

JULY 2025

Application Form (Draft EIA Report)

For

Proposed Rough Stone and Gravel Quarry – 3.76.67 Ha

at

**S. F Nos. 70/4A & 70/5B in Midithepalli Village of
Shoolagiri Taluk, Krishnagiri District,
Tamil Nadu State**

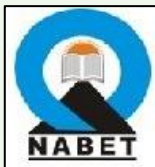
Sector No. 1(a) (Sector No. 1 as per NABET)

Category of the Project: B1 Cluster Mining

Baseline Period: April 2025 - June 2025

***Environmental Consultant
& Laboratory details:***

Ecotech Labs Pvt Ltd,



No 48, 2nd Main road,
South extension
Ram Nagar, Pallikaranai,
Chennai -600100.

Proponent details:

**M/s. R. K. M Sand
and Aggregates,**

Proprietor:

Thiru.Ravikumar,
Villa No.126, Adarsh
Palm, Retreat Villas,
Devarabisanahalli,
Bangalore,
Karnataka – 560 103.

Date:

From

M/s.R.K.M Sand and Aggregates,
Proprietor: Thiru.Ravikumar,
Villa No.126, Adarsh Palm,
Retreat Villas, Devarabisanahalli,
Bangalore, Karnataka – 560 103.

To

The District Environmental Engineer
Tamilnadu Pollution Control Board,
Plot No:140A, SIPCOT Industrial Complex,
Hosur, Krishnagiri – 635 126.

Sir,

Sub: Request to conduct Public Hearing – Environmental Clearance for the “**M/s.R.K.M Sand and Aggregates** Rough Stone and Gravel Quarry” over a total extent of 3.76.67 Ha at S. F. Nos. 70/4A & 70/5B in Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu – Reg

Ref: ToR Identification No. TO25B0108TN5423420N Dated: 13.05.2025

Please find enclosed herewith the application of Draft EIA Report along with necessary enclosures towards seeking environmental clearance for the **M/s.R.K.M Sand and Aggregates** Rough Stone and Gravel Quarry” over a total extent of 3.76.67 Ha at S. F. Nos. 70/4A & 70/5B in Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu. In this regard, we had obtained the Terms of Reference from State Environmental Impact Assessment Authority (SEIAA) TamilNadu; vide reference mentioned above for conducting EIA studies. We wish to inform that the draft EIA report complying with all the conditions mentioned in the TOR has been prepared and the copies of the same are enclosed with this letter. With reference to the above, we kindly request the TNPCB to make the necessary arrangements for **Conducting the Public hearing for the Rough Stone Quarry**. With the above, we request the TNPCB to accept and process our application for conducting the Public Hearing at the earliest.

Thanking you

Yours Sincerely

Authorized Signatory

Enclosures: Draft EIA report

M/s. R.K.M Sand and Aggregates,

Proprietor: Thiru.Ravikumar,

Villa No.126, Adarsh Palm,

Retreat Villas, Devarabisanahalli,

Bangalore, Karnataka – 560 103.

UNDERTAKING

We, M/s.R.K.M Sand and Aggregates, undertaking that the Draft Environmental Impact Assessment (EIA) Report for Rough Stone and Gravel Quarry over an extent of 3.76.67 Ha at S.F.No. 70/4A & 70/5B of Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamilnadu State under project category B1 and Schedule S.No.1(a)

ToR issued by the State Expert Appraisal Committee, TN vide **ToR Identification No. TO25B0108TN5423420N Dated: 13.05.2025**

I, hereby assure that all the information and data provided in the EIA report is accurate, true and correct and owns responsibility for the same.

Place: Krishnagiri

Yours faithfully

Date:

For M/s. R.K.M Sand and Aggregates,

Plot No.48A, 2nd Main Road,
Ram Nagar, South Extension,
Pallikaranai, Chennai - 600 100.
GST NO. 33AADCE6103A2ZH
PAN NO. AADCE6103A



Eco Tech Labs Pvt Ltd

Cell No. 98400 87542
Email : info@ecotechlabs.in
Website : www.ecotechlabs.in
CIN : U74900TN2014PTC094895

UNDERTAKING

I, Dr. A. Dhamodharan, Managing Director, confirms that this Draft EIA Report of Rough Stone and Gravel Quarry over an extent of 3.76.67 Ha at S.F.No. 70/4A & 70/5B of Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamilnadu State has been prepared at M/s. Ecotech Labs Pvt. Ltd., Chennai.

I also confirm that I shall be fully accountable for any miss-leading information mentioned in this Report.



Signature:

Name: Dr. A. Dhamodharan

Designation: Managing Director

Name of the EIA Consultant Organization: M/s. Ecotech Labs Pvt Ltd., Chennai.

NABET Certificate No: NABET/EIA/25-28/RA 0400

Date:

Place: Chennai

Declaration of Experts contributing to the EIA

Declaration by experts contributing to the EIA report for Rough Stone and Gravel Quarry (minor mineral) mining project of M/s.R.K.M Sand and Aggregates Rough Stone and Gravel Quarry over a total extent of 3.76.67 Ha at S.F.No. 70/4A & 70/5B of Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamilnadu State.

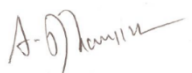
I, hereby certify that I was a part of the EIA team in the following capacity that developed the above EIA.

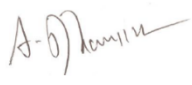
Project	New Rough Stone and Gravel Quarry – 3.76.67 Ha
Type & Category	1 (a) Mining of Minerals
Project Proponent	M/s.R.K.M Sand and Aggregates, Proprietor: Thiru.Ravikumar
Environment Consultant with their Accreditation Status	M/s. Eco Tech Labs Pvt. Ltd., QCI Accredited
NABET Certificate No.	NABET/ EIA/25-28/ SA 0400
EIA Coordinator Name Signature	Dr. A. Dhamodharan (Mining of Minerals) 
Period of Involvement	April 2025 to June 2025
Contact Information	M/s. Eco Tech Labs Pvt. Ltd. No. 48, 2nd Main Road, Ram Nagar South Extension Pallikaranai, Chennai - 600 100 Mobile: +91 9789906200 E-mail: dhamo@ecotechlabs.in

Functional Area Experts

The basic fact division that environment and laboratory are accredited by NABL and Ministry of Environment and Forests, India and by other international bodies, stand testimony to its emphasis.

S. No.	Functional areas	Name of the experts	Involvement (period and task)	Signature and date
1	AP	Mrs. K. Vijayalakshmi	1. Selection of Baseline Monitoring stations based on the wind direction. 2. Interpretation of Baseline data by comparing it with standards prescribed by CPCB against the type of area. 3. Identification of sources of air pollution and suggesting mitigation measures to minimize impact. <i>Period: March 2022 – Till now</i>	
2	WP	Dr. A. Dhamodharan	1. Selection of baseline Monitoring Locations for Ground water analysis and also identifying nearest surface water to be studied. 2. Interpretation of baseline data collected 3. Identification of impacts based on the baseline study conducted and also to the ground water and nearby surface water due to the proposed project 4. Preparation of suitable and appropriate mitigation plan. <i>Period: March 2022 – Till now</i>	
3	SHW	Dr. A. Dhamodharan	1. Identification of nature of solid waste generated 2. Categorization of the generated waste and estimating the quantity of waste to be generated based on the per capita basis. Identification of impacts of SHW on Environment 3. Suggesting suitable mitigation measures by recommending appropriate disposal method for each category of waste generated 4. Top soil and refuse management <i>Period: March 2022 – Till now</i>	

4	SE	Mr. S. Pandian	1. Primary data collection through the census questionnaire 2. Obtaining Secondary data from authenticated sources and incorporating the same in EIA report. 3. Impact assessment & proposing suitable mitigation plan 4. CSR budget allocation by discussing with the local body and allotting the same for need based activity. Period: March 2022 – Till now *INVOLVES PUBLIC HEARING	
5	EB	Dr. A. Dhamodharan	1. Primary data collection through field survey and sheet observation for ecology and biodiversity 2. Secondary Collection through various authenticated sources 3. Prediction of anticipated impacts and suggesting appropriate mitigation measures. Period: March 2022 – Till now	
6	HG	Dr. T. P. Natesan	1. Study of existing surface drainage arrangements in the core and buffer zone, impact due to mining on these drainage courses and suggestion of mitigative measures 2. Determination of groundwater use pattern, development of rainwater harvesting program. Storm water management through garland drainage system. Period: March 2022 – Till now	
7	GEO	Dr. T. P. Natesan	1. Field survey for assessing regional and local geology, aquifer distribution, Determination of groundwater use pattern, development of rainwater harvesting program. Period: March 2022 – Till now	

8	SC	Dr. A. Dhamodharan	1. Interpretation of baseline report 2. Identification of possible impacts on soil, prediction of soil conservation and suggesting suitable mitigation measures. Period: March 2022 – Till now	
9	AQ	Mrs. K. Vijayalakshmi	1. Collection of Meteorological data for the baseline study period 2. Plotting wind rose plot and thereby selecting the monitoring locations based on the wind pattern 3. Estimation of sources of air emissions and air quality modeling is done 4. Interpretation of the results obtained 5. Identification of the impacts and suggesting suitable mitigation measures. Period: March 2022 – Till now	
10	NV	Mrs. K. Vijayalakshmi	1. Selection of monitoring locations 2. Interpretation of baseline data 3. Prediction of impacts due to noise pollution and suggestion of appropriate mitigation measures Period: May 2022 – Till now	
11	LU	Dr. T. P. Natesan	1. Collection of Remote sensing satellite data to study the land use pattern. 2. Primary field survey and limited field verification for land categorization in the study area 3. Preparation of Land use map using Satellite data for 10km radius around the project site. Period: March 2022 – Till now	
12	RH	Mrs. K. Vijayalakshmi	1. Identification of the risk 2. Interpreting consequence contours 3. Suggesting risk mitigation measures Period: March 2022 – Till now	

Declaration by the Head of the accredited consultant organization/ authorized person

I, Dr. A. Dhamodharan, hereby confirm that the above-mentioned experts prepared the EIA report of mining project at S.F.No. 70/4A & 70/5B of Midithelpalli Village, Shoolagiri Taluk, Krishnagiri District, Tamilnadu State

I also confirm that the consultant organization shall be fully accountable for any misleading information mentioned in this statement.

Signature:



Name: Dr.A. Dhamodharan

Designation: Managing Director

Name of the EIA consultant organization: M/s. Eco Tech Labs Private Limited

NABET Certificate No: NABET/ EIA/25-28/ RA 0400

Draft EIA Report

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

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Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
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ABBREVIATION

LU –LAND USE

AP – AIR POLLUTION MONITORING, PREVENTION AND CONTROL

AQ- METEOROLOGY, AIR QUALITY MODELING AND PREDICTION

WP – WATER POLLUTION MONITORING, PREVENTION AND CONTROL

EB- ECOLOGY AND BIODIVERSITY

NV- NOISE & VIBRATION

SE- SOCIO-ECONOMICS

HG- HYDROLOGY, GROUND WATER AND WATER CONSERVATION

GEO –GEOLOGY

RH – RISK ASSESSMENT AND HAZARDS MANAGEMENT

SHW –SOLID AND HAZARDOUS WASTE MANAGEMENT

SC- SOIL CONSERVATION

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

EXECUTIVE SUMMARY

1. Project Background:

The Proposed project is in Patta land having total extent area of 3.76.67 Ha, located at S.F.No.70/4A & 70/5B of Midithepalli Village of Shoolagiri Taluk, Krishnagiri District and Tamil Nadu. The category of project is B1, it is a fresh rough stone and gravel quarry in Midithepalli village. The area is situated on gently sloping terrain towards the Eastern side, covered with Rough Stone and Gravel which does not sustain any type of vegetation.

The quarry operation is proposed to carry out with conventional open cast mechanized mining with a 5.0-meter vertical bench with a bench width of 5.0 meter. The Quarry operation involves shallow jack hammer drilling, slurry blasting, loading and transportation.

The quarry operation is proposed up to depth for 47.0m (2.0m Gravel + 45.0m Rough stone). The Total Geological reserve is about 96,630m³ of Gravel and 21,44,580m³ of Rough Stone. The Mineable Reserves are 82,530m³ of Gravel and 12,24,475m³ of Rough stone. Production schedule is proposed an average production of 82,530m³ of Gravel and 12,24,475m³ of Rough stone for Ten years only.

The Mining Plan was approved by the Deputy Director, Geology & Mining, Krishnagiri vide letter Rc.No.768/2024 Mines dated 18.12.2023. There is no CRZ zone, Western Ghats, notified Bird sanctuaries, wild life sanctuaries as per Wild life protection Act 1972, within the radius of 15Km.

2. Nature & Size of the Project

The Rough Stone and Gravel Quarry over an extent of 3.76.67 Hectares land is located Midithepalli Village of Shoolagiri Taluk, Krishnagiri District.

Mineral intends to quarry : Rough stone and Gravel

District : Krishnagiri

Taluk : Shoolagiri

Village : Midithepalli

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Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

S. F. Nos. : 70/4A & 70/5B

Extent : 3.76.67 Hectares

Table 1: Brief Description of the Project

S. No	Particulars	Details
1	Latitude	12° 46' 07.7657" N to 12° 45' 57.2328" N
2	Longitude	77° 57' 10.9141" E to 77° 57' 01.9504" E
3	Site Elevation above MSL	The altitude of the area is 869m above MSL.
4	Topography	slightly elevated terrain
5	Land use of the site	Patta land
6	Extent of lease area	3.76.67 Ha
7	Nearest highway	MDR 422 – Berigai to Shoolagiri Road – 3.18 Km - SE NH 48 – Hosur to Krishnagiri Road – 9.37 Km - S
8	Nearest railway station	Hosur Railway Station – 14.82 km - SW
9	Nearest airport	Kempagowda International Airport – 54.02 Km - NW
10	Nearest town / city	Town - Shoolagiri – 11.67 km - SE City - Hosur – 13.02 km - W District - Krishnagiri – 37.30 km - SE
11	Rivers / Canal	• Ponnaniyar River – 6.09Km - SW
12	Lake	• Muthali lake – 4.67Km – W • Bukkasagaram Lake – 4.76Km- S • Berikai Lake – 5.12Km – N

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		• Peddakullu Lake – 5.86Km – SW • Lake 1 – 5.25Km – SW • Doripalli Lake – 6.28Km – S • Thummanapalli Lake – 6.89Km – SSW • Kelavarapalli Reservoir – 7.14Km – W • Kamandoddi Lake – 8.56Km – S • Kumudapalli Lake – 9.57Km – SW • Moranapalli Lake – 9.89Km - SW
13	Hills / valleys	Nil in 15 km radius
14	Archaeologically places	Nil in 15 km radius
15	National parks / Wildlife Sanctuaries	• Cauvery North Wildlife Sanctuary – 25.35 Km – S • Cauvery South Wildlife Sanctuary – 47.26 Km - SW
16	Reserved / Protected Forests	• Meditepalli RF – 1.29Km – N • Berigai RF – 1.73Km – SE • Berigai Extension RF – 2.17Km – NE • Sanamavu RF – 5.91Km – SW • Settipalli RF – 7.37Km – SE
17	Seismicity	Proposed Lease area come under Seismic zone-II (low risk area)
18	Defense Installations	Nil in 15 Km radius

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

3. Need for the Project

- ❖ The mining activities as proposed are the backbone of all construction and infrastructure projects as the raw material for construction is available only from such mining. The Rough stone extracted will be transported to be Stone crusher of district Krishnagiri.
- ❖ The raw Rough stone as well as the crushed material of stone is in high demand in real estate, construction projects as well as in building construction projects.
- ❖ Rough stone is quarried for producing crusher aggregates to the nearby building contractors, road contractors and nearby villagers.
- ❖ After quarrying the entire reserves mined out, the area will be used as water reservoir to have an artificial recharge to the nearby wells.
- ❖ No damage to the land is caused, no reclamation or back filling is required.

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Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

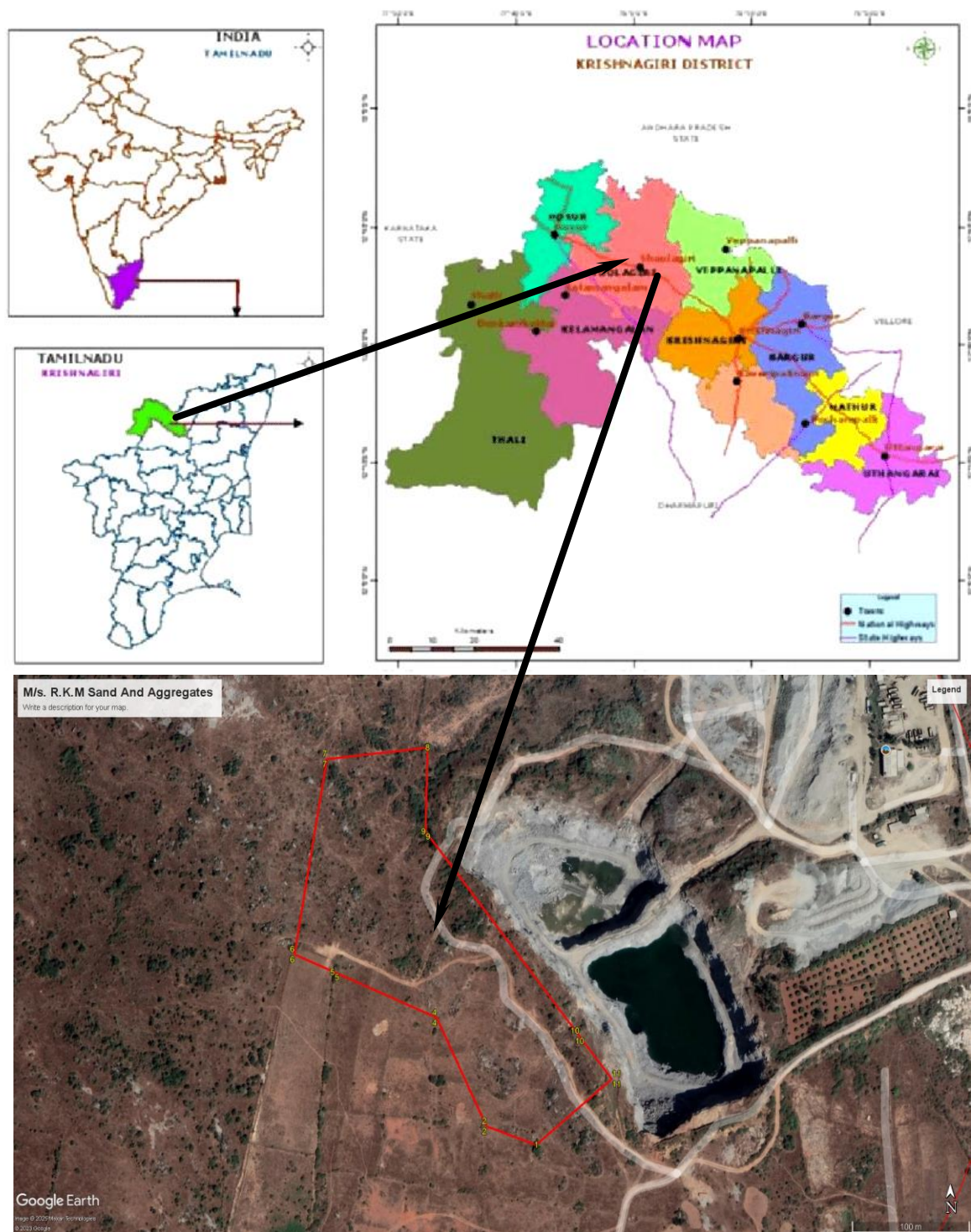


Figure 1: Location Map of the Project Site

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

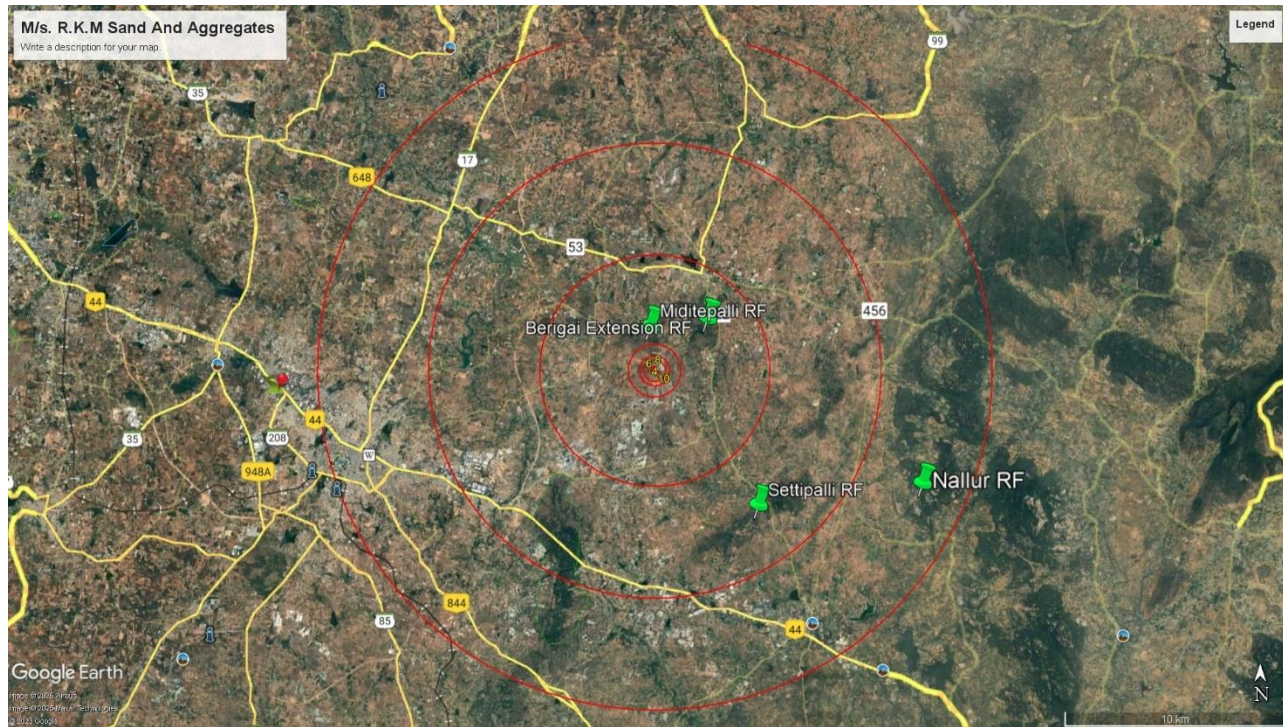


Figure 2: Google Image of the Project Site

4. Charnockite

Charnockite and granitic gneisses are extensively quarried as rough stone which is used as aggregates for construction of building, laying of roads and for preparation of value added products like hollow blocks, pillar stones, M-sand etc. Charnockite occurs as massive bodies, greyish colour, medium to coarse grained, composed quartz, feldspar and orthopyroxene. At places, metamorphic gneissic banding (alternate dark and black colour) in charnockite is noticed. Top portion, it gives gneissic appearance but 1-5m depth below it is typical charnockite of grey colour.

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<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

5. Geological resources

The geological resources have been calculated based on the cross-section method.

Table 2. Geological resources

Section	Bench	L (m)	W (m)	D (m)	Volume in (Cu.m.)	Geological Reserve in Cu.m (100%)	Gravel in (Cu.m.)
XY-AB	I	236	150	2			70800
	II	221	141	5	155805	155805	
	III	236	150	5	177000	177000	
	IV	236	150	5	177000	177000	
	V	236	150	5	177000	177000	
	VI	236	150	5	177000	177000	
	VII	236	150	5	177000	177000	
	VIII	236	150	5	177000	177000	
	IX	236	150	5	177000	177000	
	X	236	150	5	177000	177000	
Total					1571805	1571805	70800
XY-CD	I	123	105	2			25830
	II	107	105	5	56175	56175	
	III	123	105	5	64575	64575	
	IV	123	105	5	64575	64575	
	V	123	105	5	64575	64575	
	VI	123	105	5	64575	64575	
	VII	123	105	5	64575	64575	

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
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	VIII	123	105	5	64575	64575	
	IX	123	105	5	64575	64575	
	X	123	105	5	64575	64575	
Total					572775	572775	25830
Grand Total					2144580	2144580	96630

Mineable reserves:

The Mineable reserves are calculated by deducting 7.5m & 10m Safety distance and bench loss. In this regard, since the adjacent area also to be under new lease area, necessary action will be taken to get permission from DGMS in future to comply regulation under (111)3 of MMR.1961.

Table 3. Mineable Reserves

Section	Bench	L (m)	W (m)	D (m)	Volume in (Cu.m.)	Mineable Reserve in Cu.m(100%)	Gravel in (Cu.m.)
XY-AB	I	229	135	2			61830
	II	221	133	5	146965	146965	
	III	229	135	5	154575	154575	
	IV	224	125	5	140000	140000	
	V	219	115	5	125925	125925	
	VI	214	105	5	112350	112350	
	VII	209	95	5	99275	99275	
	VIII	204	85	5	86700	86700	
	IX	199	75	5	74625	74625	
	X	194	65	5	63050	63050	

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
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Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

Total=					1003465	1003465	61830
XY-CD	I	115	90	2			20700
	II	107	86	5	46010	46010	
	III	115	78	5	44850	44850	
	IV	110	68	5	37400	37400	
	V	105	58	5	30450	30450	
	VI	100	48	5	24000	24000	
	VII	95	38	5	18050	18050	
	VIII	90	28	5	12600	12600	
	IX	85	18	5	7650	7650	
Total=					221010	221010	20700
Grand Total=					1224475	1224475	82530

Table 4. Year wise Production Plan

Year	Section	Bench	L (m)	W (m)	D (m)	Volume In M3	Recoverable Reserve in m3 @ 100%	Gravel in m3
I-Year	XY-AB	I	229	135	2			61830
		II	221	133	5	146965	146965	
	TOTAL					146965	146965	61830
II-Year	XY-CD	I	115	90	2			20700
		II	107	86	5	46010	46010	
		III	115	78	5	44850	44850	
	TOTAL					90860	90860	20700

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<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

III-Year	XY-AB	III	229	135	5	154575	154575	
	TOTAL					154575	154575	
IV-Year	XY-AB	IV	224	125	5	140000	140000	
	TOTAL					140000	140000	
V-Year	XY-CD	IV	110	68	5	37400	37400	
		V	105	58	5	30450	30450	
	XY-AB	V	219	115	5	125925	125925	
	TOTAL					193775	193775	
VI-Year	XY-AB	VI	214	105	5	112350	112350	
	XY-CD	VI	100	48	5	24000	24000	
	TOTAL					136350	136350	
VII-Year	XY-AB	VII	209	95	5	99275	99275	
	XY-CD	VII	95	38	5	18050	18050	
	TOTAL					117325	117325	
VIII-Year	XY-AB	VIII	204	85	5	86700	86700	
	XY-CD	VIII	90	28	5	12600	12600	
	TOTAL					99300	99300	
IX-Year	XY-AB	IX	199	75	5	74625	74625	
	XY-CD	IX	85	18	5	7650	7650	
	TOTAL					82275	82275	
X-Year	XY-AB	X	194	65	5	63050	63050	
	TOTAL					63050	63050	
Grand Total						1224475	1224475	82530

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6. Mining

Opencast mining

The quarry operation is proposed to carry out with conventional open cast mechanized mining with 5.0-meter vertical bench with a bench width of 5.0 meter. The Quarry operation involves shallow jack hammer drilling, blasting, loading and transportation.

Process Description

- The reserves and resource are arrived based upon the Geological investigation.
- Removal of Topsoil by Excavators and directly Loaded into Tippers.
- Removal of Rough Stone by Excavators by Drilling and Blasting.
- Shallow Drilling With Jackhammer of 25.5mm Dia.
- Minimum Blasting With Class 3 Explosives.
- Loading of Rough Stone By Excavators Into Tippers.

7. Water Requirement

Total water requirement for the mining project is 2.0 KLD. Domestic water will be sourced from nearby Midithepalli Village and other water will be sourced from nearby road tankers supply.

Table 5. Water Balance

Purpose	Quantity	Source
Drinking Water	1.0 KLD	Mineral water purchased from approved water vendors available Midithepalli village which is about 1.70 km NE from the project site.
Green belt	0.5 KLD	Other domestic activities through road tankers supply
Dust suppression	0.5 KLD	From road tankers supply
Total	2.0 KLD	

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8. Manpower

Total manpower required for the project is approximately 20 persons. The workers will be from nearby villages.

Table 6. Man Power

1.	Skilled	Operators	3 Nos
		Mechanic	2 No
		Blaster / Mat	1 No
2.	Semi – skilled	Drivers	3 Nos
3.	Unskilled	Musdoor / Labors	6 Nos
		Cleaners	2 Nos
		Office Boy	1 No
4.	Management & Supervisory staff		2 Nos
Total			20 Nos

9. Solid Waste Management

Table 7 Solid Waste Management

S. No	Type	Quantity	Disposal Method
1	Organic	2.88 kg/day	Municipal bin including food waste
2	Inorganic	4.32 kg/day	TNPCB authorized recyclers

As per CPCB guidelines: MSW per capita/day =0.45 kg/day

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Table 8 500m Radius Cluster Mine

1) Details of Existing quarries:

S. No.	Name of the lessee	Village & Taluk	Mineral	S.F. No	Extent	Rc. No & Date	Lease Period
1.	Thiru.B.Srikar, S/o. Bharathy D.No.25, Shanti Nagar (West), 2 nd Cross, Hosur – 635109.	Shoolagiri & Midithepalli	Rough stone	79	1.86.50	Rc. No. 646/2021/ Mines dated: 08.08.24	08.08.24 To 07.08.34
2.	Thiru.D.Sreenivasalu, S/o. Vekateshwarlu, No. Radha lakshmi Nilayam, Devachandra Main road, Bangalore	Shoolagiri & Midithepalli	Rough stone	80/1 80/2	3.17.08	Rc. No. 1305/2018/ Mines dated: 20.12.22	20.12.22 to 19.12.32
3.	Thiru.Venkat reddy, S/o. (Late) Uthama Reddy, Kolar Taluk, Uddanahalli, Chakkarasanahalli, Karnataka	Shoolagiri & Midithepalli	Rough stone	81/2 82/1	2.05.92	Rc. No. 1308/2018/ Mines dated: 31.10.2022	31.10.22 to 30.10.32

2) Details of Expired/Old Quarries:

S.No.	Name of the lessee	Village	S.F.No	Extent	GO No. & Date	Lease period
1.	M/s. Sarva Infra Pvt. Ltd, 540, 3 rd floor, CMH Road, Indira Nagar, Bangalore.	Shoolagiri & Midithepalli	70/1B, 70/1C	4.05.0	Rc.No. 09/2014/ Mines Dated:26.10.2015	28.10.2015 to 27.10.2020

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3) Details of Proposed Quarries

S. No.	Name of the lessee	Village & Taluk	Mineral	S.F. No	Extent	GO No. & Date	Lease period
1.	M/s.R.K.M Sand and Aggregates, Proprietor: Thiru.Ravikumar, Villa No.126, Adarsh Palm, Retreat Villas, Devarabisanahalli, Bangalore, Karnataka – 560 103.	Shoolagiri, Midithepalli	Rough stone	70/4A & 70/5B	3.76.67	-	Instant proposal

The Total extent of the Existing / Lease expired / Proposed quarries are 14.91.17 Ha.

10. Land Requirement

The total extent area of the project is 3.76.67 Ha, Patta land in Midithepalli Village of Shoolagiri Taluk, Krishnagiri District.

Table 9 Land Use Breakup

S. No.	Land Use	Present Area (Hect)	Area in use during the quarrying period (Hect)
1.	Area under Quarrying	Nil	3.09.0
2.	Infrastructure	Nil	0.01.0
3.	Roads	Nil	0.01.0
4.	Green Belt	Nil	0.65.67
5.	Unutilized Area	3.76.67	Nil
	Total	3.76.67 Ha	3.76.67 Ha

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Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

11. Human Settlement

There are no habitations within 300m radius. There are villages located in this area within 5km radius of the quarry.

Table 10 Habitation

SL. NO.	DIRECTION	VILLAGE	POPULATION	DISTANCE
1	NW	Alnatham	327	1.50 Km
2	E	Athetti	180	1.50 Km
3	SE	Mensandoddi	310	1.81 Km
4	SW	Venkatesapuram	2873	1.60 Km

12. Power Requirement

The Rough Stone Quarry project does not require huge water and electricity for the project.

16 Litre diesel per hour for excavator for mining and loading for Rough stone needed.

13. Scope of the Baseline Study

This chapter contains information on existing environmental scenario on the following parameters.

1. Micro – Meteorology
2. Water Environment
3. Air Environment
4. Noise Environment
5. Soil / Land Environment
6. Biological Environment
7. Socio-economic Environment

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13.1 Micro – Meteorology

Meteorology plays a vital role in affecting the dispersion of pollutants, once discharged into the atmosphere. Since meteorological factors show wide fluctuations with time, meaningful interpretation can be drawn only from long-term reliable data.

- i) Average Minimum Temperature : 17 °C
- ii) Average Maximum Temperature : 39 °C
- iii) Average Annual Rainfall of the area: 968 mm

13.2 Air Environment

Ambient air monitoring was carried out on a monthly basis in the surrounding areas of the Mine Lease area to assess the ambient air quality at the source. To know the ambient air quality at a larger distance i.e., in the study area of 5 km. radius, air quality survey has been conducted at 5 locations. Major air pollutants like Particulate Matter (PM₁₀), Sulphur Dioxide (SO₂), Nitrogen Dioxide (NO₂) were monitored, and the results are summarized below.

The baseline levels of PM₁₀ (67-41 µg/m³), PM_{2.5} (33-14 µg/m³), SO₂ (21-6 µg/m³), NO₂ (34 -11 µg/m³), all the parameters are well within the standards prescribed by National Ambient Air Quality during the study period from April 2025 to June 2025.

13.3 Noise Environment

The maximum Day noise and Night noise were found to be 65 dB(A) and 54 dB(A) respectively in Government High School, Muthali. The minimum Day Noise and Night noise were 44 dB(A) and 39 dB(A) respectively which was observed in project site. The observed values are all well within the Standards prescribed by CPCB.

13.4 Water Environment

- The average pH ranges from 6.74 – 8.53.
- TDS value varied from 405 mg/l to 1003 mg/l

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- Hardness varied from 227 to 630 mg/l
- Chloride varied from 34.7 to 223 mg/l

13.5 Land Environment

The analysis results shows that the majority of soil in the project and surrounding area is slightly alkaline in nature and pH value ranges from 6.90 to 8.96 with organic matter 0.11 to 0.83%. The concentration of Nitrogen, Phosphorus & Potassium has been found to be in good amount in the soil samples.

13.6 Biological Environment

The proposed Mining lease area is mostly dry barren ground with small shrubs and bushes. No specific endangered flora & fauna exist within the mining lease area.

14. Rehabilitation/ Resettlement

- The overall land of the mine is Patta land. There is no displacement of the population within the project area and adjacent nearby area. Social development of nearby villages will be considered in this project.
- The mine area does not cover any habitation. Hence the mining activity does not involve any displacement of human settlement.

15. Greenbelt Development

1. The development of greenbelt in the peripheral buffer zone of the mine area.
2. The Green belt has been recommended as one of the major components of the Environmental Management Plan, which will improve ecology, environment and quality of the surrounding area.
3. Local trees like Neem, Pungam, Naval etc will be planted along the lease boundary and avenues as well as over non-active dumps at a rate of 100 trees per annum with interval 5m.
4. The rate of survival expected to be 80% in this area

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Table.11 Plantation/ Afforestation Program

Name of species proposed	Survival	No of species
Neem, Pungam, Poovarasu, Naval, Mantharai, Arasa Maram, Magizham, Vilvam, vaagai, Marudha maram, Thandri, Poovarasu, Manjadi, Usil, Aathi, Panai, Uzha, Illuppai, Eachai, Vanni Maram	80%	1900
Total		1900

16. Anticipated Environmental Impacts

16.1 Air Environment and Mitigation Measures

1. Water sprinkling will be done on the roads & unpaved roads.
2. Proper mitigation measures like water sprinkling will be adopted to control dust emissions.
3. Plantation will be carried out on approach roads, solid waste site & nearby mine premises.
4. To control the emissions regular preventive maintenance of equipment will be carried out.

16.2 Noise Environment and Mitigation Measures

1. Periodical monitoring of ambient noise will be done as per CPCB guidelines.
2. No other equipment except the transportation vehicles and excavator for loading will be allowed.
3. Noise generated by these equipments shall be intermittent and does not cause much adverse impact

17. Responsibilities for Environmental Management Cell (EMC)

The responsibilities of the EMC include the following:

- i. Environmental Monitoring of the surrounding area
- ii. Developing the green belt/Plantation

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iii. Ensuring minimal use of water

iv. Proper implementation of pollution control measures

18. Environmental Monitoring Program

A monitoring schedule with respect to Ambient Air Quality, Water & Wastewater Quality, Noise Quality as per Tamil Nadu State Pollution Control Board (TNPCB), shall be maintained.

19. Project Cost

The total project cost is **Rs 80,50,000/-** for deployment of machinery and creation of infrastructural facilities like approach road, mine office / Workers Shed, First Aid Room etc., including electrifications and water supply.

Table 12 Project Cost details

S. No.	Description	Cost
1	Fixed Asset Cost	Rs.40,50,000/-
2	Operational and Fencing Cost	Rs. 40,00,000/-
	Total	Rs. 80,50,000/-

20. Corporate Environmental Responsibility

The Corporate Environment Responsibility (CER) fund will be provided to the below activity.

Table 13 CER Cost

S.No.	CER Activity	CER value (Rs)
1.	PUPS – Miditheapalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State.(65 Students) Providing facilities are: ➤ Two Classroom Building, Staff toilet, Prayer assembly hall with stage, Dining hall with handwash ➤ R.O Water Facility	3,00,000/-

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	➤ Smart Classroom facility ➤ Greenbelt Development inside and around the campus – 50 No's. ➤ Environmental, Social Awareness and General Knowledge Books in Tamil Language ➤ Hygienic Toilet Facility and maintenance upto lease period.	
2.	PUPS – Athimugam Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State. (164 Students) Providing facilities are: ➤ Two Class room Building, Staff toilet, Prayer assembly hall with stage, Dining hall with handwash ➤ R.O Water Facility ➤ Greenbelt Development inside and around the campus – 50 No's. ➤ Environmental, Social Awareness and General Knowledge Books in Tamil Language	2,00,000/
Total		5,00,000

21. Benefits of the Project

- There is a positive impact on socioeconomics of people living in the villages. Mining operations in the subject area has a positive impact by providing direct and indirect jobs opportunities.
- The project is environmentally compatible, financially viable and would be in the interest of the construction industry thereby indirectly benefiting the masses.
- Quarrying in this area is not going to have any negative impact on the social or cultural life of the villagers in the nearby vicinity.

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1 Introduction

1.1 PREAMBLE

Environment Impact Assessment (EIA) is a process used to identify the environmental, social & economic impacts of a project prior to decision making. It aims to predict environmental impacts at an early stage of project planning and design, find ways and means to reduce adverse impacts, shape projects to suit the local environment and present the prediction options to the proponent. By using EIA, both environmental & economic benefits can be achieved. By considering environmental effects - prediction & mitigation, early benefits in project planning, protection of the environment, optimum utilization of resources, thus saving overall time & cost of the project.

1.2 GENERAL INFORMATION ON MINING OF MINERALS

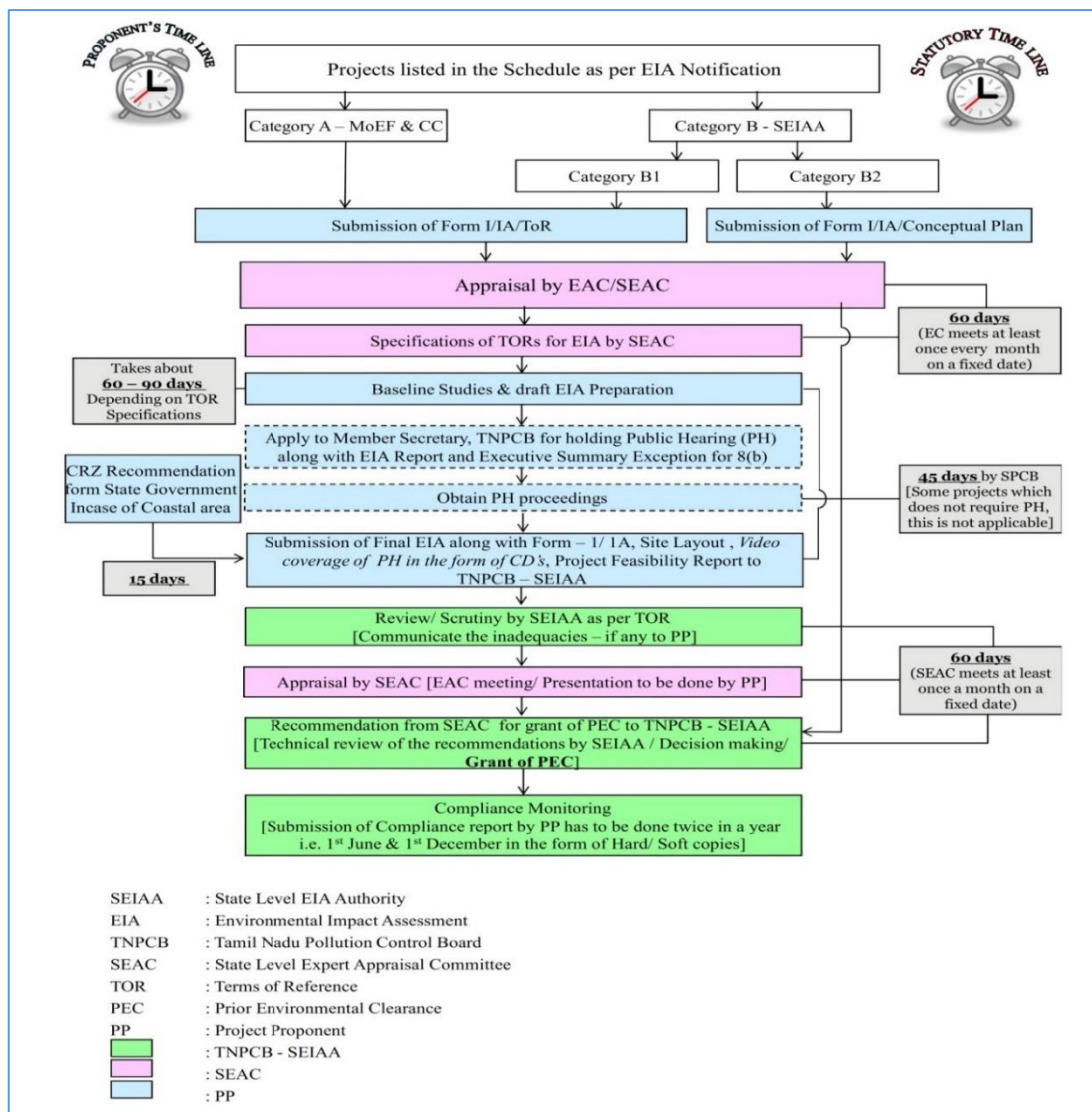
The Entire district is underlain by the rocks belonging to hard crystalline rock masses of Archaean age. The Archaean rocks in this area are represented by rocks of eastern Ghat complex comprising charnockites, Migmatite complex of composite gneiss. The district is covered by metamorphic crystalline rocks of charnockite, composite gneiss of Archaean age. These rocks are highly metamorphosed and have been subjected to sever folding, crushing and faulting. Charnockites group is occupied by North and Southern part of the basin. The other rock type is encountered by composite granitic gneiss of Epidote hornblende biotite gneiss and hornblende biotite gneiss are occupy in the middle portion of the basin. Charnockite group occupies the high ground as well as plain and it is poorly weathered and jointed. They are generally black grey to dark grey in colour medium to coarse grained texture, and generally massive and un-foliated. A gneissic rock occurs as linear bands in the middle portion of the area and is highly migmatite. Mostly, micaceous with bands of granites, pegmatites, quartz veins the rock is well foliated. The Hornblende biotite gneiss forms the country rock of the area and epidote hornblende gneiss (Proterozoic age) occurs as small isolated outcrops. The crystalline formations are charnockite, granitic gneiss of Archean age have been intruded by dolerite dykes and pegmatite veins. These rocks are highly metamorphosed and have been subjected to very severe folding, crushing and faulting. The crystalline rocks are subjected to tectonic activities under various orogenic cycles resulting in the development of secondary structures such as joints. fissures and cleavages. The intensity of weathering varies from place to place.

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1.3 ENVIRONMENTAL CLEARANCE

As per EIA Notification, 2006 and its subsequent amendments (O.M vide No. F. No. L- 11011/175/2018-IA-II(M) Govt of India MOEF&CC on December 12th, 2018) project comes under category B1 cluster & schedule 1(a) under item 1

The proposed project is categorized under Category “B1” 1(a) (Cluster) - {Mining of Minerals} as the 500m radius area is more than 5 Ha including the mine lease area. Hence, the project will be considered at SEAC, Tamil Nadu.



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1.4 TERMS OF REFERENCE (TOR)

The terms of Reference have been issued by SEAC TN vide TOR Identification No. TO25B0108TN5423420N Dated: 13.05.2025. additional ToR points were recommended by SEAC TN in addition to the Standard ToR Points. The replies for the same were addressed in this report.

1.5 POST ENVIRONMENTAL CLEARANCE MONITORING

1.5.1 Methodology adopted

Post project monitoring will be carried out as per conditions stipulated in the environmental clearance letter issued by SEIAA, consent issued by SPCB as well as according to CPCB guidelines. The lease area is considered as core zone and the area lying within 10 km radius from the lease boundary is considered as buffer zone, where some impacts may be observed on physical and biological environment. In the buffer zone slight impact may be observed and that too is occasional.

Table 1-1: Post Environmental Clearance Monitoring

S. No.	Description	Frequency of Monitoring
1.	Ambient Air Quality Monitoring	Quarterly/ Half Yearly
2.	Water level & Quality Monitoring	Quarterly/ Half Yearly
3.	Noise Level Monitoring	Quarterly/ Half Yearly
4.	Soil Quality Monitoring	Yearly
5.	Medical Check-up	Yearly

1.6 GENERIC STRUCTURE OF THE EIA DOCUMENT

Chapter 1: Introduction. This chapter contains the general information on the mining of minerals, major sources of environmental impacts in respect of mining projects and details of environmental clearance process.

Chapter 2: Project Description. In this chapter the proponent should also furnish detailed description of the proposed project, such as the type of the project, need for the project, project location, layout, project activities during construction and operational phases, capacity of the project, project operation i.e., land availability, utilities (power and water supply) and infrastructure facilities such as roads, railways, housing and other

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requirements. If the project site is near a sensitive area it is to be mentioned clearly why an alternative site could not be considered. The project implementation schedule estimated cost of development as well as operation etc. should also be included.

Chapter 3: Analysis of Alternatives (Technology and Site). This chapter gives details of various alternatives both in respect of location of site and technologies to be deployed, in case the initial scoping exercise considers such a need.

Chapter 4: Description of Environment. This chapter should cover baseline data in the project area and study area.

Chapter 5: Impact Analysis and mitigation measures. This chapter describes the anticipated impacts on the environment and mitigation measures. The method of assessment of impacts including studies carried out, modelling techniques adopted to assess the impacts where pertinent should be elaborated in this chapter. It should give details of the impacts on the baseline parameters, both during the construction and operational phases, and suggests the mitigation measures to be implemented by the proponent.

Chapter 6: Environmental Monitoring Program. This chapter should cover the planned environmental monitoring program. It should also include the technical aspects of monitoring the effectiveness of mitigation measures.

Chapter 7: Additional Studies. This chapter should cover the details of the additional studies required in addition to those specified in the ToR and which are necessary to cater to more specific issues applicable to the particular project.

Chapter 8: Project Benefits. This chapter should cover the benefits accruing to the locality, neighborhood, region and nation as a whole. It should bring out details of benefits by way of improvements in the physical infrastructure, social infrastructure, employment potential and other tangible benefits.

Chapter 9: Environmental Cost Benefit Analysis. This chapter should cover on Environmental Cost Benefit Analysis of the project.

Chapter 10: Environmental Management Plan. This chapter should comprehensively present the Environmental Management Plan (EMP), which includes the administrative and technical setup, summary

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matrix of EMP, and the cost involved to implement the EMP, both during the construction and operational phase and provisions made towards the same in the cost estimates of project construction and operation. This chapter should also describe the proposed post-monitoring scheme as well as inter-organizational arrangements for effective implementation of the mitigation measures.

Chapter 11: Summary and Conclusions. This chapter gives the summary of the full EIA report condensed to ten A-4 size pages at the maximum. It should provide the overall justification for the implementation of the project and should explain how the adverse effects have been mitigated.

Chapter 12: Disclosure of Consultants. This chapter should include the names of the consultants engaged with their brief resume and nature of consultancy rendered.

1.7 DETAILS OF PROJECT PROPONENT

Project Proponent : M/s. RKM Sand and Aggregates

Status of the Proponent : Individual

Proponent's Name & Address : M/S. R.K.M Sand and Aggregates,
 Prop. Thiru. D. Ravikumar,
 Villa No.126, Adarsh Palm,
 Retreat Villas, Devarabisanahalli,
 Bangalore, Karnataka- 560 103.

1.8 BRIEF DESCRIPTION OF THE PROJECT

1.8.1 Project Nature, Size & Location

As per EIA Notification, 2006 and its subsequent amendments (O.M vide No. F. No. L-11011/175/2018-IA-II(M) Govt of India MOEF&CC on December 12th, 2018) project comes under category B1 cluster & schedule 1(a) under item 1.

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

Proposed proposal pertains to Rough stone and gravel mining project by mechanized open cast method on allotted mine lease area at Midithepalli Village, Shoolagiri Taluk of Krishnagiri District, Tamil Nadu. It is an elevated terrain. The total allotted mine lease for the proposed project is 3.76.67 Ha with their maximum production capacity i.e., 82,530m³ of Gravel and 12,24,475 m³ of rough stone for the period of Ten years only.

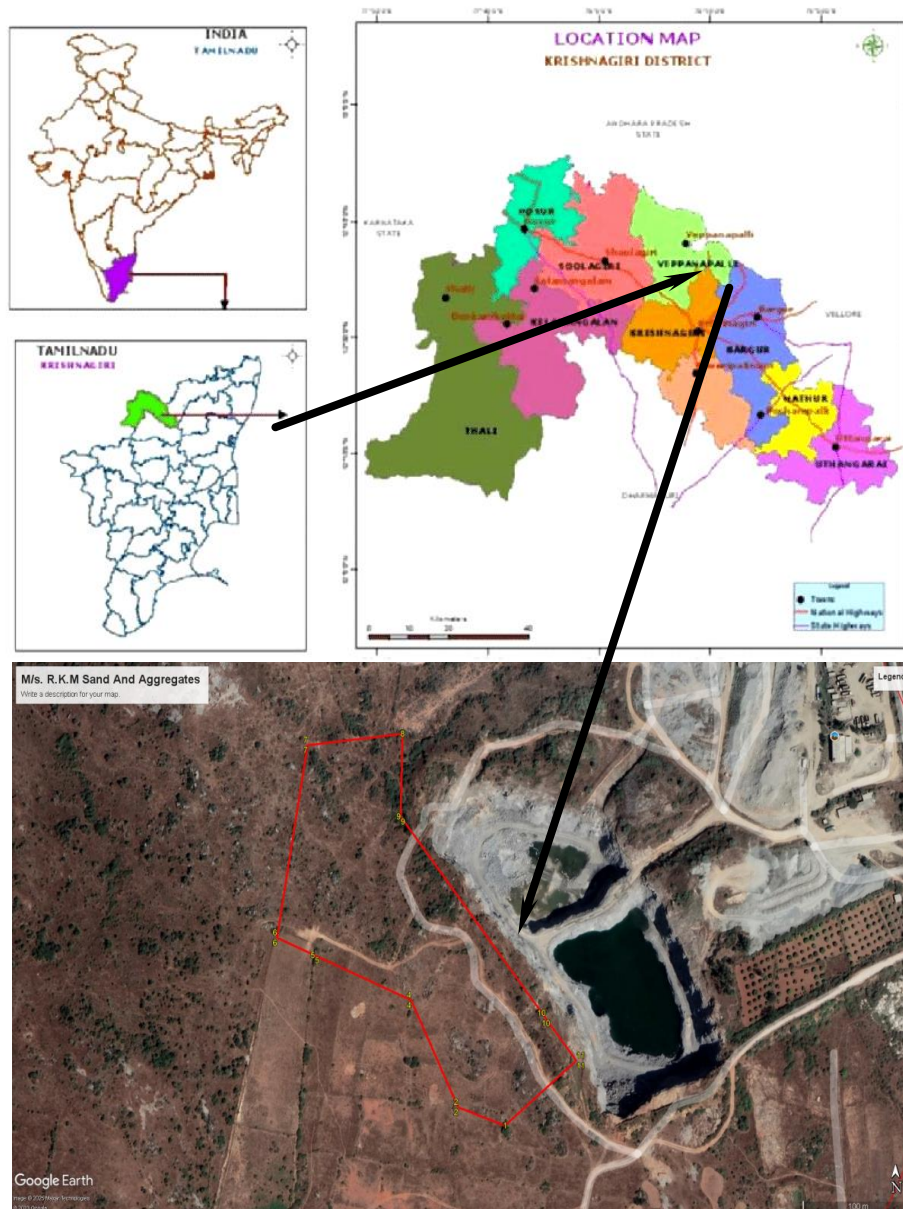


Figure 1.1: Location Map of the Project site

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

2 Project Description

This chapter furnishes detailed description of the proposed project, such as the type of the project, need for the project, project location, layout, project activities during mining, capacity of the project, project operation i.e., land availability, utilities (power and water supply) and infrastructure facilities such as roads, railways, housing and other requirements. The project implementation schedule estimated cost for carrying out entire mining activity is included.

2.1 GENERAL

Proposed proposal pertains to Rough stone and gravel mining project by open cast mechanized method on allotted mine lease area at Midithepalli Village, Shoolagiri Taluk of Krishnagiri District, Tamil Nadu. It is a slightly elevated terrain. We have obtained a fresh mining plan from the Department of Geology and Mining, Krishnagiri District for 3.76.67 Ha land area in the S.F.Nos. 70/4A & 70/5B for a proposed mining depth of 47.0m Gravel 2.0m + Rough stone 45.0m and ten years production of 12,24,475 m³ of Rough Stone and 82,530 m³ of Gravel.

Type of the project:

As per EIA Notification, 2006 and its subsequent amendments (O.M vide No.F.No. L-11011/175/2018-IA-II(M) Govt of India MOEF&CC on December 12th, 2018) project comes under category B1 cluster & schedule 1(a) under item 1. The project required to be appraised at state level by State Environment Impact Assessment Authority, Tamil Nadu. Environment Clearance study will involve preparation of draft EIA report on the basis of baseline & impact assessment study is carried out. Also, before appraisal, under 7(III) of EIA notification 2006, the project involves the Public Consultation and the same will be conducted under SPCB (TN) in Krishnagiri District. The proceedings of the same will be incorporated in the Final EIA Report.

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

The mines within 500m radius from the project site is listed below.

Table 2-1: Quarry within 500m Radius

1) Details of Existing quarries:

S. No.	Name of the lessee	Village & Taluk	Mineral	S.F. No	Extent	Rc. No & Date	Lease Period
1.	Thiru.B.Srikar, S/o. Bharathy, No.25, Shanthi Nagar (West), 2 nd Cross, Hosur Tk, Krishnagiri - 635109	Shoolagiri, Midithepalli	Rough stone	79	1.86.50	-	08.08.24 To 07.08.34
2.	Thiru.D.Sreenivasalu, S/o. Vekateshwarlu, No. Radha lakshmi Nilayam, Devachandra Main road, Bangalore	Shoolagiri & Midithepalli	Rough stone	80/1 80/2	3.17.08	Rc.No. 1305/2018/ Mines dated: 20.12.22	20.12.22 to 19.12.32
3.	Thiru.Venkat reddy, S/o. (Late) Uthama Reddy, Kolar Taluk, Uddanahalli, Chakkarasanahalli, Karnataka	Shoolagiri & Midithepalli	Rough stone	81/2 82/1	2.05.92	Rc.No. 1308/2018/ Mines dated: 31.10.2022	31.10.2022 to 30.10.2032

2) Details of Expired/Old Quarries:

S.No.	Name of the lessee	Village	S.F.No	Extent	GO No. & Date	Lease period
1.	M/s. Sarva Infra Pvt. Ltd, 540, 3 rd floor, CMH Road, Indira Nagar, Bangalore.	Shoolagiri & Midithepalli	70/1B, 70/1C	4.05.0	Rc.No. 09/2014/ Mines Dated:26.10.2015	28.10.2015 to 27.10.2020

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3) Details of Proposed Quarries

S. No.	Name of the lessee	Village & Taluk	Mineral	S.F. No	Extent	GO No. & Date	Lease period
1.	M/s.R.K.M Sand and Aggregates, Proprietor: Thiru.Ravikumar, Villa No.126, Adarsh Palm, Retreat Villas, Devarabisanahalli, Bangalore, Karnataka – 560 103.	Shoolagiri, Midithepalli	Rough stone	70/4A & 70/5B	3.76.67	-	Instant proposal

The Total extent of the Existing / Lease expired / Proposed quarries are 14.91.17Ha

2.1.1 Need for the project:

The Entire district is underlain by the rocks belonging to hard crystalline rock masses of Archaean age. The Archaean rocks in this area are represented by rocks of eastern Ghat complex comprising charnockites, Migmatite complex of composite gneiss. The district is covered by metamorphic crystalline rocks of charnockite, composite gneiss of Archaean age. These rocks are highly metamorphosed and have been subjected to sever folding, crushing and faulting. Charnockites group is occupied by the North and Southern part of the basin. The other rock type is encountered by composite granitic gneiss of Epidote hornblende biotite gneiss and hornblende biotite gneiss are occupy in the middle portion of the basin. Charnockite group occupies the high ground as well as plain and it is poorly weathered and jointed. They are generally black grey to dark grey in colour medium to coarse grained texture, and generally massive and un-foliated. A gneissic rock occurs as linear bands in the middle portion of the area and is highly migmatite. Mostly, micaceous with bands of granites, pegmatites, quartz veins the rock is well foliated. The Hornblende biotite gneiss forms the country rock of the area and epidote hornblende gneiss (Proterozoic age) occurs as small isolated outcrops. The crystalline formations are charnockite, granitic gneiss of Archean age have been intruded by dolerite dykes and pegmatite veins. These rocks are highly metamorphosed and have been subjected to very severe folding, crushing and faulting. The crystalline rocks are subjected to tectonic

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activities under various orogenic cycles resulting in the development of secondary structures such as joints, fissures and cleavages. The intensity of weathering varies from place to place.

2.2 BRIEF DESCRIPTION OF THE PROJECT

Table 2-2 Salient Features of the Project

S. No.	Description	Details
1	Project Name	Rough Stone and Gravel Quarry-3.76.67 ha
2	Proponent	M/S. R.K.M Sand and Aggregates, Prop.Thiru. D. Ravikumar,
3	Mining Lease Area Extent	3.76.67 Ha
4	Location	S.F.Nos. 70/4A & 70/5B of Midithepalli Village, Shoolagiri Taluk, Krishnagiri District.
5	Latitude	12° 46' 07.7657" N to 12° 45' 57.2328" N
6	Longitude	77° 57' 10.9141" E to 77° 57' 01.9504" E
7	Topography	slightly elevated terrain
8	Site Elevation above MSL	The altitude of the area is 869m above MSL.
9	Topo sheet No.	57- H/13
10	Minerals of Mine	Rough Stone and Gravel Quarry
11	Proposed production of Mine	12,24,475 m ³ of Rough Stone & 82,530m ³ of Topsoil
12	Ultimate depth of Mining	47 m (2m Gravel + 45m Rough stone)
13	Method of Mining	Open cast, mechanized mining
14	Water demand	2.0 KLD

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
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15	Source of water	Water will be supplied through tankers supply
16	Manpower	20 Nos.
17	Mining Lease	Precise Area Communication Letter received from Deputy Director, Dept. of Geology & Mining, Krishnagiri vide letter Rc.No.768/2024 Mines Dated 25.11.2024.
18	Mining Plan Approval	Mining Plan was approved by the Deputy Director, Dept. of Geology & Mining, Krishnagiri vide letter Rc.No.768/2024 Mines Dated 18.12.2024
19	Production details	Geological resources: 21,44,580 m ³ of Rough stone and 96,630m ³ of Gravel & Proposed year wise recoverable reserves: 12,24,475m ³ of Rough Stone and 82,530m ³ of Gravel.
20	Boundary Fencing	10 m barrier all along the boundary Fencing will be provided.
21	Disposal of overburden	The entire lease area is covered 2.0m of Gravel and the estimated quantity of Gravel is 33210m ³ . Gravel formation will be removed and hydraulic excavators are used for loading the gravel into the tipper from pit head to needy buyers. This will be done only after obtaining permission and paying necessary seigniorage fees to the Government.
22	Ground water	The ground water table is reported as 66m below ground level in nearby wells of this area. Mining depth taken as 39m. Now, proposed quarry depth is above the water table. Hence, quarrying may not affect the ground water. Now,

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		the proposed quarry depth is above the water table. Hence, quarrying may not affect the ground water.
23	Habitations within 300m radius of the Project Site	There is no Habitation within 300m radius of the project site.
24	Drinking water	Water will be supplied through tankers from Midithepalli village which is about 1.70 km NE from the project site.

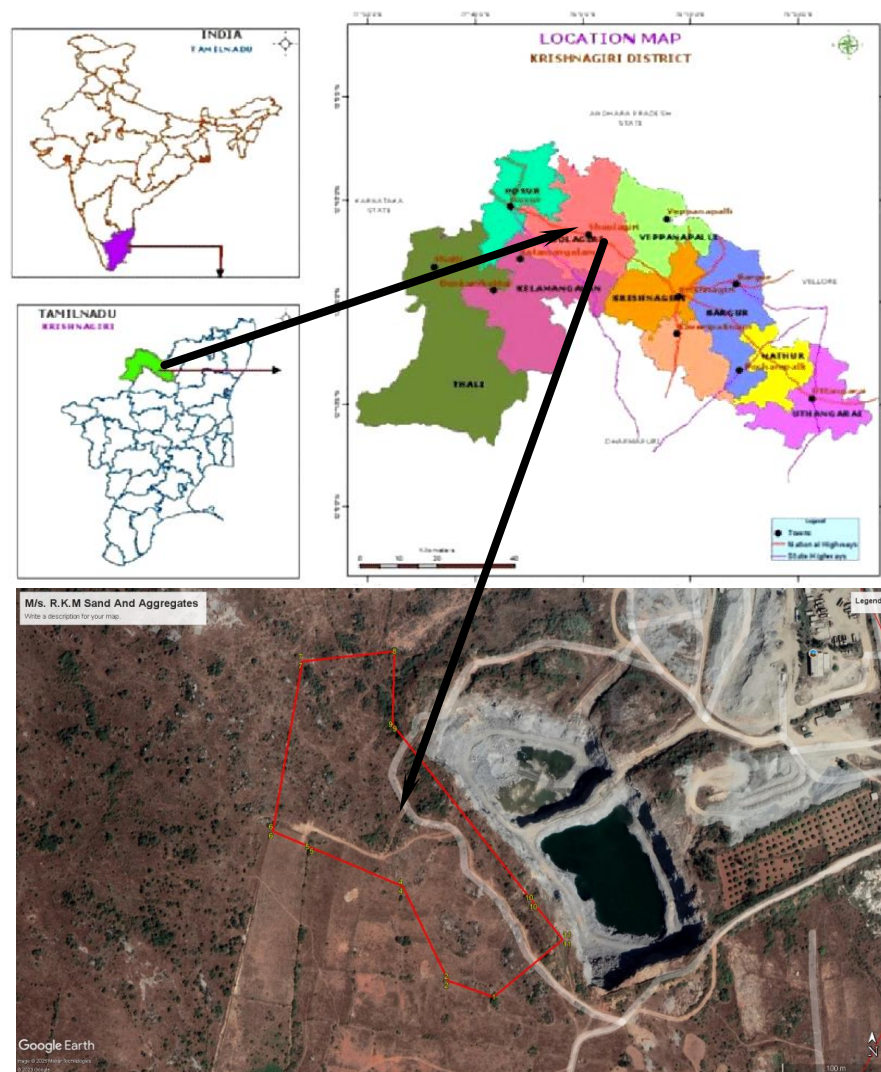


Figure 2.1: Location Map of the Project Site

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
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Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	



Figure 2.2: Google Earth Image and Coordinates of the Project Site

2.2.1 Site Connectivity:

The site is connected to haul village road which is about 1.43 km – South.

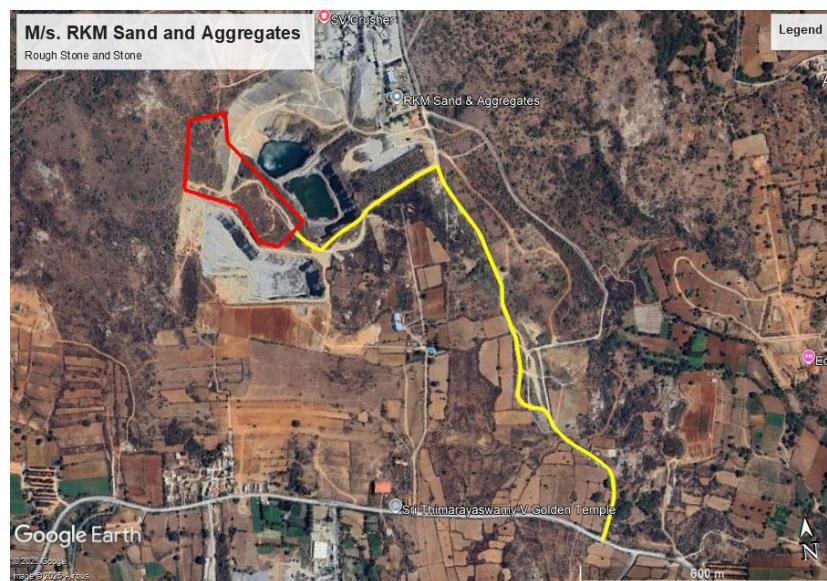


Figure 2.3: Site Connectivity

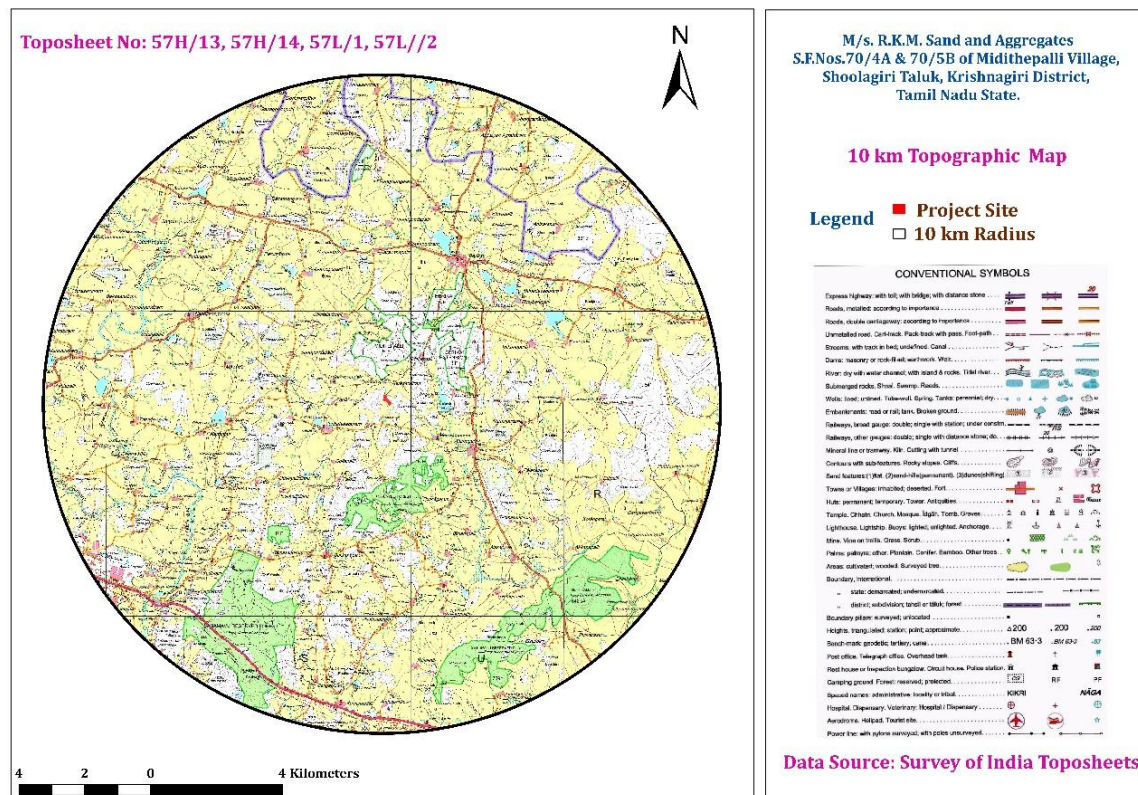
Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
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2.3 LOCATION DETAILS:

Table 2-3: Location Details

S. No	Particulars	Details
1.	Latitude	12° 46' 07.7657" N to 12° 45' 57.2328" N
2.	Longitude	77° 57' 10.9141" E to 77° 57' 01.9504" E
3.	Site Elevation above MSL	The altitude of the area is 869m above MSL.
4.	Topography	Slightly elevated terrain
5.	Land use of the site	Patta land
6.	Extent of lease area	3.76.67 Ha

Figure 2.4: Topo Map of Project Site



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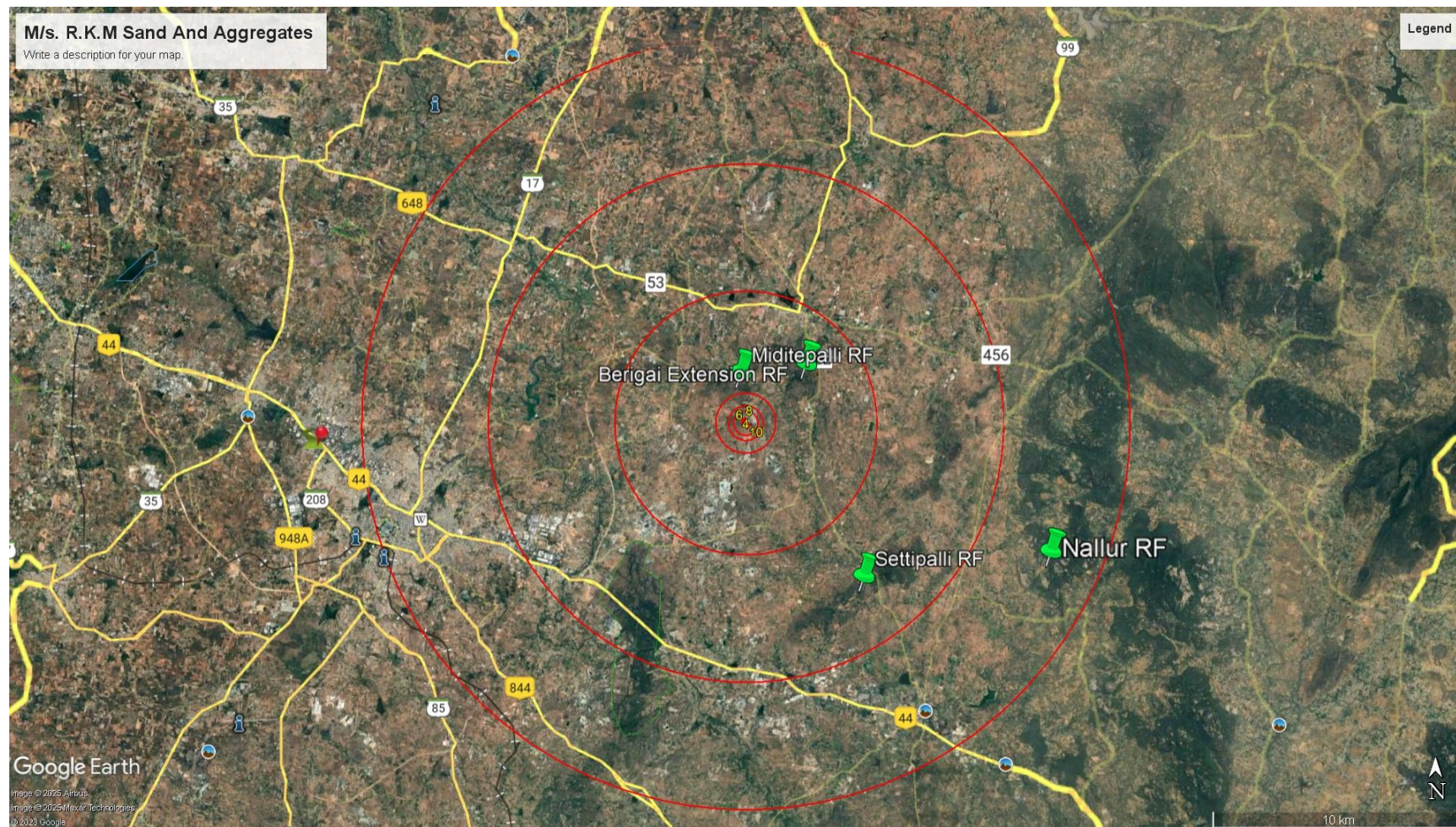


Figure 2.5: Environmental Sensitivity within 15km radius

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
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2.3.1 Site Photographs

The site photographs of the project site are as follows

Figure 2.6: Site Photographs



2.3.2 Land Use Breakup of the Mine Lease Area

The Mine Lease area is Elevated terrain. The land use pattern of the mine lease area as follows.

Table 2-4: Land use pattern

S. No.	Land Use	Present Area (Hect)	Area in use during the quarrying period (Hect)
1.	Area under Quarrying	Nil	3.09.0
2.	Infrastructure	Nil	0.01.0
3.	Roads	Nil	0.01.0
4.	Green Belt	Nil	0.65.67
5.	Unutilized Area	3.76.67	Nil
	Total	3.76.67 Ha	3.76.67 Ha

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2.3.3 Human Settlement

There are no habitations within the radius of 300m. The nearby habitations are as follows

Table 2-5: Habitation

SL. NO.	DIRECTION	VILLAGE	POPULATION	DISTANCE
1	North	Karnapalli	280	4.5 Kms
2	East	Naraseepuram	240	4.1Kms
3	South	Guttlapalli	200	1.0kms
4	West	Advanapalli	250	3.1Kms

2.4 LEASEHOLD AREA

The Rough Stone Quarry Mine of 3.76.67 Ha is a Patta land. The lease area falls in S.F No: 70/4A & 70/5B of Midithepalli Village, Shoolagiri Taluk, Krishnagiri District. There is no reserve forest or protected forest land within the lease area. There is neither human settlement within 300m radius from the lease area.

2.5 GEOLOGY

Krishnagiri District is underlain by crystalline metamorphic complex in the western parts of district and sedimentary tract in eastern side. An area of 4551 Sq.km is covered by crystalline rocks (63%) and 2671 Sq.km is covered by sediments (37%).

The general geological sequence of formation is given below:

- Quaternary - Laterites, Sands and Clays
- Tertiary - Sandstone, Gravels and Clays
- Cretaceous - Limestone,
- Calcareous Sandstone and Clay unconformity.
- Archaean - Charnockites, Gneisses, Granites, Dolerites and Pegmatite

The major part of the area is covered by metamorphic crystalline rocks of charnockite, granitic gneiss of Archaean age intruded by dolerite dykes and pegmatite veins. These rocks are highly metamorphosed and

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have been subjected to very severe folding, crushing and faulting. Ground Water occurs under phreatic conditions and wherever there are deep seated fractures, it occurs under semi-confined to confined conditions.

Occurrence of Ground Water in hard rock depends upon the intensity and depth of weathering, fractures and fissures present in the rocks. Granites and gneisses yield moderately compared to the yield in Charnockites. The depth of well in hard rock generally ranges between 8 and 15m below ground level. Generally, yield in open wells ranges from 30 to 250m³ /day and in bore well between 260 and 430 m³ /day. The weathered thickness varies from 2.5 m to 42m in general. There are 3 to 5 fracture zones within 100 m and 1 to 4 fracture zones between 100 and 200 m. The Cretaceous formation is represented by Arenaceous Limestone, Calcareous sand - stone and marl. The Tertiary formation is an argillaceous comprising of Silty clay stones, argillaceous Limestone. The Quaternary deposits represented by the river deposits of Ponnaiyar and Varahanadhi spread over as patches in Villupuram District. The alluvium consists of unconsolidated sands, gravelly sands, clays and clayey sands. The thickness of the sands ranges between 15 and 25 m in the alluvial formation which also form potential aquifers. In some areas, sandstone of tertiary formation are potential groundwater reservoirs.

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

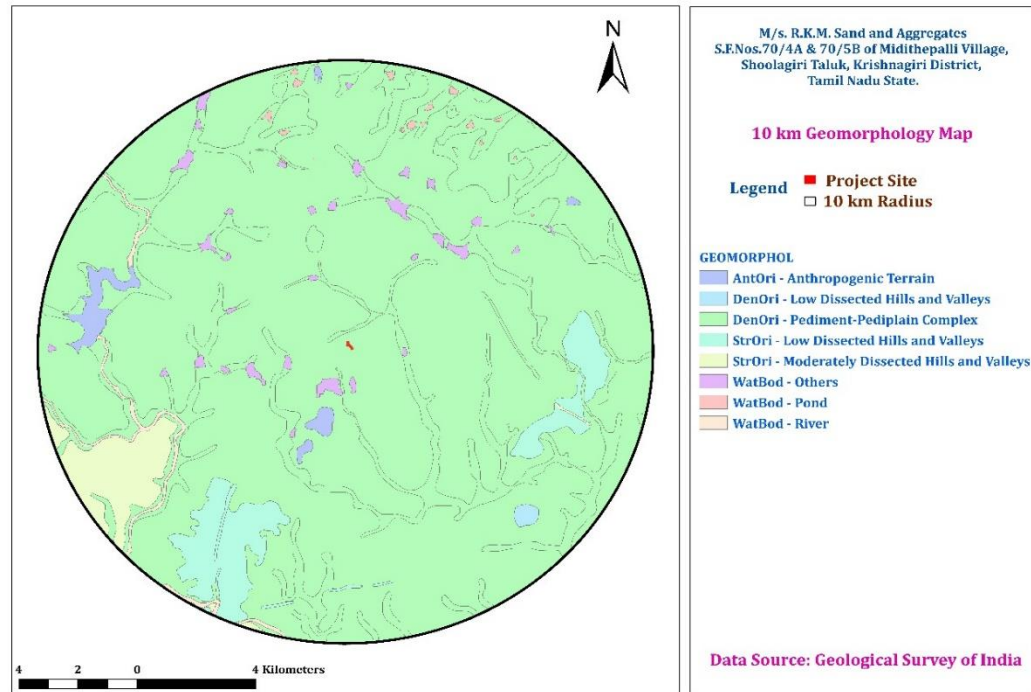


Figure 2.7: Geomorphology

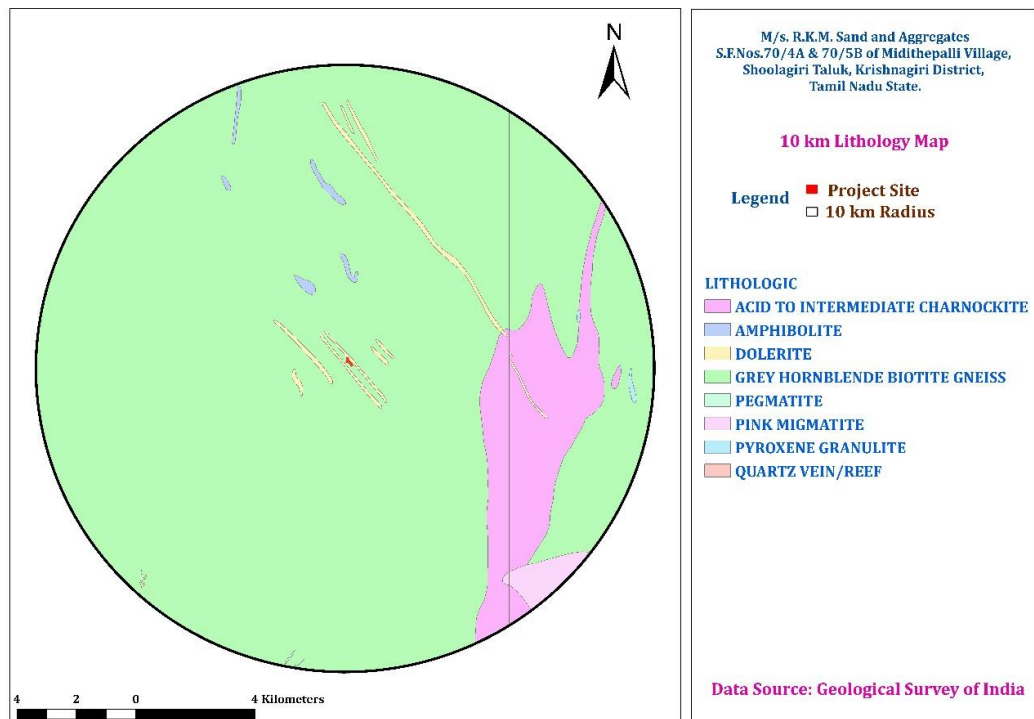


Figure 2.8 Lithology

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

2.6 QUALITY OF RESERVES:

The mining lease area is 3.76.67 Ha, with production capacity of 12,24,475m³ of Rough Stone and 82,530 m³ of Gravel. Due to its significant role in the domestic as well as infrastructural market, making the mining of Stone along with associated minor minerals is economically viable.

Table 2-6: Details of Mining

S. No	Particulars	Details
1	Method of Mining	Open Cast mechanized
2	Geological resources	21,44,580 m ³ of Rough Stone & 96,630 m ³ Gravel
3	Recoverable Reserves	12,24,475m ³ of Rough Stone & 82,530 m ³ of Gravel
4	Proposed Production	12,24,475 m ³ of Rough Stone & 82,530 m ³ of Gravel
5	Elevation Range of the Mine Site	The altitude of the area is 869m above MSL.

2.6.1 *Estimation of Reserves*

The practical method of the systematic geological mapping and delineation of Rough stone (Charnockite) within the field was done and careful evaluation of body luster, physical properties, engineering properties, commercial aspects, etc. The Topographical, Geological plan and sections demarcated the commercial marketable Rough stone (Charnockite) deposit has been prepared in 1:1000 scale and the estimated balance Geological resources as 12,24,475 m³ of Rough Stone.

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

2.6.2 Geological resources

Gravel:

The Thickness of Gravel in this area is 2.0m and the total volume of Gravel will be 96,630 m³.

Rough Stone:

The Available Geological Resources is estimated as 21,44,580m³ respectively. Gravel is calculated up to a depth of 2m and Rough Stone at a depth of 45m. Total Depth-47m.

Table 2-7: Geological resources

Section	Bench	L (m)	W (m)	D (m)	Volume in (Cu.m.)	Geological Reserve in Cu.m (100%)	Gravel in (Cu.m.)
XY-AB	I	236	150	2			70800
	II	221	141	5	155805	155805	
	III	236	150	5	177000	177000	
	IV	236	150	5	177000	177000	
	V	236	150	5	177000	177000	
	VI	236	150	5	177000	177000	
	VII	236	150	5	177000	177000	
	VIII	236	150	5	177000	177000	
	IX	236	150	5	177000	177000	
	X	236	150	5	177000	177000	
Total=					1571805	1571805	70800
XY-CD	I	123	105	2			25830
	II	107	105	5	56175	56175	
	III	123	105	5	64575	64575	
	IV	123	105	5	64575	64575	
	V	123	105	5	64575	64575	
	VI	123	105	5	64575	64575	
	VII	123	105	5	64575	64575	
	VIII	123	105	5	64575	64575	
	IX	123	105	5	64575	64575	
	X	123	105	5	64575	64575	
Total=					572775	572775	25830
Grand Total=					2144580	2144580	96630

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

2.6.3 Mineable Reserves

Gravel:

The Thickness of Gravel in this area is 2.0m and the total volume of Gravel will be 82,530 m³.

Rough stone:

The Mineable reserves and the Recoverable reserves are 12,24,475m³ respectively, at the rate of 100% recovery upto the permissible depth. Total Depth - 47m (2m Gravel + 45m Rough Stone).

Table 2-8: Mineable Reserves

Section	Bench	L (m)	W (m)	D (m)	Volume in (Cu.m.)	Mineable Reserve in Cu.m(100%)	Gravel in (Cu.m.)
XY-AB	I	229	135	2			61830
	II	221	133	5	146965	146965	
	III	229	135	5	154575	154575	
	IV	224	125	5	140000	140000	
	V	219	115	5	125925	125925	
	VI	214	105	5	112350	112350	
	VII	209	95	5	99275	99275	
	VIII	204	85	5	86700	86700	
	IX	199	75	5	74625	74625	
	X	194	65	5	63050	63050	
Total=					1003465	1003465	61830
XY-CD	I	115	90	2			20700
	II	107	86	5	46010	46010	
	III	115	78	5	44850	44850	
	IV	110	68	5	37400	37400	
	V	105	58	5	30450	30450	
	VI	100	48	5	24000	24000	
	VII	95	38	5	18050	18050	
	VIII	90	28	5	12600	12600	
	IX	85	18	5	7650	7650	
Total=					221010	221010	20700
Grand Total=					1224475	1224475	82530

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

2.6.4 Year wise Production Plan

Rough stone production Ten Years details as follows:

The proposed rate of production of Rough Stone is estimated as 12,24,475m³ & Gravel is 82,530m³ for Ten Five years. The average proposed rate of production of Rough Stone is about 122447m³ per year at the rate of 100% recovery upto the permissible depth. Reserves Calculated upto 47m (2m Gravel + 45m Rough Stone). (Refer Drawing Plate No. IV-A1-Year wise Sections years.

Table 2-9: Year wise Production Plan

Year	Section	Bench	L (m)	W (m)	D (m)	Volume in m ³	Recoverable Reserve in m ³ @ 100%	Gravel in m ³
I-Year	XY-AB	I	229	135	2			61830
		II	221	133	5	146965	146965	
	TOTAL					146965	146965	61830
II-Year	XY-CD	I	115	90	2			20700
		II	107	86	5	46010	46010	
		III	115	78	5	44850	44850	
	TOTAL					90860	90860	20700
III-Year	XY-AB	III	229	135	5	154575	154575	
	TOTAL					154575	154575	
IV-Year	XY-AB	IV	224	125	5	140000	140000	
	TOTAL					140000	140000	
V-Year	XY-CD	IV	110	68	5	37400	37400	
		V	105	58	5	30450	30450	
	XY-AB	V	219	115	5	125925	125925	
	TOTAL					193775	193775	
VI-Year	XY-AB	VI	214	105	5	112350	112350	
	XY-CD	VI	100	48	5	24000	24000	
	TOTAL					136350	136350	
VII-Year	XY-AB	VII	209	95	5	99275	99275	
	XY-CD	VII	95	38	5	18050	18050	
	TOTAL					117325	117325	
VIII-Year	XY-AB	VIII	204	85	5	86700	86700	
	XY-CD	VIII	90	28	5	12600	12600	

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoalagiri Taluk, Krishnagiri District	

	TOTAL					99300	99300	
IX-Year	XY-AB	IX	199	75	5	74625	74625	
	XY-CD	IX	85	18	5	7650	7650	
	TOTAL					82275	82275	
X-Year	XY-AB	X	194	65	5	63050	63050	
	TOTAL					63050	63050	
Grand Total						1224475	1224475	82530

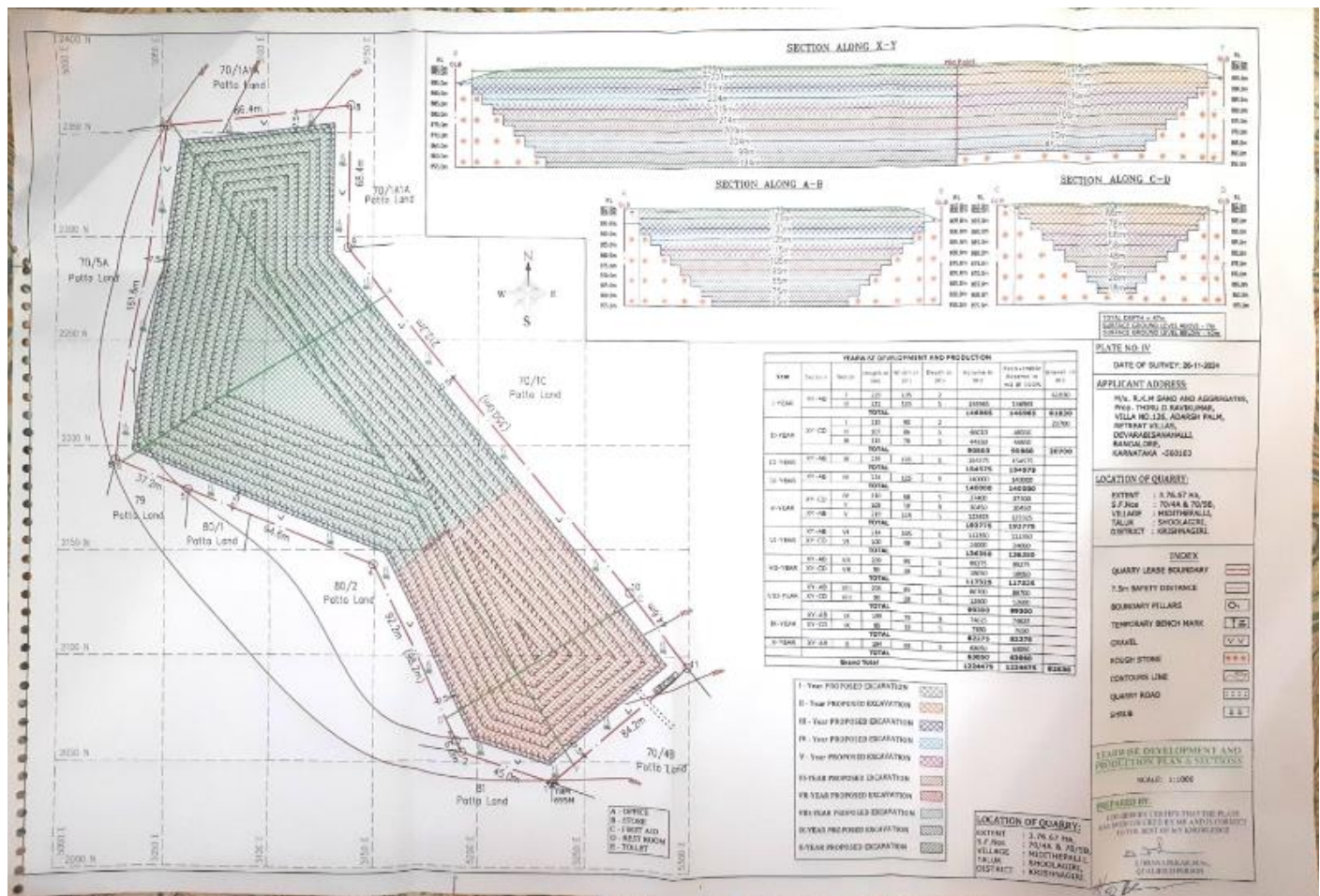


Figure 2.9 Year Wise Plan

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

2.7 TYPE OF MINING

The proposed project is an open cast mechanized mining with one 2.0 m bench for Gravel followed by a 5.0m vertical bench with a bench width not less than the bench height. However, as far as the quarrying of Rough Stone is concerned, observance of the provisions of regulations 106(2) (b) as above is seldom possible due to various inherent Petro genetic factors coupled with mining difficulties. Hence, it is proposed to obtain relaxation to the provisions of the above regulation from the Director of Mines Safety for which necessary provision is available with Regulation 106(2) (b) of MMR-1961, under Mines Act- 1952.

2.7.1 Method of Working:

The Rough stone are proposed to quarry at 5m bench height & 5m bench width with conventional Open cast mechanized method. The quarry operation involves Shallow jack hammer drilling, Blasting, Loading & transportation of Rough Stone to the nearby crusher units/road formation works. The production of Rough Stone in this quarry involves the following method which is typical for Rough Stone quarrying in contrast to other major mineral mining.

Splitting of rock mass of considerable volume from the parent rocks by jackhammer drilling and blasting by manually braking and loading the Rough Stone from pit head to the needy crushing units/civil works for the needy sectors.

2.7.2 Overburden

The entire lease area covers 2.0m of Gravel and estimated quantity of Gravel is 82,530 m³. Gravel formation will be removed and transported to the needy users, only after obtaining permission and paying necessary seigniorage fees to the Government.

2.7.3 Machineries to be used

The type of machineries proposed for quarrying operation for the entire project is listed below.

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

Table 2-10: List of Machineries used

For Mining operation and Load Equipment	Excavator of 1.2 Cu.m bucket capacity Jack Hammer (25.5 mm dia) Tractor mounted compressor
Transportation	Tipper 3 No. of 10 M.T capacity

2.7.4 Blasting:

2.7.4.1 Blasting Pattern:

The quarrying operation will be carried out by Mechanized Opencast method in conjunction with conventional method of mining using jack hammer drilling and blasting for shattering effect and loosen the rough stone.

2.7.4.2 Drilling & Blasting:

Drilling and Blasting Parameters are as follows.

Table 2-11: Drilling and Blasting Parameters

1	Diameter of the hole	32-36 mm
2	Spacing	60 Cms
3	Depth	1 to 1.5 m
4	Charge / Hole	D.Cord with water or 70gms of gun powder or Gelatine.
5	Pattern of hole	Zig Zag
6	Inclination of hole	70° from the horizontal.
7	Quantity of rock broken	0.45 MT x 2.6 = 1.17 MT
8	Quantity of rock broken per day	111.24m ³
9	Control Blasting efficiency @90%	1.17 x 90% = 1.05 MT / hole
10	Charge per hole	140 gms of 25mm dia cartridge

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2.7.4.3 Types of Explosives to be used:

A small diameter of 25mm Slurry explosives is proposed to be used for shattering and heaving effect for removal and winning of Rough Stone. No deep hole drilling or primary blasting is proposed.

2.7.4.4 Measures to minimize ground vibration due to blasting:

The quarry is situated more than 1 km from the nearby villages. Controlled blasting measures will be adopted for minimizing the ground vibration and fly of rocks. Shallow depths jackhammer drilling & blasting is proposed to be carried out with minimum use of explosive mainly to give shattering effect in rough stone for easy excavation and to control fly of rock.

Table 2-12: Blasting Details

Parameters	Details
Diameter of holes	32-36mm
Spacing	60 cms
Powder factor	6 to 7 tons/kg of explosives
Pattern of hole	Zig Zag
Charge/hole	D.Cord with water or 70gms of gun powder or Gelatine.
Blasted at daytime	5 to 6 pm

2.7.4.5 Storage & Safety measures taken during blasting:

The project proponent “M/s. RKM Sand and Aggregates” will engage an authorized explosive agency to carry out the small amount of blasting and it will be supervised by Permit Mines Manager. The copy of the explosive certificate is attached as *Annexure*.

2.8 MAN POWER REQUIREMENTS

The manpower requirement to meet out the production Schedule and the machinery strength envisaged in the mining plan and to comply with the statutory provisions of the Mines Safety Regulations is as follows.

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Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

Table 2-13: Man Power Requirements

1.	Skilled	Operators	3 Nos
		Mechanic	2 Nos
		Blaster / Mat	1 No
2.	Semi – skilled	Drivers	3 Nos
3.	Unskilled	Musdoor / Labors	6 Nos
		Cleaners	2 Nos
		Office Boy	1 No
4.	Management & Suoervisory staff		2 Nos
Total			20 Nos

No child less than 18 years will be entertained during quarrying operations.

2.8.1 *Water Requirement*

Total water requirement for the mining project is 2.0 KLD. Domestic water will be sourced from nearby Midithepalli village and other water will be sourced from nearby road tankers supply.

Table 2-14: Water Requirment

Purpose	Quantity	Sources
Drinking Water	1.0 KLD	Packaged Drinking water vendors available in Midithepalli village which is about 1.70 km NE from the project site.
Green belt	0.5 KLD	Other domestic activities through road tankers supply
Dust suppression	0.5 KLD	From road tankers supply
Total	2.0 KLD	

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2.9 PROJECT IMPLEMENTATION SCHEDULE

The implementation schedule of the proposed Mine Lease of M/s. RKM Sand and Aggregates (3.76.67 ha) is as follows.

Table 2-15: Mining Schedule

MINING SCHEDULE										
Activity	Dec 25	Dec 26	Dec 27	Dec 28	Dec 29	Dec 30	Dec 31	Dec 32	Dec 32	Dec 33
Site Clearance										
Excavation – Top Soil Removal/Overburden										
I Year Production – 146965 Cum - Rough Stone & 61830 Cum Gravel										
II Year Production – 90860 Cum - Rough Stone & 20700 Cum Gravel										
III Year Production – 154575 Cum - Rough Stone										
IV Year Production – 140000 Cum - Rough Stone										
V Year Production – 193775 Cum - Rough Stone										
VI Year Production – 136350 Cum - Rough Stone										
VII Year Production – 117325 Cum - Rough Stone										
VIII Year Production – 99300 Cum - Rough Stone										
IX Year Production – 82275 Cum - Rough Stone										
X Year Production – 63050 Cum - Rough Stone										

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

2.10 SOLID WASTE MANAGEMENT

Table 2-15: Solid Waste Management

S. No	Type	Quantity	Disposal Method
1	Organic	3.6 kg/day	Municipal bin including food waste
2	Inorganic	5.4 kg/day	TNPCB authorized recyclers

As per CPCB guidelines: MSW per capita/day = 0.45 kg/day

2.11 MINE DRAINAGE

The quarry operation is proposed upto a depth of 47.0m (2.0m Gravel & 45.0m Rough stone).

The ground water table is reported as 66m below ground level in nearby wells of this area. Mining depth taken as 45m. Now, proposed quarry depth is above the water table. Hence, quarrying may not affect the ground water.

2.12 POWER REQUIREMENT

This rough stone quarry project does not require huge water and electricity for the project.

16 Litre diesel per hour for excavator for mining and loading for Rough Stone needed.

2.13 PROJECT COST

S.NO	Description of cost	Cost of lakhs
A	Fixed Asset cost:	
	Land cost (Amount for Patta Land)	Rs.37,20,000/-
	Labours shed	Rs. 1,50,000/-
	Refilling/Fencing cost	Rs.1,00,000/-
	Sanitary facilities	Rs.80,000/-
	Total Fixed Asset cost	Rs.40,50,000/-

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B	Operational cost:	
	Machinery cost	Rs.40,00,000/-
	Total Operational Cost	Rs.40,00,000/-
Total Project cost (A+B)		Rs.80,50,000/-

2.14 GREENBELT

1. The development of greenbelt in the peripheral buffer zone of the mine area.
2. The Green belt has been recommended as one of the major components of the Environmental Management plan, which will improve ecology, environment and the quality of the surrounding area.
3. Local trees like Neem, Pungam, Naval etc. will be planted along the lease boundary and avenues as well as over non-active dumps at a rate of 200 trees per annum with interval 5m.
4. The rate of survival expected to be 80% in this area

Table. 2-17 Plantation/ Afforestation Program

Name of species proposed	Survival	No of species
Neem, Pungam, Poovarasu, Naval, Mantharai, Arasa Maram, Magizham, Vilvam, vaagai, Marudha maram, Thandri, Poovarasu, Quaker buttons, Thethankottai maram, Manjadi, Usil, Aathi, Panai, Uzha, Illuppai, Eachai, Vanni Maram	80%	1885
Total		1885

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

3 Description of the Environment

3.1 GENERAL:

The method of mining for extracting rough stone quarry is required to be selected in such a manner to ensure sustainable development. Mining activities invariably affect the existing environmental status of the site. It has both adverse and beneficial effects. In order to maintain the environmental commensuration with the mining operation, it is essential to undertake studies on the existing environmental scenario and assess the impact on different environmental components. This would help in formulating suitable management plans and sustainable resource extraction.

To understand the existing environmental scenario, Baseline data helps in identification, prediction and evaluation of impacts in Environmental Impact assessment. Through field study, baseline data are collected considering various factors of the project. This includes-

- Physical- the area, the soil properties, the geological characteristics, the topography, etc
- Chemical- water, air, noise and soil pollution levels, etc.
- Biological- the biodiversity of the area, types of flora and fauna, species richness, species distribution, types of ecosystems, presence or absence of endangered species and/or sensitive ecosystems etc.
- Socioeconomic- demography, social structure, economic conditions, developmental capabilities, displacement of locals, etc.

3.1.1 *Study Area:*

The study area for the mining projects is as follows:

- Mine lease area as the “core zone”
- A study area of 10 km radius from the project boundary is designated as buffer Zone and for the study of Socio-economic status, 10 km radius from the boundary limits of the mine lease area has been selected.

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

We have obtained Terms of Reference from SEIAA vide Letter No. SEIAA-TN TOR Identification No. TO25B0108TN5423420N Dated: 13.05.2025. The baseline monitoring is carried out in April 2025 to June 2025 and the analysis is briefed in the EIA report. The proponent has engaged M/s. Ecotech labs Pvt. Ltd for carrying out the existing baseline study.

3.1.2 Instruments Used

The following instruments were used at the site for baseline data collection.

1. Respirable Dust Sampler with attachment for gaseous Pollutants, Envirotech APM 460, APM411.
2. Fine Particulate Matter (FPM) Sampler, APM 550
4. Sound Level Meter Model SL–4010
5. 2000 series watchdog automatic weathering monitoring station

3.1.3 Baseline Data Collection Period:

The baseline data is collected in accordance with the CPCB Guidelines. The Baseline study is carried out from April 2025 to June 2025.

3.1.4 Frequency of Monitoring

Table 3-1: Frequency of Sampling and Analysis

Attributes	Sampling	Frequency
Air environment – Meteorological (wind speed, wind direction, rainfall, humidity, temperature)	Project site	1 hourly continuous
Air environment – Pollutants PM 10 PM 2.5 SO ₂ NO _x	6 locations	24 hourly twice a week 4 hourly. Twice a week, One non-monsoon season 8 hourly, twice a week

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		24 hourly, twice a week
Noise	6 locations	24 hourly Once in 6 locations
Water (Ground water) pH, Temperature, Turbidity, Magnesium Hardness, Total Alkalinity, Chloride, Sulphate, Fluoride, Nitrate, Sodium, Potassium, Salinity, Total nitrogen, Total Coliforms, Fecal Coliforms	6 locations	Once in 6 locations
Water (surface water) pH, Temperature, Turbidity, Magnesium Hardness, Total Alkalinity, Chloride, Sulphate, Fluoride, Nitrate, Sodium, Potassium, Salinity, Total nitrogen, Total Coliforms, Fecal Coliforms	Sample from nearby lakes/river	One-time Sampling
Soil (Organic matter, Texture, pH, Electrical Conductivity, Permeability, Water holding capacity, Porosity)	6 locations	Once in 6 locations
Ecology and biodiversity Study	Study area covering 10 km radius	One-time Sampling
Socio- Economic study (Population, Literacy Level, employment, Infrastructure like school, hospitals & commercial establishments)	Villages around 10 km radius	One-time Sampling

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Miditheapalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

3.1.5 Secondary data Collection

Apart from the primary data, Secondary data is also used for the collection; collation; synthesis and interpretation.

- Flora & Faunal Study
- Land use study
- Demography and socio-economic analysis
- Meteorological data, from Indian Meteorological Department (IMD)

3.1.6 Study area details

Table 3-2 Study area details

S. No	Description	Details	Source
1.	Project Location	S.F.Nos. 70/4A & 70/5B Miditheapalli Village, Shoolagiri Taluk, Krishnagiri District.	Field Study
2.	Latitude & Longitude	12° 46' 07.7657" N to 12° 45' 57.2328" N 77° 57' 10.9141" E to 77° 57' 01.9504" E	Topo Sheet
3.	Topo Sheet No.	57- H/13	Survey of India Toposheet
4.	Mine Lease Area	3.76.67 Ha	--
Demography in the study area (as per Census 2011)			
5.	Total Population	2,873	Census Survey of India
6.	Total Number of Households	650	
7.	Maximum Temperature (°C)	34	IMD
8.	Minimum Temperature (°C)	24	
9.	Ecological Sensitive Areas -	• Muthali lake – 4.67Km – W • Bukkasagaram Lake – 4.76Km- S	

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	Wetlands, watercourses or other waterbodies, coastal zone, biospheres, mountains, forests	• Berikai Lake – 5.12Km – N • Peddakullu Lake – 5.86Km – SW • Lake 1 – 5.25Km – SW • Doripalli Lake – 6.28Km – S • Thummanapalli Lake – 6.89Km – SSW • Kelavarapalli Reservoir – 7.14Km – W • Kamandoddi Lake – 8.56Km – S • Kumudapalli Lake – 9.57Km – SW • Moranapalli Lake – 9.89Km - SW	Google Earth/Field Study																								
10.	Densely Populated area	Hosur - 13.02 Km -SE																									
11.	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	<table> <tr> <th>S. No.</th> <th>Places</th> <th>Dist. From Project Site</th> </tr> <tr> <td colspan="3">Schools & Colleges</td> </tr> <tr> <td>1</td> <td>Government Higher Secondary School, Athimugam</td> <td>3.54 Km - SE</td> </tr> <tr> <td>2</td> <td>Adhiyaman college of Agriculture & Research, Athimugam.</td> <td>3.88 Km - SE</td> </tr> <tr> <td>3</td> <td>Government Higher Secondary School, Venkatesapuram</td> <td>1.98 Km - SW</td> </tr> <tr> <td colspan="3">Hospitals</td> </tr> <tr> <td>1</td> <td>Government Hospital, Athimugam</td> <td>3.70 Km - SEE</td> </tr> <tr> <td>2</td> <td>Government Hospital, Kamandoddi</td> <td>8.82 Km - S</td> </tr> </table>	S. No.	Places	Dist. From Project Site	Schools & Colleges			1	Government Higher Secondary School, Athimugam	3.54 Km - SE	2	Adhiyaman college of Agriculture & Research, Athimugam.	3.88 Km - SE	3	Government Higher Secondary School, Venkatesapuram	1.98 Km - SW	Hospitals			1	Government Hospital, Athimugam	3.70 Km - SEE	2	Government Hospital, Kamandoddi	8.82 Km - S	Google Earth/Field Study
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3.1.7 Site Connectivity:

The site is connected to Venkatesapuram village road which is about 1.43 km – South.



Figure 3.1: Site Connectivity

3.2 LAND USE ANALYSIS

3.2.1 Land Use Classification

Land Use / Land Cover - Land Use refers to man's activity and the various uses which are carried on land. Land Cover refers to natural vegetation, water bodies, rock/soil, artificial cover and others, resulting due to land transformation. The present Land Use/Land Classification map is developed with following objectives. The main objective of the study is to classify the different land use within 10 km from the project boundary.

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3.2.2 Methodology

Information of land use and land cover is important for many planning and management activities concerning the surface of the earth (Agarwal and Garg, 2000). Land use refers to man's activities on land, which are directly related to land (Anderson et al., 1976). The land use and the land cover determine the infiltration capacity. Barren surfaces are poor retainers of water as compared to grasslands and forests, which not only hold water for longer periods on the surface, but at the same time allow it to percolate down.

The terms ‘land use’ and ‘land cover’ (LULC) are often used to describe maps that provide information about the types of features found on the earth’s surface (land cover) and the human activity that is associated with them (land use). Satellite remote sensing is being used for determining different types of land use classes as it provides a means of assessing a large area with limited time and resources. However, satellite images do not record land cover details directly and they are measured based on the solar energy reflected from each area on the land. The amount of multi spectral energy in multi wavelengths depends on the type of material at the earth’s surface and the objective is to associate particular land cover with each of these reflected energies, which is achieved using either visual or digital interpretation. In the present study the task is to study in detail the land use and land cover in and around the project site. The study envisages different LULC around the proposed project area and the procedure adopted is as below.

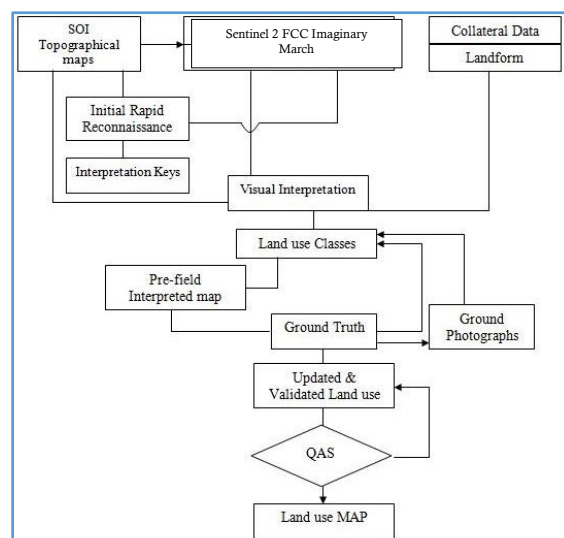


Figure 3.2 Flow Chart showing Methodology of Land use mapping

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3.2.3 *Satellite Data*

Sentinal 2 multispectral satellite data of 2020 was utilized for the present study. Details of satellite data is given below. The rectification of imagery was carried out to bring the digital data on the earth coordinate system by means of ground control point (GCP) assignments/SOI topo sheets.

3.2.4 *Scale of mapping*

Considering the user defined scale of mapping, 1:50000 Sentinal 2 data was used for Land use / Land cover mapping of 10 km radius for proposed site. The description of the land use categories for 10 km radius and the statistics are given for 10 km radius.

3.2.5 *Interpretation Technique*

Standard on screen visual interpretation procedure was followed. The various Land use / Land cover classes interpreted along with the SOI topographical maps during the initial rapid reconnaissance of the study area. The physiognomic expressions conceived by image elements of color, tone, texture, size, shape, pattern, shadow, location and associated features are used to interpret the FCC imagery. Image interpretation keys were developed for each of the LU/LC classes in terms of image elements.

June 2016 FCC imagery (Digital data) of the study area was interpreted for the relevant land use classes. On screen visual interpretation coupled with supervised image classification techniques are used to prepare the land use classification.

1. Digitization of the study area (10 km radius from the proposed site) from the topo maps
2. In the present study the sentinal satellite image and SOI topo sheets of 57-H/14 have been procured and interpreted using the ERDAS imaging and ARC-GIS software adopting the necessary interpretation techniques.
3. Satellite data interpretation and vectorization of the resulting units
4. Adopting the available guidelines from manual of LULC mapping using Satellite imagery (NRSA, 1989)
5. Field checking and ground truth validation
6. Composition of final LULC map

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The LULC Classification has been done at three levels where level -I being the broad classification about the land covers that is Built-up land, agriculture land, waste land, wetlands, and water bodies. These are followed by level –II where built-up land is divided into towns/cities as well as villages. The Agriculture land is divided into different classes such as cropland, Fallow, Plantation, while wastelands are broadly divided into, Land with scrub and without Scrub and Mining and Industrial wasteland. The wetlands are classified into inland wetlands, coastal wetlands and islands. The water bodies are classified further into River/stream, Canal, Tanks and bay. In the present study level II classification has been undertaken. The SOI Topo map is presented in Annexure and Satellite imagery of 10 km radius from the project site is presented Annexure.

3.2.6 Field Verification

Field verification involved collection, verification and record of the different surface features that create specific spectral signatures / image expressions on FCC. In the study area, doubtful areas identified in course of interpretation of imagery is systematically listed and transferred on to the corresponding SOI topographical maps for ground verification. In addition to these, traverse routes were planned with reference to SOI topographical maps to verify interpreted LU/LC classes in such a manner that all the different classes are covered by at least 5 sampling areas, evenly distributed in the area. Ground truth details involving LU/LC classes and other ancillary information about crop growth stage, exposed soils, landform, nature and type of land degradation are recorded and the different land use classes are taken the Land use map is presented in Annexure.

3.2.7 Description of the Land Use / land cover classes

3.2.7.1 Water

Areas where water was predominantly present throughout the year; may not cover areas with sporadic or ephemeral water; contains little to no sparse vegetation, no rock outcrop nor built up features like docks; examples: rivers, ponds, lakes, oceans, flooded salt plains.

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3.2.7.2 Trees

Any significant clustering of tall (~15-m or higher) dense vegetation, typically with a closed or dense canopy; examples: wooded vegetation, clusters of dense tall vegetation within savannas, plantations, swamp or mangroves (dense/tall vegetation with ephemeral water or canopy too thick to detect water underneath).

3.2.7.3 Grass

Open areas covered in homogenous grasses with little to no taller vegetation; wild cereals and grasses with no obvious human plotting (i.e., not a plotted field); examples: natural meadows and fields with sparse to no tree cover, open savanna with few to no trees, parks/golf courses/lawns, pastures.

3.2.7.4 Flooded vegetation

Mix of small clusters of plants or single plants dispersed on a landscape that shows exposed soil or rock; scrub-filled clearings within dense forests that are clearly not taller than trees; examples: moderate to sparse cover of bushes, shrubs and tufts of grass, savannas with very sparse grasses, trees or other plants.

3.2.7.5 Crops

Humans planted/plotted cereals, grasses, and crops not at tree height; examples: corn, wheat, soy, fallow plots of structured land.

3.2.7.6 Scrub/Shrub

Mix of small clusters of plants or single plants dispersed on a landscape that shows exposed soil or rock; scrub-filled clearings within dense forests that are clearly not taller than trees; examples: moderate to sparse cover of bushes, shrubs and tufts of grass, savannas with very sparse grasses, trees or other plants.

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3.2.7.7 Built Area

Human made structures; major road and rail networks; large homogenous impervious surfaces including parking structures, office buildings and residential housing; examples: houses, dense villages / towns / cities, paved roads, asphalt.

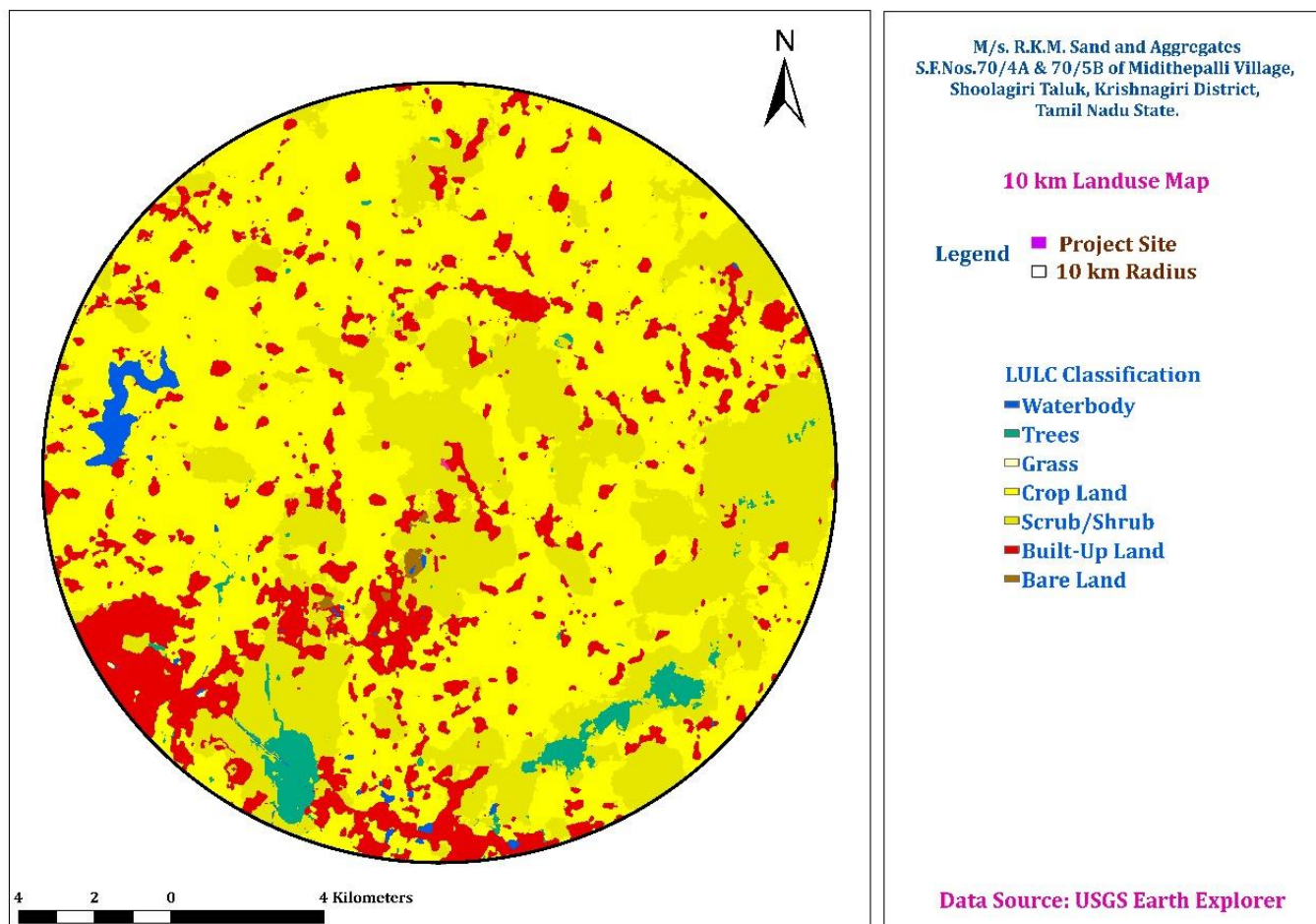


Figure 3.3 Land use classes around 10 km radius from the project site

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3.2.7.8 Different Land use classes around 10 km radius from the project site

Table 3-3 Land use pattern

Sl. No	Categories	Area in Sq.m	Percentage
1	Water Body	2.91	0.89
2	Trees	6.16	1.89
3	Grass	0.06	0.02
4	Crops	185.35	57.13
5	Scrub/Shrub	83.54	25.75
6	Built-up Area	45.88	14.14
7	Barren Land	0.51	0.15

3.3 WATER ENVIRONMENT

3.3.1 *Contour & Drainage*

The altitude of the area is 869m above MSL.

3.3.2 *Geomorphology*

The prominent geomorphic units identified in the district through interpretation of satellite imagery are structural hills in the southwestern part of the district, denudational landforms like buried pediments in the plains and inselbergs and plateaus represented by conical hills aligned with major lineaments. Krishnagiri district forms part of the upland plateau region with many hill ranges and undulating plains. The western part of the district has hill ranges of Mysore plateau with a chain of undulating hills and deep valleys extending in NNE-SSW direction. The plains of the district have an average elevation of 488 m amsl. The plateau region along the western boundary and the northwestern part of the district has an average elevation of 869m Amsl. The Guthrayan Durg with an elevation of 1395 m amsl is the highest peak in the district.

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Soils

Soils have been classified into Black soil, mixed soil, red loamy soil, gravelly and sandy soils. Red loamy and sandy soils are predominant in Hosur taluk. Vast stretches of loam soils and black soils occur in Krishnagiri district.

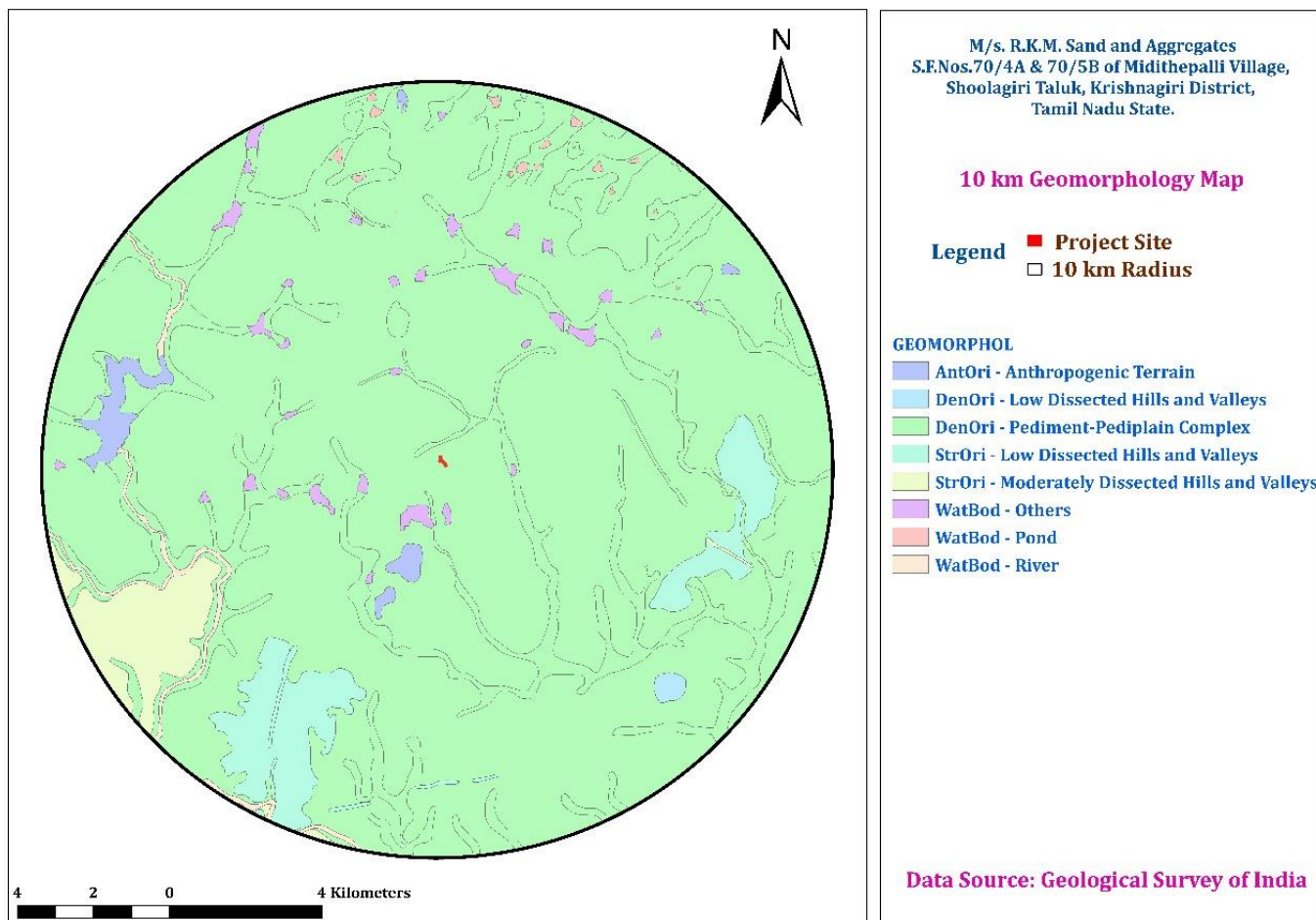


Figure 3.4 Geomorphology within 10km from the project site

3.3.3 Geology:

The geological formations of the district belong mainly to Archaean age along with rock of Proterozoic age. The former is represented by Khondalite Group of rocks, Charnockite Group of rocks, Migmatites Complex, Sathyamangalam Group of rocks, while the latter is represented by Alkaline rocks. The Khondalite Group includes garnet sillimanite gneiss and quartzite which occur as small patches. The

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migmatite complex includes garnet ferrous quartzofeldspathic gneiss and horn blends biotite gneiss, the former exposed on the western part of the district. The Sathyamangalam Group includes fuchsite quartzite, sillimanite mica schist and amphibolites. The Bhavani Group in this area includes fissile hornblende-biotite gneiss, granitoid gneiss and pink migmatite. Amphibolites with barbed ferruginous quartzite and associated quartzo-feldspathic rocks (Champion Gneiss) represent the Kolar group and are found west and southwest of Veppanapalli. Following this there are basic intrusions occurring as dykes.

The Charnockite Group occupies a major part of the south-west portion of this district with small bands of garnetiferous quartzo-feldspathicgneiss, Granite gneiss and dolerite dykes. The North-East andNorthernpartof the District mainly consist of granite gneiss with small patches of Pink Migmatite, hornblende-biotite gneiss and dolerite dykes. The Eastern part of the district consists of Epidote-Hornblende Gneiss, Ultra Mafics, Syenite and Carbonatite.

The Alkaline Complex is represented by epidote-horn blende gneiss, ultramafics, syenite and carbonatite and these are distributed in the eastern part of the district. Innumerable basic dykes and felsites, quartz, barites and pegmatite veins form part of the Alkali Complex.

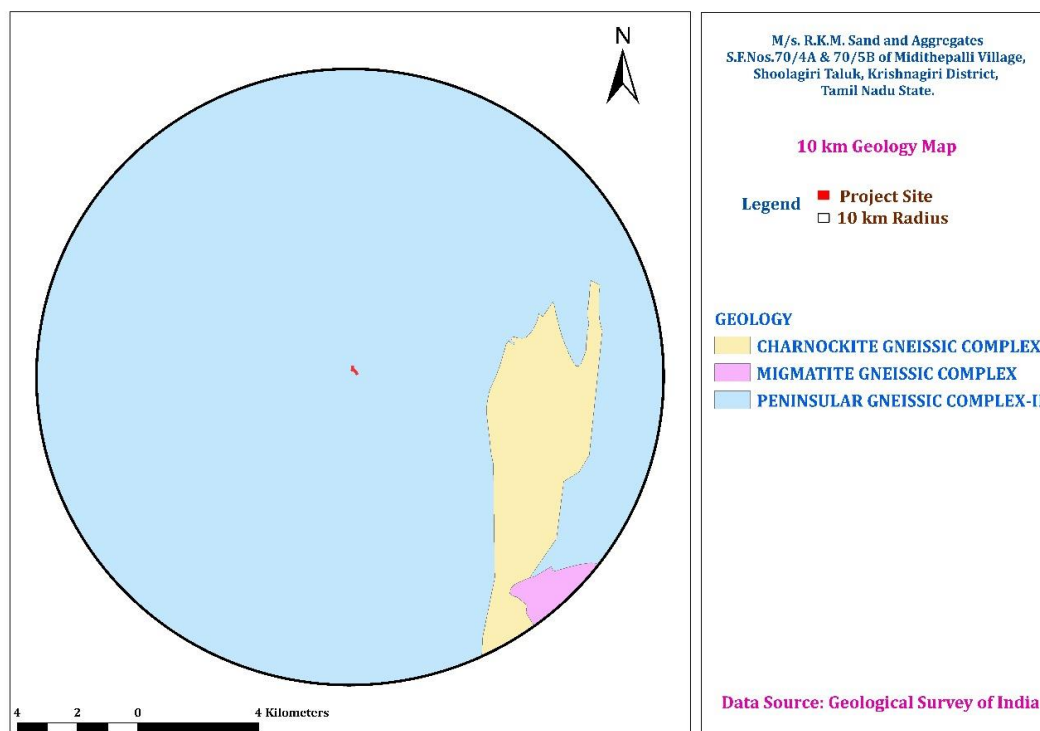


Figure 3.5 Geology within 10km from the project site

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3.3.4 *Hydrogeology*

Krishnagiri district is underlined by Archaean crystalline formations with Recent alluvial deposits of limited areal extent and thickness along the courses of major rivers (Plate-II). The occurrence and movement of ground water are controlled by various factors such as physiography, climate, geology and structural features. Weathered, and fractured crystalline rocks constitute the important aquifer systems in the district.

Ground water generally occurs under phreatic conditions in the weathered mantle and under semi-confined conditions in the fractured zones at deeper levels. The thickness of weathered zones in the district ranges from less than a meter to more than 15 m. The yield of large diameter dug wells in the district, tapping the weathered mantle of crystalline rocks ranges from 100 to 500 lpm. These wells normally sustain in pumping for 2 to 6 hours per day, depending upon the local topography and characteristics of the weathered mantle.

The depth to water level (DTW) during pre-monsoon (May 2006) ranged between 0.5 and 9.9 m bgl (Plate-III) in the district. In major part of the district the DTW is more than 5mbgl. Whereas it ranged between 2 and 9.9 m bgl (Plate-IV) during post monsoon, in the district and the DTW is in the range of 5 – 10 m bgl in the entire district except a few isolated pockets.

The yield of successful exploratory wells drilled in the district ranged from 0.78 lps to 26 lps. As per the studies the wells drilled in granitic gneiss have higher yields than the wells drilled in charnockites. The specific capacity of the wells ranged from 1.2 to 118.0 lpm/m/dd. The piezometric head of fracture zones varied between 0.50 and 18.45 m bgl.

Aquifer Parameters:

The transmissivity values of fracture zones ranged from 1 to 188 m²/day with low to very low permeability values.

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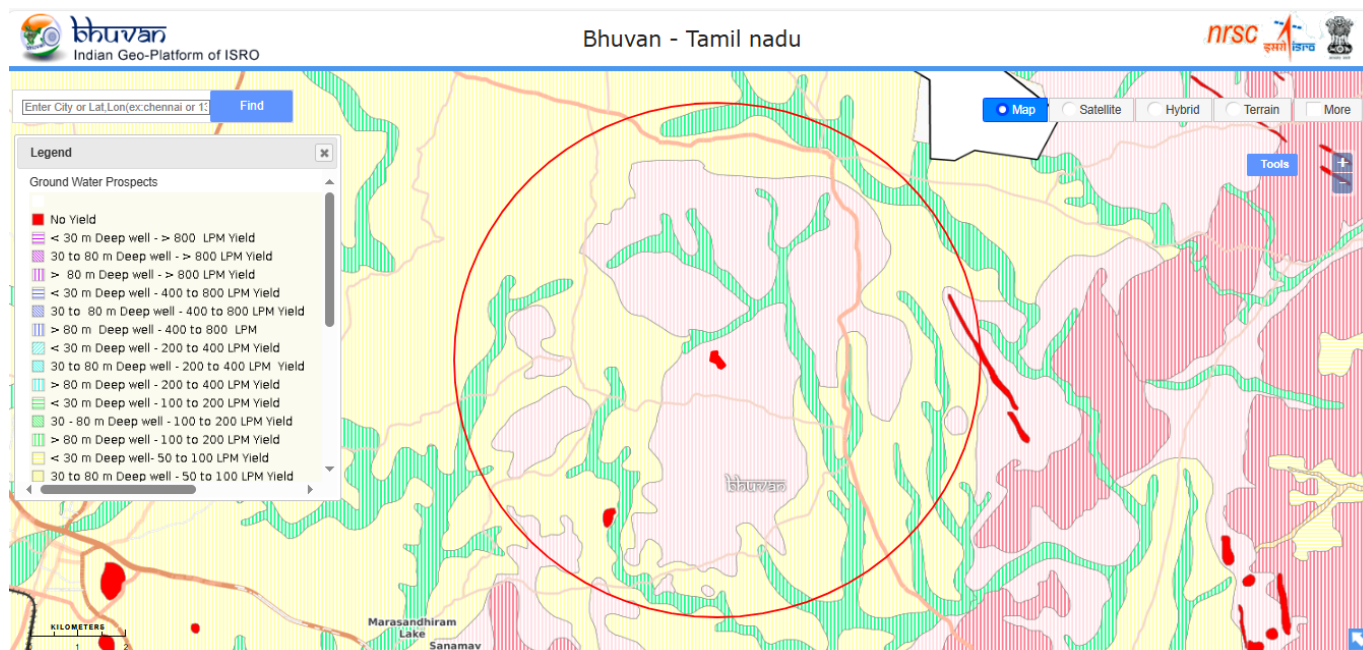


Figure 3.6 Ground water prospects within 5 km radius of the project site

3.3.5 Ground water quality monitoring

Ground water quality monitoring is done in the following locations, and analysis will be done for physical, chemical & Biological parameters.

Table 3-4 Ground water Quality Analysis

Environmental Parameters: Ground water Quality Analysis	
Monitoring Period	April 2025 to June 2025
Design Criteria	Based on the Environmental settings in the study area
Monitoring Locations	Project Site - GW1 Lord Shiva Temple, Muthali – GW2 Bhargavi Narasimha Swamy Temple, Berikai Road Sandarasettipalli – GW3 Govt.Hr Sec School,bukkasagaram – GW4

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	Midhitepalli Bus Stop – GW5 Garagamma Temple – Vanamangalam – GW6 Sri Ardhanareshwaramma Temple – Moranapalli – GW7
Methodology	Water Samples were collected in 5 Litre fresh cans as per IS 3025 Part I and transported to the laboratory in Iceboxes
Frequency of Monitoring	Once in a season

3.3.5.1 Sampling Procedure

Quality of ground water was compared with IS: 10500: 1991 (Reaffirmed 1993 With Amendment NO-3 July 2010) for drinking purposes. Water samples were collected as Grab sample from five sampling locations in a 5-liter plastic jerry can and 250 ml sterilized clean glass/pet bottle for complete physico-chemical and bacteriological tests respectively. The samples were analyzed as per standard procedure / method given in IS: 3025 (Revised Part) and standard method for examination of water and wastewater Ed. 21st, published jointly by APHA.

Table 3-5: Standard Procedure

S.no	Parameters	Test Method
1	pH (at 25°C)	IS:3025(P -11)1983 RA: 2012
2	Electrical Conductivity	IS:3025(P -14) 2013
3	Colour	IS:3025 (P -4)1983 RA: 2012
4	Turbidity	IS:3025(P -10)1984 RA: 2012
5	Total Dissolved Solids	APHA 23rd Edn.2017-2540-C
6	Total Suspended Solids	IS:3025(P-17)-1984 RA:2012
7	Total Hardness as CaCO ₃	APHA 23rd Edn.2017-2340-C
8	Calcium Hardness as CaCO ₃	APHA 23rd Edn2017.3500 Ca-B
9	Magnesium Hardness as CaCO ₃	APHA 23rd Edn.2017-3500 Mg-B
10	Calcium as Ca	APHA 23rd Edn2017.3500 Ca-B

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11	Magnesium as Mg	APHA 23rd Edn.2017-3500 Mg-B
12	Chloride as Cl	IS:3025(P -32)-1988 RA: 2014
13	Sulphate as SO4	APHA 23rd Edn.2017-4500 SO4--E
14	Total Alkalinity as CaCO3	APHA 23rd Edn.2017-2320-B
15	Iron as Fe	IS:3025(P -53):2003 RA: 2014
16	Silica as SiO2	IS:3025(P -35)1988 RA: 2014
17	Fluoride as F	APHA 23rd Edn.2012-4500-F-D
18	Nitrate as NO3	IS:3025(P -34):1988 RA: 2014
19	Potassium as K	IS:3025(P -45):1993 RA: 2014
20	Sodium as Na	IS:3025(P -45):1993 RA: 2014
21	COLIFORM	IS: 1622:1981:RA:2014
22	E.COLI	IS: 1622:1981:RA:2014

Table 3-6 Ground water sampling results

S. no	Parameters	Units	GW1	GW2	GW3	GW4	GW5	GW6	GW7
1	pH (at 25°C)	-	7.87	8.06	7.96	7.11	7.88	8.05	7.96
2	Electrical Conductivity	μS/cm	1552	995	1205	720	1632	645	1622
3	Color	Haze n Unit	BQL(L OQ:5)	BQL(L OQ:5)	BQL(L OQ:5)	BQL(L OQ:5)	BQL(L OQ:5)	BQL(L OQ:5)	BQL(L OQ:5)
4	Turbidity	NTU	BQL(L OQ:1)	BQL(L OQ:1)	BQL(L OQ:1)	BQL(L OQ:1)	BQL(L OQ:1)	BQL(L OQ:1)	BQL(L OQ:1)
5	Total Dissolved Solids	mg/L	875	637	732	412	931	445	1054
6	Total Suspended Solids	mg/L	BQL(L OQ:2)	BQL(L OQ:2)	BQL(L OQ:2)	BQL(L OQ:2)	BQL(L OQ:2)	BQL(L OQ:2)	BQL(L OQ:2)
7	Total Hardness as CaCO ₃	mg/L	452	419	531	273	379	232	521
8	Calcium Hardness as CaCO ₃	mg/L	328	274	303	100	274	130	274

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9	Magnesium Hardness as CaCO ₃	mg/L	124	145	228	173	105	102	247
10	Calcium as Ca	mg/L	132	110	122	40.3	110	52.2	110
11	Magnesium as Mg	mg/L	30.2	35.5	55.6	41.8	25.5	24.6	60.2
12	Chloride as Cl	mg/L	155	60.6	130	42.2	236	48.3	302
13	Sulphate as SO ₄	mg/L	162	144	90.5	75.5	60.2	32.2	185
14	Total Alkalinity as CaCO ₃	mg/L	330	310	245	193	320	311	245
15	Iron as Fe	mg/L	BQL(L OQ:0.1)	BQL(L OQ:0.1)	BQL(L OQ:0.1)	BQL(L OQ:0.1)	BQL(L OQ:0.1)	BQL(L OQ:0.1)	BQL(L OQ:0.1)
16	Silica as SiO ₂	mg/L	33.3	24.5	29.7	17.7	40.2	66.7	39.9
17	Fluoride as F	mg/L	0.72	1.11	0.55	1.09	1.45	1.885	0.876
18	Nitrate as NO ₃	mg/L	18.8	16.6	15.5	11.9	9.32	10.2	8.8
19	Potassium as K	mg/L	10.5	5.6	11.1	6.6	12.2	2.6	15.5
20	Sodium as Na	mg/L	130	45.5	120	56.6	203	36.6	192
21	COLIFORM	-	4	7	110	14	27	8	<2
22	E COLI	-	<2	<2	33	<2	11	<2	<2

3.3.6 Interpretation of results:

3.3.6.1 Physical parameters of water:

The basic physical parameters of water include

Colour:

Value observed in Project Site (True/Apparent Color): BQL(LOQ:5).

Acceptable and permissible limits: 5 Hazen units and 15 Hazen units respectively. The value in the project site is as same as the acceptable limits prescribed by IS:3025 (P -4)1983 RA: 2012 (referred as “Standards” from herein).

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Odour & Taste:

The water is odourless. The taste of the water is slightly salty, which is due to the presence of hardness in water, which is attributed to the presence of calcium and magnesium in the water. As per the standards, the odour and taste should be agreeable.

pH:

Value observed in the Project Site: 7.87

Acceptable and permissible limits: 6.5-8.5. The pH value is the measure of acid – base equilibrium. The value of pH in the project site clearly indicates that water is slightly neutral in nature.

Turbidity:

Value observed in the Project Site: BQL(LOQ:1)

Acceptable and permissible limits: 1 NTU & 5 NTU respectively. The value of turbidity generally indicates the presence of phytoplankton and other sediments.

Total Dissolved Solids:

Value observed in the Project Site: 875 mg/L.

Acceptable and permissible limits: 500 mg/L and 2000 mg/L respectively.

TDS is the presence of inorganic salts and small amounts of organic matter present in the water. This is mainly due to the result of surface runoff as the cations and anions in the topsoil is carried away by the water.

3.3.6.2 Chemical parameters of water:

The chemical parameters of the drinking water include,

Calcium:

Value observed in the Project Site: 132 mg/L.

Acceptable and permissible limits: 75mg/L and 200 mg/L respectively.

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<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
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Calcium is an essential macronutrient. The value of the calcium is within the prescribed permissible standards. The higher level of calcium may cause hardening in domestic equipment and will also reduce the detergent efficiency. Higher levels of calcium will lead to constipation, gas, and bloating. Apart from that, extra calcium may also increase the risk of kidney stones. If the calcium deposit in blood is high, it may lead to hypercalcemia.

Magnesium:

Value observed in the Project Site: 30.2 mg/L.

Acceptable and permissible limits: 30 mg/L and 100 mg/L respectively.

The value of Magnesium in the project site is higher than the acceptable limit and less than the permissible limit. The increase in the level of magnesium will cause diarrhea and vomiting in children.

Chloride

Value observed in the project site: 155 mg/L.

Acceptable and permissible limits: 250 mg/L and 1000 mg/L respectively.

The chloride level in the project site is within the acceptable and permissible limit. If the level of chloride is more, it may cause galvanic and pitting corrosion, increases level of metals. It imparts bitter taste to the water.

Total Alkalinity as CaCO₃:

Value observed in the project site: 330 mg/L.

Acceptable and permissible limits: 200 mg/L and 600 mg/L respectively.

Total Alkalinity is the measure of the concentration of all alkaline substances dissolved in the water which includes carbonates, bicarbonates and hydroxides. The value of the total alkalinity is slightly greater in the project site, which will impart soda taste to the water.

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

Hardness:

Value observed in the Project Site: 452 mg/L.

Acceptable and permissible limits: 200 mg/L and 600 mg/L respectively.

The value of Hardness in the project site is higher than acceptable limit but within the permissible limit. The increase in the level of hardness may cause corrosion and scaling problems, increased soap consumption and it also contributes to the salty taste of water.

3.3.7 Surface Water Analysis

Surface water samples were taken from **Bukkasagaram and Muthali lake**. The results are summarized below.

Table 3-7 Surface Water Sample Results

S. No	Parameters	Units	Bukkasagaram	Muthali
1	pH (at 25°C)	-	8.11	7.77
2	Electrical Conductivity	μS/cm	380	228
3	Color	Hazen Unit	BQL(LOQ:5)	BQL(LOQ:5)
4	Turbidity	NTU	5	10
5	Total Dissolved Solids	mg/L	247	135
6	Total Suspended Solids	mg/L	BQL(LOQ:2)	BQL(LOQ:2)
7	Total Hardness as CaCO ₃	mg/L	45	72.5
8	Calcium as Ca hardness	mg/L	42	33
9	Calcium as Ca	mg/L	16.8	13.3
10	Magnesium as Mg hardness	mg/L	3.1	39.5
11	Magnesium as Mg	mg/L	BQL(LOQ:1)	9.6
12	Chloride as Cl	mg/L	24.6	30.2
13	Sulphate as SO ₄	mg/L	5.87	12.2
14	Total Alkalinity as CaCO ₃	mg/L	62.4	53.3
15	Iron as Fe	mg/L	BQL(LOQ:0.1)	BQL(LOQ:0.1)

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

16	Silica as SiO ₂	mg/L	8.3	9.5
17	Fluoride as F	mg/l	0.704	0.212
18	Sodium as Na	mg/l	16.6	23.8
19	Potassium as k	mg/L	2.1	5.5
20	Total Kjeldahl Nitrogen as N	mg/L	14.6	11.8
21	Biochemical Oxygen Demand@270C	mg/L	9.1	10.2
22	Chemical Oxygen Demand	mg/L	29.9	30.7
23	Dissolved Oxygen	mg/L	5.1	4.6
24	Nitrate	mg/L	8.2	9.6
25	Coliform	mg/L	27	80
26	E. Coli	mg/L	7	14

Inference: The surface water quality is compared with the CPCB Water Quality Criteria against A, B, C, D & E class of water. From the test result, it is found that both the water does not fit Class A (Drinking Water Source without conventional treatment but after disinfection). But they can be used for outdoor bathing as it meets the requirements shown for class B water.

3.3.8 *Climatology & Meteorology:*

Climate and meteorology of a place can play an important role in the implementation of any developmental project. Meteorology is also the key to understand local air quality as there is an essential relationship between meteorology and atmospheric dispersion involving wind in the broadest sense of the term.

The year may broadly be divided into four seasons:

Winter season : December to February

Pre-monsoon season : March to May

Monsoon season : July to September

Post-monsoon season : October to November

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

i) **Climate**

The Eastern part of the district experiences hot climate and the Western part has a contrasting pleasant cold climate. The district is hot and dry in summer i.e., from March to June. From July to November is the rainy season and between December to February winter prevails with very cold and misty.

ii) **Temperature**

The maximum temperature is around 36⁰C and minimum temperature is 28⁰C.

iii) **Rainfall:**

Krishnagiri receives rainfall from both the northeast and the southwest monsoons. Monsoon season is from the months of July to November. During this time, the temperature is mild and pleasant. Heavy rainfall is expected in short intervals during this period. December to February are winter months.

This district gets maximum rainfall in November (274.7mm).

KRISHNAGIRI DISTRICT -NORMAL AND ACTUAL RAINFALL

Unit in mm.

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F	R/F
2017	5.7	0	48.7	37.9	198.6	19.1	24.6	189.7	291.7	219	54.5	56.2
2018	0	1.3	34.9	14.4	114.5	41.1	10.5	18.5	152.1	85.2	33.2	4.8
2019	13.2	1.2	4.5	47.2	96.5	33.6	34.6	94.7	138.6	177.7	48.7	39.5
2020	0.3	0	6.9	61.7	57.9	59	147.2	66.8	142.1	142	77	42.6
2021	40.1	5.8	0	46.6	75.7	32.4	137.7	70.2	134.9	140.4	282.6	19.1

Source: IMD

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

Metrological Data

The meteorological data – Temperature, rainfall, Wind Speed, Wind direction are recorded through AWS by setting it up in the site.

vi) Wind Rose Diagram

The wind rose denotes a class of diagrams designed to display the distribution of wind direction at a given location over a period of time. Wind roses are also useful as they project a large quantity of data in a simple graphical plot.

The wind speed & wind direction data are taken and wind rose is plotted for April 2025 to June 2025.

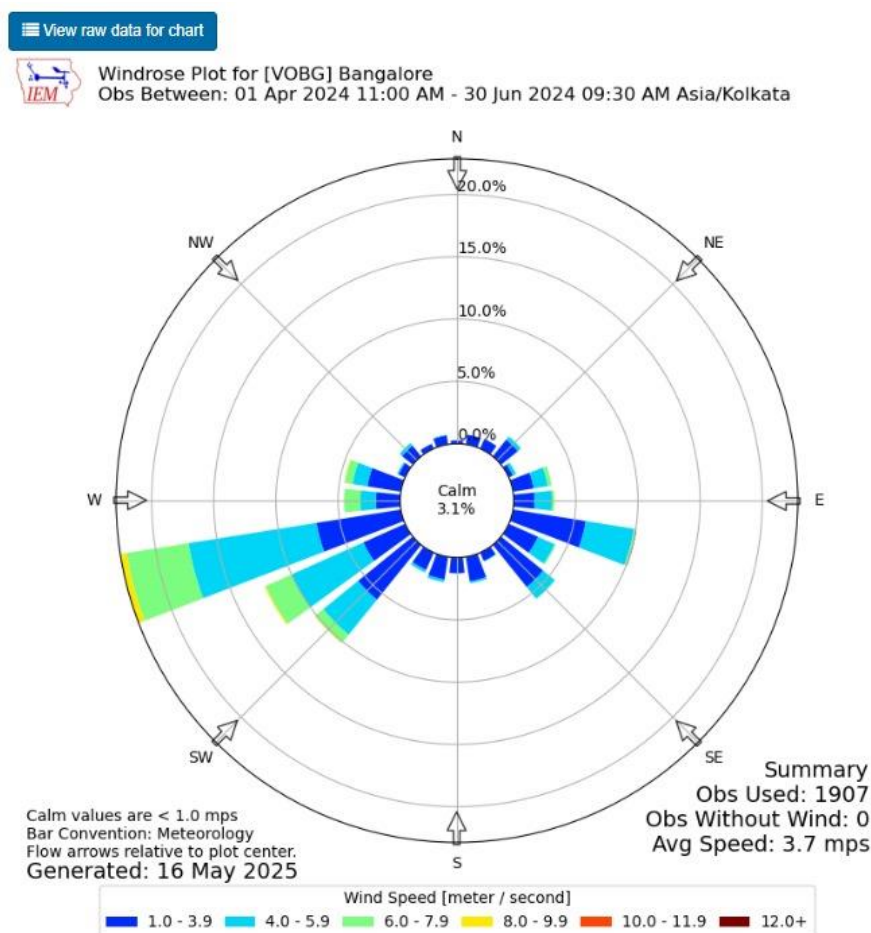


Figure 3.7 Wind rose.

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

3.3.9 Selection of Sampling Locations:

Four Monitoring locations along with the project site is selected based on Wind Direction & Wind Speed. All the monitoring locations are chosen in the downwind direction.

3.4 AMBIENT AIR QUALITY

Table 3-8: Selection of Sampling Location

Environmental Parameters: Ambient Air																											
Monitoring Period	April 2025 to June 2025																										
Design Criteria	The monitoring stations are selected based on factors like topography/terrain, prevailing meteorological conditions like predominant wind direction (December 2022 to February 2023), etc., play a vital role in the selection of air sampling stations. Based on these criteria, 7 air sampling stations were selected in the area as shown below.																										
Monitoring Locations	<table><tr><th>Location & Code</th><th>Distance (km)</th><th>Direction</th></tr><tr><td>Project Site</td><td>-</td><td>-</td></tr><tr><td>Lord Siva temple, Muthali</td><td>4.59 km</td><td>Upwind W</td></tr><tr><td>Bhargavi Narasimha Swamy Temple, Berikai Road Sandarasettipalli</td><td>6.37 km</td><td>Downwind E</td></tr><tr><td>Govt.Hr Sec School,bukkasagaram</td><td>4.10 km</td><td>Crosswind S</td></tr><tr><td>Midhitepalli Bus Stop</td><td>1.78 km</td><td>Crosswind NNE</td></tr><tr><td>Garagamma Temple Vanamangalam</td><td>7.76 km</td><td>Crosswind N</td></tr><tr><td>Sri Ardhanareshwaramma Temple - Moranapalli</td><td>8.18 km</td><td>Crosswind SW</td></tr></table>			Location & Code	Distance (km)	Direction	Project Site	-	-	Lord Siva temple, Muthali	4.59 km	Upwind W	Bhargavi Narasimha Swamy Temple, Berikai Road Sandarasettipalli	6.37 km	Downwind E	Govt.Hr Sec School,bukkasagaram	4.10 km	Crosswind S	Midhitepalli Bus Stop	1.78 km	Crosswind NNE	Garagamma Temple Vanamangalam	7.76 km	Crosswind N	Sri Ardhanareshwaramma Temple - Moranapalli	8.18 km	Crosswind SW
	Location & Code	Distance (km)	Direction																								
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	Midhitepalli Bus Stop	1.78 km	Crosswind NNE																								
	Garagamma Temple Vanamangalam	7.76 km	Crosswind N																								
	Sri Ardhanareshwaramma Temple - Moranapalli	8.18 km	Crosswind SW																								

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

Methodology	Respirable Particulate Matter (PM10) - Gravimetric (IS 5182: Part 23:2006) Particulate Matter PM2.5 - Gravimetric (Fine particulate matter) Sulphur Dioxide - Calorimetric (West & Gaeke Method) (IS 5182: Part 02: 2001) Nitrogen Dioxide - Calorimetric (Modified Jacob & Hocheiser Method) (IS 5182: Part 06:2006)
Frequency of Monitoring	2 days in a week, 4 weeks in a month for 3 months in a season.

3.4.1 *Ambient Air Quality: Results & Discussion*

The test results of the ambient air quality monitored in project site and other four locations is summarized below.

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

Code	Location	PM 10 (µg/m ³)				PM 2.5 (µg/m ³)				SO ₂ (µg/m ³)				NO _x (µg/m ³)			
		Min	Max	Avg	98	Min	Max	Avg	98	Min	Max	Avg	98	Min	Max	Avg	98
AAQ1	Project Site	54	60	56.8	60	21	27	24.5	27	12	19	15.2	19	15	23	20.0	23
AAQ2	Lord Shiva Temple, Muthali	48	59	54.0	58.54	20	26	23.5	26	11	17	13.1	16.54	14	22	18.6	22
AAQ3	Bhargavi Narasimha Swamy Temple,	42	54	48.6	53.54	17	24	21.5	24	7	14	10.2	13.54	13	20	17.1	20
AAQ4	Govt.Hr Sec School,bukkasagaram	46	55	51.1	55	19	25	22.4	25	8	15	11.1	15	17	21	17.8	21
AAQ5	Midhitepalli Bus Stop	56	66	61.4	65.54	22	29	26.6	29	14	20	17.9	20	14	25	23.0	25
AAQ6	Garagamma Temple - Vanamangalam	38	47	43.0	47	15	21	19.5	21	5	13	8.8	12.54	10	20	15.0	20
AAQ7	Sri Ardhanareshwaramma Temple - Moranapalli	41	53	46.9	52.54	16	22	18.3	22	6	13	8.8	12.54	11	19	15.3	19
NAAQ Standards - Residential Area		100 (µg/m ³)				60(µg/m ³)				80 (µg/m ³)				80 (µg/m ³)			

Table 3-9 Ambient Air Quality

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

3.4.2 Interpretation of ambient air quality:

To assess the impact, AAQ were monitored in project site and four locations.

Observation:

The Maximum value of PM10 (66 ($\mu\text{g}/\text{m}^3$), PM 2.5(29 ($\mu\text{g}/\text{m}^3$), SOx (20 ($\mu\text{g}/\text{m}^3$), NOx (25 ($\mu\text{g}/\text{m}^3$) is observed in different places.

Inference:

The monitoring results for PM10, PM2.5, Sox, NOx was found to be high Midhitepalli Bus Stop and Project site which is due to high movement of vehicles. The observed values are all well within the Standards prescribed by NAAQ.

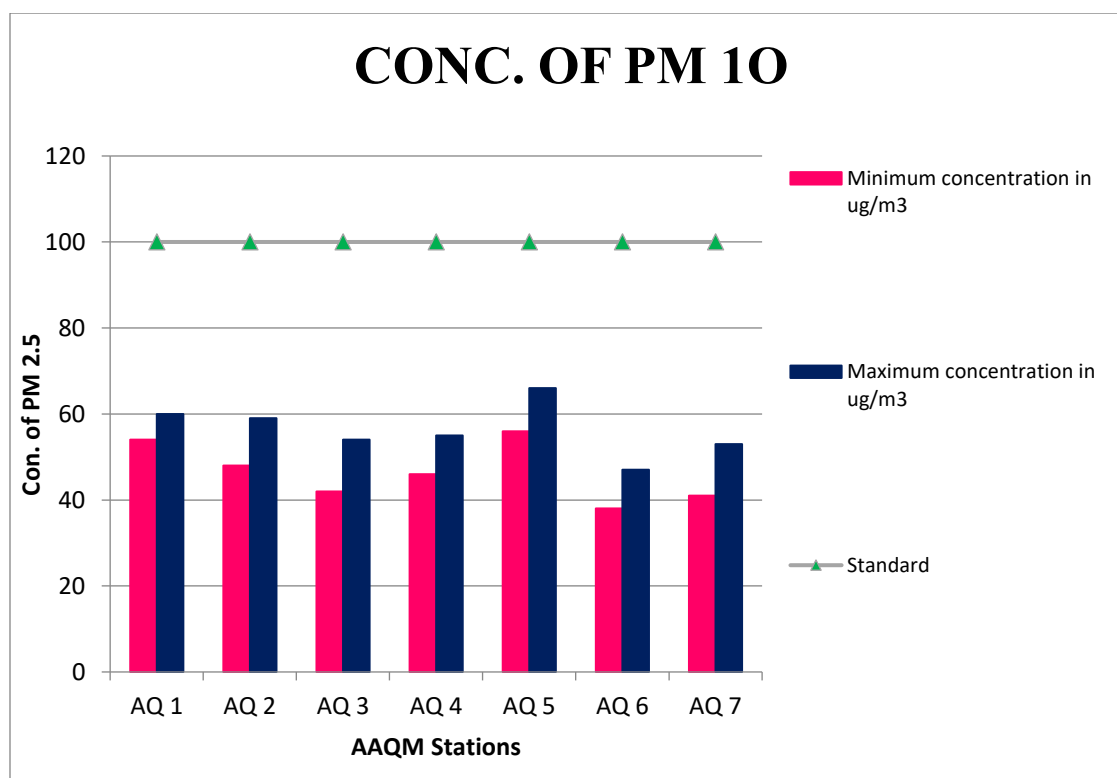


Figure 3.8 Concentration of PM10 ($\mu\text{g}/\text{m}^3$) in Study Area

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

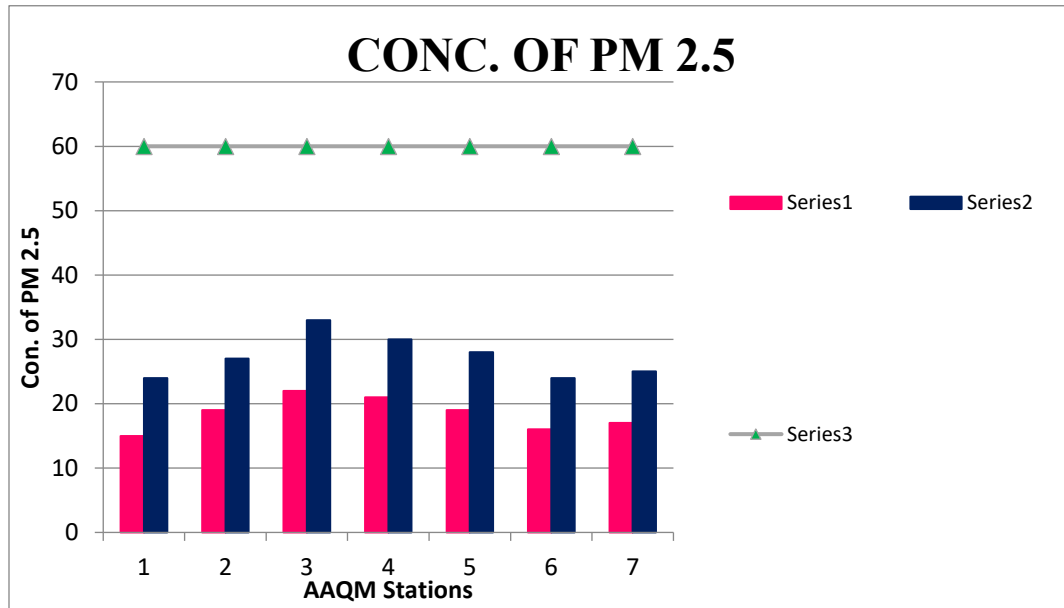
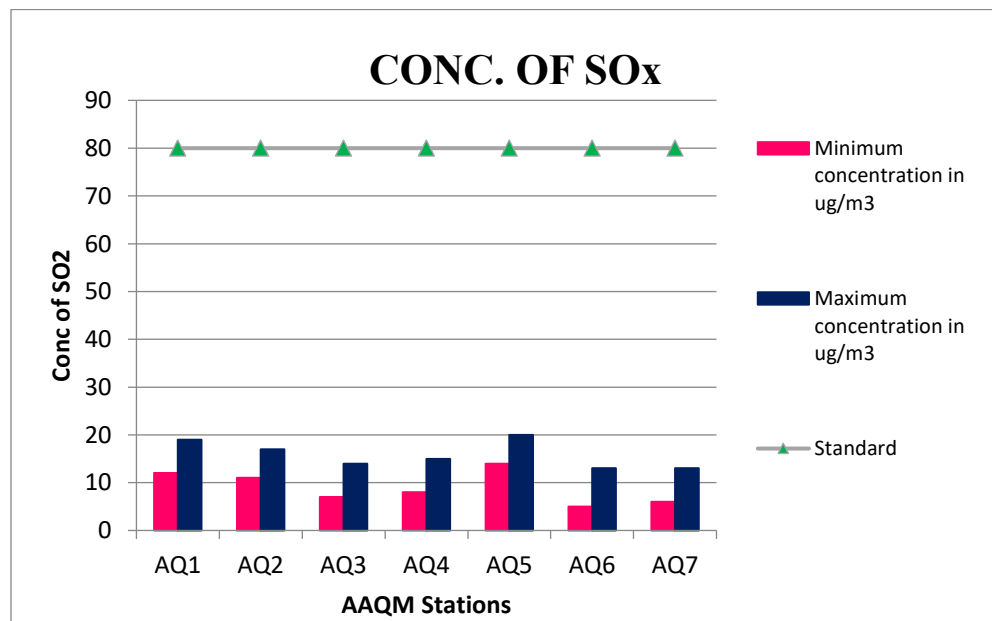


Figure 3.9 Concentration of PM2.5 ($\mu\text{g}/\text{m}^3$) in Study Area



Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

Figure 3.10 Concentration of SOx (µg/m³) in Study Area

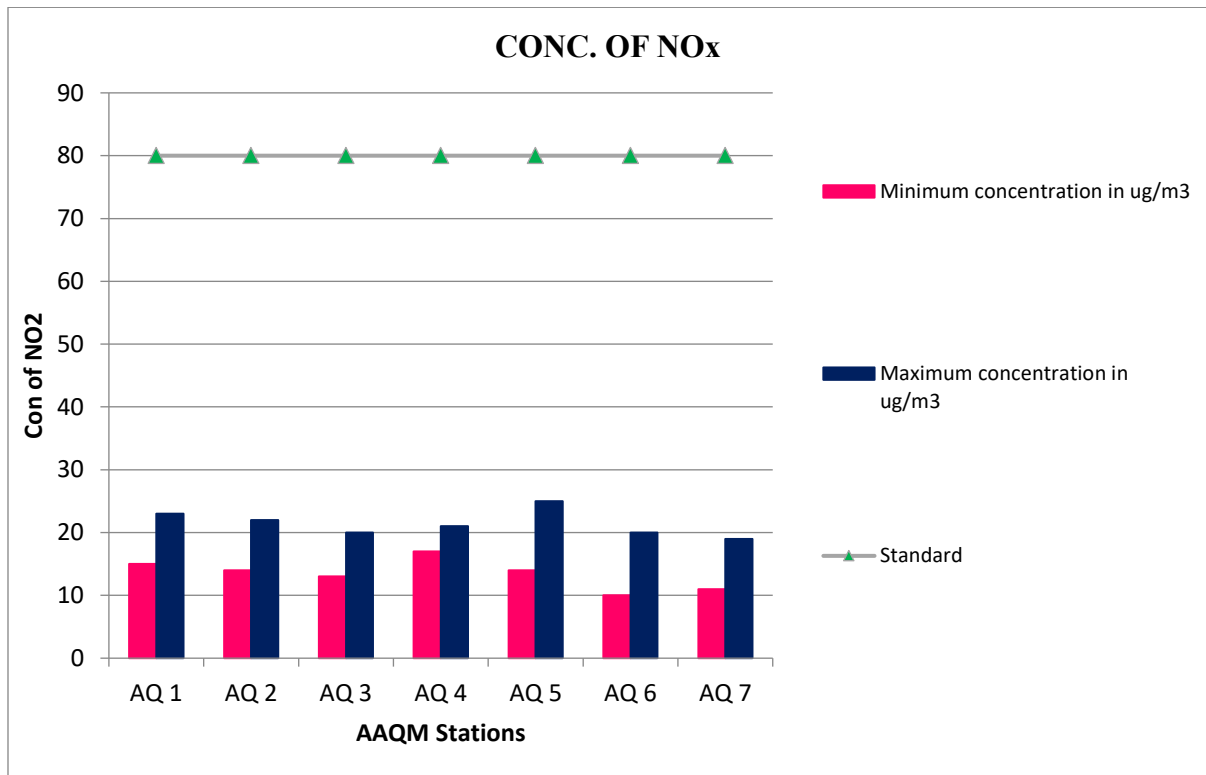


Figure 3.11 Concentration of NOx (µg/m³) in Study Area

3.5 NOISE ENVIRONMENT:

Table 3-10 Noise Analysis

Environmental Parameters: Noise Analysis	
Monitoring Period	April 2025 to June 2025
Design Criteria	Based on the Sensitivity of the area
Monitoring Locations	Project Site – N 1 Lord Shiva Temple, Muthali – N 2

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

	Bhargavi Narasimha Swamy Temple, Berikai Road Sandarasettipalli – N 3 Govt.Hr Sec School,bukkasagaram – N 4 Midhitepalli Bus Stop – N 5 Garagamma Temple – Vanamangalam – N 6 Sri Ardhanareshwaramma Temple – Moranapalli – N 7
Methodology	Noise level measurements were taken at the selected locations using noise level meter both during day and nighttime. Noise level measurements were taken continuously for 24 hours at hourly intervals
Frequency of Monitoring	Noise samples were collected from 7 locations - Once in a season

Ambient Noise Levels are monitored in the chosen 7 Locations including the project Site and the monitoring results are summarized below.

3.5.1 Day Noise Level (Leq day)

Table 3-11 Day Noise Level (Leq day)

Location	Leq day in dB(A)		
	Max	Min	Average
Project Site	51	41	48
Lord Shiva Temple, Muthali	57	46	53
Bhargavi Narasimha Swamy Temple, Berikai Road Sandarasettipalli	65	55	60
Govt.Hr Sec School,bukkasagaram	66	56	61
Midhitepalli Bus Stop	55	45	52
Garagamma Temple - Vanamangalam	60	49	55

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

Sri Ardhanareshwaramma Temple - Moranapalli	55	43	50
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3.5.2 Night Noise Level (Leq Night)

Table 3-12 Night Noise Level (Leq Night)

Location	Leq Night in dB(A)		
	Max	Min	Average
Project Site	43	36	39
Government High School, Muthali	47	39	42
Bhargavi Narasimha Swamy Temple, Berikai Road Sandarasettipalli	52	45	48
Govt.Hr Sec School,bukkasagaram	53	46	49
Midhitepalli Bus Stop	44	36	40
Garagamma Temple - Vanamangalam	46	39	42
Sri Ardhanareshwaramma Temple - Moranapalli	42	35	38

Observation:

The maximum Day noise and Night noise were found to be 66 dB(A) and 53 dB(A) respectively in Government High School, Bukkasagaram. The minimum Day Noise and Night noise were 41 dB(A) and 36 dB(A) respectively which was observed in project site. The observed values are all well within the Standards prescribed by CPCB.

3.6 SOIL ENVIRONMENT

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

Soil environment is studied for 10 km radius from the project site. The 5 km radius image shows that the soil is not affected by any kind of erosion.

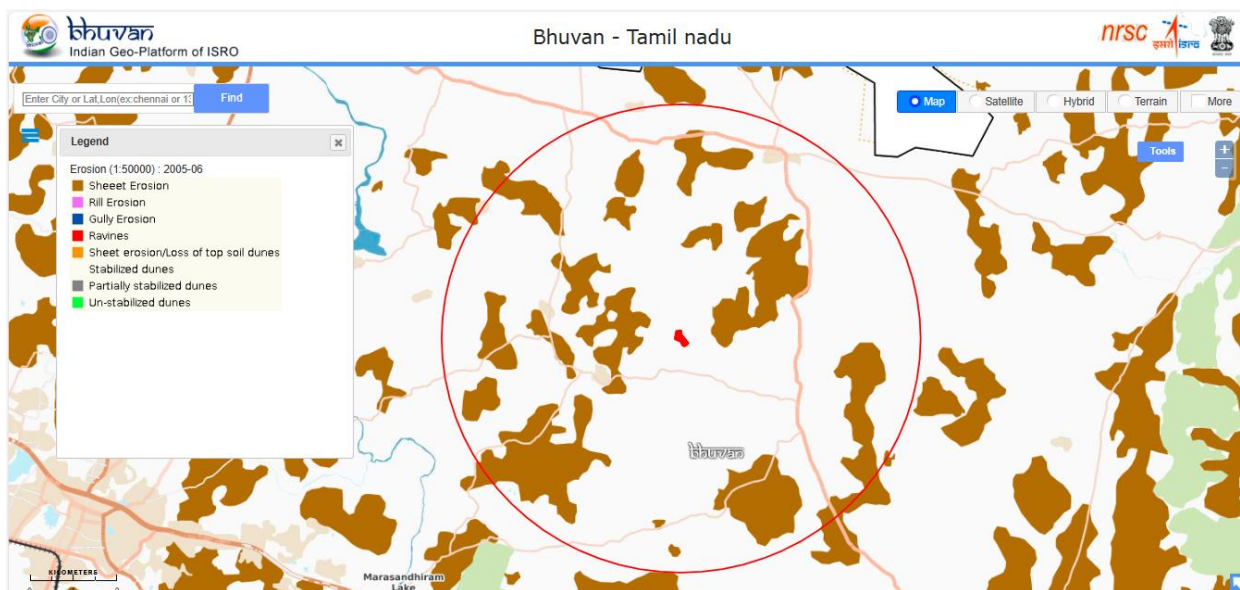


Figure 3.12 Soil Erosion pattern within 5 km radius of the project site

3.6.1 Baseline Data:

The present study of the soil quality establishes the baseline characteristics which will help in future in identifying the incremental concentrations if any, due to the operation Phase of the proposed project. The sampling locations have been identified with the following objectives:

- To determine the impact of proposed project on soil characteristics and
- To determine the impact on soils more importantly from agricultural productivity point of view.

Table 3-13 Soil Quality Analysis

Environmental Parameters: Soil Quality Analysis	
Monitoring Period	April 2025 to June 2025
Design Criteria	Based on the environmental settings of the study area

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

Monitoring Locations	Project Site – SQ 1 Lord Shiva Temple, Muthali - SQ 2 Bhargavi Narasimha Swamy Temple, Berikai Road Sandarasettipalli - SQ 3 Govt.Hr Sec School,bukkasagaram - SQ 4 Midhitepalli Bus Stop - SQ 5 Garagamma Temple – Vanamangalam - SQ 6 Sri Ardhanareshwaramma Temple – Moranapalli - SQ 7
Methodology	Composite soil samples using sampling augers and field capacity apparatus
Frequency of Monitoring	Soil samples were collected from 7 locations Once in a season

To assess the soil quality of the study area, 7 monitoring stations were selected and the results are summarized below.

Table 3-14 Soil Quality Analysis

Parameters	Unit	SQ 1	SQ 2	SQ 3	SQ 4	SQ 5	SQ 6	SQ 7
pH	-	7.25	8.56	8.06	7.79	8.11	7.89	7.88
Electrical Conductivity	ms/cm	0.45	0.75	0.44	0.260	0.61	0.388	0.15
Water holding Capacity	ml/L	3.2	5.2	5.10	4.70	3.60	6.9	2.60
Chloride	mg/Kg	195	181	177	35.5	115	95.2	158
Calcium	mg/Kg	110	144	52	42.2	70.2	85.2	51.3
Sodium	mg/Kg	495	692	432	355	460	203	440
Potassium	mg/Kg	530	710	405	320	499	185	492
Organic matter	%	0.55	0.77	0.51	0.72	0.32	0.56	0.11

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

Magnesium	mg/Kg	26.6	32.2	18	14.2	40.1	26.6	26.5
Sulphate	mg/Kg	125	215	163	283	162	72.2	277
CEC	meq/100g	12.2	17.3	14.4	10.1	13.3	13.3	11.1
Carbonate	mg/Kg	NIL	76.5	NIL	NIL	18.2	NIL	NIL
Bi-Carbonate	mg/Kg	102	405	24.4	65.5	132	185	78.9
TKN	%	0.22	0.17	0.19	0.11	0.21	0.17	0.16
Bulk density	g/cm ³	1.55	1.32	1.22	1.65	1.32	1.19	1.34
Phosphorous	mg/Kg	165	266	232	188	110	85.5	157
Sand	%	70.2	70.2	69.6	66.6	58.2	55	64.3
Clay	%	14.1	20.2	22.0	16.3	20.2	21.1	14.3
Silt	%	23	13.1	12.4	25.5	23.3	26	21.4
SAR	meq/Kg	10.993	13.578	13.167	12.0731	10.85324	4.9225	12.4
Silicon	%	0.099	0.088	0.089	1.011	0.093	0.084	0.098

3.6.1.1 Physical Properties:

Regular cultivation practices increase the bulk density of soils thus inducing compaction. This results in a reduction in water percolation rate and penetration of roots through soils. Soils with low bulk density have favorable physical conditions whereas those with high bulk density exhibit poor physical conditions for agriculture crops. The bulk density of the soil in the study area ranged between 1.19 to 1.65 meq/100g which indicates favorable physical condition for plant growth. The water holding capacity was found in the range of 2.6 ml/l to 5.10 ml/l.

3.6.1.2 Chemical Properties:

Chemical characteristics of soils include pH, exchangeable cations and fertility status in the form of NPK values and organic matter. The value of the pH ranges from 7.25 to 8.56, which indicates majority of pH of the soil is slightly alkaline. The soil in the project site is sodic in nature, which challenges because they tend to have very poor structure which limits or prevents water infiltration and drainage. The organic matter varies from 0.11 to 0.77 %, which indicates the soil is slightly unfertile.

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

3.7 ECOLOGY AND BIODIVERSITY

Ecology and Biodiversity is studied for 10 km radius around the project site. Project site and 2km around the project site is considered as core zone and from 2 km to 10 km radius, it is considered as buffer zone.

- Primary field survey is carried out for the assessment of flora and fauna in the core zone.
- Secondary data from Journals/Literature were studied and compiled to understand the species present in the buffer zone.

3.7.1 Methods available for floral analysis:

3.7.1.1 Plot Sampling Methods

- Quadrat – 2D shape (e.g. square or rectangle, or other shape) used as a sampling unit
- Transect
 - Line transects feature only a length dimension, usually defined by a tape stretched across the area to be sampled.
 - Belt transects have a width as well as length.
 - Pace-transects are established when the observer strides along an imaginary line across the sample site and uses their foot placement to determine specific sampling points.

3.7.1.2 Plot less Sampling Methods

- Closest individual method - Distance is measured from each random point to the nearest individual.
- Nearest neighbour method - Distance is measured from an individual to its nearest neighbour.

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

- Random pairs method - Distance is measured from one individual to another on the opposite side of the sample point.
- Point-centred quarter (PCQ) method - Distance is measured from the sampling point to the nearest individual in each quadrat.

3.7.2 Field study& Methodology adopted:

To assess the suitability of the methodology, a random field survey was done. Field survey was conducted around a 2 km radius from the project site and five locations were chosen based on the species density. Quadrat method is chosen for the proposed study as compared to other sampling methods, because they are relatively simple to use. Quadrat plots are uniform in size and shape and distributed randomly throughout the sample area, which makes the study design straightforward. They are also one of the most affordable techniques because they require very few materials.

3.7.3 Study outcome:

Phyto-sociological parameters, such as ***Density, Frequency, Basal Area, Abundance and Importance Value Index*** of individual species (Trees) were determined in randomly placed quadrates of different sizes in the study area. Relative frequency, relative basal area and relative density were calculated and the sum of these three represented Importance Value Index (IVI) for various species. For shrubs, herbs and grasses, ***Density, Frequency, Relative Density & Relative Frequency were found.***

Sample plots were selected in such a way to get maximum representation of different types of vegetation and plots were laid out in different parts of the study area of 2 km radius. Analysis of the vegetation will help in determining the relative importance of each species in the study area and to reveal if any economically valuable species is threatened in the process.

Table 3-15 Calculation of Density, Frequency (%), Dominance, Relative Density, Relative Frequency, Relative Dominance & Important Value Index

Parameters	Formula
Density	Total No. of individuals of species/ Total No. of Quadrats used in sampling

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Frequency (%)	(Total No. of Quadrats in which species occur/ Total No. of Quadrats studied) * 100
Dominance	Total Basal Area /Total area sampled
Abundance	Total No. of individuals of species/ No. of Quadrats in which they occur
Relative Density	(Total No. of individuals of species/Sum of all individuals of all species) * 100
Relative Frequency	(Total No. of Quadrats in which species occur/ Total No. of Quadrats occupied by all species) * 100
Relative Dominance	Dominance of a given species/Total Dominance of all species
Important Value Index	Relative Density + Relative Frequency + Relative Dominance

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Table 3-16 Tree Species in the core Zone

S. No.	Scientific Name	Local Name	Total No. of species	Total of Quadrants with species	Total No. of Quadrants	Density	Frequency (%)	Abundance	Dominance	Relative Density	Relative Frequency	Relative Dominance	IVI	IUCN Conservation Status
1	Ficus Carica	Athi Maram	2	2	6	0.33	33.33	1	0.28	1.68	2.17	4.45	8.31	Least Concern
2	Cocos nucifera	Thennai	10	6	6	1.67	100.0	1.67	0.15	8.40	6.52	2.39	17.32	Not assessed
3	Azadirachta indica	Veppam	17	6	6	2.83	100.0	2.83	0.13	14.29	6.52	1.98	22.79	Not assessed
4	Tamarindus indica	Puli	10	6	6	1.67	100.0	1.66	0.20	8.40	6.52	3.09	18.02	Not assessed
5	Mangifera indica	Mamaram	7	6	6	1.17	100.0	1.16	0.07	5.88	6.52	1.11	13.52	Data insufficient
6	Morinda pubescens	Nuna	6	6	6	1.00	100.0	1	0.24	5.04	6.52	3.74	15.31	Not assessed

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7	Couroupita guianensis	Nagalingam	5	3	6	0.83	50.00	1.67	0.14	4.20	3.26	2.18	9.64	Not assessed
8	Bombax ceiba	Sittan	4	4	6	0.67	66.67	1	0.08	3.36	4.35	1.27	8.98	Not assessed
9	Acacia nilotica	Karuvelai	4	4	6	0.67	66.67	1	0.28	3.36	4.35	4.45	12.16	Least Concern
10	Bambusa vulgaris	Moongil	4	4	6	0.67	66.67	1	0.50	3.36	4.35	7.92	15.63	Not assessed
11	Syzygium cumini	naval	5	1	6	0.83	16.67	5	0.11	4.20	1.09	1.79	5.07	Not assessed
12	Carica papaya	Papaya	3	3	6	0.50	50.00	1	0.09	2.52	3.26	1.43	7.21	Not assessed
13	Psidium guajava	Guava	3	3	6	0.50	50.00	1	0.23	2.52	3.26	3.61	9.39	Not assessed
14	Cassia siamea	ManjalKonrai	3	2	6	0.50	33.33	1.5	0.07	2.52	2.17	1.11	5.81	Least Concern
15	Ficus religiosa	Arasa maram	3	3	6	0.50	50.00	1	0.09	2.52	3.26	1.35	7.13	Not assessed
16	Musa paradise	Vaazhai	3	3	6	0.50	50.00	1	0.08	2.52	3.26	1.19	6.97	Not assessed

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17	Prosopis juliflora	Vaelikaruvai	3	3	6	0.50	50.00	1	0.21	2.52	3.26	3.34	9.13	Not assessed
18	Tectona grandis	Thekku	3	3	6	0.50	50.00	1	0.12	2.52	3.26	1.88	7.66	Not assessed
19	Thespesia populnea	Poovarasam	3	3	6	0.50	50.00	1	0.15	2.52	3.26	2.39	8.18	Not assessed
20	Causuarina equisetifolia	Savukku	2	2	6	0.33	33.33	1	0.21	1.68	2.17	3.34	7.20	Not assessed
21	Alstonia scholaris	Elilaipalai	2	2	6	0.33	33.33	1	0.27	1.68	2.17	4.31	8.16	Least Concern
22	Anacardium occidentale	Cashew	1	1	6	0.17	16.67	1	0.44	0.84	1.09	6.96	8.88	Not assessed
23	Artocarpus heterophyllus	Palaa	2	2	6	0.33	33.33	1	0.18	1.68	2.17	2.85	6.70	Not assessed
24	Aegle marmelos	Vilvam	1	1	6	0.17	16.67	1	0.16	0.84	1.09	2.50	4.43	Not assessed
25	Delonix elata	Perungondrai	1	1	6	0.17	16.67	1	0.17	0.84	1.09	2.62	4.54	Least Concern
26	Pithecellobium dulce	Kodukapuli	1	1	6	0.17	16.67	1	0.14	0.84	1.09	2.18	4.11	Not assessed

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27	Citrus medica	Elumichai	2	2	6	0.33	33.33	1	0.23	1.68	2.17	3.61	7.46	Not assessed
Total			110	83					5.02					

Table 3-17 Shrubs in the Core Zone

S. No.	Scientific Name	Local Name	Total No. of species	Total of Quadrants with species	Total No. of Quadrants	Density	Frequency (%)	Abundance	Relative Density	Relative Frequency	IUCN Conservation Status
1	Jatropagossypifolia	Kaatamanaku	32	17	24	1.17	0.71	1.65	14.43	17.17	Not Assessed
2	Calotropis gigantea	Erukam	16	12	24	0.58	0.50	1.17	7.22	12.12	Not Assessed
3	Tabernaemontanadivaricata	Crepe Jasmine	4	3	24	0.13	0.13	1	1.55	3.03	Not Assessed
4	Catharanthus roseus	Nithyakalyani	4	3	24	0.13	0.13	1	1.55	3.03	Not Assessed
5	Datura metal	Ummattangani	7	4	24	0.21	0.17	1.25	2.58	4.04	Not Assessed

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6	Robiniapseudoacacia	Black locust	15	5	24	0.71	0.21	3.4	8.76	5.05	Least Concern
7	Acalypha indica	Kuppaimeni	18	8	24	0.83	0.33	2.5	10.31	8.08	Not Assessed
8	Stachytarphaeurticifolia	Rat tail	13	9	24	0.63	0.38	1.67	7.73	9.09	Not Assessed
9	Woodfordiafruiticosa	Velakkai	4	3	24	0.13	0.13	1	1.55	3.03	Least Concern
10	Hibiscus rosa sinensis	Sembaruthi	3	2	24	0.13	0.08	1.5	1.55	2.02	Not Assessed
11	Lantana camara	Unnichedi	8	6	24	0.38	0.25	1.5	4.64	6.06	Not Assessed
12	Parthenium hysterophorous	Vishapoondur	45	13	24	2.08	0.54	3.85	25.77	13.13	Not Assessed
13	Euphorbia geniculate	Amman Pacharisi	5	3	24	0.13	0.13	1	1.55	3.03	Not Assessed

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Table 3-18 Herbs & Grasses in the core zone

S. No.	Scientific Name	Local Name	Total No. of species	Total of Quadrants	Total No. of Quadrants	Density	Frequency (%)	Abundance	Relative Density	Relative Frequency	IUCN Conservati on status
1	Helicteresisora	Valampuri	4	2	30	0.07	0.07	1	0.79	2.15	Not assessed
2	Tridax procumbens	Vettukaayathalai	7	4	30	0.17	0.13	1.25	1.98	4.30	Not assessed
3	Heraculem spondylium	Hog Weed	19	10	30	0.67	0.33	2	7.94	10.75	Not assessed
4	Tridax procumbens	Cuminipachai	18	4	30	0.50	0.13	3.75	5.95	4.30	Not assessed
5	Senna occidentalis	Nattamsakarai	30	4	30	0.83	0.13	6.25	9.92	4.30	Not assessed
6	Plumbago zeylanica	Chittiramoolam	12	3	30	0.10	0.10	1	1.19	3.23	Not assessed
7	Scrophularia nodosa	Sarakkothini	18	7	30	0.50	0.23	2.14	5.95	7.53	Not assessed

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8	Viburnum dentatum	Viburnum	7	5	30	0.17	0.17	1	1.98	5.38	Least concern
9	Cynodondactylon	Arugu	15	6	30	0.40	0.20	2	4.76	6.45	Not assessed
10	Euphorbia hirta	Amman Pacharisi	7	4	30	0.17	0.13	1.25	1.98	4.30	Not assessed
11	Sida cordifolia	Maanikham	50	4	30	1.50	0.13	11.25	17.86	4.30	Not assessed
12	Sida acuta	Malaidangi	12	3	30	0.33	0.10	3.33	3.97	3.23	Not assessed
13	Laportea canadensis	Peruganchori	28	20	30	1.00	0.67	1.5	11.90	21.51	Not assessed
14	Sporobolus fertilis	Giant Parramatta Grass	10	4	30	0.30	0.13	2.25	3.57	4.30	Not assessed
15	Tephrosia purpurea	Kavali	23	4	30	0.67	0.13	5	7.94	4.30	Not assessed

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3.7.4 Calculation of species diversity by Shannon – wiener Index, Evenness and richness by Margalef:

Biodiversity index is a quantitative measure that reflects how many different types of species, there are in a dataset, and simultaneously takes into account how evenly the basic entities (such as individuals) are distributed among those types of species. The value of biodiversity index increases both when the number of types increases and when evenness increases. For a given number of type of species, the value of a biodiversity index is maximized when all type of species are equally abundant. Interpretation of Vegetation results in the study area is given below.

Table 3-19 Calculation of species diversity

Description	Formula
Species diversity – Shannon – Wiener Index	$H = \sum [(p_i) * \ln(p_i)]$ Where p_i : Proportion of total sample represented by species i : number of individuals of species i / total number of samples
Evenness	$H/H_{\max}$ $H_{\max} = \ln(s) = \text{maximum diversity possible}$ $S = \text{No. of species}$
Species Richness by Margalef	$RI = S - 1 / \ln N$ Where S = Total Number of species in the community N = Total Number of individuals of all species in the community

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3.7.5 Calculation of species diversity by Shannon – wiener Index, Evenness and richness by Margalef for trees

i. Species Diversity

Scientific Name	Common Name	No. of Species	Pi	ln (Pi)	Pi x ln (Pi)
Ficus Carica	Athi Maram	2	0.018182	-4.00733	-0.07286
Cocos nucifera	Thennai	10	0.090909	-2.3979	-0.21799
Azadirachta indica	Veppam	17	0.154545	-1.86727	-0.28858
Tamarindus indica	Puli	10	0.090909	-2.3979	-0.21799
Mangifera indica	Mamaram	7	0.063636	-2.75457	-0.17529
Morinda pubescens	Nuna	6	0.054545	-2.90872	-0.15866
Couroupita guianensis	Nagalingam	5	0.045455	-3.09104	-0.1405
Bombax ceiba	Sittan	4	0.036364	-3.31419	-0.12052
Acacia nilotica	Karuvelai	4	0.036364	-3.31419	-0.12052
Bambusa vulgaris	Moongil	4	0.036364	-3.31419	-0.12052
Syzygium cumini	naval	5	0.045455	-3.09104	-0.1405
Carica papaya	Papaya	3	0.027273	-3.60187	-0.09823
Psidium guajava	Guava	3	0.027273	-3.60187	-0.09823
Cassia siamea	ManjalKonrai	3	0.027273	-3.60187	-0.09823
Ficus religiosa	Arasa maram	3	0.027273	-3.60187	-0.09823
Musa paradise	Vaazhai	3	0.027273	-3.60187	-0.09823
Prosopis juliflora	Vaelikaruvai	3	0.027273	-3.60187	-0.09823
Tectona grandis	Thekku	3	0.027273	-3.60187	-0.09823
Thespesia populnea	Poovarasam	3	0.027273	-3.60187	-0.09823
Causuarina equisetifolia	Savukku	2	0.018182	-4.00733	-0.07286
Alstonia scholaris	Elilaipalai	2	0.018182	-4.00733	-0.07286
Anacardium occidentale	Cashew	1	0.009091	-4.70048	-0.04273
Artocarpus heterophyllus	Palaa	2	0.018182	-4.00733	-0.07286

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Aegle marmelos	Vilvam	1	0.009091	-4.70048	-0.04273
Delonix elata	Perungondrai	1	0.009091	-4.70048	-0.04273
Pithecellobium dulce	Kodukapuli	1	0.009091	-4.70048	-0.04273
Citrus medica	Elumichai	2	0.018182	-4.00733	-0.07286
Total		110			-3.02215005

H (Shannon Diversity Index) =3.02

Shrubs

Scientific Name	Common Name	No. of Species	Pi	ln (Pi)	Pi x ln (Pi)
Jatropagossypifolia	Kaatamanaku	32	0.183908	-1.69332	-0.31142
Calotropis gigantea	Erukam	16	0.091954	-2.38647	-0.21945
Tabernaemontanadivaricata	Crepe Jasmine	4	0.022989	-3.77276	-0.08673
Catharanthus roseus	Nithyakalyani	4	0.022989	-3.77276	-0.08673
Datura metal	Ummattangani	7	0.04023	-3.21315	-0.12926
Robiniapseudoacacia	Black locust	15	0.086207	-2.45101	-0.21129
Acalypha indica	Kuppaimeni	18	0.103448	-2.26868	-0.23469
Stachytarphaeurticifolia	Rat tail	13	0.074713	-2.59411	-0.19381
Woodfordiafruiticosa	Velakkai	4	0.022989	-3.77276	-0.08673
Hibiscus rosa sinensis	Sembaruthi	3	0.017241	-4.06044	-0.07001
Lantana camara	Unnichedi	8	0.045977	-3.07961	-0.14159
Parthenium hysterophorous	Vishapoondur	45	0.258621	-1.35239	-0.34976
Euphorbia geniculata	Amman Pacharisi	5	0.028736	-3.54962	-0.102
Total		174			-2.2234

H (Shannon Diversity Index) =2.22

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Herbs

Scientific Name	Common Name	No. of Species	Pi	ln (Pi)	Pi x ln (Pi)
Helicteresisora	Valampuri	4	0.015385	-4.17439	-0.06422
Tridax procumbens	Vettukaayathalai	7	0.026923	-3.61477	-0.09732
Heraculem spondylium	Hog Weed	19	0.073077	-2.61624	-0.19119
Tridax procumbens	Cuminipachai	18	0.069231	-2.67031	-0.18487
Senna occidentalis	Nattamsakarai	30	0.115385	-2.15948	-0.24917
Plumbago zeylanica	Chittiramoolam	12	0.046154	-3.07577	-0.14196
Scrophularia nodosa	Sarakkothini	18	0.069231	-2.67031	-0.18487
Viburnum dentatum	Viburnum	7	0.026923	-3.61477	-0.09732
Cynodondactylon	Arugu	15	0.057692	-2.85263	-0.16457
Euphorbia hirta	Amman Pacharisi	7	0.026923	-3.61477	-0.09732
Sida cordifolia	Maanikham	50	0.192308	-1.64866	-0.31705
Sida acuta	Malaidangi	12	0.046154	-3.07577	-0.14196
Laportea canadensis	Peruganchori	28	0.107692	-2.22848	-0.23999
Sporobolus fertilis	Giant Parramatta Grass	10	0.038462	-3.2581	-0.12531
Tephrosia purpurea	Kavali	23	0.088462	-2.42519	-0.21454
Total		260			-2.51

H (Shannon Diversity Index) =2.51

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i. Species diversity calculation

Details	H	Hmax	Evenness	Species Richness (Margalef)
Trees	3.02	3.36	0.89	5.95
Shrubs	2.22	2.56	0.86	2.32
Herbs	2.51	2.70	0.92	2.51

From the above, it can be interpreted that herb community has higher diversity. While the tree community shows less diversity. It is also observed that most of the quadrates have controlled generation of plant species with older strands. Higher herb species diversity can be interpreted as a greater number of successful species and a more stable ecosystem where more ecological niches are available, environmental change is less likely to be damaging to the ecosystem. Species richness is high for herb community when compared with tree and shrubs.

3.7.6 Floral study in the Buffer Zone:

Economically important Flora of the study area

Agricultural crops: Paddy, Maize, Ragi, Banana, Sugarcane, Cotton, Tamarind, Coconut, Mango, Groundnut, Vegetables and Flowers by the local people.

Medicinal species: The nearby area is also endowed with the several medicinal species which are commonly available in the shrub forest and waste lands. The common medicinal species of the region are *Asparagus racemosus* (satamulli), *Aegle marmelos* (golden apple), *Azadirachta indica* (Neem) etc.

Rare and endangered floral species: There are no rare or endangered or threatened (RET) species of in the study area. During the vegetation survey, there are no any species which are endangered or threatened under IUCN (International Union for Conservation of Nature and Natural resources) guidelines.

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3.7.7 Faunal Communities

Both direct and indirect observation methods were used to survey the fauna.

- Point Survey Method: Observations were made in each site for 15 minutes duration.

Roadside Counts: The observer traveled by motor vehicles from site to site, all sightings were recorded (this was done both in the day and night time). An index of abundance of each species was also established.

Pellet and Track Counts: All possible animal tracks and pellets were identified and recorded (South Wood, 1978).

Additionally, survey of relevant literature was also done to consolidate the list of fauna distributed in the buffer zone.

Based on the Wildlife Protection Act, 1972 (WPA 1972, Anonymous. 1991, Upadhyay 1995, Chaturvedi and Chaturvedi 1996) species were short-listed as Schedule II or I and considered herein as endangered species. Species listed in Ghosh (1994) are considered as Indian Red List species.

Methodology Adopted:

Point Survey method was adopted for this development project where observations were made in each site for 15 minutes duration (10 times).

Study in the core zone:

Point Survey method was adopted for the study within 2 km radius and the following species were observed.

Mammals: No wild mammalian species was directly sighted during the field survey. Discussion with local villagers located around the study area also could not confirm presence of any wild animal in that area. Three striped Palm Squirrel, Common Indian Hare, Common mongoose, Common Mouse etc were observed during primary survey.

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Avifauna: Since birds are considered to be the indicators for monitoring and understanding human impacts on ecological systems (Lawton, 1996) attempt was made to gather quantitative data on the avifauna by walk through survey within the entire study area and surrounding areas. From the primary survey, a total of 26 species of avifauna were identified and recorded in the study area. The diversity of avifauna from this region was found to be quite high and encouraging.

The list of fauna species found in the study area is mentioned in Table below.

Table 3-20 List of fauna species

Scientific Name	Common Name	Schedule of wild life protection act	IUCN conservation status
Mammals			
Funambulus pennanti	Palm Squirrel	IV	Least Concern
Mus rattus	Indian rat	IV	Not listed
Bandicota bengalensis	Indian mole rat	IV	Least Concern
Funambulus palmarum	Three stripped palm squirrel	IV	Least Concern
Herestes edwardsii	Common Mongoose	IV	Not listed
Mus musculus	Common Mouse	IV	Least Concern
Bandicota indica	Rat	IV	Least Concern
Lepus nigricollis	Indian Hare	IV	Least Concern
Felis catus	Cat	Not listed	Not listed
Canis lupus familiaris	Indian dog	Not listed	Not listed
Bos Indicus	Indian Cow	Not listed	Not listed
Bubalus bubalis	Buffalo	I	Not listed
Sus scrofa domesticus	Domestic pig	Not listed	Not listed
Birds			
Milvus migrans	Black kite	IV	Least concern
Saxicoloides fulicatus	Indian Robin	IV	Least concern

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Pycnonotus cafer	Red vented Bulbul	IV	Least concern
Phragamaticola aedon	Thick billed warbler	IV	Least concern
Pericrocotus cinnamomeus	Small Minivet	IV	Least concern
Eudynamys scolopaceus	Koel	IV	Least concern
Psittacula krameni	Rose ringed parakeet	IV	Least concern
Dicrurus marcocercus	Black drongo	IV	Least concern
Columba livia	Rock pigeon	IV	Least concern
Corvus splendens	House crow	IV	Least concern
Alcedo atthis	Small blue kingfisher	IV	Least concern
Cuculus canorus	Common Cukoo	IV	Least concern
Reptiles & Amphibians			
Chameleon zeylanicum	Chameleon	IV	Not listed
Calotes versicolor	Common garden lizard	II	Not listed
Bungarus caeruleus	Common krait	IV	Not listed
Ophisops leschenaultia	Snake eyed lizard	--	Not listed
Bufo melanostictus	Toad	IV	Least concern
Ptyas mucosa	Rat snakes	IV	Least concern
Hemidactylus sp.	House lizard	--	Not listed
Butterflies			
Danaus chrysippus	Plain Tiger	--	Not listed
Papilio demoleus	Common lime	--	Not listed

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Table 3-21: Demography Survey Study

Source: Census of India, 2011

S. No	Villages	Household	Population	Sex Ratio		Literacy Rate		SC	ST
				Male	Female	Male	Female		
1	Kariyasandiram	95	346	184	162	23	24	0	0
2	Amuthugondapalli	120	543	274	269	131	97	228	0
3	Koladasapuram	221	857	429	428	276	216	390	0
4	Midithepalli	287	1287	667	620	369	261	278	31
5	Kumbalam	164	761	394	367	254	159	0	95
6	Athimugam	937	4540	2339	2201	1317	980	334	17
7	Midithepalli	650	2873	1484	1389	960	695	583	0
8	Advanapalli	58	239	123	116	75	50	1	0
9	Sudugondapalli	87	447	229	218	128	89	95	0
10	Palavanapalli	258	1096	540	556	349	288	370	0
11	Nandimangalam	591	2602	1314	1288	797	609	713	0
12	Pathamuthali	205	967	499	468	275	198	392	0
13	Muthalli	108	444	223	221	132	90	130	0
14	Dhasapalli	152	894	443	451	202	161	1	0
15	Alur	678	3018	1569	1449	1058	736	178	5
16	Bukkasagaram	460	2126	1109	1017	742	471	319	0
17	Doripalli	852	3681	1898	1783	1165	848	596	0
18	A.Settipalli	605	2764	1428	1336	960	635	509	11
19	Moranapalli	2174	9160	4855	4305	3403	2439	1503	13
20	Maruthanapalli	1093	4816	2532	2284	1547	1054	422	0
21	Shoolagiri	2101	9530	4788	4742	3480	2923	1487	0
22	Onalvadi	1607	6656	3411	3245	2475	1968	1360	0
23	Sanamavu	925	4248	2182	2066	1487	1062	659	183
24	Halekotta	707	2990	1535	1455	1071	760	209	83
25	Samanapalli	721	3198	1635	1563	922	730	304	0

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3.9 TRAFFIC IMPACT ASSESSMENT

Traffic data collected continuously for 24 hours by visual observation and counting of vehicles under three categories, viz., heavy motor vehicles, light motor vehicles and two/three wheelers. As traffic densities on the roads are high, two skilled persons were deployed simultaneously at each station during each shift- one person on each of the two directions for counting the traffic. At the end of each hour, fresh counting and recording was undertaken. Total numbers of vehicles per hour under the three categories were determined.



Figure 3.14: Site Connectivity

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Table 3-22: No. of Vehicles per Day

S. No	Vehicles Distribution	Number of Vehicles Distribution/Day	Passenger Car Unit (PCU)	Total Number of Vehicle in PCU
		MDR	-	MDR
1	Cars	831	1	831
2	Buses	249	3	747
3	Trucks	352	3	1056
4	Two wheelers	946	0.5	473
5	Three wheelers	490	1.5	735
Total		2868	-	3842

Table 3-23: Existing Traffic Scenario and LOS

Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	Existing V/C Ratio	LOS
MDR-422	3842/24=160.08	413	0.387	B

Note: The existing level may be “Very Good” for MDR=422.

V/C	LOS	Performance
0.0-0.2	A	Excellent
0.2-0.4	B	Very Good
0.4-0.6	C	Good/ Average/ Fair
0.6-0.8	D	Poor
0.8 - 1.0	E	Very Poor

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4 Anticipated Environmental Impacts & Mitigation Measures

This chapter describes the anticipated impacts on the environment and mitigation measures. The method of assessment of impacts including studies carried out, modeling techniques adopted to assess the impacts where pertinent should be elaborated in this chapter. It should give the details of the impacts on the baseline parameters, both during the construction and operational phases and suggests the mitigation measures to be implemented by the proponent.

4.1 INTRODUCTION

An environmental impact is defined as any change to the environment, whether adverse or beneficial, resulting from a facility's activities, products, or services. The anticipation of the possible & potential Environmental impact due to the proposed project is a key step in EIA. Based on the impacts assessed, appropriate mitigation measures should be adopted to maintain the environment with less or no damage.

Environmental Impacts can be group into Primary impacts & Secondary Impacts

Primary Impacts: These impacts are directly attributed by the project

Secondary Impacts: These are those which are induced by primary impacts and include the associated investments and changed patterns of the social and economic activities by the action.

Assessment of impacts is done for the following Environmental Parameters:

- Land Environment
- Water Environment
- Air Environment
- Noise Environment
- Biological Environment
- Socio Economic Environment

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4.2 LAND ENVIRONMENT:

Aspect	Impact	Mitigation Measures
<i>Mining of rough stone</i>	The proposed 3.76.67 Ha mine located in Midithepalli Village having 12,24,475m ³ of Rough Stone & 82,530m ³ of Gravel respectively for the period of Ten years. The quarry operation is proposed to carry out with conventional open cast mechanized mining with 5.0-meter vertical bench and bench width of 5.0 meter. At the end of 10 years, mining lease area will be converted into ultimate pit.	The proposed project site is not prone to any kind of soil erosion (Source: Bhuvan). In addition, garland drainage of 1m x 1m will be provided to avoid storm water run- off. It is proposed to plant 1885 Nos of native species (Neem, Magizham, Tamarind, Elandhai and Vilvam) along the roads, outer periphery of the mining area which enhances the binding property of the soil.
	Ultimate Pit Dimensions:	It is proposed to improve the affected land wherever possible for better land use, so as to support vegetation and creation of water reservoir in the ultimate pit after quarrying. The entire lease area is covered 2.0m of Gravel and the estimated quantity of Gravel is 82,530m ³ .
	344.0m (L)Avg X 112.0m (W)Avg X 47.0m (D) (Surface Ground level above-7m, Surface Ground level below-40m)	

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	The main impact of open cast mining on land-use is land degradation. The land is bound to be excavated for mining of Rough Stone and Gravel Quarry. Impact on soil of the study area will be minimal as there are no wastewater generated, heavy metal infusion, stack emissions. Impact due to transformation of terrain characteristics over the large area results in soil degradation.	Gravel formation will be removed and hydraulic excavators are used for loading the gravel into the tipper from pit head to needy buyers. This will be done only after obtaining permission and paying necessary seigniorage fees to the Government. The source of dust generation is majorly due to drilling, blasting, loading & unloading of the mined-out mineral, the impact will be mitigated by water sprinkling regularly once in 3hrs. The proposed mining activity is carried out in hilly terrain where the altitude of the area is 869m above MSL. After removal of minerals, undulating portion will be created. Excavated area or ultimate pit at the end of the mine period will be converted into water reservoir. Two tier tree belts will be planted along the safety distance.
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	Solid waste will be generated from the mining activity as there will be refuse also generation of domestic waste. If it is not properly managed, may cause odor and health problem to the workers.	The 100% recovery is achieved by extracting the entire mineable reserve. Hence there will be no refuse generation due to the mining activity. Apart from that, a very meagre quantity of domestic waste will be generated in the project, which will be handed over to the local body on daily basis.
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4.3 WATER ENVIRONMENT:

Aspect	Impact	Mitigation Measures
<i>Drilling, Blasting, Loading and unloading, Transportation of the excavated mineral.</i>	The mining in the area may cause ground water contamination due to intersection of the water table and mine runoff.	The water table will not be intersected during mining, as the ultimate depth is limited upto 47.0m (2m Gravel + 45m Rough Stone), whereas the ground water table is at 66m below the ground level. The municipal wastewater will be disposed into septic tanks of 5 cum and soak pit. No

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	The ground water depletion may occur due to mining activity Chemicals consisting of nitrate used for blasting may pollute the surface run off. Improper management of Domestic wastewater in the Mine lease may create unhygienic conditions in the site thereby causing health impacts to the labours.	chemicals consisting of toxic elements will be used for carrying out mining activity. The ground water table is at a depth of 66m BGL, the mining operation will not affect the aquifer. The ultimate pit at the end of the mining operation will be used for rainwater storage, the stored water will be used for green belt development and further the stored water will be used for domestic purposes (other than drinking) after proper treatment. Further, the run-off water will be stored in sumps and after proper treatment; water will be used in the mining operation for dust suppression. Provision of urinals/Latrines along with septic tank followed by soak pit arrangement will be provided in the Mine Lease area for the proper management of wastewater
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4.4 AIR ENVIRONMENT:

Aspect	Impact	Mitigation Measures
<i>Drilling, Blasting, Loading and unloading, Transportation of the excavated mineral.</i>	<i>Impacts during Operation Phase</i> During mining operation, fugitive dust and other air pollutants like particulate matter (PM₁₀ & PM_{2.5}) will be generated. The main source of pollutants arises due to drilling and blasting. 2 No of Tipper will be used for loading and unloading, 2 No of Excavator (1.20 m³ bucket capacity (with rock breaker attachment) will be used for excavation of the mineral which contributes to the generation of fugitive dust. In addition, blasting will be done using explosives leading to the generation of dust.	<i>Mitigation Measures during Operation Phase</i> It is proposed to plant 1885 Nos of native species (40% inside lease area & 60% outside lease area) along the haul roads, outer periphery within the lease area to prevent the impact of dust in consultation with Forest department for the plantation of trees (Neem, Magizham, Tamarind, Elandhai and Vilvam) in two tier to combat air pollution and with herbs (Nerium) in between the tree species. Planning transportation routes of the mined out mineral, so as to reach the nearest paved roads (an approach road) by shortest route connecting to Haul village road. Alternatively, gravelled road may be constructed between mine lease area and nearest paved road

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	<u><i>Effect on Human</i></u> • Adverse effect on human health of working labourers and neighbouring villagers like effect on breathing and respiratory system, damage to lung tissue, influenza or asthma. • Dust generation due to loading and unloading of mineral and due to transportation can also affect the workers as well as nearby villagers. <u><i>Effect on Plants</i></u> • Stomatal index may be minimized due to dust deposit on leaf.	connectivity. The speed of trucks plying on the haul road will be limited to 20km/hr to avoid generation of dust. The trucks will be covered by tarpaulin. Overloading will be avoided. Personal Protective Equipments (PPEs) like eye goggles, dust mask, leather gloves, safety shoes & boots will be provided to the workers engaged at dust generation points like excavation and loading points. 0.5 KLD of water will be proposed for sprinkling on unpaved roads to avoid dust generation during transportation.
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Air Quality Modeling:

The AERMOD is actually a modeling system with three separate components:

- AERMOD (AERMIC Dispersion Model),
- AERMAP (AERMOD Terrain Preprocessor)
- AERMET (AERMOD Meteorological Preprocessor)

4.4.1 Source Characterization

A detailed listing of all emission sources and their corresponding modelling input release parameters and emission rates is listed this report. A general description of how each source type was treated is presented below.

The emission Sources from the proposed operation are

Point Sources:

Point sources for mining operations are typically include dust collectors, hot water heaters, and emergency generator(s). Since at the present project the following sources are anticipated.

1. Hydraulic excavator –1.2 Cum Bucket Capacity (with Rock Breaker Attachment)
2. Jack Hammer 25.5 mm Dia
3. Tipper
4. Tractor Mounted - Compressor
5. Drilling and excavation with Accessories

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Road Sources:

A road network was developed to depict the anticipated haul truck routes and truck discharge locations during the mine operations. The anticipated emissions from the road sources and corresponding anticipated impact during the monitoring period of April 2025 to June 2025 emissions were estimated. Emissions due to haul road and general plant traffic on the unpaved road network were modelled as volume sources. The model volume source parameter for the haul roads initially utilized USEPA developed emission factors for hauling trucking. The haul road sources utilized source to source spacing of 6 meters along the simulated haul roads. The initial lateral dimension of the sources were set to 3 m were used as an input to replicated a 2 truck travel adjacent for a typical mining scenario.

The parameters considered for the hauling operation include the following,

- size of haul trucks commonly used
- degree of dust control/compaction of permanent haul roads

Other fugitive particulate emission sources:

Other fugitive particulate emission sources that were modelled as volume sources include the following:

- Fugitive emissions from trucks unloading at the primary crusher were represented by a single volume source. The release height was set to 0 meters (dump pocket is at grade level).
- Fugitive emissions due to wind erosion is not considered as the mining area is predominately rocky surface with minimal wind erosion. If an wind erosion is anticipated to occur, it would be localized.

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- Fugitive emissions from transfer points were represented by single volume sources. The release heights for these sources were set to the actual height of the truck transfer process.

Post Project Scenario

Emissions from operations will result from process equipment and mining operations. Process equipment was modeled at maximum capacity. Emissions from mining were based upon the mining rate and haul truck travel necessary to transport the stones and waste from the pit to the storage area.

Predicted maximum ground level concentrations considering micro meteorological data of April 2025 to June 2025 are superimposed on the maximum baseline concentrations obtained during the study period to estimate the post project scenario, which would prevail at the post operational phase. The overall scenario with predicted concentrations over the maximum baseline concentrations is shown in the following table along with isopleths.

Table 4-1 Emission Factors for uncontrolled mining

Activity	Emission Factor		References	
Topsoil handling	Scraper	0.029 Kg TSPM/ average time between spray application	USEPA (2008)	Jose I. Huertas & Dumar A. Camacho & Maria E. Huertas, Standardized emissions inventory methodology for open-pit mining areas, Environmental Science Pollution Research, 2012.
	Bulldozing	15.048	USEPA (2008)	

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		kg PM10/ Hr excavation		
	Loading	2.3237E-04 kg PM10/ average time between spray application	USEPA (2006a)	
	Haulage	0.69718 kg PM10/VKT	USEPA (2006a) Cowherd (1988)	
Rough stone mining	Wet drilling	8.00E-5 lbs PM10/ Ton produce	EPA. August, 2004. Section 11.19.2, Crushed Stone Processing and Pulverized Mineral Processing. In: Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources, Fifth Edition, AP-42. U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards. Research Triangle Park, North Carolina.	
	Loading	1.00E-4 lbs PM10/ Ton produce		

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4.5 NOISE ENVIRONMENT:

Aspect	Impact	Mitigation Measures
<i>Drilling, Blasting, Loading and unloading, Transportation of the excavated mineral.</i>	Usage of Equipments (Excavator, Tipper, Jack Hammer), Machinery and trucks used for transportation will generate noise. Noise from the machinery can cause hypertension, high stress level, hearing loss, sleep disturbance etc due to prolonged exposure. Number of vehicles will be increased due to the proposed mining activity hence vehicle may collide which may result in unwanted sound and can also cause	• The machinery will be maintained in good running condition so that noise will be reduced to minimum possible level. • Awareness will be imparted to the workers once in six months about the permissible noise level and effect of maximum exposure to those levels. Adequate silencers will be provided in all the diesel engines of vehicles. • It will be ensured that all transportation vehicles carry a valid PUC Certificates. • Speed of trucks entering or leaving the mine will be limited to moderate speed (20km/hr) to prevent undue noise from empty vehicles. The noise generated by the machinery will be reduced

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	impact on human health like breathing and respiratory system, damage to lung tissue, influenza or asthma.	by proper lubrication of the machinery and other equipments. - It is proposed to plant 1885 Nos. of native species (Neem, Mandharai, Athi, Tamarind, Ashoka, Casuarinas and Villam) to reduce the impact of noise in the study area. The development of green belts around the periphery of the mine will be implemented to attenuate noise. - The trucks will be diverted on two roads viz. Venkatesapuram village road and a District Road to avoid traffic congestion. - Health check-up camps will be organized once in six month. - Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas.
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		Provision of quiet areas, where employees can get relief from workplace noise.
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4.6 BIOLOGICAL ENVIRONMENT:

Aspect	Impacts	Mitigation Measures
Site Clearance	Loss of habitat due to site clearance which may lead to ecological disturbance.	The proposed mining lease is already a dry land hence no site clearance is required. Only few shrubs and herbs like parthenium sp., prosopis juliflora were present.
Planting of trees	Development of afforestation in the mine lease area will have a positive impact as the land was initially a barren.	10 m safety distance will be provided all along the boundary of the mine lease area and safety. Around 0.65.67 Ha of land is utilized for greenbelt development (1885 Nos – 10 years). This will attract avifauna thus enhancing the existing ecological environment.

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4.7 SOCIO ECONOMIC ENVIRONMNET:

Aspect	Impact	Mitigation Measures
Proposed implementation of Mining activity	Land acquisition for the implementation of the project may result in loss of assets, which in return will make the PAP to shift, losing their normal routine and livelihood	The proposed project is a Patta land and the land is vacant where there are no human settlement within 300m radius. Hence the project does not involve Rehabilitation and resettlement
Drilling, Blasting, Loading and Transportation of the mined out mineral	The mining activities may cause dust emission, noise pollution thereby causing disturbance to the local habitat	No human activity is envisaged near the project site. The nearest human settlement is observed in Midithepalli village which is 1.70 Km from site
Grazing and Rearing activities in the nearby villages	The Grazing and rearing of local animals like Sheep, Goat and cows is observed in the nearby villages, which may be affected due to the project as the movement of the vehicles may affect/injure the animals	It is proposed to use gravelled road and nearest paved road and preferred not to use unpaved roads. In addition to that, the speed of trucks will be limited to 20km/hr to avoid any accidents.
Employment opportunity	The project will improve the livelihood of the local people	After the development of the proposed mine, it will improve the livelihood of local people and also provide the direct and indirect

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		employment opportunities. The rough stone for the infrastructural development in the area will be made available from the local markets at reasonably lower price.
Corporate Environmental Responsibility	The proposed project will help in natural resource augmentation & Community resource development.	As a part of CER i.e., 5.0 Lakhs will be allocated to 1.PUPS– Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State.(65 Students) Providing facilities are: ➤ Two Class room Building, Staff toilet, Prayer assembly hall with stage, Dining hall with handwash ➤ R.O Water Facility ➤ Smart Classroom facility ➤ Greenbelt Development inside and around the campus – 50 No's. ➤ Environmental, Social Awareness and General Knowledge Books in Tamil Language

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		➤ Hygienic Toilet Facility and maintenance upto lease period 2. PUPS– Athimugam Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State. (164 Students) Providing facilities are: ➤ Two Classroom Building, Staff toilet, Prayer assembly hall with stage, Dining hall with handwash ➤ R.O Water Facility ➤ Greenbelt Development inside and around the campus – 50 No's. ➤ Environmental, Social Awareness and General Knowledge Books in Tamil Language ➤ Hygienic Toilet Facility and maintenance upto lease period
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4.8 OTHER IMPACTS:

S. No	Aspect	Impact	Mitigation measure
1.	Risk due to the proposed mining	Accidents may occur in the mine area	Proper PPE kit (Safety jacket, Helmet, Safety Shoes, Gloves) etc will be provided to each and every employee in the mine lease concerning the safety of each labour.
2.	Blasting	Injury to the labours due to the blasting activity	Alarm system in the form of Siren will be engaged in the project site to caution the blasting activity. In addition to that, the blasting activity will be scheduled at particular time – 5 P.M to 6 P.M (or whenever required) so that the employees will be aware of the activity. Smoking will be banned in the site and sign boards will be displayed in various places at site.
3.	Screening of Labours	Labours will be checked for health condition before employing them in mining activity	All the labours will be checked and screened for health before employing them. After employing them, periodical medical check-ups will be held once in every six months.

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5 Analysis Of Alternatives

5.1 GENERAL

Analysis of alternative is a significant aspect in planning and designing any project. Cost benefit analysis should be worked out along with other parameters while choosing an alternative in such a way that the production is maximum and the mining operation is environment friendly and cost effective. The mine plan and mine closure plan has been approved by the Deputy Director, Department of Mining and Geology, Krishnagiri District prior to submission of the Form-1 and PFR.

ToR issued by the SEIAA-TN vide ToR Identification No. TO25B0108TN5423420N Dated: 13.05.2025. The study for alternative analysis involves in-depth examination of site and technology.

5.1.1 *Analysis for Alternative Sites and Mining Technology*

5.1.1.1 Alternative Site

The proposed project is the mining of Rough Stone Quarry and is proposed after prospecting the area. In other words, these can be implemented in the mineral available zone. Since the mining block has been allotted in principal by the State Government, there is no case for studying and exploring any other site as an alternative.

5.1.1.2 Alternative Technology

The open cast mining could be manual/ mechanized depending upon the geological and topographical setup of the mineral (ROM) to be won and the daily/annual targeted production.

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Table 5-1: Alternative for Technology and other Parameters

S. No.	Particular	Alternative Option 1	Alternative Option 2	Remarks
1.	Technology	Opencast semi mechanized mining	Opencast mechanized mining	Opencast mechanized Involving drilling and blasting are preferred. Benefits: Material is hard so to make it
2.	Employment	Local employment.	Outsource employment	Local employment is preferred. Benefits: Provides employment to local people along with financial benefits. No residential building/ housing is required.
3.	Labour transportation	Public transport	Private transport	Local labours will be deployed from Midithepalli village so they will either reach mine site by bicycle or by foot. Benefits: Cost of transportation of labors will be negligible
4.	Material transportation	Public transport	Private transport	Material will be transported through trucks/trolleys on the contract basis. Benefits: It will give indirect employment.
5.	Water	Tanker supplier	Ground water/	Tanker supply will be preferred. Water will be sourced from Midithepalli village which is 1.70 km from site.

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6 Environmental Monitoring Program

6.1 GENERAL:

This chapter covers the planned environmental monitoring program. It also includes the technical aspects of monitoring the effectiveness of mitigation measures.

Monitoring is important to measure the efficiency of control measures. Post project monitoring of environmental parameters is of key importance to assess the status of environment. The monitoring program will serve as an indicator for identifying environmental degradation due to operation of the project and help in selection of appropriate mitigation measures to safeguard the environment.

Regular monitoring is as important as control of pollution since the efficacy of control measures can only be determined by monitoring. The project proponent has awarded **M/s. Ecotech Labs Pvt Ltd** for carrying out the post project environmental monitoring (PPM) and timely compliance report submission to various regulatory authorities.

Therefore, a regular monitoring programme of the environmental parameters is essential to take into account the changes in the environmental quality. The objectives of monitoring are to:-

- Verify effectiveness of planning decisions;
- Measure effectiveness of operational procedures;
- Confirm statutory and corporate compliance; and
- Identify unexpected changes.

Table 6-1: Environmental Monitoring Programme

Parameters	Sampling	Frequency	Location
Air environment – Pollutants PM 10 PM 2.5	7 locations	24 hourly twice a week 4 hourly. Twice a week, One non monsoon season 8 hourly, twice a week	• Project site • Lord Shiva Temeple, Muthali • Bhargavi Narasimha Swamy Temple,

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SO ₂ NO _x		24 hourly, twice a week	• Govt.Hr Sec School, bukkasagaram • Midhitepalli Bus Stop • Garagamma Temple - Vanamangalam • Sri Ardhanareshwaramma Temple - Moranapalli
Noise	7 locations	24 hourly Once in 7 locations	• Project site • Lord Shiva Temple, Muthali • Bhargavi Narasimha Swamy Temple, • Govt.Hr Sec School, bukkasagaram • Midhitepalli Bus Stop • Garagamma Temple - Vanamangalam • Sri Ardhanareshwaramma Temple - Moranapalli
Water (Ground water) • pH • Temperature • Turbidity • Magnesium Hardness • Total Alkalinity • Chloride • Sulphate • Fluoride • Nitrate • Sodium • Potassium • Salinity • Total nitrogen	7 locations	Once in 7 locations	• Project site • Lord Shiva Temple, Muthali • Bhargavi Narasimha Swamy Temple, • Govt.Hr Sec School, bukkasagaram • Midhitepalli Bus Stop • Garagamma Temple – Vanamangalam • Sri Ardhanareshwaramma Temple - Moranapalli

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• Total Coliforms • Fecal Coliforms			
Water (surface water) • pH • Temperature • Turbidity • Magnesium Hardness • Total Alkalinity • Chloride • Sulphate • Fluoride • Nitrate • Sodium • Potassium • Salinity • Total nitrogen • Total Coliforms • Fecal Coliforms	Sample from nearby lakes/river	One time Sampling	1. Bukkasagaram Lake – 4.45 km, S
Soil (Organic matter, Texture, pH, Electrical Conductivity, Permeability, Water holding capacity, Porosity)	7 locations	Once in 7 locations	• Project site • Lord Shiva Temple, Muthali • Bhargavi Narasimha Swamy Temple, • Govt.Hr Sec School, bukkasagaram • Midhitepalli Bus Stop • Garagamma Temple - Vanamangalam • Sri Ardhanareshwaramma Temple - Moranapalli

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Ecology and biodiversity Study	Study area covering 10 km radius	One time Sampling	
Socio-Economic study (Population, Literacy Level, employment, Infrastructure like school, hospitals & commercial establishments)	Villages around 10 km radius	One time Sampling	

Table 6-2: Monitoring Schedule during Mining

S. No.	Attributes	Parameters	Frequency	Location
1.	Ambient Air Quality at Mine Site & Fugitive Dust Sampling	PM 10 PM 2.5 SO ₂ NO _x	Once in a Month	Project Site
2.	Ground water Quality	Drinking Water Parameters, As per IS - 10500: 2012	Half yearly	Project Site
3.	Surface Water Quality	Class will be assessed as per the CPCB Guidelines	Half yearly	Project Site
4.	Soil Quality	(Organic matter, Texture, pH, Electrical Conductivity, Permeability, Water holding capacity, Porosity)	Half yearly	Project Site
5.	Noise Level Monitoring	Noise level in dB(A) Quarterly/half yearly	Half yearly	Project Site

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7 Additional Studies

7.1 GENERAL

This chapter covers the details of the additional studies viz. Risk assessment, Disaster Management, Public Hearing, Rehabilitation and Resettlement.

7.1.1 *Public Hearing:*

As the proposed mining project falls under 1(a), Category B1 – Cluster Mining include

Existing Quarries:

1. Thiru.B.Srikar – 1.86.50 Ha
2. Thiru.D.Sreenivasalu – 3.17.08 Ha
3. Thiru.Venkatareddy – 2.05.92 Ha

Expired/ Old quarries:

1. M/s. Sarva Infra Pvt Ltd – 4.05.0 Ha

Proposed Quarries:

1. M/s. RKM Sand and Aggregates – 3.76.67 Ha

The Total extent of the Existing / Proposed quarries are 14.91.17Ha.

Hence under 7(III) of EIA notification 2006 and its subsequent amendments, the project involves the Public Consultation and the same will be conducted under SPCB (TN) in Krishnagiri District. The proceedings of the same will be incorporated in the Final EIA Report.

7.1.2 *Risk assessment:*

For mining projects to be successful, it should meet not only the production requirements, but also maintain the highest safety standards for all the workers. The industry has to identify the hazards, assess the associated risks and bring the risks to tolerable level regularly. Mining has considerable safety risk to miners. Unsafe conditions and practices in mines lead to a number of accidents and causes loss and injury to human

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lives, damage property, interrupt production etc. Risk assessment is a systematic method of identifying and analyzing the hazards associated with an activity and establishing a level of risk. The hazards cannot be completely eliminated, and thus there is a need to define and estimate an accident risk level possible to be presented either in quantitative or qualitative way.

7.1.3 Identification of Hazard

7.1.3.1 Blasting Pattern:

The quarrying operation will be carried out by Opencast Semi Mechanized method in conjunction with conventional method of mining using Jack Hammer drilling and blasting for shattering effect and loosen the Rough Stone.

7.1.3.2 Drilling and Blasting:

Drilling and Blasting parameters are as follows:

Diameter of Hole	32-36mm
Spacing between holes	60 cms
Depth	1 to 1.5 m
Pattern of hole	Zigzag
Inclination of holes	70° from horizontal
Use of delay detonators	25 milli-second delays
Detonating fuse	“Detonating” Cord

a. Types of explosives to be used:

Small dia of 25mm Slurry explosives are proposed to be used for shattering and heaving effect for removal and winning of Rough Stone. No deep hole drilling or Primary blasting is proposed.

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b. Measures proposed to minimize ground vibration due to Blasting:

The quarry is situated more than 0.87 km from the nearby villages. Controlled blasting measures will be adopted for minimizing ground vibration and fly of rock. Shallow depths jackhammer drilling & blasting is proposed to be carried out with minimum use of explosive mainly to give the shattering effect in rough stone for easy excavation and to control fly of rocks.

Diameter of Holes	=	32-36mm
Powder factor	=	6 to 7 Tons/Kg of explosives
Depth	=	1 to 1.5 m
Charge/Hole	=	D.Cord with water or 70gms of gun powder or Gelatine.
Blasted at day time	=	5 to 6 PM

Storage and safety measures to be taken while blasting: The proponent will engage an authorized explosive agency to carry out the small amount of blasting and it will be supervised by competent and statutory Foreman/Permit Mines Manager.

Heavy Machineries: The following heavy machineries will be used in the proposed area:

- For Mining – Excavator of 1.2 Cum Bucket capacity (with Rock Breaker attachment), Jack Hammers (25.5 mm Dia) of 4 Nos.
- Loading Equipment – Excavator of 1.2 Cum Bucket Capacity (with Bucket attachment)
- Transportation (includes within the mine and mine to destination) – Tipper 1 No. of 10 M.T capacity (from quarry to needy peoples and local crushers)

a. Risk:

Most of the accidents during transport of mined out mineral using other heavy vehicles are often attributed to mechanical failures and human errors.

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b. Mitigation measures to minimize the risk

- At the time of loading no person will be allowed within the swing radius of the excavation.
- The dumpers/ trucks will stand near the loading equipment and fully braked when the muck is filled in it.
- The truck would be brought to a lower level so that the loading operation suits to the ergonomic condition of the workers.
- The workers will be provided with helmets, gloves and safety boots; loading and unloading operations will be carried out only during daylight.
- All the mining machineries will be regularly maintained and checked such as brakes, lights and horns to keep in the efficient working order.

7.1.4 General Precautionary measures for the Risk involved in the proposed mine:

- In order to take care of above hazard/disaster, the following control measures will be adopted:
- All safety precautions and provisions of Mine Act, 1952, Metalliferous Mines Regulation, 1961 and Mines Rules, 1955 will be strictly followed during all mining operations;
- Entry of unauthorized persons will be prohibited;
- Firefighting and first-aid provisions in the ECC and mining area;
- Provisions of all the safety appliances such as safety boot, helmets, goggles etc. will be made available to the workers (20 Nos.) and regular inspection for their use;
- In case of eventuality, first aid will be given by the senior safety officer in the mine area initially to the injured person. The safety officer will give notice of accident as per Rule-23 of Mines Act-1952;
- The safety officer (common for 3 mines within 500m radius) will be responsible for coordination between management district authorities/DGMS etc. Regarding general safety as per Rule-181 of MMR 1961, “No person shall negligently or willfully do anything likely to endanger life or limb in the mine, or negligently or willfully omit to do anything necessary for the safety of the

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mine or of the persons employed there in”. The workers will be provided with protective foot wear and safety helmets;

- Cleaning of mine faces will be regularly done;
- Handling of explosives, charging and blasting will be carried out by highly skilled labors only;
- Regular maintenance and testing of all mining equipment as per manufacturer’s guidelines;
- Suppression of dust by sprinkling water on the haulage roads;

7.1.5 Safety Team:

The effective implementation of compliance of Safety Rules/ Statutory Provisions will be ensured. The safety officer will be engaged, meeting the requirement of Mines Act and their duties and responsibilities. The safety officer will be responsible for identification of the hazardous conditions and unsafe acts of workers and advice on corrective actions, conduct safety audit, organize training programs and provide professional expert advice on various issues related to occupational safety and health. Organizing safety training will be conducted to employees and contractor labors periodically.

7.1.6 Emergency Control Centre

The emergency control center will be provided to handle the emergency. The site main controller, key personnel and the senior officers of the fire and police services will attend it. The center will be equipped to receive and transmit information and directions from and to the incident controller and other areas of the works, as well as outside. The emergency control center will be sited in an area of minimum risk. This common Emergency control center will be used for the mines around the 500m radius.

7.2 DISASTER MANAGEMENT

The possible risks in the case of stone along with associated minor minerals mining projects are fly rock, vibration failure of pit, slope and waste dump, accidents due to transportation. Mining and allied activities are associated with several potential hazards to both the employees and the public at large. Safety of the mine and the employees is taken care of by the mining rules &

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regulations, which are well defined with laid down procedure for safety, which when scrupulously followed, safety is ensured not only to manpower but also to machines & working environment.

7.2.1 Emergency Management Plan For Proposed Mines On Site- Offsite Emergency Preparedness Plan:

The emergency plan delineates the procedures for dealing with accidents or unexpected events and natural calamities arising from mining activity. An experience of any accidents that have occurred in other manufacturing/mining projects is considered to prepare this plan. This Emergency plan should be periodically reviewed and modified. It should also be changed based on the observations of emergency mock drills and experience of handling actual emergencies.

Major objectives of this onsite – offsite emergency plan are:

- To take necessary proactive and preventive actions to avoid the emergency.

The main aim of any emergency plan should be to prevent emergency situations.

To train the manpower to handle the emergencies of the following nature:

- Onsite (Within ML boundary)
- Offsite (Outside ML boundary)

7.2.1 Onsite off-site emergency Plan:

1- Emergency on account of:

- Fire
- Explosion
- Major accidents involving man-made collapse of the mining edges.
- Snake bites, attack by honey bees or attack by wild animals.

2- Disaster due to natural calamities like:

- Flood/ heavy rains which can involve natural landslides.

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- Earth quake
- Cyclone
- Lightening

7.2.2 Emergency Plan:

- The mining operations should be immediately stopped in case of any emergency. A siren will be sounded during emergency time.
- An emergency assembly point will be created and all the workers will guide visitors or contractors to approach assembly point.
- Emergency vehicle (Ambulance) will be available in the nearby place, in proximity to the three mines and will rush to the emergency control centre at the blowing of emergency siren. The driver of emergency vehicle will follow the instructions of Incident Controller/Site Main Controller.
- Workers will be trained for the precautions to be taken during natural disasters like heavy rain, floods, earthquake and cyclone.
- All escape routes from mines to the assembly point or any other safe location will be made and the escape plan will be displayed in many places in the mine area

7.2.3 Emergency Control:

- Shut down of mining operations: Raising the alarm or siren followed by immediate safe shut down of the power supply, and isolation of affected areas.
- Treatment of injured: First aid and hospitalization of injured persons
- Protection of environment and property: During mitigation, efforts will be made to prevent impacts on environment and property to the extent possible.
- Preserving all evidences and records: This will be done to enable a thorough investigation of the true causes of the emergency.
- Ensuring safety of personnel prior to restarting of operations: Efforts required will be made to ensure that work environment is safe prior to restarting the work.

7.3 NATURAL RESOURCE CONSERVATION

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There are no natural resources within the premises. The conservation strategies for energy will be followed in the proposed mine lease area. The pollutants of the mine will be minimized by adopting appropriate mitigation measures as mentioned Chapter 5 to prevent the effects on nearest water bodies. No surface runoff from the project site will be let into the nearest water bodies.

7.4 RESETTLEMENT AND REHABILITATION:

The proposed Mine lease area is Patta land. There is no displacement of the population within the project area and adjacent nearby area and hence Rehabilitation & Resettlement is not applicable.

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8 Project Benefits

8.1 GENERAL

This chapter covers the benefits accruing to the locality, neighborhood, region and nation as a whole. It brings out the details of benefits by way of improvements in the physical infrastructure, social infrastructure, employment potential and other tangible benefits.

8.1.1 *Physical Benefits*

The opening of the proposed project will enhance the following physical infrastructure facilities in the adjoining areas:

Market: Generating useful economical resource for construction. Due to demand supply chain, excavated mineral (Rough stone) will sold in the market in the affordable price.

Infrastructure: The excavated rough stone will be used for *Laying Roads, Building & Construction Projects, Bridges*.

Enhancement of Green Cover & Green Belt Development: As a part of reclamation plan, native tree species will be planted along the safety boundary of the mine lease area. A suitable combination of trees that can grow fast and also have good leaf cover will be adopted to develop the green belt. It is proposed to plant 500 numbers of native species along with some fruit bearing and medicinal trees during the mining plan period.

8.2 SOCIAL BENEFITS

The mining in the area will create rural employment. During site visit, it has been observed that the economic conditions of the villages in the study area is quite normal. After the development of the proposed mine, it will improve the livelihood of local people and also provide the indirect employment opportunities. The rough stone for the infrastructural development in the area will be made available from the local markets at reasonably lower price.

As a part of CER, i.e., 5 Lakhs will be allocated. The detailed agenda, which is to be executed has been framed. The salient features of the programmes are as follows:

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To construct Toilet and Auditorium, Provide Sports equipments, Wire fence to playground and Basic amenities such as Environmental awareness books (Tamil) in Library for students, Green Belt development, Hygienic Toilet and maintenance of toilet upto lease period to Government High School, Venkatesapuram.

8.3 PROJECT COST / INVESTMENT DETAILS

1	<u>A. Fixed Asset Cost:</u>	:	
	• Land Cost	:	Rs. 18,00,000/-
	• Labour Shed	:	Rs. 1,20,000/-
	• Sanitary Facility	:	Rs. 80,000/-
	• Refilling/Fencing cost	:	
	Total=	:	Rs. 1,00,000/-
			Rs.21,00,000/-
2	<u>B. Operational Cost:</u>	:	Rs.30,00,000/-
	<u>Machinery cost</u>		
	Total Project Cost(A+B)	:	Rs. 51,00,000/-

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9 Environmental Management Plan

9.1 INTRODUCTION

This chapter comprehensively presents the Environmental Management Plan (EMP), which includes the administrative and technical setup, summary matrix of EMP, the cost involved to implement the EMP, during various Mining activities and provisions made towards the same in the cost estimates of project. This chapter describes the proposed monitoring scheme as well as inter-organizational arrangements for effective implementation of the mitigation measures.

9.2 SUBSIDENCE

Mining will be carried out by opencast mechanized mining method with drilling & blasting as per mining plan approved by Department of Mining and Geology, Krishnagiri. Subsidence/slope failures are not envisaged because there are no loose strata overlying the deposit (mineral to be excavated). The bench height will be average 5m. The individual bench slope has been proposed to be kept at 60° from horizontal. Moreover, all safety standards/ safeguards will be implemented as per guidelines prescribed by Director General of Mines Safety.

9.3 MINE DRAINAGE

9.3.1 *Storm water Management*

The following measures will be taken with respect to the prevailing site conditions.

- Storm water drains with silt traps of size 1m x 1m will be suitably constructed all along the periphery of the pit area to collect the run-off from the mine area and divert into the pit.
- All measures will be taken not to disturb the existing drainage pattern adjacent to the mine lease area.
- The storm water collected from the mine area will be utilized for dust suppression on haul roads, plantation within the premises, etc.,

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9.3.2 *Drainage*

Local workers will be deployed for the project. But, urinals and Latrines will be provided and the same will be connected to septic tank followed by soak pit arrangement. No domestic waste will be deposited into the nearby area. Regular checking will be carried out to find any blockage due to silting or accumulation of loose materials. The drains will also be checked for any damage in lining / stone pitching, etc.

9.3.3 *Administrative and Technical Setup*

The Environment Management Plan (EMP) will consist of all mitigation measures for each component of the environment due to the activities increased during mining operation to minimize adverse environmental impacts resulting from the activities of the project.

To carry out the above activities, M/s. RKM Sand and Aggregates will work in association with M/s. Ecotech Labs Pvt Ltd.

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Table 9-1: Impacts and mitigation measures

S. No	Impacts on Environment	Activity /Aspect	Anticipated impacts	Mitigation measures
1.	Air	Fugitive Emission	During mining operation, fugitive dust and other air pollutants like particulate matter (PM10 & PM 2.5) will be generated.	Planting of trees along the safety distance of the Mine Lease Area Water will be sprinkled in the site as dust suppression measure.
2.	Water	Wastewater Generation	Improper management of Domestic wastewater in the Mine lease may create unhygienic conditions in the site thereby causing health impacts to the labors	Provision of urinals/Latrines along with septic tank followed by soak pit arrangement will be provided in the Mine Lease area for the proper management of wastewater.
3.	Noise	Mining activities like drilling, blasting, loading and transportation	Noise from the machinery can cause hypertension, high stress level, hearing loss, sleep disturbance etc due to prolonged exposure. Apart from Mining activities like	Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas.

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			drilling, blasting may generate noise	
4.	Land	Improper management of Storm water Runoff	Storm water Runoff may result in Soil Erosion	Garland drainage of 1m x 1m will be provided to avoid storm water run- off.
5.	Social Responsibility	Mining workers	Unhygienic site sanitation facilities may cause health damage to workers.	The objective is to ensure health and safety of the workers with effective provisions for the basic facilities of sanitation, drinking water, safety of equipments or machinery etc. The following will be done in the site ✓ By complying with the safety procedures, norms and guidelines (as applicable) as outlined in the National Building Code of India, Bureau of Indian Standards. ✓ Provide adequate number of

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				decentralized latrines and urinals ✓ Providing Septic tank along with Soak pit arrangement ✓ Providing First Aid room, conducting frequent health checkups to labor and conducting free medical camps ✓ Providing safety helmet, Gloves, Jacket & Boots ✓ Providing measures to prevent fires. Firefighting extinguishers and buckets of sand will be provided in the construction site
6.	Building materials resource conservation	Building Material consumption	Use of farfetched construction materials than the locally available construction materials may lead to over	• Use of locally available construction materials.

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			exploitation of natural resources & increase in carbon footprint.	
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Table 9-2: Budgetary Allocation for EMP during Mining

	Mitigation Measure	Provision for Implementation	Capital	Recurring
Air Environment	Compaction, gradation and drainage on both sides for Haulage Road	Rental Dozer & drainage construction on haul road @ Rs. 10,000/- per hectare; and yearly maintenance @ Rs. 10,000/- per hectare	37667	37667
	Fixed Water Sprinkling Arrangements + Water sprinkling by own water tankers	Fixed Sprinkler Installation and New Water Tanker Cost for Capital; and Water Sprinkling (thrice a day) Cost for recurring	800000	50000
	Muffle blasting – To control fly rocks during blasting	Blasting face will be covered with sand bags / steel mesh / old tyres / used conveyor belts	0	5000
	Wet drilling procedure / latest eco-friendly drill machine with separate dust extractor unit	Dust extractor @ Rs. 25,000/- per unit deployed as capital & @ Rs. 2500 per unit recurring cost for maintenance	75000	7500

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Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

	No overloading of trucks/tippers/tractors	Manual Monitoring through Security guard	0	8857036
	Stone carrying trucks will be covered by tarpaulin	Monitoring if trucks will be covered by tarpaulin	0	10000
	Enforcing speed limits of 20 km/hr within ML area	Installation of Speed Governors @ Rs. 5000/- per Tipper/Dumper deployed	10000	1000
	Regular monitoring of exhaust fumes as per RTO norms	Monitoring of Exhaust Fumes by Manual Labour	0	5000
	Regular sweeping and maintenance of approach roads for at least about 200 m from ML Area	Provision for 2 labours @ Rs.10,000/labour (Contractual) per Hectare	0	75334
	Installing wheel wash system near gate of quarry	Installation + Maintenance + Supervision	50000	20000
Noise Environment	Source of noise will be during operation of transportation vehicles, HEMM for this proper maintenance will be done at regular intervals.	Provision made in Operating Cost	0	0
	Oiling & greasing of Transport vehicles and	Provision made in Operating Cost	0	0

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

	HEMM at regular interval will be done			
	Adequate silencers will be provided in all the diesel engines of vehicles.	Provision made in Operating Cost	0	0
	It will be ensured that all transportation vehicles carry a fitness certificate.	Provision made in Operating Cost	0	0
	Safety tools and implements that are required will be kept adequately near blasting site at the time of charging.	Provision made in OHS part	0	0
	Line Drilling all along the boundary to reduce the PPV from blasting activity and implementing controlled blasting.	Provision made in Operating Cost	0	0
	Proper warning system before blasting will be adopted and clearance of the area before blasting will be ensured.	Blowing Whistle by Mining Mate / Blaster / Compentent Person	0	0
	Provision for Portable blaster shed	Installation of Portable blasting shelter	50000	2000

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

	NONEL Blasting will be practiced to control Ground vibration and fly rocks	Rs. 30/- per 6 Tonnes of Blasted Material	0	1932188
Waste Management	Waste management (Spent Oil, Grease etc.,)	Provision for domestic waste collection and disposal through authorized agency	25000	20000
		Installation of dust bins	5000	2000
	Bio toilets will be made available outside mine lease on the land of owner itself	Provision made in Operating Cost	0	0
Mine Closure	1. Progressive Closure Activity - Surface Runoff Management	Provision for garland drain @ Rs. 10,000/- per Hectare with maintenance of Rs. 5,000/- per annum	37667	5000
	2. Progressive Closure Activity Barbed Wire Fencing to quarry area will be Provisioned	Per Hectare fencing Cost @ Rs. 2,00,000/- with Maintenance of Rs 10,000/- per annum	753340	10000
	3. Progressive Closure Activity Green belt development - 500 trees per one hectare - (200 Inside	Site clearance, preparation of land, digging of pits / trenches, soil amendments, transplantation of saplings @ 200 per plant (capital) for plantation inside the lease area	150668	22600.2

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

	Lease Area & 300 Outside Lease Area)	and @ 30 per plant maintenance (recurring)		
		Avenue Plantation @ 300 per plant (capital) for plantation outside the lease area and @ 30 per plant maintenance (recurring)	339003	33900.3
	4. Implementation of Final Mine Closure Activity as per Approved Mining Plan on Last Year.	For Final Closure activities 15% of the proposed closure cost will be spent during final mine closure stage - Last year	202827	0
	5. Contribution towards Green Fund. As per TNMMCR 1959, Rule 35 A	The Contribution towards Green Funds @ 10% of Seigniorage fee are indicated as part of EMP Budget and not necessarily implemented in the Project Site	11482443	0
Implementation of EC, Mining Plan & DGMS Condition	Size 6' X 5' with blue background and white letters as mentioned in MoM Appendix II by the SEAC TN	Fixed Display Board at the Quarry Entrance as permanent structure mentioning Environmental Conditions	10000	1000
	Air, Water, Noise and Soil Quality sampling every 6 Months for Compliance Report of EC Conditions	Submission of 2 Half Yearly Compliance - Lab Monitoring Report as per CPCB norms	0	50000

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

	Workers will be provided with Personal Protective Equipment's	Provision of PPE @ Rs. 4000/- per employee with recurring based on wear and tear (say, @ Rs. 1000/- per employee)	80000	20000
	Health check up for workers will be provisioned	IME & PME Health check up @ Rs. 1000/- per employee	0	20000
	First aid facility will be provided	Provision of 2 Kits per Hectare @ Rs. 2000/-	0	7533.4
	Slope Stability Action Plan	Slope Stability action plan in the end of fourth year plan period	200000	0
	Mine will have safety precaution signages, boards.	Provision for signages and boards made	10000	2000
	No parking will be provided on the transport routes. Separate provision on the south side of the hill will be made for vehicles /HEMMs. Flaggers will be deployed for traffic management	Parking area with shelter and flags @ Rs. 50,000/- per hectare project and Rs. 10,000/- as maintenance cost	188335	10000
	Installation of CCTV cameras in the mines and mine entrance	Camera 4 Nos, DVR, Monitor with internet facility	30000	5000

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

	Implementation as per Mining Plan and ensure safe quarry working	Mines Manager (1 st Class / 2 nd Class / Mine Foreman) under regulation 34 / 34 (6) of MMR, 1961 and Mining Mate under regulation 116 of MMR, 1961 @ 40,000/- for Manager & @ 25,000/- for Foreman / Mate	0	780000
Total (Rs)			2851680	11991758.9
Grand Total (Rs)			14843439	

Year	Cost (@ 5% per year inflation adjustment) in Rs.
1st Year	14843439
2nd Year	12591347
3rd Year	13220914
4th Year	13881960
5th Year	14576058
6th Year	15304861
7th Year	16070104
8th Year	16873609
9th Year	17717289
10th Year	18603154
Total	1536,82,735/-

Total EMP cost for the period of Ten years: - **Rs.1536,82,735/- (Rs. 1537 Lakhs) only.**

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

10 Summary & Conclusion

This chapter summarizes the overall justification for implementation of the project and explains how the potential impacts are mitigated.

10.1 INTRODUCTION

M/s. RKM Sand and Aggregates site is a cluster of three mining projects. The individual mine lease area is 3.76.67 Ha of Rough Stone Quarry located at S.F.Nos. 70/4A & 70/5B of Midithepalli Village, Shoolagiri Taluk in Krishnagiri District.

10.2 PROJECT OVERVIEW

Table 10-1: Project Overview

S. No.	Description	Details
1	Project Name	Rough Stone and Gravel Quarry-3.76.67 Ha
2	Proponent	M/S. R.K.M Sand And Aggregates, Prop.Thiru. D. Ravikumar,
3	Mining Lease Area Extent	1.86.50 Ha
4	Location	S.F.Nos. 70/4A & 70/2B Midithepalli Village, Shoolagiri Taluk, Krishnagiri District.
5	Latitude	12° 46' 07.7657" N to 12° 45' 57.2328" N
6	Longitude	77° 57' 10.9141" E to 77° 57' 01.9504" E
7	Topography	Slightly elevated terrain
8	Site Elevation above MSL	The altitude of the area is 869m above MSL.
9	Topo sheet No.	57- H/13
10	Minerals of Mine	Rough Stone and Gravel Quarry
11	Proposed production of Mine	82,530m ³ of Gravel and 12,24,475m ³ of rough stone for Ten years only.

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

12	Ultimate depth of Mining	47 m (2m gravel + 45 m rough stone)
13	Method of Mining	Open cast, mechanized mining
14	Water demand	2.0 KLD
15	Source of water	Water will be supplied through tankers supply
16	Manpower	20 Nos.
17	Mining Lease	Precise Area Communication Letter received from Deputy Director, Dept. of Geology & Mining, Krishnagiri vide letter Rc.No.768/2024Mines Dated 25.11.2024.
18	Mining Plan Approval	Mining Plan was approved by the Deputy Director, Dept. of Geology & Mining, Krishnagiri vide letter Rc.No.768/2024 Mines Dated 18.12.2024.
19	Production details	Geological resources:21,44,580m ³ of rough stone and 96,630m ³ of Gravel. Proposed year-wise recoverable reserves: 82,530m ³ of Gravel and 12,24,475m ³ of rough stone for Ten years only
20	Boundary Fencing	10 m barrier all along the boundary Fencing will be provided.
21	Disposal of overburden	The entire lease area is covered 2.0m of Gravel and the estimated quantity of Gravel is 82,530m ³ . Gravel formation will be removed, and hydraulic excavators are used for loading the gravel into the tipper from pit head to needy buyers. This will be done only after obtaining permission and paying necessary seigniorage fees to the Government.
22	Ground water	The ground water table is reported as 66m below ground level in nearby wells of this area. Mining depth taken as 47m. Now, proposed

Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

		quarry depth is above the water table. Hence, quarrying may not affect the ground water.
23	Habitations within 300m radius of the Project Site	There is no Habitation within 300m radius of the project site.
24	Drinking water	Water will be supplied through tankers from Midithepalli village which is 1.70 Km – Northeast of the proposed project site.

10.3 JUSTIFICATION OF THE PROPOSED PROJECT

The said project plays a significant role in the domestic as well as infrastructural market. To achieve a huge infrastructure being envisaged by Government of India, particularly in road and housing sector, there is a need for basic building materials. The rough stone form the primary building material.

Rough stone is one of the most valuable natural building materials. Aggregates are mostly used for building roads and footpaths Aggregates – stone used for its strong physical properties – crushed and sorted into various sizes for use in concrete, coated with bitumen to make asphalt or used 'dry' as bulk fill in construction. Mostly used in roads, concrete and building products. Aggregates represent about 98% of quarry output, most of which is used in road construction, maintenance and repair. Much of this goes to the production of asphalt; the remainder is used 'dry' without the addition of other materials to provide a sturdy base for roads.

Since Krishnagiri, a city known for its small-scale industries and also the soil in the area near project site is not very fertile making it unsuitable for carrying out agricultural activities. The topography near the lease area is barren dry lands showing only less chance for crop growth and development of vegetation. In addition to that, geological resources of rough stone is abundant in the lease area which is evident from the mine activities carried out in the nearby sites.

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

Table 10-2: Anticipate Impacts & Appropriate Mitigation Measures

S. No.	Potential Impact	Mitigation Measure
1	The main impact in the air environment is dust emission during various mining activities such as drilling, blasting, excavation, loading and transportation. The dust emission may affect the quality of ambient air in the and around the mine area. The increased emission may cause respiratory & Cardiovascular problems in human health	Proper mitigation measures like water sprinkling on haul roads will be adopted to control dust emissions. To control the emissions regular preventive maintenance of equipments will be carried out on contractual basis. Plantation will be carried out along approach roads & mine premises.
2	Waste water will be generated due to mining activity and from other domestic activities. These may contaminate the ground water leading to ground water table	No waste water will be generated from the mining activity of minor minerals as the project only involves lifting of over burden from mine site. The wastewater generated from the domestic activity will be disposed off safely through the proposed septic tank. Mining will not intersect ground water table. Hence the water table will not be impacted due to the proposed project
3	Noise will be generated in the mine area during various mining activities such as blasting, drilling, excavation. During transportation of the mined out mineral, there may be noise generation due to the movement of vehicles. This may impact the	Periodical monitoring of noise will be done. No other equipments except the transportation vehicles and Excavator (as & when required) for loading will be allowed at site.

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

	health condition of the workers by creating headache	Noise generated by these equipments shall be intermittent and does not cause much adverse impact. Plantation will be carried out along approach roads. The plantation minimizes propagation of noise and also arrest dust.
4	Solid waste will be generated from the mining activity as there will be refuse after 95% recovery and also generation of domestic waste	The 100% recovery is achieved by extracting the entire mineable reserve. Hence there will be no refuse generation due to the mining activity. Apart from that, a very meagre quantity of domestic waste will be generated in the project, which will be handed over to the local body on daily basis.
5	During mining activities, there are chances of workers getting health issues or may be prone to accidents	Dust masks will be provided as additional personal protection equipment to the workers working in the dust prone area. Periodical trainings will be conducted to create awareness about the occupational health hazards due to activities like blasting, drilling, excavation Workers health related problem if any, will be properly addressed.

<i>Project</i>	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
<i>Project Proponent</i>	<i>M/s. RKM Sand and Aggregates</i>	
<i>Project Location</i>	<i>Midithepalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

11 Disclosure of Consultant

11.1 INTRODUCTION

This chapter presents the details of the environmental consultants engaged, their background and the brief description of the key personnel involved in the project. Specific studies on the mining project have been carried out by engaging engineers/experts of Ecotech Labs Pvt. Ltd, Chennai. Ecotech Labs Pvt. Ltd (ETL), Chennai is NABET accredited consultancy organization. ETL is equipped with in-house, spacious laboratory, accredited by NABL (National Accreditation Board for Testing & Calibration Laboratories), Department of Science & Technology, Government of India and MoEF & CC.

11.2 ECO TECH LABS PVT. LTD – ENVIRONMENT CONSULTANT

Eco Tech Labs Pvt. Ltd is a multi-disciplinary testing and research laboratory in India. Eco Tech labs provides high quality services in environmental consultancy, engineering solution, chemical and microbiological laboratory analysis of food, water and environment (Air, Water, Soil) with highest accuracy.

The Quality policy

- We at Eco Tech Labs Pvt. Ltd. engaged in providing Environmental consulting services and we are committed to strengthen our capabilities in all areas of our operations in line with customer requirements & expectations, applicable legal requirements & stakeholders expectations.
- We are committed to establish and maintain Quality Management System (QMS) for continual improvement in processes and Services
- We are committed to provide customized solutions in realistic, time bound and cost effective to achieve highest degree of customer satisfaction and Environmental improvement.
- We shall establish, maintain & periodically review our documented management systems, objectives and performance in consultation with our employees and prevailing best practices.

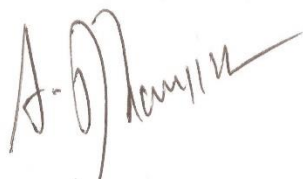
Project	<i>Rough stone and Gravel Quarry – 3.76.67 Ha</i>	<i>Draft EIA Report</i>
Project Proponent	<i>M/s. RKM Sand and Aggregates</i>	
Project Location	<i>Miditheapalli Village, Shoolagiri Taluk, Krishnagiri District</i>	

- Effective communication of organization's policy and objectives to employees and seeking feedbacks from all our employees and concerned stakeholders for continual improvement.

Declaration by Experts contributing to the EIA of Rough Stone and Gravel Quarry- 3.76.67 Ha by M/s. RKM Sand and Aggregates, S.F.No. 70/4A & 70/5B of Miditheapalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State

I, hereby, certify that I was a part of the EIA team in the following capacity that developed the above EIA.

EIA Coordinator: Dr. A. Dhamodharan



Signature:

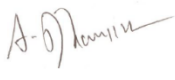
Period of involvement: 01.12.2021 to Till now

Contact information: M/s. Ecotech Labs Pvt Ltd.,

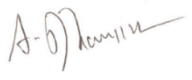
No. 48, 2nd Main road, Ram Nagar South Extension,

Pallikaranai

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

S. No.	Functional areas	Name of the experts	Involvement (period and task)	Signature and date
1	AP	Mrs. K. Vijayalakshmi	1. Selection of Baseline Monitoring stations based on the wind direction 2. Interpretation of Baseline data by comparing it with standards prescribed by CPCB against the type of area 3. Identification of sources of air pollution and suggesting mitigation measures to minimize impact Period: December 2021 – Till now	
2	WP	Dr. A. Dhamodharan	1. Selection of baseline Monitoring Locations for Ground water analysis and also identifying nearest surface water to be studied. 2. Interpretation of baseline data collected 3. Identification of impacts based on the baseline study conducted and also to the ground water and nearby surface water due to the proposed project 4. Preparation of suitable and appropriate mitigation plan. Period: December 2021 – Till now	
3	SHW	Dr. A. Dhamodharan	1. Identification of nature of solid waste generated 2. Categorization of the generated waste and estimating the quantity of waste to be generated based on the per capita basis. Identification of impacts of SHW on Environment 3. Suggesting suitable mitigation measures by recommending appropriate disposal method for each category of waste generated 4. Top soil and refuse management	

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

			Period: December 2021 – Till now	
4	SE	Mr. S. Pandian	1.Primary data collection through the census questionnaire 2.Obtaining Secondary data from authenticated sources and incorporating the same in EIA report. 3.Impact assessment & proposing suitable mitigation plan 4.CSR budget allocation by discussing with the local body and allotting the same for need based activity. Period: December 2021 – Till now *Involves Public Hearing	
5	EB	Dr. A. Dhamodharan	1.Primary data collection through field survey and sheet observation for ecology and biodiversity 2.Secondary Collection through various authenticated sources 3.Prediction of anticipated impacts and suggesting appropriate mitigation measures. Period: December 2021 – Till now	
6	HG	Dr. T. P. Natesan	1. Study of existing surface drainage arrangements in the core and buffer zone, impact due to mining on these drainage courses and suggestion of mitigative measures 2. Determination of groundwater use pattern, development of rainwater harvesting program. Storm water management through garland drainage system. Period: December 2021 – Till now	

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

7	GEO	Dr. T. P. Natesan	1. Field survey for assessing regional and local geology, aquifer distribution, Determination of groundwater use pattern, development of rainwater harvesting program. Period: December 2021 – Till now	
8	SC	Dr. A. Dhamodharan	1. Interpretation of baseline report 2. Identification of possible impacts on soil, prediction of soil conservation and suggesting suitable mitigation measures. Period: December 2021 – Till now	
9	AQ	Mrs. K. Vijayalakshmi	1. Collection of Meteorological data for the baseline study period 2. Plotting wind rose plot and thereby selecting the monitoring locations based on the wind pattern 3. Estimation of sources of air emissions and air quality modeling is done 4. Interpretation of the results obtained 5. Identification of the impacts and suggesting suitable mitigation measures. Period: December 2021 – Till now	
10	NV	Mrs. K. Vijayalakshmi	1. Selection of monitoring locations 2. Interpretation of baseline data 3. Prediction of impacts due to noise pollution and suggestion of appropriate mitigation measures Period: May 2022 – Till now	

Project	Rough stone and Gravel Quarry – 3.76.67 Ha	Draft EIA Report
Project Proponent	M/s. RKM Sand and Aggregates	
Project Location	Midithepalli Village, Shoolagiri Taluk, Krishnagiri District	

11	LU	Dr. T. P. Natesan	1. Collection of Remote sensing satellite data to study the land use pattern. 2. Primary field survey and limited field verification for land categorization in the study area 3. Preparation of Land use map using Satellite data for 10km radius around the project site. Period: December 2021 – Till now	
12	RH	Mrs. K. Vijayalakshmi	1. Identification of the risk 2. Interpreting consequence contours 3. Suggesting risk mitigation measures Period: December 2021 – Till now	

Declaration by the Head of the accredited consultant organization/ authorized person

I, Dr. A. Dhamodharan, hereby, confirm that the above-mentioned experts prepared the EIA report of mining project at Survey Numbers. 70/4A & 70/2B Midithepalli Village, Shoolagiri Taluk, Krishnagiri District. I also confirm that the consultant organization shall be fully accountable for any misleading information mentioned in this statement.




Signature:

Name: Dr. A. Dhamodharan

Designation: Managing Director

Name of the EIA consultant organization: M/s. Eco Tech Labs Private Limited

NABET Certificate No. & Issue Date: NABET/EIA/25- 28/RA 0444

ANNEXURE-I

**STANDARD TOR CONDITIONS WITH
ADDITIONAL TOR POINTS**



File No: 11889
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA),
TAMIL NADU)



Dated 13/05/2025



To,

M/s. R.K.M Sand and Aggregates
R/ AT NO. 50, RADHA LAKSHMI NILAYA, DEVASANDRA MAIN ROAD, K R RPURAM,
BANGALORE, ADARSH PALM, RETREAT VILLAS, DEVARABISANAHALLI, BANGALORE,
BENGALURU URBAN, KARNATAKA, 560103
rkd50.parivesh@gmail.com

Subject: Grant of Terms of Reference under the provision of the EIA Notification 2006-as amended regarding.

Sir/Madam,

Sub: SEIAA, Tamil Nadu – Proposed Rough stone & Gravel Quarry lease over an extent of 3.76.67Ha at S.F.Nos.70/4A & 70/5B of Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu by M/S. R.K.M Sand and Aggregates - under project category – “B1” and Schedule S.No. 1(a) – ToR issued along with Public Hearing- preparation of EIA report – Regarding.

Ref: 1. Online proposal No. SIA/TN/MIN/524962/2025, Dated: 25/02/2025.

2. Your application submitted for Terms of Reference dated: 26.03.2025.

3. Minutes of the 542nd SEAC Meeting held on 26.03.2025.

4. Minutes of the 817th Authority meeting held on 07.05.2025.

2. The particulars of the proposal are as below :

(i) TOR Identification No.	TO25B0108TN5423420N
(ii) File No.	11889
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	R.K.M sand and Aggregate - Rough stone and Gravel Quarry
(viii) Name of Company/Organization	DUDDUKURI RAVIKUMAR
(ix) Location of Project (District, State)	KRISHNAGIRI, TAMIL NADU
(x) Issuing Authority	SEIAA
(xii) Applicability of General Conditions	no
(xiii) Applicability of Specific Conditions	no

1. In view of the particulars given in the Para 1 above, the project proposal inter alia including Form-1 (Part A and B) were submitted to the SEIAA for an appraisal by the SEAC under the provision of EIA notification 2006 and its subsequent amendments.
2. The above-mentioned proposal has been considered by SEIAA in the meeting held on 07.05.2025. The minutes of the meeting and all the Application and documents submitted [(viz. Form-1 Part A, Part B,)] are available on PARIVESH portal which can be accessed by scanning the QR Code above.
3. The State Expert Appraisal Committee (SEAC), based on the information & clarifications provided by the project proponent and after detailed deliberations on all technical aspects recommended the proposal for grant of Terms of Reference with public hearing under the provision of EIA Notification, 2006 and as amended thereof subject to the stipulation of specific and general conditions as detailed in Annexure (2).
4. The SEIAA has examined the proposal in accordance with the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and after accepting the recommendations of the SEAC hereby decided to issue the following Terms of Reference with public hearing for instant proposal of M/s. R.K.M Sand and Aggregates under the provisions of EIA Notification, 2006 and as amended thereof.
5. The Ministry/SEIAA-TN reserves the right to stipulate additional conditions, if found necessary.
6. The Terms of Reference with public hearing to the aforementioned project is under provisions of EIA Notification, 2006. It does not tantamount to approvals/consent/permissions etc. required to be obtained under any other Act/Rule/regulation. The Project Proponent is under obligation to obtain approvals /clearances under any other Acts/Regulations or Statutes, as applicable, to the project.
7. This issues with the approval of the Competent Authority.
8. The TORs with public hearing prescribed shall be valid for a period of three years from the date of issue, for submission of the EIA/EMP report as per OM No. J-11013/41/2006-IA-II(I)(part) dated 29th August 2017.

Copy To

1. The Secretary, Ministry of Mines, Government of India, Shastri Bhawan, New Delhi.
2. The Principal Secretary to Government, Environment and Forests Department, Tamil Nadu.
3. The Additional Chief Secretary to Government, Natural Resources Department, Tamil Nadu.
4. The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
5. The Chair Person, TNPC Board, 76, Mount Salai, Guindy, Chennai-32
6. The District Collector, Krishnagiri District
7. The Commissioner of Geology and Mines, Guindy, Chennai-32
8. The Assistant Director, Department of Geology & Mining, Krishnagiri District
9. EI Division, Ministry of Environment & Forests, Paryavaran Bhawan, New Delhi.
10. Integrated Regional office of MoEF&CC, Sastri Bhawan, Nungambakkam, Chennai
11. File Copy

Annexure 1

Specific Terms of Reference for (Mining Of Minerals)

1. Seiaa Specific Conditions:

S. No	Terms of Reference
1.1	The authority noted that the subject was placed in the 542 nd SEAC-I meeting held on 26.03.2025. After detailed discussions, the Authority accepts the recommendation of SEAC-I and decided to grant Terms of Reference (ToR) along with Public Hearing for the quantity of 12,24,475 m³ of rough stone and 82,530 m³ of gravel upto the depth of 47m as per the approved mining plan, under cluster for undertaking the combined Environment Impact Assessment Study and preparation of separate Environment Management Plan subject to the conditions as recommended by SEAC-I &

S. No	Terms of Reference
	normal conditions & the conditions mentioned in Annexure of this minutes.

2. Seac Conditions - Site Specific

S. No	Terms of Reference
2.1	1. The PP shall furnish a sworn affidavit stating that the project proponent shall quarry only to the proposed depth. 2. A Cluster Management Committee (CMC) shall be constituted including all the mines in the cluster as Committee Members for the effective management of the mining operation in the cluster through systematic & scientific approach with appointment of required statutory personnel, appropriate environmental management, system of maintaining the haul roads and village/panchayat roads, authorized blasting operation, Monitoring system of the environmental & other statutory compliances & its reporting status, etc. The PP shall submit the following details in the form of an Affidavit during the EIA appraisal: (i) Copy of the agreement forming CMC. (ii) The Organisation chart of the Committee with defining the role of the members (iii) The 'Standard Operating Procedures' (SoP) executing the planned activities. 3. The PP shall ensure the installation of CCTV at the proposed quarry site and ensure its inclusion during the EIA presentation.

3. Seac Standard Conditions

S. No	Terms of Reference
3.1	1. In the case of existing/operating mines, a letter obtained from the concerned AD (Mines) shall be submitted and it shall include the following: (i) Original pit dimension (ii) Quantity achieved Vs EC Approved Quantity (iii) Balance Quantity as per Mineable Reserve calculated. (iv) Mined out Depth as on date Vs EC Permitted depth (v) Details of illegal/illicit mining (vi) Violation in the quarry during the past working. (vii) Quantity of material mined out outside the mine lease area (viii) Condition of Safety zone/benches (ix) Revised/Modified Mining Plan showing the benches of not exceeding 6 m height and ultimate depth of not exceeding 50m. 2. Details of habitations around the proposed mining area and latest VAO certificate regarding the location of habitations within 300m radius from the periphery of the site. 3. The proponent is requested to carry out a survey and enumerate on the structures located within the radius of (i) 50 m, (ii) 100 m, (iii) 200 m and (iv) 300 m (v) 500m shall be enumerated with details such as dwelling houses with number of occupants, whether it belongs to the owner (or) not, places of worship, industries, factories, sheds, etc with indicating the owner of the building, nature of construction, age of the building, number of residents, their profession and income, etc. 4. The PP shall submit a detailed hydrological report indicating the impact of proposed quarrying operations on the waterbodies like lake, water tanks, etc are located within 1 km of the proposed quarry. 5. The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report. 6. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas,

S. No	Terms of Reference
	Sanctuaries, Tiger reserve etc., up to a radius of 25 km from the proposed site. 7. In the case of proposed lease in an existing (or old) quarry where the benches are not formed (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall the PP shall carry out the scientific studies to assess the slope stability of the working benches to be constructed and existing quarry wall, by involving any one of the reputed Research and Academic Institutions - CSIR-Central Institute of Mining & Fuel Research / Dhanbad, NIRM/Bangalore, Division of Geotechnical Engineering-IIT-Madras, NIT-Dept of Mining Engg, Surathkal, and Anna University Chennai-CEG Campus. The PP shall submit a copy of the aforesaid report indicating the stability status of the quarry wall and possible mitigation measures during the time of appraisal for obtaining the EC. 8. However, in case of the fresh/virgin quarries, the Proponent shall submit a conceptual 'Slope Stability Plan' for the proposed quarry during the appraisal while obtaining the EC, when the depth of the working is extended beyond 30 m below ground level. 9. The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the statutory competent person as per the MMR 1961 such as blaster, mining mate, mine foreman, II/I Class mines manager appointed by the proponent. 10. The PP shall present a conceptual design for carrying out only controlled blasting operation involving line drilling and muffle blasting in the proposed quarry such that the blast-induced ground vibrations are controlled as well as no fly rock travel beyond 30 m from the blast site. 11. The EIA Coordinators shall obtain and furnish the details of quarry/quarries operated by the proponent in the past, either in the same location or elsewhere in the State with video and photographic evidences. 12. If the proponent has already carried out the mining activity in the proposed mining lease area after 15.01.2016, then the proponent shall furnish the following details from AD/DD, mines, 13. What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines? 14. Quantity of minerals mined out. · Highest production achieved in any one year · Detail of approved depth of mining. · Actual depth of the mining achieved earlier. · Name of the person already mined in that leases area. · If EC and CTO already obtained, the copy of the same shall be submitted. · Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches. 15. All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/Topo sheet, topographic sheet, geomorphology, lithology and geology of the mining lease area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone). 16. The PP shall carry out Drone video survey covering the cluster, green belt, fencing, etc., 17. The proponent shall furnish photographs of adequate fencing, green belt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan. 18. The Project Proponent shall provide the details of mineral reserves and mineable reserves, planned production capacity, proposed working methodology with justifications, the anticipated impacts of the mining operations on the surrounding environment, and the remedial measures for the same. 19. The Project Proponent shall provide the Organization chart indicating the appointment of various statutory officials and other competent persons to be appointed as per the provisions of the Mines Act'1952 and the MMR, 1961 for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment. 20. The Project Proponent shall conduct the hydro-geological study considering the contour map of the water table detailing the number of groundwater pumping & open wells, and surface water

S. No	Terms of Reference
	bodies such as rivers, tanks, canals, ponds, etc. within 1 km (radius) along with the collected water level data for both monsoon and non-monsoon seasons from the PWD / TWAD so as to assess the impacts on the wells due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. 21. The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, soil quality & flora/fauna including traffic/vehicular movement study. 22. The Proponent shall carry out the Cumulative impact study due to mining operations carried out in the quarry specifically with reference to the specific environment in terms of soil health, biodiversity, air pollution, water pollution, climate change and flood control & health impacts. Accordingly, the Environment Management plan should be prepared keeping the concerned quarry and the surrounding habitations in the mind. 23. Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted. 24. Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given. 25. Details of the land for storage of Overburden/Waste Dumps (or) Rejects outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be provided. 26. Proximity to Areas declared as 'Critically Polluted' (or) the Project areas which attracts the court restrictions for mining operations, should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the TNPCB (or) Dept. of Geology and Mining should be secured and furnished to the effect that the proposed mining activities could be considered. 27. Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided. 28. Impact on local transport infrastructure due to the Project should be indicated. 29. A tree survey study shall be carried out (nos., name of the species, age, diameter etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity. 30. A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific. 31. As a part of the study of flora and fauna around the vicinity of the proposed site, the EIA coordinator shall strive to educate the local students on the importance of preserving local flora and fauna by involving them in the study, wherever possible. 32. The purpose of Green belt around the project is to capture the fugitive emissions, carbon sequestration and to attenuate the noise generated, in addition to improving the aesthetics. A wide range of indigenous plant species should be planted as given in the appendix-I in consultation with the DFO, State Agriculture University. The plant species with dense/moderate canopy of native origin should be chosen. Species of small/medium/tall trees alternating with shrubs should be planted in a mixed manner. 33. Taller/one year old Saplings raised in appropriate size of bags, preferably ecofriendly bags should be planted as per the advice of local forest authorities/botanist/Horticulturist with regard to site specific choices. The proponent shall earmark the greenbelt area with GPS coordinates all along the boundary of the project site with at least 3 meters wide and in between blocks in an organized manner 34. A Disaster management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period.

S. No	Terms of Reference
	35. A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report for the complete life of the proposed quarry (or) till the end of the lease period. 36. Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed. 37. Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations. 38. The Socio-economic studies should be carried out within a 5 km buffer zone from the mining activity. Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation. 39. Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given. 40. Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc. 41. If any quarrying operations were carried out in the proposed quarrying site for which now the EC is sought, the Project Proponent shall furnish the detailed compliance to EC conditions given in the previous EC with the site photographs which shall duly be certified by MoEF&CC, Regional Office, Chennai (or) the concerned DEE/TNPCB. 42. The PP shall prepare the EMP for the entire life of mine and also furnish the sworn affidavit stating to abide the EMP for the entire life of mine. 43. Concealing any factual information or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this Terms of Conditions besides attracting penal provisions in the Environment (Protection) Act, 1986.

4. Seiaa Standard Conditions:

S. No	Terms of Reference
4.1	<u>Cluster Management Committee</u> 1. Cluster Management Committee shall be framed which must include all the proponents in the cluster as members including the existing as well as proposed quarry. 2. The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc., 3. The List of members of the committee formed shall be submitted to AD/Mines before the execution of mining lease and the same shall be updated every year to the AD/Mines. 4. Detailed Operational Plan must be submitted which must include the blasting frequency with respect to the nearby quarry situated in the cluster, the usage of haul roads by the individual quarry in the form of route map and network. 5. The committee shall deliberate on risk & emergency management plan, fire safety & evacuation plan and sustainable development goals pertaining to the cluster in a holistic manner especially during natural calamities like intense rain and the mitigation measures considering the inundation of the cluster and evacuation plan. 6. The Cluster Management Committee shall form Environmental Policy to practice sustainable mining in a scientific and systematic manner in accordance with the law. The role played by the committee in implementing the Environmental policy devised shall be given in detail in the EIA Report. 7. The committee shall furnish action plan regarding the restoration strategy with respect to the individual quarry falling under the cluster in a holistic manner.

S. No	Terms of Reference
	8. The committee shall deliberate on the health of the workers/staff involved in the mining as well as the health of the public in the vicinity. <u>Agriculture & Agro-Biodiversity</u> 9. Impact on surrounding agricultural fields around the proposed mining Area. 10. Impact on soil flora & vegetation around the project site. 11. Details of type of vegetation including no. of trees & shrubs within the proposed mining area and. If so, transplantation of such vegetation all along the boundary of the proposed mining area shall committed mentioned in EMP. 12. The Environmental Impact Assessment should study the agro-biodiversity, agro- forestry, horticultural plantations, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural Ecosystem. 13. Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services. 14. The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock. <u>Forests</u> 15. The project proponent shall detailed study on impact of mining on Reserve forests and free ranging wildlife. 16. The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna. 17. The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection. 18. The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site. <u>Water Environment</u> 19. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby waterbodies due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period. 20. Erosion Control measures. 21. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the nearby Villages, Water-bodies/ Rivers, & any ecological fragile areas. 22. The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir. 23. The project proponent shall study and furnish the details on potential fragmentation impact on natural Environment, by the activities. 24. The project proponent shall study and furnish the impact on aquatic plants and animals in water bodies and possible scars on the landscape, damages to nearby caves, heritage site, and archaeological sites possible land form changes visual and aesthetic impacts. 25. The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components. 26. The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites. 27. The EIA shall include the impact of mining activity on the following: - Hydrothermal/Geothermal effect due to destruction in the Environment. - Bio-geochemical processes and its foot prints including Environmental stress. - Sediment geochemistry in the surface streams. <u>Energy</u> 28. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished.

S. No	Terms of Reference
	<u>Climate Change</u> 29. The Environmental Impact Assessment shall study in detail the carbon emission and also suggest the measures to mitigate carbon emission including development of carbon sinks and temperature reduction including control of other emission and climate mitigation activities. 30. The Environmental Impact Assessment should study impact on climate change, temperature rise, pollution and above soil & below soil carbon stock, soil health and physical, chemical & biological soil features. 31. Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood. <u>Mine Closure Plan</u> 32. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued. <u>EMP</u> 33. Detailed Environment Management Plan along with adaptation, mitigation & remedial strategies covering the entire mine lease period as per precise area communication order issued and the scope for achieving SDGs. 34. The Environmental Impact Assessment should hold detailed study on EMP with budget for Green belt development and mine closure plan including disaster management plan. <u>Risk Assessment</u> 35. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining. <u>Disaster Management Plan</u> 36. To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazards & to cope with disaster/unfavorable accidents in & around the proposed mine lease area due to the proposed method of mining activity & its related activities covering the entire mine lease period as per precise area communication order issued. <u>Others</u> 37. The project proponent shall furnish VAO certificate with reference to 300m radius regard to approved habitations, schools, Archaeological sites, Structures, railway lines, roads, water bodies such as streams, odai, vaari, canal, channel, river, lake pond, tank etc. 38. As per the MoEF& CC office memorandum F.No.22-65/2017-IA.III dated: 30.09.2020 and 20.10.2020 the proponent shall address the concerns raised during the public consultation and all the activities proposed shall be part of the Environment Management Plan. 39. The project proponent shall study and furnish the possible pollution due to plastic and microplastic on the Environment. The ecological risks and impacts of plastic & microplastics on aquatic Environment and fresh water systems due to activities, contemplated during mining may be investigated and reported.

Standard Terms of Reference for (Mining of minerals)

1.

S. No	Terms of Reference
1.1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994
1.2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine

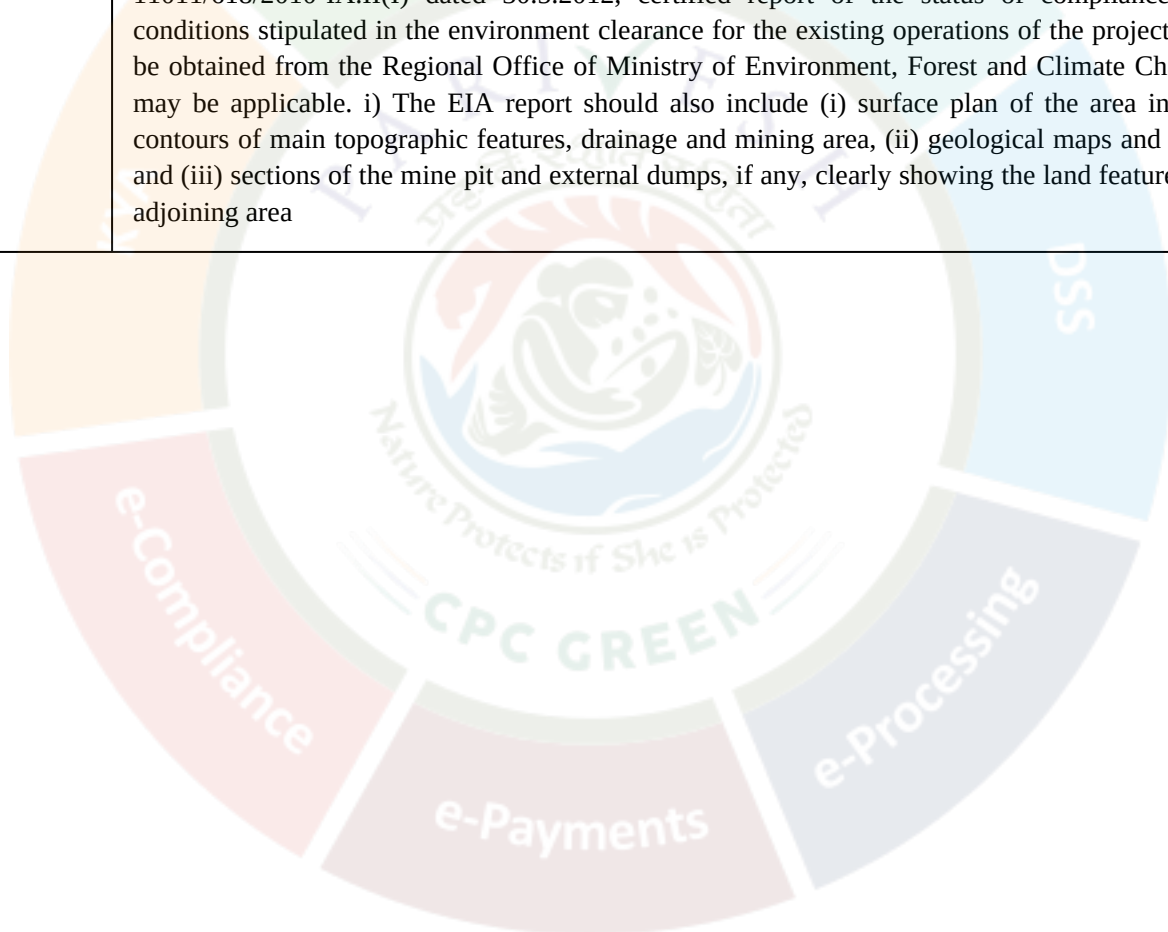
S. No	Terms of Reference
	should be given
1.3	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee
1.4	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone)
1.5	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics
1.6	Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority
1.7	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report
1.8	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided
1.9	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period
1.10	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given
1.11	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given
1.12	A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal

S. No	Terms of Reference
	Committees
1.13	Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished
1.14	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated
1.15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given
1.16	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted
1.17	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished
1.18	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled- I fauna found in the study area, the necessary plan alongwith budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost
1.19	Proximity to Areas declared as Critically Polluted or the Project areas likely to come under the Aravali Range, (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered
1.20	Similarly, for coastal Projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority)
1.21	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their

S. No	Terms of Reference
	R&R and socio-economic aspects should be discussed in the Report
1.22	One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given
1.23	Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map
1.24	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated
1.25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided
1.26	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided
1.27	Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided
1.28	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from State Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished
1.29	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out
1.30	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same
1.31	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation

S. No	Terms of Reference
	already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution
1.32	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines
1.33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report
1.34	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report
1.35	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed
1.36	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations
1.37	Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation
1.38	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project
1.39	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project
1.40	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given
1.41	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out
1.42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report
1.43	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc
1.44	Besides the above, the below mentioned general points are also to be followed:- a) All documents to

S. No	Terms of Reference
	be properly referenced with index and continuous page numbering. b) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated. c) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project. d) Where the documents provided are in a language other than English, an English translation should be provided. e) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted. f) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed. g) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation. h) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable. i) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area



A. STANDARD TERMS OF REFERENCE

- 1) Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.
- 2) A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given.
- 3) All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee.
- 4) All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ topo sheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).
- 5) Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, geomorphology of land forms of the area, existing minerals and mining history of the area, important water bodies, streams and rivers and soil characteristics.
- 6) Details about the land proposed for mining activities should be given with information as to whether mining conforms to the land use policy of the State; land diversion for mining should have approval from State land use board or the concerned authority.
- 7) It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA Report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board of Directors of the Company and/or shareholders or stakeholders at large, may also be detailed in the EIA Report.

- 8) Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.
- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- 12) Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13) Status of forestry clearance for the broken up area and virgin forestland involved in the Project including deposition of Net Present Value (NPV) and Compensatory Afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.

- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.
- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20) Similarly, for Coastal Projects, a CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease with respect to CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation &

Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.

- 22) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)] primary baseline data on ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.
- 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.

- 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- 29) Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.
- 30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
- 31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
- 32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if

contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.

- 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- 35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 37) Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.
- 38) Detailed Environmental Management Plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- 39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.

43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.

44) Besides the above, the below mentioned general points are also to be followed:-

- a) Executive Summary of the EIA/EMP Report
- b) All documents to be properly referenced with index and continuous page numbering.
- c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
- d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
- e) Where the documents provided are in a language other than English, an English translation should be provided.
- f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
- g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.
- h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the ToR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
- i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the Environment Clearance for the existing operations of the project, should be

obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.

- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

In addition to the above, the following shall be furnished:-

The Executive summary of the EIA/EMP report in about 8-10 pages should be prepared incorporating the information on following points:

1. Project name and location (Village, District, State, Industrial Estate (if applicable)).
2. Process description in brief, specifically indicating the gaseous emission, liquid effluent and solid and hazardous wastes.
3. Measures for mitigating the impact on the environment and mode of discharge or disposal.
4. Capital cost of the project, estimated time of completion.
5. The proponent shall furnish the contour map of the water table detailing the number of wells located around the site and impacts on the wells due to mining activity.
6. A detailed study of the lithology of the mining lease area shall be furnished.
7. Details of village map, “A” register and FMB sketch shall be furnished.
8. Detailed mining closure plan for the proposed project approved by the Geology of Mining department shall be submitted along with EIA report.
9. Obtain a letter /certificate from the Assistant Director of Geology and Mining standing that there is no other Minerals/resources like sand in the quarrying area within the approved depth of mining and below depth of mining and the same shall be furnished in the EIA report.
10. EIA report should strictly follow the Environmental Impact Assessment Guidance Manual for Mining of Minerals published February 2010.
11. Detail plan on rehabilitation and reclamation carried out for the stabilization and restoration of the mined areas.

12. The EIA study report shall include the surrounding mining activity, if any.
13. Modeling study for Air, Water and noise shall be carried out in this field and incremental increase in the above study shall be substantiated with mitigation measures.
14. A study on the geological resources available shall be carried out and reported.
15. A specific study on agriculture & livelihood shall be carried out and reported.
16. Impact of soil erosion, soil physical chemical and biological property changes may be assumed.
17. Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./ private land, status of its acquisition, nearby (in 2-3 km.) water body, population, within 10km other industries, forest, eco-sensitive zones, accessibility, (note - in case of industrial estate this information may not be necessary)
18. Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
19. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
20. Likely impact of the project on air, water, land, flora-fauna and nearby population
21. Emergency preparedness plan in case of natural or in plant emergencies
22. Issues raised during public hearing (if applicable) and response given
23. CER plan with proposed expenditure.
24. Occupational Health Measures
25. Post project monitoring plan
26. The project proponent shall carry out detailed hydro geological study through intuitions/NABET Accredited agencies.
27. A detailed report on the green belt development already undertaken is to be furnished and also submit the proposal for green belt activities.
28. The proponent shall propose the suitable control measure to control the fugitive emissions during the operations of the mines.

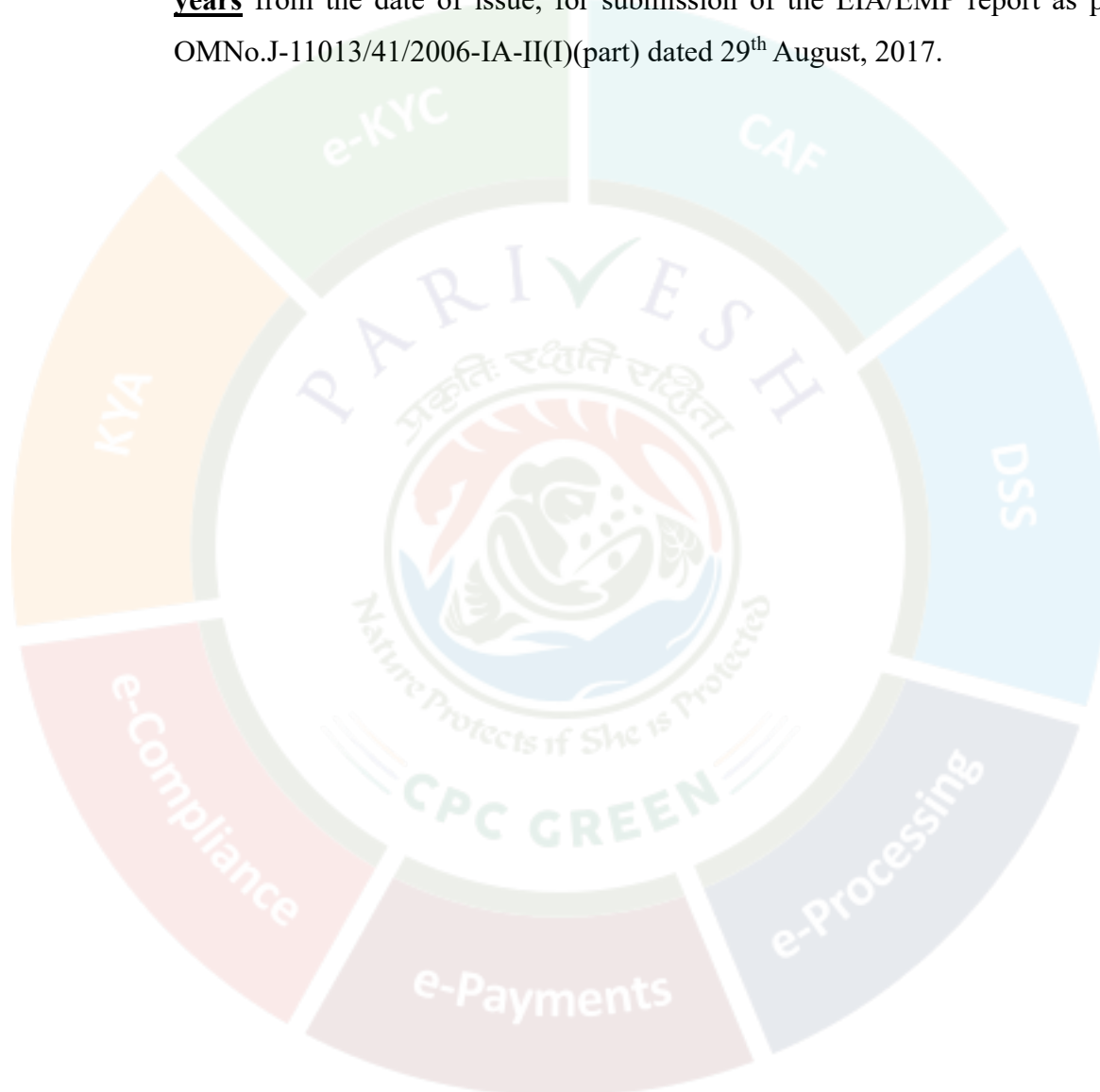
29. A specific study should include impact on flora & fauna, disturbance to migratory pattern of animals.
30. Reserve funds should be earmarked for proper closure plan.
31. A detailed plan on plastic waste management shall be furnished. Further, the proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throw away plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986. In this connection, the project proponent has to furnish the action plan.

Besides the above, the below mentioned general points should also be followed:-

- a. A note confirming compliance of the TOR, with cross referencing of the relevant sections / pages of the EIA report should be provided.
- b. All documents may be properly referenced with index, page numbers and continuous page numbering.
- c. Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.
- d. While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF& CC vide O.M. No. J-11013/41/2006-IA.II (I) dated 4th August, 2009, which are available on the website of this Ministry should also be followed.
- e. The consultants involved in the preparation of EIA/EMP report after accreditation with Quality Council of India (QCI)/National Accreditation Board of Education and Training (NABET) would need to include a certificate in this regard in the EIA/EMP reports prepared by them and data provided by other organization/Laboratories including their status of approvals etc. In this regard circular no F. No.J -11013/77/2004-IA-II(I) dated 2nd December, 2009, 18th March 2010, 28th May 2010, 28th June 2010, 31st December 2010 & 30th September 2011 posted on the Ministry's website <http://www.moef.nic.in/> may be referred.
 - After preparing the EIA (as per the generic structure prescribed in Appendix-III of the EIA Notification, 2006) covering the above mentioned points, the

proponent will take further necessary action for obtaining environmental clearance in accordance with the procedure prescribed under the EIA Notification, 2006.

- The final EIA report shall be submitted to the SEIAA, Tamil Nadu for obtaining Environmental Clearance.
- The TORs with public hearing prescribed shall be **valid for a period of three years** from the date of issue, for submission of the EIA/EMP report as per OMNo.J-11013/41/2006-IA-II(I)(part) dated 29th August, 2017.



TOR Reply of Proposed Rough Stone Quarry Over an Extent of 3.76.67 Ha

COMPLIANCE OF TOR CONDITIONS

Point wise compliance of ToR points issued by SEIAA, TN vide ToR Identification No. TO25B0108TN5423420N Dated: 13.05.2025 for Mining of Minor Minerals in the Mine of Proposed Rough stone and Gravel Quarry Over an Extent of 3.76.67 Ha at S.F.No.70/4A & 70/5B of Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State.

STANDARD TERMS OF REFERENCE

ToR Ref.	Description	Response	Page Ref. in EIA Report
1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification, 1994 came into force w.r.t. the highest production achieved prior to 1994.	This is a fresh mining project of Proposed Rough stone and Gravel quarry. Precise Area Communication Letter received from Deputy Director, Dept. of Geology & Mining, Krishnagiri vide letter Rc.No.768/2024 Mines Dated 25.11.2024. Mining Plan was approved by the Deputy Director, Dept. of Geology & Mining, Krishnagiri vide letter Rc.No.768/2024 Mines Dated 18.12.2024. As area is being exploited for the first time hence Year-wise production details since 1994 and before 1994 are not relevant or applicable. Proposed Production of Rough Stone for five years is proposed in the EIA/EMP in chapter no-2.	Chapter-2 Table No.2.2 Page No.42

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2.	A copy of document in support of the fact that the Proponent is the rightful lessee of the mine should be given.	The mine lease area of 3.76.67 hectare in Midithepalli Village for Rough stone and Gravel quarry approved by Mining Plan was approved by the Deputy Director, Dept. of Geology & Mining, Krishnagiri vide letter Rc.No.768/2024 Mines Dated 18.12.2024	Annexure III
3	All documents including approved mine plan, EIA and public hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management and mining technology and should be in the name of the lessee.	All the documents i.e., Mining Plan, EIA and public hearing are compatible with each other in terms of ML area production levels, waste generation and its management and mining technology are compatible with one another. The mining plan of the project site has been submitted to The Deputy Director, Dept. of Geology & Mining, Krishnagiri District	Annexure-VI Chapter- II
4	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/ Topo - sheet should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).	Details of coordinates of all corners of proposed mining lease area have been incorporated in mining plan and Chapter 2 of EIA/ EMP Report.	Chapter-2, Fig no. 2.2
5	Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, important water	Topo map as attached in Chapter-2	Chapter-2, Fig no. 2.4

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	bodies, streams and rivers and soil characteristics		
6.	Details about the land proposed for mining activities should be given with information as to whether conforms to the land use policy of the state; land diversion for mining should have approval from State land use board or the concerned authority	Details about the land proposed for mining activities should be given Chapter 2.	Chapter-2 Page 42
7	It should be clearly stated whether the proponent company has a well laid down Environment Policy approved by its Board of Directors? If so, it may be spelt out in the EIA report with description of the prescribed operating process/procedures to bring into focus any infringement/deviation/ violation of the environmental or forest norms/ conditions? The hierarchical system or administrative order of the Company to deal with the environmental issues and for ensuring compliance with the EC conditions may also be given. The system of reporting of non-compliances / violations of environmental norms to the Board	Noted.	

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	of Directors of the Company and/or shareholders or stakeholders at large may also be detailed in the EIA report.		
8	Issues relating to Mine Safety, including subsidence study in case of underground mining and slope study in case of open cast mining, blasting study etc. should be detailed. The proposed safeguard measures in each case should also be provided.	It is an open cast mining project. Blasting details are incorporated in chapter 2	Chapter-2, Page no.57
9	The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc should be for the life of the mine / lease period.	Study area comprises of 10 km radius from the mine lease boundary. Key Plan showing core zone (ML area).	Chapter-2 Fig no. 2.5 Page no.45
10	Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if	Land Use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, National Park, migratory routes of fauna, water bodies, human settlements and other ecological features has been prepared and incorporated in Chapter-2 of EIA/ EMP Report. There is no wildlife sanctuary and national park, migratory routes of fauna in the study area. The nearest	Chapter-2, Table no. 2.4 Page no.47

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	any, of change of land use should be given.	wildlife sanctuary is Cauvery North Wildlife Sanctuary located 25.35 km - S	
11	Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.	Gravel formation will be removed and transported to the needy end user, only after obtaining permission and paying necessary seigniorage fees to the Government.	Chapter-2, Page no.56
12	A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.	Complied. The proposed mining lease area is not falling under forest land.	

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13	Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of net present value (NPV) and compensatory afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.	The proposed mining lease area is not falling under forest land.	
14	Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.	Not Applicable. There is no involvement of forest land in the project area.	
15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.	Details of flora have been discussed in Chapter-3 of the EIA/EMP Report.	Chapter-3 Pg No. 99
16	A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly detailed mitigative measures required, should be worked out with cost implications and submitted.	There is a relatively poor sighting of animals in the core and buffer areas of the mining lease. No significant impact is anticipated	

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17	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger/Elephant Reserves/ (existing as well as proposed), if any, within 10km of the mine lease should be clearly indicated, supported by a location map duly authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the State Wildlife Department/Chief Wildlife Warden under the Wildlife (Protection) Act, 1972 and copy furnished.	There is two wildlife sanctuaries named Cauvery North Wildlife Sanctuary and Cauvery South Wildlife Sanctuary located at a distance of 25.35 kms, S and 47.26 kms, S from the project site.	Executive Summary Page No: 14
18	A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan for their conservation should be	Details biological study (flora & fauna) within 10 km radius of the project site have been incorporated in Chapter-3 of EIA/ EMP Report. No flora & fauna listed in scheduled I have been found in study area so there is no need of conservation plan. However, all care will be taken for protection of flora & fauna, if any in the lease hold area.	Chapter – 3 Pg No. 99

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	prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.		
19	Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Dept. Should be secured and furnished to the effect that the proposed mining activities could be considered.	The proposed mining lease area is not falling under critically polluted area.	
20	Similarly, for coastal projects, A CRZ map duly authenticated by one of the authorized agencies Similarly, for coastal projects, A CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease w.r.t CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would	There is no Coastal Zone within 15km radius of the project site.	

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	also need to obtain approval of the concerned Coastal Zone Management Authority)		
21	R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need based sample survey, family wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village located in the mine lease area will be shifted or not. The issues relating to shifting of Village including their R&R and socio-economic aspects should be discussed in the report.	There is no Rehabilitation and resettlement is involved. Land classified as Patta land.	

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22	One season (non-monsoon) and (Summer Season), (Post monsoon) primary baseline data on ambient air quality CPCB Notification of 2009 water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre- dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500m of the mine lease in the pre- dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.	Baseline data collected during Pre monsoon season (April 2025 to June 2025) has been incorporated in EIA/EMP report. The key plan of monitoring station has been discussed in Chapter-3 Locations of the monitoring stations have been selected keeping in view the pre- dominant downwind direction and location of the sensitive receptors and also that they represent whole of the study area.	Chapter 3
23	Air quality modelling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of	Air quality modelling & Impact of Air quality will be furnished in Final EIA report Transportation of mineral during	Chapter-4 Page No.111

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	movement of vehicles for transportation of mineral. The details of the model used and input parameters used for modelling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing predominant wind direction may also be indicated on the map.	operation of mines will be done by road & Venkatesapuram village road through dumpers and the impact of movement of vehicles are incorporated in EIA/EMP report. Air quality modelling & Impact of Air quality will be furnished in Final EIA report	
24	The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.	Total water requirement: 2.0 KLD Dust Suppression: 0.5 KLD Domestic Purpose: 1 KLD Plantation :0.5 KLD Domestic Water will be sourced from nearby village Midithepalli which is about 1.70 Km - NE of the area.	Chapter-2 Page no. 59
25	Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.	Not Applicable Water will be taken from nearby villages	
26	Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in	At the last stage of mining operation, almost complete area will be worked to restore the land to its optimum reclamation for future use as water	

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	the Project, if any, should be provided.	reservoir.	
27	Impact of the project on the water quality, both surface and groundwater should be assessed and necessary safeguard measures, if any required, should be provided.	Impact of the project on the water quality & its mitigation measures has been incorporated in Chapter-4 of EIA/EMP report.	Chapter-4 Page No.116
28	Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.	Maximum working depth: 39 m (2m Gravel + 37 m Rough stone) The ground water table is reported as 66 m below surface ground level in nearby wells of this area. Now, the present quarry shall be proposed above the water table and hence, quarrying may not affect the ground water So mine working will not be intersecting the ground water table.	Chapter-2 Page no. 34 Table No. 2.2
29	Details of any stream, seasonal or otherwise, passing through the lease area and modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.	There is no any stream crossing in the proposed quarry	Executive Summary

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30	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and BGL. A schematic diagram may also be provided for the same.	The altitude of the area is 869m above MSL. Depth: 47 m (2.0m Gravel & 45.0m Rough stone)	Chapter-2 Table no. 2.2 Page no. 39
31	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant pollution	Green Belt Development plan is proved given in Chapter 2.	Chapter-2
32	Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result	Impact on local transport infrastructure due to the project has been assessed. There shall not be much impact on local transport.	Chapter-3

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	of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project proponent shall conduct impact of Transportation study as per Indian Road Congress Guidelines	Traffic density from the proposed mining activity has been incorporated in EIA/EMP report.	Page No.119
33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA report.	Adequate infrastructure & other facilities shall be provided to the mine workers. Details are given in chapter-2 of EIA/EMP	Chapter-2
34	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.	Conceptual post mining land use and Reclamation and restoration sectional plates are given in Mining Plan followed by Scheme of mining.	Mining plates Annexure VI
35	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in	Suitable measure will be adopted to minimize occupational health impacts of the project. The project shall have positive impact on local environment. Details are given in chapter-10 of EIA/EMP.	Chapter-10 Pg No. 170

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	the EMP. The project in the mining area may be detailed		
36	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.	Suitable measure will be adopted to minimize occupational health impacts of the project.	Chapter-10 Pg No. 170
37	Measures of socio-economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.	Suitable measures has been discussed in Chapter 4	Chapter-4 Pg No. 135
38	Detailed environmental management plan to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.	Environment Management Plan has been described in detail in Chapter-9 of the EIA/EMP Report.	Chapter-9 Pg No. 160
39	Public hearing points raised and commitment of the project proponent on the same along with time bound action plan to implement the same should be	Public Hearing proceedings will be furnished in Final EIA report	

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	provided and incorporated in the final EIA/EMP Report of the Project.																	
40	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.	Not applicable No. litigation is pending against the project in any court.																
41	The cost of the project (capital cost and recurring cost) as well as the cost towards implementation of EMP should clearly be spelt out.	<table><tr><th>S. No</th><th>Description</th><th>Cost</th></tr><tr><td>1</td><td>Fixed Asset Cost</td><td>40,50,000/-</td></tr><tr><td>2</td><td>Operational Cost</td><td>40,00,000 /-</td></tr><tr><td></td><td>Total</td><td>80,50,000/-</td></tr><tr><td>3</td><td>EMP Cost (10 Years)</td><td>1536,82,735/-</td></tr></table>	S. No	Description	Cost	1	Fixed Asset Cost	40,50,000/-	2	Operational Cost	40,00,000 /-		Total	80,50,000/-	3	EMP Cost (10 Years)	1536,82,735/-	Chapter-8 Pg No. 154
S. No	Description	Cost																
1	Fixed Asset Cost	40,50,000/-																
2	Operational Cost	40,00,000 /-																
	Total	80,50,000/-																
3	EMP Cost (10 Years)	1536,82,735/-																
42	A Disaster Management Plan shall be prepared and included in the EIA/EMP Report.	Disaster Management and Risk Assessment has been incorporated in Chapter-7	Chapter-7 Pg No. 149															
43	Benefits of the project if the project is implemented should be spelt out. The benefits of the project shall clearly indicate environmental, social economic, employment potential etc.	Benefits of the project has incorporated	Chapter-8 Pg No. 153-154															
44	Besides the above, the below mentioned general points are also to be followed:																	

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(a)	Executive Summary of the EIA/EMP report	Complied	Executive Summary of EIA Report is given from page No.10-25
(b)	All documents to be properly referenced with index and continuous page numbering.	Complied	
(c)	Where data are presented in the report especially in tables, the period in which the data were collected and the sources should be indicated.	Complied	
(d)	Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF & CC NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the project.	Complied	
(e)	Where the documents provided are in a language other than English, an English translation should be provided.	Complied	
(f)	The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and	The complete questionnaire has been prepared	

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	submitted.		
(g)	While preparing the EIA report, the instructions for the proponents and instructions for the consultants issued by MoEF vide O.M. No. J-11013/41/2006-IA. II(I) dated 4th August 2009, which are available on the website of this Ministry, should also be followed.	The EIA report has been prepared and complying with the circular issued by MoEF vide O.M. No. J-11013/41/2006-IA. II(I) dated 4th August 2009.	
(h)	Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF with reasons for such changes and permission should be sought, as the TOR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation	There are no changes in prepared EIA as per submitted Form-1 & PFR	
(i)	As per the circular no. J-11011/618/2010-IA. II(I) dated 30.5.2012, report on the status of compliance of the conditions stipulated in the environment clearance for the	Will be complied after grant environment clearance from SEIAA, Tamilnadu	

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	existing operations of the project by the Regional Office of Ministry of Environment & Forests, if applicable.		
(j)	The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections (iii) sections of mine pit and external dumps, if any clearly showing the features of the adjoining area.	All Sectional Plates of Quarry is enclosed in Mining Plan.	

ANNEXURE-II

PRECISE AREA COMMUNICATION LETTER

Annexure -I

ந.க.எண். 768/2024/கனிமம் நாள்: 25.11.2024.

புவியியல் மற்றும் கரங்கத்துறை
மாவட்ட ஆட்சியர் அலுவலகம்
கிருஷ்ணகிரி.



குறிப்பாணை

பொருள் : கனிமங்களும் சுரங்கங்களும் - சிறு கனிமம் - கிராவல் மற்றும் சாதாரண கற்கள் - கிருஷ்ணகிரி மாவட்டம் - குளகிரி வட்டம் - மிடிதேப்பள்ளி கிராம புல எண்கள். 70/4A மற்றும் 70/5B ல் மொத்த விஸ்தீரணம் 3.76.67 ஹெக்டேர் பரப்பில் கிராவல் மற்றும் சாதாரண கற்கள் வெட்டியெடுக்க அனுமதி கோரி M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தினரால் விண்ணப்பம் அளிக்கப்பட்டது - வருவாய்துறை, வனத்துறை மற்றும் புவியியல் & சுரங்கத்துறை புலத்தணிக்கை அறிக்கை சமர்ப்பிக்கப்பட்டது - தகுதியான நிலப்பரப்பாக கருதி ஏற்பளிக்கப்பட்ட சுரங்க திட்டம் மற்றும் சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணைய இசைவினை பெற்று சமர்ப்பிக்கக் கோருதல் - தொடர்பாக.

- பார்வை :
1. M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தின் விண்ணப்ப நாள்: 08.07.2024.
 2. மாவட்ட ஆட்சியர், கிருஷ்ணகிரி அவர்களின் கடிதம் ந.க. 768/2024/கனிமம், நாள்: 11.07.2024.
 3. வட்டாட்சியர், குளகிரி அவர்களின் கடிதம் ந.க.எண். 1416/2024/அ2 நாள்: 02.09.2024.
 4. சார் ஆட்சியர், ஒசூர் அவர்களின் கடிதம் ந.க.எண். 3160/2024/பி2 நாள்: 10.10.2024.
 5. உதவி இயக்குநர் (கனிமம்) மற்றும் உதவி புவியியலாளர் (கனிமம்) கிருஷ்ணகிரி அவர்களது புலத்தணிக்கை அறிக்கை நாள்: 24.10.2024.
 6. மற்றும் உரிய ஆவணங்கள்.

பார்வையில் காணும் கடிதங்களின்பால் கனிவான கவனம் வேண்டப்படுகிறது.

2. கிருஷ்ணகிரி மாவட்டம், குளகிரி வட்டம், மிடிதேப்பள்ளி கிராம புல எண்கள். 70/4A மற்றும் 70/5B ல் மொத்த விஸ்தீரணம் 3.76.67 ஹெக்டேர் பரப்பில் கிராவல் மற்றும் சாதாரண கற்கள் வெட்டியெடுக்க அனுமதி வழங்க கோரி M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தினர் 08.07.2024 நாளிட்ட விண்ணப்பத்தினை உரிய ஆவணங்களுடன் சமர்ப்பித்துள்ளனர்.

3. மேற்கண்ட விண்ணப்பம் தொடர்பாக வட்டாட்சியர், குளகிரி, சார் ஆட்சியர், ஓசூர், உதவி இயக்குநர் (கனிமம்) மற்றும் உதவி புவியியலாளர் (கனிமம்) கிருஷ்ணகிரி ஆகியோர் புலத்தணிக்கை மேற்கொண்டு குளகிரி வட்டம், மிடிதேப்பள்ளி கிராம புல எண்கள். 70/4A மற்றும் 70/5B ல் மொத்த விஸ்தீரணம் 3.76.67 ஹெக்டேர் பரப்பில் விண்ணப்பதாரர் M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தினருக்கு நிபந்தனைகளுக்குட்பட்டு கிராவல் மற்றும் சாதாரண கற்கள் வெட்டியெடுக்க அனுமதி வழங்கலாம் என பரிந்துரை செய்துள்ளனர்.

4. எனவே, வட்டாட்சியர், குளகிரி, சார் ஆட்சியர், ஓசூர், உதவி இயக்குநர் (கனிமம்) மற்றும் உதவி புவியியலாளர் (கனிமம்) கிருஷ்ணகிரி ஆகியோரின் பரிந்துரைகள் மற்றும் நிபந்தனைகளின் அடிப்படையில், குளகிரி வட்டம், மிடிதேப்பள்ளி கிராம புல எண்கள். 70/4A மற்றும் 70/5B ல் மொத்த விஸ்தீரணம் 3.76.67 ஹெக்டேர் பரப்பில் விண்ணப்பதாரர் M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தினருக்கு 1959ம் வருட தமிழ்நாடு சிறுகனிம விதிகள், விதி எண்.19(1)-ன்படி மேற்கண்ட நிபந்தனைகளுக்குட்பட்டு 10 (பத்து) வருட காலத்திற்கு சாதாரண கற்கள் குவாரி உரிமம் வழங்குவதற்குரிய தகுதியான நிலப்பரப்பாக கருதப்படுகிறது.

5. மேலும், தமிழ்நாடு சிறு கனிம சலுகை விதிகள்-1959 விதி எண். 41-ன்படி குவாரிப்பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்க திட்டத்தினை இக்கடிதம் கிடைக்கப்பெற்ற 90 தினங்களுக்குள் சமர்ப்பிக்குமாறு மனுதாரரைக் கேட்டுக்கொள்ளப்படுகிறது. மேலும் ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தின் தொடர்ச்சியாக 1959ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.42-ன்படி சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் இசைவினைப் பெற்று சமர்ப்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் கீழ்க்கண்ட நிபந்தனைகளுக்குட்பட்டு வழங்கப்படும் என இதன் மூலம் தெரிவிக்கப்படுகிறது.

நிபந்தனைகள்:

a. 1959ம் வருடத்திய தமிழ்நாடு சிறு கனிம சலுகை விதிகள், அட்டவணை-||ல் கண்டுள்ளபடி குவாரி செய்யப்படும் கனிமங்களுக்குரிய சீனியரேஜ் தொகையினை அவ்வப்போது செலுத்தி கனிமம் கொண்டு செல்லப்பட வேண்டும்.

b. அருகிலுள்ள பட்டா நிலங்களுக்கு 7.5 மீ பாதுகாப்பு இடைவெளியும் விட்டு குவாரிப் பணி மேற்கொள்ள வேண்டும்.



- c. அனுமதி கோரும் புலத்தைச் சுற்றியுள்ள விளைநிலங்களுக்கு எந்த வித பாதிப்பும் ஏற்படாமல் குவாரிப் பணி மேற்கொள்ள வேண்டும். கிருஷ்ணகிரி மற்றும் சுரங்கத்துறை உரிய காலத்திற்குள் சமர்ப்பிக்க வேண்டும்.
- d. விதிகளின்படி ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தினை உரிய காலத்திற்குள் சமர்ப்பிக்க வேண்டும்.
- e. குவாரி உரிமம் வழங்க உள்ள பகுதிக்கு சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் முன் அனுமதி பெற்று சமர்ப்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும்.
- f. குவாரி குத்தகை கோரி விண்ணப்பித்துள்ள புலத்திற்கு செல்ல அனுகு பாதை அமைந்துள்ள பட்டா நிலங்களின் உரிமையாளர்களிடம் முறையாக அனுமதியினை விண்ணப்பதாரர் தனது சொந்த செலவில் பெற்றுக்கொள்ள வேண்டும்.
- g. வரைபடத்தில் துறை ரீதியாக பரிந்துரைக்கப்பட்ட இடத்தில் வெட்டி எடுக்கப்படும் சாதாரண மண்ணை ஒவ்வொரு லோடு கனிமத்திற்கும் உண்டான தொகையை செலுத்தி உரிய நடைச்சீட்டு பெற்று கனிமம் சென்றடையும் இடம் பூர்த்தி செய்த பிறகு மட்டுமே கனிமத்தை வெளியே கொண்டு செல்ல வேண்டும்.
- h. அனுமதிக்கப்படும் கனமீட்டர் அல்லது அனுமதிக்கப்பட்ட காலம் இதில் எது முன்னதாக முடிவடைகிறதோ அப்போது உரிமம் காலாவதியானதாக கருதப்படும்.
- i. எடுத்துச் செல்லப்படும் கனிமத்திற்கு உரிய வித்தியாச கனிமத்தொகை ஏதும் பின்வரும் காலங்களில் கணக்கீடு செய்யப்பட்டால், அவற்றை தவறாமல் செலுத்தப்பட வேண்டும்.
- j. பொதுமக்களுக்கோ போக்குவரத்திற்கோ எவ்வித இடையூறுமின்றி மண்ணை வாகனங்களின் மூலம் தார்பாய் இட்டு கொண்டு செல்ல வேண்டும்.
- k. இந்த அனுமதியை பயன்படுத்தி அருகிலுள்ள பட்டா / அரசு புலங்களிலிருந்து சாதாரண மண்ணை வெட்டி எடுக்கக் கூடாது.



- I. அனுமதிக்கப்படும் புலத்தின் சாதாரண மண் தவிர வேறு கனிமங்கள் ஏதேனும் இருந்தால் அதை வெட்டி எடுத்து செல்லக் கூடாது.
- III. விதிமீறல்கள் ஏதேனும் கண்டறியப்பட்டின் குத்தகை உரிமம் ரத்து செய்யப்படும்.

[Signature]
25/11/24

துணை இயக்குநர்,
புவியியல் மற்றும் சுரங்கத்துறை,
கிருஷ்ணகிரி.

பெறுநர்:

M/s. R.K.M Sand and Aggregates,
Prop. Thiru. D.Ravikumar,
Villa No. 126, Adarsh Palm,
Retreat Villas, Devarabisanahalli,
Bengalore, Karnataka - 560 103.

[Signature]
25-11-24

நகல்:

1. ஆணையர், புவியியல் மற்றும் சுரங்கத்துறை, சென்னை.
2. மாவட்ட ஆட்சித் தலைவர், கிருஷ்ணகிரி - தகவலுக்காக.

[Signature]

S.DHANASEKAR, M.Sc., (Geo)
Qualified Person

ANNEXURE-III
MINING PLAN APPROVED LETTER

From

Dr.P. Jayapal, M.Sc., Ph.D.,
Deputy Director,
Dept. of Geology and Mining,
Collectorate,
Krishnagiri.

To

M/s. R.K.M Sand and Aggregates,
Prop. Thiru. D.Ravikumar,
Villa No. 126, Adarshpalm,
Retreat Villas, Devarabisanahalli,
Bangalore,Karnataka - 560 103.

Rc.No. 768 /2024/Mines Dated: 18.12.2024

Sir,

Sub: Mines and Minerals – Minor Mineral - Rough Stone -
Krishnagiri District – Shoolagiri Taluk – Midithepalli Village -
Patta land - S.F.Nos. 70/4A (0.43.32) & 70/5B (3.33.35)-
Over an extent of 3.76.67 ha - Application preferred by M/s.
R.K.M Sand and Aggregates - Draft Mining Plan submitted -
Mining Plan Approved - reg.

- Ref:**
1. Application preferred by M/s. R.K.M Sand and Aggregates dated 08.07.2024.
 2. Precise area communication issued by the Deputy Director of Geology and Mining vide Letter No. 768/2024/Mines dated 25.11.2024.
 3. Representation of M/s. R.K.M Sand and Aggregates, dated 09.12.2024.

Kind attention is invited to the references cited above.

2. M/s. R.K.M Sand and Aggregates had preferred an application for quarrying rough stone over an extent of 3.76.67 ha of patta land in S.F.Nos. 70/4A (0.43.32) & 70/5B (3.33.35) in Midithepalli Village, Shoolagiri Taluk, Krishnagiri District for a period of 10 years under the provisions of Rule 19 (1) of Tamil Nadu

Minor Mineral Concession Rules, 1959. In this regard, the precise area communication was issued to the lessee vide the reference 2nd cited with a direction to submit approved mining plan and Environment Clearance.

3. Accordingly, M/s. R.K.M Sand and Aggregates has submitted 03 copies of draft Mining Plan vide letter dated 09.12.2024. The same has been examined and it is found correct.

4. As per the mining plan the year wise production for the proposed first and second five years are as follows.

First Five Years	Year	Recoverable Reserves (m³) @ 100%	Gravel in (m³)
	1 st Year	146965	61830
	2 nd year	90860	20700
	3 rd year	154575	-
	4 th year	140000	-
	5 th year	193775	-
	Total	726175	82530

Second Five Years	Year	Recoverable Reserves (m³) @ 100%	Top Soil in (m³)
	6 th year	136350	-
	7 th year	117325	-
	8 th year	99300	-
	9 th year	82275	-
	10 th year	63050	-
	Total	498300	-

5. Hence, the power delegated under Rule 4 of TNMMCR, 1959 and as per the guidelines/instructions issued by the Commissioner of Geology and Mining, vide letter Rc.No.3868/LC/2012 dated 19.11.2012, the said mining plan submitted by the applicant is hereby approved subject to the following conditions.

i) The mining plan is approved without prejudice to any other law applicable to the quarry lease from time to time whether such laws are made by the Central Government, State Government or any other authority.

ii) This approval of the mining plan does not in any way imply the approval of the Government in terms of any other provisions of Mines and Minerals Development and Regulation Act, 1957 or any other connected laws including Forest (Conservation) Act, 1957 Forest (Conservation) Act, 1980 Forest Conservation Rules, 1981, Environment protection Act, 1980 Indian Explosive Act, 1884 (Central Act IV of 1884) and the rules made there under and the Tamil Nadu Minor Mineral Concession rules, 1959.

iii) The mining plan is approved without prejudice to any other orders or directions from any court of competent jurisdiction.

iv) All the conditions mentioned in the precise area letter shall be followed during quarry operation as per rules.

v) The applicant shall get prior Environmental clearance from the appropriate authority and shall submit it to the District Collector, Krishnagiri.

vi) Every Mining Plan duly approved under the rule 41(9) of TNMMCR, 1959 shall be valid for a period of five years. Further, the applicant shall review the mining plan and submit the scheme of mining for the next five years of the lease for approval wherever quarrying lease is required beyond 5 years.

vii) If the approved mining plan required modifications within the lease period, the applicant shall carry out such modifications and resubmit the modified mining plan for approval.


Deputy Director,
Dept. of Geology and Mining,
Krishnagiri.


18.12.24

Copy to

- : 1. The Commisssioner,
Dept of Geology and Mining,
Guindy, Chennai -32.
2. The Chairman, Tamil Nadu
State Environment Impact
Assessment Authority,
3rd Floor, Panakal Maligai,
No. 1 Jeenes Road, Saidapet,
Chennai -15.

ANNEXURE-IV
500M Radius letter

From

Dr.P. Jayapal, M.Sc., Ph.D.,
Deputy Director,
Dept. of Geology and Mining,
Collectorate,
Krishnagiri.

To

M/s. R.K.M Sand and Aggregates,
Prop. Thiru. D.Ravikumar,
Villa No. 126, Adarshpalm,
Retreat Villas, Devarabisanahalli,
Bangalore,Karnataka - 560 103.

Rc.No. 768 /2024/Mines**Dated: 28.01.2025****Sir,**

Sub: Mines and Minerals - Minor Mineral - Rough Stone -
Krishnagiri District - Shoolagiri Taluk - Midithepalli Village -
Patta land - S.F.Nos. 70/4A (0.43.32) & 70/5B (3.33.35)-
Over an extent of 3.76.67 ha - Application preferred by M/s.
R.K.M Sand and Aggregates - Mining Plan Approved - Details
of quarries situated within 500m radial distance requested -
Quarry details within 500m radial distance furnished-Reg.

- Ref:** 1. Application preferred by M/s. R.K.M Sand and Aggregates
dated 08.07.2024.
2. The Deputy Director of Geology and Mining vide Letter No.
768/2024/Mines dated 25.11.2024 (Precise area
communication).
3. The Deputy Director of Geology & Mining, Krishnagiri in
Roc.No.768/2024/Mines, dated 18.12.2024 (Mining plan
approval).
4. Representation of M/s. R.K.M Sand and Aggregates, dated
06.01.2025

Kind attention is invited to the references cited above.

2. M/s. R.K.M Sand and Aggregates had preferred an application for quarrying rough stone over an extent of 3.76.67 ha of patta land in S.F.Nos. 70/4A (0.43.32) & 70/5B (3.33.35) in Midithepalli Village, Shoolagiri Taluk, Krishangiri District for a period of 10 years under the provisions of Rule 19 (1) of Tamil Nadu Minor Mineral Concession Rules, 1959.

3. Subsequently, the precise area was communicated to the applicant vide the reference 2nd cited with a direction to submit approved mining plan and Environment Clearance for taking further action.

4. Accordingly, the applicant submitted Mining Plan and the same was approved by the Deputy Director of Geology & Mining vide the reference 3rd cited.

5. At this juncture, the applicant vide the reference 4th cited has requested the details of quarries situated within 500m radial distance from the lease applied area. As requested by the applicant, the details of quarries situated within 500m radial distance from the lease applied area is furnished as follows:

I. Details of Existing Quarries

S. No.	Name of the Lessee	Village/ Taluk	S.F.No.	Extent in ha	Proceedings Rc.No. & date	Lease period
1	Thiru.B.Srikar, S/o.Bharathy D.No.25, Shanti Nagar (West),2ndCross, Hosur-635 109.	Midithepal li Village & Shoolagiri Taluk	79	1.86.50	Rc.No.646/2021/ Mines dated:08.08.2024	08.08.2024 to 07.08.2034
2.	Thiru.D.Sreenivasalu S/o.M.Venkateshwarlu D.No.50, Radha Lakshmi Nilaiyam, Devachandra Main Road, Bangalore-560 036.	Midithepalli Village & Shoolagiri Taluk	80/1, 80/2	3.17.08	Rc.No.1305/2018 /Mines dated:20.12.2022	20.12.2022 to 19.12.2032

3.	Thiru.Venkat Reddy, S/o.(late) Uthama Reddy, Kolar Taluk, Uddapanahalli, Chakkarasanahalli, Karnataka - 563 133.	Midithepalli Village & Shoolagiri Taluk	81/2 & 82/1	2.05.92	Rc.1308/2018/M ines dated:31.10.2022	31.10.2022 to 30.10.2032
Total				7.09.50		

II. Details of Expired/Abandoned Quarries

S. No.	Name of the Applicant/Lessee	Village/ Taluk	S.F.No.	Extent (ha)	Proceeding Rc.No. & date	Lease period
1	M/s.Sarva Infra Private Ltd,540, 3 rd floor, CMH Road, Indira Nagar, Bangalore-560 038.	Midithepalli Village & Shoolagiri Taluk	70/1B, 1C	4.05.00	Rc.09/2014/ Mines dated:26.10. 2015	28.10.2015 to 27.10.2020 (Lease Expired)
Total				4.05.00		

III. Details of Proposed/applied quarries

S. No.	Name of the Applicant/Lessee	Village/ Taluk	S.F.No.	Extent (ha)	Proceeding Rc.No. & date	Remarks
1	M/s. R.K.M Sand and Aggregates, Proprietor: Thiru.Ravikumar, Villa No.126, Adarsh Palm, Retreat Villas, Devarabisanahalli, Bangalore, Karnataka-560 103.	Midithepalli Village & Shoolagiri Taluk	70/4A & 70/5B	3.76.67	- ----	Instant Proposal
Total				3.76.67		

[Signature]
28/01/25

Deputy Director,

Dept. of Geology and Mining,
Krishnagiri.

[Signature]
28.01.25

Copy to :

The Chairman,
Tamil Nadu State Environment Impact Assessment
Authority, 3rd Floor, Panakal Maligai,
No. 1 Jeenes Road, Saidapet,
Chennai -15.

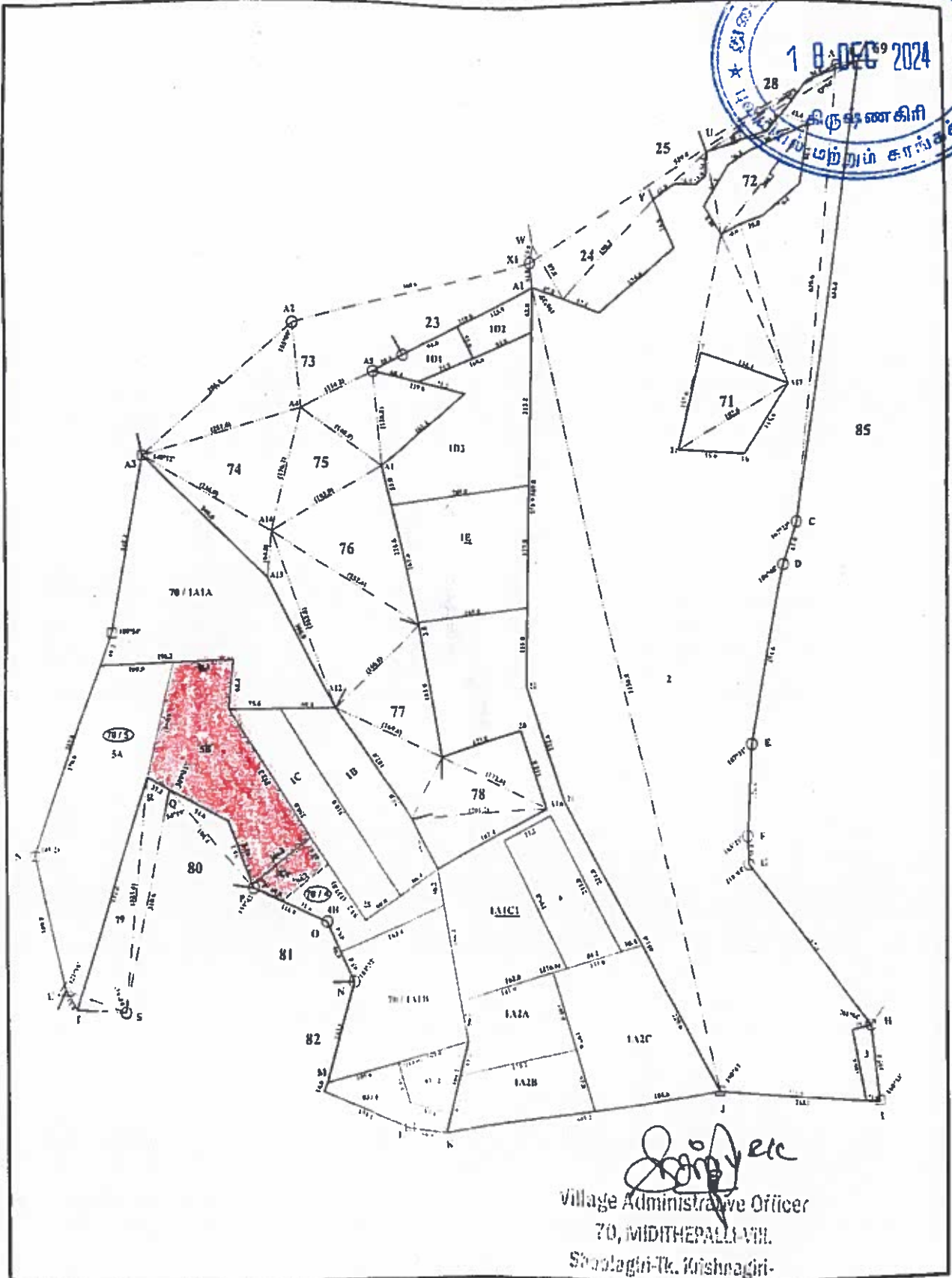
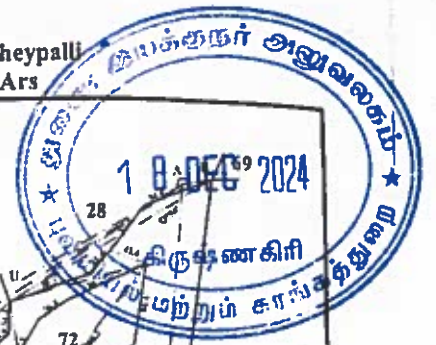
ANNEXURE-V
FMB, A REGISTER, VILLAGE MAP

ANNEXURE - II

District : Krishnagiri
Taluk : Soolagiri

S.No : 70

Village No : 70
Name : Miditheypalli
Area : Hec Ars



Scale 1mm : 5000 mm

[Signature]
J. DHANASEKAR, M.Sc. (Geo)
Qualified Person

மாவட்டம் துளசி

கிராமக் கணக்கு
வட்டம் 70- மிடுகுதபள்ளி

[illegible]

எண் 2

கிராமத்தில் வருடவாரி புலவாரி கைப்பற்று சாகுபடி அடங்கல் கணக்கு

இரண்டாம் போகம்.	
(13)	எந்த மாதத்தில் பயிர் செய்யப்பட்டது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது.
(14)	பயிரின் பெயர்.
(15)	பயிரான / அறுவடையான பரப்பு.
(16)	உண்மையான பாய்ச்சல் ஆதாரம்.
(17)	விளைச்சல் அளவு விழுக்காடு.
(18)	கிராம அறுவடையின் குறிப்புகள் :- (1) புலன்களின் பகுதிகளில் மட்டும் பயிரிடப்பட்ட இனங்களில் விவசாயிகள் அளவில். (2) கைப்பற்றில் இல்லாத நிலங்களின் சாகுபடியின் பரப்பு தள்ளுபடி. (3) முந்தைய மாதத்தில் பாய்ச்சல் உதவியின்றி பயிரிடப்பட்டவை என்று பதிவாகியுள்ள நிலங்களுக்கு பிந்தைய மாதங்களில் நீர் பாய்ச்சப்பட்ட விவசாயிகள். (4) வனம், (ஆ) பயனற்ற பயிர் செய்ய இயலாத நிலம், (இ) விவசாயம் மற்றும் இதர காரியங்களுக்கு பயன் படுத்தப்படும் நிலம், (ஈ) பயிரிடத்தக்க தரிக (உ) நிலையான புல் தரைகளும் மற்றும் இதர மேய்ச்சல் நிலங்களும், (ஊ) விதைக்கப்பட்ட திகர பரப்பில் சேர்க்கப்படாத மரவகைப் பயிர்களும் தோப்புகளும், (எ) நடப்புத் தரிககள் (ஏ) இதர தரிக நிலங்கள்.
(19)	கிழக்கண்டல்கையில் பயிரிடப்படாது உள்ள நிலத்தின் தரிகத்தின் மீது பரப்பின் விவசாயிகள் தரிகத்தின் அளவை எண் அயல்வகுதியில். (அ) வனம், (ஆ) பயனற்ற பயிர் செய்ய இயலாத நிலம், (இ) விவசாயம் மற்றும் இதர காரியங்களுக்கு பயன் படுத்தப்படும் நிலம், (ஈ) பயிரிடத்தக்க தரிக (உ) நிலையான புல் தரைகளும் மற்றும் இதர மேய்ச்சல் நிலங்களும், (ஊ) விதைக்கப்பட்ட திகர பரப்பில் சேர்க்கப்படாத மரவகைப் பயிர்களும் தோப்புகளும், (எ) நடப்புத் தரிககள் (ஏ) இதர தரிக நிலங்கள்.



☐ Negative

No. 7-1
NARIGANAFURAM

No. 42
BERUKAI

No. 122
ALENATTAM

SIRKANA¹PALLE

VENKĀTESĀPURAM

No. 69
ATHIMUGAM

[illegible]

Survey No.	Name of District
66	Madhya Pradesh
"	Madhya Pradesh
78	Madhya Pradesh
116	Madhya Pradesh
137	Madhya Pradesh
"	Madhya Pradesh

Manifestation under section 12 of the Food and Drug Survey and Sequestration Act VII of 1973 published at page 104. Nil of Chittagong District Gazette dated 22-1-1993

S.DHANASEKAR, M.Sc., (Geo)
Qualified Person

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 as holder of the Government of Land Grants, General &

ANNEXURE-VI MINING PLAN REPORT & PLATES

MINING PLAN

FOR

GRANT OF ROUGH STONE & GRAVEL QUARRY LEASE IN PART

TOTAL LEASE GRANTED PERIOD 10 YEARS

PERIOD OF MINING 10 YEARS

(Prepared Under Rules 41 & 42 as amended in Tamil Nadu Minor Mineral Concession Rules, 1959)



LOCATION OF THE APPLIED AREA

EXTENT : 3.76.67Ha.
S.F. Nos : 70/4A & 70/5B
VILLAGE : MIDITHEPALLI
TALUK : SHOOLAGIRI
DISTRICT : KRISHNAGIRI.
STATE : TAMIL NADU.

APPLICANT

M/s. R.K.M SAND AND AGGREGATES,
Prop. THIRU. D. RAVIKUMAR,
VILLA NO.126, ADARSH PALM,
RETREAT VILLAS,
DEVARABISANAHALLI,
BANGALORE,
KARNATAKA- 560 103.

PREPARED BY

S.DHANASEKAR, M.Sc.(Geo),
QUALIFIED PERSON,
NO. 5/30-7B, AVVAI NAGAR,
PONKUMAR MINES ROAD,
JAGIR AMMAPALAYAM,
SALEM DISTRICT – 636 302.

Email: geodhana@yahoo.co.in

CELL : 98946-28970 & 73733-74702.



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ANNEXURES

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LIST OF PLATES

SL. NO.	DESCRIPTION	PLATE NO.	SCALE
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12.	Progressive Mine Closure Plan	VIII	1:1000

M/s. R.K.M Sand and Aggregates,
Prop. D. Ravikumar,
Villa No.126, Adarsh Palm,
Retreat Villas,
Devarabisanahalli,
Bangalore,
Karnataka -560 103.



CONSENT LETTER FROM THE APPLICANT

I hereby give my consent for preparing the Mining Plan in respect of **Rough Stone & Gravel** quarry over an extent of **3.76.67 Hectares of Patta Land** in S.F.Nos.70/4A & 70/5B of **Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State.**

I request the Deputy Director, Department of Geology and Mining, KRISHNAGIRI District to make further correspondence regarding modifications if any in the Mining Plan with the said Qualified Person on this following address.

S.DHANASEKAR, M.Sc.,
Qualified Person
No.5/30-7B, Avvai Nagar,
Ponkumar Mines Road,
Jagir ammapalayam,
Salem District - 636302.
E-Mail: geodhana@yahoo.co.in
Cell: 98946-28970

I hereby undertake that all modifications so made in the Mining Plan by the Qualified Person may be deemed to have been made with our knowledge and consent and shall be acceptable to us and binding on us in all respects.

For M/s. R.K.M Sand and Aggregates,

(D. Ravikumar)

Proprietor

Place: Bangalore

Date:

M/s. R.K.M Sand and Aggregates,
Prop. D. Ravikumar,
Villa No.126, Adarsh Palm,
Retreat Villas,
Devarabisanahalli,
Bangalore,
Karnataka -560 103.



DECLARATION

I hereby declare that the Mining Plan in respect of **Rough Stone & Gravel** quarry over an extent of **3.76.67 Hectares** of **Patta Land** in **S.F.Nos.70/4A & 70/5B** of **Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State** has been prepared with our consultation and I have understood the contents and agree to implement the same in accordance with the Mining Laws.

For M/s. R.K.M Sand and Aggregates,

(D. Ravikumar)

Proprietor

Place: Bangalore

Date:

S. Dhanasekar.M.Sc.,(Geol),
Qualified Person,

No.5/30-7B, Avvai Nagar,
Ponkumar Mines Road,
Jagir Ammapalayam,
Salem- 636 302



CERTIFICATE

This is to certify that, the provisions of Minor Minerals Conservation and Development Rules, 2010 (MMCDR) have been observed in the Mining Plan for the grant of **Rough Stone & Gravel** quarry lease over an extent of **3.76.67 Hectares** of **Patta Land** in **S.F.Nos.70/4A & 70/5B** of **Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State** obtained by **M/s. R.K.M Sand and Aggregates, Prop. Thiru. D. Ravikumar**, for applied quarry lease.

Wherever specific permission / exemptions / relaxations or approvals are required, the Applicant will approach the concerned authorities of State and Central Governments for obtaining such permissions etc.

Certified

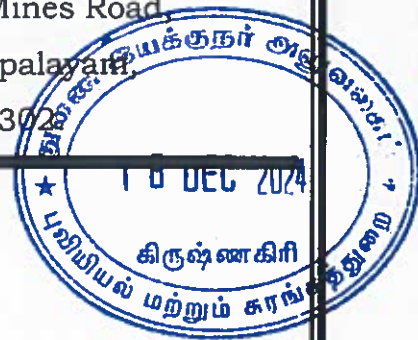

Signature of Qualified Person.
S.DHANASEKAR, M.Sc.,(Geo)
Qualified Person

Place: Salem

Date:

S. Dhanasekar.M.Sc.,(Geol),
Qualified Person,

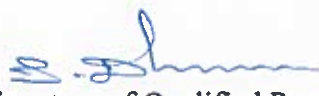
No.5/30-7B, Avvai Nagar,
Ponkumar Mines Road,
Jagir Ammapalayam,
Salem- 636 302



CERTIFICATE

This is to certify that during preparation of Mining Plan for **Rough Stone & Gravel** quarry over an extent of **3.76.67 Hectares of Patta Land** in **S.F.Nos.70/4A & 70/5B** of **Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State** for **M/s. R.K.M Sand and Aggregates, Prop.Thiru. D. Ravikumar**, covers all the provisions of Mines Act, Rules, and Regulations etc made there under and whenever specific permission are required, the Applicant will approach the Director General of Mines Safety, Chennai. The standards prescribed by DGMS in respect of Mines Health will be strictly implemented.

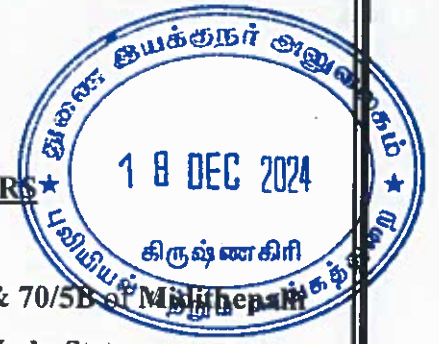
Certified


Signature of Qualified Person.
S.DHANASEKAR, M.Sc.,(Geo)
Qualified Person

Place: Salem

Date:

MINING PLAN FOR MINOR MINERALS
ROUGH STONE & GRAVEL QUARRY
TOTAL LEASE GRANTED PERIOD 10 YEARS
PERIOD OF MINING 10 YEARS



Over an extent of 3.76.67 Hectares of Patta Land in S.F.Nos.70/4A & 70/5B of Midithepalli
Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State
(Prepared Under Rules 41 & 42 as amended in Tamil Nadu Minor Mineral Concession
Rules, 1959)

1.0 INTRODUCTION :

1. M/s. R.K.M Sand and Aggregates, Prop. Thiru. D. Ravikumar, residing at Villa No.126, Adarsh Palm, Retreat Villas, Devarabisanahalli, Bangalore, Karnataka-560 103, has obtained quarry lease for **Rough Stone & Gravel** over an extent of 3.76.67 Hectares of **Patta Land** in S.F.Nos.70/4A & 70/5B of Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu State for a period of Ten Years.
2. The Deputy Director, Krishnagiri in his letter Rc. No. 768/2024/Minerals dated: 25.11.2024 directed the applicant to produce approved Mining Plan and Environmental Clearance certificate from the State Environment Impact Assessment Authority (SEIAA) for the grant of quarry lease for the applied area.
3. Accordingly, Mining Plan is prepared under Rules 41 & 42 as amended in Tamil Nadu Minor Mineral Concession Rules, 1959 by incorporating the conditions imposed in the precise area communication letter and by incorporating all the details proposed in the letter to obtain environmental clearance from State Environment Impact Assessment Authority.
4. In the above circumstances, the mining plan has been prepared for the Applicant M/s. R.K.M Sand and Aggregates, Prop.:Thiru.D. Ravikumar, for approval and subsequent submission of Form-I and Pre-Feasibility report to obtain environmental clearance from the SEIAA of Tamil Nadu.
5. This Mining Plan is prepared for the Rough Stone & Gravel Quarry for the period of Ten Years by considering the TNMMCR 1959, and as per the EIA Notification 2006 and subsequent amendments and judgments.
6. The Geological Reserves is estimated as 2144580M³ and Mineable & recoverable Reserves is estimated as 1224475M³ of Rough Stone & 82530M³ of Gravel after leaving necessary safety distance from the lease boundary as indicated while granting the quarry lease Proceedings and relevant mining laws in force.


S.DHANASEKAR, M.Sc., (Geo)
Qualified Person

7. The proposed production scheduled for the Ten years is estimated as 1224475M³ of Rough Stone & 82530M³ of Gravel. Proposed average annual production of Rough stone 122447M³.

8. Estimated Life of the Quarry

Total Mineable ROM	= 1224475 M ³
Recoverable Reserves @ 100%	= 1224475 M ³
Average production per year	= 122447 M ³
Estimated Life of the Quarry	= 1224475 / 122447 = 10.0 years

Life = 10.0 years

The Life of mine may change depend upon the prospecting results, rate of production and the extent of mechanization done by the applicant in near future.

9. Environmental measures already adopted are,

- i) Dust Control at source while drilling and blasting,
- ii) Dust suppression at loading point and transport haul roads,
- iii) Noise Control in blasting, control of fly rock missiles and vibration by doing peak particle velocity with in standard as prescribed by the DGMS and MoEF.
- iv) Unnecessary land degradation should be avoided or damaged land should be reclaimed or rehabilitated.
- v) Uneven rat hole mining is avoided and follow scientific and systematic mining by safe bench system of open cast mining.
- vi) Mining near major fracture zones already avoided to control ground water fluctuation in the adjacent agricultural lands.
- vii) Emission test of vehicles should be intact maintaining minimum emission level of flue gases.
- viii) Noise level should not exceed 80db and the vehicles use only permitted Air Horn while on road near residential areas.
- ix) Safety zones as prescribed by the Department of Geology and Mining from adjacent infrastructures should be strictly adhering to.
- x) And any other conditions as stipulated by the concerned authorities will be followed to protect the environment.



2.0 EXECUTIVE SUMMARY:

a.	Name of the Village	: Midithepalli
b.	Name of the Panchayat / Union	: Midithepalli/ Shoolagiri
c.	The proposed total Mineable Reserves	: 1224475M ³ of Rough stone & 82530M ³ of Gravel
d.	The proposed quantity of reserves (level of production) for Ten Years to be mined is (Recoverable reserves)	: 1224475M ³ of Rough stone & 82530M ³ of Gravel
e.	Total extent of the area	: 3.76.67Ha
f.	Proposed Period of mining	: Ten Years
g.	Proposed Depth of mining	: 47.0m (Surface Ground level above-7m, Surface Ground level below-40m).
h.	Existing Pit Dimension	: Nil
i.	Average Production Per Year	: 122447M ³
j.	Method of mining / level of mechanization	: Opencast, Semi-mechanized Mining with a bench height of 5m and bench width of 5m is proposed.
k.	Types of Machineries used in the quarry	: i) Compressor with jack hammer. ii) Excavator of 0.90Cbm bucket Capacity.
l.	Cost of the Project a. Fixed Cost b. Operational Cost c. EMP Cost	Rs. 40,50,000/- Rs. 40,00,000/- Rs. 3,80,000/-
m.	The Applied lease area is bounded by four corners and the coordinates are Latitude Longitude North East South East North West South West	Toposheet No. 57 – H/13 : 12° 46' 07.7657" N to 12° 45' 57.2328" N : 77° 57' 10.9141" E to 77° 57' 01.9504" E : 12° 46' 07.7657" N 77° 57' 05.7114" E : 12° 45' 58.9793" N 77° 57' 10.9141" E : 12° 46' 0.6050" N 77° 57' 5.9704" E : 12° 46' 2.2861" N 77° 57' 1.9504" E



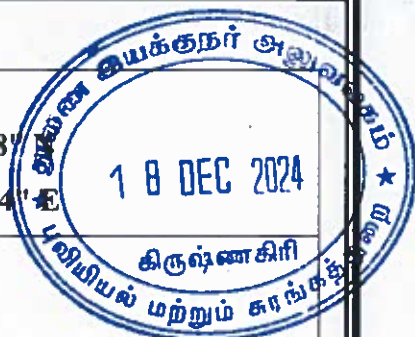
3.0 GENERAL INFORMATION:

3.1	a.	Name of the Applicant	:	M/s. R.K.M Sand and Aggregates Prop. D. Ravikumar,
	b.	Address of the Applicant with phone No and e-mail id if any	:	M/s. R.K.M Sand and Aggregates Prop. D. Ravikumar, Villa No.126, Adarsh Palm, Retreat Villas, Devarabisanahalli, Bangalore, Karnataka -560 103.
	c.	Status of the Applicant	:	Proprietor
3.2	a.	Mineral Which the Applicant intends to mine	:	Rough Stone & Gravel
	b.	Precise area letter	:	Roc. No. 768/2024/Minerals dated: 25.11.2024
	c.	Period of permission	:	10 Years
	e.	Name and Address of the Qualified Person preparing Mining Plan	:	S.Dhanasekar, M.Sc., Qualified Person No.5/30-7B, Avvai Nagar, Ponkumar Mines Road, Jagir Ammapalayam, Salem District - 636302. E-Mail: geodhana@yahoo.co.in Cell: 98946-28970 & 73733-74702

4.0 LOCATION: DETAILS AREA:

State	District	Panchayat / Union	Taluk	Village	S.F.Nos	Extent in Hectare
Tamil Nadu	Krishnagiri	Midithepalli/ Shoolagiri	Shoolagiri	Midithepalli	70/4A 70/5B	0.43.32 3.33.35
TOTAL =						3.76.67
b.	Classification of the Area (Ryotwari / Poramboke / others)		:	It is a Patta Land, which is not fit for vegetation/cultivation.		
c.	Ownership / Occupancy of the Applied Lease area (Surface rights)		:	It is a Patta Land in S.F.Nos.70/4A & 70/5B registered in the name of Mr. D. Ravikumar, Proprietor of M/s. R.K.M Sand and Aggregates vide Patta No. 985 & 984. Hence the applicant has surface rights over the area.		

d.	Toposheet No. with Latitude and Longitude	:	Toposheet No. 57 – H/13 12° 46' 07.7657" N to 12° 45' 57.2328" N 77° 57' 10.9141" E to 77° 57' 01.9504" E
e.	Existence of Public Road / Railway line if any nearby the area and approximate distance	:	Krishnagiri - Shoolagiri = 26.0Km Shoolagiri - Athimugam = 11.0Km Quarry site is located in Northwestern side at a distance of 3.8kms from Athimugam.



PART - A

5.0 GEOLOGY AND MINERAL RESERVES:

5.1	a.	Topography	:	1. The area is situated slightly elevated terrain sloping towards eastern side with Rough Stone which does not sustain any type of vegetation. The altitude of the area is 895m above MSL. 2. No major river is found nearby the lease area. 3. Water table is noticed at a depth of 67m from below the surface in the adjacent open well and bore well. 4. Temperature of the area is reported to be 18°C to a maximum of 38°C during summer. 5. Rainfall of this area is about 800mm to 900 mm during the monsoons in a year.
	b.	Infrastructures nearby the Applied Lease area.		
		1. Post Office	:	Venkatesapuram – 3.0kms
		2. Police Station	:	Athimugam – 3.8kms
		3. G.H	:	Athimugam – 4.8kms
		4. Fire service	:	Hosur – 21.0kms
		5. Railway Station	:	Hosur – 19.0kms
		6. School	:	Venkatesapuram – 2.1kms
		7. Airport	:	Bangalore – 98.3kms
		8. Seaport	:	Chennai – 305.0kms

c.	Regional Geology	: Krishnagiri District is underlined by the wide range of metamorphic rocks of peninsular gneissic complex. These rocks are extensively weathered and overlain by the recent valley fills and alluvium at places. The geological formations found in the district are Archaean rocks like Gneisses, Granites, Charnockites, basic granulites and calc-gneisses. The younger formations are Quartz veins and pegmatite. The generalized stratigraphic succession of the geological formations met within this District is as follows. <table border="1"> <thead> <tr> <th></th><th>Age</th><th>Rock Formation</th></tr> </thead> <tbody> <tr> <td>1.</td><td>Recent to Sub recent</td><td>Soil, Alluvium</td></tr> <tr> <td>2.</td><td>Archaean</td><td>Granites, basic granulites, Peninsular Gneiss, Calc Gneiss and Charnockites</td></tr> </tbody> </table>		Age	Rock Formation	1.	Recent to Sub recent	Soil, Alluvium	2.	Archaean	Granites, basic granulites, Peninsular Gneiss, Calc Gneiss and Charnockites			
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1.	Recent to Sub recent	Soil, Alluvium												
2.	Archaean	Granites, basic granulites, Peninsular Gneiss, Calc Gneiss and Charnockites												
d.	Geology of the Lease Area	1. The area is mainly composed of Archaean crystalline metamorphic complex. 2. The rock type noticed in the area for lease is Granite Gneiss which contains mostly Quartz and Feldspar with some ferromagnesian minerals. The Granite Gneiss is part of peninsular Gneisses, a high grade metamorphic rock. 3. The general trend of formation is NW – SE and dip towards SW-70°. The general geological succession of the area is given under <table border="1"> <thead> <tr> <th></th><th>Age</th><th>Rock Formation</th></tr> </thead> <tbody> <tr> <td>1.</td><td>Recent to Sub recent</td><td>Soil, Alluvium</td></tr> <tr> <td>2.</td><td>Archaean</td><td>Charnockites</td></tr> <tr> <td>3.</td><td>Archaean</td><td>Peninsular Gneiss, and Calc Gneiss</td></tr> </tbody> </table>		Age	Rock Formation	1.	Recent to Sub recent	Soil, Alluvium	2.	Archaean	Charnockites	3.	Archaean	Peninsular Gneiss, and Calc Gneiss
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2.	Archaean	Charnockites												
3.	Archaean	Peninsular Gneiss, and Calc Gneiss												

5.2		Details of Exploration already carried out if any	:	Since the Rough Stone & Gravel is seen from the Surface itself, No needed to exploration. However, the area was personally examined by the Geologist who prepared the Mining Plan.																																																																																																																																																																																						
5.3	a.	Already excavated in pit dimensions	:	Nil																																																																																																																																																																																						
	b.	Geological Resources: Gravel: The Thickness of Gravel in this area is 2.0m and the total volume of Gravel will be 96630m ³ . Rough Stone : The Available Geological Resources is estimated as 2144580m ³ respectively, at the rate of 100% Recovery upto the permissible depth. The Geological reserve of Rough stone and Gravel is calculated upto a Total Depth-47m (2m Gravel + 45m Rough Stone) (Surface Ground level above-7m, Surface Ground level below-40m).																																																																																																																																																																																								
<table><thead><tr><th colspan="8">GEOLOGICAL RESERVES</th></tr><tr><th>Section</th><th>Bench</th><th>L (m)</th><th>W (m)</th><th>D (m)</th><th>Volume in (Cu.m.)</th><th>Geological Reserve in Cu.m (100%)</th><th>Gravel in (Cu.m.)</th></tr></thead><tbody><tr><td rowspan="10">XY-AB</td><td>I</td><td>236</td><td>150</td><td>2</td><td></td><td></td><td>70800</td></tr><tr><td>II</td><td>221</td><td>141</td><td>5</td><td>155805</td><td>155805</td><td></td></tr><tr><td>III</td><td>236</td><td>150</td><td>5</td><td>177000</td><td>177000</td><td></td></tr><tr><td>IV</td><td>236</td><td>150</td><td>5</td><td>177000</td><td>177000</td><td></td></tr><tr><td>V</td><td>236</td><td>150</td><td>5</td><td>177000</td><td>177000</td><td></td></tr><tr><td>VI</td><td>236</td><td>150</td><td>5</td><td>177000</td><td>177000</td><td></td></tr><tr><td>VII</td><td>236</td><td>150</td><td>5</td><td>177000</td><td>177000</td><td></td></tr><tr><td>VIII</td><td>236</td><td>150</td><td>5</td><td>177000</td><td>177000</td><td></td></tr><tr><td>IX</td><td>236</td><td>150</td><td>5</td><td>177000</td><td>177000</td><td></td></tr><tr><td>X</td><td>236</td><td>150</td><td>5</td><td>177000</td><td>177000</td><td></td></tr><tr><td colspan="5">Total=</td><td>1571805</td><td>1571805</td><td>70800</td></tr><tr><td rowspan="10">XY-CD</td><td>I</td><td>123</td><td>105</td><td>2</td><td></td><td></td><td>25830</td></tr><tr><td>II</td><td>107</td><td>105</td><td>5</td><td>56175</td><td>56175</td><td></td></tr><tr><td>III</td><td>123</td><td>105</td><td>5</td><td>64575</td><td>64575</td><td></td></tr><tr><td>IV</td><td>123</td><td>105</td><td>5</td><td>64575</td><td>64575</td><td></td></tr><tr><td>V</td><td>123</td><td>105</td><td>5</td><td>64575</td><td>64575</td><td></td></tr><tr><td>VI</td><td>123</td><td>105</td><td>5</td><td>64575</td><td>64575</td><td></td></tr><tr><td>VII</td><td>123</td><td>105</td><td>5</td><td>64575</td><td>64575</td><td></td></tr><tr><td>VIII</td><td>123</td><td>105</td><td>5</td><td>64575</td><td>64575</td><td></td></tr><tr><td>IX</td><td>123</td><td>105</td><td>5</td><td>64575</td><td>64575</td><td></td></tr><tr><td>X</td><td>123</td><td>105</td><td>5</td><td>64575</td><td>64575</td><td></td></tr><tr><td colspan="5">Total=</td><td>572775</td><td>572775</td><td>25830</td></tr><tr><td colspan="5">Grand Total=</td><td>2144580</td><td>2144580</td><td>96630</td></tr></tbody></table>					GEOLOGICAL RESERVES								Section	Bench	L (m)	W (m)	D (m)	Volume in (Cu.m.)	Geological Reserve in Cu.m (100%)	Gravel in (Cu.m.)	XY-AB	I	236	150	2			70800	II	221	141	5	155805	155805		III	236	150	5	177000	177000		IV	236	150	5	177000	177000		V	236	150	5	177000	177000		VI	236	150	5	177000	177000		VII	236	150	5	177000	177000		VIII	236	150	5	177000	177000		IX	236	150	5	177000	177000		X	236	150	5	177000	177000		Total=					1571805	1571805	70800	XY-CD	I	123	105	2			25830	II	107	105	5	56175	56175		III	123	105	5	64575	64575		IV	123	105	5	64575	64575		V	123	105	5	64575	64575		VI	123	105	5	64575	64575		VII	123	105	5	64575	64575		VIII	123	105	5	64575	64575		IX	123	105	5	64575	64575		X	123	105	5	64575	64575		Total=					572775	572775	25830	Grand Total=					2144580	2144580	96630
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XY-AB	I	236	150	2			70800																																																																																																																																																																																			
	II	221	141	5	155805	155805																																																																																																																																																																																				
	III	236	150	5	177000	177000																																																																																																																																																																																				
	IV	236	150	5	177000	177000																																																																																																																																																																																				
	V	236	150	5	177000	177000																																																																																																																																																																																				
	VI	236	150	5	177000	177000																																																																																																																																																																																				
	VII	236	150	5	177000	177000																																																																																																																																																																																				
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	X	236	150	5	177000	177000																																																																																																																																																																																				
Total=					1571805	1571805	70800																																																																																																																																																																																			
XY-CD	I	123	105	2			25830																																																																																																																																																																																			
	II	107	105	5	56175	56175																																																																																																																																																																																				
	III	123	105	5	64575	64575																																																																																																																																																																																				
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	X	123	105	5	64575	64575																																																																																																																																																																																				
Total=					572775	572775	25830																																																																																																																																																																																			
Grand Total=					2144580	2144580	96630																																																																																																																																																																																			

c. **Mineable Reserves:**

The Mineable reserves are calculated by deducting 7.5m safety distance for Patta land.

Gravel :

The Thickness of Gravel in this area is **2.0m** and the total volume of Gravel will be **82530m³**.

Rough Stone :

The mineable reserves and the Recoverable Reserves are **1224475m³** respectively, at the rate of 100% recovery upto the permissible depth. The Mineable reserve of Rough stone and Gravel is calculated upto a **Total Depth-47m** (2m Gravel + 45m Rough Stone) (Surface Ground level above-7m, Surface Ground level below-40m).

MINEABLE RESERVES							
Section	Bench	L (m)	W (m)	D (m)	Volume in (Cu.m.)	Mineable Reserve in Cu.m(100%)	Gravel in (Cu.m.)
XY-AB	I	229	135	2			61830
	II	221	133	5	146965	146965	
	III	229	135	5	154575	154575	
	IV	224	125	5	140000	140000	
	V	219	115	5	125925	125925	
	VI	214	105	5	112350	112350	
	VII	209	95	5	99275	99275	
	VIII	204	85	5	86700	86700	
	IX	199	75	5	74625	74625	
	X	194	65	5	63050	63050	
Total=					1003465	1003465	61830
XY-CD	I	115	90	2			20700
	II	107	86	5	46010	46010	
	III	115	78	5	44850	44850	
	IV	110	68	5	37400	37400	
	V	105	58	5	30450	30450	
	VI	100	48	5	24000	24000	
	VII	95	38	5	18050	18050	
	VIII	90	28	5	12600	12600	
	IX	85	18	5	7650	7650	
Total=					221010	221010	20700
Grand Total=					1224475	1224475	82530

6.0 MINING:

6.1	Method of Mining	:	1. Opencast method of semi mechanized mining is being adopted to extract Rough Stone of required size. 2. Machineries like Tractor mounted compressor attached with Jack hammers is used for drilling and blasting. Excavators are used for quarrying of Rough Stone and Tippers / Lorries are used for the transportation of Rough Stone & Gravel to the destination.
6.2	Mode of Working	:	It is a semi mechanized quarrying operation using shot hole drilling with the help of compressor and jack hammers and smooth blasting. Rough Stone are removed using Hydraulic excavator and loaded directly to the tippers and transported to the needy buyers.
6.3	Proposed bench height & Width	:	Bench height = 5mts. Bench width = 5mts.
6.4	Details of Overburden / Mineral Production proposed for Ten Year.	:	Gravel/ Overburden production details follows: This area is covered 2.0m Gravel and the estimated quantity of Gravel is $82530m^3$. Gravel formation will be removed and hydraulic excavators are used for loading the gravel into the tipper from pit head to needy buyers. This will be done only after obtaining permission and paying necessary seigniorage fees to the Government.
Year wise reserves calculations : Rough stone production Ten Years details as follows: The proposed rate of production of Rough Stone is estimated as $1224475m^3$ & Gravel is $82530m^3$ for Ten years. The average proposed rate of production of Rough Stone is about $122447m^3$ per year at the rate of 100% recovery upto the permissible depth. Reserves Calculated upto 47m (2m Gravel + 45m Rough Stone) (Surface Ground level above-7m, Surface Ground level below-40m). (Refer Drawing Plate No.IV-A-Year wise Sections).			

YEARWISE DEVELOPMENT AND PRODUCTION									
Year	Section	Bench	L (m)	W (m)	D (m)	Volume In M3	Recoverable Reserve in m3 @ 100%	Gravel in m3	
I-Year	XY-AB	I	229	135	2				
		II	221	133	5	146965	146965	61830	
	TOTAL					146965	146965	61830	
II-Year	XY-CD	I	115	90	2				
		II	107	86	5	46010	46010		
		III	115	78	5	44850	44850		
	TOTAL					90860	90860	20700	
III-Year	XY-AB	III	229	135	5	154575	154575		
	TOTAL					154575	154575		
IV-Year	XY-AB	IV	224	125	5	140000	140000		
	TOTAL					140000	140000		
V-Year	XY-CD	IV	110	68	5	37400	37400		
		V	105	58	5	30450	30450		
	XY-AB	V	219	115	5	125925	125925		
	TOTAL					193775	193775		
VI-Year	XY-AB	VI	214	105	5	112350	112350		
	XY-CD	VI	100	48	5	24000	24000		
	TOTAL					136350	136350		
VII-Year	XY-AB	VII	209	95	5	99275	99275		
	XY-CD	VII	95	38	5	18050	18050		
	TOTAL					117325	117325		
VIII-Year	XY-AB	VIII	204	85	5	86700	86700		
	XY-CD	VIII	90	28	5	12600	12600		
	TOTAL					99300	99300		
IX-Year	XY-AB	IX	199	75	5	74625	74625		
	XY-CD	IX	85	18	5	7650	7650		
	TOTAL					82275	82275		
X-Year	XY-AB	X	194	65	5	63050	63050		
TOTAL						63050	63050		
Grand Total						1224475	1224475	82530	
6.5	a.	Mining	: Drilling of shot holes will be carried out using compressor and jack hammer. Depth of holes shall be 1 to 2m bench height and spacing shall be 0.75m and burden shall be 0.60m from the preface. Details of drilling equipments are given below.						
			Type	No s	Dia of hole	Size / Capacity	Make	Motive power	H.P
			Jack Hammer	3	25.5 mm	Hand held	Atlas copco 2Nos	Diesel	60

b.	Loading	:	Loading of waste and rough stone is being carried out by Excavator into 10 tonne capacity tippers from the working place periodically. Details of loading equipment are given as under.					
			Type	Nos	Bucket Capacity (MT)	Make	Motive power	H.P.
			Hydraulic excavator	2	1.2 M ³	L&T or Ex200	Diesel	120
c.	Transportation	:	Transport of raw materials and waste shall be done by 10 tonnes tipper					
			Type	Nos	Size / Capacity	Make	Motive power	H.P.
			Tipper	2	10 M.T	Ashok Leyland	Diesel	110
d.	Energy: Electricity for mines and lights only at nights (working is restricted on day time only between 8Am to 4Pm). Diesel (HSD) will be used for quarrying machines around 993344 liters for the entire project life. Diesel will be brought from nearby diesel pumps. No power is required for the project. Lightings on the night is taken from nearby electric poles after obtaining permission from concerned authorities. <u>For Gravel:</u> Per hour excavator will consume = 10 litres / hour Per hour excavator will excavate = 60m ³ of Gravel For 82530m ³ = 82530/ 60 = 1375.5 hours Diesel consumption working hours = 1376 x 10 litres Total diesel consumption = 13760 litres of HSD will be utilized for Gravel. <u>For Rough stone:</u> Per hour excavator will consume = 16 litres / hour Per hour excavator will excavate = 20m ³ of rough stone For 1224475m ³ = 1224475 / 20 = 61224 hours Diesel consume 61224 working hours = 61224 hours x 16 litres Total diesel consumption = 979584 liters of HSD will be utilized for Rough stone. Total diesel consumption is around (Gravel 13760 Litres + Rough Stone 979584Litres) = 993344 litres of HSD for the entire period of life.							

6.6	a.	Disposal of Overburden	: The Gravel of the lease area is estimated as 82530m ³ . Gravel formation will be removed and transported to the needy end user, only after obtaining permission and paying necessary seigniorage fees to the Government.
6.7	a.	Brief Note on Conceptual Mining Plan for the entire lease period	: Conceptual Mining Plan is prepared with an object of systematic development of bench lay outs, selection of ultimate pit limit, depth of quarrying, ultimate pit slope, etc. Average Ultimate Pit dimension in given as Under, Ultimate Pit Dimensions: 344.0m (L)Avg X 112.0m (W)Avg X 47.0m (D) (Surface Ground level above-7m, Surface Ground level below-40m) Ultimate pit size is designed based on certain practical factors such as the economical depth of mining, safety zones, permissible areas etc. Afforestation has been proposed on the boundary barrier by planting trees. All the baseline information studies like Air Quality monitoring, Noise and Vibration monitoring, Water Analysis studies are being carried out every year as per the MOEF norms.

7.0 BLASTING:

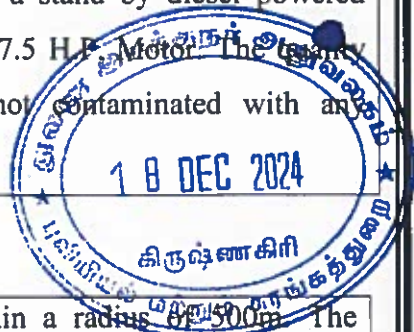
7.1	Proposed Control Blasting Pattern	: The massive formation shall be broken into pieces of portable size by drilling and Proposed Control Blasting using jack hammers and shot hole Blasting. Powder factor of explosives for breaking such hard rock shall be in the order of 6 to 7 tonnes per K.g of explosives.
		ROCK BLASTING

7.2	Types of Explosives	: Following explosives are recommended for efficient blasting with safe practice.																				
		<table><tr><th>S. No</th><th>Description</th><th>Class / Division</th><th>Type</th><th>Size</th></tr><tr><td>1.</td><td>Slurry</td><td>Class - 3</td><td>Nitro Compound</td><td>25 x 200</td></tr><tr><td>2.</td><td>Detonators</td><td>Class - 3</td><td>Ordinary and elec (OD & ED)</td><td>6.5 x 25</td></tr><tr><td>3.</td><td>Safety fuse</td><td>Class - 6</td><td>Blue sump fuse coils of 10mts each</td><td></td></tr></table>	S. No	Description	Class / Division	Type	Size	1.	Slurry	Class - 3	Nitro Compound	25 x 200	2.	Detonators	Class - 3	Ordinary and elec (OD & ED)	6.5 x 25	3.	Safety fuse	Class - 6	Blue sump fuse coils of 10mts each	
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3.	Safety fuse	Class - 6	Blue sump fuse coils of 10mts each																			
7.3	Measures proposed to minimize ground vibration due to blasting	: The following steps are being adopted to control ground vibration due to blasting. 1. The minimum recommended delay time of 8ms was introduced to minimize ground vibration to avoid constructive interference of blast vibration waves and hence its impact or amplitude is less. 2. Use of Ammonium nitrate fuel oil mixture for shot holes is avoided because which cause high fly of rocks in view critical diameter problem. Only high strength explosives like slurry are used in the form of cartridge. 3. Charge per hole will exceed the powder factor designed for each hole based on the quantum of blasting, strength of rocks, fracture pattern etc.																				
7.4	Storage of Explosives and safety measures to be taken while blasting.	: 1. An authorized explosive agency is engaged to carry out blasting. 2. The blasting time in a day is between 5 PM to 6 PM. 3. First Aid Box is kept ready at all the time. 4. Necessary precautionary announcement is being carried out before the blasting operation.																				

8.0 MINE DRAINAGE:

8.1	Depth of Water table	:	The ground water table is reported as 67m below ground level in nearby open wells and bore wells of this area. Mining depth taken as 47m (Surface Ground level above-7m, Surface Ground level below-40m). Now, proposed quarry depth is above the water table. Hence, quarrying may not affect the ground water.
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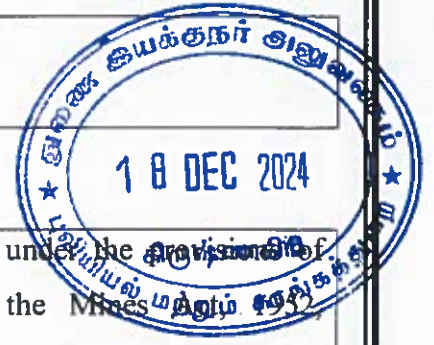
8.2	Arrangement and Places where the mine water is finally proposed to be discharged	:	The ground water may not rise immediately in this type of mining. However, the rain water percolation and collection of water from the seepage shall be less than 300 lpm and it shall be pumped about periodically by a stand by diesel powered Centrifugal pump motivated with 7.5 H.P. Motor. The quantity of water is potable and it is not contaminated with any hazardous things.
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9.0 OTHER PERMANENT STRUCTURES:

9.1	Habitations / Village	:	There are no villages within a radius of 500m. The nearest habitations with the population is given as under, <table border="1"> <thead> <tr> <th>Direction</th><th>Village</th><th>Distance in kms</th><th>Population</th></tr> </thead> <tbody> <tr> <td>North</td><td>Karnapalli</td><td>4.5 Kms</td><td>280</td></tr> <tr> <td>East</td><td>Naraseepuram</td><td>4.1Kms</td><td>240</td></tr> <tr> <td>South</td><td>Guttlapalli</td><td>1.0kms</td><td>200</td></tr> <tr> <td>West</td><td>Advanapalli</td><td>3.1Kms</td><td>250</td></tr> </tbody> </table>	Direction	Village	Distance in kms	Population	North	Karnapalli	4.5 Kms	280	East	Naraseepuram	4.1Kms	240	South	Guttlapalli	1.0kms	200	West	Advanapalli	3.1Kms	250
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West	Advanapalli	3.1Kms	250																				
9.2	Power lines (HT/LT)	:	There is no Power line is located in the lease area.																				
9.3	Water bodies (River, Pond, Lake, Odai, Channel etc)	:	There are no other Water bodies (River, Pond, Lake, etc) is located in this area.																				
9.4	Archeological / Historical Monuments	:	There are no Archeological / Historical Monuments within a radius of 500m.																				
9.5	Road (NH, SH, Village Road etc)	:	Krishnagiri - Shoolagiri = 26.0Km Shoolagiri - Athimugam = 11.0Km Quarry site is located in Northwestern side at a distance of 3.8kms from Athimugam.																				
9.6	Places of Worship	:	There are no Places of Worship within a radius of 500m.																				
9.7	Reserved Forest / Forest / Social Forest / Wild Life Sanctuary etc.,	:	There are no Wild Life Sanctuary etc within a radius of 10km. No reserve forest located within 60m radial distance.																				
9.8	Any Interstate Border, Protected areas under the Wild Life (Protection) Act, 1972, Critically Polluted Areas as Identified by Central Pollution Control Board and Notified Eco sensitive areas.	:	There are No inter State border within a radius of 10 kms. North Cauvery Wild life Sanctuary located within the distance of about 25.0Kms from the lease area.																				

9.9	Any Other Structures	:	Nil.
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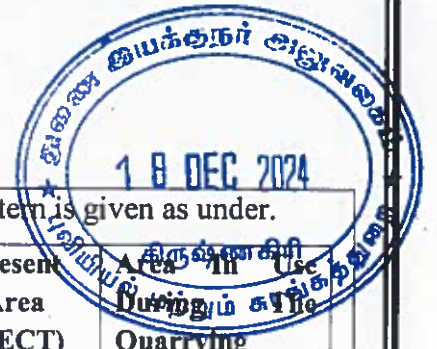
10.0 EMPLOYMENT POTENTIAL & WELFARE MEASURES:

10.1	Employment Potential (Management & Supervisory personal)	:	1. As per Mines safety under the provisions of MMR, 1961 under the Mines Act, 1952 whenever the workers are employed more than 10, it is preferred to have a qualified Mining Mate to keep all the production workers directly under his control and supervision. 2. The following man power is proposed for quarrying Rough Stone during the Ten years period to achieve the proposed production and to comply the provisions of the Government norms. <table border="1"> <tr> <td>1.</td><td>Skilled</td><td>Operator</td><td>3 No.</td></tr> <tr> <td></td><td></td><td>Mechanic</td><td>2 No.</td></tr> <tr> <td></td><td></td><td>Blaster/Mat</td><td>1 No.</td></tr> <tr> <td>2.</td><td>Semi – skilled</td><td>Driver</td><td>3 Nos</td></tr> <tr> <td>3.</td><td>Unskilled</td><td>Musdoor / Labors</td><td>6 Nos</td></tr> <tr> <td></td><td></td><td>Cleaners</td><td>2Nos</td></tr> <tr> <td></td><td></td><td>Office Boy</td><td>1No</td></tr> <tr> <td>4.</td><td colspan="2">Management & Supervisory staff</td><td>2No.</td></tr> <tr> <td></td><td colspan="2">Total =</td><td>20Nos</td></tr> </table>	1.	Skilled	Operator	3 No.			Mechanic	2 No.			Blaster/Mat	1 No.	2.	Semi – skilled	Driver	3 Nos	3.	Unskilled	Musdoor / Labors	6 Nos			Cleaners	2Nos			Office Boy	1No	4.	Management & Supervisory staff		2No.		Total =		20Nos
1.	Skilled	Operator	3 No.																																				
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	Total =		20Nos																																				
10.2	Welfare Measures	:																																					
	a. Drinking Water	:	Drinking water at the rate of 2Ltrs per person shall be provided as per the Mines Rules, 1960. It is proposed to make a borehole for providing uninterrupted supply of drinking water and other utilities.																																				

b.	Sanitary facilities	:	Semi-permanent latrines & urinals shall be maintained at convenient places for use of labours as per the provisions of Rule (33) of the Mines Rules, 1960 separately for males and females. Washing facilities shall also be arranged as per rule (36) of the Mines Rules, 1960.
c.	First Aid Facility	:	Being a small mine first aid station as per provisions under Rule (44) of the Mines Rules 1960 is provided with facilities as per the third schedule as prescribed. Qualified First Aid personnel should be appointed or nominated to attend emergency first aid treatment.
d.	Labor Health	:	As per Mines Rule, Periodic medical examination has been arranged for occupational health once in a year in addition to attending medical treatment of occupational injuries under the Rule 45 (A), MR, 1960.
e.	Precautionary safety measures to the Laborers	:	Safety provisions like helmet, goggles, safety shoes, Dust mask, Ear muffs etc have to be provided as per the circulars and amendments made for Mine labours under the guidance of DGMS being a mechanized operation. Necessary training will be conducted once in a year to all the employees with the help of qualified and experienced officers to train about the safe and system at quarrying operation.

PART – B

11.0 ENVIRONMENTAL MANAGEMENT PLAN:



11.1	Area Land Use Pattern	:	The applied land use pattern is given as under.			
			S. No.	Description	Present Area (HECT)	Area in Use During Quarrying Period (HECT)
			1.	Area under quarrying	Nil	3.09.0
			2.	Infrastructure	Nil	0.01.0
			3.	Roads	Nil	0.01.0
			4.	Green Belt & Dump	Nil	0.65.67
			5.	Unutilized Area	3.76.67	Nil
				Total =	3.76.67Ha	3.76.67Ha
11.2	Water Regime	:	Water table in this area is noticed at a depth of 67m below the surface ground level and presently, the quarrying of Rough Stone is proposed up to a depth of 47m (Surface Ground level above-7m, Surface Ground level below-40m) and hence, it will not affect the ground water depletion of this area.			
11.3	Flora and Fauna	:	Except acacia bushes, no other valuable trees are noticed in the Applied Lease area. Further, neither flora of botanical interest nor fauna of zoological interest is noticed in this area.			
11.4	Climatic conditions	:	Generally sub-tropical climatic condition prevails throughout the year and this District receives rain both in South west and North east monsoon. The average rainfall is about 800mm to 900mm and the temperature ranges from 18⁰C during winter and to a maximum of 38⁰C during the summer.			
11.5	Human Settlement	:	The nearest habitations with the population.			
			Direction	Village	Distance in Kms	Population
			North	Karnapalli	4.5 Kms	280
			East	Naraseepuram	4.1Kms	240
			South	Guttlapalli	1.0kms	200
			West	Advanapalli	3.1Kms	250

11.6	Plan for Air, Dust : Suppression	Air or dust expected to be generated from drilling process, hauling roads, places of excavation etc., is being suppressed by periodical wetting of land by water spraying. For the sampling of air, high volume air sampler (Model VFC-PM10) was used (15 meter above and 5 meter away from road) and the particulates were collected on what man GFA glass fiber filters dried in a hot air oven at 105°C for 1hr and weighed. The average flow rate was about 1.1 cubic meters.
11.7	Plan for Noise Control :	Quarrying of Rough Stone is being carried out by drilling and blasting by using low power explosives, and hence, noise is very minimum. However, periodical noise level monitoring will be carried out to check the noise level in and around the quarry site. In order to assess the extent of noise pollution due to vehicular traffic different zones viz., Silence zone, Residential Zone, Commercial zone, Traffic signals and Industrial zones were identified in urban and suburban areas of Krishnagiri. Adequate number of observations were made in all the selected sites by using the sound level meter (LT Lutron SL-4001).
11.8	Environmental Impact : Assessment Statement Describing Impact on mining on the next Ten Years.	Factors to be considered for EIA are, 1. Dust generation, 2. Land degradation 3. Stabilization and vegetation of dumps 4. Adverse effect on water regime 5. Socio economic benefits arising out of Mining. 6. Noise and Vibration.
	a. Dust :	Dust is expected to be generated from drilling, hauling roads place of excavation etc and it will be suppressed by periodical wetting of lands.
	b. Land degradation :	Land degradation is by means of cutting the trees and removal of fertile soil does not arise. Proposed usage of land for the next Ten years shall be less than 3.76.67Ha. Afforestation will be started during the first year of mining operation itself.

	c. Stabilization and vegetation of dumps :	The soil will be spread over the non-active dumps along the slope and edges to plant tree saplings to form vegetal cover over the dumps. Such vegetal cover will prevent erosion of dumps during rainy seasons.
	d. Socio economic benefits arising out of mining :	1. To provide Employment opportunities of the nearby villagers. 2. For the cultural development of the nearby villagers.
	e. Noise and vibration :	Since, no deep hole blasting is proposed with small dia explosives are used for breaking the hard rock and boulders, the noise and vibration is very minimum and are within the permissible limits.
11.9	Proposal for Waste Management :	There is no requirement for waste management as there is 100% recovery percentage.
11.10	Proposal of Reclamation of Land affected during mining activities and at the end of mining. :	The present mining is proposed to a depth of 47m (Surface Ground level above-7m, Surface Ground level below-40m). The mined out area will be fenced on top of open cast working with S1 fencing. Low lying areas with water logging shall be used for fish culture. No immediate proposals for closure of pit as the rough stone persist still at deeper level.
11.11	Program for Afforestation :	Trees like Neem Pungan & Panai etc were planted along the lease boundary and avenues as well as over non active dumps at a rate 100 trees per year with an interval of 5m. The rate of survival expected to be 80% in this area.
11.12	Proposed Financial Estimate / Budget for (EMP) Environment Management Fixed Asset Cost:	
	1. Land Cost	: Rs.37,20,000/- (Amount for Patta Land)
	2. Labour Shed	: Rs. 1,50,000/-
	3. Sanitary Facility	: Rs. 80,000/-
	4. Fencing cost	: Rs. 1,00,000/-
	Total=	: Rs.40,50,000/-

<u>Operational Cost:</u>		
<u>Machinery cost</u>	:	Rs.40,00,000/-
<u>EMP Cost:</u>		
1. Drinking water facility	:	Rs. 1,20,000/-
2. Safety kits	:	Rs. 60,000/-
3. Water sprinkling	:	Rs. 80,000/-
4. Afforestation	:	Rs. 30,000/-
5. Water quality test	:	Rs. 30,000/-
6. Air quality test	:	Rs. 30,000/-
7. Noise/vibration test	:	Rs. 30,000/-
Total=	:	Rs. 3,80,000/-
Total Project Cost	:	Rs.84,30,000/-



12.0 MINE CLOSURE PLAN:

12.1	Steps proposed for phased restoration, reclamation of already mined out area.	:	The present mining is proposed to a depth of 47m (Surface Ground level above-7m, Surface Ground level below-40m). The mined out area will be fenced on top of open cast working with S1 fencing to arrest the entry of cattle's and public in to the quarry site.
12.2	Measures to be under taken on mine closure as per Act & Rules	:	Measures will be taken as per the Acts and Rules. The quarried pit will be fenced by using Barbed wire fencing. Green belt development at the rate of 100 trees per year will be proposed.
12.3	Mitigation measures to be undertaken for safety and restoration/ reclamation of the already mined out area	:	It is a fresh Rough Stone & Gravel Quarry with a depth of 47m (Surface Ground level above-7m, Surface Ground level below-40m) for Ten years and hence, no need of mitigation and restoration / reclamation of the applied lease area.

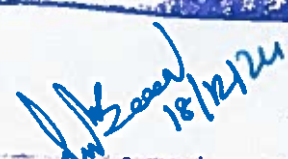
13.0 ANY OTHER DETAILS INTEND TO FURNISH BY THE APPLICANT

- (i) Permission will be obtained from the Director of Mines Safety for extracting the Rough Stone from the Boundary barriers and from slopes.
- (ii) Care and precautionary measures will be taken for the safety of workers as per Rules and Acts.
- (iii) The applicant will endeavor every attempt to quarry the Rough Stone economically without any wastage and to improve the environment and ecology.
- (iv) Accordingly, Mining Plan is prepared under Rule 41 & 42 as amended in Tamil Nadu Minor Mineral Concession Rules, 1959 by incorporating the conditions imposed in the precise area communication letter and by incorporating all the details proposed in the letter to obtain environment clearance from State Environment Impact Assessment Authority.
- (v) In the above circumstances, this Mining Plan is prepared for approval of Rough Stone & Gravel Quarry for a period of Ten Years.




S.DHANASEKAR, M.Sc., (Geo)
Qualified Person

This Mining Plan is approved based on guidelines / instruction issued and in corporation of the particulars specified in the letter Roc. No. 768/2024/MS. Dated 18-12-24 of the Deputy Director of Geology and Mining, Krishnagiri and subject to further fulfillment of the conditions laid down under Tamil Nadu Minor Mineral Concession Rules, 1959 and Minor Mineral Conservation and Development Rule 2010.


DEPUTY DIRECTOR
Geology and Mining,
Collectorate, Krishnagiri.


18.12.24

This Mining Plan is approved subject to the conditions / Stipulation Indicated in the Mining Plan Approval

Letter Roc. No. 768/2024/MS. Dated 18-12-24

Annexure -I

ந.க.எண். 768/2024/கனிமம் நாள்: 25.11.2024.

புவியியல் மற்றும் கரங்கத்துறை
மாவட்ட ஆட்சியர் அலுவலகம்
கிருஷ்ணகிரி.



குறிப்பாணை

பொருள் : கனிமங்களும் சுரங்கங்களும் - சிறு கனிமம் - கிராவல் மற்றும் சாதாரண கற்கள் - கிருஷ்ணகிரி மாவட்டம் - குளகிரி வட்டம் - மிடிதேப்பள்ளி கிராம புல எண்கள். 70/4A மற்றும் 70/5B ல் மொத்த விஸ்தீரணம் 3.76.67 ஹெக்டேர் பரப்பில் கிராவல் மற்றும் சாதாரண கற்கள் வெட்டியெடுக்க அனுமதி கோரி M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தினரால் விண்ணப்பம் அளிக்கப்பட்டது - வருவாய்துறை, வனத்துறை மற்றும் புவியியல் & சுரங்கத்துறை புலத்தணிக்கை அறிக்கை சமர்ப்பிக்கப்பட்டது - தகுதியான நிலப்பரப்பாக கருதி ஏற்பளிக்கப்பட்ட சுரங்க திட்டம் மற்றும் சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணைய இசைவினை பெற்று சமர்ப்பிக்கக் கோருதல் - தொடர்பாக.

- பார்வை :
1. M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தின் விண்ணப்ப நாள்: 08.07.2024.
 2. மாவட்ட ஆட்சியர், கிருஷ்ணகிரி அவர்களின் கடிதம் ந.க. 768/2024/கனிமம், நாள்: 11.07.2024.
 3. வட்டாட்சியர், குளகிரி அவர்களின் கடிதம் ந.க.எண். 1416/2024/அ2 நாள்: 02.09.2024.
 4. சார் ஆட்சியர், ஒசூர் அவர்களின் கடிதம் ந.க.எண். 3160/2024/பி2 நாள்: 10.10.2024.
 5. உதவி இயக்குநர் (கனிமம்) மற்றும் உதவி புவியியலாளர் (கனிமம்) கிருஷ்ணகிரி அவர்களது புலத்தணிக்கை அறிக்கை நாள்: 24.10.2024.
 6. மற்றும் உரிய ஆவணங்கள்.

பார்வையில் காணும் கடிதங்களின்பால் கனிவான கவனம் வேண்டப்படுகிறது.

2. கிருஷ்ணகிரி மாவட்டம், குளகிரி வட்டம், மிடிதேப்பள்ளி கிராம புல எண்கள். 70/4A மற்றும் 70/5B ல் மொத்த விஸ்தீரணம் 3.76.67 ஹெக்டேர் பரப்பில் கிராவல் மற்றும் சாதாரண கற்கள் வெட்டியெடுக்க அனுமதி வழங்க கோரி M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தினர் 08.07.2024 நாளிட்ட விண்ணப்பத்தினை உரிய ஆவணங்களுடன் சமர்ப்பித்துள்ளனர்.

3. மேற்கண்ட விண்ணப்பம் தொடர்பாக வட்டாட்சியர், குளகிரி, சார் ஆட்சியர், ஓசூர், உதவி இயக்குநர் (கனிமம்) மற்றும் உதவி புவியியலாளர் (கனிமம்) கிருஷ்ணகிரி ஆகியோர் புலத்தணிக்கை மேற்கொண்டு குளகிரி வட்டம், மிடிதேப்பள்ளி கிராம புல எண்கள். 70/4A மற்றும் 70/5B ல் மொத்த விஸ்தீரணம் 3.76.67 ஹெக்டேர் பரப்பில் விண்ணப்பதாரர் M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தினருக்கு நிபந்தனைகளுக்குட்பட்டு கிராவல் மற்றும் சாதாரண கற்கள் வெட்டியெடுக்க அனுமதி வழங்கலாம் என பரிந்துரை செய்துள்ளனர்.

4. எனவே, வட்டாட்சியர், குளகிரி, சார் ஆட்சியர், ஓசூர், உதவி இயக்குநர் (கனிமம்) மற்றும் உதவி புவியியலாளர் (கனிமம்) கிருஷ்ணகிரி ஆகியோரின் பரிந்துரைகள் மற்றும் நிபந்தனைகளின் அடிப்படையில், குளகிரி வட்டம், மிடிதேப்பள்ளி கிராம புல எண்கள். 70/4A மற்றும் 70/5B ல் மொத்த விஸ்தீரணம் 3.76.67 ஹெக்டேர் பரப்பில் விண்ணப்பதாரர் M/s. R.K.M Sand and Aggregates என்ற நிறுவனத்தினருக்கு 1959ம் வருட தமிழ்நாடு சிறுகனிம விதிகள், விதி எண்.19(1)-ன்படி மேற்கண்ட நிபந்தனைகளுக்குட்பட்டு 10 (பத்து) வருட காலத்திற்கு சாதாரண கற்கள் குவாரி உரிமம் வழங்குவதற்குரிய தகுதியான நிலப்பரப்பாக கருதப்படுகிறது.

5. மேலும், தமிழ்நாடு சிறு கனிம சலுகை விதிகள்-1959 விதி எண். 41-ன்படி குவாரிப்பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்க திட்டத்தினை இக்கடிதம் கிடைக்கப்பெற்ற 90 தினங்களுக்குள் சமர்ப்பிக்குமாறு மனுதாரரைக் கேட்டுக்கொள்ளப்படுகிறது. மேலும் ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தின் தொடர்ச்சியாக 1959ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.42-ன்படி சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் இசைவினைப் பெற்று சமர்ப்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் கீழ்க்கண்ட நிபந்தனைகளுக்குட்பட்டு வழங்கப்படும் என இதன் மூலம் தெரிவிக்கப்படுகிறது.

நிபந்தனைகள்:

- 1959ம் வருடத்திய தமிழ்நாடு சிறு கனிம சலுகை விதிகள், அட்டவணை-||ல் கண்டுள்ளபடி குவாரி செய்யப்படும் கனிமங்களுக்குரிய சீனியரேஜ் தொகையினை அவ்வப்போது செலுத்தி கனிமம் கொண்டு செல்லப்பட வேண்டும்.
- அருகிலுள்ள பட்டா நிலங்களுக்கு 7.5 மீ பாதுகாப்பு இடைவெளியும் விட்டு குவாரிப் பணி மேற்கொள்ள வேண்டும்.



- c. அனுமதி கோரும் புலத்தைச் சுற்றியுள்ள விளைநிலங்களுக்கு எந்த வித பாதிப்பும் ஏற்படாமல் குவாரிப் பணி மேற்கொள்ள வேண்டும். கிருஷ்ணகிரி மற்றும் சுரங்கத்துறை உரிய காலத்திற்குள் சமர்ப்பிக்க வேண்டும்.
- d. விதிகளின்படி ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தினை உரிய காலத்திற்குள் சமர்ப்பிக்க வேண்டும்.
- e. குவாரி உரிமம் வழங்க உள்ள பகுதிக்கு சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் முன் அனுமதி பெற்று சமர்ப்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும்.
- f. குவாரி குத்தகை கோரி விண்ணப்பித்துள்ள புலத்திற்கு செல்ல அணுகு பாதை அமைந்துள்ள பட்டா நிலங்களின் உரிமையாளர்களிடம் முறையாக அனுமதியினை விண்ணப்பதாரர் தனது சொந்த செலவில் பெற்றுக்கொள்ள வேண்டும்.
- g. வரைபடத்தில் துறை ரீதியாக பரிந்துரைக்கப்பட்ட இடத்தில் வெட்டி எடுக்கப்படும் சாதாரண மண்ணை ஒவ்வொரு லோடு கனிமத்திற்கும் உண்டான தொகையை செலுத்தி உரிய நடைச்சீட்டு பெற்று கனிமம் சென்றடையும் இடம் பூர்த்தி செய்த பிறகு மட்டுமே கனிமத்தை வெளியே கொண்டு செல்ல வேண்டும்.
- h. அனுமதிக்கப்படும் கனமீட்டர் அல்லது அனுமதிக்கப்பட்ட காலம் இதில் எது முன்னதாக முடிவடைகிறதோ அப்போது உரிமம் காலாவதியானதாக கருதப்படும்.
- i. எடுத்துச் செல்லப்படும் கனிமத்திற்கு உரிய வித்தியாச கனிமத்தொகை ஏதும் பின்வரும் காலங்களில் கணக்கீடு செய்யப்பட்டால், அவற்றை தவறாமல் செலுத்தப்பட வேண்டும்.
- j. பொதுமக்களுக்கோ போக்குவரத்திற்கோ எவ்வித இடையூறுமின்றி மண்ணை வாகனங்களின் மூலம் தார்பாய் இட்டு கொண்டு செல்ல வேண்டும்.
- k. இந்த அனுமதியை பயன்படுத்தி அருகிலுள்ள பட்டா / அரசு புலங்களிலிருந்து சாதாரண மண்ணை வெட்டி எடுக்கக் கூடாது.



- I. அனுமதிக்கப்படும் புலத்தின் சாதாரண மண் தவிர வேறு கனிமங்கள் ஏதேனும் இருந்தால் அதை வெட்டி எடுத்து செல்லக் கூடாது.
- III. விதிமீறல்கள் ஏதேனும் கண்டறியப்பட்டின் குத்தகை உரிமம் ரத்து செய்யப்படும்.

துணை இயக்குநர்,
புவியியல் மற்றும் சுரங்கத்துறை,
கிருஷ்ணகிரி.

பெறுநர்:

M/s. R.K.M Sand and Aggregates,
Prop. Thiru. D.Ravikumar,
Villa No. 126, Adarsh Palm,
Retreat Villas, Devarabisanahalli,
Bengalore, Karnataka - 560 103.

நகல்:

1. ஆணையர், புவியியல் மற்றும் சுரங்கத்துறை, சென்னை.
2. மாவட்ட ஆட்சித் தலைவர், கிருஷ்ணகிரி - தகவலுக்காக.

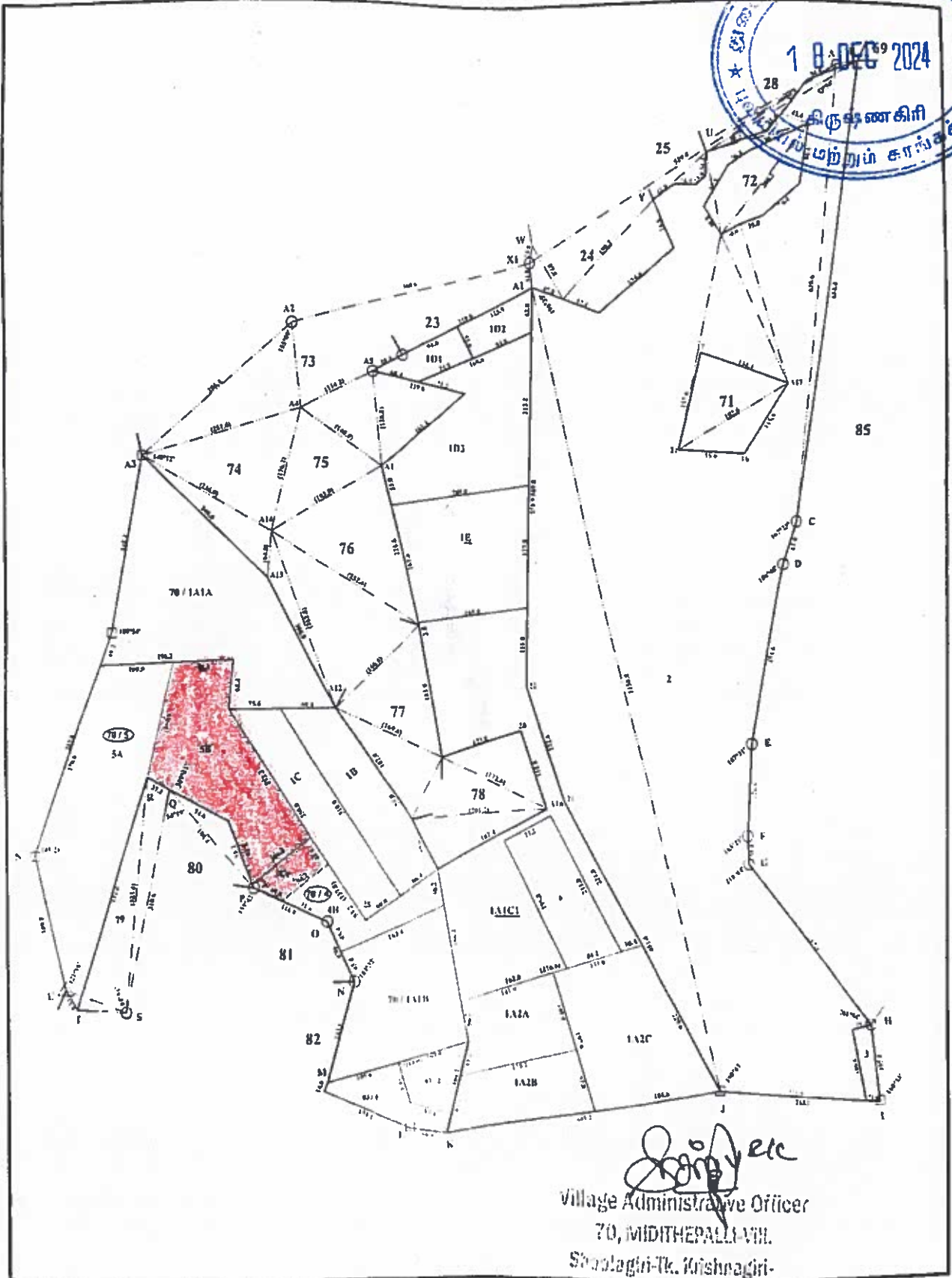
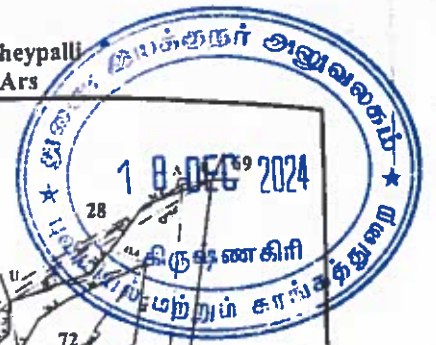

S.DHANASEKAR, M.Sc., (Geo)
Qualified Person

ANNEXURE - II

District : Krishnagiri
Taluk : Soolagiri

S.No : 70

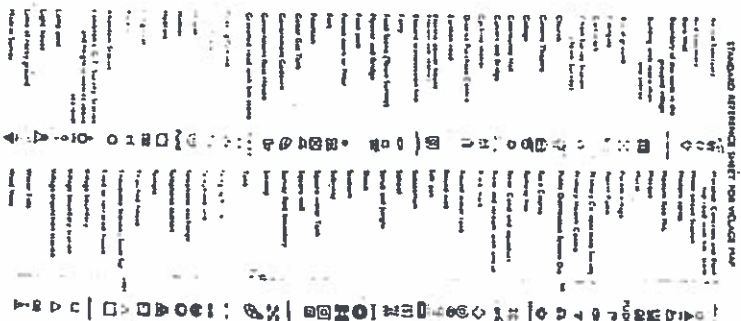
Village No : 70
Name : Miditheypalli
Area : Hec Ars



Scale 1mm : 5000 mm

[Signature]
J. DHANASEKAR, M.Sc. (Geo)
Qualified Person

Survey No.	Name of device
66	PQ01M/FALL
"	Moscow E. cont
98	Kalamazoo East
736	Proterozoic
137 *	Podium
" 3	Pilgrimage Road



18 DEC 2024

5. DHANASEKAR, M.Sc. (Geo)
Qualified Person

Planted under the
Name of GARLAND
about 8 years or less
at one Pinedale Road Co.
to at first Pinedale road is
one of the C-100 type, covered
by one Department of Road to



தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கிருஷ்ணகிரி

வருவாய் கிராமம் : மிடிதேபள்ளி

வட்டம் : குளகிரி

பட்டா எண் : 985

உரிமையாளர்கள் பெயர்

1. VENKATAIAH

மகன்

D .RAVI KUMAR

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக்ட - ஏர்	ரூ - பை	ஹெக்ட - ஏர்	ரூ - பை	ஹெக்ட - ஏர்	ரூ - பை	
70	4A	0 - 43.32	0.27	--	--	--	--	2024/0105/31/549183- -2024/31/11/000200SD ----- 20-02-2024
		0 - 43.32	0.27					

குறிப்பு :



- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 31/11/070/00985/180062 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
- இத் தகவல்கள் 06-11-2024 அன்று 12:54:00 PM நேரத்தில் அச்சடிக்கப்பட்டது.
- கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்



தமிழ்நாடு அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

மாவட்டம் : கிருஷ்ணகிரி

வட்டம் : சூளகிரி

வருவாய் கிராமம் : மிடிதேபள்ளி

பட்டா எண் : 984

உரிமையாளர்கள் பெயர்

1. VENKATAIAH

மகன்

D .RAVI KUMAR

-

புல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புரைகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
70	5B	3 - 33.35	2.07	--	--	--	--	2024/0105/31/549173- -2024/31/11/000199SD ----- 20-02-2024
		3 - 33.35	2.07					

குறிப்பு :



- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து
- பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 31/11/070/00984/180051 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
 - இத் தகவல்கள் 06-11-2024 அன்று 12:55:50 PM நேரத்தில் அச்சடிக்கப்பட்டது.
 - கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

கிராமக் கணக்கு
வடம் 70-11-1950

முதல் போகம்.

கைப்பற்று தாரகூடைய
பெயரும் எண்ணும்
அல்லது அனுபோக
தாரகூடைய பெயர்.

ஒரு போகம் அல்ல
போகம்.

(5)

(9)

நிலத்தின் எந்த பகுதி
யாவது சாகுபடியாளரால்
பயிரிடப்பட்டுள்ளதா.

எந்த மாதத்தில் பயிர்
செய்யப்பட்டது எந்த
மாதத்தில் அறுவடை
செய்யப்பட்டது.

பயிரின் பெயர்.

**பயிரான் / அறுவடை
யான் பரப்பு.**

**உண்மையான
பாய்ச்சல் ஆகாரம்.**

**விளைச்சல் அளவு
விழுக்காடு.**

70 SB 2 2.0 984 D. RAVI

KUMAR

கிராம நிர்வாக அலுவலர்
பிடித்தப்பள்ளம்

380/30-R.F. III-A-10-23,00,000 CPS,-GBP-Mdu.-7-2018.

स्टेप 2

கிராமத்தில் வகுடவாரி புலவாரி கைப்பற்று சாகுபடி ஆடங்கல் கனடக்கு

இரண்டாம் பாகம்.

எந்த மாதத்தில் பயிர்
செய்யப்பட்டது எந்த
மாதத்தில் அறுவடை
செய்யப்பட்டது.

(14) பயிரின் பெயர்.

(அ) பயிரான / அறுவடையான
பரப்பு.

உண்மையான பாய்ச்சல்
ஆகாரம்.

வினாக்கள் அளவு
விமலக்காடு.

கிராம அலுவலரின் குறிப்புகள்:-
 (1) புலன்களின் பகுதிகளில் மட்டும் பயிரிடப்பட்ட இளம்பகரில் விவசாயிகள் அளவில்.
 (2) கைப்பற்றில் இல்லாத நிலங்களின் சாகுபடியின் பரப்பு தள்ளப்படும்.
 (3) முந்தைய மாதத்தில் பாய்ச்சல் உதவியின்றி பயிரிடப்பட்டவை என்று பதிவாகியுள்ள நிலங்களிலிருந்து பிழைதடி மாதங்களில் நீர் பாய்ச்சப்பட்ட விவசாயிகள்.

[illegible]

(கு) பமிர் பார்வையிடும் ஆ
தரப்புகள்கள்.

DEC 2024

சிறுநீர்வழி

கிராமக் கணக்கு
டம் 70-169ஆய்வுள்ளி

பொருள்
பொருள்

முதல் போகும்.

கைப்பற்று தாருடைய பெயரும் என்னும் அல்லது அனுபோக தாருடைய பெயர்.

(1)	நில அளவை எண்.
(2)	உட்டிரிவு எண்.
(3)	பரப்பு.
(4)	தீர்வை.
(5)	ஒரு போகம் அல்லது இரு போகம்.
(6)	எக்பற்றி தராதபைய பெயரும் என்னும் அல்லது அநுபோக தராதபைய பெயர்.
(7)	நிலத்தின் எந்த பகுதியாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளது.
(8)	எந்த மாதத்தில் பயிர் செய்யப்பட்டது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது.
(9)	பயிரின் பெயர்.
(10)	பயிரான / அறுவடையான பரப்பு.
(11)	உண்மையான பாப்ச்சல் ஆதாரம்.
	விளைச்சல் அளவு விழுக்காடு.

3048007985 D. RAVIKUMAR

AR

16

கிராம நிர்வாக அலுவலர்
மிஷனேப்பள்ளாரி.

380/30-R.F. 111-A-10-23,00,000 Cps,-GBP-Mdu.-7-2018.

எண் 2	கிராமத்தில் வசூலுபவரிடமிருந்து சரக்குப் பரிசீலனை	கிழக்காண்டி
இராணுவப் போகம்.		

இரண்டாம் போதம்.

(13)	எந்த மாதத்தில் பயிர் செய்யப்பட்டது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது.
(14)	பயிரின் பெயர்.
(15)	பயிராள / அறுவடையான பரப்பு.
(16)	உண்மையான பாய்ச்சல் ஆதாரம்.
(17)	விளைச்சல் அளவு விழுக்காடு.

கிராம அலுவலரின் குறிப்புரை :-
(1) புலன்களின் பகுதிகளில் மட்டுமே பயிரிடப்பட்ட இனங்களில் விங்குகள் அளவில்.
(2) கைப்பற்றில் இல்லாத நிலங்களின் சாகுபடியின் பரப்பு தன்மையும்
(3) முந்தைய மாதத்தில் பாய்ச்சல் உதவியின்றி பயிரிடப்பட்டவை என்றும் பதிவாகியுள்ள நிலங்கள் களுக்கு நிந்தைய மாதங்களில் நீர் பாய்ச்சப்பட்ட விவரங்கள்.

(அ) வசம், (ஆ) பூண்டி பட்டிர் செய்து வெய்ய வெய்யாக இருக்கும். (இ) விவசாயம் மற்றும் இதர காரியங்களுக்கும் பயன் படுத்தப் படும் நிலம். (ஈ) பயிரிடத்தக்க தரிக் (உ) நிலவளம் புல் தீர்ப்பு மற்றும் இதர செடிவெல் நிலங்களும் (ஊ) விளைக்கப்படாத திறர் பரம்பல் போக்குப்போகாத மாறவகைப் பயிர்க்கும் போப்புகளும். (ஈ) நடப்புத் தரிசிகள் (ஏ) இதர தரிசு நிலங்கள்.

(18-உ)

கீழ்க்கண்ட வினாக்கள்
 ௨. ஊர் தலைநகர்
 பரப்பின் நிலப்பரப்பு
 அளவை எண்
 பகுதியில்.

(அ) வடம் (ஆ) பக்கத்தின் பரப்பின்
 இதிலாத நிலம். (இ) விரிவான பரப்பின்
 பரப்பின் நிலம். (ஈ) பரப்பின் நிலம்.

மேலும் இதர செய்தல் நிலங்களை
 விவரிக்கப்பட்டுள்ளன. (அ) பரப்பின்
 விவரிக்கப்பட்டுள்ளன. (அ) பரப்பின்
 விவரிக்கப்பட்டுள்ளன.

(18௨)



அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : கிருஷ்ணகிரி

வட்டம் : சூளகிரி

கிராமம் : மிடிதேபள்ளி



1. புல எண்	70	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	4A	10. மண் தரம்	5
3. பழைய புல உட்பிரிவு எண்	70-4	11. தீர்வை (ரூ - ஹெ)	0.62
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 43.32
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.27
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	985
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.D .RAVI KUMAR

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து
1. பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற
இணைய தளத்தில் 31/11/070/70/4A/160062 என்ற குறிப்பு எண்ணை உள்ளீடு
செய்து உறுதி செய்துகொள்ளவும்.

அ-பதிவேடு விவரங்கள் - ஊரகம்



மாவட்டம் : கிருஷ்ணகிரி

வட்டம் : குளகிரி

கிராமம் : மிடிதேபள்ளி

1. புல எண்	70	9. மண் வயனமும் ரகமும்	8 - 3
2. உட்பிரிவு எண்	5B	10. மண் தரம்	5
3. பழைய புல உட்பிரிவு எண்	70-5	11. தீர்வை (ரூ - ஹெ)	0.62
4. பகுதி	P	12. பரப்பு (ஹெக்டேர் - ஏர்)	3 - 33.35
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	2.07
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	984
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	1.D .RAVI KUMAR

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து
1. பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற
இணைய தளத்தில் 31/11/070/70/5B/160051 என்ற குறிப்பு எண்ணை உள்ளிடு
செய்து உறுதி செய்துகொள்ளவும்.


S.DHANASEKAR, M.Sc., (Geo)
Qualified Person

55/3/2023



தமிழ்நாடு தமிழ்நாடு TAMILNADU ரூ: 1000/-
 4.8.2023 D. Ravikumar
 Bangalore-36

BE 142351
 T. SRINIVASAN
 S.V. Licence No: 3925/B1/2000
 SHOOLAGIRI-Tk, Krishnagiri-Dt.

ABSOLUTE SALE DEED

THIS DEED OF ABSOLUTE SALE IS MADE AND EXECUTED AT
 SHOOLAGIRI ON THIS THE 04th DAY OF AUGUST 2023

"BETWEEN"

- 1) Mrs.H.Lavaniya (Aadhar No.4545 2578 6030) & (PAN No.AHWPL6103C) aged about 38 years W/o.A.V.M. Hemnaath, residing at No. 3/504-1, Athimugam village and Post, Shoolagiri Taluk, Krishnagiri District. (Cell No.93631 13366)
- 2) Mr.M.N.Ravi Khumarr (Aadhar No.5055 5661 1674) aged about 27 years S/o.late. Nagabhushan M.C. residing at No.194/18, Ist Floor, Prasanthi Nilayam, VLT Jalagandeshwarar Nagar, Opp.Anand Electronic, NH Road, Hosur Town and Taluk, Krishnagiri District. (Cell No.93631 15599) (PAN:CBKPR0926F)

VENDORS

VENDEE

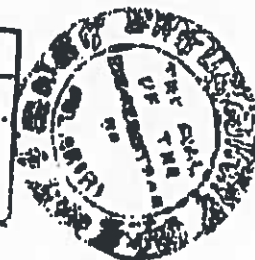
H. Lavaniya

[Signature]

[Signature] Ravi Khumarr M.N

G.P.A. Agent
 S. Y. K. K.

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Registering Officer



S. Srinivas



- 3) **Mr. N. Shekar Reddy**, S/o. Late. H. Narayana Reddy, aged about 43 years, residing at No. 111, "Akshya Nivas" H.N.R Layout, Kankandrahalli village, Carmalaram Post, Varthur Hobli, Bangalore-560 035, Karnataka State. Represented by his registered General Power of Attorney holder **Mr. S.Manikandan (Aadhar No.8046 6932 8404) & (PAN No.AJBPM4136B)** S/o.Sampangiraman, aged about 39 years residing at No.1525/5-25, Lingayath Street, Berigai village and Shoolagiri Taluk, Krishnagiri District, vide registered General Power of Attorney deed dated 20.06.2016, vide Doc. No.2654/2016 of SRO Shoolagiri.
- 4) **Mr.S.SIVAPPA @ SIVA (Aadhar No.6936 6295 0838) & (PAN:FJUPS7864G)** aged about 32 years S/o.Sakkappa. residing at No.2/239, Alusonai Village, Peddasigarlapalli Post, Shoolagiri Taluk, Krishnagiri District. Mobile No.90037 89536

(Hereinafter called the "VENDORS/SELLERS") which expression shall unless and otherwise requires the context includes, their legal heirs, successors, agents, representatives and assigns of the ONE PART.

AND IN FAVOUR OF

Mr.D.Ravi Kumar (Aadhar No.5271 0811 7760) aged about 51 years S/o.Venkataiah, residing at No.17/18, Sapthagiri Nilaya, Near Vinayaka Temple, KR Puram, Vinayaka Nagar, Bangalore North, Krishnarajapuram, Bangalore, Karnataka- 560 036. (Cell No.98450 42149) (PAN:ADDPR1752Q) (Hereinafter called "the VENDEE/PURCHASER") which expression shall unless and otherwise requires the context include, his legal heirs, successors, agents, representatives and assigns of the OTHER PART.

Whereas an extent of Ac.1.07 cents along with larger area in main Sy.No.70/1A1 and subdivision Sy.No.70/4 (item No.1 of the schedule mentioned property) of Midithepalli village of Shoolagiri Taluk belongs to vendor No.1 H. Lavaniya W/o.A.V.M. Hemnaath as her separate and self acquired property, having been earlier purchased by her under a registered Sale deed dated 27.06.2018 (regd. as Doc. No.2752/2018 of SRO Shoolagiri) from the previous owners Gurrappa @ Gullappa and others.

VENDORS

H. Lavaniya
Ravi Kumar M.V.
G.P.A. Agent
S. Y. K. R.

VENDEE

[Signature]

S. Sivappa.

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And whereas an extent of Ac.8.23 cents along with larger area in main Sy. No.70/1A1 and subdivision Sy.No.70/5 (item No.2 of the schedule mentioned property) of Midithepalli village of Shoolagiri Taluk belongs to vendor No.3 N. Shekar Reddy S/o. Late. H. Narayana Reddy as his separate and self acquired property, having been earlier purchased by him under a registered Sale deed dated 24.11.2014 (regd. as Doc. No.5151/2014 of SRO Shoolagiri) from the previous owners Muniyappa @ Annaiah and others. From the date of purchase the vendor No.3 N. Shekar Reddy is in possession and enjoyment of the same and he had also entered as separate pattadhar in the revenue records under patta No.464.

And whereas the vendor No.3 N. Shekar Reddy had executed a registered General Power of Attorney in favour of S.Manikandan S/o. Sampangiramaiah, under a registered General Power of Attorney deed dated 20.06.2016 (Regd. as doc. No.2654/2016 of SRO Shoolagiri) thereby authorising and empowering him to sell the above said property on behalf of him.

And whereas the vendor No.2 had also claim same property in Sy. Nos.70/1A1 and 70/5 and he purchase the same from Gurrappa @ Gullappa and others under a registered sale deed dated 31.07.2018 (Regd. as Doc. No.5388/2018 of SRO Shoolagiri).

And whereas the vendor No.4 (S.Sivappa @ Siva) had also claim same property in Sy. No.70/5 and he purchase the same from R.Anandareddy under a registered sale deed dated 24.02.2016 (Regd. as Doc. No.1011/2016 of SRO Shoolagiri).

And whereas the vendor No.2 claim item No.2 of the schedule mentioned property as per sale deed Doc. No.5388/2018 and similarly vendor No.3 claim same property as per sale deed Doc.No.5151/2014 and similarly vendor No.4 claim same property as per sale deed Doc.No.1011/2016 and hence there is an rival claim between vendor Nos.2,3 and 4 with respect to item No.2 of the schedule mentioned property and hence in order to convey valid right and title over the same and

VENDORS

H. Lavanappa

Frank Khuman M.V.

G.P.A. Agent

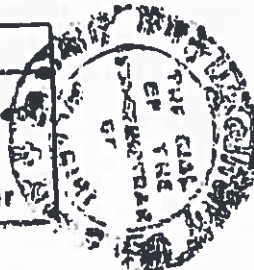
S. G. M. K. S.

S. S. S. S.

VENDEE

S. S. S. S.

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also in order to avoid any future claim or dispute the vendor Nos. 2, 3 and 4 have jointly execute this deed of sale with respect to item No. 1 of the schedule mentioned property, along with vendor No. 1, she entitled to the No. 1 of the schedule mentioned property in favour of the vendee.

Thus, the vendors have got good, valid, absolute and marketable title over the schedule mentioned properties and they are legally and lawfully entitled to sell the same to the vendee.

And Whereas, the vendors have agreed to sell absolutely to the vendee the under schedule mentioned properties for valid and proper sale consideration amount of **Rs.31,15,500/- (Rupees Thirty One Lakhs Fifteen thousand and Five Hundred only)** in order to discharge their sundry debts and also to purchase other properties, family necessities and benefits.

And whereas, vendee has also agreed to purchase the schedule mentioned properties from the vendors. And in pursuance of the sale talk, the vendor Nos. 1 and 2 and vendee have also entered into registered sale agreement dated 13.12.2018, (Regd. as Doc. No. 6110/2018 of SRO Shoolagiri) thereby agreeing to sell the schedule mentioned properties for total sale consideration amount of **Rs.31,15,500/- (Rupees Thirty One Lakhs Fifteen thousand and Five Hundred only)** and the vendors have also received an advance amount of Rs. 5,00,000/- (Rupees Five Lakhs only) by way of Cheque bearing No. 000973 dated 17.12.2018 of Canara Bank, Krishnarajapuram Branch, Bengaluru Infavour of Vendor No. 1 H. Lavaniya and the vendors have agreed to receive the balance sale consideration amount of **Rs.26,15,500/- (Rupees Thirty Seven Lakhs Twenty thousand only)** at the time of the execution and registration of the sale deed by way of CHEQUES/Cash and now in pursuance of the above said sale agreement the vendors execute this deed of sale in the following manner:

Now this deed of sale witnesseth, that in pursuance of the sale talk the vendors have this day received the balance sale consideration amount of **Rs.26,15,500/- (Rupees Thirty Seven Lakhs Twenty thousand only)** from the vendee by way of CHEQUES/Cash in the following manner:-
a) **Rs.10,00,000/- (Rupees Ten Lakhs only)** by way of Cheque bearing No. 000152 dated 04.08.2023 of ICICI Bank, Old Airport Road Branch, Bangalore, in the name of vendor No. 2 **Mr. M. N. Ravi khumarr.**

VENDORS

H. Lavaniya

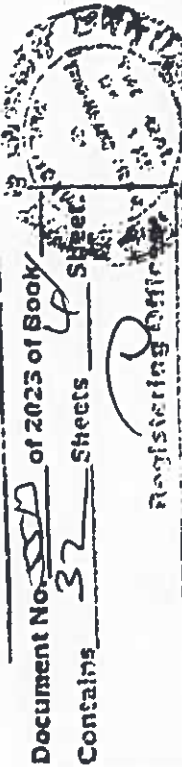
Mr. M. N. Ravi khumarr

S. P. A. AGENT
S. H. K. K. K.

S. S. S. S.

VENDEE

[Signature]





b) **Rs.5,00,000/-** (Rupees Five Lakhs only) by way of Cheque bearing No.000153 dated 04.08.2023 of ICICI Bank, Old Airport Road Branch, Bangalore, in the name of General Power of Attorney Holder **Mr.S.Manikandan** on behalf of Principal Vendor No.3 N.Shekar Reddy.

c) **Rs.2,00,000/-** (Rupees Two Lakhs only) by way of Cash to General Power of Attorney Holder **Mr.S.Manikandan** on behalf of Principal Vendor No.3 N.Shekar Reddy

d) **Rs.9,15,500/-** (Rupees Nine Lakhs Fifteen Thousand and Five Hundred only) by way of Cheque bearing No.000154 dated 04.08.2023 of Old Airport Road Branch, Bangalore, in the name of vendor No.4 **Mr.S.Sivappa @ Siva.**

and thus the vendors do hereby acknowledge that the entire sale consideration amount has been duly received from the Vendee in the above said manner and in consideration thereof, the vendors do hereby convey, transfer, assign and sell absolutely the schedule mentioned properties for the absolute use of the vendee together with all rights easements, privileges and appurtenances whatsoever belonging to or enjoyed there under and reputed so to be. All the rights, title, easements, interest, properties claim and demand whatsoever of the vendors into or upon the under schedule mentioned properties are hereby conveyed absolutely unto the vendee free from all encumbrances, charges, liens and demands whatsoever by the vendors.

The vendors do hereby covenant and agree that the vendors and all persons claiming under them shall and will from time to time upon the request and at the cost of the vendee do and execute or cause to be done and execute all such acts, deeds and things whatsoever for further and more perfectly assuring the under mentioned schedule properties and every part thereof according to the true intent and meaning of these presents, as shall or may be reasonably required.

It is hereby covenanted by the vendors that the under mentioned schedule properties hereby conveyed are free from all encumbrances, charges, liens or demands or litigations of any sort and the vendors do hereby assure and covenant that they have not suppressed any material facts affecting the title to the properties hereby conveyed and they covenant and undertake to clear any defect or encumbrance affecting

VENDORS

H. Laxmiya
Prani Khanna M.N.
G.P.A. Agent
S. Y. K. M. S.

VENDEE

D. B. S.

S. S. S.

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S. S. S.		

S. S. S. ing Officer



The schedule mentioned properties if come to light after the execution of the sale deed at their own cost and fully protect the vendee in all respects. The vendors do hereby assure and covenant that they have not entered into any earlier agreement of sale with respect to the under mentioned schedule properties or any part thereof, with any other person or persons and the vendors have not done anything whereby the schedule mentioned properties may be subject to any attachment or lien of any court or person or any claim whatsoever in any manner detrimental to the vendee. The vendors also covenant that they have fully and correctly disclosed all the relevant information pertaining to the schedule mentioned properties and the source of title and other details relevant for the sale of properties without any omission or suppressing any details in any respect in this behalf.

The vendors do hereby covenant and assure that the schedule mentioned properties are not notified or subject to any proceedings under the Land Acquisition Act, for any purpose and they do not hold land in excess of Tamil Nadu Land Reforms Act 1961, and that the sale will not be hit by any provisions of the above said Act. The schedule mentioned properties are not hit by any Provisions of the Tenancy Laws or other enactments in any manner and also not hit by any lispendens or any claim from any minors.

The vendors do hereby admit and covenant that the absolute full and actual physical possession of the schedule mentioned properties are also delivered to the vendee on this day itself and the vendee is also absolutely entitled to apply to the Revenue Authorities for transfer of Patta in her name and the vendors do hereby give their full consent for the transfer of Patta or change of Patta or change of registry in the revenue accounts in the name of vendee with respect to the properties sold hereunder. The vendors have also paid the revenue to the schedule mentioned properties without any arrears and the vendee shall hereafter pay the Land Revenue, Cess, etc., to the Government in her own right. The vendors have also handed over the original title deeds to support their title of the schedule mentioned properties.

VENDORS

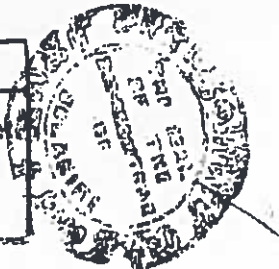
H. Laxmings.
K. K. K. K. M. N.

G. P. A. Agent
L. M. K. K.
S. S. S.

VENDEE

[Signature]

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The vendors do hereby covenant and assure that they agree and undertake to indemnify the vendee against all claims and demands of disputes of any sort with respect to the schedule mentioned properties in all respects at all times.

SCHEDULE OF PROPERTIES

In **MIDITHEPALLI VILLAGE**, of Shoolagiri Taluk attached to Shoolagiri Sub Registration District, Krishnagiri Registration District of Krishnagiri District the lands :-

1) Sy. No.70/1 Dry Extent of Hec.38.42.5m Asst Rs. 23.74 np., Survey Number: 70/1A1, Dry Ext. Hec.21.60.0 land further sub divided as Survey Number: 70/1A1A, Dry Ext. Hec.12.03.0, Asst Rs.7.46 np. land, now sub divided as new **SURVEY NUMBER 70/4**, Dry Extent Hec. 1.53.0 (or) Ac.3.78 cents, Asst Rs. 0.95 np., in this **Ac.1.07 cents**, bounded as follows:-

East : Land in Sy.No.70/1C

West : Land in Sy.No.81

North : Land in Sy.No.70/5

South : Land in Sy.No.81 and Remaining Land in same Survey Number

2) Sy. No.70/1 Dry Extent of Hec.38.42.5m Asst Rs. 23.74 np., Survey Number: 70/1A1, Dry Ext. Hec.21.60.0 land further sub divided as Survey Number: 70/1A1A, Dry Ext. Hec.12.03.0, Asst Rs.7.46 np land now sub divided as new **SURVEY NUMBER 70/5**, Dry Extent Hec. 8.10.0 (or) Ac.20.00, Asst Rs. 5.02 np., in this **Ac.8.23 cents**, bounded as follows:-

East : Land in Sy.Nos.70/1C and Sy.No.70/1A1A

West : Remaining land in Sy. No.70/5 and Land in Sy.No.80

North : Land in Sy. Nos.70/1A1A and 70/5

South : Sy.Nos.80 and 70/4

Both together making total extent of **Ac.9.30 cents** of land.

VENDORS

H. Laxmiya
Rani Khumam M.V

VENDEE

[Signature]

G.P.A. Agent

S. Y. K. M. V

S. S. S. M. V

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9
PREVENTION OF UNDER VALUATION OF DOCUMENTS UNDER
SECTION 3(1) OF MADRAS STAMP ACT

MIDITHEPALLI VILLAGE
SHOOLAGIRI TALUK, KRISHNAGIRI DISTRICT



Sl. No.	Survey No.	Extent in acres	Nature of Land	Value Rs.
1	70/4	1.07	Dry	Rs. 4,28,000/-
2	70/5	8.23	Dry	Rs.32,92,000/-
TOTAL		9.30		Rs.37,20,000/-

VENDORS

H. Lavaniga

Ravi Kumar M.V.

G.P.A. Agent

S. Y. Srinivas

S. Srinivas

VENDEE

D. B. Srinivas

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DECLARATION

Declaration for non-encroachment of land in water-Bodies

I/We hereby certify that schedule of property mentioned in this document is not encroached in any wated bodies, water passages, catchment areas of water baides. If any information/declaration issued is found false in future, i/we know that we shall be liable for disciplinary action taken by law.

VENDOR/VENDOR'S

H. Laveaniya
Rani Khumar M..

VENDEE/VENDEE'S

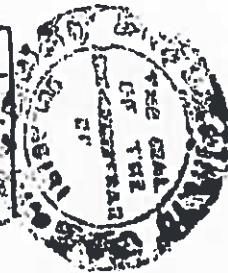
R. R. R.

G.P.A. Agent

S. L. M. K.

S. S. M. P.

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Contains <u>32</u> Sheets <u>10</u> Sheet.
<u>R. R. R.</u> Officer





உறுதிமொழி

இங்கு ஆவணத்தை எழுதிக் கொடுப்பவர்களும், எழுதிப்பெறுவர்களும் கீழ்க்கண்ட உறுதி மொழியை அளிக்கின்றோம்.

வழக்கிடை ஆவண சொத்து பதிவுச்சட்டம் 1908 பிரிவு 22(A) மற்றும் 22(B)-க்கு உட்பட்டதல்ல எனவும், ஆவணத்துடன் இணைக்கப்பட்ட அனைத்து ஆவணங்களும் இந்திய தண்டனை சட்டம் 1860 பிரிவு 470-ன் படி Forged Document அல்ல எனவும், ஆவணத்தை எழுதிப்பெறுபவர் அனைத்து ஆவணங்களையும் பரிசீலித்து வில்லங்கம் சரிபார்த்து எழுதிப்பெறுகிறார் எனவும், சொத்து மாற்றுச் சட்டம் 1882-ன் படி சொத்து பரிமாற்றம் தொடர்பான அனைத்து பிரிவுகளுக்கும் உட்பட்டு செயல்பட்டுள்ளோம். எனவும் உறுதிமொழி அளிக்கின்றோம்.

H. Kareanig
Ravi Khumaw

[Signature]

G. P. A. Agent
S. P. M. L. S.

S. S. R. P. P.

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Registering Officer		



CERTIFICATE UNDER SECTION 42 OF THE INDIAN STAMP ACT 1899



SOL-4735 of 2023

I hereby certify that a sum of ₹ 2,59,400/- (Rupees Two Lakh Fifty Nine Thousand Four Hundred only) of duty stamp duty has been levied under section 41 of the Stamp Act in respect of this instrument from Mr. P. K. KUMAR residing at 17/18, Sapthagiri Nilaya, Near Vinayaka Temple, KR Puram, Vinayaka Nagar, Bangalore South, Keshanapuram, Bangalore, Karnataka- 560 039, Karnataka India, 560039.

Sub Registrar, Soolagiri
Date: 10.08.2023

Signature of Sub Registrar and Collector under Section
42 of the Indian Stamp Act

Presented in the office of the Sub Registrar of Soolagiri and fee of ₹ 77,410/- paid at 04.48 PM on the 10.08.2023 by

Left Thumb



Additions as per recitals of document

Execution admitted by
Left Thumb



H. Lavaniya

Identity of the person verified through Consent based AADHAAR Authentication using Thumb Impression with UIDAI reference No. : UKC:869347d2706e9418894cdf8/be639f9ba31569 (Details from UIDAI : Lavaniya H W/O A V M Hemnaath, 15-09-1984, xxxxxxxx6030)



Execution admitted by
Left Thumb



Ravi Khanna M.N.

Identity of the person verified through Consent based AADHAAR Authentication using Thumb Impression with UIDAI reference No.

Document No. 5513 of 2023 of Book 186
(Details from UIDAI : M N Ravi Khanna S/O
Contains 3 Sheets)





Execution admitted by
Left Thumb



Nagabhushan, 22-03-1995, xxxxxxxx16741

S. Yinkumar

Identity of the person verified through Consent based AADHAAR Authentication using Thumb Impression with UIDAI reference No. UKC:7499374b5cd2658cfa4354bc006891bd79647b (Details from UIDAI : Manikandan Sampangiraman S/O: Sampangiraman, 06-09-1982, xxxxxxxx8404)



Execution admitted by
Left Thumb



S. Siva

Identity of the person verified through Consent based AADHAAR Authentication using Thumb Impression with UIDAI reference No. UKC:521700d4e751135fce4c2b9becb0d4bf89bb69 (Details from UIDAI : Siva S S/O: Sakkappa, 08-07-1991, xxxxxxxx0838)



Execution admitted by
Left Thumb



a. Siva

Identity of the person verified through Consent based AADHAAR Authentication using Thumb Impression with UIDAI reference No. UKC:128742eec8990fdf1d4a738755f0298611c5e0 (Details from UIDAI : Duddukuri Ravikumar S/O: Duddukuri Venkatalah, 02-07-1972, xxxxxxxx7760)



13th day of August 2023

Vinodh paneerselvam
Sub Registrar
Soolagiri

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Registering Officer



R/Soolagiri/Book-1/5513/2023

Document No. R/Soolagiri/Book-1/5513/2023

18 DEC 2023

Sub Registrar



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Registering Officer





தமிழக அரசு

வருவாய்த் துறை

நில உரிமை விபரங்கள் : இ. எண் 10(1) பிரிவு

யாவட்டம் : கிருஷ்ணகிரி

வட்டம் : குளகிரி

வருவாய் கிராமம் : மிடிதேபள்ளி

பட்டா எண் : 525

உரிமையாளர்கள் பெயர்

1. குராப்பா	யகன்	குரரப்பா (எ)குள்ளப்பா
2. குரரப்பா	மகன்	கோவிந்தப்பா
3. சீனப்பா	மகள்	கமலம்மா
4. சீனப்பா	மகள்	குரர்ம்மா
5. சீனப்பா	மகள்	தனம்மா
6. சீனப்பா	மகள்	கௌரம்மா
7. சாவித்திரியம்மா	மகன்	முரளிமோகன்
8. சாவித்திரியம்மா	மகள்	உஷா

பல எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	ஹெக்டர் - ஏர்	ரூ - பை	
70	5	8 - 10.00	5.02	--	--	--	--	2016/0103 /31/023960--756/1423 -- 27-12-2016
		8 - 10.00	5.02					

குறிப்பு2 :



- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 31/11/070/00525/140062 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி செய்துகொள்ளவும்.
- இத் தகவல்கள் 04-08-2023 அன்று 02:17:01 PM நேரத்தில் அச்சடிக்கப்பட்டது.
- கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

Document No. SSD of 2023 of Book
Contains 32 Sheets 15 Sheet
Registering Officer





தமிழக அரசு

வருவாய்த் துறை

[நில உரிமை சிபாரிசுகள் : இ. எண் 10(1) பிரிவு]

மாவட்டம் : கிருஷ்ணகிரி

வட்டம் : சூளகிரி

வருவாய் பிராமம் : மிடிதேபள்ளி

பட்டா எண் : 594

உரிமையாளர்கள் பெயர்

1 என் எம் ஹெம்நாத்

மனைவி

லாவண்பா

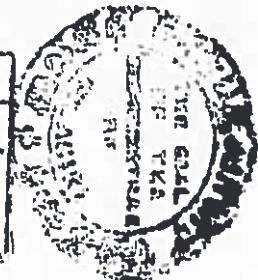
ப.எண்	உட்பிரிவு	புன்செய்		நன்செய்		மற்றவை		குறிப்புகள்
		பரப்பு	தீர்வை	பரப்பு	தீர்வை	பரப்பு	தீர்வை	
		ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	ஹெக் - ஏர்	ரூ - பை	
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		1 - 53.00	0.95					

குறிப்பு 2 :



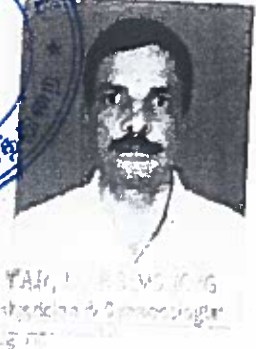
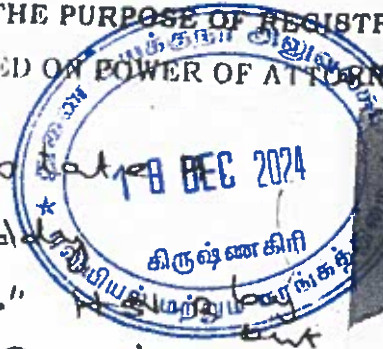
- மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 31/11/070/00594/140058 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி செய்துகொள்ளவும்.
- இத் தகவல்கள் 04-08-2023 அன்று 02:18:02 PM நேரத்தில் அச்சடிக்கப்பட்டது.
- கைப்பேசி கேமராவின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்

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Contains 32 Sheets 16 Sheet.
Registering Office



LIFE CERTIFICATE FOR THE PURPOSE OF REGISTRATION OF
DOCUMENTS BASED ON POWER OF ATTORNEY

N. Shekar Reddy S/o
Narayana Reddy
No. III "Akshaya Nivas"
Kodikondrahalli (v) Carmalaram (P)
Varthur Hobli; Bangalore - 560035



[Signature]

SIGNATURE OF THE INDIVIDUAL

Certified that the individual name Shri/Smt. Ms.

S/o.

address

Who has signed in my presence and whose photo has been attested by me, is alive, as on this date.

Name:-	UMA KUMAR Dr. UMA KUMAR, MBBS MS, (DEG) Consultant Obstetrician & Gynaecologist Reg. No. 82644
Designation of Registered Medical Practitioner with registered No. / 'A' group officer	

Seal/No.

of

Regd. 82644

Practitioner / 'A' Group officer

Place :	HOSUR
Date : (in words)	FOUR - ZERO EIGHT - TWO THOUSAND TWENTY THREE

ID No. for Group 'A' group Officers should be their GPF No. / PAN Card No. / Aadhar No. / Voter ID.

The Medical Practitioner / 'A' group Officer should attest the Photo of the individual and half of the Signature should be on the Photo and other half on this paper.

Document No. 5512 of 2023 of Book/
Contains 32 Sheets 17 Sheet.

By order
Registrar, Bangalore



02.02.2013

General of Registration

நில உடமை பட்டி நேரல்முறைப்பீடு:

கிருஷ்ணகிரி மாவட்ட வருவாய் அலுவலர் அவர்களின் செயல்முறைகள்
முன்னிலை: திரு. து. கிருஷ்ண



ப.மு. எண். 31877/2013/சே. 2

மொழிகள்: நில உடமை பட்டி மேம்பாட்டு திட்டம் மேல்முறையீடு - கிருஷ்ணகிரி மாவட்டம்
- குளகிரி வட்டம் - மிடிதேப்பள்ளி கிராமம் - புல எண். 70/1-க்கு பட்டா
வழங்கக் கோரி முகனூர் கிராமத்தை சேர்ந்த திரு கோவிந்தப்பா என்பவர்
அளித்த மனு உத்தரவு பிறப்பித்தல்.

- படிக்க 1. திரு. கோவிந்தப்பா என்பவர் மனு நாள் 23.12.2013 (ம) 21.4.2016
2. மற்றும் தொடர்புடைய கட்டுகள்.



ஆவண :-

கிருஷ்ணகிரி மாவட்டம், ஒசூர் வட்டம், முகனூர் கிராமத்தை சேர்ந்த திரு கோவிந்தப்பா என்பவர் குளகிரி வட்டம், மிடிதேப்பள்ளி கிராமம், புல எண். 70/1-ல் நில உடமை மேம்பாட்டு திட்டத்தில் திருத்தம் கோரி மனு செய்துள்ளார். இதன் பேரில் மனுதாரர் மற்றும் எதிர் மனுதாரர் 26.04.2016 அன்று விசாரணைக்கு அழைக்கப்பட்டனர். 26.04.2016 தேதிய விசாரணைக்கு தி/ன். கோவிந்தப்பா த/பெ குரர்ப்பா (1), முரளிமோகன் தா/பெ சாவித்திரியம்மாள் (2), குரர்ப்பா (எ) குள்ளப்பா (3), தனம்மா (4), குரரம்மா (5), கமலம்மா (6), கௌரம்மா (7), ஆகியோர் ஆஜராகி மேற்படி சொத்தில் தங்களுக்குள்ள பாத்யதை குறித்து கீழ்க்கண்டவாறு வாக்குமூலம் பதிவு செய்துள்ளனர்.

2) ஒசூர் சார்பதிவாளர் அலுவலக ஆவண எண். 306/1936 நாள் 01.12.1936-ன்படி ஒசூர் வட்டம், தோரிப்பள்ளி கிராமத்தில் வசிக்கும் திரு. வீரேசகவுடு அவர்களின் குமாரர் நஞ்சுண்டகவுடு என்பவரிடமிருந்து ஒசூர் வட்டம், அத்திமுகம் கிராமத்தை சேர்ந்த திம்மராயகவுடு அவர்களின் குமாரர் சப்பராயகவுடு அவர்கள் பைமாஷ் எண். 53 விஸ் 217 ஏக்கர் நிலத்தை கிராமமாக பெற்று அதன் பிறகு மேற்படி நிலம் 1942-ம் வருடம் சுவாதீனம் 1942ஆம் வருடம் திரு. திம்மராயகவுடு அவர்களின் குமாரர் சப்பராயகவுடு என்பவரிடமிருந்து எனது தந்தையும் பில்லேகவுடு குமாரருமாகிய திரு. குரர்ப்பா என்பவர் பைமாஷ் எண். 53 விஸ்தீரணம் 217 ஏக்கர் நிலம் கிராமம் பெற்றது கிராமம் பெற்ற நிலம் 1947-ஆம் ஆண்டு ஒசூர் சார் பதிவாளர் அலுவலக ஆவண எண். 294/1947ன்படி மேற்படி நபரிடமிருந்து விற்பனைக்கிராமமாக எனது தந்தை குரர்ப்பா என்பவர் பெற்றார் என்றும் அதன்பிறகு 1962 ஆம் ஆண்டு செட்டிமென்ட் அலுவலரால் மேற்படி நிலத்திற்கு பட்டா வழங்கப்பட்டபோது பைமாஷ் எண். 53 ஆனது 70/1 விஸ்தீரணம் 94.95 ஏக்கர் நிலம் தனது தந்தை திரு. குரர்ப்பா என்பவர் பெயரில் பட்டா வழங்கப்பட்டது. ஆனால் எங்களுக்கு பாத்தியப்பட்ட 217 ஏக்கர் நிலத்தில் மீதமுள்ள 122.25 ஏக்கர் நிலத்திற்கு தங்கள் தந்தை திரு. குரர்ப்பா பெயரில் பட்டா வழங்கப்படவில்லை புல எண். 70/2 விஸ். 116.4 ஏக்கர் நிலம் மேய்ச்சல் தரை என பாகுபாடு செய்யப்பட்டுள்ளது எனவும், புல எண். 70/3 விஸ் 0.61 ஏக்கர் நிலமானது தோட்டி திம்மராயன் என்பவர் பெயரில் பட்டா எண். 59-ல் தாக்கலாகியுள்ளது என்றும், மேற்படி கிராமம் பெற்ற 217.2 ஏக்கர் நிலத்தை தனது தந்தை திரு. குரர்ப்பா கிராமம் பெற்றது

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Contains 22 Serials 18 Sheets	
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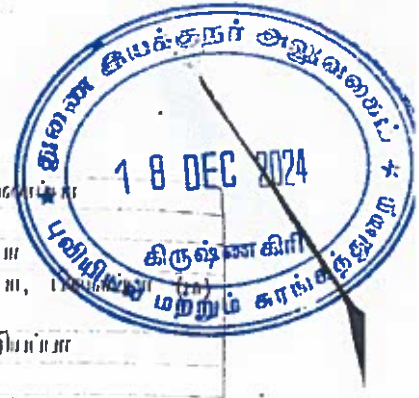
முதல் முதல் சபை பதிவாளர் ஆவண எண். 295/1947 நாள் 14.10.1947 நாள் முதல் கிராமியப் பதிவுகள் செய்வதில்லை என்பதை, நிலவு எண் பதிவு எண்மைய (புதிதில்) திட்டத்தில் எண்மையப் பதிவு எண். 20/1 விஸ்தீர்ணம் 38.42.05 ஹெக்டேர் நிலம் ஆனது பட்டா எண். 333-ல் சம்பந்தம் இல்லாத திரு முனியப்பா மற்றும் பதினேழு நபர்கள் பெயரிலும் புல எண். 70/2 விஸ்தீர்ணம் 20.26.5 ஹெக்டேர் நிலமானது நிலவு எண் பதிவு எண்மைய (புதிதில்) திட்டத்தில் மேய்ச்சல் தரை கிணறு என பாடபாடு செய்யப்பட்டுள்ளது என்றும் புல எண். 70/3-ல் விஸ்தீர்ணம் 0.24.5 ஹெக்டேர் நிலமானது பெத்த முனியப்பா மற்றும் 3 நபர்கள் பெயரில் பட்டா எண். 323-ல் தாக்கவாயியும் உள்ளது என்றும் வில்லங்க சான்றிலும் 1947 முதல் 1986 வரை மேற்படி நிலத்தை தனது தந்தை திரு. குரப்பா என்பவர் விற்பனை செய்ததாக எவ்வித பதிவுகளும் இல்லை என தெரியவருகிறது எனவும் நிலவு எண் பதிவு எண்மைய (புதிதில்) திட்டத்தில் புல எண். 70/1 விஸ்தீர்ணம் 38.42.05 ஹெக்டேர் நிலத்திற்கு வழங்கப்பட்ட பட்டாவை ரத்து செய்து தனது தந்தை திரு. குரப்பா பெயரில் பட்டா வழங்குமாறு திரு. கோவிந்தப்பா என்பவர் கோரியுள்ளார்.

3) எதிர் மனுதாரர் சார்பில் 26.4.2016 தேதிய விசாரணைக்கு எவரும் ஆஜராகவில்லை. 23.05.2016 அன்று நடைபெறுவதாக இருந்த விசாரணைக்கான அழைப்பாணை 30.05.2016 அன்று கிடைக்கபெற்றதாகவும், இவ்வினம் தொடர்பான தனது எழுத்துபூர்வமான வாதுரையினை திரு மது (எ) ஹேம்நாத் (1), கைலேஷ் (எ) கமலேஷ் (எ) கிரீலேஷ்வர் (2), எம்.பி.அகமது ஹாசன் த/பெ வீ முகம்மது (3), திரு முகம்மது சாவித் (4) மற்றும் திரு சர்வாஸ் இன்பா (பி) லிட். நியமனதாரர் திரு டி.ரவிக்குமார் ஆகியோர் 23.06.2016 தேதியன்று பதிவஞ்சலில் அனுப்பிவைத்துள்ளார். இவ்வாதுரையில் வழக்கிடை சொத்தானது மிடிதேப்பள்ளி கிராம புல எண். 70/1-ல் 94.95 ஏக்கர் நிலம் அதனுடைய ஆஜர் பட்டாவாரான குரப்பா (எ) குரப்பா கவுடு த/பெ பில்லே கவுடு என்பவரிடமிருந்து கிரையம் பெற்று தங்களது சுவாதினத்தில் உள்ள நிலம் எனவும், மேற்படி நிலமானது நிலவரித் திட்டம் தொடங்குவதற்கு முன்பாக பைமாஷ் எண். 53-ல் 217 ஏக்கர் நிலம் திரு நஞ்சண்ட கவுடு என்பவருக்கு சொந்தமானதாகும். மேற்படி நஞ்சண்ட கவுடு என்பவர் ஆவண எண். 795/1947 நாள்: 14.10.1947 அன்று 217 ஏக்கர் நிலத்தினை திரு குரப்பா கவுடு என்பவருக்கு விற்பனை செய்துள்ளார். அதன் பின்பு திரு குரப்பா (எ) குரப்பா கவுடு என்பவர் கிழக்கண்ட விவரப்படி மேற்படி பைமாஷ் எண். 53-ல் விற்பனை செய்துள்ளார்.

	ஆவண எண்	பதிவு நாள்	விற்பனை விஸ்தீர்ணம். (ஏக்கரில்)	கிரையம் பெற்ற நபர்
1	1805/1948	04.08.1948	8.00	மாரப்பா
2	1806/1948	04.08.1948	10.00	மட்டல நாயுடு
3	1807/1948	04.08.1948	10.00	கிட்டப்பா, சில்லப்பா (ம) திம்மராய நாயுடு
4	1808/1948	04.08.1948	10.00	மாரப்பா
5	1809/1948	04.08.1948	8.00	கெஞ்சகுரியப்பா
6	1810/1948	04.08.1948	5.00	சம்புகாடு
7	1811/1948	04.08.1948	4.00	திப்புடு
8	2607/1948	10.08.1948	8.00	முனியப்பா
9	2606/1948	15.08.1948	6.00	முனியப்பா (ம) கெம்புடு

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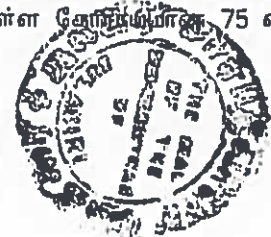
10	2608/1948	16.08.1948	5.00	கொம்பா எம்மா
11	2609/1948	10.08.1948	5.00	கொச்சம்மா
12	2610/1948	10.08.1948	10.00	கொக்கரவாய்
13	2611/1948	10.08.1948	15.00	கொவிந்தம்மா, எல்லம்மா
14	2612/1948	24.08.1948	8.00	கொத்தா கிழியம்மா
15	2613/1948	10.08.1948	4.00	முனியம்மா
16	2614/1948	10.08.1948	5.00	செத்தாழிமுடி
17	2615/1948	24.08.1948	4.00	லக்கரம்மா
18	2616/1948	10.08.1948	5.00	திம்மராயம்மா
19	2617/1948	07.11.1948	4.00	முனிகடா
20	3202/1958	23.10.1958	15.00	ஏர்ப்பா
21	3242/1958	29.10.1958	6.00	சித்தப்பா
22	3243/1959	27.01.1959	5.00	ராஜப்பா
23	1239/1958	22.12.1958	20.00	முனியப்பா (எ) அன்னையப்பா

4) நிலவரித்திட்டம் அமுல் செய்யப்படுவதற்கு முன்பே திரு குர்ரப்பா (எ) குர்ரப்பா கவுடு என்பவர் மிடிதேப்பள்ளி பைமாஷ் எண். 53-ல் தான் கிரையம் பெற்ற 217 ஏக்கரில் 180 ஏக்கர் நிலத்தை மேற்கண்டவாறு விற்பனை செய்துள்ளார். அதன்பின்பு நிலவரித்திட்டம் அமுல் படுத்திய பின்பு மேற்படி குர்ரப்பா (எ) குர்ரப்பா கவுடு என்பவர் புல எண். 70/1 23.50 ஏக்கர் நிலம் கிழக்கண்ட விவரப்படி விற்பனை செய்துள்ளார்.

வ. எண்.	ஆவண எண்	பதிவு நாள்	விற்பனை விஸ்தீரணம். (ஏக்கரில்)	கிரையம் பெற்ற நபர்
1	895/1965	12.04.1965	10.00	லக்கம்மய்யா (1) முனியம்மா (2)
2	896/1965	10.04.1965	04.00	எல்லப்பா (1) மற்றும் சித்தம்மா (2)
3	897/1965	12.04.1965	03.00	நாராயணப்பா
4	899/1965	12.04.1965	06.50	சித்தப்பா
5	மொத்தம்		23.50	

5) இதனை தொடர்ந்து குர்ரப்பா (எ) குர்ரப்பாகவுடு என்பவர் ஒட்டு மொத்தமாக 23.50 ஏக்கர் நிலத்தினை விற்பனை செய்துள்ளார். நிலஉடமை பதிவு மேம்பாட்டு திட்டத்தில் புல எண். 70/1-ல் 38.425 ஹெக்டேர் நிலம் பட்டா எண். 333-ல் முனியப்பா த/பெ பிள்ளைய்யா (1) செக்கரியப்பா த/பெ பாசப்பா (2) திரு.முனியப்பா த/பெ பில்லப்பா (3) திரு.முனியப்பா த/பெ சித்தப்பா (4) திரு.எல்லப்பா த/பெ எல்லப்பா (5) திரு.சித்தம்மா க/பெ எல்லப்பா (6) திரு.சின்னநாராயணரெட்டி த/பெ நடுக்கண்டாரெட்டி (7) திரு.திப்பாய்யா த/பெ கொப்பய்யா (8) திரு.வீரப்பா த/பெ சின்ன லட்சுமய்யா (9) திரு.கெம்பய்யா (10) திரு.ஏரப்பா (11) திரு.முனியப்பா (12) திரு.வெங்கடேசப்பா (13) திரு.காசியப்பா (14) திருமதி.முனியம்மா க/பெ முனியப்பா (15) திரு.முனியம்மா க/பெ சொக்கரலப்பா (16) திரு.ளரப்பா (17) திருமதி.நாகம்மா (18) மனுதாரர்கள் குர்ரப்பா (எ) குர்ரப்பாகவுடு என்பவர் பெயரில் பதிவு செய்யப்பட்டுள்ளது. ச.எண். 70/1-ல் உள்ள அனைத்து நிலங்களும் பல்வேறு நபர்களுக்கு விற்பனை செய்யப்பட்டுள்ளது. மனுதாரர்கள் தாங்கள் கிரையம் பெற்ற 70/1-ல் உள்ள நிலத்தின் 75 ஏக்கர்

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நிலம் மேலும் பல உட்பிரிவுகளாக 70/1a, 70/1b, 70/1c மற்றும் 70/1d பிரிக்கப்பட்டுள்ளது என்றும், மேற்படி உட்பிரிவுகள் பட்டா மற்றும் செய்ப்பாட்டு மனுதாரர்கள் மற்றும் விற்பனை செய்தவருக்கு வழங்கப்பட்டுள்ளது. மேலும் மனுதாரர்கள் குரர்பா (எ) குரர்பாகவுடு ஆபீசர்கள் மேற்படி ச.எண். 70/1 94.95 ஏக்கர் நிலத்தை பல உட்பிரிவுகளாக பிரிக்கப்பட்டு அனாமல் செய்து ஏற்கனவே எவையும், மேற்படி பிரதிவாதிதான் மற்றும் குரர்பா (எ) குரர்பாகவுடு என்பவரின் குடும்ப உறுப்பினர்கள் உயர்நீதிமன்றத்தில் ரிட் எண். 3190/2013 என்று மனு ஒன்றை வட்டாட்சியர் அவர்களுக்கு எதிராக தாக்கல் செய்தனர். இந்த சென்னை உயர்நீதிமன்ற தீர்ப்பில் ரிட் மனு எண். 3190/2013 தீர்ப்பு நாள்: 17.02.2015-ல் மனுதாரர் 22.02.2012 அன்று அளித்த மேல்முறையீட்டு மனு மீது உரிய உத்திரவு பிறப்பிக்க பிரதிவாதிதான் ஒன்றை வட்டாட்சியருக்கு உத்திரவிடப்பட்டது. ஆனால் இவ்வினம் நிலஉடமை பதிவு மேம்பாட்டு திட்டத்தின் போது ஏற்பட்டுள்ள பிழையினை திருத்தம் செய்ய கோரி மாவட்ட வருவாய் அலுவலர் முன்பு 23.12.2013 அன்று அளித்த மனு என்னால் பரிசீலனைக்கு எடுத்துக்கொள்ளப்பட்டது.

6) இவ்வினத்தில் மிடிதேபள்ளி கிராம புல எண். 70/1-ல் தீர்க்கப்பட வேண்டிய இனங்கள் கீழ்க்கண்டவாறு.

- 1) மிடிதேபள்ளி கிராம புல எண். 70 நிலஉடமை பதிவு மேம்பாட்டு திட்டத்திற்கு முன்பு என்னவாக இருந்தது?
- 2) மிடிதேபள்ளி கிராம புல எண். 70 நிலஉடமை பதிவு மேம்பாட்டு திட்டத்திற்கு முன்பு எவர் பெயரில் தாக்கலாகி இருந்தது?
- 3) மேற்படி புல எண். 70 நிலஉடமை பதிவு மேம்பாட்டு திட்டத்தில் என்னவாக யார் பெயரில் எவ்வளவு பரப்பிற்கு பட்டா தாக்கல் செய்யப்பட்டுள்ளது.
- 4) மேற்படி நிலத்திற்கு பட்டா பெற தகுதியுடைய நபர்கள் யார்? யார்?
- 5) தற்போதைய கிராம கணக்குகளில் மேற்படி புல எண். 70 என்னவாக பதிவாகி உள்ளது?

பத்தி 6(1) மற்றும் 6(2)-க்கான விளக்கம்:- நிலஉடமை பதிவு மேம்பாட்டு திட்டத்திற்கு முன்பே "அ" பதிவேடு மற்றும் எஸ்.எல்.ஆர். பதிவேட்டின்படி கிருஷ்ணகிரி மாவட்டம், சூளகிரி வட்டம், 224. மிடிதேபள்ளி கிராம புல எண். 70 ஆனது 70/1 ரயத்து புஞ்சை, மண் வயனம் 8.3, தரம் 5, தீர்வை ஏக்கருக்கு 0.25 பைசா, பரப்பு 94.95 ஏக்கர். தீர்வை ரூ.38.24 பைசா பட்டாதாரர் கலத்தில் எம்.1 பி.குரர்பா குறிப்பு கலத்தில் புல்காவல் பட்டா சலுகை தீர்வை என குறிப்பிடப்பட்டுள்ளது. புல எண்.70/2 சர்க்கார் புறம்போக்கு, மண்வயனம் தரம், தீர்வை இல்லை, பரப்பு 114.04 ஏக்கர் நிலம் குறிப்பு கலத்தில் மேய்ச்சல் தரை கிணறு என குறிப்பிடப்பட்டுள்ளது. புல எண். 70/3 ரயத்து புஞ்சை, மண் வயனம் 8.3, தரம் 5, தீர்வை ஏக்கருக்கு ரூ.0.87 பைசா, பரப்பு 0.61 சென்ட், தீர்வை 0.53 பைசா, பட்டாதாரர் கலத்தில் பட்டா எண்.59, மு.தோட்டிதம்மராயன் பெயரில் தாக்கலாகி உள்ளது, குறிப்பு கலத்தில் குறிப்பு இல்லை.

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7.பத்தி 6(3)-க்கான விளக்கம்:- நிறைவேற்றப் பதிவு செய்யப்பட்டு திட்டத்தின் போது மிடிதேபள்ளி கிராம புல எண். 70 - ஆனது 70/1 ரயத்து புல்கை, மண் வயனம் 8.3, தரம் 5, தீர்வை ஹெக்டேருக்கு 0.62 பைசா, பரப்பு 38.42.5 ஹெக்டேர், தீர்வை ரூ.23.24 பைசா, பட்டாதாரர் கலத்தில் பட்டா எண்.333, முனியப்பா மற்றும் 17 நபர்கள் சொந்திலும், குறிப்பு கலத்தில் புல்காவல் பட்டா தீர்வை எண்.333, குறிப்பிடப்பட்டுள்ளது புல எண்.70/2 சர்க்கார் புறப்போக்கு, மண்வயனம் தரம், தீர்வை இல்லை, பரப்பு 49.96.5 ஹெக்டேர் நிலம் குறிப்பு கலத்தில் பேய்மால் தரை என குறிப்பிடப்பட்டுள்ளது. புல எண். 70/3 ரயத்து புல்கை, மண் வயனம் 8.3, தரம் 5, தீர்வை ஹெக்டேருக்கு ரூ.2.15 பைசா, பரப்பு 0.24.5 ஹெக்டேர், தீர்வை 0.53 பைசா, பட்டாதாரர் கலத்தில் பட்டா எண்.323, சொ.பெத்தமுனியப்பா மற்றும் 3 நபர்கள் பெயரில் தாக்கலாதி உள்ளது, குறிப்பு கலத்தில் குறிப்பு இல்லை.

8. பத்தி 6(4)-க்கான விளக்கம்:- இவ்வினத்தில் பத்தி 7-ல் குறிப்பிடப்பட்டுள்ள விவரங்களை ஆராயும் போது மிடிதேபள்ளி கிராம புல எண். 70-ஆனது தமிழ்நாடு இனாம் ஒழிப்புச் சட்டம், 30/1963-ன்படி மேற்படி கிராமமானது நிலவரித்திட்டம் மேற்கொள்ள தமிழக அரசால் எடுத்துக்கொள்ளப்பட்டு நிலவரித் திட்ட அலுவலர், சேலம் அவர்கள் புல எண். 70-ஐ 70/1, 70/2 மற்றும் 70/3 என உட்பிரிவுகள் செய்யப்பட்டு, புல எண். 70/1-க்கு மேல்முறையீட்டு மனுதாரரின் தந்தை திரு குரர்பா என்பவருக்கு 0.25 பைசா தீர்வையில் 94.95 ஏக்கர் நிலத்திற்கு புல்காவல் பட்டா வழங்கப்பட்டுள்ளது. இனாம் ஒழிப்பு சட்டம் 26/1963-ன்படி ஆவணங்கள் மற்றும் கவாத்தன் அடிப்படையில் அப்போதைய நிலவரித் திட்ட அலுவலரால் திரு குரர்பா என்பவருக்கு பட்டா வழங்கப்பட்டுள்ளது. இதனை எதிர்த்து மேற்படி சட்டம் பிரிவு 12(2)-ல் நிலவரித் திட்ட அலுவலரால் பிறப்பிக்கப்பட்ட உத்திரவினை எதிர்த்து தனி நபர் உத்திரவு பிறப்பிக்கப்பட்ட 3 மாதக் காலத்திற்குள் தீர்ப்பாயத்தில் மேல்முறையீடு செய்துக்கொண்டிருக்க வேண்டும். எதிர் மனுதாரர்கள் அவ்வாறு மேல்முறையீடு செய்து அதன் பேரில் பரிகாரம் தேடிக்கொண்டதற்கான ஆதார ஆவணங்கள் ஏதும் விசாரணை சமயத்தில் தாக்கல் செய்யவில்லை. எனவே மேற்படி தனி நபர் பெயரில் பட்டா வழங்கப்பட்டுள்ளதால், நிலவரித்திட்டத்தின் போது பட்டா பெற்றுள்ள திரு குரர்பா என்பவரால் இந்நிலத்தில் விற்பனைகள் ஏதும் செய்யப்படாத நிலையில் நிலஉடைமை பதிவு மேம்பாட்டு திட்டத்திலும் இந்த புலத்திற்கான பட்டா பெற திரு குரர்பா என்பவரே தகுதி உடையவராவார்.

9.பத்தி 6(5)-க்கான விளக்கம்:- குளகிரி வட்டம், மிடிதேபள்ளி கிராமம், புல எண். 70-ஆனது கிராம "அ" பதிவேட்டின் படி ஒரூர், வட்டாட்சியரின் வட்ட 8ஏ/66/1418 நாள்: 29.07.2008-ன்படி கீழ்க்கண்டவாறு உட்பிரிவுகள் செய்து உத்திரவிடப்பட்டுள்ளது.

70/1ஏ	26.86.5	333. முனியப்பா மற்றும் 17 நபர்கள்
70/1பி	2.02.5	407. பிரவீனா
70/1சி	2.02.5	408. கே.என்.நாயுடு
70/1டி	4.47.5	333. முனியப்பா மற்றும் 17 நபர்கள்
70/1இ	3.03.5	407. பிரவீனா

38.42.5

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வாட் 86/406/1420 நாள்: 29.10.2010 என்பது

70/1௭1 21.60.0 333 முனியம்மா மற்றும் 25 நபர்கள்
70/1௭2 5.26.5 426 எல்லப்பா மகன் சாந்தகுமார்

26.86.5

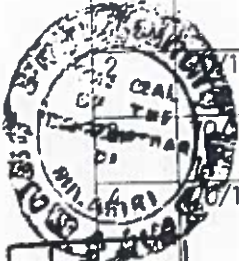
வாட் 8௭/84/1422 நாள்: 9.10.2012-ன்பது

70/1௭1 12.03.0 333 முனியம்மா மற்றும் 25 நபர்கள்
70/1௭1பி 3 14.0 442 அலிமொசின்கான் (1), அப்துல் ரகப் (2)
70/1௭1சி 6.43.0 333 முனியம்மா மற்றும் 25 நபர்கள்

21.60.0

10 கிராம கணினி சிட்டாவில் கீழ்க்கண்டவாறு ச.எண். 70/1 உட்பிரிவுகள் செய்யப்பட்டு பதிவு செய்யப்பட்டுள்ளது.

வ. எண்.	புல எண்/ உட்பிரிவு எண்	விஸ்தீரணம் (ஹெக்டேரில்)	பட்டா எண் / நில உடமைதாரர் பெயர்	குறிப்பு
1	70/1௭1பி	3.14.0	442. அலிமொசின்கான் த/பெ (லேட்) அலி அப்சர்கான் (1) ஆர். அப்துல் ரகப் த/பெ ரகமதுல்லா (2) சைபுதீன் பாகிர் முகம்மது த/பெ பாகிர் முகம்மது (2)	புல் காவல் பட்டா
	70/1௭2	5.26.5	426. சாந்தகுமார் த/பெ எல்லப்பா	புல் காவல் பட்டா
	70/1௭1பி	0.60.5	488. முனியம்மா க/பெ சக்கார்ப்பா	--
	70/1௭2	0.61.0	489. வெங்கடேஷ் த/பெ முனியம்மா (1) நாராயணசாமி த/பெ முனியம்மா ஆஞ்சப்பா (௭) ஆஞ்சி த/பெ முனியம்மா	--
	70/1௭1௭ 70/1௭1பி 70/1௭3 70/4	2.40.0 6.43.0 3.26.0 1.53.0	333. முனியம்மா த/பெ பில்லய்யா முனியம்மா த/பெ சித்தப்பா சென்றாய செட்டி த/பெ நஞ்சுண்ட செட்டி கோபாய்யா த/பெ கோபாய்யா எர்ப்பா த/பெ பெத்தமாரப்பா முனியம்மா க/பெ முனியம்மா முனியம்மா க/பெ சக்கார்ப்பா எர்ப்பா, நாகம்மா, ஈரம்மா, கிர்வேஷ்வர் (ம) மது த/பெ முனிசந்திரப்பா, வெங்கடம்மா க/பெ கிருஷ்ணப்பா, எச்.முனியம்மா த/பெ அனுபந்தப்பா, எம்.சந்திரசேகர் த/பெ முனியம்மா, பி.ரமேஷ் த/பெ பாபண்ணா,	புல் காவல் பட்டா



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			ஆர்.ஆனந்தரெட்டி த/பெ ராமரெட்டி, எம்.ரங்கநாத் த/பெ முனியப்பா, கே.பிரவீனா க/பெ நாராயணப்பா, முனியப்பா (எ) அன்னையப்பா த/பெ திம்மராயப்பா, ஏ.வி.முனிசத்திரப்பா த/பெ வெங்கடசாமி குஷால் பஹாடியா த/பெ ஸ்ரீலால் சந்தாஜி, எஸ்.நாராயணப்பா த/பெ லட்சுமேகவுடு, பசம்மா க/பெ முனியப்பா மற்றும் சர்வா இன்பிரா (பி) லிமிடெட்	
6.	70/1பி	2.025	407. பிரவீனா க/பெ நாராயணப்பா	--
	70/1இ	3.035		
7.	70/1சி	2.025	408. கே.என்.நாயுடு	--
8.	70/5	8.10.0	464. என்.சேகரரெட்டி	

இவ்வினத்தில் மேலே படிக்கப்பட்ட பத்தி 7 முதல் 10 வரையிலான இனங்கள் இரு தரப்பினர் அளித்துள்ள வில்லங்க சான்று நகல் மற்றும் ஆதார ஆவணங்கள் மற்றும் வாக் குழுவலங்ககள் பரிசீலித்ததில் மனுதாரர் திரு கோவிந்தப்பா என்பவரின் தந்தை (மே) குரரப்பா (எ) பில்லம்மா என்பவர் பெயரில் மிடிதேபள்ளி கிராம புல எண். 70-ல் விஸ்தரினம் 211.60 ஏக்கர் நிலத்தினை விலைக்கு வாங்கி உள்ளதாகவும், அதனை பட்டா மாற்றி தருமதி கோபியுள்ளார். இருப்பினும், நிலவரித் திட்ட அலுவலரால் மேற்படி புல எண். 70 ஆனது 70/1, 70/2 மற்றும் 70/3 என உட்பிரிவு செய்யப்பட்டு புல எண். 70/1-ல் 94.95 ஏக்கர் நிலம் மற்றும் மெய்யுறையின் (1) மனுதாரரின் தந்தை திரு குரரப்பா பெயரில் பட்டா தாக்கல் செய்யப்பட்டுள்ளது. எனவே, நிலவரித் திட்டத்தின் போது பட்டா பெற்றுள்ள திரு குரரப்பா என்பவரே நிலத்தை பரிவு செய்யப்பட்டு திட்டத்திலும் பட்டா பெற தகுதியுடையவராகிறார். இருப்பினும், நிலவரித் திட்டத்தின் போது பட்டா பெற்ற திரு குரரப்பா என்பவர் புல எண். 70/1-ல் மொத்த விஸ்தரினம் 94.95 ஏக்கரில் 10.00 ஏக்கர் நிலம் ஒரூர் சார்புவிவாகர் ஆவண எண்.895/1965 நாள்: 12.04.1965-ன்படி திரு லகுமய்யா (1), திருமதி முனியம்மா (2) ஆகியோருக்கும், 4 ஏக்கர் நிலம் ஆவண எண். 896/1965 நாள்: 12.04.1965-ன்படி திரு என்பா (1), திருமதி சித்தப்பா (2) ஆகியோருக்கும், 3 ஏக்கர் நிலம் ஆவண எண். 897/1965 நாள்: 12.04.1965-ன்படி திரு நாராயணப்பா என்பவருக்கும், 6.5 ஏக்கர் நிலம் ஆவண எண். 899.1965 நாள்: 12.04.1965-ன்படி திரு சித்தப்பா என்பவருக்கும் ஆக மொத்தம் 23.50 ஏக்கர் நிலம் விற்பனை செய்துள்ளார். இதனை தொடர்ந்து திரு குரரப்பா என்பவரால் விற்பனை செய்யப்பட்ட மேற்படி ஆவணங்களின் தொடர்ச்சியாக, கிழ்க்கண்ட விற்பனைகள் நிகழ்ந்துள்ளன.

வ. எண்.	ஆவண எண் / நாள்	பரப்பு (ஏக்)	விற்பவர்	வாங்கியவர்
1	899/1965/12.4.65	6.50	குரரப்பா	சித்தப்பா
2	2579/1972/12.9.72	6.50	சித்தப்பா	எரரப்பா, நாகம்மா
3	1270/2003/22.12.03	0.50	எரரப்பா, நாராயணம்மா, நாகம்மா	முனிராஜப்பா

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4	3960/2006/18.12.06	6.50	முனிப்பாடம் மற்றும் கிராமபஞ்சாயத்து பிரதான	பிரதான
5	2503/12/14.6.12	6.50	பிரதான	தி/ள்.சர்வா இன்பிரா அபிவிருத்தி மற்றும் மகேஷ் ராம்தாஸ் எலப்பா, சித்தம்மா
6	896/1965/10.04.65	4.00	குரப்பா கவுடு	கிராமபஞ்சாயத்து
7	544/95/22.5.95	4.00	எலப்பா, சித்தம்மா	கிராமபஞ்சாயத்து
8	606/2006/27.2.06	4.00	விபிசுமார் ஏஜெண்ட் ஓம்பிரகாஷ் பிரிசுசுபல்	ஹேமநாத் (எ) மது
9	1041/2007/6.3.07	1.00	ஹேமநாத் (எ) மது	பிரதான
10	896/1965/10.4.65	4.00	குரப்பா கவுடு	எலப்பா, சித்தம்மா
10	544/95/22.5.95	4.00	எலப்பா, சித்தம்மா	கிராமபஞ்சாயத்து
11	976/2003/9.7.03	4.00	குரப்பா கவுடு ஏஜெண்ட், கிராமபஞ்சாயத்து பிரிசுசுபல்	ஓம்பிரகாஷ்
12	606/06/27.2.06	4.00	விபிசுமார் ஏஜெண்ட் ஓம்பிரகாஷ் பிரிசுசுபல்	ஹேமநாத் (எ) மது
13	1550/07/3.4.07	3.00	ஹேமநாத் (எ) மது	கமலாசுந்தரி
14	314/2014/30.1.14	3.00	கமலாசுந்தரி	சர்வா இன்பிரா
15	895/1965/12.4.65	10.00	குரப்பா கவுடு	லகுமய்யா, முனியம்மா
16	1664/69/5.6.69	5.00	லகுமய்யா	குரப்பா
17	2443/70/2.10.70	10.00	குரப்பா, ராஜப்பா	முனியம்மா
18	1111/04/22.7.04	2.53	முனியம்மா, முனியம்மா	பசுமமா (தானம்)

மேலும், நிலவரித் திட்டத்தின் போது பட்டா பெற்றுள்ள திரு குர்ரப்பா என்பவர் மிடிதேபள்ளி கிராம புல எண். 70/1-ல் மொத்தமுள்ள 94.95 ஏக்கர் நிலத்தில், பத்தி 4-ல் குறிப்பிடப்பட்டுள்ள விவரப்படி நிலவரித்திட்ட பட்டாதாரும், மேல்முறையீட்டு மனுதாரரின் தந்தையுமான திரு குர்ரப்பா என்பவர் விற்பனை செய்துள்ள 23.50 ஏக்கர் நீங்கலாக, மீதமுள்ள 71.45 ஏக்கர் நிலம் திரு குர்ரப்பா என்பவருக்கு பாத்யதைபட்டது என்பது தெளிவாகின்றது.

மனுதாரர்கள் வாக்குமூலம் மற்றும் ஆவணங்கள் கவனமாக என்னால் பரிசீலனை செய்யப்பட்டத்தில் கிருஷ்ணகிரி மாவட்டம், சூளகிரி வட்டம், மிடிதேப்பள்ளி கிராமம், பட்டா எண்.442 (புல எண். 70/1ஏ1பி விஸ்தீரணம் 3.14.0 ஹெக்டேர்) 426 (புல எண். 70/1ஏ2 விஸ்தீரணம் 5.26.5 ஹெக்டேர்) 464 (புல எண். 70/5 விஸ்தீரணம் 8.10.0 ஹெக்டேர்) ஆகியவற்றில் உள்ள பட்டாதாரர்களுள் சம்மி செய்தும், பட்டா எண்.333-ல் 70/4 விஸ்தீரணம் 1.53.0 ஹெக்டேர் நிலத்தினை சம்மி செய்தும், நிலவரித்திட்டத்தின் போது பட்டா பெற்றுள்ள திரு குர்ரப்பா என்பவரது பெயரில் பட்டா தாக்கல் செய்யக்கூடியதாக தெரியவருகிறது. திரு குர்ரப்பா என்பவர் கடந்த 27.10.1965 அன்று இறந்து விட்டதால் அவரது வாரிசுகாரர்களான திரு.குர்ரப்பா (1) திரு.குள்ரப்பா (1) திரு.கோலிந்தப்பா (2)

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Registering Officer

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இந்திய அரசாங்கம்
Government of India

மாவட்டம் / District
Lavanija H
பிறந்த நாள் / DOB 15/09/1984
பாலம் / Gender FEMALE

4545 2578 6030
VID: 9102518110210534

எனது அ.அ.அ. எனது அடையாளம்

Unique Identification Authority of India

மாவட்டம் / District
Lavanija H
பிறந்த நாள் / DOB 15/09/1984
பாலம் / Gender FEMALE

4545 2578 6030
VID: 9102518110210534



आयकर विभाग
INCOME TAX DEPARTMENT



भारत सरकार
GOVT. OF INDIA



स्थायी लेखा संख्या कार्ड
Permanent Account Number Card
AHWPL6103C

नाम / Name
LAVANIYA H

पिता का नाम / Father's Name
NAGABHUSHAN

जन्म की तारीख / Date of Birth
15/09/1984

हस्ताक्षर / Signature
H. Lavanija



22062019

H. Lavanija

Document No. 513 of 2023 of Book
Contains 32 Sheets 22 Sheet.

Deputy Officer





சென்னை அரசு
Government of India

புகைப்படம்
AI N Ravi Khuman
பிறப்பு நாள்/DOB: 22/03/1985
பால/SEX: MALE

5055 5661 1674
VID: 9112 8948 0066 6855

எனது உடையாள்

சென்னை அரசு
Unique Identification Authority of India

புகைப்படம்
S/O நகுந்தூசன், 134/18 பிரசந்தி பிளாக்,
134/18 பிளாக், பிரசந்தி பிளாக், ஹசூர்,
தமிழ்நாடு - 635109

Address:
S/O Naganthushan, 134/18 PRASANTHI
NLAYAM 1ST FLOOR,
VLT JALAGANDESHWARAR NAGAR, OPP
ANAND ELECTRONICS NH ROAD, HOSUR,
Hosur, Krishnagiri,
Tamil Nadu - 635109

5055 5661 1674
VID: 9112 8948 0066 6855

1047 | Helpdesk: uidai.gov.in | www.uidai.gov.in

Ravindhuran M N

சென்னை அரசு
Government of India

புகைப்படம்
Manikandan Sampangraman
பிறப்பு நாள்/DOB: 08/09/1982
பால/SEX: MALE

8046 6932 8404
VID: 9158 5261 9773 9603

எனது உடையாள்

சென்னை அரசு
Unique Identification Authority of India

புகைப்படம்
S/O: சம்பங்கரமன், ஹவர் 1525, லிங்கயத்
ஸ்ட்ரீட், பெருகல், ஹசூர்,
தமிழ்நாடு - 635105

Address:
S/O: Sampangraman, dno 1525, lingayat
STREET, BERUGAL, HOSUR, Berigal,
Krishnagiri,
Tamil Nadu - 635105

8046 6932 8404
VID: 9158 5261 9773 9603

1047 | Helpdesk: uidai.gov.in | www.uidai.gov.in

G.P.A. Agent
S. Y. Kumar

சென்னை அரசு
Government of India

புகைப்படம்
S/O: சக்கப்பா, D NO 2/239, அலுசனாலை,
பெட்டாச்சிநகரப்பள்ளி, கிருஷ்ணகிரி,
தமிழ்நாடு - 635117

Address:
S/O: Sakkappa, D NO 2/239, ALUSONAI,
PEDDACHINGALAPALLI,
Peddisigartopalli, Krishnagiri,
Tamil Nadu - 635117

6936 6295 0838
VID: 9111 1311 1041 4919

எனது உடையாள்

சென்னை அரசு
Unique Identification Authority of India

புகைப்படம்
S/O: சக்கப்பா, D NO 2/239, அலுசனாலை,
பெட்டாச்சிநகரப்பள்ளி, கிருஷ்ணகிரி,
தமிழ்நாடு - 635117

Address:
S/O: Sakkappa, D NO 2/239, ALUSONAI,
PEDDACHINGALAPALLI,
Peddisigartopalli, Krishnagiri,
Tamil Nadu - 635117

6936 6295 0838
VID: 9111 1311 1041 4919

எனது உடையாள்

S. S. S.

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Ravindhuran M N



आयकर विभाग
INCOME TAX DEPARTMENT

भारत सरकार
GOVT. OF INDIA

स्थायी लेखा संख्या कार्ड
Permanent Account Number Card

CBKPR0926F

नाम/ Name
M N RAVI KHUMARR

पिता का नाम, Father's Name
NAGABHUSHAN

जन्म की तारीख/ Date of Birth
22/03/1995

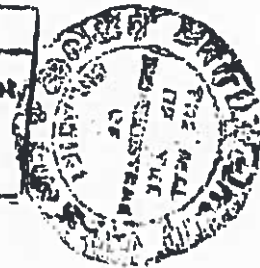
हस्ताक्षर/ Signature

18062018

Ravi Khumar M.N.

Document No. 5512 of 2023 of Book
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Registering Officer





ಭಾರತೀಯ ಏಕೈಕ ಗುರುತು ಪ್ರಾಧಿಕಾರ

ಭಾರತ ಸರ್ಕಾರ

Unique Identification Authority of India
Government of India

ನೋಂದಣಿ ಸಂಖ್ಯೆ Enrolment No.: 1208/72100/00069

To
ದುದುಕುರಿ ರವಿಕುಮಾರ್
Dudukuri Ravikumar
S/O: Venkataiah
#17/18, Sathagin Nilaya
K R Puram Vinayaka Nagar
Near Vinayaka Temple
Bangalore North
Kshnarajapuram
Bangalore Karnataka - 560036
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ನನ್ನ ಆಧಾರ್, ನನ್ನ ಗುರುತು



ಭಾರತ ಸರ್ಕಾರ
Government of India



ದುದುಕುರಿ ರವಿಕುಮಾರ್
Dudukuri Ravikumar
ಜನ್ಮ ದಿನಾಂಕ/DOB: 02/07/1972
ವೈಯಕ್ತಿಕ/MALE

5271 0811 7760

VID : 9152 1227 8199 9596

ನನ್ನ ಆಧಾರ್, ನನ್ನ ಗುರುತು



ಭಾರತೀಯ ಏಕೈಕ ಗುರುತು ಪ್ರಾಧಿಕಾರ
Unique Identification Authority of India

ವಿಳಾಸ:
S/O: ವೆಂಕಟಾiah, #17/18, ಸಾಥಗಿರಿ ನಿಲಯ,
ವಿನಾಯಕ ದೇವಾಲಯದ ಹತ್ತಿರ, ಕೆ ಆರ್ ಪುರಂ, ವಿನಾಯಕ
ನಗರ, ಬೆಂಗಳೂರು ನಗರ, ಬೆಂಗಳೂರು,
ಕರ್ನಾಟಕ - 560036

Address:
S/O: Venkataiah, #17/18, Sathagin
Nilaya, Near Vinayaka Temple, K R
Puram, Vinayaka Nagar, Bangalore
North, Bangalore,
Karnataka - 560036



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5271 0811 7760

VID : 9152 1227 8199 9596



ಮಾಹಿತಿ

- ಆಧಾರ್ ಗುರುತಿನ ಪುರಾವೆಯೇ ಹೊರತು ಪೌರತ್ವದಲ್ಲ
- ನಿಮ್ಮ ಗುರುತನ್ನು ಪರಿಶೀಲಿಸಲು ಅನ್ ಲೈನ್ ಮೂಲಕ ದೃಢೀಕರಿಸಿ
- ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಪ್ರಕ್ರಿಯೆ ಮೂಲಕ ಮುದ್ರಿತವಾದ ದಿವ್ಯಸ್ಥಾನ ದಾಖಲೆ ಇದಾಗಿದೆ

INFORMATION

- Aadhaar is a proof of identity, not of citizenship
- To establish identity, authenticate online.
- This is electronically generated letter.

- ಆಧಾರ್ ದೇಶದಾದ್ಯಂತ ಮಾನ್ಯತೆಯನ್ನು ಪಡೆದಿದೆ.
- ಭವಿಷ್ಯದಲ್ಲಿ, ಸರ್ಕಾರಿ ಹಾಗೂ ಸರ್ಕಾರೇತರ ಸೇವೆಗಳನ್ನು ಪಡೆಯಲು ಆಧಾರ್ ನಿಮಗೆ ಸಹಾಯಕವಾಗಿರುತ್ತದೆ.
- Aadhaar is valid throughout the country.
- Aadhaar will be helpful in availing Government and Non-Government services in future.

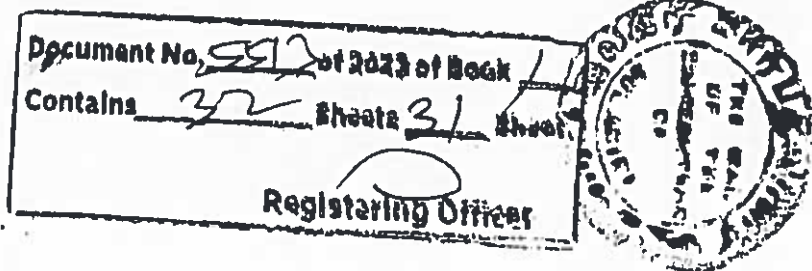
[Signature]

Document No. 5271 0811 7760 of 2023 of Book 1
Contains 32 Sheets 32 Sheet.
Registering Officer





[Handwritten signature]





Government of India

செல் நம்பர்
Geol Nagappa
பிறந்த நாள்/DOB: 05/06/1990
ஆண்/ MALE



Unique Identification Authority of India

முகவரி:
S/O: நாடப்பா, எண் 233, சிவசங்கரன் பள்ளி,
கலிங்காவரம், கலிங்காவரம், கிருஷ்ணகிரி,
தமிழ்நாடு - 635117

Address:
S/O: Nagappa, n o233, srveshankarapalli,
KALINGAVERAM, Kalingavaram, Krishnagiri,
Tamil Nadu - 635117

9122 9768 5504

VID : 9113 2306 1784 6592

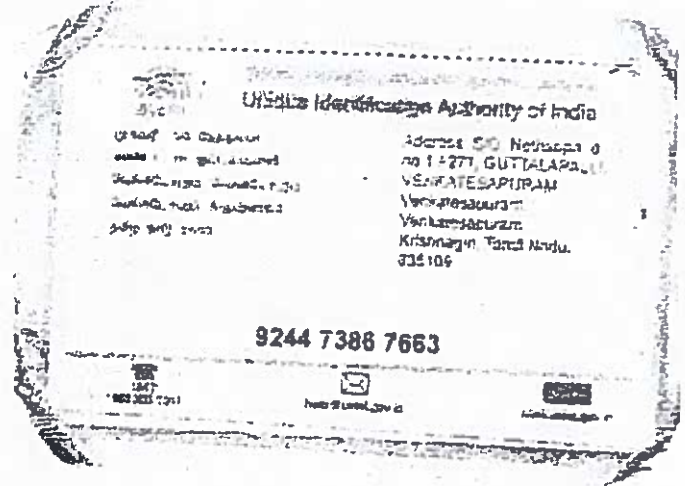
1047 | help@uidai.gov.in | www.uidai.gov.in

9122 9768 5504

VID : 9113 2306 1784 6592

எனது ஆதார். எனது அடையாளம்

N. Arif



N. Aravath

Document No. 5513 of 2023 of Book
Contains 32 Sheets 32 Sheet.
Registering Officer



S.DHANASEKAR, M.Sc., (Geo)
Qualified Person

Annexure -VI

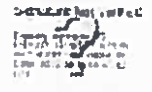


ಭಾರತ ಸರ್ಕಾರ
Government of India

ಭಾರತೀಯ ವಿಶಿಷ್ಟ ಗುರುತು ಪ್ರಾಧಿಕಾರ
Unique Identification Authority of India

ನೋಂದಣಿ ಸಂಖ್ಯೆ Enrolment No.: 0000/00689/61762

To
ದುದ್ದುಕುರಿ ರವಿಕುಮಾರ್
Duddukuri Ravikumar
S/O. Duddukuri Venkataiah
VILLA NO-126
ADARSH PALM RETREAT VILLAS
Devarabrisanahalli
Bengaluru Karnataka - 560103
9845042149



ನಿಮ್ಮ ಆಧಾರ್ ಸಂಖ್ಯೆ / Your Aadhaar No. :

5271 0811 7760

VID : 9185 2093 5803 2571

ನನ್ನ ಆಧಾರ್. ನನ್ನ ಗುರುತು



ಭಾರತ ಸರ್ಕಾರ
Government of India



ದುದ್ದುಕುರಿ ರವಿಕುಮಾರ್
Duddukuri Ravikumar
ಜನ ದಿನಾಂಕ/DOB. 02/07/1972
ಲಿಂಗ/ GENDER: MALE

5271 0811 7760

VID : 9185 2093 5803 2571

ನನ್ನ ಆಧಾರ್. ನನ್ನ ಗುರುತು



- ಆಧಾರ್ ಗುರುತಿನ ಪುರಾವೆಯೇ ಹೊರತು ಪೌರತ್ವದ್ದಲ್ಲ
- ಸುರಕ್ಷಿತ ಕ್ಷುಣ್ಣ ಕೋಡ್ ಆಪ್ಷನ್ XML / ಆನ್‌ಲೈನ್ ವರದಿಗಳನ್ನು ಒಳಗಿನ ಗುರುತನ್ನು ಪರಿಶೀಲಿಸಿ
- ಎಲೆಕ್ಟ್ರಾನಿಕ್ ಪ್ರಕ್ರಿಯೆ ಮೂಲಕ ಮುದ್ರಿತವಾದ ವಿಶ್ವಾಸ್ಯದ ದಾಖಲೆ ಇದಾಗಿದೆ

INFORMATION

- Aadhaar is a proof of identity, not of citizenship
- Verify identity using Secure QR Code/ Offline XML/ Online Authentication
- This is electronically generated letter

- ಆಧಾರ್ ದೇಶದಾದ್ಯಂತ ಮಾನ್ಯತೆಯನ್ನು ಪಡೆದಿದೆ
- ಸುಲಭವಾಗಿ ಸರ್ಕಾರಿ ಹಾಗೂ ಸಾರ್ವಜನಿಕ ಸೇವೆಗಳನ್ನು ಪಡೆದುಕೊಳ್ಳಲು ಆಧಾರ್ ಸಹಾಯಕವಾಗಿದೆ
- ನಿಮ್ಮ ಮೊಬೈಲ್ ಸಂಖ್ಯೆ ಮತ್ತು ಇ-ಮೇಲ್ ಐಡಿ ಅನ್ನು ಆಧಾರ್ ನಲ್ಲಿ ನವೀಕರಿಸಿ
- ಆಧಾರ್ ನ್ನು ನಿಮ್ಮ ಸ್ಮಾರ್ಟ್ ಫೋನ್ ನಲ್ಲಿ ಕೂಡಾ ಮುದ್ರಿ- mAadhaar ಆಪ್‌ನಲ್ಲಿ ಒಳಗೊಂಡಿರುತ್ತದೆ

- Aadhaar is valid throughout the country
- Aadhaar helps you avail various Government and non Government services easily
- Keep your mobile number & email ID updated in Aadhaar
- Carry Aadhaar in your smart phone – use mAadhaar App

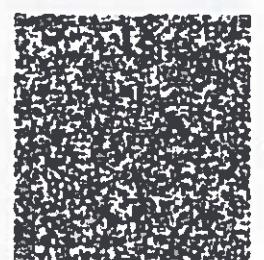


ಭಾರತೀಯ ವಿಶಿಷ್ಟ ಗುರುತು ಪ್ರಾಧಿಕಾರ
Unique Identification Authority of India



ವಿಳಾಸ:
ಎಸ್/ಒ ದುದ್ದುಕುರಿ ರವಿಕುಮಾರ್, ವಿಲ್ಲಾ ನಂ-126,
ಆದರ್ಶ ಪಾಲ್ಮ ರಿಟ್ರೀಟ್ ವಿಲ್ಲಾಸ್, ದೇವರಬಿಸನಹಳ್ಳಿ,
ಬೆಂಗಳೂರು,
ಕರ್ನಾಟಕ - 560103

Address:
S/O. Duddukuri Venkataiah, VILLA NO 126,
ADARSH PALM RETREAT VILLAS,
Devarabrisanahalli, Bengaluru,
Karnataka - 560103



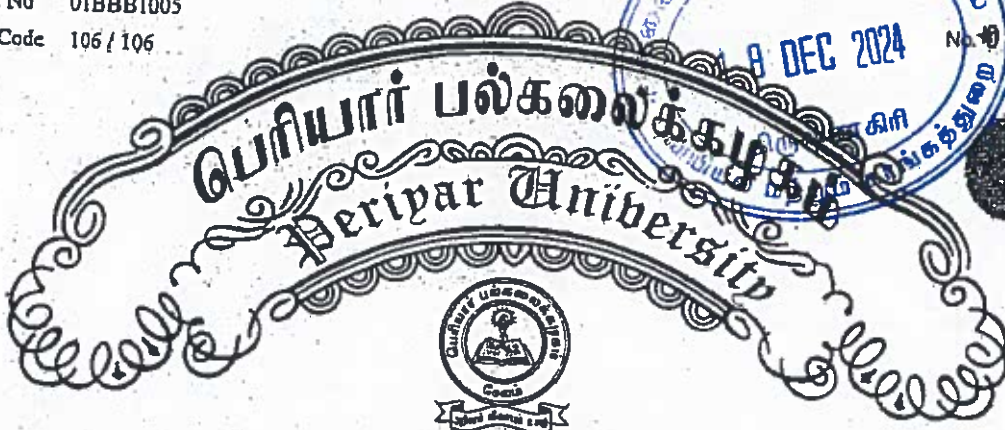
5271 0811 7760

VID : 9185 2093 5803 2571

1047 | help@uidai.gov.in | 1800 11 22 99 99

G.DHANASEKAR, M.Sc., (Geo)
Qualified Person

Reg. No 01BBB1005
Col Code 106 / 106



அறிவியல் புலம்

FACULTY OF SCIENCE

பெரியார் பல்கலைக்கழக ஆட்சிக்குழு 2003 ஆம் ஆண்டு ஏப்ரல் மாதம்
நடந்த பயன்பாட்டு புவியமைப்பியல் தேர்வில்
S தனசேகர் என்பவர்
முதல் வகுப்பில் தேர்ச்சி பெற்றார் என்று தக்க தேர்வாளர்கள்
சான்றளித்தபடி அறிவியல் நிறைஞர் என்னும்
பட்டத்தை அவருக்குப் பல்கலைக்கழக இலச்சினையுடன் வழங்குகிறது.

*The Syndicate of the Periyar University hereby makes known
that DHANASEKAR S has been
admitted to the DEGREE OF MASTER OF SCIENCE in
APPLIED GEOLOGY*

*he/she having been certified by duly appointed Examiners to be qualified
to receive the same and was placed in the FIRST CLASS at the
Examination held in APRIL 2003*

Given under the seal of this University



நாள்

Dated 15-09-2004

சேலம் 636011, தமிழ்நாடு, இந்தியா.
Salem 636011, TamilNadu, India.

பதிவாளர்
Registrar

குணைவேந்தர்
Vice-Chancellor

J. DHANASEKAR, M.Sc., (Geo)
Qualified Person

PRITHVI MINERALS,



ANNEXURE - VIII

☎ : 04288 - 262489

VARANALLAMPALAYAM,
ASATHUR POST - 637 303.

SANKARI Tk, Salem Dt. Tamil Nadu

Date :27.12.08.

TO WHOMSOEVER IT MAY CONCERN

This is to certify that SHRI S. DHANASEKAR, S/o. Shri A. Sundaram residing at No.8/3, Kullappan Street, Omalur Taluk, Salem District - 636 455 is working in our mines for the date of 15.10.2003 to till date as Geologist. During the above tenure of service his execution of the assigned work is exemplary and worth mentioning. We wish him success in his future endeavours.

For PRITHVI MINERALS,


(T.P. THANGAVEL.)
Partner


S.DHANASEKAR, M.Sc., (Geo)
Qualified Person



ANNEXURE-IX

PHOTO SHOWN PROPOSED APPLIED LEASE AREA VIEW-1



PHOTO SHOWN PROPOSED APPLIED LEASE AREA VIEW-2




G. DHANASEKAR, M.Sc., (Geo)
Qualified Person



PLATE NO: I

DATE OF SURVEY: 26-11-2024

APPLICANT ADDRESS:

M/s. R.K.M SAND AND AGGREGATES,
Prop. THIRU.D.RAVIKUMAR,
VILLA NO.126, ADARSH PALM,
RETREAT VILLAS,
DEVARABISANAHALLI,
BANGALORE,
KARNATAKA -560103

LOCATION OF QUARRY:

EXTENT : 3.76.67 Ha,
S.F.Nos : 70/4A & 70/5B,
VILLAGE : MIDTHEPALLI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE AREA :



TOPO SHEET NO.: 57-H/13

LATITUDE : 12° 46' 7.7657" N to 12° 45' 57.2328" N

LONGITUDE : 77° 57' 10.9141" E to 77° 57' 1.9504" E

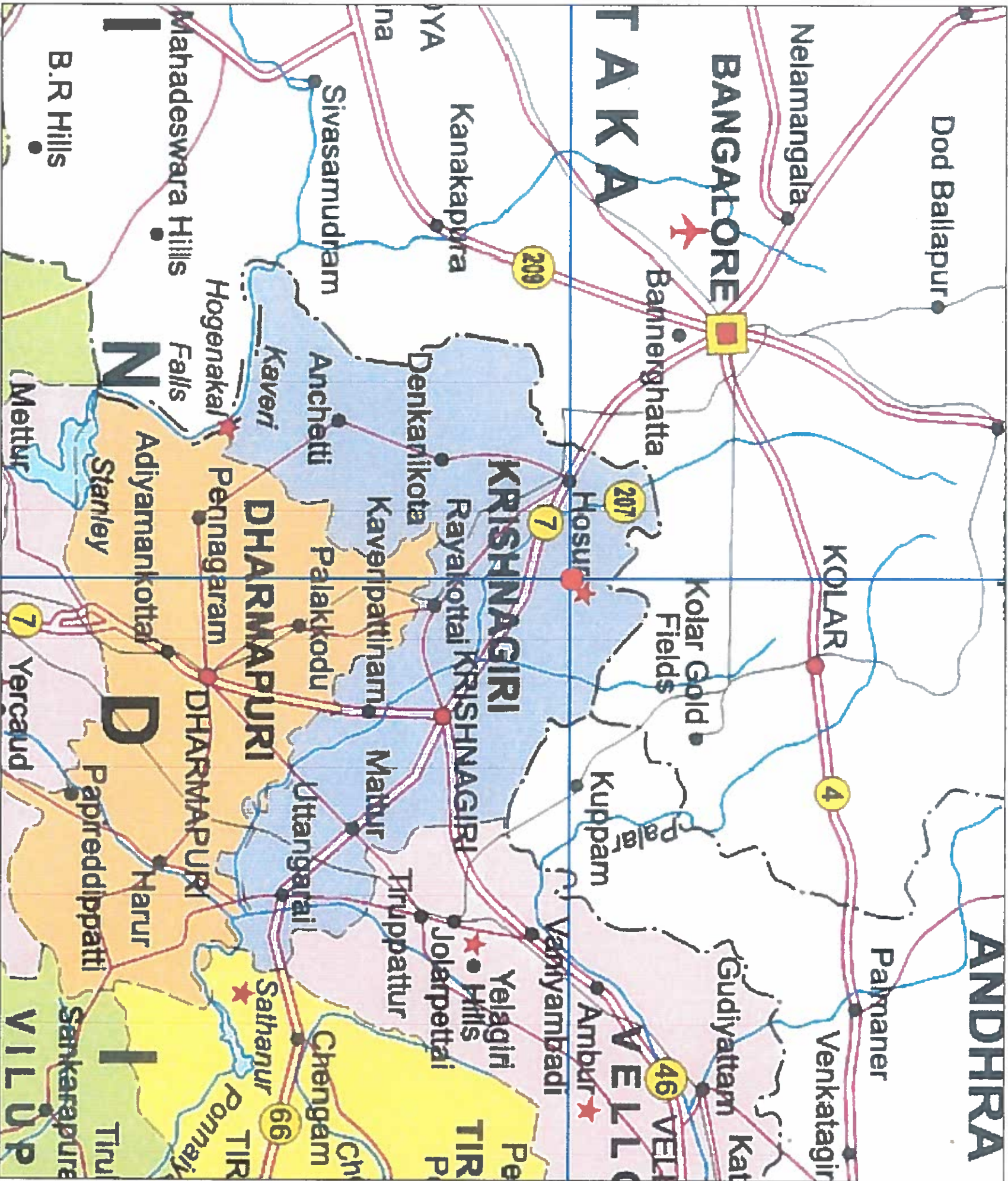
LOCATION MAP

NOT TO SCALE

Prepared By:

I DO HEREBY CERTIFY THAT THE PLATE
HAS BEEN CHECKED BY ME AND IS CORRECT
TO THE BEST OF MY KNOWLEDGE

SUBHANASANKAR M.G.



77° 57' 1.9504" E

12° 46' 7.7657" N

77° 57' 10.9141" E

12° 45' 57.2328" N

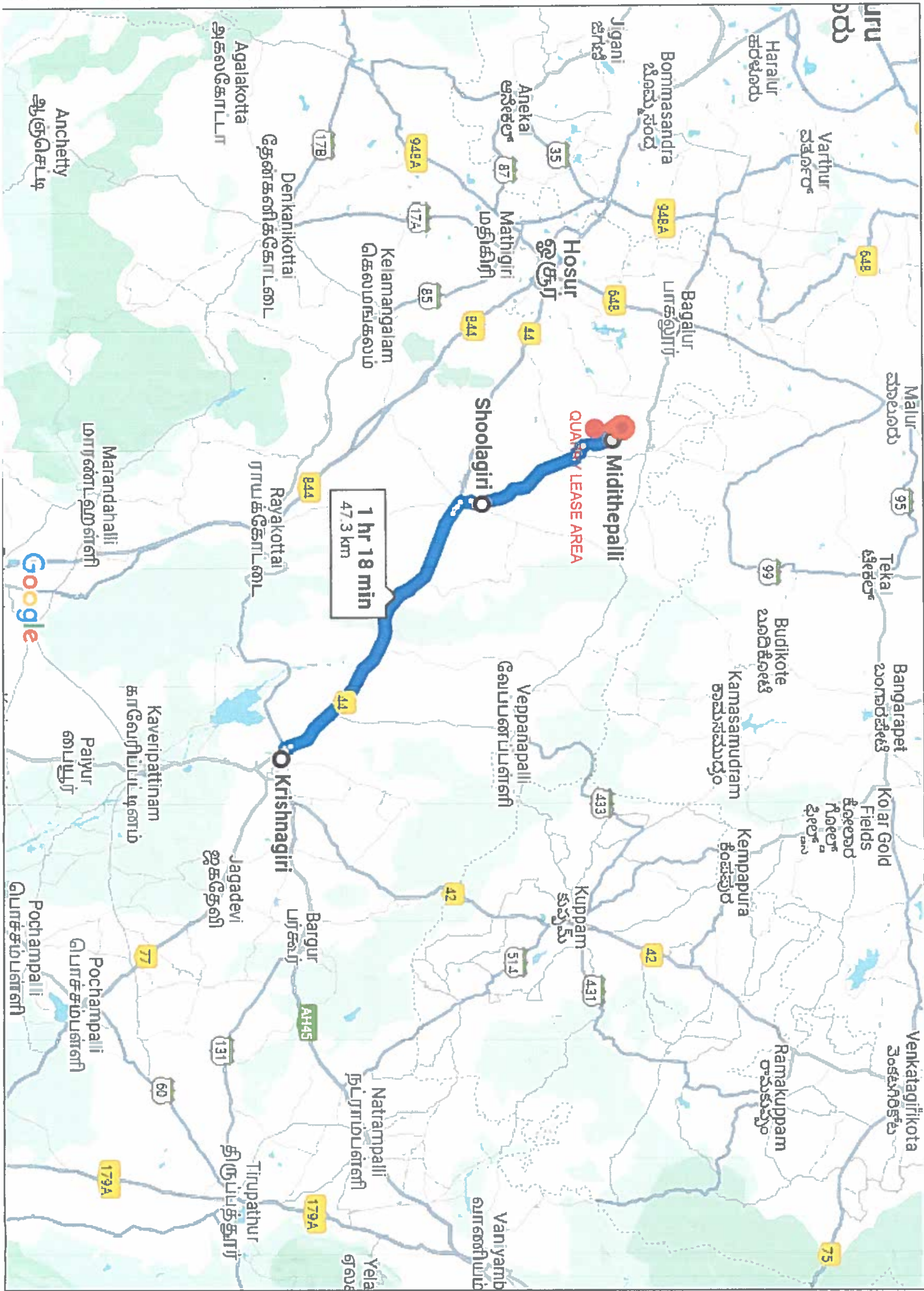


PLATE NO: 1A
DATE OF SURVEY: 26-11-2024
APPLICANT ADDRESS: M/s. R.K.M SAND AND AGGREGATES, Prop. THIRU.D.RAVIKUMAR, VILLA NO.126, ADARSH PALM, RETREAT VILLAS, DEVARABISANAHALLI, BANGALORE, KARNATAKA -560103
LOCATION OF QUARRY: EXTENT : 3.76.67 Ha, S.F.Nos : 70/4A & 70/5B, VILLAGE : MIDTHIPALLI, TALUK : SHOOLAGIRI, DISTRICT : KRISHNAGIRI.
INDEX QUARRY LEASE AREA ROAD
ROUTE MAP NOT TO SCALE
Prepared By: I DO HEREBY CERTIFY THAT THE PLATE HAS BEEN CHECKED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE S.DIHANASEKAR.M.Sc.

PLATE NO: IB

DATE OF SURVEY: 28-11-2024

APPLICANT ADDRESS

M/s. R.K.M. SAND AND AGGREGATES,
PROP. H.R.U.D. RAVIKUMAR,
VILLAGE NO. 126, ADARSH PALM,
RETRAI VILLAGE, DEC 2011,
DEVARABISANAHALLI,
BANGALORE,
KARNATAKA, 560103

LOCATION OF QUARRY:

EXTENT : 3.76.67 Ha,
S.F.Nos : 70/4A & 70/5B,
VILLAGE : MIDTHEPALLI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE AREA :



5KM RADIUS

TOPO SHEET NO. : 57-H/13

LATITUDE : 12° 46' 7.7657" N to 12° 45' 57.2328" N

LONGITUDE : 77° 57' 10.9141" E to 77° 57' 1.9504" E



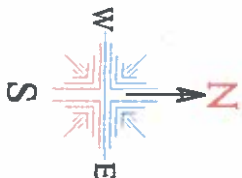
TOPO SHEET MAP OF
THE LEASE AREA

SCALE:1:50,000

Prepared By:

I DO HEREBY CERTIFY THAT THE PLATE
HAS BEEN CHECKED BY ME AND IS CORRECT
TO THE BEST OF MY KNOWLEDGE

G. CHITANAGUVAID M.C.



12° 46' 7.7657" N

77° 57' 1.9504" E

77° 57' 10.9141" E

12° 45' 57.2328" N

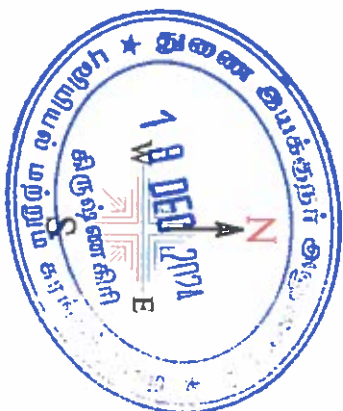


PLATE NO: IC

DATE OF SURVEY: 26-11-2024

APPLICANT ADDRESS:

M/s. R.K.M SAND AND AGGREGATES,
Prop. THIRU.D.RAVIKUMAR,
VILLA NO.126, ADARSH PALM,
RETREAT VILLAS,
DEVARABISANAHALLI,
BANGALORE,
KARNATAKA -560103

LOCATION OF QUARRY:

EXTENT : 3.76.67 Ha,
S.F.Nos : 70/4A & 70/5B,
VILLAGE : MIDTHEPALLI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE BOUNDARY



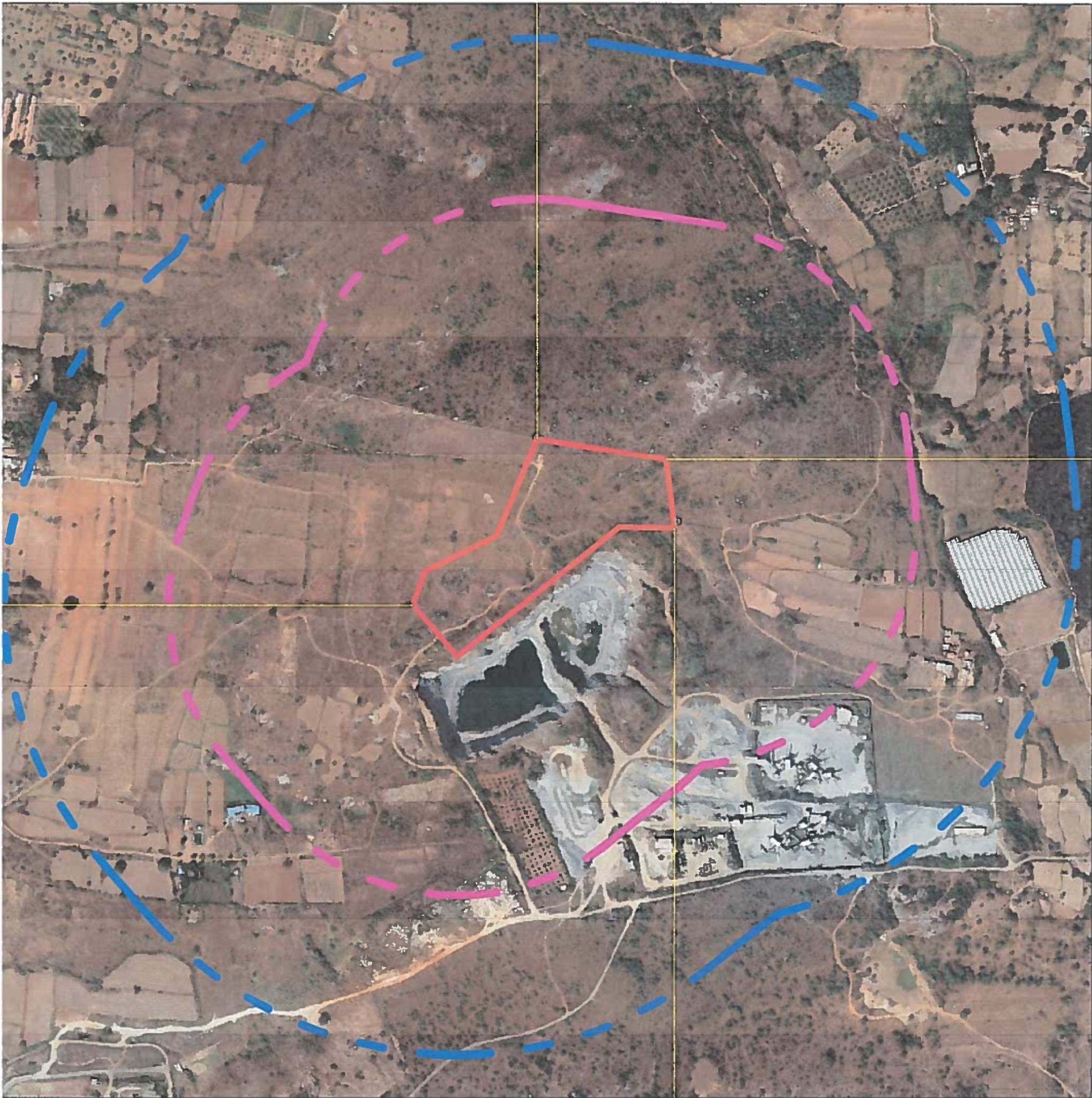
SATELLITE IMAGE
(LEASE AREA)

SCALE:1:2000

Prepared By:

I DO HEREBY CERTIFY THAT THE PLATE
HAS BEEN CHECKED BY ME AND IS CORRECT
TO THE BEST OF MY KNOWLEDGE

12° 46' 7.4625" N 77° 57' 2.8661" E



DATE OF SURVEY: 26-11-2024

M/s. R.K.M SAND AND AGGREGATES,
PROP. THIRU.D.RAVIKUMAR,
VILLA NO.126, ADARSH PALM,
RETREAT VILLAS,
DEVARABISANAHALLI,
BANGALORE,
KARNATAKA -560103

EXTENT : 3.76.67 Ha,
S.F.Nos : 70/4A & 70/5B,
VILLAGE : MIDITHEPALLI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

QUARRY LEASE BOUNDARY

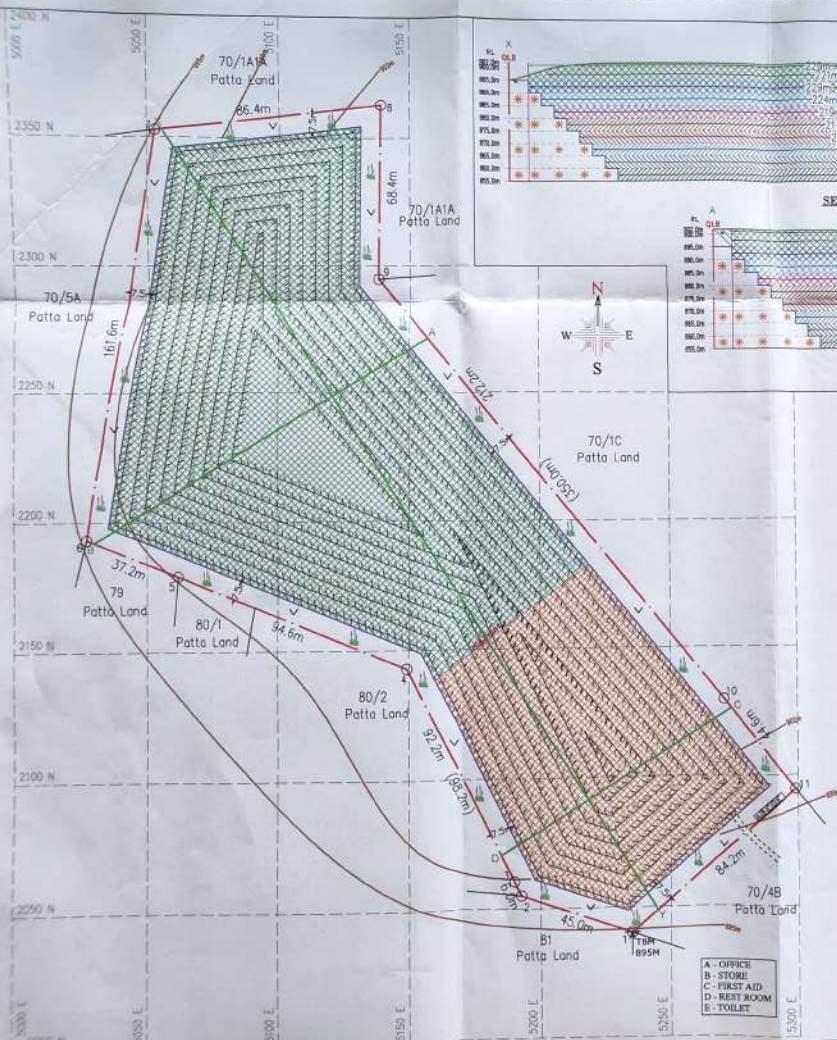
500M RADIUS

300M RADIUS

SCALE:1:5000

I DO HEREBY CERTIFY THAT THE PLATE
HAS BEEN CHECKED BY ME AND IS CORRECT
TO THE BEST OF MY KNOWLEDGE

SHIYAN SHI KANG M & C.



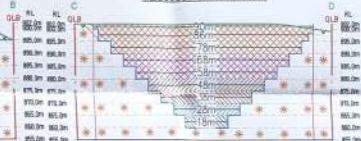
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



TOTAL DEPTH = 4.75m
SURFACE GROUND LEVEL ABOVE - 7m
SURFACE GROUND LEVEL BELOW - 43m

PLATE NO-IV

DATE OF SURVEY: 26-11-2024

APPLICANT ADDRESS:

M/s. R.K.M SAND AND AGGREGATES,
Prop. THIRU D. RAVIKUMAR,
VILLA NO.126, ADARSH PALM,
RETIREMENT VILLAS,
DEVARABISANAHALLI,
BANGALORE,
KARNATAKA - 560103

LOCATION OF QUARRY:

EXTENT : 3.76.67 Ha.
S.F. Nos : 70/4A & 70/5B,
VILLAGE : MIDITHEPALLI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE BOUNDARY

7.5m SAFETY DISTANCE

BOUNDARY PILLARS

TEMPORARY BENCH MARK

GRAVEL

ROUGH STONE

CONTOURS LINE

QUARRY ROAD

SURVEY

YEARWISE DEVELOPMENT AND PRODUCTION PLAN & SECTIONS

SCALE: 1:1000

PREPARED BY:

I DO HEREBY CERTIFY THAT THE PLATE HAS BEEN CHECKED BY ME AND IS ACCURATE TO THE BEST OF MY KNOWLEDGE.

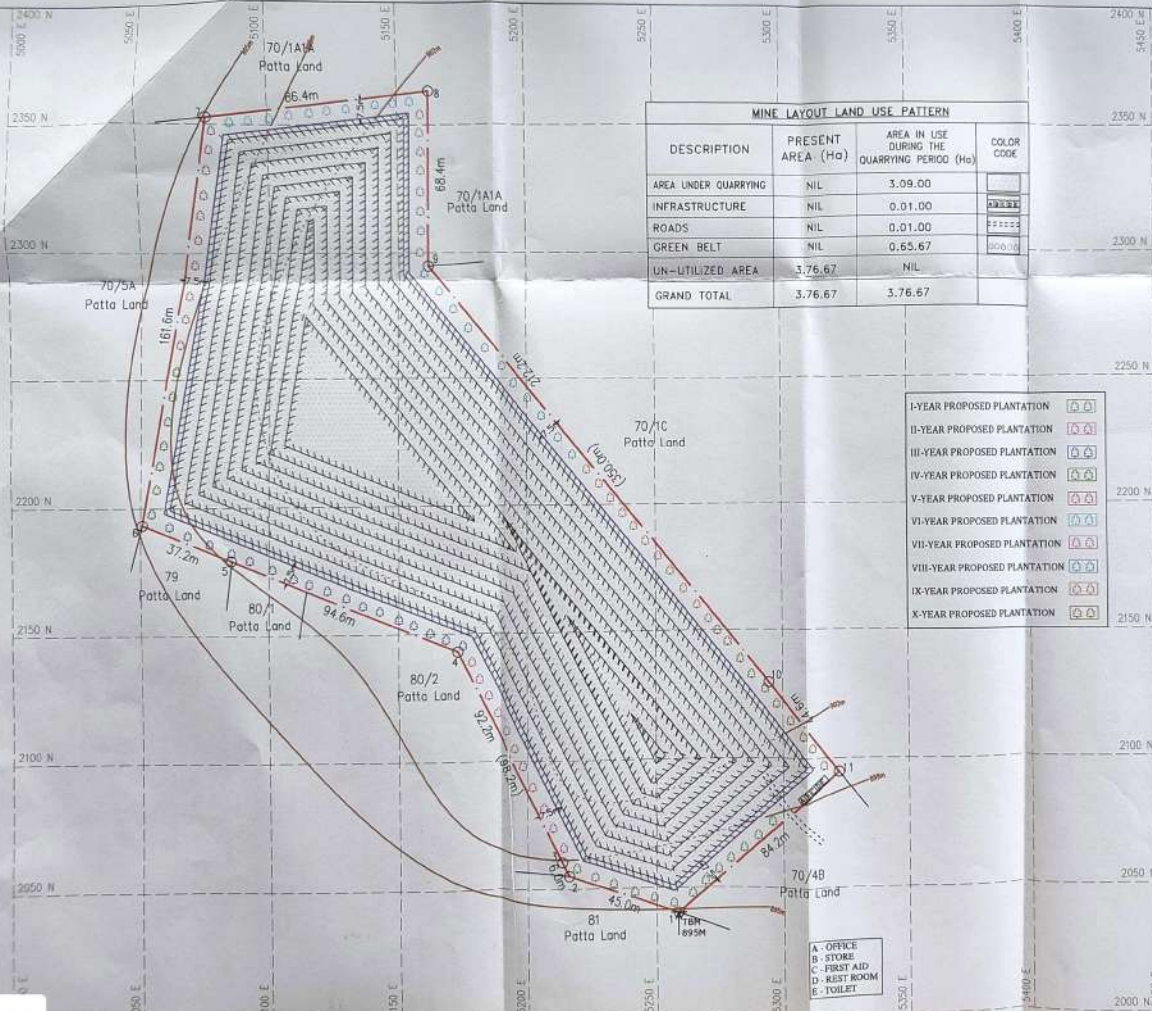
SRINIVASA KALM,
QUALIFIED ENGINEER

LOCATION OF QUARRY:

EXTENT : 3.76.67 Ha.
S.F. Nos : 70/4A & 70/5B,
VILLAGE : MIDITHEPALLI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

YEARWISE DEVELOPMENT AND PRODUCTION									
Year	Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in M3	Recoverable Reserve in m3 @ 10%	Stranded m3	
I-YEAR	XY-AD	I	229	125	3	140965	140965	61500	
		II	221	113	3	140965	140965	10300	
		TOTAL				140965	140965	101800	
II-YEAR	XY-CD	I	115	50	2	48030	48030		
		II	107	86	3	42650	42650		
		III	115	78	3	42650	42650		
TOTAL					90860	90860	20700		
III-YEAR	XY-AB	I	229	125	3	140965	140965		
		II	221	113	3	140965	140965		
		TOTAL				140965	140965		
IV-YEAR	XY-AB	IV	224	125	3	140301	140301		
		TOTAL				140000	140000		
V-YEAR	XY-AB	V	135	68	3	27400	27400		
		VI	101	58	3	30650	30650		
		VI-AB	V	210	115	3	125850	125850	
TOTAL					103775	103775			
VI-YEAR	XY-AB	VI	214	105	3	112050	112050		
		VI-CD	VI	300	48	3	28300	28300	
		TOTAL				136350	136350		
VII-YEAR	XY-AB	VII	208	95	3	96175	96175		
		VII-CD	VII	95	88	3	108750	108750	
		TOTAL				117925	117925		
VIII-YEAR	XY-AB	VIII	234	85	3	86700	86700		
		VIII-CD	VIII	95	88	3	108750	108750	
		TOTAL				93600	93600		
IX-YEAR	XY-AB	IX	199	75	3	74225	74225		
		IX-CD	IX	95	88	3	108750	108750	
		TOTAL				82775	82775		
X-YEAR	XY-AB	X	190	65	3	63600	63600		
		X-CD	X	95	88	3	108750	108750	
		TOTAL				1224478	1224478	81300	
Grand Total						1224478	1224478	81300	

- I - Year PROPOSED EXCAVATION
- II - Year PROPOSED EXCAVATION
- III - Year PROPOSED EXCAVATION
- IV - Year PROPOSED EXCAVATION
- V - Year PROPOSED EXCAVATION
- VI - Year PROPOSED EXCAVATION
- VII - Year PROPOSED EXCAVATION
- VIII - Year PROPOSED EXCAVATION
- IX - Year PROPOSED EXCAVATION
- X - Year PROPOSED EXCAVATION



MINE LAYOUT LAND USE PATTERN			
DESCRIPTION	PRESENT AREA (Ha)	AREA IN USE DURING THE QUARRYING PERIOD (Ha)	COLOR CODE
AREA UNDER QUARRYING	NIL	3.09.00	
INFRASTRUCTURE	NIL	0.01.00	
ROADS	NIL	0.01.00	
GREEN BELT	NIL	0.65.67	
UN-UTILIZED AREA	3.76.67	NIL	
GRAND TOTAL	3.76.67	3.76.67	



PLATE NO. V

DATE OF SURVEY: 26-11-2024

AFFILIANT ADDRESS:
 M/s. R.K.M SAND AND AGGREGATES,
 Prop. THEERLO HANUMAN,
 VILLA NO.126, ADARSH PALM,
 KETHEAT VILLAS,
 DEVAHARISANAHALLI,
 BANGALORE,
 KARNATAKA - 560103

LOCATION OF QUARRY:
 EXTENT : 3.76.67 Ha,
 S.F Nos : 70/4A & 70/5B,
 VILLAGE : MIDTHERPALLI,
 TALUK : SHOLAGIRI,
 DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE BOUNDARY	
7.5m SAFETY DISTANCE	
BOUNDARY PILLARS	
TEMPORARY BENCH MARK	
GRAVEL	
ROUGH STONE	
CONTOURS LINE	
QUARRY ROAD	
MINE LAYOUT	

MINE LAYOUT LAND USE PATTERN & AFFORESTATION PLAN

SCALE: 1:1000

PREPARED BY:
 I DO HEREBY CERTIFY THAT THE PLATE
 HAS BEEN CHECKED BY ME AND IS CORRECT
 TO THE BEST OF MY KNOWLEDGE

S. BRUNASEKAR M.S.
 QUALIFIED PERSON

PLATE NO: VI

DATE OF SURVEY: 26-11-2024

APPLICANT ADDRESS:

APPLICANT ADDRESS:

M/s. R. K. M. S. AND ASSOCIATES
PROP. P. K. R. D. RAVIKUMAR
VILL. NO. 126, ADARSH PAL
RENTAT YILLAS
DEVARABAN
BANGALORE,
KARNATAKA - 560103
9845444444

LOCATION OF QUARRY:

EXTENT : 3.76.67 Ha,
S.F.Nos : 70/4A & 70/5B,
VILLAGE : MIDTHERPALLI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

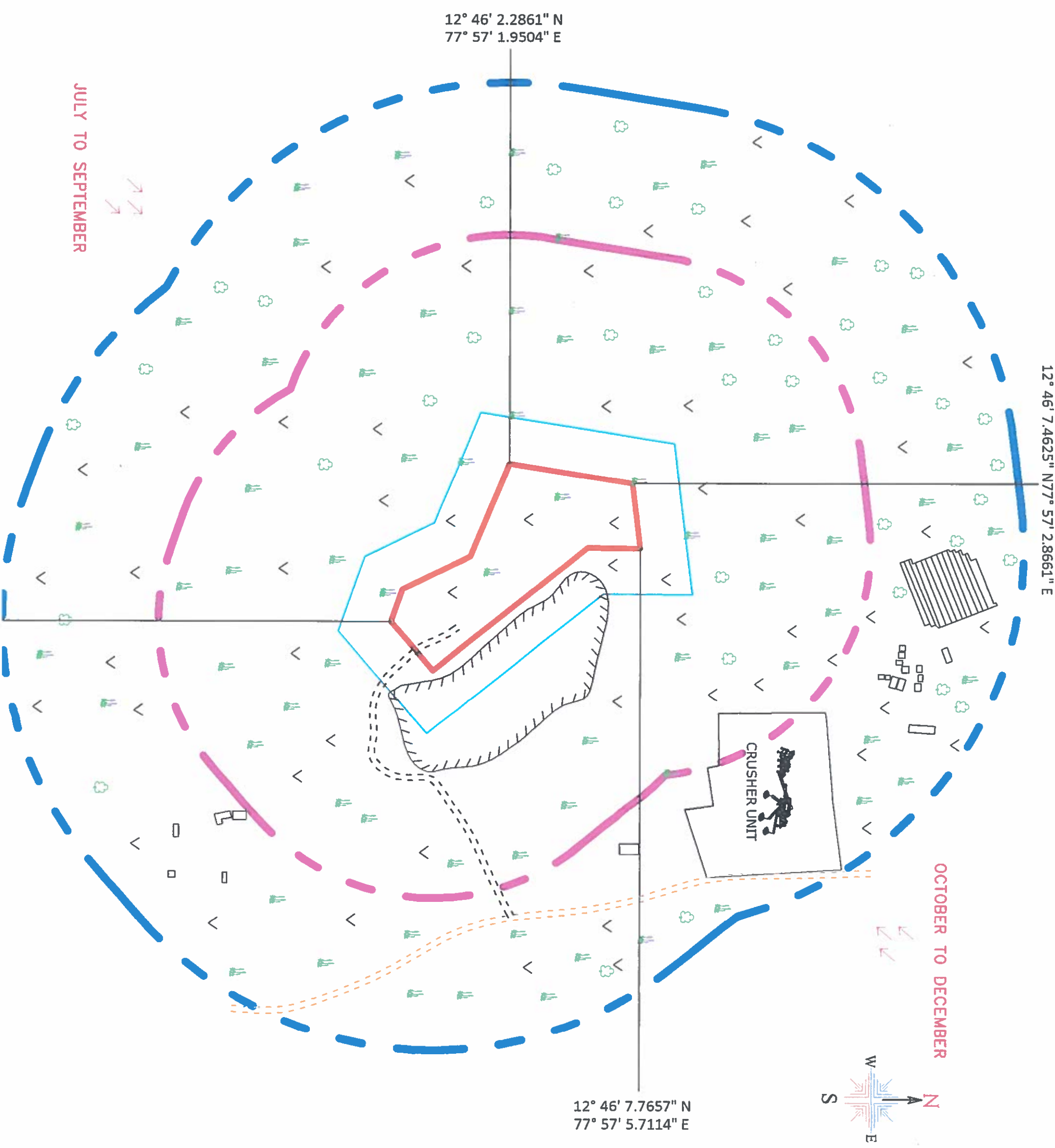
INDEX	
QUARRY LEASE BOUNDARY	
500M RADIUS	
300M RADIUS	
60m RADIUS	
TREES	
APPROACH ROAD	
QUARRY ROAD	
WIND DIRECTION	
INFRASTRUCTURES	
DRY AGRICULTURAL LAND	
SHRUB	
ADJACENT QUARRY	
CRUSHER UNIT	

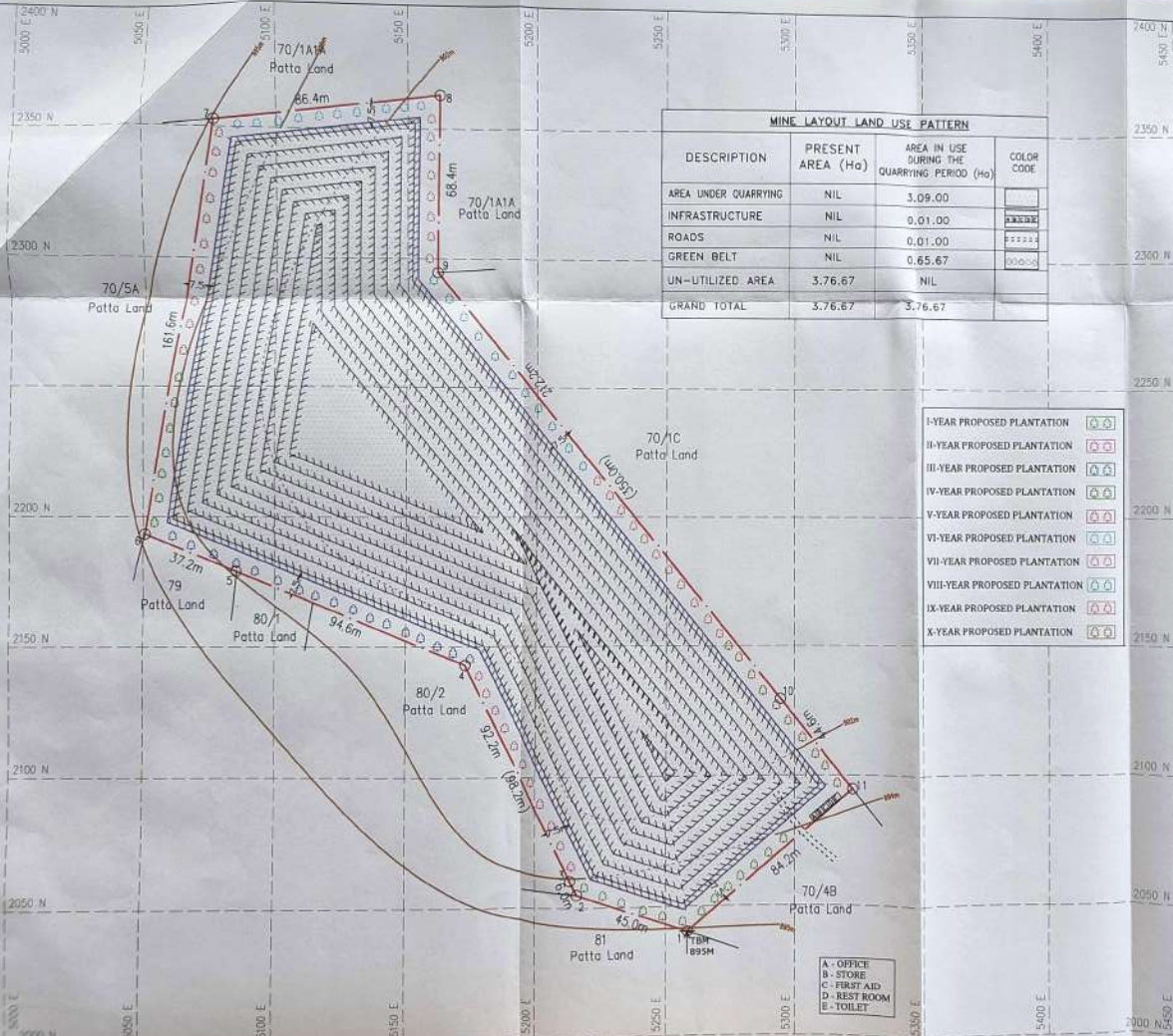
ENVIRONMENT PLAN

SCALE:1:5000

Prepared By:
I DO HEREBY CERTIFY THAT THE PLATE
HAS BEEN CHECKED BY ME AND IS CORRECT
TO THE BEST OF MY KNOWLEDGE.


 C:\NT\4\NT\4\CT\NT\4\BB\4\4\CT





MINE LAYOUT LAND USE PATTERN			
DESCRIPTION	PRESENT AREA (Ha)	AREA IN USE DURING THE QUARRYING PERIOD (Ha)	COLOR CODE
AREA UNDER QUARRYING	NIL	3.09.00	
INFRASTRUCTURE	NIL	0.01.00	
ROADS	NIL	0.01.00	
GREEN BELT	NIL	0.65.67	
UN-UTILIZED AREA	3.76.67	NIL	
GRAND TOTAL	3.76.67	3.76.67	

- I-YEAR PROPOSED PLANTATION
- II-YEAR PROPOSED PLANTATION
- III-YEAR PROPOSED PLANTATION
- IV-YEAR PROPOSED PLANTATION
- V-YEAR PROPOSED PLANTATION
- VI-YEAR PROPOSED PLANTATION
- VII-YEAR PROPOSED PLANTATION
- VIII-YEAR PROPOSED PLANTATION
- IX-YEAR PROPOSED PLANTATION
- X-YEAR PROPOSED PLANTATION

- A - OFFICE
- B - STORE
- C - FIRST AID
- D - REST ROOM
- E - TOILET



PLATE NO: VIII
 DATE OF SURVEY: 26-11-2024

AFFILIANT ADDRESS:
 M/s. R.K.M SAND AND AGGREGATES,
 PLOT. THIRU.D. RAVIKUMAR,
 VILLA NO. 125, ADARSH PALM,
 RETREAT VILLAS,
 DEVARAHANAHALLI,
 BANGALORE,
 KARNATAKA - 560103

LOCATION OF QUARRY:
 EXTENT : 3.76.67 Ha,
 S.F.No: 70/4A & 70/5B,
 VILLAGE : MIDDHAPALLI,
 TALUK : SHOLAGIRI,
 DISTRICT : KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK
- GRAVEL
- ROUGH STONE
- CONTOURS LINE
- QUARRY ROAD
- MINE LAYOUT

PROGRESSIVE MINE CLOSURE PLAN
 SCALE: 1:1000

PREPARED BY:
 I DO HEREBY CERTIFY THAT THE PLATE HAS BEEN CHECKED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE.
 S. DHANASAKARAN,
 QUALIFIED PERSON

ANNEXURE-VII
VAO CERTIFICATE

M/s. R.K.M Sand and Aggregates, Prop.D.Ravikumar Rough Stone & Gravel Quarry in the S.F.Nos.70/4A & 70/5B over an extent of 3.76.67ha. in Midithepalli Village, Shoolagiri Taluk, Krishnagiri District.

GENERAL VIEW OF THE APPLIED LEASE AREA



For M/s. R.K.M Sand and Aggregates,

**D. Ravikumar
(Deponent)**

**கிராம நிர்வாக அலுவலர்
மி.தே.பள்ளி.**

கிடுகிடுகிடு மாவட்டம் துளகிடு வட்டம் பேரிகை
உள்ளுட்டம் 070-மிடுதெப்பள்ளி தார்பி மிடுதெப்பள்ளி
கிராம சந்தை எண்: 70/4A, 70/5B, அந்தீர்ணம்:
0.43.32, 3, 33.35 தீர்ணம்: 0.27, 2.07 பட்டா எண்:
984, 985 எண் 1 இடத்தில் அமைந்துள்ள சாதாரண
கல் இயற்கைய சந்தி 300M சுற்றளவில் கோவில்
கலா, புராதன சின்னங்கலா, குடிசைபிடுகலா,
பள்ளிக் கலங்கலா, அரசு கலங்கலா கலா
என 40த்தண்டிகை அகிகை நலம் அகியபிடு
கிச்சான் 10 அகிகைபிடுகிடு என்பதனை பணிஅடன்
வகிகிடுதது வகிகிடுகலா.


கிராம நிர்வாக அலுவலர்
மிடுதெப்பள்ளி

ANNEXURE-VIII BLASTING AGREEMENT



VISHNU EXPLOSIVES

Blasting Contractor



Office : Door No. 273-A, Keelpaiyur, Paiyur Village, Kaveripattinam, Krishnagiri Dt. Pin - 635 112.

Magazine at : SF No. 344/3B, Paiyur Village, Kaveripattinam, Krishnagiri Dt.

Cell : 98427 44073, 99655 44073, 94437 44073

Ref: To

M/s. R.K.M Sand and Aggregates,
Prop.D. Ravikumar.
Villa No.126, Adarsh Palm.
Retreat Villas,
Devarabisanahalli,
Bangalore,
Karnataka – 560 103.

Sir.

Sub: Willingness to do Explosives Blasting Works – Reg.

With respect to the above subject, we would like to introduce myself as the Explosives Blasting Contractors, for which our LICENCE NO: E/SC/TN/22/463(E37227) S.F.No.344/3B, Paiyur Village, Krishnagiri Taluk magazine is situated in No.273-A, Keel Paiyur Village, Kaveripattinam, Krishnagiri, Tamilnadu-635 112.

We were engaged in professional blasting contract works with all facilities and License holders to carry out blasting works in specified time and period covered under Explosives Rules, 2008.

We kindly request yourself to engage us to do Explosives Blasting Works in your proposed Rough stone & Gravel Quarry situated at S.F.No: 70/4A & 70/5B in Midithepalli Village, Shoolagiri Taluk, Krishnagiri District over an extent of 3.76.67 hectares.

SERVING BEST AT ALL TIMES

Thanking you.

For VISHNU EXPLOSIVES.



Enclosure: Magazine License Copy.

अनुमति प्रूप एन. ई.-3 | LICENCE FORM LE-3

(विस्फोटक नियम, 2008 की अनुसूची 3 के भाग 1 के अनुच्छेद 3(क) से (घ) देखिए।)
(See article 3(a) to (d) of Part 1 of Schedule IV of Explosives Rules, 2008)

(ग) उपयोग के लिए एक समय पर वर्ग 1, 2, 3, 4, 5 या वर्ग 7 के विस्फोटक या किसी मैगजीन में वर्ग 6 के विस्फोटक रखने के लिए अनुमति
Licence to possess (c) for use, explosives of class 1, 2, 3, 4, 5, 6 or 7 in a magazine

अनुमति सं. (Licence No.): E/SC/TN/22/463(E37227)

वार्षिक फीस रुपए (Annual Fee Rs) 10400.-

1. Licence is hereby granted to

M/s Vishnu Explosives (अधिसगी / Occupier: Shri G V, Sai Supramanian), Vishnu Explosives, 273-A, Keelpaiyur Village, Kaveripattinam Taluk, Town/Village - Kaveripattinam, District KRISHNAGIRI, State-Tamil Nadu, Pincode - 635112



को अनुमति अनुदत्त की जाती है।

2. अनुमतिधारी की प्रस्थिति | Status of licensee: Proprietorship Firm

3. अनुमति निम्नलिखित प्रयोजनों के लिए विधिमन्य है।

possess for use of Detonators, Slurry Explosives, Detonating Fuse, Safety Fuse, -
के उपयोग के लिए

Licence is valid only for the following purpose

4. अनुमति विस्फोटकों के निम्नलिखित किस्मों प्रकार और मात्रा के लिए विधिमन्य है।

Licence is valid for the following kinds and quantity of explosives -- (क) (a)

क्र. सं.	नाम और विवरण	वर्ग और प्रभाग	उप-प्रभाग	मात्रा किसी एक समय में
Sr. No.	Name and Description	Class & Division	Sub-division	Quantity at any one time
1	Slurry Explosives	2.0	0	4500 Kg
2	Detonating Fuse	6.2	0	30000 Mtrs
3	Safety Fuse	6.1	0	10000 Mtrs
4	Detonators	6.3	0	44000 Nos.

(ख) किसी एक कैलेंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा (अनुच्छेद 3(ख) और (ग) के अधीन अनुमति के लिए)

20 times

(b) Quantity of explosives to be purchased in a calendar month applicable for licence under article 3(b) and (c)

as above.

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुमति परिसर की पुष्टि होती है।

रेखाचित्र क्र. (Drawing No.) E/SC/TN/22/463(E37227)

The licensed premises shall conform to the following drawing(s):

दिनांक (Dated) 18/06/1990

6. अनुमति परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:

Survey No. 344/3B, ग्राम (Town/Village): Palyur, Krishnagiri-taluk

जिला (District):

KRISHNAGIRI

राज्य (State):

Tamil Nadu

पुलिस थाना (Police Station): Kaveripattinam

पिनकोड (Pincode): 635112

दूरभाष (Phone):

ई.मेल (E-Mail):

फैक्स (Fax):

7. अनुमति परिसर में निम्नलिखित सुविधाएं अंतर्भूत हैं।

main III. magazine, lobby & detonator room

The licensed premises consist of following facilities

8. अनुमति समय समय पर यथासंशोधित विस्फोटक अधिनियम 1884 और उनके अधीन विरचित विस्फोटक नियम 2008 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपबंधों के अधीन रहते हुए अनुदत्त की जाती है।
The licence is granted subject to the provisions of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and the following Annexures

1. उपर्युक्त क्रम सं. 5 में यथा कथित रेखाचित्र (स्थान, संनिर्माण संबंधी और अन्य विवरण दर्शित करते हुए)।

Drawings (showing site, constructional and other details) as stated in serial No. 5 above.

2. अनुमति प्राधिकारी द्वारा हस्ताक्षरित इस अनुमति की शर्तें और अतिरिक्त शर्तें।

Conditions and Additional Conditions of this licence signed by the licensing authority

3. दूरी प्रूप DE-2 Distance Form DF-2

9. यह अनुमति तारीख 31 मार्च 1992 तक विधिमन्य रहेगी। This licence shall remain valid till 31st day of March 1992.

यह अनुमति, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निदिष्ट सट-VII के अधीन तथा उपबर्णित इस अनुमति की शर्तों का अधिकरण करने या यदि अनुमति परिसर योजना या उससे संलग्न उपबंध में दर्शित विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिबंधित की जा सकती है, जहां वह लागू हो।

This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this licence as set forth under Ser VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annexure attached hereto

तारीख The Date - 18/06/1990

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of Explosives
South Circle, Chennai

Amendments :

- Change in Postal Address dated - 11/01/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated - 15/01/2018
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated - 15/03/2018
- Amendment in Drawings/Facilities/Premises dated - 11/10/2021
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated - 11/10/2021

Transfers :

- Change in Licensee Name/Address/Status dated - 23/09/2011
- Change in Licensee Name/Address/Status dated - 08/10/2021

नवीनीकरण के पृष्ठानक के लिए स्थान
Space for Endorsement of Renewal

नवीनीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुमति प्राधिकारी के हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp
10-03-2022	31-03-2027	Controller of Explosives, Vellore विस्फोटक नियंत्रक, वेल्लूर Controller of Explosives, Vellore

**ANNEXURE-IX AFFIDAVIT AND CER
DETAILS**



தமிழ்நாடு தமில்நாடு TAMILNADU 29 JAN 2025
RKM Sand & Aggregates
Midithepalli

DR 867087
K. SELVARANI
STAMP VENDOR
LICENCE No. 8681901
HOSUR-635109

AFFIDAVIT TO SEIAA, TAMIL NADU

We, M/s. R.K.M Sand and Aggregates, Prop.D.Ravikumar, office at Villa No.126, Adarsh Palm, Retreat Villas, Devarabisanahalli, Bangalore, Karnataka – 560 103, do hereby solemnly declare and sincerely affirm that, We have applied for getting environment clearance to SEIAA, Tamil Nadu for quarry lease for Rough Stone & Gravel quarry over an extent of 3.76.67 Ha with Survey No. 70/4A & 70/5B, in Midithepalli Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu.

1. We swear to state and confirm that none of the following is situated within 10km radius of the quarry site for which, We have applied for environmental clearance,
 - a. Notified Protected areas under the wild life (Protection) Act, 1972 (NBWL).
 - b. Critically polluted areas as notified by the central pollution control board constituted under water (Prevention and control of Pollution) Act 1974.
 - c. Eco sensitive area as notified.



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ADVOCATE & NOTARY PUBLIC
No. 154, Ground Floor, Opp. Court Campus
Hosur-635109, Krishnagiri-(DI)
Ph. 9443490697

2. The following Corporate Environment Responsibility (CER) activities will be completed before commencement of the quarrying activities.

CER Activity	Project cost (Rs)	CER cost (Rs)
Carrying out various developmental works in the nearby region based on the need of the locals.	Rs.84,30,000/-	Rs.7,00,000/-
Total cost Allocation	Rs.84,30,000/-	Rs.7,00,000/-

3. Details of quarry within 500m radius from the applied area:

a. Details of Existing Quarries						
S.N o	Name of the lessee/	Village & Taluk	S.F. No.	Extent in Hectares	Proceeding Rc.No. & Date	Lease Period
1.	Thiru.B.Srikar, S/o. Bharathy, D.No.25, Shanthi Nagar (West), 2 nd Cross, Hosur – 635 109.	Midithepalli Village & Shoolagiri Taluk	79	1.86.50	Rc.No.646/2021/ Mines Dated. 08.08.2024	08.08.2024 To 07.08.2034
2	Thiru. D.Sreenivasalu, S/o. Venkateshwarlu, D.no.50, Radha Lakshmi Nilaiyam, Devachandra Main Road, Bangalore – 560 036.	Midithepalli Village & Shoolagiri Taluk	80/1, 80/2	3.17.08	Rc.No.1305/2018/ Mines Dated.20.12.2022	20.12.2022 To 19.12.2032
3	Thiru.Venkata Reddy, S/o (Late) Uthama Reddy, Kolar Taluk, Uddapanahalli, Chakkarasanahalli, Karnataka – 563 133	Midithepalli Village & Shoolagiri Taluk	81/2, & 82/1	2.05.92	Rc.No.1308/2018/ Mines Dated.31.10.2022	31.10.2022 To 30.10.2032




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b. Details of Expired/ Abandoned Quarries						
S.No	Name of the Applicant/ Lessee	Village & Taluk	S.F. No.	Extent in Hectares	Proceeding Rc.No. & Date	Lease Period
1.	M/s. Sarva Infra Private Ltd, 540, 3 rd floor, CMH Road, Indira Nagar, Bangalore – 560 038.	Midithepalli Village & Shoolagiri Taluk	79/1B1C	4.05.00	Rc.No.09/2014/ Mines dated 26.10.2015	28.10.2015 To 27.10.2020 (Lease Expired)

c. Details of Proposed/ Applied Quarries						
S.No	Name of the Applicant/ Lessee	Village & Taluk	S.F. No.	Extent in Hectares	Proceeding Rc.No. & Date	Lease Period
1.	M/s. R.K.M Sand and Aggregates, Prop:Thiru.Ravikumar, Vill No.126, Adarsh Palm, Retreat Villas, Devarabisanahalli, Bangalore, Karnataka – 560 103.	Midithepalli Village & Shoolagiri Taluk	70/4A & 70/5B	3.76.67	-----	Instant Proposal

4. There will not be hindrance or disturbance to the people living on enrooted/ nearby our quarry site while transporting the mineral and due to quarrying activities.
5. There is no approved habitation within 300m radius from the periphery of our applied quarry.
6. We swear that afforestation will be carried out during the course of quarrying operation and maintained.
7. Insurance coverage will be arranged for the laborers working in our quarry site.
8. The existing road from the main road to quarry is in good condition and the same will be maintained and utilized for Transportation of Rough Stone & Gravel.



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ADVOCATE & NOTARY PUBLIC
 No:154, Ground Floor, Opp.Court Campus
 Hosur-635109, Krishnagiri-(Dt)
 Ph:9443480697

9. We will not engage any child labor in our quarry site and we aware that engaging child labor is punishable under the law.
10. All types of safety / protective equipment will be provided and used by all the laborers working in our quarry.
11. No permanent structures, temple etc., are located within 500m radius from the periphery of our quarry.

We ensure to do the social and Environment commitment as mentioned in the Mining plan to the best of our knowledge.

For **M/s. R.K.M.Sand and Aggregates.,**



(D. Ravikumar)
Proprietor



S. THANIGAINATHAN, B.Com., L.L.B.
ADVOCATE & NOTARY PUBLIC
No.154, Ground Floor, Opp. Court Campus
Hosur-635109, Krishnagiri-(Dt)
Ph:9443480697

ANNEXURE-X NABET CERTIFICATE



National Accreditation Board for Education and Training

Certificate of Accreditation

Eco Tech Labs Pvt. Ltd., Chennai

No.48, 2nd Main Road, Ram Nagar, South Extension, Pallikaranai, Chennai – 600100

The organization is accredited as **Category-A** under the QCI-NABET Scheme for Accreditation of EIA Consultant Organization, Version 3: for preparing EIA/EMP reports in the following Sectors-

S. No	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1.	Mining of minerals including opencast mining only	1	1 (a) (i)	A
2.	Thermal power plants	4	1 (d)	A
3.	Metallurgical industries	8	3 (a)	B
4.	Synthetic organic chemicals industry	21	5 (f)	A
5.	Airports	29	7 (a)	A
6.	Industrial estates/ parks/ complexes/ Areas, export processing zones (EPZs), Special economic zones (SEZs), Biotech parks, Leather complexes	31	7 (c)	A
7.	Building and construction projects	38	8 (a)	B
8.	Townships and Area development projects	39	8 (b)	B

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RAAC minutes dated May 09, 2025 posted on QCI-NABET website.

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no QCI/NABET/ENV/ACO/25/3622 dated May 19, 2025. The accreditation needs to be renewed before the expiry date by Eco Tech Labs Pvt. Ltd., Chennai following due process of assessment.

Valid up to
April 10, 2028

Issue Date
May 19, 2025



Certificate No.
NABET/EIA/25-28/RA 0400

Prof (Dr) Varinder S Kanwar
(CEO – NABET)

For the updated List of Accredited EIA Consultant Organizations with approved Sectors please refer to QCI-NABET website.

