterite stones are extracted from the natural stone quarry by way of cutting at requisite sizes and lifting of the same for further transport at site. Transported to the desirable site by road through tractor trolleys or pay-loaders. The pay-loaders unload the stones at construction site and it's ready to use.

These stones are cuts through electric driven cutters which and the process is around 2 -3 hours duration. Once cutting is over from side at requisite site the stones lifted and loaded to the vehicles for further transport. Enclosures are provided to cutting & sprinkling arrangement to control the dust emission.

The undersized stones and the dust from the activity is collected and stored at adjacent site and it will utilized for filling during post mining activity.

Process Flow Diagram of Typical Stone Extraction Unit



2.6 Water Sources

Water is required in the project site for various purposes like spraying, green belt and domestic purposes to control the dust generation. The water requirement will be around 7.3 CMD. The source of the water will be from water tankers and water collected in quarry pits.

Table 3

Water Use Table

Sr. No	Activities	Demand (CMD)
1	Mine a. Drilling b. Dust Suppression c. Equipment/Vehicle washing	3 CMD
2	Green Belt	3.3 CMD
3	Domestic	1 CMD
	Total	7.3 CMD

2.7 Power Sources

The power requirement of the project will be around 35 KVA. Power supplied by MSEB. Back up will be provided by D.G Set of 50 KVA.

2.8 Waste Generated

The possible waste generated by the mining process will be some rejection which can be used for leveling of the land. No other solids or liquid waste will be generated from the mining process.

Details of O.B.

- External OB dumps: Nil
- No of OB dumps: Nil
- Area of each dump: Nil
- Height of each dump: Nil
- Quantity (in MCm) of OB in each dump: Nil
- Year of back filling: End of plan period
- No. of OB dumps reclaimed: Nil
- If garland drains and settlement facility for runoff created: No

Since there will not be any waste likely to be generated for dumping. Whatever mineral waste/powder generates during quarrying will be used for road maintenance.

Details of Internal Dumps

- **Number of internal dumps:** Nil
- **Area of each dump:** Nil
- **Height of each dump:** Nil
- **Quantity of wastes filled (MCm):** Nil

Utilization potential of wastes

- **Within the mines:** Approach road maintainance or plantation purpose
- **Outside mines:** Road maintainance or plantation purpose

2. 9 Manpower

The total manpower is 25 people at the project site. Both the skilled and the unskilled labors are included.

Table 4
Organization Table

Sr. No	Category	Operative Phase
1	Permit Manager	1
2	Supervisors / Clerk	1
3	Driver / Operators	3
4	Labourers : skilled	4
5	Unskilled	16

Conclusion

Based on the foregoing study as summarized above, it is observed that there will be marginal increase in the dust pollution, which will be controlled by sprinkling of water and transportation of stones in closed/tarpaulin covered trucks. There will be no major impact on the ambient environment & ecology due to the mining activities moreover the mining operation will lead to direct and indirect employment generation in the area. Main village, Kankavali Taluka, Sindhudurg District will have a positive impact on the **Socio Economics** of the area and lead to sustainable development of the region. The applicant will ensure the implementation of the environmental protective measures within the mine area & surroundings and will comply with the terms & conditions to be laid down by the Ministry of Environment & Forests as required under the Environmental Protection Act-1986 and its amendments.

महाराष्ट्र शासन
जिल्हाधिकारी व जिल्हादंडाधिकारी कार्यालय, सिंधुदुर्ग
मुख्य प्रशासकीय इमारत, तळ मजला, दालन क्र. १२२, खनिकर्म शाखा, ओरोस, सिंधुदुर्गनगरी- ४१६८१२
E-mail ID- misindhudurg@gmail.com

Khani/Desk-17/NGT Pune/court case/2016
Sindhudurgnagari, दि. 14/09/2017

To,

The Member Secretary (Non-coal mining)
Expert appraisal committee ,
Ministry of environment forest and
Climate change, New Delhi - 110003

Subject – Regarding Submission of earlier certified certificates.

Reference- 20th meeting of reconstituted expert appraisal committee for environmental appraisal of mining project (Non-coal) held on 24 july 2017.

Respected sir,

With reference to 20th EAC minutes here enclosing total 21 stone quarries certificates which was earlier certified by concerned authority.

Thanking you,

Attachment:- As Above

Yours faithfully,

A.P. Deuch

District Mining officer, Sindhudurg

The details of all the 21 Stone quarries are tabulated below:

Sr.No	Name of Quarry	NGT Application Reference no.	Gut No	Village	Taluka	Area (Ha)
1	Hanumant Talekar	120/2016	2003 (Part)	Darum	Kankavali	1.37
2	Narayan Hindalekar	134/2016	893 (Part)	Lingdal	Devgad	2.10
3	Shri Sagar Loke	135/2016	1031 (Part)	Lingdal	Devgad	2.93
4	Chandrakant Pujare	126/2016	1201, 1210 & 1211	Main	Kankavali	1.82
5	Sanjay Pol	130/2016	974/2, 1296	Main	Kankavali	2.33
6	Ramesh Bandal	117/2016	1066	Main	Kankavali	1.64
7	Nirhari Lingras	116/2016	931,947	Main	Kankavali	3.97
8	Pramod Kambli	129/2016	1091 (Part)	Main	Kankavali	2.61
9	Shailesh Parab	132/2016	1222	Main	Kankavali	2.12
10	Mahadev Parkar	128/2016	974 (Part)	Main	Kankavali	2.00
11	Mayaji Gurav	122/2016	1199	Main	Kankavali	0.59
12	Sadashiv Morye	118/2016	1381	Main	Kankavali	3.52
13	Narhari Lingras	116/2016	1424	Main	Kankavali	4.5
14	Santosh Parab	127/2016	1308 , 1309	Main	Kankavali	2.75
15	Bhalchandra Satam	121/2016	2399(1A)	Aynal	Kankavali	1.29
16	Sahdev Chavan	124/2016	1686 (A), 1339(Part),1684, 1685 (Part)	Koloshi	Kankavali	3.13
17	Sadanand Mane	125/2016	2399/1B	Aynal	Kankavali	1.28
18	Ashok Kurade	119/2016	1629	Savadav	Kankavali	0.75
19	Milind Keluskar	123/2016	1629 (Part)	Savadav	Kankavali	0.75
20	Vilas Hadkar	131/2016	2389,2399(1C)	Aynal	Kankavali	2.08
21	Rajendra Mane	133/2016	1218	Main	Kankavali	0.55

A.P. Desai
16/09/17

District Mining Officer
Sindhudurg

Application No. 129/2016

Certificate

This is to certify that, that the application for issuing quarrying lease for stone quarry of Mr. Pramod Sadanand Kambli situated at Gat No -1091, Village-Mine, Taluka - Kankavli, District – Sindhudurg, State – Maharashtra for an area 2.61 hectares may be considered by District Mining Office, Government of Maharashtra as per Maharashtra Minor Mineral Rules, 2013 subject to submission of Approved Mining Plan & Environmental Clearance as per EIA Notification, 2006.

Collector Sindhudurg
जिल्हाधिकारी सिंधुदुर्ग

जिल्हा खनिकर्म अधिकारी
सिंधुदुर्ग

OFFICE OF THE DEPUTY CONSERVATOR OF FORESTS, SAWANTWADI
VANABHAVAN, SALAIWADA, TAL. SAWANTWAD.PIN – 416 510
TEL : 02363/272005 E Mail – dcfsawantwadi@gmail.com

No. A/Desk-2/Land/2017-18/1546
Sawantwadi, Date :- 13/09/2017

To,
The Collector, Sindhudurg
Oros.

Subject - 1. Certificate stating presence of areas under forest at the quarry site.
2. Distance Certificate stating the distance of reserved forests or protected areas under IWPA, 1972 from the quarry site.
3. Certificate listing Schedule – I species under IWPA, 1972 in 10 km radial distance from the quarry area.

Reference: - 1. Letter received vide no – Khani/20/2/2016 dated 14.06.2017
2. Letter received from Forest Ranger, Kankavli vide no – A/Jamin/ Gaunkhanij/213/17.18

With reference to the application received from Mr. Pramod Kambli at Main Village, Gut no – 1091 (~~Part~~) for grant of mining lease, a Certificate was to be obtained from the Forest Department for the below mentioned points, the clarifications for the same are tabulated below -

Sr. No.	Points	Clarifications
1	Certificate stating presence of areas under forest at the quarry site.	Area of the Stone Quarry of Pramod Kambli is located at Gut no – 1091 (~~Part~~) does not fall under forest area.
2	Distance Certificate stating the distance of reserved forests or protected areas under IWPA, 1972 from the quarry site.	The said stone quarry at gut no – 1091 (~~Part~~) is located beyond 10 km radial distance from the boundary of Radhanagari Wildlife Sanctuary.
3	Certificate listing Schedule – I species under IWPA, 1972 in 10 km radial distance from the quarry area	Occurrence of Schedule – I wild animal species under WPA – 1972 Wildlife Act (i.e panthera pardus) is likely there, but no incidence is noted in last two years.

The authenticated list of flora and fauna found in 10 km radial distance from quarry area is attached as annexure.

Deputy Conservator of Forests
Sawantwadi Forest Department.

Cc : To, The Chief Conservator of Forest (Territorial), Kolhapur for information.
To, Forest Ranger, Kankavli for reference.

ANNEXURE

List of flora in the study area

Sr. No	Botanical Name	Common Name	IUCN Status
1	*Mangifera indica*	Mango	Data Deficient
2	*Tectona grandis*	Sag	Not yet assessed
3	*Acacia catechu*	Khair	Not yet assessed
4	*Syzgium cumini*	Jambhul	Not yet assessed
5	*Terminalia tomentosa*	Ain	Not yet assessed
6	*Bombax ceiba*	sawar	Not yet assessed
7	*Anacardium occidentale*	Kaju	Not yet assessed
8	*Carissa congesta*	Karvanda	Not yet assessed

List of Mammals in the Study Area

Sr. No.	Local Name	Common Name	Scientific Name	Schedule as per WPA, 1972.	IUCN Status
1	Landga	Jackal	*Canis aureus*	II	Least Concern ver. 3.1 Pop. trend: increasing
2	Munghus	Common Mongoose	*Herpestes edwardsii*	II	Least Concern ver. 3.1 Pop. trend: stable
3	Kalga	Common palm civet	*Paradoxurus hermaphroditus*	II	Least Concern ver. 3.1 Pop. trend: decreasing
4	Undir	Rat	*Rattus sp.*	V	–
5	Ran dukkar	Wild Boar	*Sus scrofa*	III	Least Concern ver. 3.1 Pop. trend: unknown
6	Makad	Bonnet Macaque	*Macaca radiata*	II	Least Concern ver. 3.1 Pop. trend: unknown
7	Wanar	Common Langur	*Semnopithecus entellus*	II	Least Concern ver. 3.1 Pop. trend: decreasing
8	Haran	Chittal	*Axis Axis*	III	Least Concern ver. 3.1 Pop. trend:
9	Salindar	Indian Porcupine	*Hystrix indica*	IV	Least Concern ver. 3.1 Pop. trend: stable
10	Bibtya	Leopard	*Panthera pardus*	I	VulnerableA2cd ver 3.1 Pop. trend: decreasing

ANNEXURE

List of Reptiles in the Study Area

Sr. No.	Local Name	Common Name	Scientific Name	Schedule as per WPA, 1972.	IUCN Status
1	Sarda, Satolya	Common Garden Lizard	*Calotes versicolor*	--	Not yet assessed
2	Phoorsa	Saw-scaled viper	*Echis carinatus*	IV	Not yet assessed
3	Nag, 'Pandhra zanawar'	Spectacled Cobra	*Naja naja*	IV	Not yet assessed
4	Dhaman	Rat snake	*Ptyas mucosus*	II	Not yet assessed

List of Birds in the Study Area

Sr. No	Common Name	Scientific Name	Schedule as per WPA, 1972	IUCN Status
1	Flame back Woodpecker	*Picoides mahrattensis*	*IV*	Least Concern ver. 3.1 *Pop. trend: increasing*
2	Magpie Robin	*Copsychus saularis*	*IV*	Least Concern ver. 3.1 *Pop. trend: stable*
3	Indian Robin	*Saxicoloides fulicata*	*IV*	Least Concern ver. 3.1 *Pop. trend: stable*
4	Pied Kingfisher	*Ceryle rudis*	*IV*	Least Concern ver. 3.1 *Pop. trend: unknown*
5	Small Blue Kingfisher	*Alcedo atthis*	*IV*	Least Concern ver. 3.1 *Pop. trend: unknown*
6	Cattle Egret	*Bubulcus ibis*	IV	Least Concern ver. 3.1 Pop. trend: increasing
7	Shikra	*Accipiter badius*	IV	Least Concern ver. 3.1 Pop. trend: stable
8	Indian Koel	*Eudynamys scolopacea*	IV	Least Concern ver. 3.1 Pop. trend: stable
9	Redvented Bulbul	*Pycnonotus cafer*	IV	Least Concern ver. 3.1 Pop. trend: increasing
10	Black headed Myna	*Sturnus pagodarum*	IV	Least Concern ver. 3.1 *Pop. trend: decreasing*

ANNEXURE

Sr. No	Common Name	Scientific Name	Schedule as per WPA, 1972.	IUCN Status
11	Common Myna	*Acridotheres tristis*	IV	Least Concern ver. 3.1 Pop. trend: increasing
12	Purple Sunbird	*Nectarinia asiatica*	IV	Least Concern ver. 3.1 *Pop. trend: stable*
13	Common Sandpiper	*Actitis hypoleucos*	IV	Least Concern ver. 3.1 Pop. trend: decreasing
14	Brown headed gull	*Chroicocephalus brunnicephalus*	IV	Not Yet Assessed
15	Black headed gull	*Chroicocephalus ridibundus*	IV	Least Concern ver. 3.1 Pop. trend: Unknown

Deputy Conservator of Forests
Sawantwadi Forest Department.

Government of Maharashtra
District Collector Office, Sindhudurg
Main Administrative Building, Ground Floor, Room No. 122, Mining Branch,
Oros, Sindhudurgnagari- 416812, E-mail ID- misindhudurg@gmail.com

Khani/desk-17/Cluster Certificate/Minor/SIN./2017
Dated: 09/11/2017

To,

The Member Secretary, Non Coal Mining
Ministry of Environment & Forests, & Climate Change ,
Indira Paryawaran Bhawan, Jor Bagh Road,
Jor Bagh, New Delhi-110003.

Subject: - Cluster Certificate for Minor Mineral (Laterite , Basalt Quarries) for 21 stone quarries.

Reference: 1) Minutes of Meeting of MOEF (File No. J-11011/52/2016-IA-II(M) dated:- 9th Aug 2017).

2) Received Letter from Director of Mining & Geology Nagpur vide letter no. 2038 dated: 31st Aug 2017.

Respected Sir,

With respect to above subject we issue cluster certificate for following 21 nos. of Stone quarries.

Cluster Name 1: Main Cluster(I)

Sr. No	Name of Quarry	Gut no	Village	Taluka	Area of Quarry	Area of Cluster
1	Narhari Lingras	1424	Main	Kankavli	4.5 Ha.	**19.35 Ha.**
2	Sadashiv Morye	1381	Main	Kankavli	3.52 Ha.	
3	Santosh Parab	1308, 1309	Main	Kankavli	2.75 Ha	
4	Sanjay Pol	974/2, 1296	Main	Kankavli	2.33 Ha	
5	Pramod Kambli	1091	Main	Kankavli	2.61 Ha	
6	Mahadev Parkar	974	Main	Kankavli	2.00 Ha	
7	Ramesh Bandal	1066	Main	Kankavli	1.64 Ha	

Cluster Name 2: Main Cluster (II)

Sr. No	Name of Quarry	Gut no	Village	Taluka	Area of Quarry	Area of Cluster
1	Shailesh Parab	1222	Main	Kankavli	2.12 Ha.	**5.08 Ha.**
2	Chandrakant Pujare	1201, 1210 & 1211	Main	Kankavli	1.82 Ha.	
3	Mayaji Gurav	1199	Main	Kankavli	0.59 Ha	
4	Rajendra Mane	1218	Main	Kankavli	0.55 Ha	

Cluster Name 3: Lingdal Cluster

Sr. No	Name of Quarry	Gut no	Village	Taluka	Area of Quarry	Area of Cluster
1	Sagar Loke	1031	Lingdal	Devgad	2.93	**5.03 Ha.**
2	Narayan Hindlekar	893	Lingdal	Devgad	2.10	

To certify that the other mines are within 500 meter of the said mining lease of Minor Mineral &area does not exceed 25 hectare.

List of Individual Quarries and quarries falling in cluster area less than 5 Hectares.

Sr. No	Name of Quarry	Gut no	Village	Taluka	Area of Quarry (Ha)	Area of cluster
1	Bhalchandra Satam	2399(1A)	Aynal	Kankavali	1.29 Ha	4.65 Ha
2	Sadanand Mane	2399/1B	Aynal	Kankavali	1.28 Ha	
3	Vilas Hadkar	2389,2399(1C)	Aynal	Kankavali	2.08 Ha	
4	Ashok Kurade	1629	Savadav	Kankavali	0.75 Ha	1.5 Ha
5	Milind Keluskar	1629 (Part)	Savadav	Kankavali	0.75 Ha	
6	Hanumant Talekar	2003 (Part)	Darum	Kankavali	1.37 Ha	--
7	Nirhari Lingras	931,947	Main	Kankavali	3.97 Ha	--
8	Sahdev Chavan	1686 (A), 1339(Part),1684, 1685 (Part)	Koloshi	Kankavali	3.13 Ha	--

To certify that the above stated quarries (Sr no. 1 to 5) fall in cluster scenario with area less than 5 hectare and (Sr. No 6-8) are individual entities having no quarry within 500 m radial distance.

Thanking You,

Yours Faithfully,

Collector Sindhudurg

District Collector, Sindhudurg