Application Form For Environmental Clearance (Public Hearing)

June 2026

Application Form
(Draft EIA Report)
For

Proposed Rough stone Quarry – 1.15.0 Ha
At

S.F.No. 305/4 (Part) of Berigai Village, Shoolagiri Taluk,
Krishnagiri District, Tamilnadu State

Sector No. 1(a) (Sector No. 1 as per NABET)
Category of the Project: B1 Cluster Mining

Baseline Period: November 2025 - January 2026

Environmental Consultant & Laboratory details:

Ecotech Labs Pvt Ltd,

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

Proponent details:

Thiru. N. Sankar,
S/o. Nagaraj,
Bithireddy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District.

Date: 21.06.2026

From

Thiru. N. Sankar,
S/o. Nagaraj,
Bithireddy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District.

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 Thiru. N. Sankar Rough Stone Quarry over a total extent of 1.15.0 Ha at S.F.No. 305/4 (Part) of Berigai Village, Shoolagiri Taluk, Krishnagiri District., Tamilnadu State – Regarding.

Ref: TOR Identification No. TO25B0108TN5887647N, Dated: 27.11.2025

Please find enclosed herewith the application of Draft EIA Report along with necessary enclosures towards seeking environmental clearance for the Thiru. N. Sankar Rough Stone Quarry over a total extent of 1.15.0 Ha at S.F.No. 305/4 (Part) of Berigai Village, Shoolagiri Taluk, Krishnagiri District., Tamilnadu State.

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

Thiru. N. Sankar

Enclosures: Draft EIA report

DRAFT EIA REPORT

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ABBREVIATION :

LU - Land use

AP - Air Pollution monitoring, prevention and control

AQ - Meteorology, Air quality modelling and prediction

WP - Water pollution monitoring, prevention and control

EB - Ecology and Biodiversity

NV - Noise & Vibration

SE - Socioeconomics

HG - Hydrology, ground water and water conservation

GEO - Geology

RH - Risk assessment and hazards management

SHW - Solid and Hazardous waste management

SC - Soil conservation

EXECUTIVE SUMMARY

1. Project Background:

The Proposed Project is in Government Poramboke Land having total extent area of 1.15.0 Ha, located at S.F.No. 305/4 (Part) of Berigai Village of Shoolagiri Taluk, Krishnagiri District and Tamil Nadu State. The category of project is B1, it is a Fresh rough stone quarry in Berigai village. The area is situated on Elevated terrain sloping towards the Southeast side covered with Rough Stone 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 41.0 m - 1.0 m Topsoil + 2.0 m Weathered Rock + 38.0 m Rough Stone, Surface Ground Level above is 16.0 m and Surface Ground Level below is 25.0 m. Total revised Quantities are of Geological resources are about 12,01,750 Tonnes of Rough Stone, 23,000 Tonnes of Topsoil & 46,000 Tonnes of Weathered Rock. The Mineable Reserves are about 2,25,277.25 Tonnes of Rough Stone, 15,540 Tonnes of Topsoil & 31,080 Tonnes of Weathered Rock. The year wise production reserves of rough stone for 10 years are about 2,25,277.25 Tonnes of Rough Stone, 15,540 Tonnes of Topsoil & 31,080 Tonnes of Weathered Rock and the total proposed period of mining is Ten years.

The Mining Plan was approved by the Regional Joint Director, Deputy Director (FAC), Dept. of Geology and Mining, Krishnagiri District vide letter Roc. No. 14/2025/Mines Dated: 01.09.2025 and We have Revised Mining Plan as recommended by SEAC/SEIAA, TN and the Revised Mining plan was approved by the Assistant Director, Dept. of Geology and Mining, Krishnagiri District vide Roc.No.14/2025/Mines Dated : 15.05.2026.

The project area does not fall in Hill Area Conservation Authority region. There are no Costal Regulation Zone, Western Ghats, notified Bird sanctuaries as per Wildlife protection Act 1972, within the radius of 15 km Radius. Eco Sensitive Zone of Cauvery North Wildlife Sanctuary is located at a distance of 27.27 km, S & Cauvery North Wildlife Sanctuary is located at a distance of 28.27 Km, S and Cauvery South Wildlife Sanctuary is located at distance of 51.22 km, S from the project site.

2. Nature & Size of the Project

The Rough Stone Quarry over an extent of 1.15.0 Hectares land is located at Berigai Village of Shoolagiri Taluk, Krishnagiri District.

Mineral Intends to Quarry : Rough stone.

District : Krishnagiri

Taluk : Shoolagiri

Village : Berigai

S.F. Nos. : 305/4 (Part)

Extent : 1.15.0 Hectares

Table 1: Brief Description of the Project

S. No	Particulars	Details
1	Latitude	12° 47' 44.4512" N to 12° 47' 36.8734" N
2	Longitude	77° 57' 37.7112" E to 77° 57' 34.8443" E
3	Site Elevation above MSL	Maximum - 892 m and Minimum - 876 m.
4	Topography	Elevated terrain
5	Land use of the site	Government Poramboke land
6	Extent of lease area	1.15.0 Ha
7	Nearest highway	• SH 17 C – Bagalur to Berigai Road – 1.44 Km, N • NH 648 – Devanahalli to Bagalur Road – 11.13 Km, W
8	Nearest railway station	• Hosur Railway Station – 17.04 Km, SW
9	Nearest airport	• Kempagowda International Airport – 49.70 Km, NW
10	Nearest town / city	• Town - Bagalur – 10.23 Km, NW • City - Bagalur – 10.23 Km, NW • District - Krishnagiri – 38.35 Km, SE
11	Rivers/Canal/Dam /Reservoir	• Ponnaiyar River – 8.62 Km, SW • Kelavarapalli Dam – 9.54 km, SW • Kelavarapalli Reservoir – 8.90 Km, SW
12	Lake	• Berikai Lake - 1.68 Km, NNE • Amudagondapalli lake - 1.85 Km, N • Karnapalli lake - 2.17 Km, NW • Muthali Lake - 6.53 Km, SW • Seasonal Lake - 7.93 Km, SW • Bukkasagaram Lake - 7.94 Km, S • Peddakullu Lake - 8.17 Km, SW • Doripalli Lake - 9.33 Km, S • Thummanapalli Lake - 10.13 Km, SW • Kamandoddi Lake - 11.75 Km, S • Kumudapalli Lake - 12.35 Km, SW
13	Hills / valleys	Nil in 15 km radius

14	Archaeologically places	Nil in 15 km radius
15	National parks / Wildlife Sanctuaries	• ESZ of Cauvery North Wildlife Sanctuary - 27.27 Km, S • Cauvery North Wildlife Sanctuary - 28.27 Km, S • Cauvery South Wildlife Sanctuary – 51.22 Km, S
16	Reserved / Protected Forests	• Berigai R.F - 0.304 Km, E • Miditepalli RF - 1.38 Km, SW • Berigai Extension RF - 1.45 Km, SE • Reserve Forest 1 - 3.84 Km, NW • Reserve Forest 2 - 4.61 Km, S • Reserve Forest 3 - 7.85 Km, SSW • Sanamavu RF - 9.00 Km, SSW • Settipalli RF - 9.52 Km, SSE
17	Seismicity	Proposed Lease area come under Seismic zone - II (low risk area)
18	Defense Installations	Nil within 15 Km radius

3. Need for the Project

- The proposed rough stone quarrying activity is essential to meet the growing demand for construction materials required for infrastructure development and building construction. Rough stone is a fundamental raw material for producing aggregates, which are widely used in concrete production, road construction, and other civil engineering works. The rough stone excavated from the quarry will be transported to authorized stone crusher units located in Krishnagiri District for further size reduction and processing.
- The produced aggregates and crushed stone materials are extensively utilized in the real estate sector, infrastructure development projects, road works, and general building construction activities. Considering the increasing pace of urbanization and infrastructure expansion, the demand for rough stone and its derived products remains consistently high in the region.
- Rough stone is quarried for producing crusher aggregates to the nearby building contractors, road contractors and nearby villagers.
- As the mining will be carried out up to the proposed depth in a systematic manner, the mined-out pit will remain as a water storage structure. Hence, no additional land reclamation or backfilling is proposed. The post-mining land use will therefore serve as a beneficial water conservation structure without causing permanent damage to the surrounding land environment.

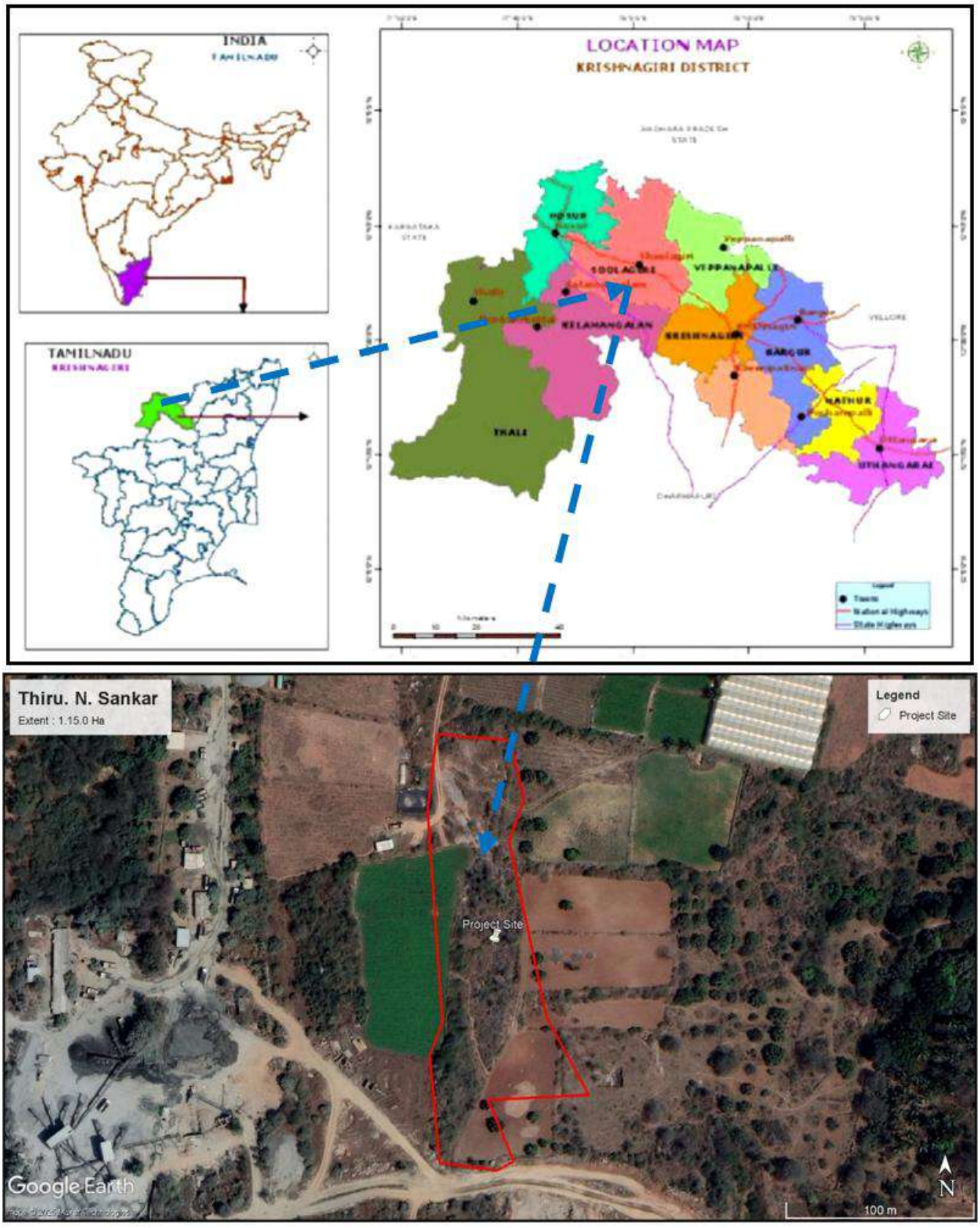


Figure 1: Location Map of the Project Site



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 buildings, 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.

5. Geological resources

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

Table 2. Geological resources

Area (Sq.m)	Depth (m)	Geological Reserves of Rough Stone (m^3)	Topsoil (m^3)	Weathered Rock (m^3)	Bulk Density	Geological Reserves of Rough Stone (Ts)	Topsoil (Ts)	Weathered Rock (Ts)
11,500	1	-	11,500	-	2	-	23,000	-
11,500	2	-	-	23,000	2	-	-	46,000

11,500	38	4,37,000	-	-	2.75	12,01,750	-	-
Total	**41**	**4,37,000**	**11,500**	**23,000**	-	**12,01,750**	**23,000**	**46,000**

Table 3. Mineable Reserves

Section	Bench	Length (m)	Width (m)	Depth (m)	Volume (m^3)	Rough Stone @100% Recovery (Ts)	Topsoil (Ts)	Weathered Rock (Ts)
XY-AB	I	96	32	1	3,072	-	6,144	-
	II	96	32	2	6,144	-	-	12,288
	III	34	32	3	3,264	8,976.00	-	-
	IV	91	22	5	10,010	27,527.50	-	-
	V	86	12	5	5,160	14,190.00	-	-
XY-AB Total					**27,650**	**50,693.50**	**6,144**	**12,288**
XY-CD	I	81	58	1	4,698	-	9,396	-
	II	81	58	2	9,396	-	-	18,792
	V	82	21	5	8,610	23,677.50	-	-
	VI	77	55	5	21,175	58,231.25	-	-
	VII	67	45	5	15,075	41,456.25	-	-
	VIII	57	35	5	9,975	27,431.25	-	-
	IX	47	25	5	5,875	16,156.25	-	-
	X	37	15	5	2,775	7,631.25	-	-
XY-CD Total					**77,579**	**1,74,583.75**	**9,396**	**18,792**
GRAND TOTAL					**1,05,229**	**2,25,277.25**	**15,540**	**31,080**

Table 4. Year wise Production Plan

Year	Section	Bench	Length (m)	Width (m)	Depth (m)	Volume (m^3)	Rough Stone @100% Recovery (Ts)	Topsoil (Ts)	Weathered Rock (Ts)
I-Year	XY-AB	I	96	32	1	3,072	-	6,144	-
	XY-AB	II	96	32	2	6,144	-	-	12,288
	XY-AB	III	34	32	3	3,264	8,976.00	-	-
	XY-AB	IV	91	22	5	10,010	27,527.50	-	-
I - Year Total						**22,490**	**36,503.50**	**6,144**	**12,288**

II-Year	XY-AB	V	86	12	5	5,160	14,190.00	-	-
	XY-CD	I	81	58	1	4,698	-	9,396	-
	XY-CD	II	81	58	2	9,396	-	-	18,792
	XY-CD	V	82	21	5	8,610	23,677.50	-	-
II - Year Total						**27,864**	**37,867.50**	**9,396**	**18,792**
III-Year	XY-CD	VI	38	55	5	10,450	28,737.50	-	-
III - Year Total						**10,450**	**28,737.50**	-	-
IV-Year	XY-CD	VI	39	55	5	10,725	29,493.75	-	-
IV - Year Total						**10,725**	**29,493.75**	-	-
V-Year	XY-CD	VII	67	45	5	15,075	41,456.25	-	-
V - Year Total						**15,075**	**41,456.25**	-	-
Total for First Five years						**86,604**	**1,74,059**	**15,540**	**31,080**
VI-Year	XY-CD	VIII	29	35	5	5,075	13,956.25	-	-
VI - Year Total						**5,075**	**13,956.25**	-	-
VII-Year	XY-CD	VIII	28	35	5	4,900	13,475.00	-	-
VII - Year Total						**4,900**	**13,475.00**	-	-
VIII-Year	XY-CD	IX	29	25	5	3,625	9,968.75	-	-
VIII - Year Total						**3,625**	**9,968.75**	-	-
IX-Year	XY-CD	IX	18	25	5	2,250	6,187.50	-	-
IX-Year	XY-CD	X	8	15	5	600	1,650.00	-	-
IX - Year Total						**2,850**	**7,837.50**	-	-
X-Year	XY-CD	X	29	15	5	2,175	5,981.25	-	-
X - Year Total						**2,175**	**5,981.25**	-	-
Total for Second Five years						**18625**	51219	-	-
GRAND TOTAL						**1,05,229**	**2,25,277.25**	**15,540**	**31,080**

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 Athimugam Village and other water will be source from nearby road tankers supply.

Table 5. Water Balance

Purpose	Quantity	Source
Drinking Water	1.0 KLD	Packaged Drinking water vendors available in Midithepalli Village which is about 1.50 km, S 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**	

8. Manpower

Total manpower required for the project is approximately 18 persons. Workers will be from nearby villages.

Table 6. Man Power

1.	Skilled	Operator	2 No.
		Mechanic	1 No.
		Blaster/Mat	1 No.
2.	Semi – skilled	Driver	2 Nos
3.	Unskilled	Musdoor / Labors	5 Nos

		Cleaners	3 Nos
		Office Boy	1No
4.	Management & Supervisory staff		3 Nos
	Total		**18 Nos**

9. Solid Waste Management

Table 7 Solid Waste Management

S. No	Type	Quantity	Disposal Method
1	Organic	3.24 kg/day	Municipal bin including food waste
2	Inorganic	4.86 kg/day	TNPCB authorized recyclers

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

Table 8 500m Radius Cluster Mine

1) Details of Existing quarries:

S. No.	Name of the Lessee	Village & Taluk	S.F. No	Extent in Ha	GO No. & Date	Lease Period
1.	Thiru. G. Murugesh	Berigai & Shoolagiri	315	2.18.0	Rc.no.546/2017/Mines, Dated 05.05.2021	05.05.2021 to 04.05.2031
2.	Thiru. K. Narayanan	Berigai & Shoolagiri	313/2	2.44.0	Roc.86/2016(Mines) Dt. 30.11.2016	02.12.2016 to 01.12.2026

2) Details of abandoned/Old Quarries:

S. No.	Name of the lessee	Village	S.F. No	Extent in Ha	GO No. & Date	Lease period
1.	……..NIL……..					

3) Details of Proposed Quarries

S. No.	Name of the lessee	Village & Taluk	S.F. No	Extent	GO No. & Date	Lease period
1.	Thiru. N. Sankar	Berigai & Shoolagiri	305/4 (Part)	1.15.0	Roc.14/2025/ Mines, Dt. 20.08.2025	Precise Area given Instant Proposal

The Total extent of the Existing / Lease expired / Proposed quarries are 5.77.0 Ha.

10. Land Requirement

The total extent area of the project is 1.15.0 Ha, Government Poramboke land in Berigai 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	0.66.0
2.	Infrastructure	Nil	0.01.0
3.	Roads	Nil	0.01.0
4.	Green Belt & Dump	Nil	0.47.0
5.	Unutilized Area	1.15.0	Nil
	Total	**1.15.0**	**1.15.0**

11. Human Settlement

There are no approved residential buildings within 300m radius. There are villages located in this area within a 5km radius of the quarry.

Table 10 Habitation

Direction	Village	Distance in Kms	Population
North	Vanamangalam	3.3Kms	300
East	Madivalam	2.27Kms	150
South	Midithepalli	1.50 Kms	350
West	Nariganapuram	2.0Kms	280

12. Power Requirement

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

16 Litres 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

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 : 18˚C

ii) Average Maximum Temperature : 3 8 ˚C

iii) Average Annual Rainfall of the area: 830 mm to 850.3 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 10 km. radius, air quality survey has been conducted at 7 locations. Major air pollutants like Particulate Matter (PM_{10}), Sulphur Dioxide (SO_2), Nitrogen Dioxide (NO_2) were monitored, and the results are summarized below.

The baseline levels of PM10 (36-57 µg/m³), PM2.5 (13-28 µg/m³), SO2 (4-18 µg/m³), NO2 (11-30 µg/m³), all the parameters are well within the standards prescribed by National Ambient Air Quality during the study period from November 2025 to January 2026.

13.3 Noise Environment

The maximum Day noise and Night noise were found to be 59 dB(A) and 47 dB(A) respectively in Taladha muneeshwara Temple and Panchayat Union Primary School Devichettipalli .The minimum Day Noise and Night noise were 41 dB(A) and 35 dB(A) respectively which was observed in G.H.S Venkatesapuram and Panchayat Raj Office, Palavanapalli & G.H.S Berigai. The observed values are all well within the Standards prescribed by CPCB.

13.4 Water Environment

- The average pH ranges from 7.01 – 7.71
- TDS value varied from 468 mg/l to 1027 mg/l
- Hardness varied from 224 to 547 mg/l

- Chloride varied from 56.7 to 223 mg/l

13.5 Land Environment

The analysis results show that the majority of soil in the project and surrounding area is slightly alkaline in nature and pH value ranges from 6.45 to 8.51 with organic matter 1.41 to 4.60 %. 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 mine is Government Poramboke 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 58 trees per annum with interval 5m.
4. The rate of survival expected to be 80% in this area

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, Sengondrai, Sarakondrai, Aacha. Aayili	80%	575
Total		**575**

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 equipments 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

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. 1,71,74,608/-** 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. 1,31,74,608/-

2	Operational Cost	Rs. 40,00,000/-
	Total	**Rs. 1,71,74,608/-**

Environmental Management Plan Cost is about **Rs.2,72,81,893/-** for 10 years.

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.	Govt Hr. Sec School. Berigai Village, Shoolagiri Taluk, Krishnagiri District. Providing facilities are: ➢ Funds for Library Development within the School Premises. ➢ Computer with Internet Connection for Education purpose. ➢ Basic amenities such as Environmental awareness books (Tamil) in Library for students, Green Belt development, RO water purifiers, Hygienic Toilet and maintenance of toilet upto lease period	5,00,000/-
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 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 near vicinity.

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.

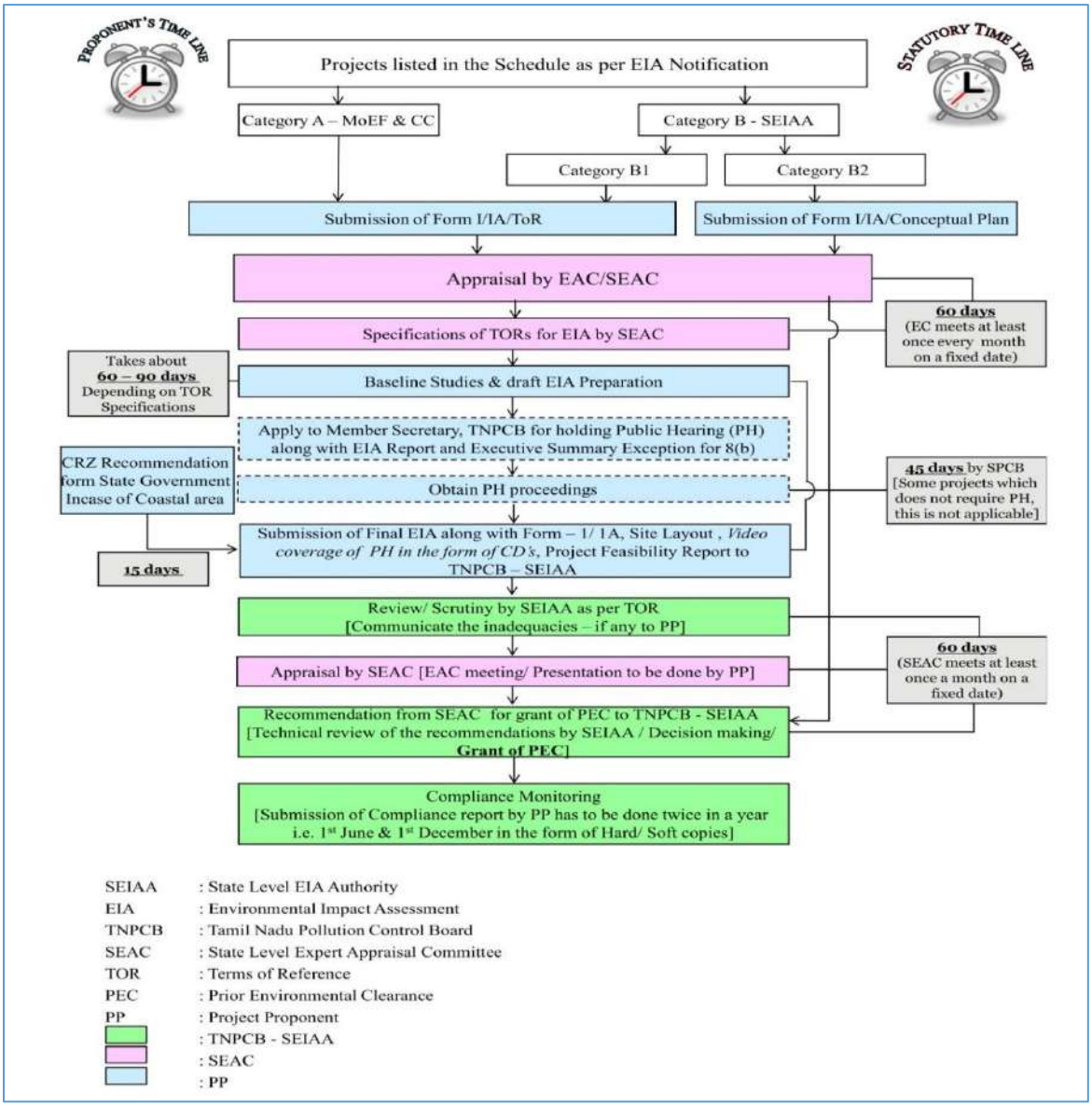
1.2 GENERAL INFORMATION ON MINING OF MINERALS

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.

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.



1.4 TERMS OF REFERENCE (TOR)

The terms of Reference have been issued by SEAC TN vide ToR Reference No. TO25B0108TN5887647N Dated: 27/11/2025. 42 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 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 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 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 be also 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 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 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 the nature of consultancy rendered.

1.7 DETAILS OF PROJECT PROPONENT

Project Proponent : Thiru. N. Sankar

Proponent's Name & Address : Thiru. N. Sankar,
S/O. Nagaraj,
Bithireddy Village, Pachappanatti Post,
Denkanikottai Taluk, Krishnagiri District.

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.

Proposed proposal pertains to Rough stone mining project by mechanized open cast method on allotted mine lease area at Berigai Village, Shoolagiri Taluk of Krishnagiri District, Tamil Nadu. It is a Elevated terrain area sloping towards South Eastern Covered with Rough Stone which does not sustain any type of vegetation. The total allotted mine lease for the proposed project is 1.15.0 Ha with their maximum production capacity i.e., 225277.25 Ts of Rough Stone.

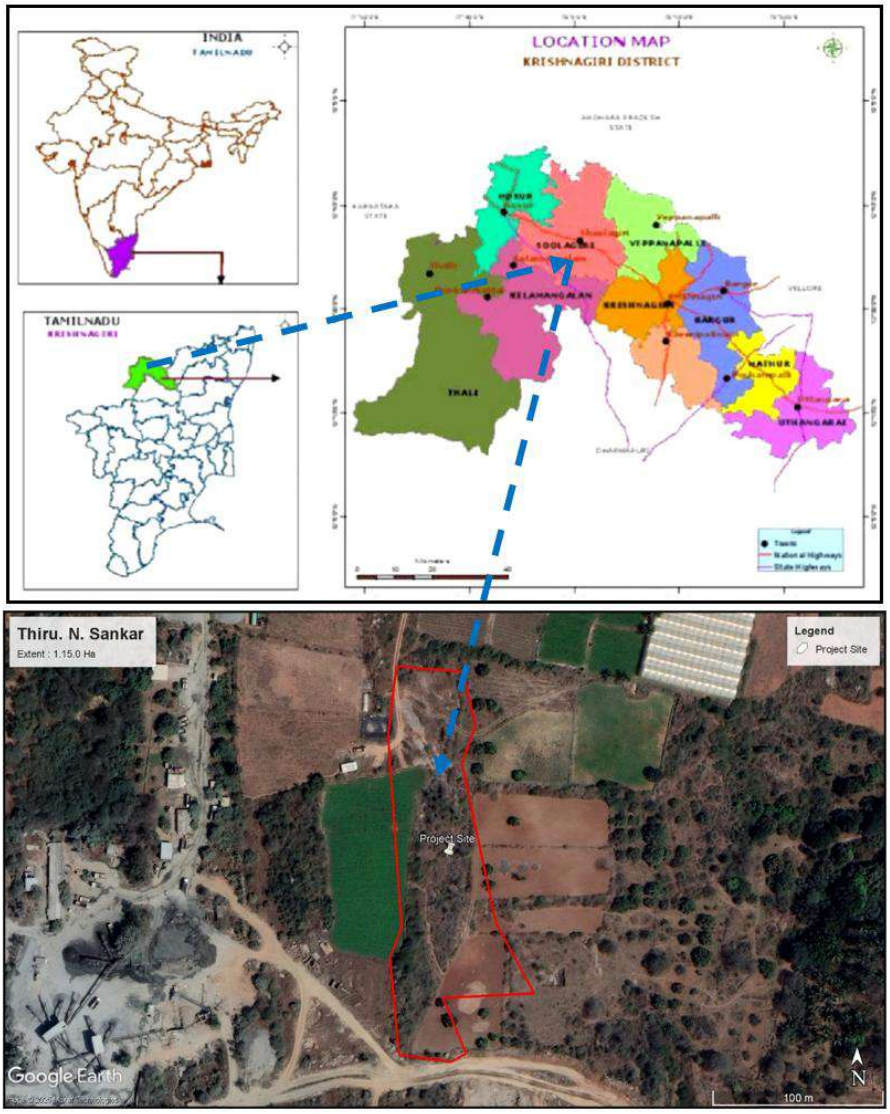


Figure 1.1: Location Map of the Project site

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 mining project by open cast mechanized method on allotted mine lease area at Berigai Village, Shoolagiri Taluk of Krishnagiri District, Tamil Nadu. It is a Elevated terrain. We have obtained a fresh mining plan from the Department of Geology and Mining, Krishnagiri District for 1.15.0 Ha land area in the S.F.Nos. 305/4 (Part) for a proposed mining depth of 41.0m (Topsoil 1.0m + Weathered Rock 2.0m + Rough stone 38.0m). The year wise production/recoverable reserves of rough stone is about 2,25,277.25 Ts of Rough stone, 15,540 Ts of Topsoil & 31,080 Ts of Weathered Rock. Total proposed period of mining is 10 years.

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.

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	S.F. No	Extent in Ha	GO No. & Date	Lease Period
1.	Thiru. G. Murugesh	Berigai & Shoolagiri	315	2.18.0	Rc.No.546/2017/Mines, Dated 05.05.2021	05.05.2021 to 04.05.2031

2.	Thiru. K. Narayanan	Berigai & Shoolagiri	313/2	2.44.0	Roc.86/2016(Mines) Dt. 30.11.2016	02.12.2016 to 01.12.2026

2) Details of abandoned/Old Quarries:

S. No.	Name of the lessee	Village	S.F. No	Extent in Ha	GO No. & Date	Lease period
1.	……..NIL……..					

3) Details of Proposed Quarries

S. No.	Name of the lessee	Village & Taluk	S.F. No	Extent	GO No. & Date	Lease period
1.	Thiru. N. Sankar	Berigai & Shoolagiri	305/4 (Part)	1.15.0	Roc.14/2025/ Mines, Dt. 20.08.2025	Precise Area given Instant Proposal

The Total extent of the Existing / Lease expired / Proposed quarries are 5.77.0 Ha.

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 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, guartz 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 weather 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 Quarry-1.15.0 Ha
2	Proponent	Thiru. N. Sankar
3	Mining Lease Area Extent	1.15.0 Ha
4	Location	S.F.Nos. 305/4 (Part), Berigai Village, Shoolagiri Taluk, Krishnagiri District.
5	Latitude	12° 47' 44.4512"N to 12° 47' 36.8734"N
6	Longitude	77° 57' 37.7112"E to 77° 57' 34.8443"E
7	Topography	Elevated terrain
8	Site Elevation above MSL	Maximum - 892 m and Minimum - 876 m. MSL
9	Topo sheet No.	57- H/13
10	Minerals of Mine	Rough Stone Quarry
11	Proposed production of Mine	Proposed Capacity of Rough Stone: 225277.25 Ts Period of Ten years.
12	Ultimate depth of Mining	41.0 m (1.0m Topsoil, 2.0m Weathered Rock & 38.0m 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	18 Nos.
17	Mining Lease	Letter was obtained from The Deputy Director (FAC), Dept. of Geology & Mining, Krishnagiri vide Rc. No. 14/2025/Mines, Dated: 27.02.2025.
18	Mining Plan Approval	Mining Plan was obtained from The Regional Joint Director, Deputy Director (FAC), Dept. of Geology & Mining, Krishnagiri vide Roc. No. 14/2025/Mines Dated: 01.09.2025 Revised Mining Plan was obtained from the Assistant Director, Dept. of Geology and Mining, Krishnagiri District vide Roc. No. 14/2025/Mines Dated : 15.05.2026.

19	Production details	Geological resources : 12,01,750 Ts of Rough Stone and the Proposed year wise recoverable reserves: 225277.25 Ts of Rough Stone for 10 years.
20	Boundary Fencing	7.50 m & 10 m barrier all along the boundary Fencing will be provided.
21	Disposal of overburden	The estimated quantity of Weathered Rock and Topsoil are 31,080 Ts & 15,540 Ts respectively. It will be formation will be removed and dumped in East and Western side of 7.5 m Boundary Barrier of the lease area used for road low lying area and Plantation Purposes.
22	Ground water	The ground water table is reported as 82m below ground level in nearby open wells and bore wells of this area. Mining reserves calculated taken up to a depth of 25 m BGL. Now, 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 approved residential building within 300m radius of the project site.
24	Drinking water	Packaged Drinking water vendors available in Midithepalli Village, which is about 1.50 km, S from the project site.

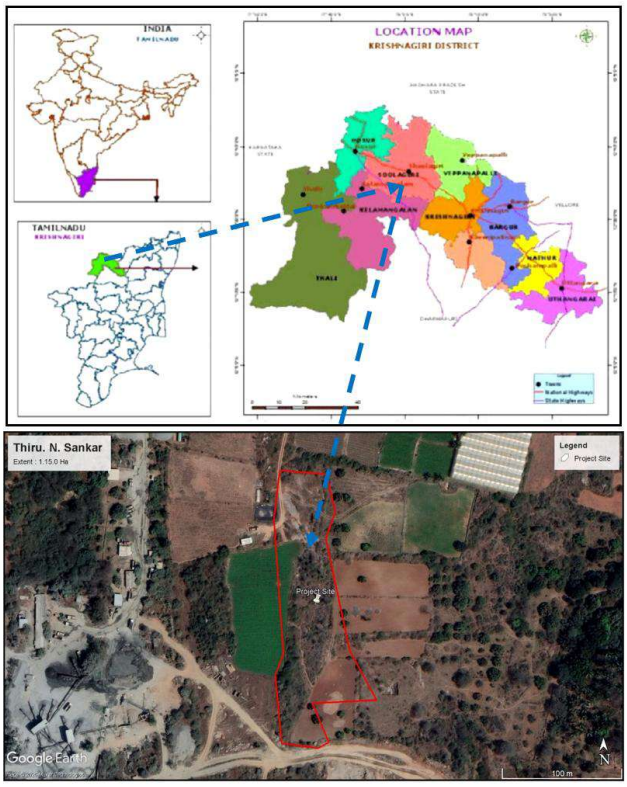


Figure 2.1: Location Map of the Project Site



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

2.2.1 *Site Connectivity:*

The site is connected to MDR 422: Berigai – Shoolagiri Road – 1.62 km, E

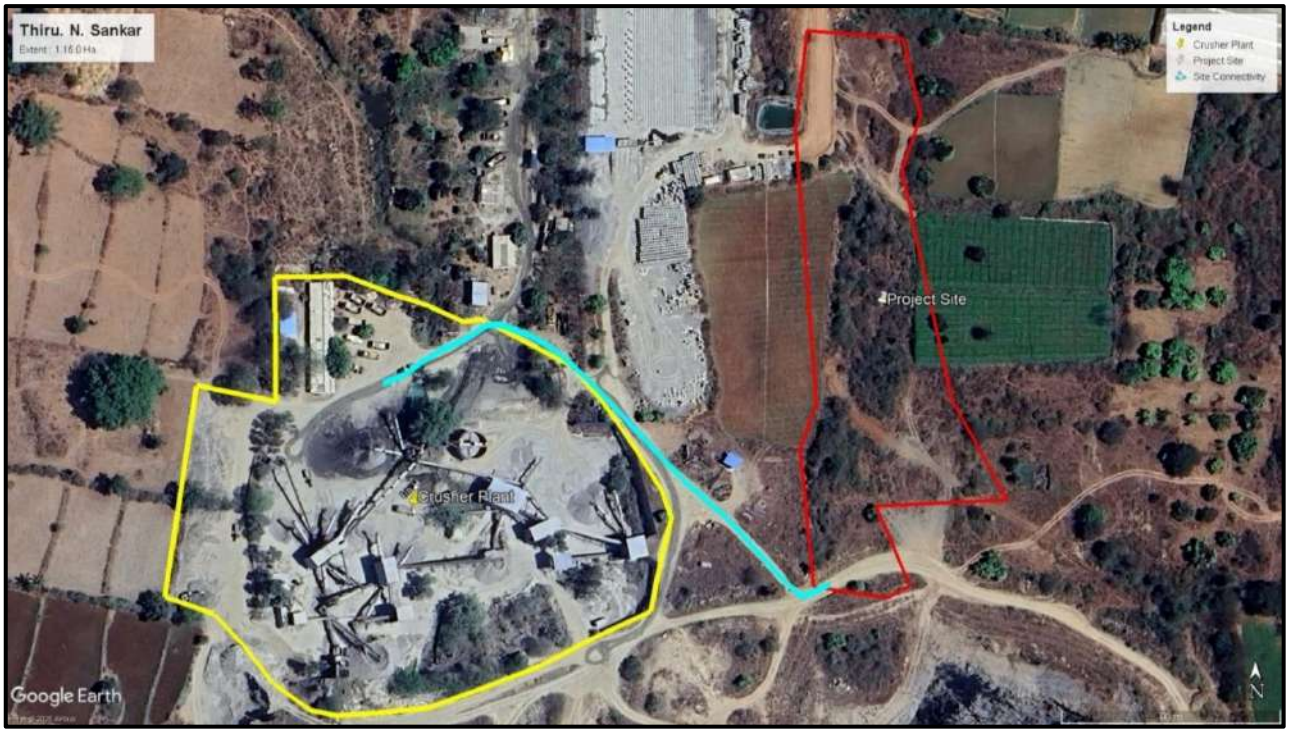


Figure 2.3: Site Connectivity

2.3 LOCATION DETAILS:

Table 2-3: Location Details

S. No	Particulars	Details
1.	Latitude	12° 47' 44.4512”N to 12° 47' 36.8734”N
2.	Longitude	77° 57' 37.7112"E to 77° 57' 34.8443"E
3.	Site Elevation above MSL	876 m to 892 m MSL
4.	Topography	Elevated terrain
5.	Land use of the site	Government Poramboke land
6.	Extent of lease area	1.15.0 Ha

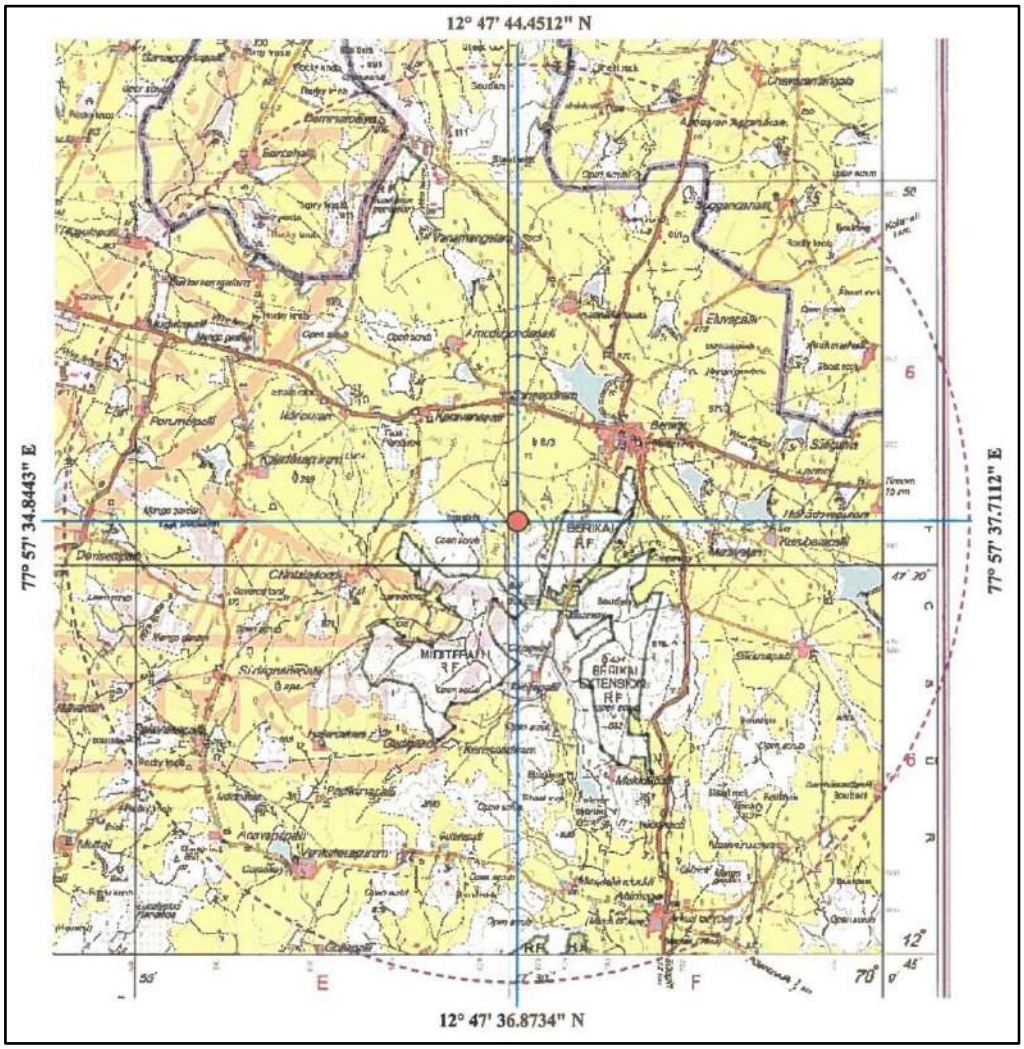


Figure 2.4: Topo Map of Project Site

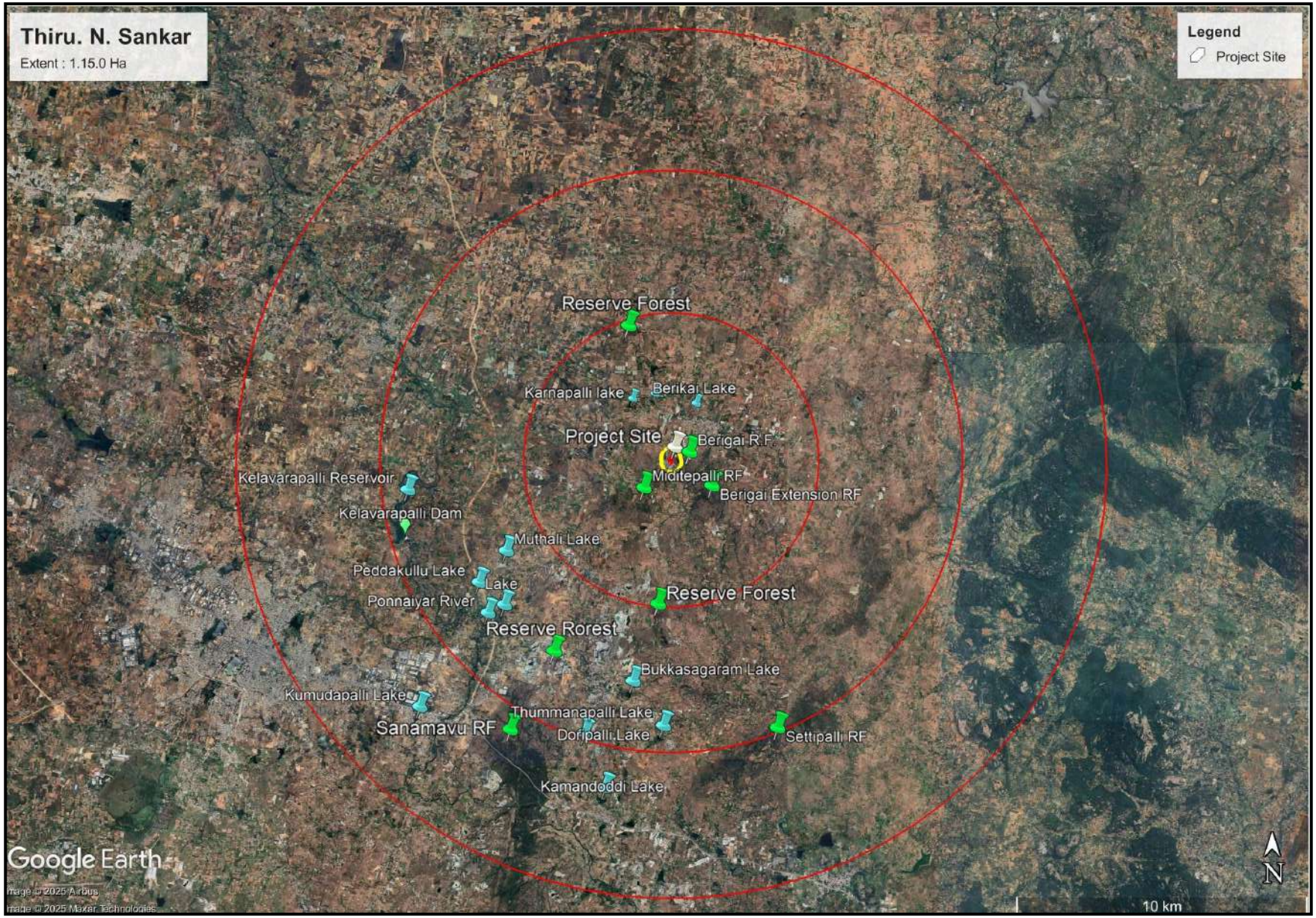


Figure 2.5: Environmental Sensitivity within 10km radius

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 (Ha)	Area in use during the quarrying period (Ha)
1	Quarrying Pit	Nil	0.66.0
2	Infrastructure	Nil	0.01.0
3	Roads	Nil	0.01.0
4	Green Belt	Nil	0.47.0

5	Unutilized Area	1.15.0	Nil
	Total	**1.15.0**	**1.15.0**

2.3.3 *Human Settlement*

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

Table 2-5: Habitation

Direction	Village	Distance in Kms	Population
North	Vanamangalam	3.3Kms	300
East	Madivalam	2.27Kms	150
South	Midithepalli	1.50 Kms	350
West	Nariganapuram	2.0Kms	280

2.4 LEASEHOLD AREA

The Rough Stone Quarry mine of 1.15.0 Ha is a Government Poramboke land. The lease area falls in S.F No: 305/4 (Part) of Berigai 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

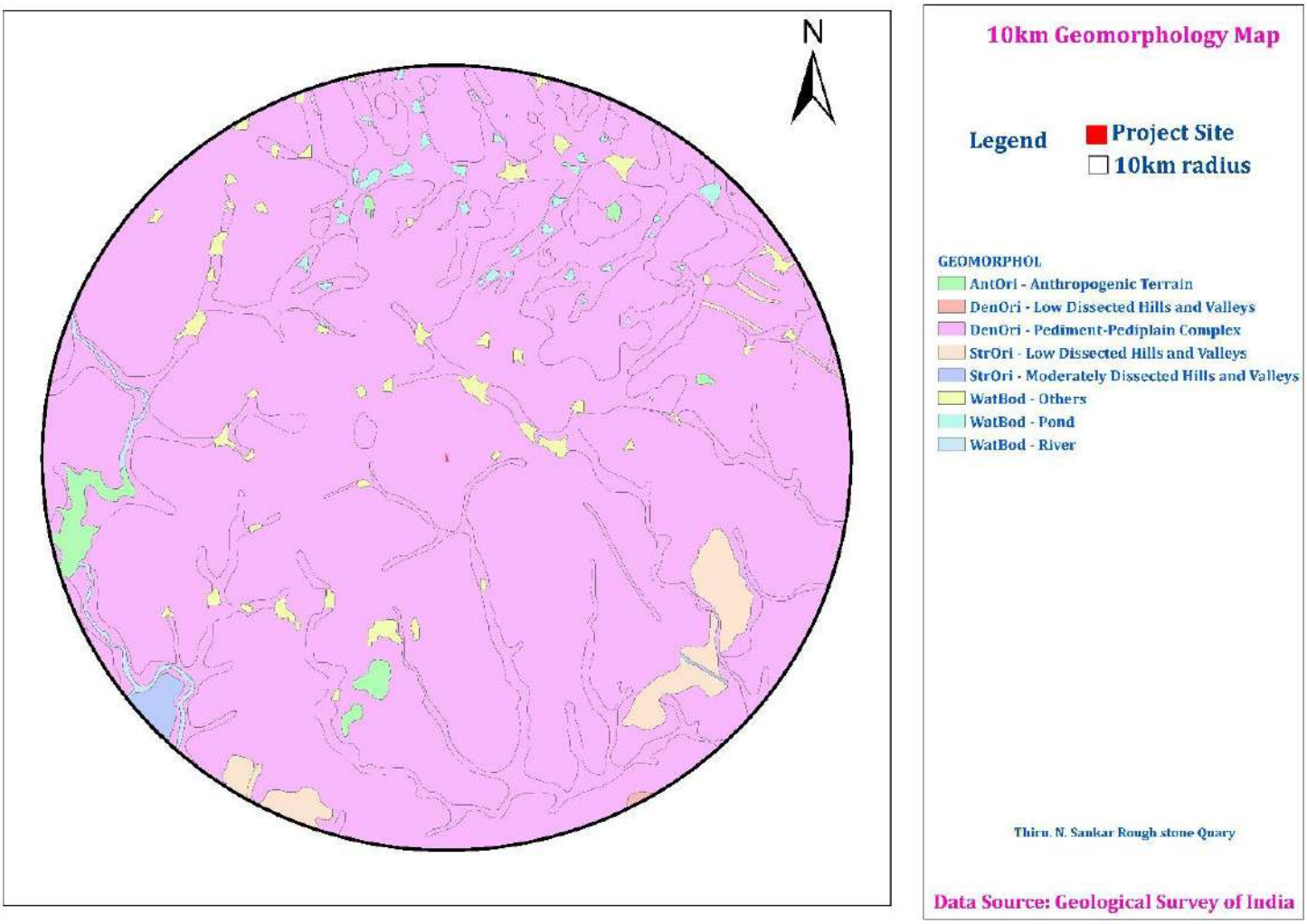
Krishnagiri District is underlain by crystalline metamorphic complex in the western parts of district and sedimentary tract in eastern side. An area of 4551 Sq.km is covered by crystalline rocks (63%) and 2671 Sq.km is covered by sediments (37%).

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 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 Charnockite. 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 250m^3 /day and in bore well between 260 and 430 m^3 /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 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.

Figure 2.7: Geomorphology

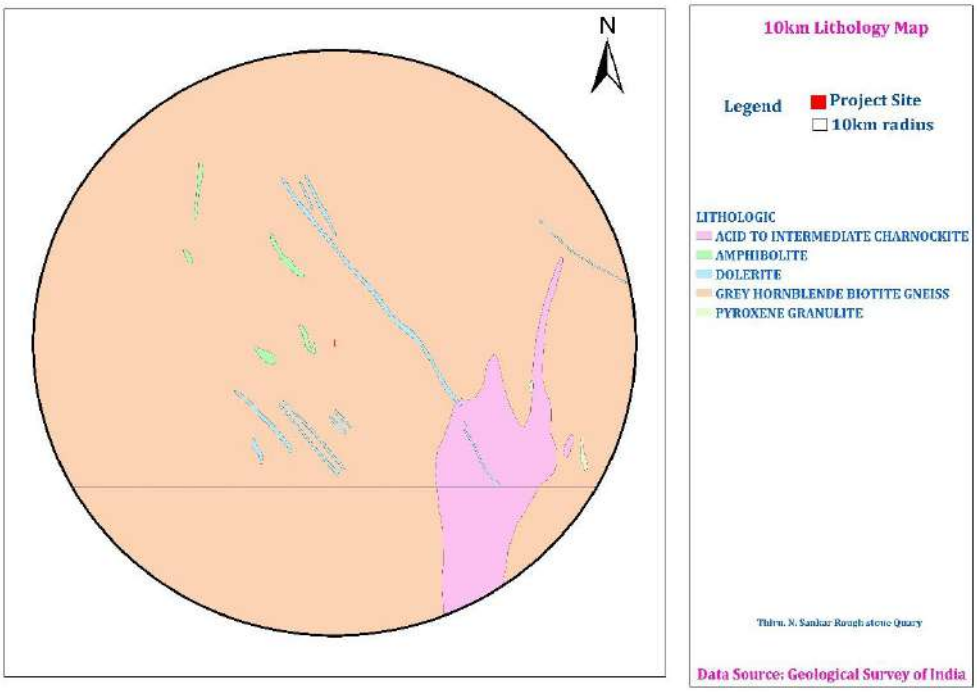


Figure 2.8 Lithology

2.6 QUALITY OF RESERVES:

The mining lease area is 1.15.0 Ha, with production capacity of 225277.25 Ts of Rough Stone (10 years), 15,540 Tonnes of Topsoil & 31,080 Tonnes of Weathered Rock. 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	Opencast mechanised
2.	Geological resources	12,01,750 Ts
3.	Mineable Reserves	2,25,277.25 Ts
4.	Proposed production for 10 years	2,25,277.25 Ts for ten years

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 12,01,750 Ts of Rough Stone, 23,000 Ts of Topsoil & 46,000 Ts of Weathered Rock.

2.6.2 *Geological resources*

Rough Stone:

Geological resources are estimated as 12,01,750 Ts of Rough Stone, 46,000 Ts of Weathered Rock & 23,000 Ts of Topsoil up to a depth of 41 m (1.0 m Top soil + 2.0 m Weathered Rock + 38.0m Rough Stone).

Table 2-7: Geological resources

Area (Sq.m)	Depth (m)	Geological Reserves of Rough Stone (m^3)	Topsoil (m^3)	Weathered Rock (m^3)	Bulk Density	Geological Reserves of Rough Stone (Ts)	Topsoil (Ts)	Weathered Rock (Ts)
11,500	1	-	11,500	-	2	-	23,000	-
11,500	2	-	-	23,000	2	-	-	46,000
11,500	38	4,37,000	-	-	2.75	12,01,750	-	-
Total	**41**	**4,37,000**	**11,500**	**23,000**	-	**12,01,750**	**23,000**	**46,000**

2.6.3 *Mineable Reserves*

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

Table 2-8: Mineable Reserves

Section	Bench	Length (m)	Width (m)	Depth (m)	Volume (m^3)	Mineable Reserves @100% (m^3)	Top Soil (m^3)	Weathered Rock (m^3)	Bulk Density	Rough Stone @100% Recovery (Ts)	Top Soil (Ts)	Weathered Rock (Ts)
XY-AB	I	96	32	1	3,072	-	3,072	-	2	-	6,144	-

	II	96	32	2	6,144	-	-	6,144	2	-	-	12,288
	III	34	32	3	3,264	3,264	-	-	2.75	8,976.00	-	-
	IV	91	22	5	10,010	10,010	-	-	2.75	27,527.50	-	-
	V	86	12	5	5,160	5,160	-	-	2.75	14,190.00	-	-
XY-AB Total					**27,650**	**18,434**	**3,072**	**6,144**	-	**50,693.50**	**6,144**	**12,288**
XY-CD	I	81	58	1	4,698	-	4,698	-	2	-	9,396	-
	II	81	58	2	9,396	-	-	9,396	2	-	-	18,792
	V	82	21	5	8,610	8,610	-	-	2.75	23,677.50	-	-
	VI	77	55	5	21,175	21,175	-	-	2.75	58,231.25	-	-
	VII	67	45	5	15,075	15,075	-	-	2.75	41,456.25	-	-
	VIII	57	35	5	9,975	9,975	-	-	2.75	27,431.25	-	-
	IX	47	25	5	5,875	5,875	-	-	2.75	16,156.25	-	-
	X	37	15	5	2,775	2,775	-	-	2.75	7,631.25	-	-
XY-CD Total					**77,579**	**63,485**	**4,698**	**9,396**	-	**1,74,583.75**	**9,396**	**18,792**
GRAND TOTAL					**1,05,229**	**81,919**	**7,770**	**15,540**	-	**2,25,277.25**	**15,540**	**31,080**

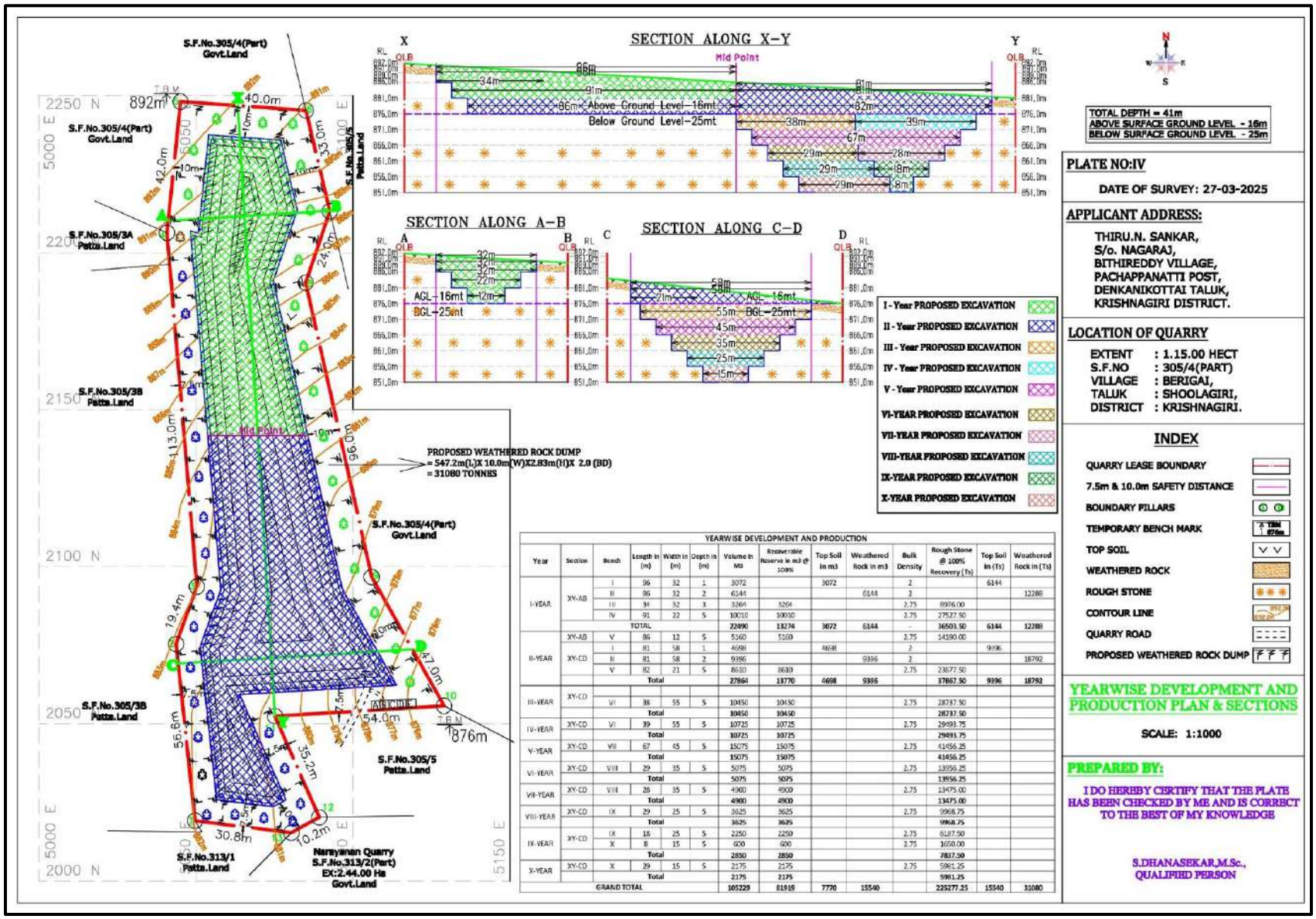
2.6.4 *Year wise Production Plan*

The year wise production/recoverable reserves of rough stone for 10 years is about 225277.25 Ts of Rough stone, 15,540 Ts of Topsoil & 31,080 Ts of Weathered Rock.

Table 2-9: Year wise Production Plan

Year	Section	Bench	Length (m)	Width (m)	Depth (m)	Volume (m^3)	Recoverable Reserve @100% (m^3)	Top Soil (m^3)	Weathered Rock (m^3)	Bulk Density	Rough Stone @100% Recovery (Ts)	Top Soil (Ts)	Weathered Rock (Ts)
I-Year	XY-AB	I	96	32	1	3,072	-	3,072	-	2	-	6,144	-
		II	96	32	2	6,144	-	-	6,144	2	-	-	12,288
		III	34	32	3	3,264	3,264	-	-	2.75	8,976.00	-	-
		IV	91	22	5	10,010	10,010	-	-	2.75	27,527.50	-	-
I-Year Total						**22,490**	**13,274**	**3,072**	**6,144**	-	**36,503.50**	**6,144**	**12,288**
II-Year	XY-AB	V	86	12	5	5,160	5,160	-	-	2.75	14,190.00	-	-
	XY-CD	I	81	58	1	4,698	-	4,698	-	2	-	9,396	-
		II	81	58	2	9,396	-	-	9,396	2	-	-	18,792
		V	82	21	5	8,610	8,610	-	-	2.75	23,677.50	-	-
II-Year Total						**27,864**	**13,770**	**4,698**	**9,396**	-	**37,867.50**	**9,396**	**18,792**
III-Year	XY-CD	VI	38	55	5	10,450	10,450	-	-	2.75	28,737.50	-	-
III-Year Total						**10,450**	**10,450**	-	-	-	**28,737.50**	-	-
IV-Year	XY-CD	VI	39	55	5	10,725	10,725	-	-	2.75	29,493.75	-	-
IV-Year Total						**10,725**	**10,725**	-	-	-	**29,493.75**	-	-
V-Year	XY-CD	VII	67	45	5	15,075	15,075	-	-	2.75	41,456.25	-	-

V-Year Total						**15,075**	**15,075**	-	-	-	**41,456.25**	-	-
Total for First Five years						**86,604**	**63,294**	**7,770**	**15,540**	**-**	**1,74,059**	**15,540**	**31,080**
VI-Year	XY-CD	VIII	29	35	5	5,075	5,075	-	-	2.75	13,956.25	-	-
VI-Year Total						**5,075**	**5,075**	-	-	-	**13,956.25**	-	-
VII-Year	XY-CD	VIII	28	35	5	4,900	4,900	-	-	2.75	13,475.00	-	-
VII-Year Total						**4,900**	**4,900**	-	-	-	**13,475.00**	-	-
VIII-Year	XY-CD	IX	29	25	5	3,625	3,625	-	-	2.75	9,968.75	-	-
VIII-Year Total						**3,625**	**3,625**	-	-	-	**9,968.75**	-	-
IX-Year	XY-CD	IX	18	25	5	2,250	2,250	-	-	2.75	6,187.50	-	-
IX-Year		X	8	15	5	600	600	-	-	2.75	1,650.00	-	-
IX-Year Total						**2,850**	**2,850**	-	-	-	**7,837.50**	-	-
X-Year	XY-CD	X	29	15	5	2,175	2,175	-	-	2.75	5,981.25	-	-
X-Year Total						**2,175**	**2,175**	-	-	-	**5,981.25**	-	-
Total for Second Five years						**18625**	18625	-	-	-	51219	-	-
GRAND TOTAL						**1,05,229**	**81,919**	**7,770**	**15,540**	-	**2,25,277.25**	**15,540**	**31,080**



YEARWISE DEVELOPMENT AND PRODUCTION

Year	Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in Ms	Recoverable Reserve in m3 @ 100%	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
I-YEAR	XY-AB	I	96	32	1	3072		3072		2		6144	
		II	96	32	2	6144			6144	2			12288
		III	34	32	3	3264	3264			2.75	8976.00		
		IV	91	22	5	10010	10010			2.75	27527.50		
	TOTAL					22490	13274	3072	6144	-	36503.50	6144	12288
II-YEAR	XY-AB	V	86	12	5	5160	5160			2.75	14190.00		
	XY-CD	I	81	58	1	4698		4698		2		9396	
		II	81	58	2	9396			9396	2			18792
		V	82	21	5	8610	8610			2.75	23677.50		
	Total					27864	13770	4698	9396		37867.50	9396	18792
III-YEAR	XY-CD	VI	86	55	5	10450	10450			2.75	28737.50		
	Total					10450	10450				28737.50		
IV-YEAR	XY-CD	VI	39	55	5	10725	10725			2.75	29493.75		
	Total					10725	10725				29493.75		
V-YEAR	XY-CD	VII	67	45	5	15075	15075			2.75	41456.25		
	Total					15075	15075				41456.25		
VI-YEAR	XY-CD	VIII	29	35	5	5075	5075			2.75	13956.25		
	Total					5075	5075				13956.25		
VII-YEAR	XY-CD	VIII	28	35	5	4900	4900			2.75	13475.00		
	Total					4900	4900				13475.00		
VIII-YEAR	XY-CD	IX	29	25	5	3625	3625			2.75	9968.75		
	Total					3625	3625				9968.75		
IX-YEAR	XY-CD	IX	18	25	5	2250	2250			2.75	6187.50		
		X	8	15	5	600	600			2.75	1650.00		
	Total					2850	2850				7837.50		
X-YEAR	XY-CD	X	29	15	5	2175	2175			2.75	5981.25		
	Total					2175	2175				5981.25		
GRAND TOTAL						105229	81919	7770	15540		225277.25	15540	31080

Figure 2.9.1 Year wise Production Plan & Section

2.7 TYPE OF MINING

The proposed project is an open cast mechanized mining with one 1.0 m bench for Topsoil followed by 2.0 m of Weathered rock and 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 the 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 estimated quantity of Top soil and Weathered Rock of 15,540 Ts and 31,080 Ts respectively. It will be effectively utilized for afforestation and filling low-lying areas along roads.

Machineries to be used

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

Table 2-10: List of Machineries used

For Mining operation Loading Equipment	Excavator of 0.9 Cu.m bucket capacity Jack Hammer (30-32 mm dia) Tractor mounted compressor
Transportation	Tipper 4 Nos. of 10/20 T capacity

2.7.3 *Blasting:*

2.7.3.1 Blasting Pattern:

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

2.7.3.2 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	70^0 from the horizontal.
7	Quantity of rock broken	0.45 MT x 2.6 = 1.17 MT
8	Quantity of rock broken per day	387.68 m^3
9	Control Blasting efficiency @90%	1.17 x 90% = 1.05MT / hole
10	Charge per hole	140 gms of 25mm dia cartridge

2.7.3.3 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.

2.7.3.4 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 powd or Gelatine.
Blasted at day time	5 to 6 pm

2.7.3.5 Storage & Safety measures taken during blasting:

The project proponent "Thiru. N. Sankar" 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.

Table 2-13: Man Power Requirements

1.	Skilled	Operators	2 Nos
		Mechanic	1 No
		Blaster / Mat	1 No
2.	Semi – skilled	Drivers	2 Nos
3.	Unskilled	Musdoor / Labors	5 Nos
		Cleaners	3 Nos
		Office Boy	1 No
4.	Management & Supervisory staff		3 Nos
Total			**18 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 source 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 1.50 km, S from the
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**	

2.9 PROJECT IMPLEMENTATION SCHEDULE

The implementation schedule of the proposed Mine Lease of Thiru. N. Sankar (1.15.0 ha) is as follows.

Table 2-15: Mining Schedule

MINING SCHEDULE FOR TEN YEARS										
Activity	Dec-27	Dec -28	Dec -29	Dec -30	Dec -31	Dec-32	Dec -33	Dec -34	Dec -35	Dec -36
Site Clearance										
Excavation - Top Soil Removal/Overburden										
I Year Production – 6144 Ts - Topsoil & 12,288 Ts - Weathered Rock & 36,503.50 Ts - Rough Stone										
II Year Production – 9,396 Ts – Topsoil, 18,792 Ts Weathered Rock & 37,867.50 Ts - Rough Stone										
III Year Production – 28737.50 Ts - Rough Stone										
IV Year Production – 29493.75 Ts - Rough Stone										
V Year Production – 41456.25 Ts - Rough Stone										
VI Year Production – 13956.25 Ts - Rough Stone										
VII Year Production – 13475.0 Ts - Rough Stone										
VIII Year Production – 9968.75 Ts - Rough Stone										
IX Year Production – 7837.50 Ts - Rough Stone										
X Year Production – 5981.25 Ts - Rough Stone										

2.10 SOLID WASTE MANAGEMENT

Table 2-15: Solid Waste Management

S. No	Type	Quantity	Disposal Method
1	Organic	3.24 kg/day	Municipal bin including food waste
2	Inorganic	4.86 kg/day	TNPCB authorized recyclers

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

2.11 MINE DRAINAGE

The ground water table is reported as 82 m below ground level in nearby open wells and bore wells of this area. Mining reserves calculated taken upto 41.0 m. 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 Litres diesel per hour for excavator for mining and loading for Rough Stone needed.

2.13 PROJECT COST

1	**A. Fixed Asset Cost**:		
	1. Land Cost	:	Rs. 1,29,04,608/- (Leased Tender Amount for Govt. Poramboke Land)
	2. Labour Shed	:	Rs. 1,20,000/-
	3. Sanitary Facility	:	Rs. 70,000/-
	4. Refilling/Fencing cost	:	Rs. 80,000/-
	Total =		**Rs. 1,31,74,608/-**
2	**B. Operational Cost:**		
	Machinery cost	:	**Rs.40,00,000/-**
	Total Project Cost (A + B)	:	**Rs. 1,71,74,608/-**

I. EMP Cost :

	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	11500	11500
	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	300000	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	50000	5000
	No overloading of trucks/tippers/tractors	Manual Monitoring through Security guard	0	584717
	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 Governers @ 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	23000
	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 HEMM at regular interval will be done	Provision made in Operating Cost	0	0
	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
	NONEL Blasting will be practiced to control Ground vibration and fly rocks	Rs. 30/- per 6 Tonnes of Blasted Material	0	402188
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	11500	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	230000	10000
	3. Progressive Closure Activity Green belt development - 500 trees per one hectare - (200 Inside Lease Area & 300 Outside Lease Area)	Site clearance, preparation of land, digging of pits /trenches, soil amendments, transplantation of saplings @ 200 per plant (capital) for plantation inside the lease area and @ 30 per plant maintenance (recurring)	46000	6900

		Avenue Plantation @ 300 per plant (capital) for plantation outside the lease area and @ 30 per plant maintenance (recurring)	103500	10350
	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	63488	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	1455057	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
	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)	72000	18000
	Health check up for workers will be provisioned	IME & PME Health check up @ Rs. 1000/- per employee	0	18000
	First aid facility will be provided	Provision of 2 Kits per Hectare @ Rs. 2000/-	0	2300
	Slope Stability Action Plan	Slope Stability action plan in the end of ninth year plan period	300000	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	57500	10000
	Installation of CCTV cameras in the mines and mine entrance	Camera 4 Nos, DVR, Monitor with internet facility	30000	5000

	Implementation as per Mining Plan and ensure safe quarry working	Mines Manager (1st Class / 2nd 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)			**1372000**	**2059955**
Grand Total (Rs)			**3431955**	

Overall Budget			
Year	**Cost (@ 5% per year inflation adjustment) in Rs.**	**Year**	**Cost (@ 5% per year inflation adjustment) in Rs.**
1st Year	3431955	**6th Year**	2629083
2nd Year	2162953	**7th Year**	2760537
3rd Year	2271100	**8th Year**	2898564
4th Year	2384655	**9th Year**	3043492
5th Year	2503888	**10th Year**	3195666
Total EMP Cost – Rs. 2,72,81,893/- (Rs. 272 Lakhs) for 10 years			

2.14 GREENBELT

1. The development of greenbelt in the peripheral buffer zone of the mine area.
2. 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 58 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%	575
Total		**575**

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.

We have obtained Terms of Reference from SEIAA vide Letter No. SEIAA-TN vide ToR Identification No. TO25B0108TN5887647N Dated: 27.11.2025. The baseline monitoring is carried out in November 2025 to January 2026 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 November 2025 to January 2026.

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	7 locations	24 hourly twice a week 4 hourly. Twice a week, One non-monsoon season 8 hourly, twice a week 24 hourly, twice a week
Noise	7 locations	24 hourly Once in 5 locations
Water (Ground water) pH, Temperature, Turbidity, Magnesium Hardness, Total Alkalinity, Chloride, Sulphate, Fluoride, Nitrate, Sodium, Potassium, Salinity, Total nitrogen, Total Coliforms, Fecal Coliforms	7 locations	Once in 5 locations
Water (surface water) pH, Temperature, Turbidity, Magnesium Hardness, Total Alkalinity, Chloride, Sulphate, Fluoride, Nitrate, Sodium,	Sample from nearby lakes/river	One-time Sampling

Potassium, Salinity, Total nitrogen, Total Coliforms, Fecal Coliforms		
Soil (Organic matter, Texture, pH, Electrical Conductivity, Permeability, Water holding capacity, Porosity)	7 locations	Once in 5 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

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. 305/4 (Part), Berigai Village, Shoolagiri Taluk, Krishnagiri District.	Field Study
2.	Latitude & Longitude	Latitude: 12° 47' 44.4512"N to 12° 47' 36.8734"N Longitude: 77° 57' 37.7112"E to 77° 57' 34.8443"E	Topo Sheet
3.	Topo Sheet No.	57- H/13	Survey of India Toposheet
4.	Mine Lease Area	1.15.0 Ha	--
Demography in the study area (as per Census 2011)			
5.	Total Population	7,884	

6.	Total Number of Households	1,807	Census Survey of India
7.	Maximum Temperature (°C)	38	IMD
8.	Minimum Temperature (°C)	18	
9.	Ecological Sensitive Areas - Wetlands, watercourses or other waterbodies, coastal zone, biospheres, mountains, forests	• Ponnaiyar River – 8.62 Km, SW • Berikai Lake - 1.68 Km, NNE • Amudagondapalli lake - 1.85 Km, N • Karnapalli lake - 2.17 Km, NW • Muthali Lake - 6.53 Km, SW • Seasonal Lake - 7.93 Km, SW • Bukkasagaram Lake - 7.94 Km, S • Peddakullu Lake - 8.17 Km, SW • Doripalli Lake - 9.33 Km, S • Thummanapalli Lake - 10.13 Km, SW • Kamandoddi Lake - 11.75 Km, S • Kumudapalli Lake - 12.35 Km, SW • Cauvery North Wildlife Sanctuary – 28.26 km, S • Berigai R.F - 0.304 Km, E • Miditepalli RF - 1.38 Km, SW • Berigai Extension RF - 1.45 Km, SE • Reserve Forest - 3.84 Km, NW • Reserve Forest - 4.61 Km, S • Reserve Forest - 7.85 Km, SSW • Sanamavu RF - 9.00 Km, SSW • Settipalli RF - 9.52 Km, SSE	Google Earth/Field Study
10.	Densely Populated area	Hosur - 12.42 Km - SW	

11.	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	**S. No.** / **Places** / **Dist. From Project Site** **Schools & Colleges** 1 – Govt. Hr Sec. School, Berigai – 2.27 Km, NE 2 – Govt. High School, Kattinaickendoddi – 2.73 Km, NNE 3 – Annai Madhammal Institute of Vocational Science, Berigai – 1.80 Km, NE 4 – Adhiyamaan College of Agriculture and Research, Athimugam – 5.36 Km, SSE **Hospitals** 1 – Govt. Hospital, Berigai – 1.28 Km, NE 2 – Primary Health Centre, Muthali – 7.44 Km, SW	Google Earth/ Field Study

3.1.7 *Site Connectivity:*

The nearest crusher is located at a distance of 100 m West from the proposed quarry. Google Earth Pro Map is shown below

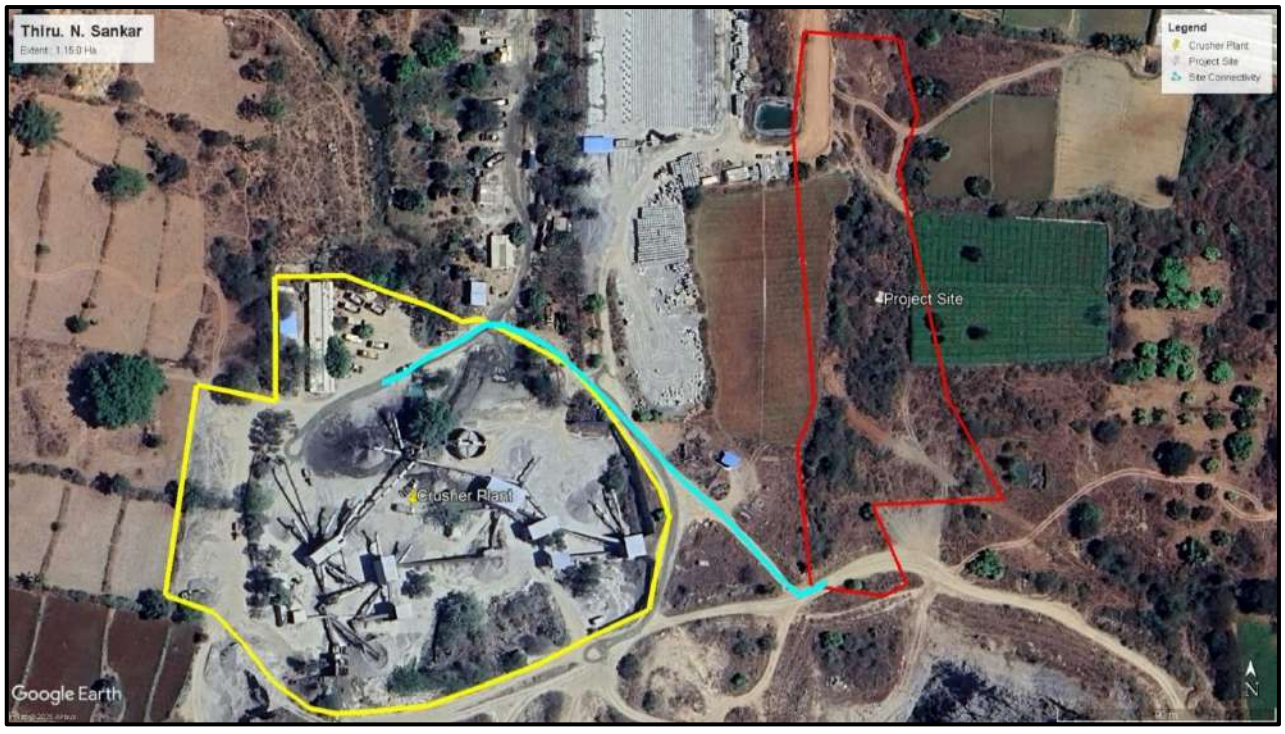


Figure 3.1: Site Connectivity

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.

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.

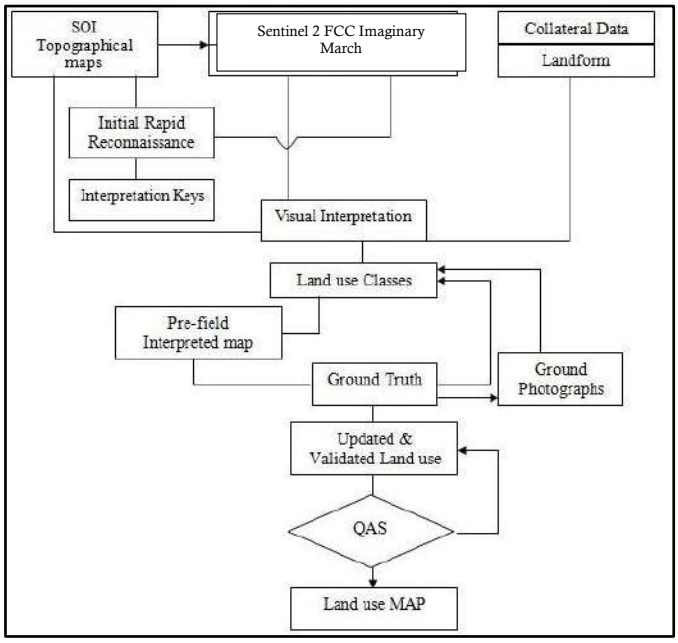


Figure 3.2 Flow Chart showing Methodology of Land use mapping.

3.2.3 *Satellite Data*

Sentinel 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 sentinel satellite image and SOI topo sheets of 57-H/13 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

The LULC Classification has been done at three levels where level -1 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.

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.

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.

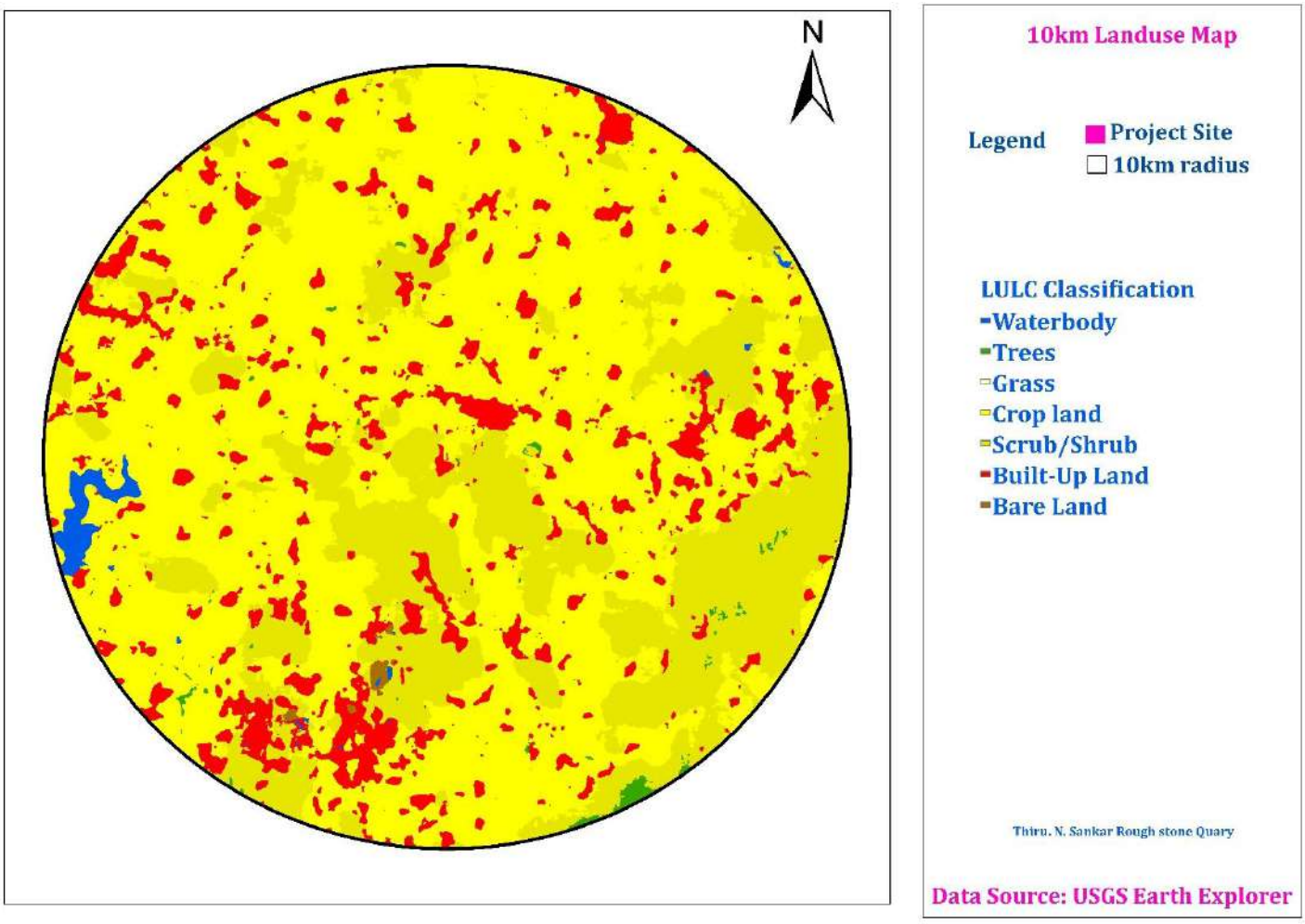


Figure 3.3 Land use classes around 10 km radius from the project site

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
1	Water Body	2.39
2	Trees	1.27
3	Grass	0.015
5	Crops	204.81

6	Scrub/Shrub	77.38
7	Built-up Area	34.48
8	Barren Land	0.52

3.3 WATER ENVIRONMENT

3.3.1 *Contour & Drainage*

The altitude of the area is 876 m to 892 m 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 Undulating 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 914 m AMSL. The Guthrayan Durg with an elevation of 1395 m AMSL is the highest peak in the district.

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.

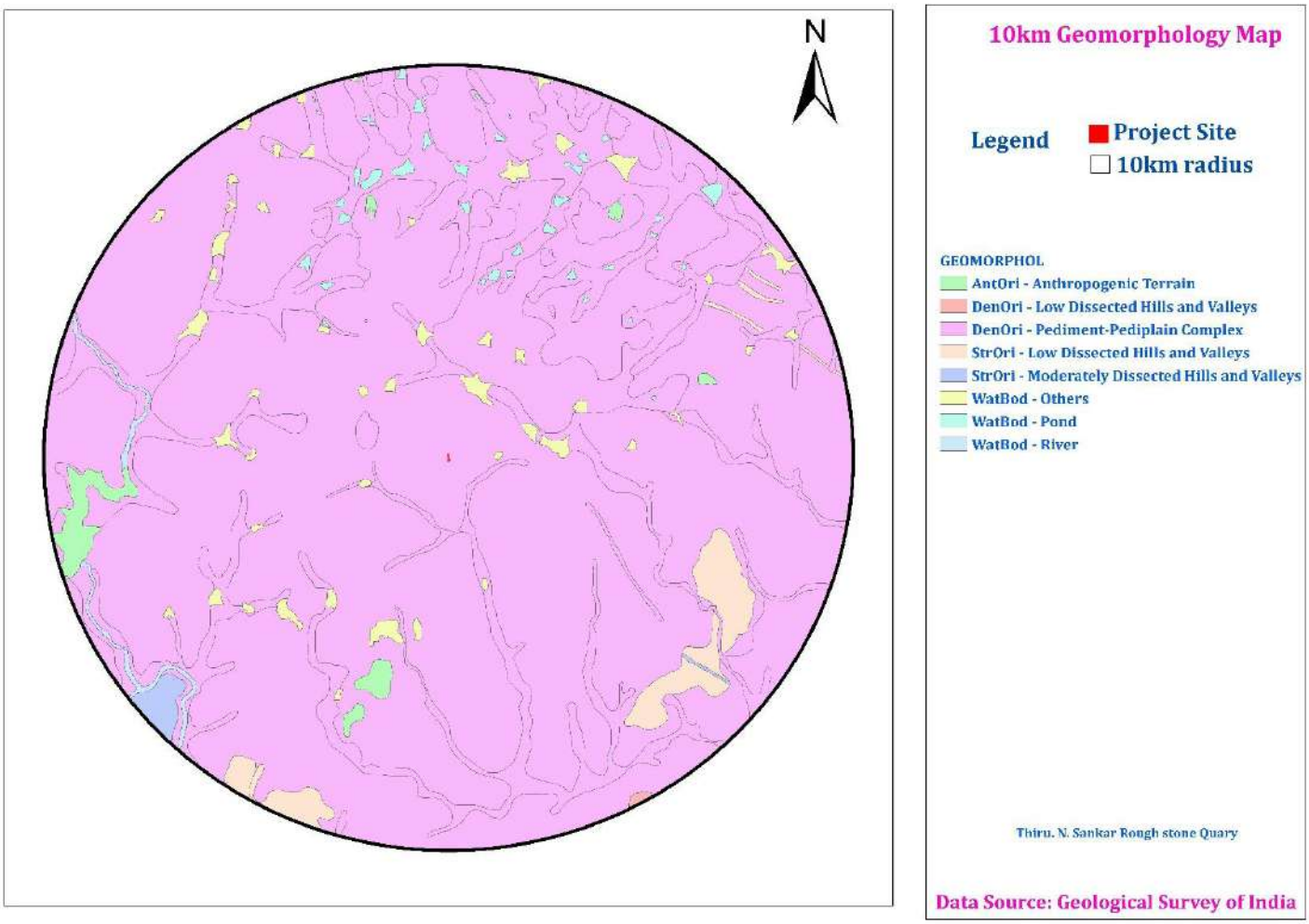


Figure 3.4 Geomorphology within 10km from the project site

3.3.3 *Geology:*

The geological formations of the district belong mainly to Archaean age along with rock of Proterozoic age. The former is rerpresented 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 migmatite complex includes garnet ferrous quartzofeldpathic 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 and Northern part of 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.

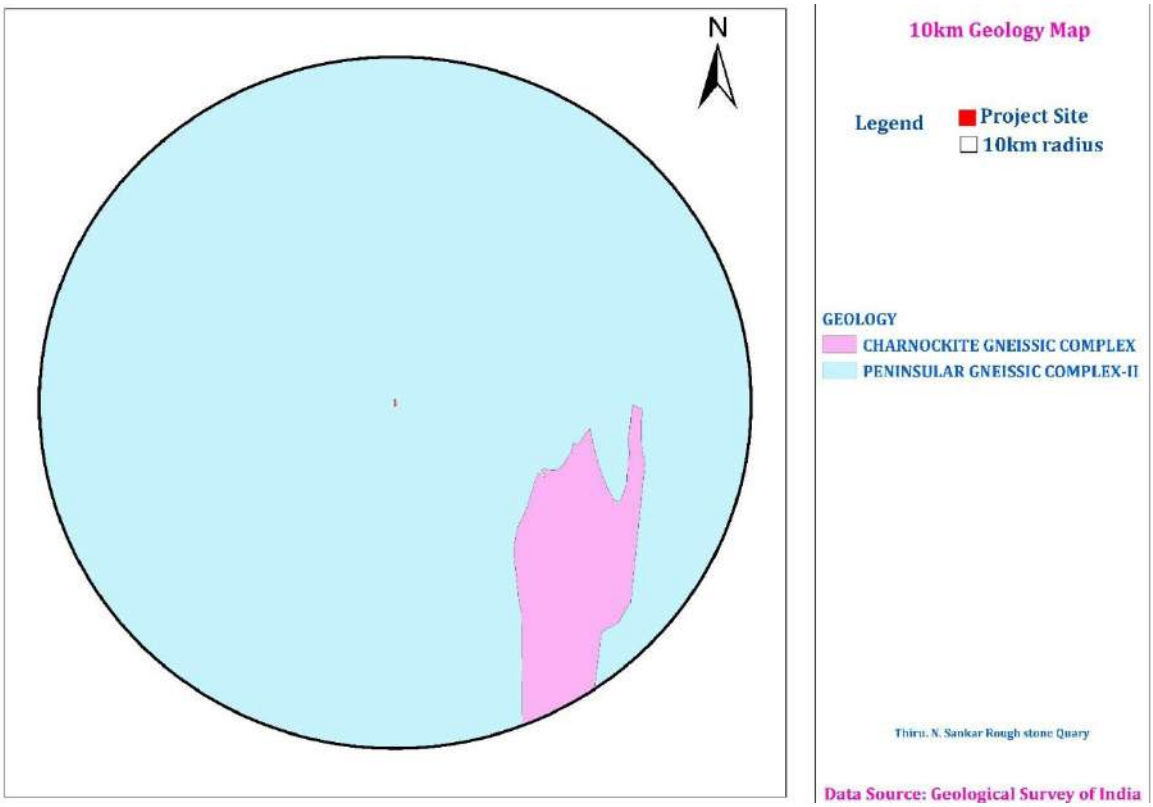


Figure 3.5 Geology within 10km from the project site

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 parts of the district the DTW is more than 5m bgl. 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 charnockite. 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 m^2 /day with low to very low permeability values.

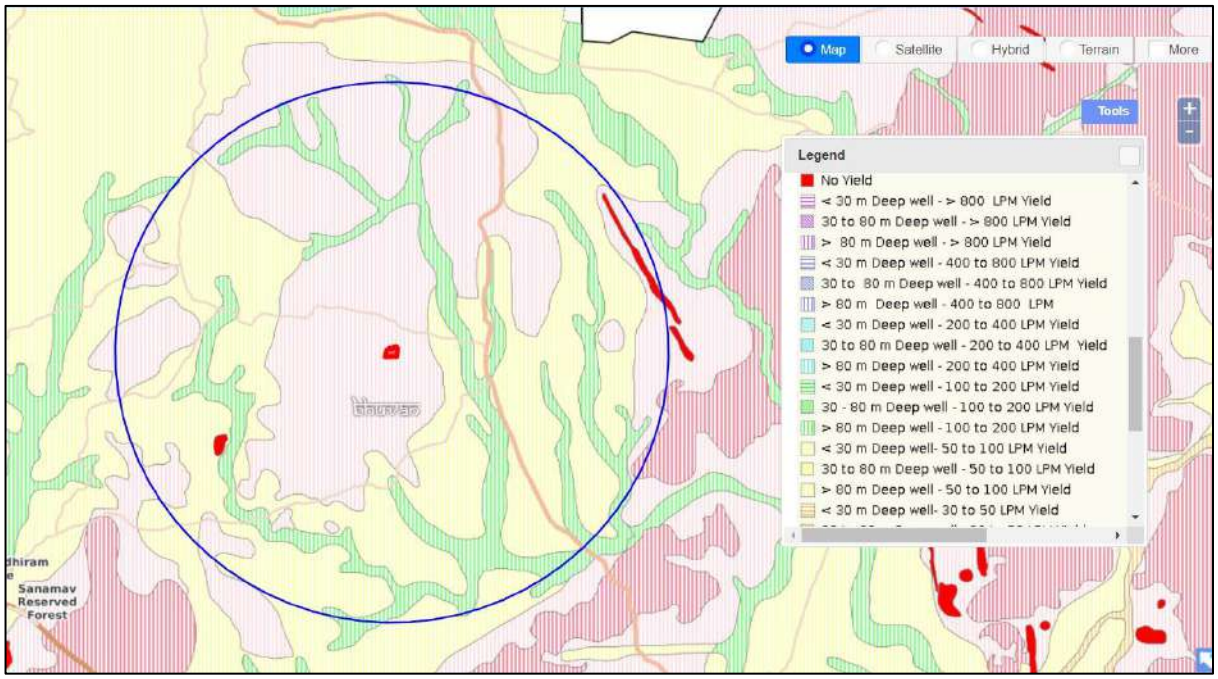


Figure 3.6 Ground water prospects within 10 km radius of the project site

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	November 2025 to January 2026
Design Criteria	Based on the Environmental settings in the study area
Monitoring Locations	Project Site. – GW 1 Government Hr Sec School, Berigai – GW 2 Taladha muneeshwara Temple, Mudugurikki – GW 3 Panchayat Union Primary School, Devichettipalli – GW 4 Panchayat Raj Office, Palavanapalli – GW 5 Government High School, Kattinaickendoddi – GW 6 Government High School, Berigai – GW 7
Methodology	Water Samples were collected in 5 Liter 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 physio-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	IS:3025(P -11)1983 RA: 2012	pH (at 25°C)
2	IS:3025(P -14) 2013	Electrical Conductivity
3	IS:3025 (P -4)1983 RA: 2012	Colour
4	IS:3025(P -10)1984 RA: 2012	Turbidity
5	APHA 23rd Edn.2017-2540-C	Total Dissolved Solids
6	IS:3025(P-17)-1984 RA:2012	Total Suspended Solids
7	APHA 23rd Edn.2017-2340-C	Total Hardness as $CaCO_3$
8	APHA 23rd Edn2017.3500 Ca-B	Calcium Hardness as $CaCO_3$
9	APHA 23rd Edn.2017-3500 Mg-B	Magnesium Hardness as $CaCO_3$

10	APHA 23rd Edn2017.3500 Ca-B	Calcium as Ca
11	APHA 23rd Edn.2017-3500 Mg-B	Magnesium as Mg
12	IS:3025(P -32)-1988 RA: 2014	Chloride as Cl
13	APHA 23rd Edn.2017-4500 SO_4^--E	Sulphate as SO_4
14	APHA 23nd Edn.2017-2320-B	Total Alkalinity as $CaCO_3$
15	IS:3025(P -53):2003 RA: 2014	Iron as Fe
16	IS:3025(P -35)1988 RA: 2014	Silica as SiO_2
17	APHA 23rd Edn.2012-4500-F-D	Fluoride as F
18	IS:3025(P -34):1988 RA: 2014	Nitrate as NO_3

Table 3-6 Ground water sampling results

S. No	Parameters	Units	GW1	GW2	GW3	GW4	GW5	GW6	GW7
1	pH (at 25°C)	-	7.41	7.67	7.49	7.58	7.68	7.01	7.71
2	Electrical Conductivity	µS/cm	882	1711	1249	1029	858	1242	995
3	Colour	Hazen Unit	BQL (LOQ:5)	BQL (LOQ:5)	BQL (LOQ:5)	BQL (LOQ:5)	BQL (LOQ:5)	BQL (LOQ:5)	BQL (LOQ:5)
4	Turbidity	NTU	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)
5	Total Dissolved Solids	mg/L	468	1027	708	595	533	798	558
6	Total Suspended Solids	mg/L	BQL (LOQ:2)	BQL (LOQ:2)	BQL (LOQ:2)	BQL (LOQ:2)	BQL (LOQ:2)	BQL (LOQ:2)	BQL (LOQ:2)
7	Total Hardness as $CaCO_3$	mg/L	279	547	454	320	224	419	342
8	Calcium Hardness as $CaCO_3$	mg/L	142	207	258	138	73.7	161	163
9	Magnesium Hardness as $CaCO_3$	mg/L	137	340	196	182	150	258	179
10	Calcium as Ca	mg/L	57.1	83.0	103	55.3	29.6	64.7	65.5
11	Magnesium as Mg	mg/L	33.3	82.7	47.7	44.2	36.5	62.8	43.4
12	Chloride as Cl	mg/L	56.7	223	107	108	109	166	94.6
13	Sulphate as SO_4	mg/L	49.4	122	80.3	26.8	11.2	75.5	25.4
14	Total Alkalinity as $CaCO_3$	mg/L	290	199	225	288	230	192	191
15	Iron as Fe	mg/L	BQL (LOQ:0.1)	BQL (LOQ:0.1)	BQL (LOQ:0.1)	BQL (LOQ:0.1)	BQL (LOQ:0.1)	BQL (LOQ:0.1)	BQL (LOQ:0.1)
16	Silica as SiO_2	mg/L	12.7	6.95	27.1	2.05	19.6	28.2	25.3
17	Fluoride as F	mg/L	BQL (LOQ:0.2)	BQL (LOQ:0.2)	BQL (LOQ:0.2)	BQL (LOQ:0.2)	BQL (LOQ:0.2)	BQL (LOQ:0.2)	BQL (LOQ:0.2)
18	Nitrate as NO_3	mg/L	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)	BQL (LOQ:1)
19	Potassium as K	mg/L	9.65	10.1	8.62	5.41	2.3	17.1	10.2
20	Sodium as Na	mg/L	47.2	151	91.50	68.1	91.1	109	81.1

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 10500 : 2012 (referred as "*Standards*" from herein).

Odour & Taste :

The water is oduorless. 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: 7.41

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

Turbidity:

Value observed in the Project Site: less than 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: 468 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 top soil 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: 57.1 mg/L.

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

Calcium is an essential macronutrient. The value of the calcium is within the prescribed Acceptable and permissible standards. The higher level of calcium may cause hardening in domestic equipment and will also reduce 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 : 33.3 mg/L.

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

The value of Magnesium in the project site is within 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: 56.7 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, increase level of metals. It imparts a bitter taste to the water.

Total Alkalinity as $CaCO_3$:

Value observed in the project site: 290 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 include carbonates, bicarbonates and hydroxides. The value of the total alkalinity is within the project site, which will impart soda taste to the water.

Hardness:

Value observed in the Project Site: 279 mg/L.

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

The value of Hardness in the project site is within the acceptable limit and 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 **Berigai Lake** Which is located at a distance of **1.81 km, NNE** from the quarry. The results are summarized below.

Table 3-7 Surface Water Sample Results

S. No	Parameters	Units	Berigai Lake
1	pH (at 25°C)	-	7.47
2	Electrical Conductivity	µS/cm	1045
3	Colour	Hazen Unit	10
4	Turbidity	NTU	5.9
5	Total Dissolved Solids	mg/L	565
6	Total Suspended Solids	mg/L	12.2
7	Total Hardness as $CaCO_3$	mg/L	216
8	Calcium Hardness as $CaCO_3$	mg/L	48.1
9	Magnesium Hardness as $CaCO_3$	mg/L	23.4
10	Calcium as Ca	mg/L	124
11	Magnesium as Mg	mg/L	85.3
12	Chloride as Cl	mg/L	232
13	Sulphate as SO_4	mg/L	0.23
14	Total Alkalinity as $CaCO_3$	mg/L	19.2
15	Iron as Fe	mg/L	120
16	Silica as SiO_2	mg/L	96.4
17	Fluoride as F	mg/l	1.72
18	Nitrate as NO_3	mg/L	105
19	Potassium as K	mg/L	14.2
20	Sodium as Na	mg/L	16.5
21	Total Kjeldahl Nitrogen as N	mg/L	3.2
22	Biochemical oxygen Demand @ 27c	mg/L	11.3
23	Chemical Oxygen Demand	mg/L	5.66

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 : January to February

Pre-monsoon season : March to May

Monsoon season : July to September

Post-monsoon season : October to December

i) **Climate**

Eastern part of the district experiences hot climate and 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 38^0 C and minimum temperature is 18^0 C.

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, 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 (282.60 mm).

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
2021	5.7	0	48.7	37.9	198.6	19.1	24.6	189.7	291.7	219	54.5	56.2
2022	0	1.3	34.9	14.4	114.5	41.1	10.5	18.5	152.1	85.2	33.2	4.8
2023	13.2	1.2	4.5	47.2	96.5	33.6	34.6	94.7	138.6	177.7	48.7	39.5
2024	0.3	0	6.9	61.7	57.9	59	147.2	66.8	142.1	142	77	42.6
2025	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

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 November 2025 to January 2026.

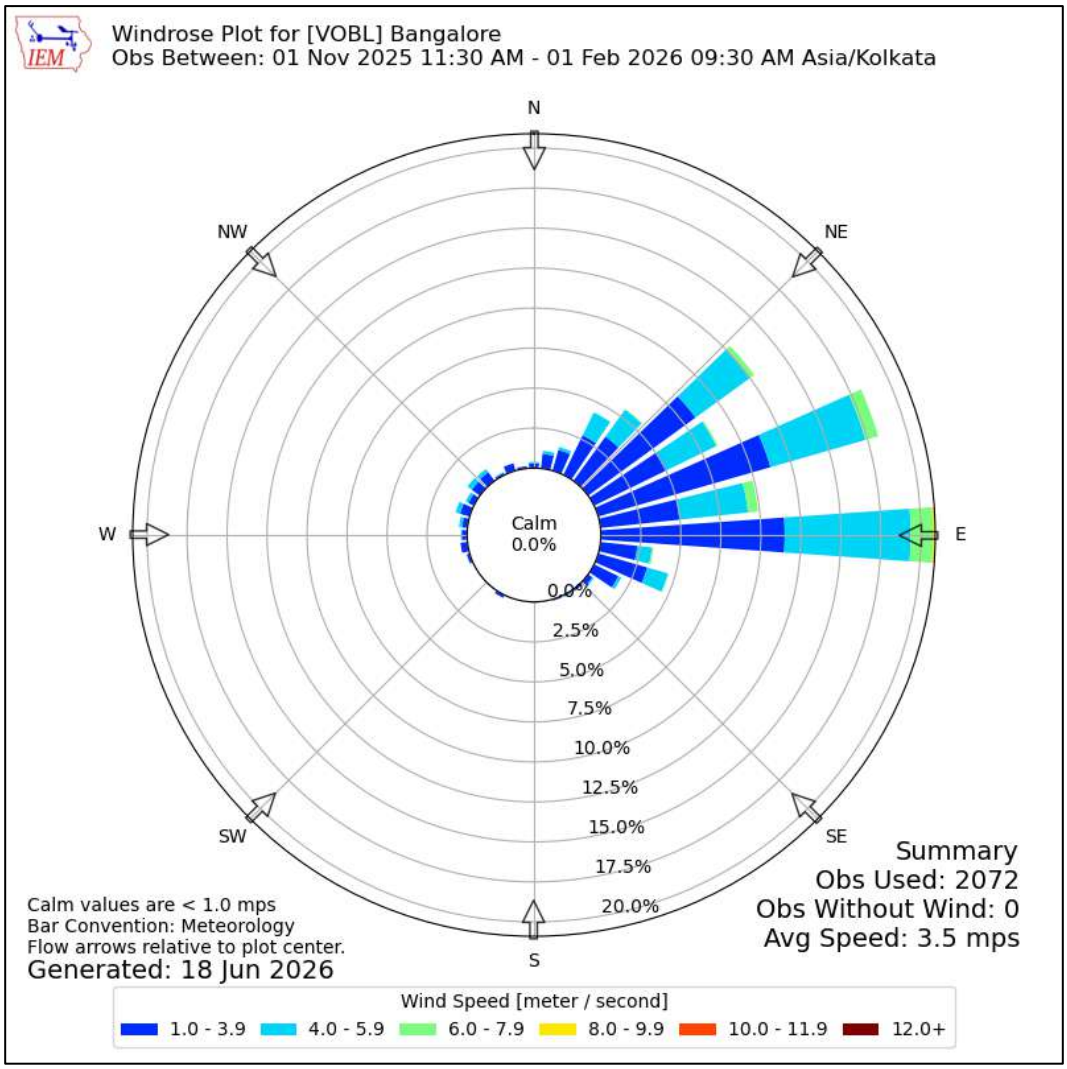


Figure 3.7 - Wind rose (November 2025 to January 2026).

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

<table>
<tr><td colspan="2">Environmental Parameters: Ambient Air</td></tr>
<tr><td>Monitoring Period</td><td>November 2025 to January 2026</td></tr>
<tr><td>Design Criteria</td><td>The monitoring stations are selected based on factors like topography/terrain, prevailing meteorological conditions like predominant wind direction (November 2025 to January 2026), etc., play a vital role in the selection of air sampling stations. Based on these criteria, 5 air sampling station were selected in the area as shown below.</td></tr>
<tr><td>Monitoring Locations</td><td>
<table>
<tr><th>Location & Code</th><th>Distance & Direction (km)</th><th>Wind Direction</th></tr>
<tr><td>Project Site.</td><td>-</td><td>-</td></tr>
<tr><td>Government Hr Sec School, Berigai</td><td>2.28 Km, E</td><td>E - Upwind</td></tr>
<tr><td>Taladha muneeshwara Temple, Mudugurikki</td><td>6.11 Km, E</td><td>E - Upwind</td></tr>
<tr><td>Panchayat Union Primary School, Devichettipalli</td><td>5.26 Km, W</td><td>W – Downwind</td></tr>
<tr><td>Panchayat Raj Office, Palavanapalli</td><td>4.61 Km, W</td><td>W - Downwind</td></tr>
<tr><td>Government High School, Kattinaickendoddi</td><td>2.72 Km, N</td><td>N – Crosswind</td></tr>
<tr><td>Government High School, Berigai</td><td>4.14 Km, SSW</td><td>SSW- Crosswind</td></tr>
</table>
</td></tr>
<tr><td>Methodology</td><td>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)</td></tr>
<tr><td>Frequency of Monitoring</td><td>2 days in a week, 4 weeks in a month for 3 months in a season.</td></tr>
</table>

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.

Table 3-9 Ambient Air Quality

Code	Location	PM 10 (µg/m³)				PM 2.5 (µg/m³)				SO_2 (µg/m³)				NOx (µg/m³)			
		Min	Max	Avg	98 percentiles	Min	Max	Avg	98 percentiles	Min	Max	Avg	98 percentiles	Min	Max	Avg	98 percentiles
AAQ 1	Project Site.	39	51	44	50	13	22	18	22	4	11	8	11	11	23	15	22
AAQ 2	Government Hr Sec School, Berigai	36	50	43	49	14	21	18	21	6	11	8	11	12	23	18	23
AAQ 3	Taladha muneeshwara Temple, Mudugurikki	40	55	48	54	17	28	22	27	7	18	12	18	17	30	21	29
AAQ 4	Panchayat Union Primary School, Devichettipalli	41	55	48	55	16	24	20	24	6	11	9	11	11	23	17	23
AAQ 5	Panchayat Raj Office, Palavanapalli	49	56	52	56	19	26	23	26	7	14	11	14	12	23	18	23
AAQ 6	Government High School, Kattinaickendoddi	48	55	52	55	18	24	21	24	6	13	9	12	16	27	21	27
AAQ 7	Government High School, Berigai	49	57	53	57	19	25	22	25	6	14	10	13	17	28	22	28
NAAQ Standards - Residential Area		100 (µg/m³)				60(µg/m³)				80 (µg/m³)				80 (µg/m³)			

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 (57 µg/m^3), PM 2.5 (28 µg/m^3), SOx (18 µg/m^3), NOx (30 µg/m^3) is observed in different places.

Inference:

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

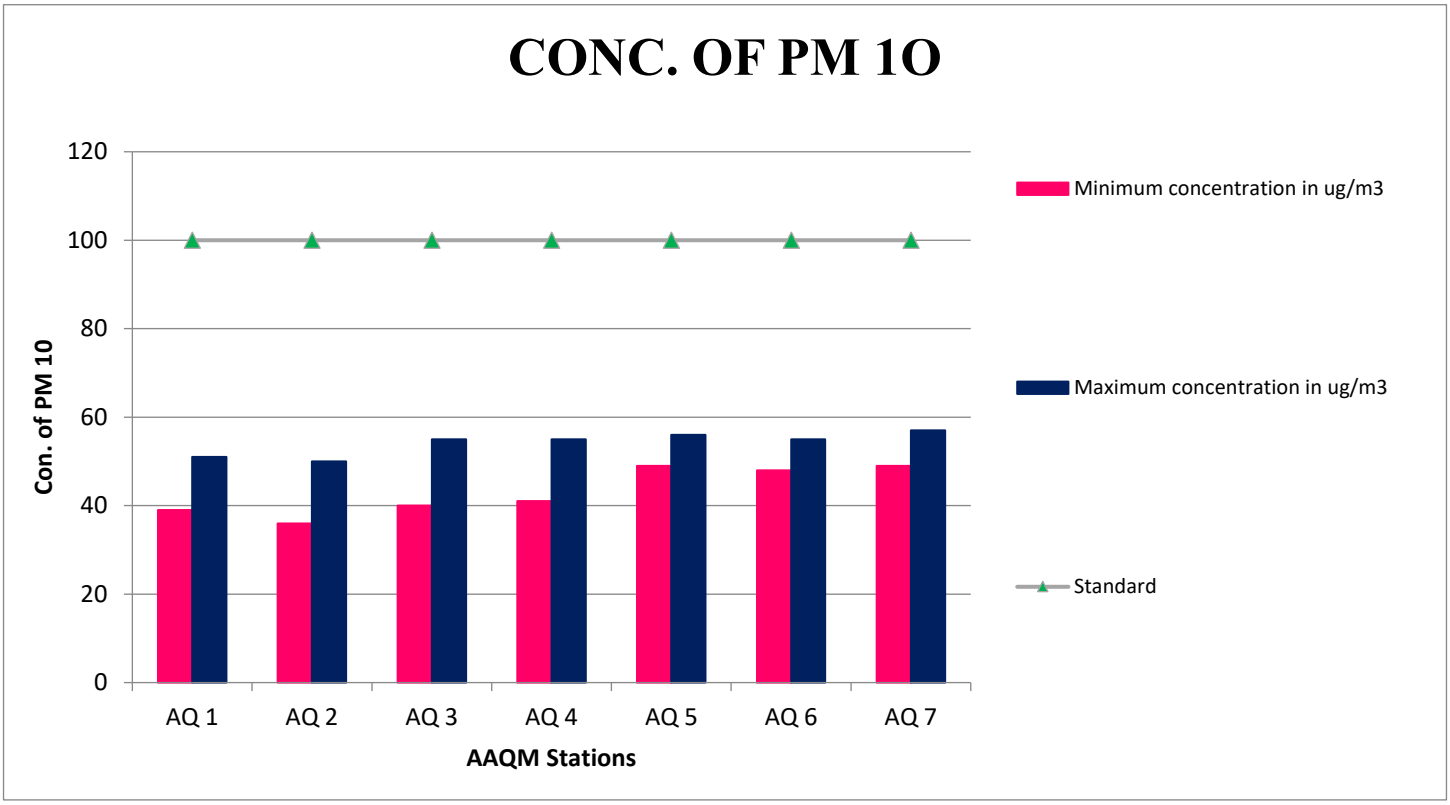


Figure 3.8 Concentration of PM10 (µg/m^3) in Study Area

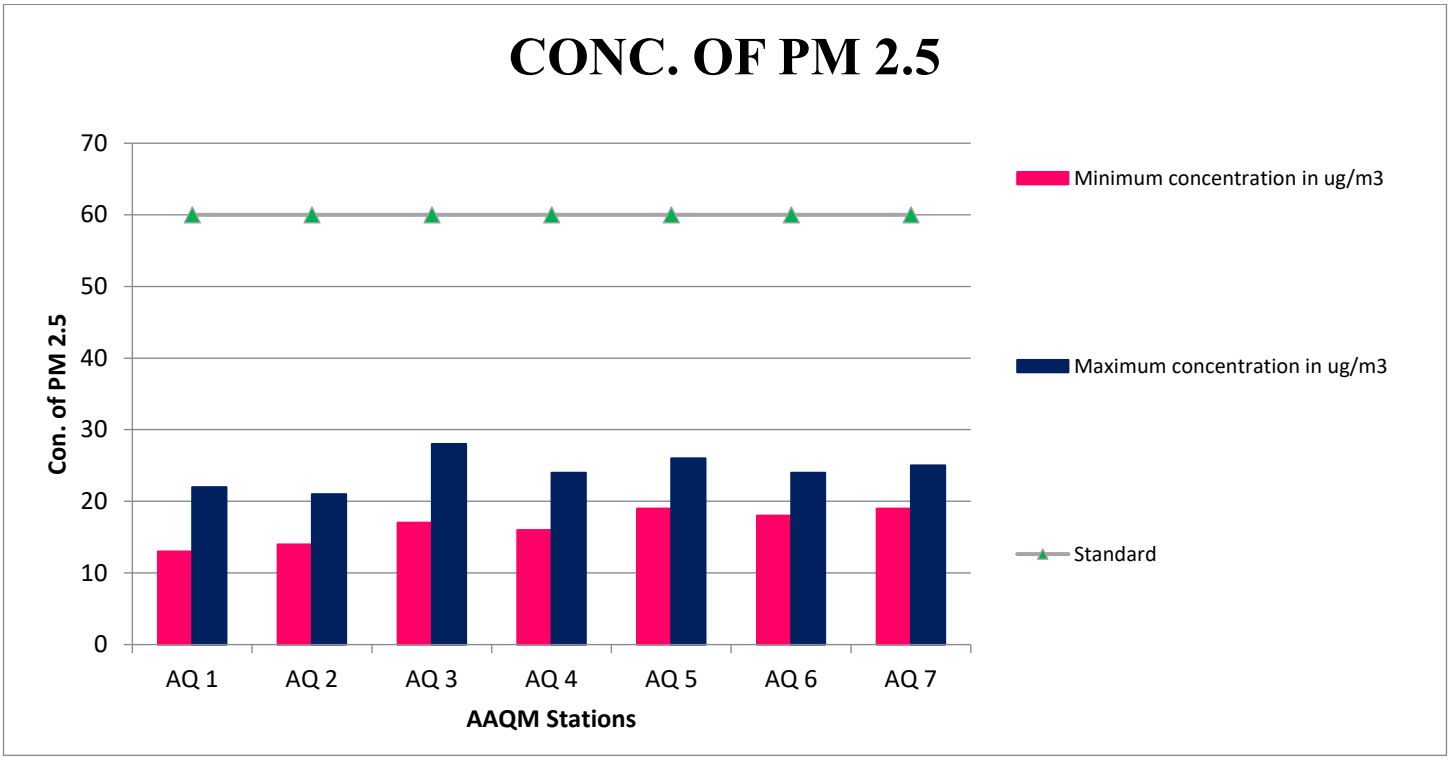


Figure 3.9 Concentration of PM2.5 (µg/m^3) in Study Area

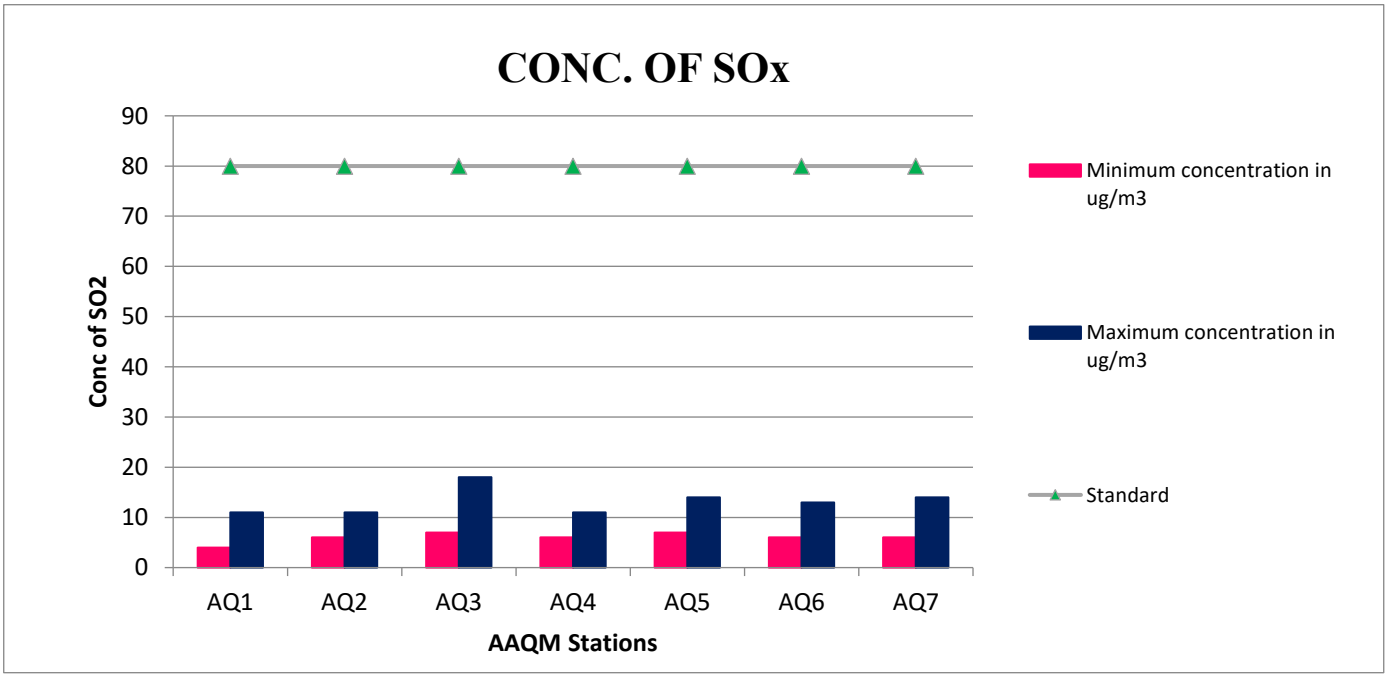


Figure 3.10 Concentration of SOx (µg/m^3) in Study Area

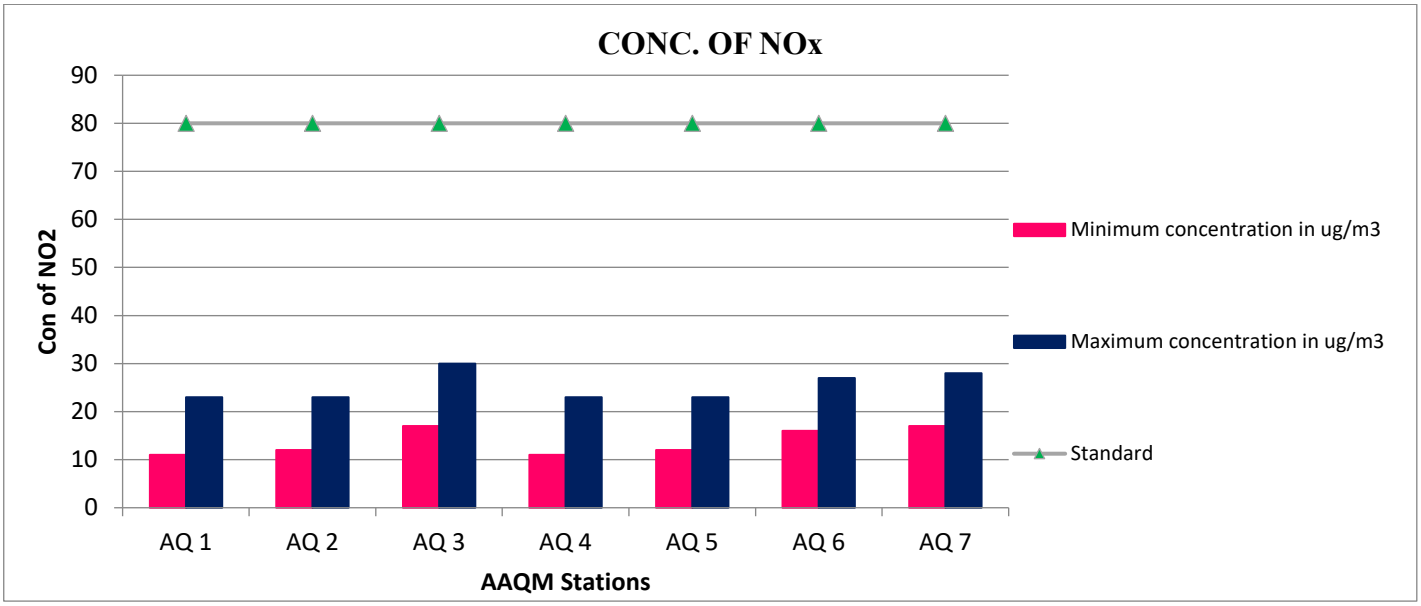


Figure 3.11 Concentration of NOx (µg/m^3) in Study Area

3.5 NOISE ENVIRONMENT:

Table 3-10 Noise Analysis

Environmental Parameters*: Noise Analysis*	
Monitoring Period	November 2025 to January 2026
Design Criteria	Based on the Sensitivity of the area
Monitoring Locations	Project Site. – N 1 Government Hr Sec School, Berigai – N 2 Taladha muneeshwara Temple, Mudugurikki – N 3 Panchayat Union Primary School, Devichettipalli – N 4 Panchayat Raj Office, Palavanapalli – N 5 Government High School, Kattinaickendoddi – N 6 Government High School, Berigai – N 7
Methodology	Noise level measurements were taken at the selected locations using noise level meter both during day and night time. 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	55	45	52
G.H.S Berigai	55	43	50
Taladha muneeshwara Temple	59	48	54
Panchayat Union Primary School Devichettipalli	57	46	53
Panchayat Raj Office, Palavanapalli	54	43	50
G.H.S Kattinaickendoddi	57	48	53
G.H.S Berigai	51	41	48

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	44	36	40
G.H.S Berigai	42	35	38
Taladha muneeshwara Temple	46	39	42
Panchayat Union Primary School Devichettipalli	47	39	42
Panchayat Raj Office, Palavanapalli	43	35	38
G.H.S Kattinaickendoddi	45	38	42
G.H.S Berigai	43	36	39

Observation:

The maximum Day noise and Night noise were found to be 59 dB(A) and 47 dB(A) respectively in Taladha muneeshwara Temple and Panchayat Union Primary School, Devichettipalli. The minimum Day Noise and Night noise were 51 dB(A) and 42 dB(A) respectively, which was observed in G.H.S Berigai and G.H.S Berigai. The observed values are all well within the Standards prescribed by CPCB.

3.6 SOIL ENVIRONMENT

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.

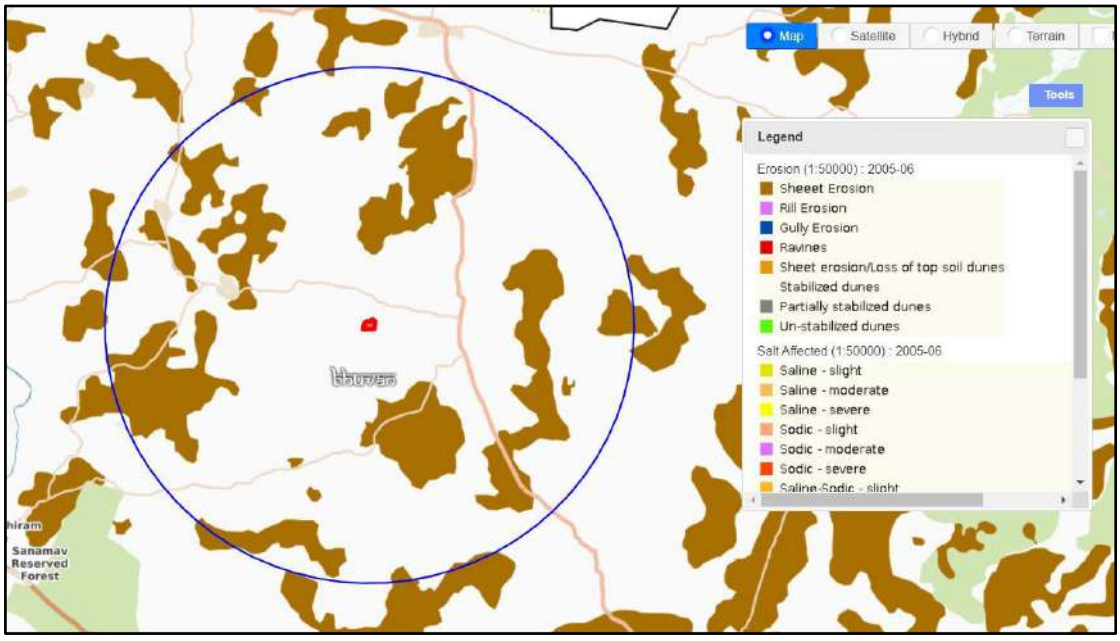


Figure 3.12 Soil Erosion pattern within 5 km radius of the project site

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	November 2025 to January 2026
Design Criteria	Based on the environmental settings of the study area
Monitoring Locations	Project Site – SQ1 Government Hr Sec School, Berigai – SQ2 Taladha muneeshwara Temple, Mudugurikki – SQ3 Panchayat Union Primary School, Devichettipalli – SQ4 Panchayat Raj Office, Palavanapalli – SQ5 Government High School, Kattinaickendoddi – SQ6 Government High School, Berigai – SQ7

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 (at 25^0C)	-	8.22	8.02	8.51	7.10	7.80	6.45	7.70
Electrical Conductivity	ms/cm	0.33	0.22	0.31	0.10	0.20	0.09	0.10
Water holding Capacity	ml/L	6.80	6.80	7.59	7.40	7.65	6.90	7.96
Chloride	mg/Kg	98	161	242	187	94	147	143
Calcium	mg/Kg	79.5	67.5	88.5	59.0	42.0	52.5	49.5
Sodium	mg/Kg	368	276	295	180	286	253	186
Potassium	mg/Kg	320	223	238	174	242	196	172
Organic matter	%	2.6	3.4	1.4	1.4	1.5	4.1	4.6
Magnesium	mg/Kg	31	57	50	82	79	17	18.5
Sulphate	mg/Kg	120	172	139	39	39	69	66
CEC	meq/100g	12.3	15	17	13	18	13	19
Carbonate	mg/Kg	NIL	NIL	NIL	NIL	NIL	NIL	NIL
Bi-Carbonate	mg/Kg	135	384	289	141	152	160	171
TKN	%	0.7	0.9	0.4	0.4	0.4	1.1	1.3
Bulk density	g/cm^3	1.1	1.1	1.4	1.2	1.2	1.2	1.3
Phosphorous	mg/Kg	112	99	79	102	106	95	89
Sand	%	56	53	57	52	51	54	50
Clay	%	8	7	5	4	8	8	8
Silt	%	36	40	38	44	41	38	42
SAR	meq/Kg	11.2	12.4	13.2	11.5	12.4	13.1	12.5

silicon	%	0.74	0.821	0.761	0.761	0.761	0.415	0.441

3.6.1.1 Physical Properties:

Regular cultivation practices increase the bulk density of soils thus inducing compaction. This results in reduction in water percolation rate and penetration of roots through soils. The 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 1.10 to 1.40 meq/100g which indicates favorable physical condition for plant growth. The water holding capacity was found in the range of 6.80 ml/l to 7.96 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 6.45 to 8.51, which indicates the 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 1.40 % to 4.60 %, which indicates the soil is slightly unfertile.

3.7 ECOLOGY AND BIODIVERSITY

Ecology and Biodiversity is studied for a 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.
- Random pairs method - Distance is measured from one individual to another on the opposite side of the sample point.
- Point-centered 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, 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 quadrate 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
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

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	Puliyamaram	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
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
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
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
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	Stachytarpheaurticifolia	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	Vishapoondu	45	13	24	2.08	0.54	3.85	25.77	13.13	Not Assessed
13	Euphorbia geniculata	Amman Pacharisi	5	3	24	0.13	0.13	1	1.55	3.03	Not Assessed

Table 3-18 Herbs & Grasses in the core zone

S. No.	Scientific Name	Local Name	Total No. of species	Total of Quadrants with .	Total No. of Quadra	Density	Frequency (%)	Abundance	Relative Density	Relative Frequency	IUCN Conservation 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
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

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

The biodiversity index is a quantitative measure that reflects how many different type 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	$H=\Sigma[(p_i)*\ln(p_i)]$ 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)= maximum diversity possible S=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

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
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
Stachytarpheaurticifolia	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	Vishapoondu	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

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

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.

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 stripped Palm Squirrel, Common Indian Hare, Common mongoose, Common Mouse etc., were observed during primary survey.

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 Mangoose	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
Sus scrofa domesticus	Domestic pig	Not listed	Not listed
Birds			

Milvus migrans	Black kite	IV	Least concern
Saxicoloides fulicatus	Indian Robin	IV	Least concern
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
Euploea core	Common crow	--	Least concern
Danaus genutia	Common tiger	--	Not listed
Eurema brigitta	Small grass yellow	--	Least concern

3.8 DEMOGRAPHY AND SOCIO ECONOMICS

The demography survey study is done within 10km radius from the project site.

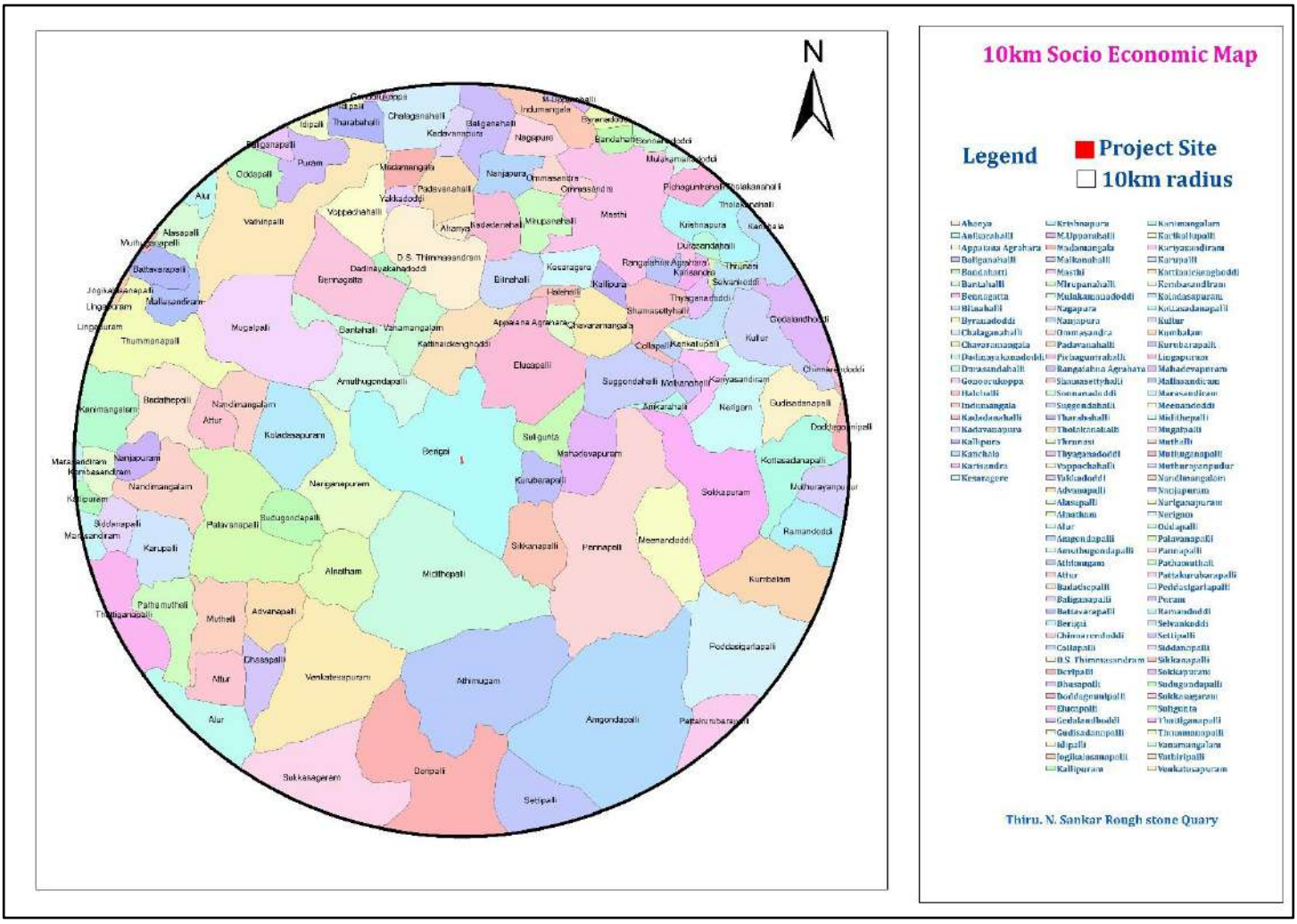


Figure 3.13 Socio Economic map surrounding the project site.

The population, Household, Sex ratio, Literacy rate, SC, ST details for all the villages in the study area is listed below:

Table 3-21: Demography Survey Study

S. No	Villages	House-hold	Population	Sex Ratio		Literacy Rate		SC	ST
				Male	Female	Male	Female		
1.	Meenandoddi	83	358	180	178	94	82	62	0
2.	Pannapalli	997	4431	2275	2156	1292	915	583	0
3.	Sikkanapalli	135	555	279	276	200	146	167	0
4.	Sokkapuram	280	1285	633	652	347	313	274	0
5.	Kurubarapalli	339	1571	820	751	437	320	713	0
6.	Alnatham	71	327	170	157	118	58	77	0
7.	Midithepalli	287	1287	667	620	369	261	278	31
8.	Berigai	1807	7884	3970	3914	3007	2522	597	6
9.	Suligunta	217	962	495	467	284	212	90	0
10.	Mahadevapuram	89	371	189	182	106	71	0	0

11.	Sudugondapalli	87	447	229	218	128	89	95	0
12.	Koladasapuram	221	857	429	428	276	216	390	0
13.	Advanapalli	58	239	123	116	75	50	1	0
14.	Amuthagondapalli	120	543	274	269	131	97	228	0
15.	Mugalpalli	239	970	500	470	344	253	199	0
16.	Elucapalli	93	420	210	210	141	96	322	0

Source: Census of India, 2011

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.

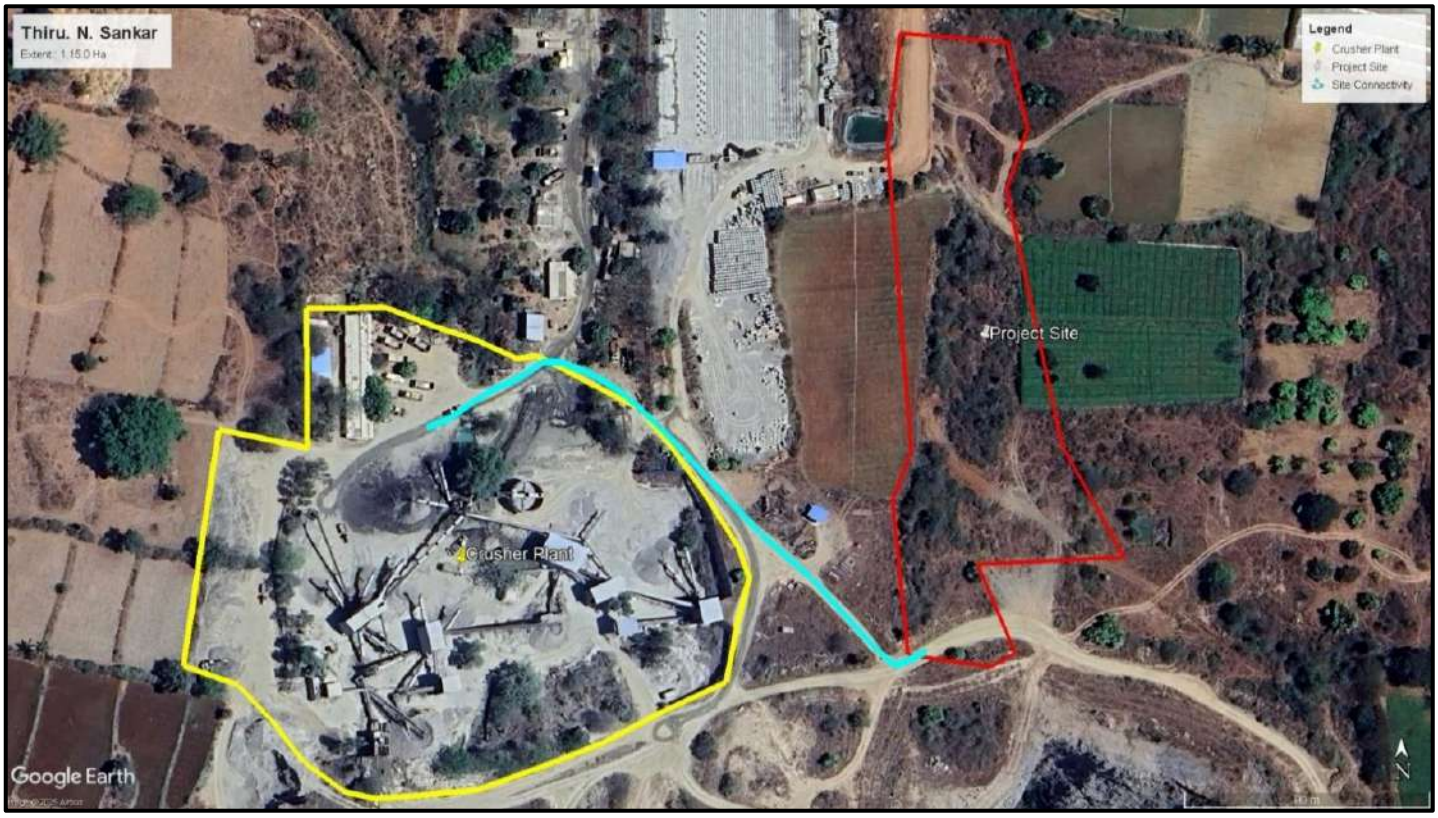


Figure 3.14: Site Connectivity

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
		SH 17 C	**-**	**SH 17 C**
1	Cars	813	1	813
2	Buses	294	3	882
3	Trucks	325	3	975
4	Two wheelers	967	0.5	483.5
5	Three wheelers	409	1.5	613.5
Total		**2808**	**-**	**3767**

Table 3-23: Existing Traffic Scenario and LOS

Road	V (Volume in PCU/hr)	C (Capacity in PCU/hr)	Existing V/C Ratio	LOS
SH 17 C	3767/24=157	413	0.38	**B**

Note: The existing level may be "Very Good" for SH 17 C

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

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

4.2 LAND ENVIRONMENT:

Aspect	Impact	Mitigation Measures
Mining of rough stone	The proposed 1.15.0 Ha mine located in Berigai Village having 225277.25 Ts of Rough Stone, 31,080 Ts of Weathered Rock & 15,540 Ts of Topsoil respectively for 10 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 5 years, mining lease area will be converted into ultimate pit. 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 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. 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 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 575 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. 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 1.0 m of Topsoil & 2.0 m of Weathered Rock and estimated quantities of 15,540 Ts & 31,080 Ts. Topsoil formation will be removed and transported to the needy users, 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 Elevated terrain where the altitude of the area is Maximum 876 to 892 m 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. 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.

4.3 WATER ENVIRONMENT:

Aspect	Impact	Mitigation Measures
Drilling, Blasting, Loading and unloading, Transportation of the excavated mineral.	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 41 m (1.0m Topsoil, 2.0m Weathered Rock & 38.0m Rough stone, whereas the ground water table is at 82 m below the ground level. The municipal wastewater will be disposed into

	The ground water depletion may occur due to mining activity	septic tanks of 5 cum and soak pit. No chemicals consisting of toxic elements will be used for carrying out mining activity. The ground water table is at a depth of 82 m 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.
	Chemicals consisting of nitrate used for blasting may pollute the surface run off.	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.
	Improper management of Domestic wastewater in the Mine lease may create unhygienic conditions in the site thereby causing health impacts to the labours.	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

4.4 AIR ENVIRONMENT:

Aspect	Impact	Mitigation Measures
Drilling, Blasting, Loading and unloading, Transportation of the excavated mineral.	***Impacts during Operation Phase*** During mining operation, fugitive dust and other air pollutants like particulate matter (PM_{10} & $PM_{2.5}$) will be generated.	***Mitigation Measures during Operation Phase*** It is proposed to plant 575 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

	The main source of pollutants arises due to drilling and blasting. 2 Nos. of Tipper will be used for loading and unloading, 1 No of Excavator (1.20 m^3 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. *Effect on Human* • 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. *Effect on Plants* • Stomatal index may be minimized due to dust deposit on leaf.	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 SH 17 C. Alternatively, gravelled road may be constructed between mine lease area and nearest paved road connectivity. The speed of trucks plying on the haul road will be limited to 20 km/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.

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 in 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 – 1.20 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

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 November 2025 to January 2026 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 dimensions of the sources were set to 3 m were used as an input to replicate 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.
- 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 November 2025 to January 2026 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 kg PM10/ Hr excavation	**USEPA (2008)**	
	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		

4.5 NOISE ENVIRONMENT:

Aspect	Impact	Mitigation Measures
Drilling, Blasting, Loading and unloading, Transportation of the excavated mineral.	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.	• 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.

	Number of vehicles will be increased due to the proposed mining activity hence vehicle may collate which may result in unwanted sound and can also cause impact on human health like breathing and respiratory system, damage to lung tissue, influenza or asthma.	The noise generated by the machinery will be reduced by proper lubrication of the machinery and other equipments. • It is proposed to plant 575 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 roads viz. SH 17C to avoid traffic congestion. • Health check-up camps will be organized once in six months. • Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas. • Provision of quiet areas, where employees can get relief from workplace noise.

4.6 BIOLOGICAL ENVIRONMNENT:

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., 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 0.47.0 Ha of land is utilized for greenbelt development (575 Nos – 10 years). This will attract avifauna thus enhancing

		the existing ecological environment.

4.7 SOCIO ECONOMIC ENVIRONMNENT:

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 Government Poramboke land and the land is vacant where there is 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 1.50 km, S 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 20 km/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 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., Rs.5,00,000/- will be allocated. **Govt Hr. Sec School. Berigai Village, Shoolagiri Taluk, Krishnagiri District. Providing facilities like:** Funds for Library Development within the School Premises. Computer with Internet Connection for Education purpose. Basic amenities such as Environmental awareness books (Tamil) in Library for students, Green Belt development, RO water purifiers, Hygienic Toilet and maintenance of toilet upto lease period.

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 Labors	Labors 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 checkups will be held once in every six months.

5 Analysis Of Alternatives

5.1 GENERAL

Analysis of alternatives 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 environmentally friendly and cost effective. The mine plan and mine closure plan have 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. TO25B0108TN5887647N Dated 27.11.2025.

The study for alternative analysis involves in-depth examination of sites 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 principle 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.

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 loose and to bring it to appropriate size.
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 Thuppuganapalli 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 1.50 km East from site.

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.	1. Project Site. 2. Government Hr Sec School, Berigai 3. Taladha muneeshwara Temple, Mudugurikki

SO_2 NO_X		Twice a week, One non monsoon season 8 hourly, twice a week 24 hourly, twice a week	4. Panchayat Union Primary School, Devichettipalli 5. Panchayat Raj Office, Palavanapalli 6. Government High School, Kattinaickendoddi 7. Government High School, Venkatesapuram
Noise	7 locations	24 hourly Once in 7 locations	1. Project Site. 2. Government Hr Sec School, Berigai 3. Taladha muneeshwara Temple, Mudugurikki 4. Panchayat Union Primary School, Devichettipalli 5. Panchayat Raj Office, Palavanapalli 6. Government High School, Kattinaickendoddi 7. Government High School, Venkatesapuram
Water (Ground water) pH Temperature Turbidity Magnesium Hardness Total Alkalinity Chloride Sulphate Fluoride Nitrate Sodium	7 locations	Once in 7 locations	1. Project Site. 2. Government Hr Sec School, Berigai 3. Taladha muneeshwara Temple, Mudugurikki 4. Panchayat Union Primary School, Devichettipalli 5. Panchayat Raj Office, Palavanapalli 6. Government High School, Kattinaickendoddi 7. Government High School, Venkatesapuram

Water (surface water) pH Temperature Turbidity Magnesium Hardness Total Alkalinity Chloride Sulphate Fluoride Nitrate Sodium	Sample from nearby lakes/river	One time Sampling	1. Berigai Lake
Soil (Organic matter, Texture, pH, Electrical Conductivity, Permeability, Water holding capacity, Porosity)	7 locations	Once in 7 locations	1. Project Site. 2. Government Hr Sec School, Berigai 3. Taladha muneeshwara Temple, Mudugurikki 4. Panchayat Union Primary School, Devichettipalli 5. Panchayat Raj Office, Palavanapalli 6. Government High School, Kattinaickendoddi 7. Government High School, Venkatesapuram
Ecology and biodiversity Study	Study area covering 5 km radius	One time Sampling	
Socio- Economic study (Population, Literacy Level, employment, Infrastructure like school, hospitals & commercial establishments)	Villages around 5 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

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 includes,

Existing Quarries:

1. Thiru. G. Murugesh – 2.18.0 Ha
2. Thiru. K. Narayanan – 2.44.0 Ha

Abandoned / Old quarries: Nil.

Proposed Quarries:

1. Thiru. N. Sankar – 1.15.0 Ha

The Total extent of the Existing / Proposed quarries are 5.77.0 Ha.

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 risks to miners. Unsafe conditions and practices in mines lead to a number of accidents and causes loss and injury to human 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.

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

The quarry is situated more than 1.70 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 7 Nos.
- Loading Equipment – Excavator of 1.2 Cum Bucket Capacity (with Bucket attachment)
- Transportation (includes within the mine and mine to destination) – Tipper 2 Nos. of 10 M.T capacity (from quarry to needy peoples and local crushers)

a. Risk:

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

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 (16 Nos.) and regular inspection for their use;
- In case of eventuality, first aid will be given by the senior safety office 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 will fully do anything likely to endanger life or limb in the mine, or negligible or will fully omit to do anything necessary for the safety of the 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. 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 & 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 preparing 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)

7.2.2 *Onsite off-site emergency Plan:*

7.2.2.1. 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.

7.2.2.2. Disaster due to natural calamities like:

- Flood/ heavy rains which can involve natural landslides.
- Earth quake
- Cyclone
- Lightening

7.2.3 *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

7.2.4 *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

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 in 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 Government Poramboke land. There is no displacement of the population within the project area and adjacent nearby area and hence Rehabilitation & Resettlement is not applicable.

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 resources for construction. Due to demand supply chain, excavated minerals (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 indirect employment opportunities. The rough stone for the infrastructural development in the area will be made available from the local markets at reasonably lower prices.

As a part of CER, i.e., Rs.5,00,000/- will be allocated. The detailed agenda, which is to be executed, has been framed. The salient features of the programmes are as follows: **Govt Hr. Sec School. Berigai** Village, Shoolagiri Taluk, Krishnagiri District. Providing facilities are,

- Funds for Library Development within the School Premises.
- Computer with Internet Connection for Education purpose.

- Basic amenities such as Environmental awareness books (Tamil) in Library for students, Green Belt development, RO water purifiers, Hygienic Toilet and maintenance of toilet upto lease period.

8.3 PROJECT COST / INVESTMENT DETAILS

1 **C. Fixed Asset Cost**:

Land Cost	:	Rs. 1,29,04,608/- (Leased Tender Amount for Govt. Poramboke Land)
Labour Shed	:	Rs. 1,20,000/-
Sanitary Facility	:	Rs. 70,000/-
Refilling/Fencing cost	:	Rs. 80,000/-
Total	=	**Rs. 1,31,74,608/-**

2 **D. Operational Cost:**

Machinery cost	:	**Rs.40,00,000/-**
Total Project Cost (A + B)	:	**Rs. 1,71,74,608/-**

9 Environmental Cost Analysis

Not Applicable, Since Environmental Cost Benefit Analysis not recommended at the Scoping stage.

10 Environmental Management Plan

10.1 INTRODUCTION

This chapter comprehensively presents the Environmental Management Plan (EMP), which includes the administrative and technical setup, summary matrix of EMP, and 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.

10.2 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 60^0 from horizontal. Moreover, all safety standards/ safeguards will be implemented as per guidelines prescribed by Director General of Mines Safety.

10.3 MINE DRAINAGE

10.3.1 *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.,

10.3.2 *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.

10.3.3 *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, Thiru. N. Sankar will work in association with M/s. Ecotech Labs Pvt Ltd.

Table 10-1: 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 (PM_{10} & $PM_{2.5}$) 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 drilling, blasting may generate noise	Use of personal protective devices i.e., earmuffs and earplugs by workers, who are working in high noise generating areas.
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 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 exploitation of natural resources & increase in carbon footprint.	• Use of locally available construction materials.

Table 10-2: Budgetary Allocation for EMP during Mining

I. EMP Cost :

	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	11500	11500

	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	300000	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	50000	5000
	No overloading of trucks/tippers/tractors	Manual Monitoring through Security guard	0	584717
	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 Governers @ 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	23000
	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 HEMM at regular interval will be done	Provision made in Operating Cost	0	0
	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
	NONEL Blasting will be practiced to control Ground vibration and fly rocks	Rs. 30/- per 6 Tonnes of Blasted Material	0	402188
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	11500	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	230000	10000
	3. Progressive Closure Activity Green belt development - 500 trees per one hectare - (200 Inside Lease Area & 300 Outside Lease Area)	Site clearance, preparation of land, digging of pits / trenches, soil amendments, transplantation of saplings @ 200 per plant (capital) for plantation inside the lease area and @ 30 per plant maintenance (recurring)	46000	6900
		Avenue Plantation @ 300 per plant (capital) for plantation outside the lease area and @ 30 per plant maintenance (recurring)	103500	10350
	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	63488	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	1455057	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
	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)	72000	18000
	Health check up for workers will be provisioned	IME & PME Health check up @ Rs. 1000/- per employee	0	18000
	First aid facility will be provided	Provision of 2 Kits per Hectare @ Rs. 2000/-	0	2300
	Slope Stability Action Plan	Slope Stability action plan in the end of ninth year plan period	300000	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	57500	10000
	Installation of CCTV cameras in the mines and mine entrance	Camera 4 Nos, DVR, Monitor with internet facility	30000	5000
	Implementation as per Mining Plan and ensure safe quarry working	Mines Manager (1st Class / 2nd 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)			**1372000**	**2059955**
Grand Total (Rs)			**3431955**	

Overall Budget

Year	Cost (@ 5% per year inflation adjustment) in Rs	Year	Cost (@ 5% per year inflation adjustment) in Rs
1st Year	3431955	6th Year	2629083
2nd Year	2162953	7th Year	2760537
3rd Year	2271100	8th Year	2898564
4th Year	2384655	9th Year	3043492
5th Year	2503888	10th Year	3195666
Total EMP Cost – Rs. 2,72,81,893/- (Rs. 272 Lakhs)			

11 Summary & Conclusion

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

11.1 INTRODUCTION

Thiru. N. Sankar Rough Stone Quarry site is a cluster of 3 mining projects. The individual mine lease area is 1.15.0 Ha of Rough Stone Quarry located at S.F.Nos. 305/4 (Part) of Berigai Village, Shoolagiri Taluk in Krishnagiri District.

11.2 PROJECT OVERVIEW

Table 11-1: Project Overview

S.No.	Description	Details
1	Project Name	Rough Stone Quarry - 1.15.0 Ha
2	Proponent	Thiru. N. Sankar Rough Stone Quarry
3	Mining Lease Area Extent	1.15.0 Ha
4	Location	S.F.Nos. 305/4 (Part), Berigai Village, Shoolagiri Taluk, Krishnagiri District.
5	Latitude	12° 47' 44.4512”N to 12° 47' 36.8734”N
6	Longitude	77° 57' 37.7112"E to 77° 57' 34.8443"E
7	Topography	Elevated terrain
8	Site Elevation above MSL	876 - 892 m above MSL.
9	Topo sheet No.	57- H/13
10	Minerals of Mine	Rough Stone Quarry
11	Proposed production of Mine	2,25,277.25 Ts of Rough Stone, 15,540 Ts of Topsoil and 31,080 Ts Of Weathered Rock.
12	Ultimate depth of Mining	41.0 m (1.0m Topsoil, 2.0m Weathered Rock & 38.0m Rough stone (16 m AGL + 25 m BGL)
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	18 Nos.
17	Mining Lease	Letter was obtained from The Deputy Director (FAC), Dept. of Geology & Mining, Krishnagiri vide Rc. No. 14/2025/Mines, Dated: 27.02.2025.
18	Mining Plan Approval	Letter was obtained from The Regional Joint Director, Deputy Director (FAC), Dept. of Geology & Mining, Krishnagiri vide Roc. No. 14/2025/Mines Dated: 01.09.2025 Revised Mining Plan approval was obtained from the Assistance Director, Dept. of Geology and Mining, Krishnagiri District vide Roc. No. 14/2025/Mines Dated: 15.05.2026
19	Production details	Geological resources: 12,01,750 Ts Proposed year wise recoverable reserves: 2,25,277.25 Ts of Rough Stone for 10 years.
20	Boundary Fencing	7.5 m & 10 m barrier all along the boundary Fencing will be provided.
21	Disposal of overburden	The entire lease area covers 1.0 m of Topsoil & 2.0 m of Weathered Rock and estimated quantity of total 46,620 Ts. Topsoil formation will be removed and transported to the needy users, only after obtaining permission and paying necessary seigniorage fees to the Government.
22	Ground water	The quarry operation is proposed up to a depth of 41.0 m (1.0m Topsoil, 2.0m Weathered Rock & 38.0 m Rough stone (16 m AGL + 25 m BGL). The water table is below 82 m from ground level which is observed from the nearby open wells and bore wells. Hence the ground water will not be affected in any manner due to the quarrying operation during the entire lease period.
23	Habitations within 300m radius of the Project Site	There is no approved Habitation within 300m radius of the project site.
24	Drinking water	Water will be supplied through tankers from Midithepalli village which is 1.50 Km, E of the project area

11.3 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.

Table 11-2: 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 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	Wastewater will be generated due to mining activity and from other domestic activities. These may contaminate the ground water leading to ground water.	No wastewater 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.

	The mining activity may affect the ground water table	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 health condition of the workers by creating headache	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. 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.

12 Disclosure of Consultant

12.1 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.

12.2 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.
- 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 Quarry- 1.15.0 Ha by Thiru. N. Sankar at S.F.No. 305/4 (Part), Berigai 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:

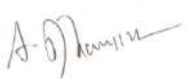
Period of involvement: 01.12.2021 to Till now

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

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

Pallikaranai

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 ***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***	
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***	
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. 305/4 (Part), Berigai 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 0400

ANNEXURE - I

TERMS OF REFERENCE (TOR), STANDARD TOR CONDITIONS WITH ADDITIONAL TOR POINTS

File No: 12880
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA), TAMIL NADU)
***

Dated: **27/11/2025**

To,

Thiru. Sankar. N
S/o, Nagaraju, D.No.1/45A, Bithireddy Village, Pachappanatti Post, Denkanikottai taluk, Krishnagiri - 635113. TAMIL NADU.
sankarrsq@gmail.com

Subject: Grant of Terms of Reference along with Public Hearing under the provision of the EIA Notification 2006-regarding.

Sir/Madam,

Sub: SEIAA, Tamil Nadu – Proposed Rough Stone quarry over an extent of 1.15.0 Ha of in S.F. Nos: 305/4 (Part) in Berigai Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu by Thiru. N. Sankar - 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/555007/2025, Dated: 13/10/2025.
2. Your application submitted for Terms of Reference dated: 16.10.2025
3. Minutes of the 640th SEAC -I Meeting held on 10.11.2025.
4. Minutes of the 921st Authority meeting held on 24.11.2025

2. The particulars of the proposal are as below:

(i) TOR Identification No.	TO25B0108TN5887647N
(ii) File No.	12880
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals
(vii) Name of Project	Thiru. N. Sankar Rough Stone Quarry
(viii) Name of Company/Organization	Sankar N
(ix) Location of Project (District, State)	KRISHNAGIRI, TAMIL NADU
(x) Issuing Authority	SEIAA
(xi) Applicability of General Conditions	no
(xii) Applicability of Specific Conditions	no

1.In view of the particulars given in the Para 1 above, the project proposal interalia 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 24.11.2025. 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 **Thiru. N. Sankar** 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 OMNo.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 Additional Chief 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 Chairperson, 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, Sasthri Bhawan, Nungambakkam, Chennai
11. File Copy

Annexure 1

Specific Terms of Reference s for (Mining Of Minerals)

1. Seiaa Specific Conditions :

S. No	Terms of Reference
1.1	The authority noted that the subject was appraised in the 640th SEAC-I Meeting held on 10.11.2025.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 161673 m ^{3} of rough stone up to the depth of 36m 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 & normal

S. No	Terms of Reference
	conditions & the conditions mentioned in SEIAA Specific & Standard conditions. 1. Before appraisal of the EIA, the Project Proponent shall furnish a NoC from the Deputy Director of Horticulture, Krishnagiri District, considering the rose cultivation in the nearby area.

2. Seac Conditions - Site Specific

S. No	Terms of Reference
2.1	**1. The proponent shall submit a revised Mining Plan incorporating the formation of benches at above ground level (AGL), and include the same in the EIA.** 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

S. No	Terms of Reference
	be included in EIA Report. 6. The DFO letter stating that the proximity distance of Reserve Forests, Protected Areas, 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.

S. No	Terms of Reference
	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 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

S. No	Terms of Reference
	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. 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.

S. No	Terms of Reference
	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. 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. **Agriculture & Agro-Biodiversity** 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, horti-cultural 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. **Forests** 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. **Water Environment** 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: a) Hydrothermal/Geothermal effect due to destruction in the Environment. b) Bio-geochemical processes and its foot prints including Environmental stress. c) Sediment geochemistry in the surface streams. **Energy**

S. No	Terms of Reference
	28. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished. **Climate Change** 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. **Mine Closure Plan** 32. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued. **EMP** 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. **Risk Assessment** 35. To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining. **Disaster Management Plan** 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/untoward 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. **Others** 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

S. No	Terms of Reference
1.2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine 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 areashould 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 givenwith 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 rea 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 rea 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

S. No	Terms of Reference
	would be desirable for representative of the State Forest Department to assist the State Expert Appraisal 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 Wildlifeand 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

S. No	Terms of Reference
	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
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 Central 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

S. No	Terms of Reference
	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
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

S. No	Terms of Reference
1.44	Besides the above, the below mentioned general points are also to be followed:- a) All documents to 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

e-Compliance
e-Payments
e-Processing
CPC GREEN
Nature Protects if She is Protected

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 cle arly 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 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 is acquisition, nearby (in 2-3 km.) water body, population, with in 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 -l1013/77/2004-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.

COMPLIANCE OF TOR CONDITIONS

Point wise compliance of ToR points issued by SEIAA, TN vide TOR Identification No. TO25B0108TN5887647N Dated: 27.11.2025 for Mining of Minor Minerals in the Mine of "Proposed Rough stone Quarry Over an Extent of 1.15.0 Ha at S.F.No. 305/4 (P) of Berigai Village, Shoolagiri Taluk, Krishnagiri District, Tamilnadu State.

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.	Precise Area Communication Letter received from The Deputy Director (FAC), Dept. of Geology & Mining, Krishnagiri vide Rc. No. 14/2025/Mines, Dated: 27.02.2025 Mining Plan was approved by the Regional Joint Director, Deputy Director (FAC), Dept. of Geology & Mining, Krishnagiri vide Roc. No. 14/2025/Mines Dated: 01.09.2025 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 ten years is proposed in the EIA/EMP in chapter no-2.	Chapter-2 Table No.2.2
2.	A copy of document in support of the fact that the Proponent is the rightful lessee of the mine should be given.	It is Government Poramboke land and the details of the same has been enclosed in Annexure.	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 Regional Joint Deputy Director, Dept. of Geology & Mining, Krishnagiri	Annexure-VI Chapter- II
4	All corner coordinates of the mine lease area, superimposed on a High-Resolution Imagery/toposheet 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,
5	Information should be provided in Survey of India Topo sheet in 1:50,000 scale indicating geological map of the area, important water bodies, streams and rivers and soil characteristics	Topo map as attached in Chapter - 2	Chapter - 2,
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 have been given in Chapter 2.	Chapter - 2

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.	Noted.	
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,
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 /	Study area comprises of 10 km radius from the mine lease boundary. Key Plan showing core zone (ML area).	Chapter - 2

	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.	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 have been prepared and incorporated in Chapter - 3 of EIA / EMP Report. There is no national park, migratory routes of fauna in the study area. ESZ of Cauvery North wildlife sanctuary is located in 27.27 km, S	Chapter - 2,
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.	The over burden in the form of Topsoil and Weathered Rock are used for filling and levelling of low-lying areas of road projects and other infrastructure development work in and around the district.	Chapter - 2,
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	The document will be obtained and furnished in the Final EIA.	

	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.	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

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 mitigate 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	
17.	Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, 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.	There is no National Parks, Bird Sanctuaries, Biosphere Reserves, Wildlife Corridors, Tiger / Elephant Reserves / Critically Polluted areas within 10 km radius of the mining lease area.	
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	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	Chapter – 3

	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 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.	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.	
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	There is no Coastal Zone within 15km radius of the project site.	

	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 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	
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	Baseline data collected during Summer Monsoon (November 2025 to January 2026) has been incorporated in EIA/EMP report.	Chapter 3

	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.	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.	
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 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	Air quality modelling & Impact of Air quality will be furnished in Final EIA report Transportation of mineral during operation of mines will be done by road ODR 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	Chapter - 4

	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.	Total water requirement: 2.0 KLD Dust Suppression: 0.5 KLD Domestic Purpose: 1.0 KLD Plantation :0.5 KLD Domestic Water will be sourced from nearby Midithepalli village which is about 1.70 km S of the area.	Chapter-2
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 the Project, if any, should be provided.	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 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
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	Maximum working depth: 16 m Surface Level and 25 m Below Ground Level The ground water table is reported as 82 m below surface ground level in nearby wells of this area. Now, the present quarry shall be proposed above the water table and hence,	Chapter - 2

	permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.	quarrying may not affect the ground water So mine working will not be intersecting the ground water table.	
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
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.	Project site elevation: 876 to 892 MSL Water Table Depth: 82 m Below Ground Level	Chapter - 2
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	Green Belt Development plan is proved given in Chapter 2.	Chapter - 2

	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	Impact on local transport infrastructure due to the project has been assessed. There shall not be much impact on local transport. Traffic density from the proposed mining activity has been incorporated in EIA/EMP report.	Chapter - 3
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 VII
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	Suitable measure will be adopted to minimize occupational health impacts of the project. The project shall have positive impact on local	Chapter - 10

	medical examination schedules should be incorporated in the EMP. The project in the mining area may be detailed.	environment. Details are given in chapter - 10 of EIA/EMP.	
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
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 have been discussed in Chapter 4	Chapter - 4
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
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 provided and incorporated in the final EIA/EMP Report of the	Public Hearing proceedings will be furnished in Final EIA report	Will be incorporated in Chapter 7 of Final EIA Report.

<table>
<tr><td></td><td>Project.</td><td></td><td></td></tr>
<tr><td>40</td><td>Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the project should be given.</td><td>Not applicable
No. litigation is pending against the project in any court.</td><td></td></tr>
<tr><td>41</td><td>The cost of the project (capital cost and recurring cost) as well as the cost towards implementation of EMP should clearly be spelt out.</td><td><table><tr><th>S. No</th><th>Description</th><th>Cost</th></tr><tr><td>1</td><td>Fixed Asset Cost</td><td>Rs. 1,31,74,608/-</td></tr><tr><td>2</td><td>Operational Cost</td><td>Rs. 40,00,000/-</td></tr><tr><td colspan="2">Total</td><td>Rs. 1,71,74,608/-</td></tr></table></td><td>Chapter - 8</td></tr>
<tr><td>42</td><td>Disaster Management Plan shall be prepared and included in the EIA/EMP Report.</td><td>Disaster Management and Risk Assessment has been incorporated in Chapter - 7</td><td>Chapter - 7</td></tr>
<tr><td>43</td><td>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.</td><td>Benefits of the project has incorporated</td><td>Chapter - 8</td></tr>
<tr><td>44</td><td>Besides the above, the below mentioned general points are also to be followed:</td><td></td><td></td></tr>
<tr><td>(a)</td><td>Executive Summary of the EIA/EMP report</td><td>Executive Summary of EIA Report is given.</td><td></td></tr>
<tr><td>(b)</td><td>All documents to be properly referenced with index and continuous page numbering.</td><td>Complied</td><td></td></tr>
<tr><td>(c)</td><td>Where data are presented in the report especially in tables, the period in which the data were collected, and the sources should be indicated.</td><td>Complied</td><td></td></tr>
</table>

(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 submitted.	The complete questionnaire has been prepared	
(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) dated4th 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	There are no changes in prepared EIA as per submitted Form-1 & PFR	

	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, report on the status of compliance of the conditions stipulated in the environment clearance for the existing operations of the project by the Regional Office of Ministry of Environment & Forest and climate change as may be applicable.	Will be complied after grant environment clearance from SEIAA, Tamilnadu	
(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.	

Additional TOR by SEAC

S.No.	Condition	Compliance
1.	The Proponent is requested to submit the valid registered lease document during the EIA appraisal after the previous lease granted for the mining operation is legally surrendered (or) lapsed with the consent of the competent authority.	We have noted and will be furnished in the Final EIA Report.
2.	The Proponent is requested to carry out a survey and enumerate on the structures located within 100m, 200m, 300m from the boundary of the mine lease area.	We have carried out enumeration study and the same will be furnished in the Final EIA Report.

3.	The proponent shall furnish the photographs of the adequate fencing, greenbelt along the periphery including replantation of existing trees & safety distance between the adjacent quarries & water bodies nearby provided as per the approved mining plan.	Photographs of the same will be furnished in the final Presentation
4.	The Project Proponent shall conduct the 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) 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. Necessary data and documentation in this regard may be provided.	We will carry out hydro-geological study and the same will be furnished in the Final EIA Report.
5.	The proponent shall submit the details regarding the nature of blasting activity which will be carried out.	Noted and agree to comply before final EIA Report.
6.	The PP shall furnish DFO letter stating that proximity distance of Reserve Forests, Protected Areas, Sanctuaries, Tiger Reserve etc., upto a radius of 25 km from the proposed site.	Noted and agree to comply before final EIA Report.
7.	The PP shall provide individual notice regarding the Public Hearing to the nearby house owners located in the vicinity of the project site.	Will be Complied before conducting Public Hearing
8.	Since the quarry is existing with a depth of excavation varies from 13 m to 29 m without benches of appropriate dimension (or) partially formed as per the approved Mining Plan, the Project Proponent (PP) shall carry out a "Slope Stability Assessment" studies for the existing conditions of the quarry wall by involving any of	We have revised the Geological, Mineable and Year-wise Production quantity and the same has been included in the Draft EIA Report and in Executive Summery

	the reputed Research and Academic Institutions – CSIR – Central Institute of Mining & Fuel Research (CIMFR) / Dhanbad, NIRM – Bengaluru, IIT – Madras, NIT Surathkal – Dept. of Mining Engg, and Anna University Chennai -CEG Campus, Chennai. The above studies shall spell out the "Action Plan" for carrying out the ralignment of the benches and quarrying operations in a safe & sustainable manner in the proposed quarry lease.	
9.	If the blasting operation is to be carried out, the PP shall present a conceptual design for carrying out the NONEL institution based controlled blasting operation including the line drilling & muffle blasting techniques and a Simulation Model indicating the anticipated Blast-induced Ground Vibrations levels in the proposed quarry as stipulated by the DGMS Circular No. 7 of 1997, during the EIA Proposal.	We have noted and conduct the optimum blasting parameters and the same will be included in the final Presentation
10.	Details of the Green belt & fencing shall be included in the EIA Report.	We have noted. Greenbelt and fencing Photographs will be furnished in the final Presentation
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.	We have noted and will be furnished in the final EIA Report.
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, a. What was the period of the operation and stoppage of the earlier mines with the last work permit issued by the AD/DD mines?	No, It is a Fresh Quarry.

	b. Quantity of minerals mines out. c. Highest production achieved in any one year. d. Details of approved depth of mining. e. Actual depth of the mining achieved earlier. f. Name of the person already mined in that leases area. g. If EC and CTO already obtained, the copy of the same shall be submitted. h. Whether the mining was carried out as per the approved mine plan (or EC if issued) with stipulated benches.	
13.	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 feature of the study area (core and buffer zone)	Complied. All corners with coordinates of the mine lease area have attached with EIA report in chapter 2
14.	The PP shall carry out Drone vide survey covering the cluster, Greenbelt, Fencing, etc.,	The drone video survey covering the cluster, greenbelt, fencing etc will be attached in Final EIA Report.
15.	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.	The details of Mineable and Planed production capacity has been attached in EIA Report in Executive Summary and the anticipated impacts of mining operation and the remedial measures has been discussed in Chapter 4. The mining methodology and impacts are followed as on prescribed norms by Government.
16.	The Project Proponent shall provide the organization chart indicating the appointment of various statutory officials and other competent persons to be	Complied. Manpower requirements table attached in

	appointed as per the provisions of Mines Act' 1952 and the MMR, 196l for carrying out the quarrying operations scientifically and systematically in order to ensure safety and to protect the environment.	EIA Report Chapter 2.
17.	The proponent shall furnish the baseline data for the environmental and ecological parameters with regard to surface water/ground water quality, air quality, oil quality & flora/fauna including traffic/vehicular movement study.	The proponent has furnished 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 details attached in EIA report chapter 3
18.	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.	Noted. Agree to comply.
19.	Rainwater harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.	Noted. Agree to comply
20.	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	Current land use of the study area has attached in EIA report chapter 3. Operational and post operational land use will be submitted.
21.	Details of the land for storage of Overburden/Waste	There is no overburden formed

	dumb (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.	
22.	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	Noted
23.	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	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
24.	Impact on local transport infrastructure due to the Project should be indicated.	Impact on local transport infrastructure due to the Project should be indicated. Traffic impact assessment has given in EIA report chapter 3
25.	A tree survey study shall be carried out (nos., name of the species, diameter, etc.,) both within the mining lease applied area & 300m buffer zone and its management during mining activity.	No tree species were found inside the project site. only few shrubs and thorny bushes were present. Tree survey study details given in EIA report chapter 3.
26.	A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.	Noted. The mine plan and mine closure plan have been approved by the Assistant Director, Department of Mining and Geology, Krishnagiri District
27.	Public hearing points raised and commitments of the PP on the same along with time bound Action Plan	Noted and will be complied in Final EIA report.

	with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project and to be submitted to SEIAA/SEAC with regard to the Office Memorandum of MoEF & CC accordingly.	
28.	The Public hearing advertisement shall be published in on major National daily and one most circulated vernacular daily	Noted. Agree to comply.
29.	The PP shall produce/display the EIA report, Executive summary and other related information with respect to public hearing Tamil Language also.	Noted
30.	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.	Noted. Agree to comply
31.	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 and local school/college authorities. 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.	Noted. Agree to comply
32.	Taller/one year old Saplings raised in appropriate size of bags, preferably eco-friendly 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 arca with GPS coordinates all along the boundary of	The green belt plan enclosed with mining plates in Annexure VI

	the project site with at least 3 meter wide and in between blocks in an organized manner.	
33.	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.	Disaster management plan has prepared and enclosed in Chapter 7.
34.	A Risk Assessment and management Plan shall be prepared and included in the EIA/EMP Report fir the complete life of the proposed quarry (or) till the end of the lease period.	Risk assessment and management plan has prepared and enclosed in chapter 7.
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.	Occupational Health impacts of the project have prepared and incorporated in Environmental management plan.
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.
37.	The Socio-economic studies should be carried out within a 5km 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.	The socio - economic study has been discussed in chapter 3.
38.	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given	No. litigation is pending against the project in any court.

39.	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 in EIA report chapter 8
40.	If any quarrying operations were caried 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	It is a fresh quarry. So, certified compliance report is no needed.
41.	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.	Noted. Agree to comply.
42.	Concealing any factual information or submission of false/fabricated data and failure to comply with any of the Condition mentioned above may result in withdrawal of this Terms of conditions besides attracting penal provisions in the Environment (Protection) Act, 1986	Noted.

Additional TOR by SEIAA

S.No.	Condition	Compliance
Cluster Management Committee		
1.	Cluster Management Committee which must include all the proponents in the cluster as members including the existing as well as proposed quarry	Noted and Complied. All the proponents in the cluster are discussed in Chapter – 2.
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.,	Green belt development, water sprinkling, tree plantation is discussed in Chapter – 2.
3.	The List of members of the committee formed	Agreed to comply.

	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.	Agreed to comply. It will be furnished in final EIA report.
5.	The committee shall deliberate on risk management plan 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	Risk management plan is discussed in Chapter – 7.
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.	Agreed to comply. It will be furnished in final 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.	Agreed to comply. It will be furnished in final EIA report.
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.	Health of workers and staff is discussed in Chapter – 9.
Agriculture & Agro - Biodiversity		
9.	Impact on surrounding agricultural fields around the proposed mining area.	Particulate Matters will be suppressed by using Sprinkling Methods, Wet drilling will be adopted and we will implement all the technic to reduce the dispersion of

		Particulate matters
10.	Impact on soil flora & vegetation around the project site	We have discussed flora and vegetation around the project site and the same is incorporated in Chapter 4 & 5.
11.	Details of type of vegetations including no. of trees & shrubs within the proposed mining area and. If so, transplantation of such vegetations all along the boundary of the proposed mining area shall committed mentioned in EMP.	Proposed Project site is a vacant land with shrubs and thorns will be removed on the primary stage of Site Cleaning.
12.	The Environmental Impact Assessment should study the biodiversity, the natural ecosystem, the soil micro flora, fauna and soil seed banks and suggest measures to maintain the natural ecosystem	We have conducted biodiversity study, Flora and Fauna and Soil type and natural ecosystem and the same is explained in Chapter 3.
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 the patta lands, Horticulture, Agriculture and livestock.	The proposed quarry operation is not expected to have any significant adverse impact on the adjoining patta lands, agricultural fields, horticultural crops, plantations, or livestock, as the quarry activities will be confined within the lease boundary and adequate environmental mitigation measures will be implemented throughout the operational period. To control and minimize dust generation, regular water sprinkling will be carried out on haul roads, working faces, and other dust-prone areas. Wet drilling practices will be adopted to suppress particulate emissions at the source. The internal roads

		will be properly maintained, and the movement of vehicles will be regulated to reduce fugitive dust emissions. A greenbelt will be developed and maintained along the lease boundary wherever feasible, which will act as a dust and noise barrier. The controlled mining operations and implementation of environmental management measures will ensure that dust levels remain within the prescribed standards. Therefore, no significant impact is anticipated on the productivity of nearby plantations, horticultural crops, agricultural lands, or on the health of livestock in the surrounding area. Periodic environmental monitoring will be carried out to assess the effectiveness of the mitigation measures and to ensure compliance with statutory norms.
	Forests	
15.	The project proponent shall detailed study on impact of mining on Reserve forests free ranging wildlife.	There is no Reserve Forest within 1 km radius of the Project Site. Hence our project will not cause any damage to reserve forest. Also, we have received letter from DFO indicating the nearest reserve forest and attached with Annexures
16.	The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and	The biological environment impacts, and its mitigation measures has been given in Chapter 4

	fauna.	
17.	The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection.	There is no existing trees in the project site and surrounding the project site. Only thorny shrubs were present.
18.	The EIA should study impact on protected areas, Reserve forests, National parks, Corridors and Wildlife pathways, near project site.	There is no Reserve Forest within 1 km radius of the Project Site. Hence our project will not cause any damage to reserve forest. Also, we have received letter from DFO indicating the nearest reserve forest and attached with Annexures. There is no protected areas, National Parks, Corridors and Wildlife pathways near project site.
Water Environment		
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 and documentation in this regard may be provided, covering the entire mine lease period.	The hydro-geological study will be conducted and submitted in final EIA report.
20.	Erosion Control Measures	Complied. Erosion details has been attached in Chapter 3. Greenbelt will be planted to avoid and control erosion.
21.	Detailed study shall be carried out in regard to impact of mining around the proposed mine lease	The detailed study will be carried out and will be furnished in the Final EIA Report

	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.	There is no water bodies within 1 km radius. Hence there won't be much 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	The proposed quarry activity will be confined within the lease area and is not expected to cause significant fragmentation of the natural environment. The project does not involve any forest land, wildlife corridor, or ecologically sensitive habitat. As mining operations are limited in extent and duration, habitat connectivity in the surrounding area will remain unaffected. Mitigation measures such as restricting operations within the lease boundary, maintaining natural drainage, and developing greenbelt plantations will further minimize any localized environmental disturbance. Therefore, the impact of the project on environmental fragmentation is expected to be negligible.
24.	The PP 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 landform changes visual and aesthetic impacts	Noted. Agree to comply.
25.	The Terms of Reference should specifically study impact on soil health, soil erosion, the soil	The soil erosion map 5km surrounding the project site has been given in chapter 3.

	physical, chemical components and microbial components.	The soil samples have been collected surrounding the project site and physical, chemical components and microbial components study has been carried out and the results are tabulated in chapter 3
26.	The Environmental Impact Assessment should study on wetlands, water bodies, river streams, lakes and farmer sites.	The water environment impacts and its mitigation measures has been given in Chapter 4
27.	The EIA shall include the impact of mining activity on the following: a) Hydrothermal/Geothermal effect due to destruction in the Environment. b) Bio-geochemical processes and its foot prints including Environmental stress. c) Sediment geochemistry in the surface streams.	Proposed quarrying activity is restricted to the near-surface geological formations and does not intersect any known geothermal zones, thermal springs, deep-seated fractures, or hydrothermal systems. The depth of mining is limited and will not influence subsurface heat flow, geothermal gradients, or hydrothermal circulation patterns. Therefore, no hydrothermal or geothermal effects are anticipated due to the proposed mining activity. The project area does not contain any ecologically sensitive habitats that could significantly alter regional biogeochemical cycles. The mining operations may cause localized and temporary environmental stress in the form of dust generation and minor land surface disturbance. However, these impacts will be effectively mitigated through water sprinkling, wet drilling, controlled blasting and greenbelt development. Since no hazardous chemicals or process effluents are involved in quarry operations, the natural nutrient cycling, carbon cycle, and other biogeochemical processes in the surrounding environment are not expected to undergo any significant alteration. The quarry operations are not expected to adversely affect the sediment geochemistry of nearby surface water bodies or streams. Adequate drainage arrangements, garland

		drains, and sedimentation pits will be provided to prevent silt-laden runoff from leaving the lease area during rainfall. Consequently, the geochemical characteristics of sediments in adjacent streams and drainage channels are expected to remain unchanged. In view of the above, the proposed mining activity is not likely to cause any significant impact on hydrothermal/geothermal conditions, biogeochemical processes, environmental stress levels, or sediment geochemistry of nearby surface streams. Regular environmental monitoring and implementation of the Environmental Management Plan (EMP) will be carried-out throughout the life of the project.
Energy		
28.	The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilize the energy shall be furnished	Agreed to Comply.
Climate Change		
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.	Noted and will be complied in Final EIA report.
30.	The EIA should study impact on climate change, temperature rise, pollution and above soil carbon stock.	Noted and will be complied in Final EIA report.
31.	Impact of mining on pollution leading to GHGs emission and the impact of the same on the local livelihood.	We will adopt several mitigation measures such as regular maintenance of vehicles and machinery to ensure efficient fuel consumption, avoidance of unnecessary idling of equipment, optimization of

		haulage routes, periodic water sprinkling on haul roads, wet drilling practices, and development of greenbelt within and around the lease area. The proposed plantation activities will contribute to carbon sequestration and improve the local microclimate. The quarry operation will not cause any significant impact on the livelihood of the local population. On the contrary, the project will generate direct and indirect employment opportunities for local residents, thereby contributing to their socio-economic development. Since the mining activities are confined within the lease area and adequate environmental management measures will be implemented, adverse impacts on agriculture, horticulture, livestock, and other livelihood activities in the surrounding villages are not anticipated.
Mine Closure Plan		
32.	Detailed mine closure plan covering the entire mine lease period as per precise area communication order issued.	Mine closure plan has been attached along with mining plates as Annexure VI.
EMP		
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.	Environment Management Plan has been described in detail in Chapter-10 of the Draft EIA/EMP Report.
34.	The EIA should hold detailed study on EMP with	The EMP details has been given in

	budget for Green belt development and mine closure plan including disaster management plan.	Chapter 8
Risk Assessment		
35.	To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of mining.	A Risk Assessment and management Plan will be prepared and included in the final EIA/EMP Report.
Disaster Management Plan		
36.	To furnish disaster management plan and disaster mitigation measures in regard to all aspects to avoid/reduce vulnerability to hazard & to cope with disaster/untoward 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.	Disaster Management and Risk Assessment has be incorporated in Chapter-7
Others		
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.	Obtained and same has been attached as Annexure.
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.	Noted and public hearing details will be included along with final EIA report.
39.	The PP shall study and furnish the possible pollution due to plastic and microplastic on the environment. The ecological risks and impact of plastic & microplastic on aquatic environment and	There will not be any plastic and microplastic pollution due to mining activity. Also, we ensure that we won't use any single use plastics in the project

	fresh water systems due to activities, contemplated during mining may be investigated and reported.	site.

SEIAA SPECFIC CONDITIONS		
1	Before appraisal of the EIA, the Project Proponent shall furnish a NoC from the Deputy Director of Horticulture, Krishnagiri District, considering the rose cultivation in the nearby area.	We have noted and Furnish the NoC from Horticulture department before submitting Final EIA Report.
SEAC SITE SPECIFIC CONDITIONS		
1.	The proponent shall submit a revised Mining Plan incorporating the formation of benches at above ground level (AGL), and include the same in the EIA.	We have revised the Geological, Mineable and Year-Wise quantity by forming benches from surface Above Ground Level and the same is included in the Draft EIA Report and Executive Summery.
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	We have noted and we will form a Cluster Management Committee (CMC) and execute the agreement by inclusive of Organisation chart of the Committee & Standard Operating Procedures and the same will be furnished along with final Presentation.

	(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	We have noted and we will install CCTV in our proposed Quarry budget of the same is already included in the Environmental Management Plan.

ANNEXURE-II

PRECISE AREA COMMUNICATION LETTER

ANNEXURE-1

Rc.No.14/2025/Mines dated:27.02.2025

O/o. Deputy Director of
Geology & Mining,
Collectorate, Krishnagiri.

Precise Area Communication

Sub : Mines and Minerals – Minor Mineral – Rough Stone – Krishnagiri District – Shoolagiri Taluk - Berigai Village – SF.No.305/4(Part) – over an extent of 1.15.0 hectare of Government poramboke land – e-Tender cum Auction conducted – Highest bid amount offered by Thiru.N.Sankar – successful bidder declared - entire bid amount remitted - Precise area communicated -Reg.

Ref :
1. Krishnagiri District Gazette (Extra-ordinary) No.12 & 20 dated: 16.11.2024.
2. e-auction (live) conducted on 03.01.2025.
3. Notice Rc.No.16/2025/Mines dated: 07.01.2025 and 09.01.2025
4. Connected Records.

****

Yours attention is invited to the reference cited.

2) Based on the recommendations of the Special Committee report dated: 13.11.2024, the District Collector, Krishnagiri has issued notice inviting tender under District Gazette No.12(English) & 20(Tamil) dated: 16.11.2024 and received applications through online from the interested bidders for conducting e-Tender cum auction.

3) Subsequently, after due processes envisaged in G.O(Ms)No.21 Natural Resources (MMC1) Department dated: 31.07.2024, e-Tender cum auction has been conducted on 03.01.2025. Since, Thiru.N.Sankar has quoted highest bid amount of Rs.1,29,04,608/- (Rupees One crore twenty nine lakhs four thousand six hundred and eight only) for the proposed lease area in Government poramboke land over an extent of 1.15.0 hectares in

SF.No.305/4(Part), Berigai Village, Shoolagiri Taluk, Krishnagiri District, Thiru.N.Sankar after careful scrutinization has been declared as the successful bidder.

4) In this regard, the highest bidder Thiru.N.Sankar vide reference 3rd cited has been directed to remit the quoted highest bid amount to the proper head of Government Account. Accordingly, the Thiru.N.Sankar has remitted the entire bid amount of Rs.1,29,04,608/- (Rupees One crore twenty nine lakhs four thousand six hundred and eight only) as detailed below;

Challan Date	E-challan No.	Bank	Category	Amount in Rs.
EMD remitted during application through online			EMD	12,53,461
07.01.2025	20250107008843	SBI, Krishnagiri	10% of Bid amount	12,90,461
29.01.2025	20250128006547	SBI, Krishnagiri	90% of Bid amount	51,80,343
24.01.2025	20250122031751	SBI, Krishnagiri		51,80,343
	-		**Total**	**1,29,04,608**

5) Since the subject area in SF.No.305/4(Part) over an extent of 1.15.0 hects of Government poramboke land situated in Berigai Village, Shoolagiri Taluk, Krishnagiri District has been considered as qualified area for grant of lease for the period of 10 years, this precise area under Rule 41(4) of TNMMCR 1959 is hereby communicated to the successful bidder Thiru.N.Sankar. They are hereby directed to submit a draft mining plan within a period of 90 days from the date of receipt of this communication as required under rule 41 of TNMMCR 1959 for approval of the Deputy Director of Geology and Mining, Krishnagiri and further directed to obtain prior environment clearance from the State Level Environment Impact Assessment Authority, (SEIAA) Chennai as required under rule 42 of TNMMCR 1959 for

further process to grant of lease in the proposed lease area subject to the following conditions:-

1) A safety distance of 7.5 meters is to be maintained to the adjacent patta lands and a safety distance of 10 meters to be maintained to the adjacent Government lands and should not cause any hindrance to them while quarrying and transportation.
2) All conditions stipulated in the District Gazette Extra ordinary notification No.12 (English) & 20 (Tamil) dated: 16.11.2024 should be adhered by the bidder.
3) Environment clearance should be obtained from the State Level Environmental Impact Assessment Authority before grant of quarry lease as per rule 42 of the Tamil Nadu Minor Mineral Concession Rules 1959.
4) The bidder should fence the lease granted area with barbed wire before the execution of lease deed as follows:
    - The piliar post shall be firmly grounded with concrete foundation of height not less than 2 meters with a distance between two pillars shall not be more than 3 meters.
    - The applicant firm shall incorporate the DGPS readings for the entire boundary pillars of the area and the same should be clearly shown in the Mining Plan
    - A soft copy of digitalized map with DGPS readings should be submitted in the CD form to the Deputy / Assistant Director, Krishnagiri.
5) As per Rule 12 (V) of Minerals (other than Atomic & Hydrocarbon Energy Minerals) Concession Rules, 2016, the applicant firm shall at his own expenses erect, maintain and keep in repair all the boundary pillars for entire period of lease.

6) The applicant should use mild explosives during quarrying.

7) Child labourers should not be engaged in the quarry works.

8) If any violation is found during quarrying operation, the Rule 36(5)(h) and the penal provisions of the Tamil Nadu Minor Mineral Concession Rules, 1959 and connected Act and rules in force will attract.

Encl: Demarcated Map showing the proposed lease area.

27/2/25

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

27/2/25

To,

Thiru.N.Sankar,
S/o. Nagaraj,
Bithireddy Village,
Pachappanatti – Post,
Denkanikottai-Taluk,
Krishnagiri District.

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

ANNEXURE-III

MINING PLAN APPROVED LETTER

From
Thiru.A.Arumuganainar, M.Sc.,
Regional Joint Director,
Deputy Director (FAC),
Dept of Geology and Mining,
Krishnagiri.

To
Thiru.N.Sankar,
S/o,Nagaraj,
Bithireddy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District.

Roc.No.14/2025/Mines dated 01.09.2025.

Sub: Mines and Minerals-Minor Mineral-Rough Stone-Krishnagiri District- Shoolagiri Taluk – Berigai Village - Government poramboke land in S.F.No.305/4 (Part)- Over an extent of 1.15.0 ha – e-Tender cum Auction conducted- Thiru.N.Sankar offered the highest bid amount - Thiru. Thiru.N.Sankar declared as the successful bidder - Precise area communicated- Draft mining plan submitted- Mining plan approved - Reg.

Ref:
1. Krishnagiri District Gazette (Extraordinary) No. 12 & 20, dated 16.11.2024.
2. e-Auction(live) conducted on 03.01.2025
3. The Deputy Director of Geology & Mining, Krishnagiri in Rc.No.14/2025/Mines, dated 27.02.2025 (Precise area communication).
4. Representation of Thiru.N.Sankar dated 08.08.2025.

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Kind attention is invited to the references cited above.

2. The District Collector, Krishnagiri has published Gazette Notification vide reference 1st cited for grant of Rough stone quarry leases in Government poromboke lands in Krishnagiri District. e-Tender Cum Auction was conducted on 03.01.2025 for the grant of quarry lease to quarry rough stone in Government poramboke land in S.F.No.305/4(Part) over an extent of 1.15.0 hectares in Berigai Village, Shoolagiri Taluk, Krishnagiri District. Since

Thiru.N.sankar had quoted the highest lease amount, the said tender was confirmed to him.

3.Subsequently,Thiru.N.sankar has remitted the entire bid amount quoted in e-Tender cum Auction and communicated precise area has been communicated vide reference 3rd cited and directed the tenderer to submit Mining plan and Environmental Clearance as required under Rules 41 & 42 of the Tamil Nadu Minor Mineral Concession Rules, 1959 for grant of rough stone quarry lease over an extent of 1.15.0 hectares of Government poramboke land in S.F.No. 305/4(Part) in Berigai Village, Shoolagiri Taluk, Krishnagiri District for a period of 10 (Ten) years under the provisions of Rule 8 of Tamil Nadu Minor Mineral Concession Rules, 1959.

4.At this juncture, Thiru.N.Sankar has submitted representation vide letter dated 08.08.2025 with enclosed draft Mining Plan prepared by a qualified person with a request to approve the draft Mining Plan.

5.Hence the applicant intends to apply and obtain permission from the Director of Mines Safety under Regulation 111(3) of the Metalliferous Mines Regulations,1961 for working common mine boundary with adjacent proposed quarry lease held by Thiru.K.Narayanan in the Government poromboke land over an extent of 2.44.0ha in S.F.No.313/2P of Berigai Village situated in the southern side of the proposed lease area, in the draft Mining Plan, the year wise production has been given in two scenarios: i) excluding common boundary ii) including common boundary.

6.The yearwise production excluding common boundary between the proposed lease area in S.F.No. 313/2P and the proposed lease area in S.F.No. 305/4(Part) is proposed as below:

Yearwise production excluding common mine boundary for the first five years

Year	Roughstone		Weathered Rock		Topsoil	
	m^3	Tons	m^3	Tons	m^3	Tons
1st Year	30933	85065.75	20736	41472	10368	20736
2nd Year	32175	88481.25	—	—	—	—
3rd Year	32175	88481.25	---	---	---	—
4h Year	18275	50256.25	---	---	---	
5th Year	14535	39971.25	---	---	—	
Total	**128093**	**352256**	**20736**	**41472**	**10368**	**20736**

Yearwise production excluding common mine boundary for the second five years

Year	Roughstone		Weathered Rock		Topsoil	
	m^3	Tons	m^3	Tons	m^3	Tons
6th Year	5250	14437.50	—	—	—	—
7th year	6500	17875.00	—	—	—	—
8th year	10660	29315.00	—	—	—	—
9th year	7285	20033.75	—	—	—	—
10th year	3885	10683.75	—	—	—	—
Total	**33580**	**92345**	—	—	—	—

7.The proposed yearwise production and the systematic and scientific method for production of Rough stone has been compared with ground condition of the subject area and found correct.

8.Hence the power delegated under Rule 41 of the Tamil Nadu Minor Mineral Concession Rules,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 draft Mining Plan is hereby approved subject to the following conditions:

(i)The draft 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 draft 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, or any other connected Laws, Forest (Conservation) Act, 1980, Forest Conservation Rules 1981, Environment protection Act, 1986, Indian Explosives Act, 1884 (Central Act IV of 1884), Metalliferous Mines Regulations,1961 and the rules made thereunder, Minor Mineral Conservation and Development Rules, 2017 and the Tamil Nadu Minor Mineral Concession Rules, 1959.

(iii)The draft Mining Plan is approved without prejudice to any other order or directions from any court of competent jurisdiction.

(iv)All the conditions mentioned in the precise area communicated to the applicant shall be followed during quarry operation as per Act and Rules.

Special Condition:

- Only after obtaining appropriate permission for common boundary from the Directorate General of Mines Safety under Regulation 111(3) of the Metalliferous Mines Regulations,1961, the lessee shall work in the areas of common boundary between the proposed lease area in S.F.No. 313/2P and the proposed lease area in S.F.No. 305/4(Part) of Berigai Village. No quarry works shall be extended into the common boundary unless permission for the effect is obtained from the

Directorate General of Mines Safety and submitted the same to the Deputy Director, Department of Geology and Mining, Krishnagiri.

Encl: Approved Mining Plan

Deputy Director (FAC),
Geology and Mining,
Krishnagiri.

01/09/2025

Copy to: -

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

ANNEXURE - IV

REVISED MINING PLAN APPROVED LETTER

From

Dr.R.Elangovan, M.Sc., Ph.D.,
Assistant Director,
Dept. of Geology and Mining,
Krishnagiri District.

To

Thiru.N.Sankar,
S/o,Nagaraj,
Bithireddy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District.

Roc.No.14/2025/Mines dated 15.05.2026.

Sub: Mines and Minerals - Minor Mineral - Rough Stone - Krishnagiri District - Shoolagiri Taluk – Berigai Village - Government poramboke land in S.F.No.305/4 (Part) - Over an extent of 1.15.0 ha – e-Tender cum Auction conducted- Thiru.N.Sankar offered the highest bid amount - Thiru. Thiru.N.Sankar declared as the successful bidder - Precise area communicated - Mining plan approved – Revised Mining Plan submitted incorporating the formation of benches at the Above Ground Level (AGL) in compliance of terms and conditions of SEIAA - Approved- Reg.

Ref:

1. Krishnagiri District Gazette (Extraordinary) No. 12 & 20, dated 16.11.2024.
2. e-Auction(live) conducted on 03.01.2025.
3. The Deputy Director of Geology & Mining, Krishnagiri in Rc.No.14/2025/Mines, dated 27.02.2025 (Precise area communication).

4. The Deputy Director (FAC) of Geology & Mining, Krishnagiri letter No.14/2025/Mines, dated 01.09.2025 (Mining plan approval).

5. Representation of Thiru.N.Sankar dated 08.05.2026.

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Kind attention is invited to the references cited above.

2. The District Collector, Krishnagiri has published Gazette Notification vide reference 1st cited for grant of Roughstone quarry leases in Government poromboke lands in Krishnagiri District. Accordingly, e-Tender-Cum-Auction was conducted on 03.01.2025 for the grant of quarry lease for quarrying rough stone in Government poramboke land in S.F.No.305/4(Part) over an extent of 1.15.0 hectares in Berigai Village, Shoolagiri Taluk, Krishnagiri District. Since Thiru.N.sankar had quoted the highest lease amount, the said tender was confirmed in his favour.

3. Subsequently, Thiru.N.sankar remitted the entire bid amount quoted in e-Tender-Cum-Auction and precise area was communicated to him vide reference 3rd cited with instructions to submit approved Mining plan and Environmental Clearance as required under Rules 41 & 42 of the Tamil Nadu Minor Mineral Concession Rules, 1959 for the grant of rough stone quarry lease in S.F.No.305/4(Part) over an extent of 1.15.0 hectares in Berigai Village, Shoolagiri Taluk, Krishnagiri District for a period of ten years under the provisions of Rule 8 of Tamil Nadu Minor Mineral Concession Rules, 1959.

4. Accordingly, Thiru.N.sankar submitted a draft mining plan and the same was approved by the Deputy Director (FAC) of Geology and Mining vide the reference 4th cited.

5. At this stage, Thiru. N. Sankar has submitted a representation dated 30.03.2026, stating that the SEIAA had directed him to furnish an approved revised Mining Plan incorporating the formation of benches at the Above Ground Level (AGL). In compliance, he has enclosed three copies of the revised draft Mining Plan prepared by a qualified person and has requested its approval to facilitate the grant of Environmental Clearance by SEIAA.

6. As per the revised draft Mining Plan, the mineable roughstone reserves up to a depth of 41 m below ground level are estimated at 2,25,227.25 MT (81,919 m^3). The proposed year-wise production and development schedule up to 41 m BGL is presented below.

Yearwise production for the first five years

Year	Roughstone		Weathered Rock		Topsoil	
	m^3	Tons	m^3	Tons	m^3	Tons
1st Year	13274	36503.50	6144	12288	3072	6144
2nd Year	13770	37867.50	9396	18792	4698	9396
3rd Year	10450	28737.50	---	---	---	---
4h Year	10725	29493.75	---	---	---	---
5th Year	15075	41456.25	---	---	---	---
Total	**63294**	**174058.5**	**15540**	**31080**	**7770**	**15540**

Yearwise production for the second five years

Year	Roughstone		Weathered Rock		Topsoil	
	m^3	Tons	m^3	Tons	m^3	Tons
6th Year	5075	13956.25	---	---	---	---
7th year	4900	13475.00	---	---	---	---
8th year	3625	9968.75	---	---	---	---
9th year	2850	7837.50	---	---	---	---
10th year	2175	5981.25	---	---	---	---
Total	**18625**	**51218.75**	**---**	**---**	**---**	**---**

7. The draft Revised Mining Plan has been examined with reference to the field conditions and found to be correct. The plan duly incorporates details such as geological resources, mineable reserves, year wise production and development program. It is also confirmed that the conditions imposed in the precise area communication have been appropriately incorporated in the draft Revised Mining Plan.

8. Hence the power delegated under Rule 41 of the Tamil Nadu Minor Mineral Concession Rules,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 draft Mining Plan is hereby approved subject to the following conditions:

(i) The draft Revised 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 draft Revised 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, or any other connected Laws, Forest (Conservation) Act, 1980, Forest Conservation Rules 1981, Environment protection Act, 1986, Indian Explosives Act, 1884 (Central Act IV of 1884), Metalliferous Mines Regulations,1961 and the rules made thereunder, Minor Mineral Conservation and Development Rules, 2017 and the Tamil Nadu Minor Mineral Concession Rules, 1959.

(iii) The draft Revised Mining Plan is approved without prejudice to any other order or directions from any court of competent jurisdiction.

(iv) All the conditions mentioned in the precise area communicated to the bidder shall be followed during quarry operation as per Act and Rules.

Encl: Approved Revised Mining Plan

15/05/2026

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

15.05.26

Copy to: -

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

ANNEXURE - V

500M Radius letter

From

Deputy Director (FAC),
Dept of Geology and Mining,
Krishnagiri.

To

Thiru.N.Sankar,
S/o,Nagaraj,
Bithireddy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District.

Roc.No.14/2025/Mines dated 15.09.2025

Sub: Mines and Minerals-Minor Mineral-Rough Stone-Krishnagiri District– Shoolagiri Taluk - Berigai Village- Government Poromboke land - S.F.No.305/4 (Part)- Over an extent of 1.15.0 ha - e-Tender cum Auction conducted- Thiru.N.Sankar offered Highest bid amount - Thiru.N.Sankar declared as the successful bidder – Mining plan approved - Details of quarries situated within 500m radial distance requested – Quarry details furnished - Reg.

Ref:

1. Krishnagiri District Gazette (Extraordinary) No. 12 & 20, dated 16.11.2024.
2. The Deputy Director of Geology & Mining, Krishnagiri Rc.No.14/2025/Mines, dated 27.02.2025 (Precise area communication).
3. The Deputy Director of Geology & Mining, Krishnagiri letter No.14/2025/Mines, dated 01.09.2025 (Mining plan approval).
4. Representation of Thiru.N.Sankar, dated 20.08.2025.

****

Kind attention is invited to the references cited above.

2. e- Tender Cum Auction was conducted on 03.01.2025 for the grant of quarry lease to quarry rough stone in Government poramboke land in S.F.No.305/4(Part) over an extent of 1.15.0 hectares in Berigai Village, Shoolagiri

Taluk and Krishnagiri District. Since Thiru.N.Sankar had quoted the highest lease amount, the said tender was confirmed to him.

3. Subsequently, Thiru.N.Sankar had been communicated precise area vide reference 2nd cited and directed to submit Mining plan and Environmental Clearance for grant of rough stone quarry lease over an extent of 1.15.0 hectares of Government poramboke land in S.F.No. 305/4(Part) in Berigai Village, Shoolagiri Taluk and Krishnagiri District for a period of 10 (Ten) years under the provisions of Rule 8 of Tamil Nadu Minor Mineral Concession Rules, 1959.

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 has requested the details of quarries situated within 500m radial distance from the lease applied area vide letter dated 20.08.2025. As requested by the applicant, the details of quarries situated within 500m radial distance from the subject 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 G.Murugesh	Berigai/ Shoolagiri	315	2.18.0	Rc.No.546/2017 /Mines, dated 05.05.2021	05.05.2021 to 04.05.2031
2	Thiru.K.Narayanan	Berigai/ Shoolagiri	313/2 (Part)	2.44.0	Roc. 86/2016 (Mines) Dt. 30.11.2016.	02.12.2016 to 01.12.2026
Total				**4.62.0**		

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	------Nil----					

III. Details of Proposed/Applied Quarries

S. No.	Name of the Applicant/Lessee	Village/ Taluk	S.F.No.	Extent (ha)	Proceeding Rc. No. & date	Status
1	Thiru.N.Sankar, S/o,Nagaraj, Bithireddy Village, Pachappanatti Post, Denkanikottai Taluk, Krishnagiri District.	Shoolagiri/ Berigai	305/4(Part)	1.15.0	14/2025/Mines, 20.08.2025	Applied Area
Total				**1.15.0**		

Sd/- A.Arumuganainar,
Deputy Director (FAC),
Geology and Mining,
Krishnagiri.

// True Copy //

15/9/2025

Assistant Director,
Dept of Geology & Mining,
Krishnagiri.

Copy to:

15/9/25

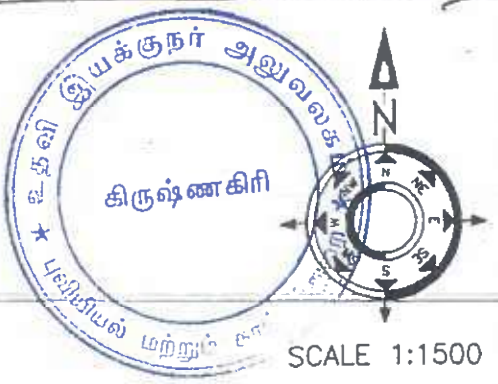
The Chairman, Tamil Nadu State Environment Impact Assessment Authority, 3rd Floor, Panakal Maligai, No. 1 Jeenes Road, Saidapet, Chennai -15.

ANNEXURE - VI

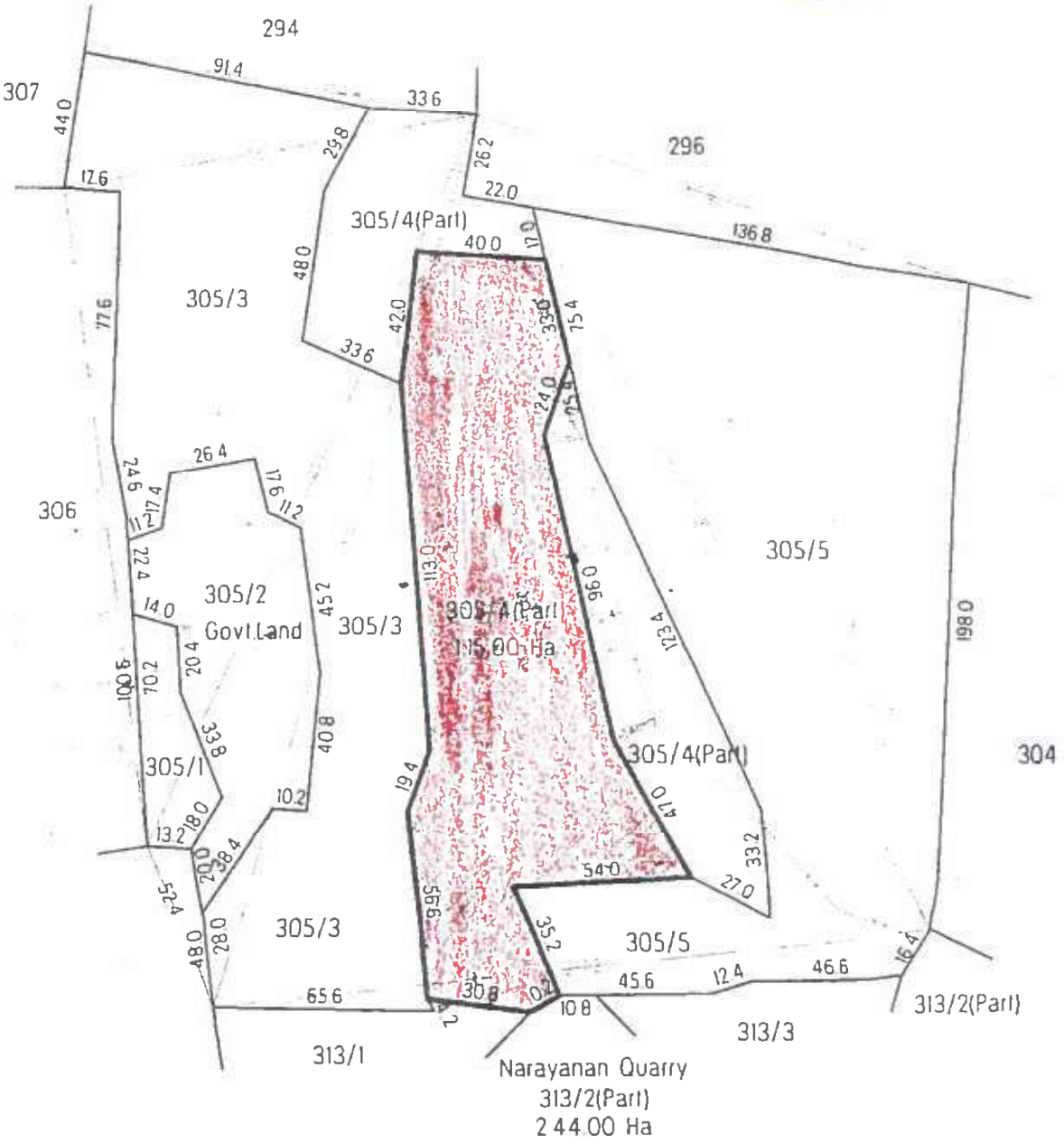
FMB, VILLAGE MAP & ADANGAL

ANNEXURE - IV

Krishnagiri District
Shoolagiri Taluk
Berigai Village
S.F.No: 305/4
Extent= 1.89.00 Hectares
Classificatin: UAW-Parai



SCALE 1:1500



K. NEELAKANDAN
Sub-Inspector of Survey,
O/o. Deputy Director, Geology and Mining,
Krishnagiri District.

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

LEGEND:

PROPOSED FOR TENDER AREA
S.F.No.305/4(Part) =1.15.00 Ha

SEASONAL ODAI

Remarks:
All Dimension in meters

அரசுக்கு
ரிதிகளில்
எனை

48	301-4								2 23·5	4 43		
302	1	302-1	அ	புற	...	...	...	...	0 52·0	...	...	ஓனி.
	2	-2	ர	ப	...	8-3	15	2 15	0 96·0	2 06	207 க. சுப்ர மணியம்	
									1 48·0	2 06		
303	...	303	அ	புற	...	...	...	...	1 02·5	...	...	ஓடை.
304	1	304-1	அ	தி.வ.த	...	...	...	...	2 10·0	...	...	பாறை.
	2	-2	ர	ப	...	8-3	5	2 15	1 18·5	2 55	282 அ. முனிவெங்க டப்பர் மகன்வி நாகம்மாள்.	
	3	-3	ர	ஈ	...	8-3	5	2 15	1 91·0	4 11	44 அன்னையா (எ) அ. முனிவெங்க டப்பர்.	வட்டக்கனை.
	4	-4	ர	ப	...	8-3	5	2 15	0 31·5	0 68	207 K. சுப்ர மணியம்.	வட்டக்கனை.
	5	-5	அ	புற	...	...	...	...	0 13·5	...	...	வாரி.
	6	-6	ர	ஈ	...	8-3	5	2 15	0 09·5	0 20	207 K. சுப்ர மணியம்.	
									5 74·0	7 54		
305	1	305-1	ர	ப	...	8-4	7	1 09	0 12·0	0 13	44 அன்னையா (எ) அ. முனிவெங் கடப்பா.	
	2	-2	அ	தி.வ.த	...	...	...	...	0 45·5	...	...	பாறை.
	3	-3	ர	ப	...	8-4	7	1 09	1 71·0	1 86	44 அன்னையா (எ) அ. முனிவெங் கடப்பா.	
	4	-4	அ	தி.வ.த	...	8-4	7	1 09	1 89·0	...	...	பாறை.
	5	-5	ர	ப	...	8-4	7	1 09	2 18·0	2 38	43 அன்னையா (எ) அ. முனிவெங் கடப்பா.	
									6 35·5	4 37		
306	...	306	ர	ப	...	8-4	7	1 09	1 46·0	1 59	102 மு. திருவேண மாணிக்கம்.	

Village Administartive Officer
SHOOLAGIRI, ✓
Shoolagiri (T.K), Krishnagiri District

16.83.5

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

ANNEXURE VI

எண் 2

கிராமத்தில் வருடவாரி புலவாரி கைப்பற்று சாகுபடி அடங்கல் கணக்கு

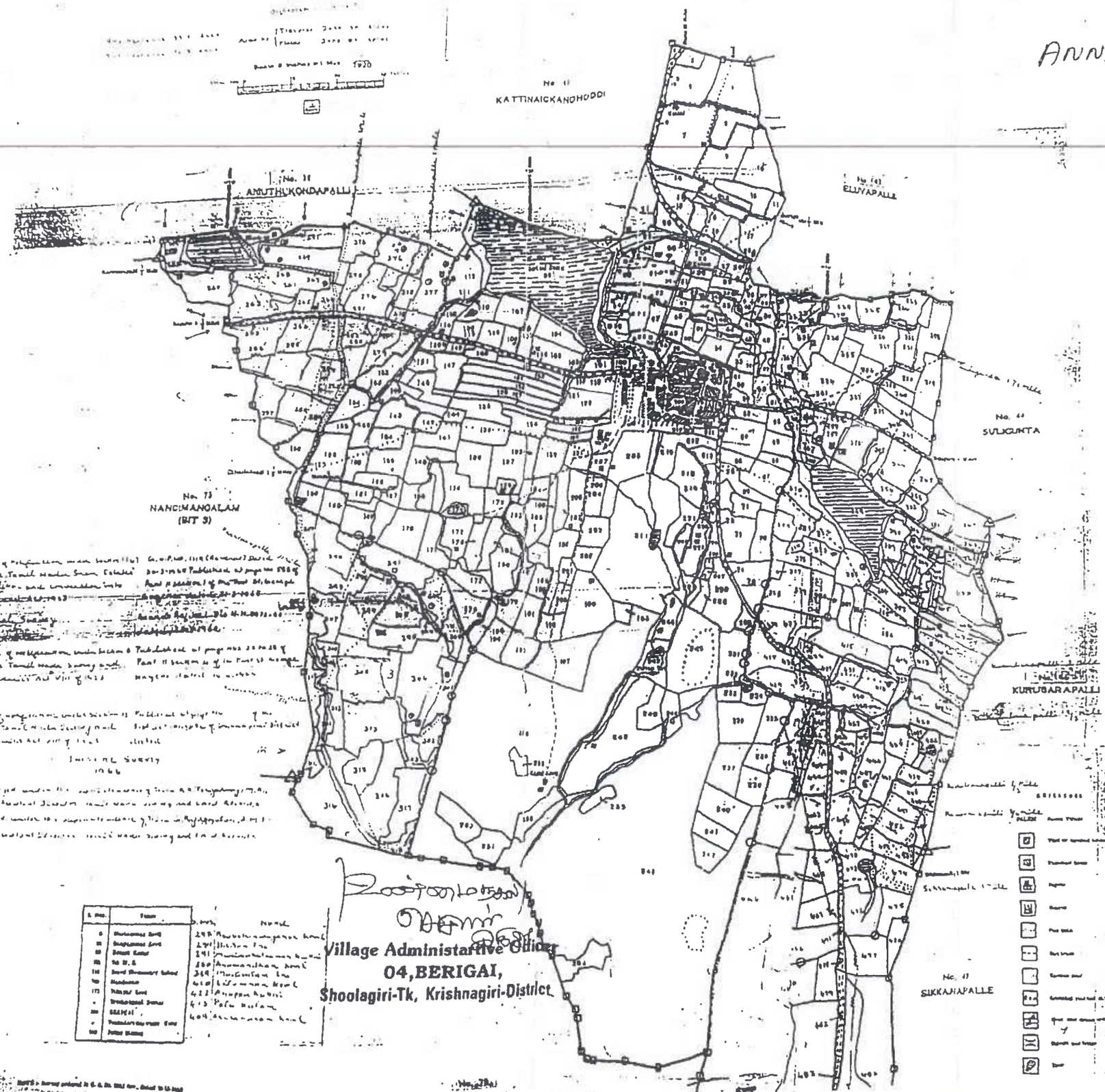
கிராமக் கணக்கு

ஆம் பசலியில் கிருஷ்ணகிரி மாவட்டம் கிருஷ்ணகிரி வட்டம் 42 போச்சிதை

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.						சாகுபடியாளின் பெயர்.	முதல் போகம்.				இரண்டாம் போகம்.					கிராம அலுவலரின் குறிப்புரை :- (1) புலன்களின் பகுதிகளில் மட்டும் பயிரிடப்பட்டிருந்தால் அவைகளின் இலக்கங்களை விவரமாக குறிப்பிடவும். (2) கைப்பற்றில் இல்லாத நிலங்களின் சாகுபடியின் தன்மையும் பரப்பு விவரமும் குறிப்பிடவும். (3) முந்தைய மாதத்தில் பயிரிடப்பட்டதை விட இந்த மாதத்தில் ஏதேனும் பயிர் மாற்றங்கள் ஏற்பட்டிருந்தால் அதற்கான காரணங்களை விவரமாக குறிப்பிடவும்.	கிழ்க்கண்டவகையில் பயிரிடப்படாது உள்ள நிலத்தின் தன்மை மற்றும் பரப்பின் விவரங்கள் ஒவ்வொரு தனி அளவை எண் அல்லது அதன் பகுதியில்.	பயிர் பார்வையிடும் அலுவலர் குறிப்புகள்.
நில அளவை எண்.	உட்பிரிவு எண்.	பரப்பு.	தீர்வை.	ஒரு போகம் அல்லது இரு போகம்.	கைப்பற்று தாருடைய பெயரும் எண்ணும் அல்லது அனுபோக தாருடைய பெயர்.	நிலத்தின் எந்த பகுதி யாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது.	பயிரின் பெயர்.	பயிரான / அறுவடையான பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விழுக்காடு.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது அறுவடை செய்யப்பட்டது.	பயிரின் பெயர்.	பயிரான / அறுவடையான பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விழுக்காடு.			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(18அ)	(19)	
305	4	1.89.0	—		—				தரிசு.								1.89.0 தரிசு			
							உண்மைநகல்/													
							Village Administartive Officer 04,BERIGAI, Shoolagiri-Tk, Krishnagiri District													

380/26-R.F. III-A-10-50,00,000 Cps.-GBP.-Mdu-7-2018.

ANNEXURE - II



Village Administartive Officer
04,BERIGAI,
Shoolagiri-Tk, Krishnagiri-District

S.DHANASEKAR, M.Sc.,(Geol
Oualified Person

ANNEXURE - VII

DFO LETTER

ANNEXURE - III

தொலைபேசி எண். 04344-[illegible]
இமெயில்-dfohosur@gmail.com

தமிழ்நாடு வனத்துறை

அனுப்புநர்,
செல்வி. க. கார்த்திகேயனி, இ.வ.ப.,
வனஉயிரினகாப்பாளர்,
ஒசூர் வனக்கோட்டம்,
மத்திகிரி, ஒசூர் – 635 110.

பெறுநர்,
மாவட்ட ஆட்சியர்,
கிருஷ்ணகிரி மாவட்டம்,
கிருஷ்ணகிரி.

மாவட்ட வன அலுவலர் அலுவலகம் கிருஷ்ணகிரி புவியியல் மற்றும் சுரங்கத்துறை

ந.க.எண். 11162/2023/எல் நாள்.01.03.2024
ஸ்ரீ சோபகிருது வருடம், மாசி மாதம் 18, திருவள்ளுவர் ஆண்டு 2055)

அய்யா/அம்மையீர்,

பொருள் : கனிமங்களும் குவாரிகளும் – கிருஷ்ணகிரி மாவட்டம் – அரசு புலங்களில் உரிமம் முடிவடைந்த குவாரிகள் மற்றும் புதிய குவாரிகளை டெண்டர் மற்றும் பொது ஏலத்தில் கொண்டுவர வனப்பகுதி மற்றும் சரணாலயத்திற்கு உள்ள தொலைவு விவரம் மற்றும் இதர விவரங்கள் கோரியது –தொடர்பாக.

பார்வை : மாவட்ட ஆட்சியர், கிருஷ்ணகிரி, ந.க.எண்.2023/2023/கனிமம், நாள்.07.10.2023, 21.11.2023, 13.12.2023 (ம) 15.02.2024

*****

பார்வையில் காணும் கடிதத்தில், தெரிவிக்கப்பட்ட அரசு புலங்களில் உரிமம் முடிவுற்ற குவாரிகள் மற்றும் புதிய குவாரிகளுக்கு டெண்டர் மற்றும் பொது ஏலத்தில் கொண்டுவர. வனப்பகுதி மற்றும் சரணாலயப் பகுதியிலிருந்து உள்ள தொலைவு விவரம் கோரப்பட்டுள்ளது. இது தொடர்பான விவரம் பின்வருமாறு தெரிவிக்கப்படுகிறது.

அட்டவணை 1

டெண்டர் / பொது ஏலம் விடுவதற்கு பரிந்துரை செய்யப்படும் குவாரி பகுதிகள் விவரம்

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWS (km)	Distance from ESZ of CNWS (km)	Distance from CSWS (km)
	KRISHNAGIRI TALUK									
1	Kallukurukki	Un-assessed waste-Malai	354 (Part-1)	1.00.00	12.575047	78.209328	Kundarapalli 0.46	26.5	25.5	42.17

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWS (km)	Distance from ESZ of CNWS (km)	Distance from CSWS (km)
2	Kallukurukki	Un-assessed waste-Malai	354 (Part-2)	1.00.00	12.575315	78.208633	Kundarapalli 0.38	26.44	25.44	42.12
3	Kallukurukki	Un-assessed waste-Malai	354 (Part-3)	1.00.00	12.575546	78.207938	Kundarapalli 0.31	26.37	25.37	42.08
4	Kallukurukki	Un-assessed waste-Malai	354 (Part-4)	1.00.00	12.575803	78.207241	Kundarapalli 0.23	26.30	25.30	42.05
5	Kallukurukki	Un-assessed waste-Malai	354(Part-5)	0.95.00	12.574730	78.206858	Kundarapalli 0.30	26.30	25.30	42
	SHOOLAGIRI TALUK									
6	Berigai	Un-assessed waste-Parai	305/4 (Part)	1.15.00	12.793944	77.960446	Berigai 0.30	28.27	27.27	51.22
7	Ullatti	Un-assessed waste-Parai	122/1 (Part)	1.00.00	12.613170	77.991782	Shoolagiri 5.84 Samanapalli RL 0.68	9.22	8.22	33.16
8	Kamandoddi	Un-assessed waste-Tharisu	653 (Part-1)	3.35.00	12.664700	77.949852	Settipalli 2.78	13.70	12.70	37.48
9	Marandapalli	Un-assessed waste-Tharisu	71/2	1.15.00	12.677092	78.057920	Thekkalapalli 1.80	19.16	18.16	42.40
10	Venkatesapuram	Un-assessed waste-Parai	132 (Part-1)	1.55.00	12.757128	77.954216	Athimugam – I 0.63	24.20	23.20	47.91
11	Venkatesapuram	Un-assessed waste-Parai	132 (Part-2)	1.45.00	12.756039	77.955732	Athimugam – I 0.48	24.10	23.10	47.94

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWS (km)	Distance from ESZ of CNWS (km)	Distance from CSWS (km)
12	Venkatesapuram	Un-assessed waste-Karadu	135 (Part)	1.70.00	12.753081	77.952074	Athimugam – I 0.41	23.76	22.76	47.39
13	Venkatesapuram	Un-assessed waste-Karadu	294 (Part-1)	3.00.00	12.757003	77.956107	Athimugam – I 0.57	24.20	23.20	47.93
14	Venkatesapuram	Un-assessed waste-Karadu	86 (Part-2)	2.00.00	12.756083	77.947017	Athimugam – I 0.99	24.08	23.08	47.27
	DENKANIKOTTAI TALUK									
15	Hosapuram	Un-assessed waste-Tharisu	359 (Part)	1.00.00	12.641910	77.817775	Sanamavu 6.06	13.50	12.50	28.34

மேற்கண்ட அட்டவணை 1ல் உள்ள குவாரி பகுதிகள், காவேரி வடக்கு வனஉயிரின சரணாலயத்திற்கான சூழல் உயர்திரன் மண்டலத்திற்குள் (Eco-Sensitive Zone) வருவதில்லை.

அட்டவணை 2

டெண்டர் / பொது ஏலம் மூலம் குத்தகை அனுமதி வழங்குவதை தற்காலிகமாக நிறுத்திவைக்க பரிந்துரை செய்யப்படும் குவாரிகளின் விவரப் பட்டியல்

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWLS (km)	Distance from ESZ of CNWLS (km)	Distance from CSWLS (km)
	KRISHNAGIRI TALUK									
1	Kallukurukki	Un-assessed waste-Malai	701 (Part-2)	1.00.00	12.555435	78.224247	Kundarapalli 3.15	27.70	26.70	41.85
2	Kallukurukki	Un-assessed waste-Malai	701 (Part-3)	1.00.00	12.555448	78.224813	Kundarapalli 3.19	27.75	26.75	41.90

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWLS (km)	Distance from ESZ of CNWLS (km)	Distance from CSWLS (km)
3	Kallukurukki	Un-assessed waste-Malai	701 (Part-5)	3.50.00	12.550433	78.228441	Kundarapalli 3.85	28.05	27.05	41.82
	SHOOLAGIRI TALUK									
4	Athimugam	Un-assessed waste-Karadu	367/2 (Part)	2.85.00	12.745869	77.957477	Athimugam – II 0.06	22.74	21.74	46.51
5	Berigai	Un-assessed waste-Parai	316/1 (Part)	2.20.00	12.791011	77.961650	Midithepalli 0.043	27.88	26.88	50.95
6	Chinnabalinaickn palayam	Un-assessed waste-Karadu	1/1 (Part)	1.70.00	12.666448	78.087067	Kariyanapalli - II 0.070	20.15	19.15	42.50
7	Sanamavu	Un-assessed waste-Karadu	967/2 (Part)	1.65.00	12.660059	77.900915	Sanamavu 0.22	12.72	11.72	36.28

RF – Reserved Forest
CNWLS – Cauvery North Wildlife Sanctuary
ESZ – Eco-sensitive Zone
CSWLS – Cauvery South Wildlife Sanctuary

- மேற்கண்ட அட்டவணை 2ல் குறிப்பிட்டுள்ள இடங்களில் வரிசை எண்கள்.01 முதல் 03 வரையில் உள்ள புல எண்.701 அருகில் சுமார் 145 ஹெக்டேர் பரப்பளவில் ஈரநிலம் (பதேதல்லா ஏரி) அமைந்துள்ளது. மேலும் இந்த மலையை ஒட்டி கிருஷ்ணகிரி காப்பு நிலம்–1 உள்ளது. இப்புலமானது கிருஷ்ணகிரி நகரப்பகுதிக்கு மிக அருகில் (1.5கி.மீ தொலைவில்) உள்ளது. இந்த மலை ஈரநிலத்தின் நீர்ப்பிடிப்பு பகுதியாக உள்ளதால், கிருஷ்ணகிரி நகரின் நிலத்தடி நீர்க்கு ஆதாரமாக உள்ளது. மேலும் இப்புலத்தினை குவாரி பணி செய்வதற்கு குத்தகை அனுமதி வழங்க மாவட்ட ஈரநில குழுவின் பரிந்துரையின்படி நடவடிக்கை எடுக்கலாம்.
- வரிசை எண்.4ல் உள்ள புலமானது அத்திமுகம்–1 மற்றும் அத்திமுகம் –2–ஆகிய காப்புகாட்டிற்கு இணைப்பாக உள்ளது. இப்பகுதியில் வன உயிரின நடமாட்டம்

உள்ளதால், வன உயிரினம் இரண்டு காப்புக்காடுகளுக்கிடையில் நடமாடும் பகுதியாகும். இப்புலத்தை குவாரி குத்தகை அனுமதி வழங்கும் நிலையில் மனித விலங்கு மோதல்கள் ஏற்பட வாய்ப்புள்ளது.

- வரிசை எண்.5ல் உள்ள புலமானது மிடிதேப்பள்ளி மற்றும் பேரிகை ஆகிய காப்புகாட்டிற்கு இணைப்பாக உள்ளது. இப்பகுதியில் வன உயிரின நடமாட்டம் உள்ளதால், வன உயிரினம் இரண்டு காப்புக்காடுகளுக்கிடையில் நடமாடும் பகுதியாகும். இப்புலத்தை குவாரி குத்தகை அனுமதி வழங்கும் நிலையில் மனித விலங்கு மோதல்கள் ஏற்பட வாய்ப்புள்ளது.
- அட்டவணை 2ல் வரிசை எண்.6ல் சின்னநாயக்கன்பாளையம் கிராம புலத்தை சுற்றி காப்புக்காடுகள் அமைந்துள்ளது. இப்பகுதியானது எர்ரண்டப்பள்ளி காப்புக்காடு மற்றும் கரியானப்பள்ளி காப்புக்காடுகளின் தொடர்ச்சி உள்ளது. மேலும் இந்தப்பகுதியான சிறுத்தைக்கு (Schedule 1 Species) உகந்த வாழ்விடமாகும்.
- வரிசை எண்.7ல் உள்ள புலமானது சானமாவு காப்புக்காட்டிற்கு அருகில் உள்ளது. இங்கு தற்போது யானை நடமாட்டம் அதிகமாக உள்ள பகுதி என்பதால் மனித விலங்கு மோதல்கள் ஏற்பட வாய்ப்புள்ளது.

மேற்படி காரணங்களினால் அட்டவணை 2ல் உள்ள 7 குவாரிகளை ஏலம் விடுவதற்கு உத்தேசிக்கப்பட்டுள்ள கிராமங்களில் டெண்டர் மற்றும் பொது ஏலத்தில் விடுவதை தற்சமயம் நிறுத்தி வைக்க பரிந்துரைக்கப்படுகிறது

குறிப்பு:- மேலும் அட்டவணை 1ல் அனுமதி வழங்கப்படும் 15 குவாரிகளுக்கு அருகில் உள்ள காப்புக்காடுகளுக்குள் அமைந்துள்ள, கிராம மக்கள் / ரோந்து பணிக்கு பயன்படுத்தப்படும் மண் சாலையை குவாரி வாகனங்கள் பயன்படுத்த அனுமதி இல்லை என்பதை அன்புடன் தெரிவித்துக்கொள்கிறேன்.

தங்கள் அன்புள்ள,

வன உயிரினக்காப்பாளர்,
ஓசூர் வனக்கோட்டம்.

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

ANNEXURE - VIII

GOVERNMENT TENDER GAZETTE

ANNEX

உதவி இயக்குநர் அலுவலகம்
பதிவெண்:
கிருஷ்ணகிரி
புவியியல் மற்றும் சுரங்கத்துறை

தமிழ்நாடு அரசு
2024

கிருஷ்ணகிரி மாவட்ட அரசிதழ்

சிறப்பு வெளியீடு

ஆணையின்படி வெளியிடப்பட்டது

கிருஷ்ணகிரி, நவம்பர் 16, 2024

[குரோதி, கார்த்திகை 1 – திருவள்ளுவர் ஆண்டு 2055] [எண் 20

மாவட்ட ஆட்சியர் அறிவிக்கை

[ந.க.எண்.2023/2023/(கனிமம்), நாள் : 15.11.2024.]

(மின்அஞ்சல் (mine.tnkgi@nic.in)

ஒப்பந்தப்புள்ளி வரவேற்கும் அறிவிக்கை

கிருஷ்ணகிரி மாவட்டத்தில் அரசு புறம்போக்கு நிலங்களில் அமைந்துள்ள சாதாரண வகை கற்குவாரிகளில் பொதுப் பயன்பாட்டிற்காக உடைகல் / சாதாரண வகை கற்கள் குவாரி கனிமக் குத்தகை தொடர்பான விண்ணப்பங்கள் வரவேற்கும் அறிவிக்கை

கனிமங்களும் குவாரிகளும் (மேம்படுத்துதல் மற்றும் ஒழுங்குபடுத்துதல்) சட்டம் 1957-ன் பிரிவு 15 மற்றும் அரசாணை (எம்.எஸ்) எண்.21 இயற்கை வளங்கள் (எம்.எம்.சி.1) துறை நாள்: 31.07.2024 மற்றும் தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959-ன் விதி எண்.8-ன் படியும், அவ்வப்போது ஏற்படுத்தப்படும் அதன் திருத்தங்களின்படியும், கிருஷ்ணகிரி மாவட்ட நிர்வாகம் இவ்வறிக்கையின் இணைப்பில் கண்டுள்ளவாறு அரசுப்புறம்போக்கு நிலங்களில் அமைந்துள்ள 20 இனங்களில் உள்ள உடைகல் / சாதாரண வகை கற்களை குவாரி செய்து பொதுப் பயன்பாட்டிற்கு, பயன்படுத்தும் பொருட்டு (e-auction) மின்னணு ஏலம் முறையில் கனிமக் குத்தகைக்கு அளிக்க ஒப்பந்தப் புள்ளிகள் வரவேற்கப்படுகின்றன.

மேற்படி கல்குவாரி குத்தகை மின்னணு ஏலத்தில் கலந்து கொள்ள உரிய படிவத்தில் ரூ.5000- (ரூபாய் ஐந்தாயிரம் மட்டும்) விண்ணப்பக் கட்டணத்துடன் அளிக்கப்படும் ஒப்பந்தப்புள்ளிகள் மூலம் தேர்ந்தெடுக்கப்படும் தகுதியான நபர்கள் தொழில்நுட்ப அடிப்படையிலான பரிசீலனை மூலம் உறுதிசெய்யப்பட்டு மின்னணு ஏலக்கேட்பில் கலந்துகொள்ள அனுமதிக்கப்படுவார்கள்.

ஒப்பந்தப்புள்ளி ஆவணத்தில் (Tender Document) தகுதிகள் குறித்த நிபந்தனைகள், மின்னணு ஏலத்தில் கலந்து கொள்ள குறிக்கப்பட்டுள்ள நாள் மற்றும் நேரம் ஆகியவை தெரிவிக்கப்பட்டுள்ளன. விளக்கங்களுடன் ஒப்பந்தப்புள்ளி படிவம், மின்னணு ஏலம் தொடர்பான அறிவிக்கை, காலமுறை, முன்கொணர்வுகள் மற்றும் நடைமுறைகள் ஆகியவற்றை வலைதள முகவரி website https://tntenders.gov.in-ல் இருந்து பதிவிறக்கம் செய்துகொள்ளலாம்.

மின்னணு ஏலம் கேட்பில் கலந்து கொள்ள ஆர்வமுள்ள மற்றும் தகுதியான நபர்கள் மேற்படி வலைதளத்தில் தாங்களாகவே பதிவு செய்து கொள்ள வேண்டும். அவ்வாறு பதிவு செய்துகொண்ட பின்னர் தகுதியான ஏலக் கேட்பு நபர்கள் உள்நுழைவு அடையாளக் குறியீடு (Login ID) மற்றும் கடவுச் சொல் (Password) ஆகியவற்றை பெற்ற பின்னர் மின்னணு ஏல நடவடிக்கைகளில் பங்குபெறலாம். ஒப்பந்தபுள்ளி படிவ மாதிரி மற்றும் கனிமப் பகுதியில் சுருக்கமான விவரங்களை கட்டணம் ஏதுமின்றி website https://tntenders.gov.in என்ற வலைதளத்தில் பதிவிறக்கம் செய்துகொள்ளலாம். எண்ம கையொப்பம் சான்று (Digital Signature certificate) பெற்றிருக்க வேண்டும்.

இவ்வினத்தில் விருப்பமுள்ள ஏலக்கேட்பு நபர்கள் தேவையான விவரங்கள் மற்றும் தொடர்புடைய ஆவணங்கள் ஆகியவற்றை மின்னணு ஏலம் – டெண்டர் வழிகாட்டு முறை கையேட்டின் பிற்சேர்க்கை 2-ல் கண்டுள்ளவாறு சரியான குறியீடு மற்றும் கடவுச் சொல் பயன்படுத்தி சமர்ப்பிக்க வேண்டும். ஏலக்கேட்பு நபர்கள் ஏலக்கேட்பு கையேட்டினை பார்வையிட்டு மின்னணு ஏலம் மற்றும் ஒப்பந்தப்புள்ளி ஆகியவற்றை இணைய வழி நுழைவாயில் (e-Portal) உரிய முறையில் சமர்ப்பிக்க வேண்டும்.

மின்னணு ஒப்பந்தப்புள்ளி, தொழில்நுட்ப மதிப்பீடு ஆகியவற்றிற்கு வழங்கப்படும் கால அளவு ஒப்பந்தப்புள்ளி வரவேற்கும் அறிவிக்கை வெளியிடப்பட்ட நாளிலிருந்து, தினசரி பத்திரிக்கைகளில் பிரசுரம் செய்தல் மற்றும் புவியியல் மற்றும் சுரங்கத் துறை வலைதளத்தில் பதிவேற்றம் செய்யப்படும் நாளிலிருந்தும் கணக்கிடப்படும்.

மின்னணு பொது ஏலத்தில் கலந்து கொள்ளும் ஏலதாரர்கள் மற்றும் உயர்ந்தபட்ச ஏலதாரர்கள் ஆகியோருக்கு மாவட்ட ஆட்சியரின் ஏல ஆவண வழிகாட்டு நெறிமுறைகள் தொகுப்பு எண்.001/MM/2024-1 நாள். 15.11.2024-ன் படி தெரிவிக்கப்பட்டுள்ளது.

கால வரையரை

மின்னணு ஒப்பந்தப்புள்ளிக்கான காலவரையரை ஒப்பந்தப்புள்ளி தொடர்பான ஆவணத்தில் உள்ளவை.

மின்னணு ஒப்பந்தப்புள்ளி விண்ணப்பம் சமர்பிக்க இறுதி நாள் – 06.12.2024

விண்ணப்பங்களை (தொழில்நுட்ப கேட்புகளுக்காக திறக்கும் நாள் – 09.12.2024

மின்னணு ஏல நாள் – பின்னர் அறிவிக்கப்படும்

இணைப்பு – மின்னணு ஒப்பந்தப்புள்ளி மற்றும் மின்னணு ஏலத்தின் மூலம் கல்குவாரி கனிமக் குத்தகை அளிக்கப்படக் கூடிய குவாரிகளின் விவரம்.

இயக்குநர் அலுவலகம் கிருஷ்ணகிரி

அட்டவணை – சாதாரண கற்குவாரி பட்டியல்

1. கிருஷ்ணகிரி வருவாய் கோட்டம்

கிருஷ்ணகிரி வட்டம்

வ. எண்.	கிராமம்	புல எண்	மொத்த பரப்பு	குவாரி குத்தகை வழங்கும் பரப்பு	வகைப்பாடு	குத்தகை உரிமம் காலம்
(1)	(2)	(3)	(4) (ஹெக்டேர்)	(5) (ஹெக்டேர்)	(6)	(7) (வருடங்கள்)
1	கல்லுகுறுக்கி	354 (பகுதி–1)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10
2	கல்லுகுறுக்கி	354 (பகுதி–2)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10
3	கல்லுகுறுக்கி	354 (பகுதி–3)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10
4	கல்லுகுறுக்கி	354 (பகுதி–4)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10

2. ஓசூர் வருவாய் கோட்டம்

ஓசூர் வட்டம்

5	அச்செட்டிப்பள்ளி	886, 887 (பகுதி), 896 மற்றும் 895 (பகுதி)	8.78.5	4.00.0	கல்லாங்குத்து	10

சூளகிரி வட்டம்

6	பேரிகை	305/4 (பகுதி)	1.89.0	1.15.0	தீ.ஏ.த (பாறை)	10
7	உல்லட்டி	122 (பகுதி–1)	4.31.0	1.00.0	தீ.ஏ.த (பாறை)	10
8	காமன்தொட்டி	653 (பகுதி–1)	7.56.0	3.35.0	தீ.ஏ.த (தரிசு)	5
9	காமன்தொட்டி	754 மற்றும் 760 (பகுதி–6)	36.46.50	4.00.0	தீ.ஏ.த (மலை)	10
10	மாரண்டப்பள்ளி	71/2	1.15.0	1.15.0	தீ.ஏ.த (பாறை)	10
11	வெங்கடேசபுரம்	132 (பகுதி–1)	3.90.0	1.55.0	தீ.ஏ.த (பாறை)	10
12	வெங்கடேசபுரம்	132 (பகுதி–2)	3.90.0	1.45.0	தீ.ஏ.த (பாறை)	10
13	வெங்கடேசபுரம்	135 (பகுதி)	42.34.0	1.70.0	தீ.ஏ.த (கரடு)	10

(1)	(2)	(3)	(4) (ஹெக்டேர்)	(5) (ஹெக்டேர்)	(6)	(7) (வருடங்கள்)
14	வெங்கடேசபுரம்	294 (பகுதி-1)	18.36.5	3.00.0	தீ.ஏ.த (கரடு)	10
15	மதிநாயக்கன் பாளையம்	53 (பகுதி-1)	86.01.5	1.70.0	தீ.ஏ.த (கரடு)	10
16	மதிநாயக்கன் பாளையம்	53 (பகுதி-2)	86.01.5	2.00.0	தீ.ஏ.த (கரடு)	10
17	வெங்கடேசபுரம்	136 (பகுதி-10)	69.36.0	2.00.0	தீ.ஏ.த (கரடு)	5
		தேன்கனிக்கோட்டை வட்டம்				
18	ஒசபுரம்	359 (பகுதி)	3.03.5	1.50.0	தீ.ஏ.த (தரிசு)	10
19	தண்டரை	738 (பகுதி-2)	61.78.0	2.00.0	தீ.ஏ.த (மலை)	10
20	தண்டரை	738 (பகுதி-3)	61.78.0	1.50.0	தீ.ஏ.த (மலை)	10

கிருஷ்ணகிரி,
15.11.2024.

கே.எம். சரயு,
மாவட்ட ஆட்சியர்,
கிருஷ்ணகிரி மாவட்டம்.

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

தமிழ்நாடு எழுதுபொருள் மற்றும் அச்சுத்துறை ஆணையரால் சேலம் அரசினர் கிளை அச்சகத்தில் அச்சிடப்பட்டு மாவட்ட ஆட்சியரால் வெளியிடப்பட்டது.

ANNEXURE - IX

MINING PLAN REPORT & PLATES

07 SEP 2025

MINING PLAN

FOR

GRANT OF ROUGH STONE

GOVERNMENT PORAMBOKE LAND

TOTAL LEASE GRANTED PERIOD 10 YEARS

PERIOD OF MINING 10 YEARS

(Prepared Under Rule 8(6)(b) Tamil Nadu Minor Mineral Concession Rules, 1959 & As Per Amendment Under Rule 41 & 42)

LOCATION OF THE APPLIED AREA

EXTENT : 1.15.0 Ha.

S. F. No. : 305/4 (PART).

VILLAGE : BERIGAI.

TALUK : SHOOLAGIRI.

DISTRICT : KRISHNAGIRI.

STATE : TAMIL NADU.

APPLICANT

THIRU. N. SANKAR,

S/o. NAGARAJ,

BITHIREDDY VILLAGE,

PACHAPPANATTI POST,

DENKANIKOTTAI TALUK,

KRISHNAGIRI DISTRICT.

PREPARED BY

S. DHANASEKAR, M.Sc.,

QUALIFIED PERSON,
NO. 5/30-7 B, AVVAI NAGAR,

PONKUMAR MINES ROAD,

JAGIR AMMAPALAYAM,

07 SEP 2025

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3.0	General Information	11
4.0	Location	11
5.0	Geology and Mineral Reserves	12
6.0	Mining	18
7.0	Blasting	22
8.0	Mine Drainage	24
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11.0	Environment Management Plan	27
12.0	Mine Closure Plan	30
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ANNEXURES

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LIST OF PLATES

Sl. No.	Description	Plate No.	Scale
1.	Location Map	I	Not to Scale
2.	Route Map	IA	Not to Scale
3.	Topo Sheet Map of the Lease Area	IB	1:50,000
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5.	Surface and Geological Plan & Sections	III	1:1000
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7.	Mine Layout, Land use Pattern & Afforestation Plan	V	1:1000
8.	Environment Plan	VI	1:5000
9.	Conceptual/Final Mine Closure Plan & Sections	VII	1:1000
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N. Sankar,
S/o. Nagaraj,
Bithiredy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District.

CONSENT LETTER FROM THE APPLICANT

I hereby give my consent for preparing the Mining Plan in respect of **Rough Stone** quarry over an extent of **1.15.0 Hectares** of **Government Poramboke Land** in **S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District, Tamil Nadu State has been prepared by Shri. **S. Dhanasekar, M.Sc.,** Qualified Person.

I request the Deputy Director, Department of Geology and Mining, KRISHNAGIRI District to make further correspondence regarding 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 - 636 302.
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 my knowledge and consent and shall be acceptable to me and binding on me in all respects.

Place: Krishnagiri
Date:

(N. Sankar)
Singnature of Applicant



N. Sankar,
S/o. Nagaraj,
Bithireddy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District.

DECLARATION

I hereby declare that the Mining Plan in respect of **Rough Stone** quarry over an extent **1.15.0 Hectares of Government Poramboke Land** in **S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District, and Tamil Nadu State has been prepared with my consultation and I have understood the contents and agree to implement the same in accordance with the Mining Laws.

(N. Sankar)
Singnature of Applicant

Place: Krishnagiri

Date:

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

Qualified Person,

No.5/30-7B, Arivai Nagar,

Ponkumar Mines Road,

Jagir Ammapalayam,

Salem- 636 302.

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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** quarry lease over an extent of **1.15.0 Hectares** of **Government Poramboke Land** in **S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District, Tamil Nadu State obtained by **N. Sankar** 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 granting such permissions etc.

Certified

Signature of Qualified Person.

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

Place: Salem.

Date:

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

Qualified Person,

No.5/307B, Avvai Nagar,

Ponkumar Mines Road,

Jagir Ammapalayam,

Salem- 636 302.

07 SEP 2025

CERTIFICATE

This is to certify that during preparation of Mining Plan for **Rough Stone** quarry over an extent of **1.15.0 Hectares** of **Government Poramboke Land** in **S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District, Tamil Nadu State for **N.Sankar** 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.,(Geol)
Qualified Person

Place: Salem

Date:

07 SEP 2025

MINING PLAN FOR MINOR MINERALS

ROUGH STONE

TOTAL LEASE GRANTED PERIOD 10 YEARS

PROPOSED PERIOD OF MINING 10 YEARS

Over an extent of 1.15.0 Hectares of Government Poramboke Land in S.F. No.305/4 (Part) of Berigai Village, Shoolagiri Taluk, Krishnagiri District, Tamilnadu State.

(Prepared Under Rule 8(6)(b) Tamil Nadu Minor Mineral Concession Rules, 1959 & As Per Amendment Under Rule 41 & 42)

1.0 INTRODUCTION AND EXECUTIVE SUMMARY:

1. **Thiru. N. Sankar,** S/o. Nagaraj, Bithireddy Village, Pachappanatti Post, Denkanikottai Taluk, Krishnagiri District. has applied for the grant of quarry lease to quarry **Rough Stone** over an extent of **1.15.0 Hectares** of **Government Poramboke Land** in **S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District of Tamil Nadu State for a period of Ten Years under Tender cum Auction.

2. The Applicant has been declared the **Successful Highest Bidder** for an amount of **Rs. 1,29,04,608/- in an E-Tender cum Auction** conducted by the Government of Tamil Nadu, as notified in Gazette No. 12 (English) & 20 (Tamil) dated 16.11.2024. A specific area has been designated for the proposed grant of a Rough Stone Quarry Lease to **Thiru. N. Sankar** over an extent of 1.15.0 hectares of Government Poramboke land in S.F.No.305/4 (Part), Berigai Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu. The quarry lease is granted for a period of **Ten years**, as per Letter **Rc.No.14/2025/Mines dated 27.02.2025**. As per the conditions of the grant, the applicant is required to submit an approved Mining Plan and obtain an Environmental Clearance Certificate from the State Environment Impact Assessment Authority (SEIAA) for the final issuance of the quarry lease.

3. Accordingly, the Mining Plan has been prepared in compliance with Rule 8(6)(b) of the Tamil Nadu Minor Mineral Concession Rules, 1959, incorporating the amendments under Rules 41 & 42. The plan includes all conditions specified in the Precise Area Communication Letter and integrates the necessary details required to obtain Environmental Clearance from the State Environment Impact Assessment Authority (SEIAA).

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



4. **Reserves after leaving Safety Distance**

Description		Rough stone (Ts)	Weathered Rock (Ts)	Top Soil (Ts)
Estimated Geological Resources		867941.25	41472	20736
Tentative Mineable Reserves		444600.75	41472	20736
Proposed production for Ten years lease period	Proposal for Ten Years	444600.75	41472	20736
	Peak Production	88481.25	41472	20736

5. Environmental measures to be adopted shall be,

i) Dust Control at source while drilling and Proposed Control Blasting,

ii) Dust suppression at loading point and transport haul roads,

iii) Noise Control in Proposed Control Blasting, control of fly rock missiles and vibration by doing peak particle velocity within standard as prescribed by the DGMS and MoEF.

iv) Unnecessary land degradation should be avoided or damaged land should be reclaimed or rehabilitated.

v) Avoid uneven rat hole mining and follow scientific and systematic mining by safe bench system of open cast mining.

vi) Mining near major fracture zones if any should be avoided to control ground water fluctuation in the adjacent agricultural lands.

vii) Emission test of vehicles should be in stack to maintain minimum emission level of flue gases.

viii) Noise level should not exceed 80db and the vehicles should 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 adhered to.

x) And any other conditions as stipulated by the concerned authorities should be followed to protect the environment.

2.0 EXECUTIVE SUMMARY:

a.	Name of the Village	:	Berigai
b.	Name of the Panchayat / Union	:	Berigai / Shoolagiri
c.	The proposed total Mineable Reserves	:	**444600.75Ts**
d.	The proposed quantity of reserves (level of production) for **Ten Years** to be mined is (Recoverable reserves)	:	**444600.75Ts**
e.	Total extent of the area	:	**1.15.0 Ha.**
f.	Proposed Period of mining	:	**Ten years**
g.	**Proposed Depth of mining**	:	Mining Reserves Calculated upto **36m** (Top Soil **1.0m** + **2.0m** Weathered Rock + **33.0m** Rough stone). Surface Ground Level Above-16m & Surface Ground Level Below -20m.
h.	Existing Pit Dimension		**Nil**
i.	Peak Production	:	**88481.25Ts**
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	:	**Rs.1,31,74,608/-**
	b. Operational Cost	:	**Rs.40,00,000/-**
	c. EMP Cost	:	**Rs.3,50,000/-**
m.	The Applied lease area is bounded by four corners and the coordinates are	:	Toposheet No. **57 – H/13**
	Latitude	:	**12° 47' 44.4512"N to 12° 47' 36.8734"N**
	Longitude	:	**77° 57' 37.7112"E to 77° 57' 34.8443"E**
	North East	:	12° 47' 43 .2981" N 77° 57' 36.5657"E
	South East	:	12° 47' 38. 1682" N 77° 57' 37.7112"E
	North West	:	12° 47' 43.0947" N 77° 57' 34.8443"E
	South West	:	12° 47' 38. 8402" N 77° 57' 34.8904"E

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3.0 GENERAL INFORMATION:

3.1	a.	Name of the Applicant	:	**Thiru. N. Sankar**
	b.	Address of the Applicant with phone No and e-mail id if any	:	**N. Sankar,** S/o. Nagaraj, Bithireddy Village, Pachappanatti Post, Denkanikottai Taluk, Krishnagiri District.
	c.	Status of the Applicant	:	Individual
3.2	a.	Mineral Which the applicant intends to mine	:	**Rough Stone**
	b.	Precise area communication letter No.	:	**Rc. No.14/2025/Mines dated 27.02.2025**
	c.	Period of permission	:	10 Years
	d.	**Name and Address of the Qualified Person preparing the Mining Plan**	:	**S.Dhanasekar, M.Sc.,** Qualified Person No.5/30-7B, Avvai Nagar, Ponkumar Mines Road, Jagir Ammapalayam, Salem District - 636 302. E-Mail: geodhana@yahoo.co.in Cell: 98946-28970 & 73733-74702

4.0 LOCATION:

a. **Details of the Area:**

State	District	Panchat / Union	Taluk	Village	S.F.No.	Extent in Ha.
Tamilnadu	Krishnagiri	Berigai/ Shoolagiri	Shoolagiri	Berigai	305/4 (Part)	1.15.0
TOTAL =						**1.15.0**

b.	Classification of the Area (Ryotwari / poramboke / others)	:	It is a Government Poramboke Land, which is not fit for vegetation/cultivation.

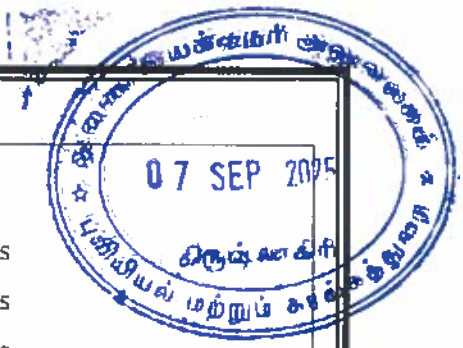
c.	Ownership / Occupancy of the Applied Lease area (Surface rights)	:	It is a Government Poramboke land. The applicant had been given precise area for the proposed grant of Rough Stone Quarry Lease.
d.	Toposheet No. with Latitude and Longitude	: : :	**Toposheet No. 57 – H/13** **12° 47' 44.4512"N to 12° 47' 36.8734"N** **77° 57' 37.7112"E to 77° 57' 34.8443"E**
e.	Existence of Public Road / Railway line if any nearby the area and approximate distance	:	Krishnagiri -Shoolagiri = 26.0 Kms Shoolagiri – Midithepalli = 12.7 Kms Quarry site is located in Northern side at a distance of 1.5 km from Midithepalli village.

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PART - A

5.0 GEOLOGY AND MINERAL RESERVES:

5.1	a.	**Topography:**		1. The area applied for quarry lease is elevated terrain area sloping towards Southeastern side covered with Rough Stone which does not sustain any type of vegetation. The altitude of the area is Maximum 892m and Minimum 876m above MSL. 2. No major river is found nearby the lease area. 3. Water table is noticed at a depth of **82m** from the below surface ground level in the adjacent open wells and bore wells of the area. 4. Temperature of the area is reported to be 18^{0}C to a maximum of 38^{0}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	:	Berigai – 2.2 Kms
		2. Police Station	:	Berigai – 2.0 Kms
		3. G.H	:	Berigai – 2.5 Kms
		4. Fire service	:	Malur – 28.6 Kms
		5. Railway Station	:	Hosur – 21.7 Kms
		6. School	:	Berigai – 4.1 Kms
		7. Airport	:	Bangalore – 157.6 Kms
		8. Seaport	:	Chennai – 256.0 Kms
	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, Charnockite 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.

	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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	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 NE – SW and dip towards SE-70^0.
				The general geological succession of the area is given as under.

	Age	Rock Formation
1.	Recent to Sub recent	Soil, Alluvium
2.	Archaean	Charnockites
3.	**Archaean**	Peninsular Gneiss, and Calc Gneiss

5.2		Details of Exploration already carried out if any	:	Since the **Rough Stone** is seen from the Surface itself, no exploration is needed. However, the area was personally examined by the Geologist who prepared the Mining Plan.
5.3	a.	Already excavated pit dimensions		**Nil**

5.3 b. GEOLOGICAL RESOURCES:

Top Soil :

The Thickness of Top soil in this area is 1.0m and the total volume of topsoil will be **20736Ts.**

Rough Stone :

The Geological Reserve within the applied lease area is estimated as **867941.25Ts,** considering a 100% Recovery rate upto the permissible depth. The reserve estimation is calculated upto a depth of **36m (1.0m** Top soil + **2.0m** Weathered Rock + **33.0m** Rough Stone).

GEOLOGICAL RESERVES												
Section	Bench	L (m)	W (m)	D (m)	Volume In M3	Geological Reserves m3	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
XY-AB	I	65	51	1	3315		3315		2		6630	
	II	65	51	2	6630			6630	2			13260
	III	65	51	3	9945	9945			2.75	27348.75		
	IV	65	51	5	16575	16575			2.75	45581.25		
	V	65	51	5	16575	16575			2.75	45581.25		
	VI	65	51	5	16575	16575			2.75	45581.25		
	VII	65	51	5	16575	16575			2.75	45581.25		
	VIII	65	51	5	16575	16575			2.75	45581.25		
	IX	65	51	5	16575	16575			2.75	45581.25		
TOTAL					**119340**	**109395**	**3315**	**6630**	-	**300836.25**	**6630**	**13260**
XY-CD	I	65	48	1	3120		3120		2		6240	
	II	65	48	2	6240			6240	2			12480
	III	25	48	3	3600	3600			2.75	9900.00		
	IV	65	48	5	15600	15600			2.75	42900.00		
	V	65	48	5	15600	15600			2.75	42900.00		
	VI	65	48	5	15600	15600			2.75	42900.00		
	VII	65	48	5	15600	15600			2.75	42900.00		
	VIII	65	48	5	15600	15600			2.75	42900.00		
	IX	65	48	5	15600	15600			2.75	42900.00		
TOTAL					**106560**	**97200**	**3120**	**6240**	-	**267300.00**	**6240**	**12480**
XY-EF	I	57	69	1	3933		3933		2		7866	
	II	57	69	2	7866			7866	2			15732
	IV	14	69	5	4830	4830			2.75	13282.50		
	V	42	69	5	14490	14490			2.75	39847.50		
	VI	65	69	5	22425	22425			2.75	61668.75		
	VII	65	69	5	22425	22425			2.75	61668.75		
	VIII	65	69	5	22425	22425			2.75	61668.75		
	IX	65	69	5	22425	22425			2.75	61668.75		
TOTAL					**120819**	**109020**	**3933**	**7866**	-	**299805.00**	**7866**	**15732**
GRAND TOTAL					**346719**	**315615**	**10368**	**20736**	-	**867941.25**	**20736**	**41472**

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c. MINEABLE RESERVES

The Mineable reserve is calculated upto **36m** (**1.0m** Top soil + **2.0m** Weathered Rock + **33.0m** Rough Stone).

The mineable reserves after leaving safety distance and benches have been estimated as **444600.75Ts** of Rough stone, **41472Ts** of Weathered Rock and **20736Ts** of Top soil at the rate of 100% recovery upto a depth of 36m(Surface Ground Level Above-16m & Surface Ground Level Below-20m).

MINEABLE RESERVES													
Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in M3	Mineable Reserves in m3 @ 100%	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
XY-AB	I	65	51	1	3315		3315		2		6630	
	II	65	51	2	6630			6630	2			13260
	III	65	51	3	9945	9945			2.75	27348.75		
	IV	65	51	5	16575	16575			2.75	45581.25		
	V	65	51	5	16575	16575			2.75	45581.25		
	VI	55	31	5	8525	8525			2.75	23443.75		
	VII	50	21	5	5250	5250			2.75	14437.50		
TOTAL					**66815**	**56870**	**3315**	**6630**	-	**156392.50**	**6630**	**13260**
XY-CD	I	65	48	1	3120		3120		2		6240	
	II	65	48	2	6240			6240	2			12480
	III	25	48	3	3600	3600			2.75	9900.00		
	IV	65	48	5	15600	15600			2.75	42900.00		
	V	65	48	5	15600	15600			2.75	42900.00		
	VI	65	30	5	9750	9750			2.75	26812.50		
	VII	65	20	5	6500	6500			2.75	17875.00		
TOTAL					**60410**	**51050**	**3120**	**6240**	-	**140387.50**	**6240**	**12480**

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Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in M3	Mineable Reserves in m3 @ 100%	Top Soil in m3	Weathered in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered in (Ts)
XY-EF	I	57	69	1	3933		3933		2		7866	
	II	57	69	2	7866			7866	2			15732
	III	14	69	3	2898	2898			2.75	7969.50		
	IV	42	69	5	14490	14490			2.75	39847.50		
	V	57	51	5	14535	14535			2.75	39971.25		
	VI	52	41	5	10660	10660			2.75	29315.00		
	VII	47	31	5	7285	7285			2.75	20033.75		
	VIII	37	21	5	3885	3885			2.75	10683.75		
TOTAL					**65552**	**53753**	**3933**	**7866**	-	**147820.75**	**7866**	**15732**
GRAND TOTAL					**192777**	**161673**	**10368**	**20736**	-	**444600.75**	**20736**	**41472**

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6.0 MINING:

6.1	Method of Mining	:	1. Opencast method of semi mechanized mining is adopted to extract Rough Stone. 2. Machineries like Tractor mounted compressor attached with Jack hammers is being used to drilling and Proposed Control Blasting. Excavators are operated for quarrying of Rough Stone and Tippers / Lorries are used for transportation of Rough Stone 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, smooth blasting. Rough Stone are removed using Hydraulic excavator and loaded directly to the tippers and transported to the nearby end users.
6.3	Proposed bench height & Width	:	Bench height = 5mts. Bench width = 5mts.
6.4	Details of Overburden / Mineral Production proposed for **Ten year**	:	**Top Soil / Overburden production details follows:** The entire lease area is covered with **1.0m of Topsoil**. It will be effectively utilized for **afforestation** and **filling low-lying areas along roads.** This lease area is covered with 2.0m of Weathered Rock. Weathered Rock will be dumped in all side boundary barrier of the lease area.
	Year wise reserves calculations : **Rough stone & Topsoil production details as follows:** The proposed rate of production of Rough Stone is estimated as **444600.75Ts** for Ten years. The Peak production of **Rough Stone** is about **88481.25Ts**. Reserves Calculated upto **36m** (**1.0m** Top soil + **2.0m** Weathered Rock + **33.0m** Rough stone).		

YEARWISE DEVELOPMENT AND PRODUCTION

Year	Section	Bench	L (m)	W (m)	D (m)	Volume in M3	Recoverable Reserve in m3 @ 100%	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
I-YEAR	XY-AB	I	65	51	1	3315		3315		2		6630	
		II	65	51	2	6630			6630	2			13260
		III	65	51	3	9945	9945			2.75	27348.75		
	XY-CD	I	65	48	1	3120		3120		2		6240	
		II	65	48	2	6240			6240	2			12480
		III	25	48	3	3600	3600			2.75	9900.00		
	XY-EF	I	57	69	1	3933		3933		2		7866	
		II	57	69	2	7866			7866	2			15732
		III	14	69	3	2898	2898			2.75	7969.50		
		IV	42	69	5	14490	14490			2.75	39847.50		
		Total				**62037**	**30933**	**10368**	**20736**		**85065.75**	**20736**	**41472**
II-YEAR	XY-AB	IV	65	51	5	16575	16575			2.75	45581.25		
	XY-CD	IV	65	48	5	15600	15600			2.75	42900.00		
		Total				**32175**	**32175**				**88481.25**		
III-YEAR	XY-AB	V	65	51	5	16575	16575			2.75	45581.25		
	XY-CD	V	65	48	5	15600	15600			2.75	42900.00		
		Total				**32175**	**32175**				**88481.25**		
IV-YEAR	XY-AB	VI	55	31	5	8525	8525			2.75	23443.75		
	XY-CD	VI	65	30	5	9750	9750			2.75	26812.50		
		Total				**18275**	**18275**				**50256.25**		
V-YEAR	XY-EF	V	57	51	5	14535	14535			2.75	39971.25		
		Total				**14535**	**14535**				**39971.25**		
VI-YEAR	XY-AB	VII	50	21	5	5250	5250			2.75	14437.50		
		Total				**5250**	**5250**				**14437.50**		

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Year	Section	Bench	L (m)	W (m)	D (m)	Volume in M3	Recoverable Reserve in m3 @ 100%	Top Soil in m3	Weathered in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered in (Ts)
VII-YEAR	XY-CD	VII	65	20	5	6500	6500			2.75	17875.00		
		Total				**6500**	**6500**				**17875.00**		
VIII-YEAR	XY-EF	VII	52	41	5	10660	10660			2.75	29315.00		
		31				**10660**	**10660**				**29315.00**		
IX-YEAR	XY-EF	VIII	47	31	5	7285	7285			2.75	20033.75		
		Total				**7285**	**7285**				**20033.75**		
X-YEAR	XY-EF	IX	37	21	5	3885	3885			2.75	10683.75		
		Total				**3885**	**3885**				**10683.75**		
GRAND TOTAL						**192777**	**161673**	**10368**	**20736**		**444600.75**	**20736**	**41472**

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6.5	a.	Mining	:	Drilling of shot holes will be carried out using compressor and jack hammer. Depth of holes shall be to 2m bench height and spacing shall be 0.75m and burden shall be 0.60m from the prefuse. Details of drilling equipments are given below.

Type	Nos	Dia of hole	Size / Capacity	Make	Motive power	H.P.
Jack Hammer	2	25.5 mm	Hand held	Atlas copco 2Nos	Diesel	60

	b.	Loading	:	Loading of waste and rough stone shall be carried out by 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	1	1.2 M^3	L&T or Ex200	Diesel	120

	c.	Transportation	:	Transport of raw materials and waste shall be done by Tipper of 10 M.T. capacity

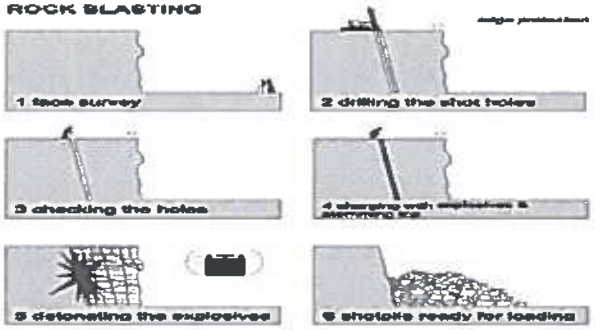
Type	Nos	Size / Capacity	Make	Motive power	H.P.
Tipper	2	10 M.T	Ashok Leyland	Diesel	110

6.6		Disposal of Overburden	:	The estimated quantity of Top soil is **20736Ts.** It will be effectively utilized for **afforestation** and **filling low-lying areas along roads.**
6.7		**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** 177.0m(L) X 37.0m(W) Avg X 36.0m(D) 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 will be carried out every year as per the MOEF norms.

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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.
			
7.2	Types of Explosives	:	Following explosives are recommended for efficient Proposed Control Blasting with safe practice.

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 32
3.	Safety fuse	Class - 6	Blue sump fuse coils of 10mts each	

7.3	**Measures proposed to minimize ground vibration due to Proposed Control Blasting**	:	The following steps shall be adopted to control ground vibration due to Proposed Control 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. 2. In case of electronic detonators, which are inherently much more accurate delays (+/- 0.2 milliseconds delay) to minimizes the ground vibration. 3. Use of Ammonium nitrate fuel oil mixture for shot holes may be avoided because which cause for high fly of rocks in view critical diameter problem. Only high strength explosives like slurry will be used in the form of cartridge. 4. Charge per hole should exceed the powder factor designed for each hole based on the quantum of Proposed Control Blasting, strength of rocks, fracture pattern etc.
7.4	Storage of Explosives and safety measures to be taken while Proposed Control Blasting.	:	1. The Applicant stores the explosives as per the Indian Explosives Act, 1958. 2. An authorized explosive agency is engaged to carry out blasting. 3. The blasting time in a day is between 5 PM to 6 PM. 4. First Aid Box is kept ready at all the time. 5. Necessary precautionary announcement is being carried out before the blasting operation. operation.

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8.0 MINE DRAINAGE:

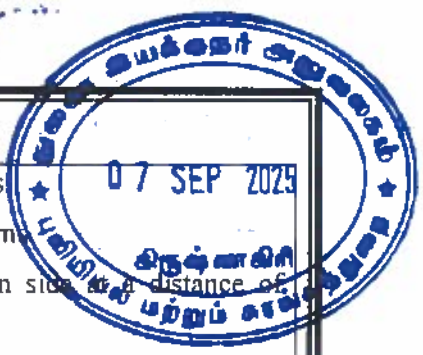
8.1	Depth of Water table	:	The ground water table is reported at 33m below ground level in nearby open wells and bore wells of this area. Mining reserves calculated taken upto 36m. Now, proposed quarry depth is above the water table. Hence, quarrying may not affect the ground water.
8.2	Arrangement and 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 out periodically by a stand by diesel powered Centrifugal pump motivated with 7.5 H.P. Motor. The quality of water is potable and it is not contaminated with any hazardous things.

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,

Direction	Village	Distance in Kms	Population
North	Vanamangalam	3.3Kms	300
East	Madivalam	2.27Kms	150
South	Midithepalli	1.7Kms	350
West	Nariganapuram	2.0Kms	280

9.2	Power lines (HT/LT)	:	No power line is located in the lease area.
9.3	Water bodies (River, Pond, Lake, Odai, Channel etc)	:	There is no Water bodies (River, Pond, Lake, Odai, Channel etc) located within a radius of 500m.
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 = 26.0 Kms Shoolagiri – Midithepalli = 12.7 Kms Quarry site is located in Northern side at a distance of 1.5 km from Midithepalli village.
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.,	:	Distance between Reserve Forest Berigai and the applied area = 0.30km. Distance from Cauvery North Wild life Sanctuary = 28.27 kms. Distance from Cauvery South Wild life Sanctuary = 51.22 kms.
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	:	**Distance from Cauvery North Wild life Sanctuary = 28.27 kms.** **Distance from Cauvery South Wild life Sanctuary = 51.22 kms.**
9.9	Any Other Structures	:	**Nil**

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 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 to the provisions of the Government norms.

				1.	Skilled	Operator	2 Nos
						Mechanic	1 No.
						Blaster/Mate	1No.
				2.	Semi – skilled	Driver	2 Nos
				3.	Unskilled	Musdoor Labours	5 Nos
						Cleaners	3Nos
						Office Boy	1No
				4.	Management & Supervisory staff		3No.
					Total =		18Nos
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 are also 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 will be 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.	**Labour 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 been provided as per the circulars and amendments made for Mine labours under the guidance of DGMS being a semi-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.			

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PART – B

11.0 ENVIRONMENTAL MANAGEMENT PLAN:

11.1	Existing Land Use Pattern	:	The existing land use pattern is given as under:

Sl. No.	Land Use	Present Area (Hect)	Area in use during the quarrying period (Hect)
1.	Area under quarrying	Nil	0.66.0
2.	Infrastructure	Nil	0.01.0
3.	Roads	Nil	0.01.0
4.	Green Belt & Dump	Nil	0.47.0
5.	Unutilized Area	1.15.0	Nil
	Total =	**1.15.0Ha**	**1.15.0Ha**

11.2	Water Regime	:	The water table in this area is observed at a depth of 82 meters below the surface. The proposed quarrying of rough stone is planned up to a depth of 36 meters, which is well above the groundwater level. Therefore, the mining activity will not impact groundwater depletion in 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 18^0C during winter and to a maximum of 38^0C during the summer.
11.5	Human Settlement	:	The nearest habitations with the population is given.

Direction	Village	Distance in Kms	Population
North	Vanamangalam	3.3Kms	300
East	Madivalam	2.27Kms	150
South	Midithepalli	1.7Kms	350
West	Nariganapuram	2.0Kms	280

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11.6	Plan for Air, Dust Suppression	:	Air or dust expected to be generated from drilling process, hauling roads, places of excavation, etc. will be suppressed by periodical wetting of land by water sprayings. For the sampling of air, high volume air sampler (Model VFC-PM10) was used (10 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 will be carried out by drilling and Proposed Control Blasting by using low power explosives, and hence, noise will be 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 Ten years shall be less than **1.15.0Ha.** Afforestation

			will be started during the first year of mining operation itself.
	c. Stabilization and vegetation of dumps	:	The topsoil 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, small dia explosives are used for breaking the hard rock and boulders, the noise and vibration will be 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 proposed mining is planned to a depth of **36m** (surface ground level above-16m & Surface Ground Level Below-20m). 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, Punga & Panai etc will be planted along the lease boundary and avenues as well as over non active dumps at a rate100 trees per annum 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 **A. Fixed Asset Cost:** Land Cost	: :	 Rs. 1,29,04,608/-(Leased tender amount for Government Poramboke Land)
	Labour Shed	:	Rs. 1,20,000/-
	Sanitary Facility	:	Rs. 70,000/-
	Fencing cost	:	Rs. 80,000/-
	Total=	:	**Rs.1,31,74,608/-**
	B. Operational Cost: **Machinery cost**	: :	 **Rs.40,00,000/-**
	C. EMP Cost:		
	1. Drinking water facility	:	Rs. 1,10,000/-
	2. Safety kits	:	Rs. 75,000/-
	3. Water sprinkling	:	Rs. 50,000/-
	4. Afforestation	:	Rs. 25,000/-
	5. Water quality test	:	Rs. 30,000/-
	6. Air quality test	:	Rs. 30,000/-
	7. Noise/vibration test	:	Rs. 30,000/-
	Total=	:	**Rs. 3,50,000/-**
	Total Project cost(A+B+C)	:	**Rs.1,75,24,608/-**

12.0 MINE CLOSURE PLAN:

12.1	Steps proposed for phased restoration, reclamation of already mined out area.	:	The proposed mining is planned to a depth of 36m. 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 quarry with a mineable depth of 36m for Ten years only and hence, no need of mitigation and restoration / reclamation of the applied lease area.

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13.0 ANY OTHER DETAILS INTEND TO FURNISH BY THE APPLICANT

(i) Permission will be obtained from the Director of Mines Safety for the 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 endeavour 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 8(6)(b) Tamil Nadu Minor Mineral Concession Rules, 1959 & As per Amendment under Rule 41 & 42 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 Level Environmental Impact Assessment Authority.

(v) This Mining Plan is prepared for the Applied Rough Stone 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 corperation of the particulars specified in the letter Roc. No. 14/2025 Dated 7.9.2025 of the Duputy 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.

01/09/25

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

Letter Roc. No. 14/2025 Dated 7.9.25

ANNEXURE-I

Rc.No.14/2025/Mines dated:27.02.2025

O/o. Deputy Director of
Geology & Mining,
Collectorate, Krishnagiri.

07 SEP 2025

Precise Area Communication

Sub : Mines and Minerals – Minor Mineral – Rough Stone – Krishnagiri District – Shoolagiri Taluk - Berigai Village – SF.No.305/4(Part) – over an extent of 1.15.0 hectare of Government poramboke land – e-Tender cum Auction conducted – Highest bid amount offered by Thiru.N.Sankar – successful bidder declared - entire bid amount remitted - Precise area communicated -Reg.

Ref :
1. Krishnagiri District Gazette (Extra-ordinary) No.12 & 20 dated: 16.11.2024.
2. e-auction (live) conducted on 03.01.2025.
3. Notice Rc.No.16/2025/Mines dated: 07.01.2025 and 09.01.2025
4. Connected Records.

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Yours attention is invited to the reference cited.

2) Based on the recommendations of the Special Committee report dated: 13.11.2024, the District Collector, Krishnagiri has issued notice inviting tender under District Gazette No.12(English) & 20(Tamil) dated: 16.11.2024 and received applications through online from the interested bidders for conducting e-Tender cum auction.

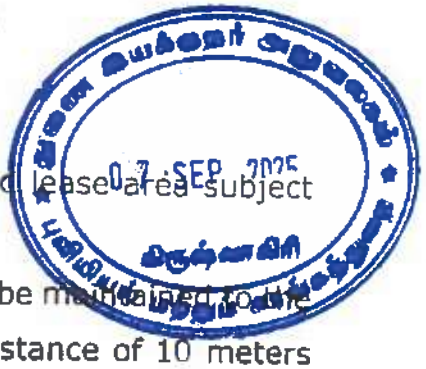
3) Subsequently, after due processes envisaged in G.O(Ms)No.21 Natural Resources (MMC1) Department dated: 31.07.2024, e-Tender cum auction has been conducted on 03.01.2025. Since, Thiru.N.Sankar has quoted highest bid amount of Rs.1,29,04,608/- (Rupees One crore twenty nine lakhs four thousand six hundred and eight only) for the proposed lease area in Government poramboke land over an extent of 1.15.0 hectares in

SF.No.305/4(Part), Berigai Village, Shoolagiri Taluk, Krishnagiri District, Thiru.N.Sankar after careful scrutinization has been declared as the successful bidder.

4) In this regard, the highest bidder Thiru.N.Sankar vide reference 3rd cited has been directed to remit the quoted highest bid amount to the proper head of Government Account. Accordingly, the Thiru.N.Sankar has remitted the entire bid amount of Rs.1,29,04,608/- (Rupees One crore twenty nine lakhs four thousand six hundred and eight only) as detailed below;

Challan Date	E-challan No.	Bank	Category	Amount in Rs.
EMD remitted during application through online			EMD	12,53,461
07.01.2025	20250107008843	SBI, Krishnagiri	10% of Bid amount	12,90,461
29.01.2025	20250128006547	SBI, Krishnagiri	90% of Bid amount	51,80,343
24.01.2025	20250122031751	SBI, Krishnagiri		51,80,343
			Total	**1,29,04,608**

5) Since the subject area in SF.No.305/4(Part) over an extent of 1.15.0 hects of Government poramboke land situated in Berigai Village, Shoolagiri Taluk, Krishnagiri District has been considered as qualified area for grant of lease for the period of 10 years, this precise area under Rule 41(4) of TNMMCR 1959 is hereby communicated to the successful bidder Thiru.N.Sankar. They are hereby directed to submit a draft mining plan within a period of 90 days from the date of receipt of this communication as required under rule 41 of TNMMCR 1959 for approval of the Deputy Director of Geology and Mining, Krishnagiri and further directed to obtain prior environment clearance from the State Level Environment Impact Assessment Authority, (SEIAA) Chennai as required under rule 42 of TNMMCR 1959 for



further process to grant of lease in the proposed lease area subject to the following conditions:-

1) A safety distance of 7.5 meters is to be maintained to the adjacent patta lands and a safety distance of 10 meters to be maintained to the adjacent Government lands and should not cause any hindrance to them while quarrying and transportation.
2) All conditions stipulated in the District Gazette Extra ordinary notification No.12 (English) & 20 (Tamil) dated: 16.11.2024 should be adhered by the bidder.
3) Environment clearance should be obtained from the State Level Environmental Impact Assessment Authority before grant of quarry lease as per rule 42 of the Tamil Nadu Minor Mineral Concession Rules 1959.
4) The bidder should fence the lease granted area with barbed wire before the execution of lease deed as follows:
    - The piliar post shall be firmly grounded with concrete foundation of height not less than 2 meters with a distance between two pillars shall not be more than 3 meters.
    - The applicant firm shall incorporate the DGPS readings for the entire boundary pillars of the area and the same should be clearly shown in the Mining Plan
    - A soft copy of digitalized map with DGPS readings should be submitted in the CD form to the Deputy / Assistant Director, Krishnagiri.
5) As per Rule 12 (V) of Minerals (other than Atomic & Hydrocarbon Energy Minerals) Concession Rules, 2016, the applicant firm shall at his own expenses erect, maintain and keep in repair all the boundary pillars for entire period of lease.

6) The applicant should use mild explosives during quarrying.

7) Child labourers should not be engaged in the quarry works.

8) If any violation is found during quarrying operation, the Rule 36(5)(h) and the penal provisions of the Tamil Nadu Minor Mineral Concession Rules, 1959 and connected Act and rules in force will attract.

Encl: Demarcated Map showing the proposed lease area.

27/2/25

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

27/2/25

To,

Thiru.N.Sankar,
S/o. Nagaraj,
Bithireddy Village,
Pachappanatti – Post,
Denkanikottai-Taluk,
Krishnagiri District.

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

தமிழ்நாடு அரசு
2024

பதிவெண்.
07 SEP 2024

கிருஷ்ணகிரி மாவட்ட அரசிதழ்

சிறப்பு வெளியீடு

ஆணையின்படி வெளியிடப்பட்டது

கிருஷ்ணகிரி, நவம்பர் 16, 2024

[குரோதி, கார்த்திகை 1 – திருவள்ளுவர் ஆண்டு 2055] [எண் 20

மாவட்ட ஆட்சியர் அறிவிக்கை

[ந.க.எண்.2023/2023/(கனிமம்), நாள் : 15.11.2024.]

(மின்அஞ்சல் (mine.tnkgl@nic.in)

ஒப்பந்தப்புள்ளி வரவேற்கும் அறிவிக்கை

கிருஷ்ணகிரி மாவட்டத்தில் அரசு புறம்போக்கு நிலங்களில் அமைந்துள்ள சாதாரண வகை கற்குவாரிகளில் பொதுப் பயன்பாட்டிற்காக உடைகல் / சாதாரண வகை கற்கள் குவாரி கனிமக் குத்தகை தொடர்பான விண்ணப்பங்கள் வரவேற்கும் அறிவிக்கை

கனிமங்களும் குவாரிகளும் (மேம்படுத்துதல் மற்றும் ஒழுங்குபடுத்துதல்) சட்டம் 1957-ன் பிரிவு 15 மற்றும் அரசாணை (எம்.எஸ்) எண்.21 இயற்கை வளங்கள் (எம்.எம்.சி.1) துறை நாள்: 31.07.2024 மற்றும் தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959-ன் விதி எண்.8-ன் படியும், அவ்வப்போது ஏற்படுத்தப்படும் அதன் திருத்தங்களின்படியும், கிருஷ்ணகிரி மாவட்ட நிர்வாகம் இவ்வறிக்கையின் இணைப்பில் கண்டுள்ளவாறு அரசுப்புறம்போக்கு நிலங்களில் அமைந்துள்ள 20 இனங்களில் உள்ள உடைகல் / சாதாரண வகை கற்களை குவாரி செய்து பொதுப் பயன்பாட்டிற்கு, பயன்படுத்தும் பொருட்டு (e-auction) மின்னணு ஏலம் முறையில் கனிமக் குத்தகைக்கு அளிக்க ஒப்பந்தப் புள்ளிகள் வரவேற்கப்படுகின்றன.

மேற்படி கல்குவாரி குத்தகை மின்னணு ஏலத்தில் கலந்து கொள்ள உரிய படிவத்தில் ரூ.5000/- (ரூபாய் ஐந்தாயிரம் மட்டும்) விண்ணப்பக் கட்டணத்துடன் அளிக்கப்படும் ஒப்பந்தப்புள்ளிகள் மூலம் தேர்ந்தெடுக்கப்படும் தகுதியான நபர்கள் தொழில்நுட்ப அடிப்படையிலான பரிசீலனை மூலம் உறுதிசெய்யப்பட்டு மின்னணு ஏலக்கேட்பில் கலந்துகொள்ள அனுமதிக்கப்படுவார்கள்.

ஒப்பந்தப்புள்ளி ஆவணத்தில் (Tender Document) தகுதிகள் குறித்த நிபந்தனைகள், மின்னணு ஏலத்தில் கலந்து கொள்ள குறிக்கப்பட்டுள்ள நாள் மற்றும் நேரம் ஆகியவை தெரிவிக்கப்பட்டுள்ளன. விளக்கங்களுடன் ஒப்பந்தப்புள்ளி படிவம், மின்னணு ஏலம் தொடர்பான அறிவிக்கை, காலமுறை, முன்கொணர்வுகள் மற்றும் நடைமுறைகள் ஆகியவற்றை வலைதள முகவரி website https://tntenders.gov.in-ல் இருந்து பதிவிறக்கம் செய்துகொள்ளலாம்.

மின்னணு ஏலம் கேட்பில் கலந்து கொள்ள ஆர்வமுள்ள மற்றும் தகுதியான நபர்கள் மேற்படி வலைதளத்தில் தாங்களாகவே பதிவு செய்து கொள்ள வேண்டும். அவ்வாறு பதிவு செய்துகொண்ட பின்னர் தகுதியான ஏலக் கேட்பு நபர்கள் உள்நுழைவு அடையாளக் குறியீடு (Login ID) மற்றும் கடவுச் சொல் (Password) ஆகியவற்றை பெற்ற பின்னர் மின்னணு ஏல நடவடிக்கைகளில் பங்குபெறலாம். ஒப்பந்தபுள்ளி படிவ மாதிரி மற்றும் கனிமப் பகுதியில் சுருக்கமான விவரங்களை கட்டணம் ஏதுமின்றி website https://tntenders.gov.in என்ற வலைதளத்தில் பதிவிறக்கம் செய்துகொள்ளலாம். எண்ம கையொப்பம் சான்று (Digital Signature certificate) பெற்றிருக்க வேண்டும்.

இவ்வினத்தில் விருப்பமுள்ள ஏலக்கேட்பு நபர்கள் தேவையான விவரங்கள் மற்றும் தொடர்புடைய ஆவணங்கள் ஆகியவற்றை மின்னணு ஏலம் – டெண்டர் வழிகாட்டு முறை கையேட்டின் பிற்சேர்க்கை 2-ல் கண்டுள்ளவாறு சரியான குறியீடு மற்றும் கடவுச் சொல் பயன்படுத்தி சமர்ப்பிக்க வேண்டும். ஏலக்கேட்பு நபர்கள் ஏலக்கேட்பு கையேட்டினை பார்வையிட்டு மின்னணு ஏலம் மற்றும் ஒப்பந்தப்புள்ளி ஆகியவற்றை இணைய வழி நுழைவாயில் (e-Portal) உரிய முறையில் சமர்ப்பிக்க வேண்டும்.

மின்னணு ஒப்பந்தப்புள்ளி, தொழில்நுட்ப மதிப்பீடு ஆகியவற்றிற்கு வழங்கப்படும் கால அளவு ஒப்பந்தப்புள்ளி வரவேற்கும் அறிவிக்கை வெளியிடப்பட்ட நாளிலிருந்து, தினசரி பத்திரிக்கைகளில் பிரசுரம் செய்தல் மற்றும் புவியியல் மற்றும் சுரங்கத் துறை வலைதளத்தில் பதிவேற்றம் செய்யப்படும் நாளிலிருந்தும் கணக்கிடப்படும்.

மின்னணு பொது ஏலத்தில் கலந்து கொள்ளும் ஏலதாரர்கள் மற்றும் உயர்ந்தபட்ச ஏலதாரர்கள் ஆகியோருக்கு மாவட்ட ஆட்சியரின் ஏல ஆவண வழிகாட்டு நெறிமுறைகள் தொகுப்பு எண்.001/MM/2024-1 நாள். 15.11.2024-ன் படி தெரிவிக்கப்பட்டுள்ளது.

கால வரையரை

மின்னணு ஒப்பந்தப்புள்ளிக்கான காலவரையரை ஒப்பந்தப்புள்ளி தொடர்பான ஆவணத்தில் உள்ளவை.

மின்னணு ஒப்பந்தப்புள்ளி விண்ணப்பம் சமர்ப்பிக்க இறுதி நாள் – 06.12.2024

விண்ணப்பங்களை (தொழில்நுட்ப கேட்புகளுக்காக திறக்கும் நாள் – 09.12.2024

மின்னணு ஏல நாள் – பின்னர் அறிவிக்கப்படும்

இணைப்பு – மின்னணு ஒப்பந்தப்புள்ளி மற்றும் மின்னணு ஏலத்தின் மூலம் கல்குவாரி கனிமக் குத்தகை அளிக்கப்படக் கூடிய குவாரிகளின் விவரம்.

07 SEP 2025

அட்டவணை – சாதாரண கற்குவாரி பட்டயங்கள்

1. கிருஷ்ணகிரி வருவாய் கோட்டம்

கிருஷ்ணகிரி வட்டம்

வ. எண்.	கிராமம்	புல எண்	மொத்த பரப்பு	குவாரி குத்தகை வழங்கும் பரப்பு	வகைப்பாடு	குத்தகை உரிமம் காலம்
(1)	(2)	(3)	(4) (ஹெக்டேர்)	(5) (ஹெக்டேர்)	(6)	(7) (வருடங்கள்)
1	கல்லுகுறுக்கி	354 (பகுதி–1)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10
2	கல்லுகுறுக்கி	354 (பகுதி–2)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10
3	கல்லுகுறுக்கி	354 (பகுதி–3)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10
4	கல்லுகுறுக்கி	354 (பகுதி–4)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10

2. ஓசூர் வருவாய் கோட்டம்

ஓசூர் வட்டம்

5	அச்செட்டிப்பள்ளி	886, 887 (பகுதி), 896 மற்றும் 895 (பகுதி)	8.78.5	4.00.0	கல்லாங்குத்து	10

சூளகிரி வட்டம்

6	பேரிகை	305/4 (பகுதி)	1.89.0	1.15.0	தீ.ஏ.த (பாறை)	10
7	உல்லட்டி	122 (பகுதி–1)	4.31.0	1.00.0	தீ.ஏ.த (பாறை)	10
8	காமன்தொட்டி	653 (பகுதி–1)	7.56.0	3.35.0	தீ.ஏ.த (தரிசு)	5
9	காமன்தொட்டி	754 மற்றும் 760 (பகுதி–6)	36.46.50	4.00.0	தீ.ஏ.த (மலை)	10
10	மாரண்டப்பள்ளி	71/2	1.15.0	1.15.0	தீ.ஏ.த (பாறை)	10
11	வெங்கடேசபுரம்	132 (பகுதி–1)	3.90.0	1.55.0	தீ.ஏ.த (பாறை)	10
12	வெங்கடேசபுரம்	132 (பகுதி–2)	3.90.0	1.45.0	தீ.ஏ.த (பாறை)	10
13	வெங்கடேசபுரம்	135 (பகுதி)	42.34.0	1.70.0	தீ.ஏ.த (கரடு)	10

(1)	(2)	(3)	(4) (ஹெக்டேர்)	(5) (ஹெக்டேர்)	(6)	(7) (வருடங்கள்)
14	வெங்கடேசபுரம்	294 (பகுதி-1)	18.36.5	3.00.0	தீ.எ.த (கரடு)	10
15	மதிநாயக்கன் பாளையம்	53 (பகுதி-1)	86.01.5	1.70.0	தீ.எ.த (கரடு)	10
16	மதிநாயக்கன் பாளையம்	53 (பகுதி-2)	86.01.5	2.00.0	தீ.எ.த (கரடு)	10
17	வெங்கடேசபுரம்	136 (பகுதி-10)	69.36.0	2.00.0	தீ.எ.த (கரடு)	5
		தேன்கனிக்கோட்டை வட்டம்				
18	ஒசபுரம்	359 (பகுதி)	3.03.5	1.50.0	தீ.எ.த (தரிசு)	10
19	தண்டரை	738 (பகுதி-2)	61.78.0	2.00.0	தீ.எ.த (மலை)	10
20	தண்டரை	738 (பகுதி-3)	61.78.0	1.50.0	தீ.எ.த (மலை)	10

கிருஷ்ணகிரி.
15.11.2024.

கே.எம். சரயு,
மாவட்ட ஆட்சியர்,
கிருஷ்ணகிரி மாவட்டம்.

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

தமிழ்நாடு எழுதுபொருள் மற்றும் அச்சுத்துறை ஆணையரால் சேலம் அரசினர் கிளை அச்சகத்தில் அச்சிடப்பட்டு மாவட்ட ஆட்சியரால் வெளியிடப்பட்டது.

தொலைபேசி எண். 04344 296600
இ-மெயில்-dfohosur@gmail.com

07 SEP 2023

புதியபேருந்து நிலையம் மற்றும் சுற்றுச்சூழல் மாசுக்கட்டுப்பாடு வாரியம் கிருஷ்ணகிரி

தமிழ்நாடு வனத்துறை

அனுப்புநர்,
செல்வி. க. கார்த்திகேயனி, இ.வ.ப.,
வனஉயிரினகாப்பாளர்,
ஒசூர் வனக்கோட்டம்,
மத்திகிரி, ஒசூர் – 635 110.

பெறுநர்,
மாவட்ட ஆட்சியர்,
கிருஷ்ணகிரி மாவட்டம்,
கிருஷ்ணகிரி.

ந.க.எண். 1162/2023/எல் நாள்.01.03.2024
ஸ்ரீ சோபகிருது வருடம், மாசி மாதம் 18, திருவள்ளுவர் ஆண்டு 2055)

அய்யா/அம்மையீர்,

பொருள் : கனிமங்களும் குவாரிகளும் – கிருஷ்ணகிரி மாவட்டம் – அரசு புலங்களில் உரிமம் முடிவடைந்த குவாரிகள் மற்றும் புதிய குவாரிகளை டெண்டர் மற்றும் பொது ஏலத்தில் கொண்டுவர வனப்பகுதி மற்றும் சரணாலயத்திற்கு உள்ள தொலைவு விவரம் மற்றும் இதர விவரங்கள் கோரியது –தொடர்பாக.

பார்வை : மாவட்ட ஆட்சியர், கிருஷ்ணகிரி, ந.க.எண்.2023/2023/கனிமம், நாள்.07.10.2023, 21.11.2023, 13.12.2023 (ம) 15.02.2024

*****

பார்வையில் காணும் கடிதத்தில், தெரிவிக்கப்பட்ட அரசு புலங்களில் உரிமம் முடிவுற்ற குவாரிகள் மற்றும் புதிய குவாரிகளுக்கு டெண்டர் மற்றும் பொது ஏலத்தில் கொண்டுவர. வனப்பகுதி மற்றும் சரணாலயப் பகுதியிலிருந்து உள்ள தொலைவு விவரம் கோரப்பட்டுள்ளது. இது தொடர்பான விவரம் பின்வருமாறு தெரிவிக்கப்படுகிறது.

அட்டவணை 1

டெண்டர் / பொது ஏலம் விடுவதற்கு பரிந்துரை செய்யப்படும் குவாரி பகுதிகள் விவரம்

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWS (km)	Distance from ESZ of CNWS (km)	Distance from CSWS (km)
	KRISHNAGIRI TALUK									
1	Kallukurukki	Un-assessed waste-Malai	354 (Part-1)	1.00.00	12.575047	78.209328	Kundarapalli 0.46	26.5	25.5	42.17

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWS (km)	Distance from ESZ of CNWS (km)	Distance from CSWS (km)
2	Kallukurukki	Un-assessed waste-Malai	354 (Part-2)	1.00.00	12.575315	78.208633	Kundarapalli 0.38	26.44	25.44	42.12
3	Kallukurukki	Un-assessed waste-Malai	354 (Part-3)	1.00.00	12.575546	78.207938	Kundarapalli 0.31	26.37	25.37	42.08
4	Kallukurukki	Un-assessed waste-Malai	354 (Part-4)	1.00.00	12.575803	78.207241	Kundarapalli 0.23	26.30	25.30	42.05
5	Kallukurukki	Un-assessed waste-Malai	354[Part-5)	0.95.00	12.574730	78.206858	Kundarapalli 0.30	26.30	25.30	42
	SHOOLAGIRI TALUK									
6	Berigai	Un-assessed waste-Parai	305/4 (Part)	1.15.00	12.793944	77.960446	Berigai 0.30	28.27	27.27	51.22
7	Ullatti	Un-assessed waste-Parai	122/1 (Part)	1.00.00	12.613170	77.991782	Shoolagiri 5.84 Samanapalli RL 0.68	9.22	8.22	33.16
8	Kamandoddi	Un-assessed waste-Tharisu	653 (Part-1)	3.35.00	12.664700	77.949852	Settipalli 2.78	13.70	12.70	37.48
9	Marandapalli	Un-assessed waste-Tharisu	71/2	1.15.00	12.677092	78.057920	Thekkalapalli 1.80	19.16	18.16	42.40
10	Venkatesapuram	Un-assessed waste-Parai	132 (Part-1)	1.55.00	12.757128	77.954216	Athimugam – I 0.63	24.20	23.20	47.91
11	Venkatesapuram	Un-assessed waste-Parai	132 (Part-2)	1.45.00	12.756039	77.955732	Athimugam – I 0.48	24.10	23.10	47.94

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Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWLS (km)	Distance from ESZ of CNWLS (km)	Distance from CSWLS (km)
12	Venkatesapuram	Un-assessed waste-Karadu	135 (Part)	1.70.00	12.753081	77.952074	Athimugam – I 0.41	23.76	22.76	47.39
13	Venkatesapuram	Un-assessed waste-Karadu	294 (Part-1)	3.00.00	12.757003	77.956107	Athimugam – I 0.57	24.20	23.20	47.93
14	Venkatesapuram	Un-assessed waste-Karadu	86 (Part-2)	2.00.00	12.756083	77.947017	Athimugam – I 0.99	24.08	23.08	47.27
	DENKANIKOTTAI TALUK									
15	Hosapuram	Un-assessed waste-Tharisu	359 (Part)	1.00.00	12.641910	77.817775	Sanamavu 6.06	13.50	12.50	28.34

மேற்கண்ட அட்டவணை 1ல் உள்ள குவாரி பகுதிகள், காவேரி வடக்கு வனஉயிரின சரணாலயத்திற்கான சூழல் உயர்திரன் மண்டலத்திற்குள் (Eco-Sensitive Zone) வருவதில்லை.

அட்டவணை 2

டெண்டர் / பொது ஏலம் மூலம் குத்தகை அனுமதி வழங்குவதை தற்காலிகமாக நிறுத்திவைக்க பரிந்துரை செய்யப்படும் குவாரிகளின் விவரப் பட்டியல்

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWLS (km)	Distance from ESZ of CNWLS (km)	Distance from CSWLS (km)
	KRISHNAGIRI TALUK									
1	Kallukurukki	Un-assessed waste-Malai	701 (Part-2)	1.00.00	12.555435	78.224247	Kundarapalli 3.15	27.70	26.70	41.85
2	Kallukurukki	Un-assessed waste-Malai	701 (Part-3)	1.00.00	12.555448	78.224813	Kundarapalli 3.19	27.75	26.75	41.90

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWLS (km)	Distance from ESZ of CNWLS (km)	Distance from CSWLS (km)
3	Kallukurukki	Un-assessed waste-Malai	701 (Part-5)	3.50.00	12.550433	78.228441	Kundarapalli 3.85	28.05	27.05	41.82
	SHOOLAGIRI TALUK									
4	Athimugam	Un-assessed waste-Karadu	367/2 (Part)	2.85.00	12.745869	77.957477	Athimugam – II 0.06	22.74	21.74	46.51
5	Berigai	Un-assessed waste-Parai	316/1 (Part)	2.20.00	12.791011	77.961650	Midithepalli 0.043	27.88	26.88	50.95
6	Chinnabalinaickn palayam	Un-assessed waste-Karadu	1/1 (Part)	1.70.00	12.666448	78.087067	Kariyanapalli - II 0.070	20.15	19.15	42.50
7	Sanamavu	Un-assessed waste-Karadu	967/2 (Part)	1.65.00	12.660059	77.900915	Sanamavu 0.22	12.72	11.72	36.28

RF – Reserved Forest
CNWLS – Cauvery North Wildlife Sanctuary
ESZ – Eco-sensitive Zone
CSWLS – Cauvery South Wildlife Sanctuary

- மேற்கண்ட அட்டவணை 2ல் குறிப்பிட்டுள்ள இடங்களில் வரிசை எண்கள்.01 முதல் 03 வரையில் உள்ள புல எண்.701 அருகில் சுமார் 145 ஹெக்டேர் பரப்பளவில் ஈரநிலம் (ப்தேதல்லா ஏரி) அமைந்துள்ளது. மேலும் இந்த மலையை ஒட்டி கிருஷ்ணகிரி காப்பு நிலம்–1 உள்ளது. இப்புலமானது கிருஷ்ணகிரி நகரப்பகுதிக்கு மிக அருகில் (1.5கி.மீ தொலைவில்) உள்ளது. இந்த மலை ஈரநிலத்தின் நீர்ப்பிடிப்பு பகுதியாக உள்ளதால், கிருஷ்ணகிரி நகரின் நிலத்தடி நீர்க்கு ஆதாரமாக உள்ளது. மேலும் இப்புலத்தினை குவாரி பணி செய்வதற்கு குத்தகை அனுமதி வழங்க மாவட்ட ஈரநில குழுவின் பரிந்துரையின்படி நடவடிக்கை எடுக்கலாம்.
- வரிசை எண்.4ல் உள்ள புலமானது அத்திமுகம்–1 மற்றும் அத்திமுகம் –2–ஆகிய காப்புகாட்டிற்கு இணைப்பாக உள்ளது. இப்பகுதியில் வன உயிரின நடமாட்டம்



உள்ளதால், வன உயிரினம் இரண்டு காப்புக்காடுகளுக்கிடையில் நடமாடும் பகுதியாகும். இப்புலத்தை குவாரி குத்தகை அனுமதி வழங்கும் நிலையில் மனித விலங்கு மோதல்கள் ஏற்பட வாய்ப்புள்ளது.

- வரிசை எண்.5ல் உள்ள புலமானது மிடிதேப்பள்ளி மற்றும் பேரிகை ஆகிய காப்புகாட்டிற்கு இணைப்பாக உள்ளது. இப்பகுதியில் வன உயிரின நடமாட்டம் உள்ளதால், வன உயிரினம் இரண்டு காப்புக்காடுகளுக்கிடையில் நடமாடும் பகுதியாகும். இப்புலத்தை குவாரி குத்தகை அனுமதி வழங்கும் நிலையில் மனித விலங்கு மோதல்கள் ஏற்பட வாய்ப்புள்ளது.
- அட்டவணை 2ல் வரிசை எண்.6ல் சின்னநாயக்கன்பாளையம் கிராம புலத்தை சுற்றி காப்புக்காடுகள் அமைந்துள்ளது. இப்பகுதியானது எர்ரண்டப்பள்ளி காப்புக்காடு மற்றும் கரியானப்பள்ளி காப்புக்காடுகளின் தொடர்ச்சி உள்ளது. மேலும் இந்தப்பகுதியான சிறுத்தைக்கு (Schedule 1 Species) உகந்த வாழ்விடமாகும்.
- வரிசை எண்.7ல் உள்ள புலமானது சானமாவு காப்புக்காட்டிற்கு அருகில் உள்ளது. இங்கு தற்போது யானை நடமாட்டம் அதிகமாக உள்ள பகுதி என்பதால் மனித விலங்கு மோதல்கள் ஏற்பட வாய்ப்புள்ளது.

மேற்படி காரணங்களினால் அட்டவணை 2ல் உள்ள 7 குவாரிகளை ஏலம் விடுவதற்கு உத்தேசிக்கப்பட்டுள்ள கிராமங்களில் டெண்டர் மற்றும் பொது ஏலத்தில் விடுவதை தற்சமயம் நிறுத்தி வைக்க பரிந்துரைக்கப்படுகிறது

குறிப்பு:- மேலும் அட்டவணை 1ல் அனுமதி வழங்கப்படும் 15 குவாரிகளுக்கு அருகில் உள்ள காப்புக்காடுகளுக்குள் அமைந்துள்ள, கிராம மக்கள் / ரோந்து பணிக்கு பயன்படுத்தப்படும் மண் சாலையை குவாரி வாகனங்கள் பயன்படுத்த அனுமதி இல்லை என்பதை அன்புடன் தெரிவித்துக்கொள்கிறேன்.

தங்கள் அன்புள்ள,

வன உயிரினக்காப்பாளர்,
ஒசூர் வனக்கோட்டம்.

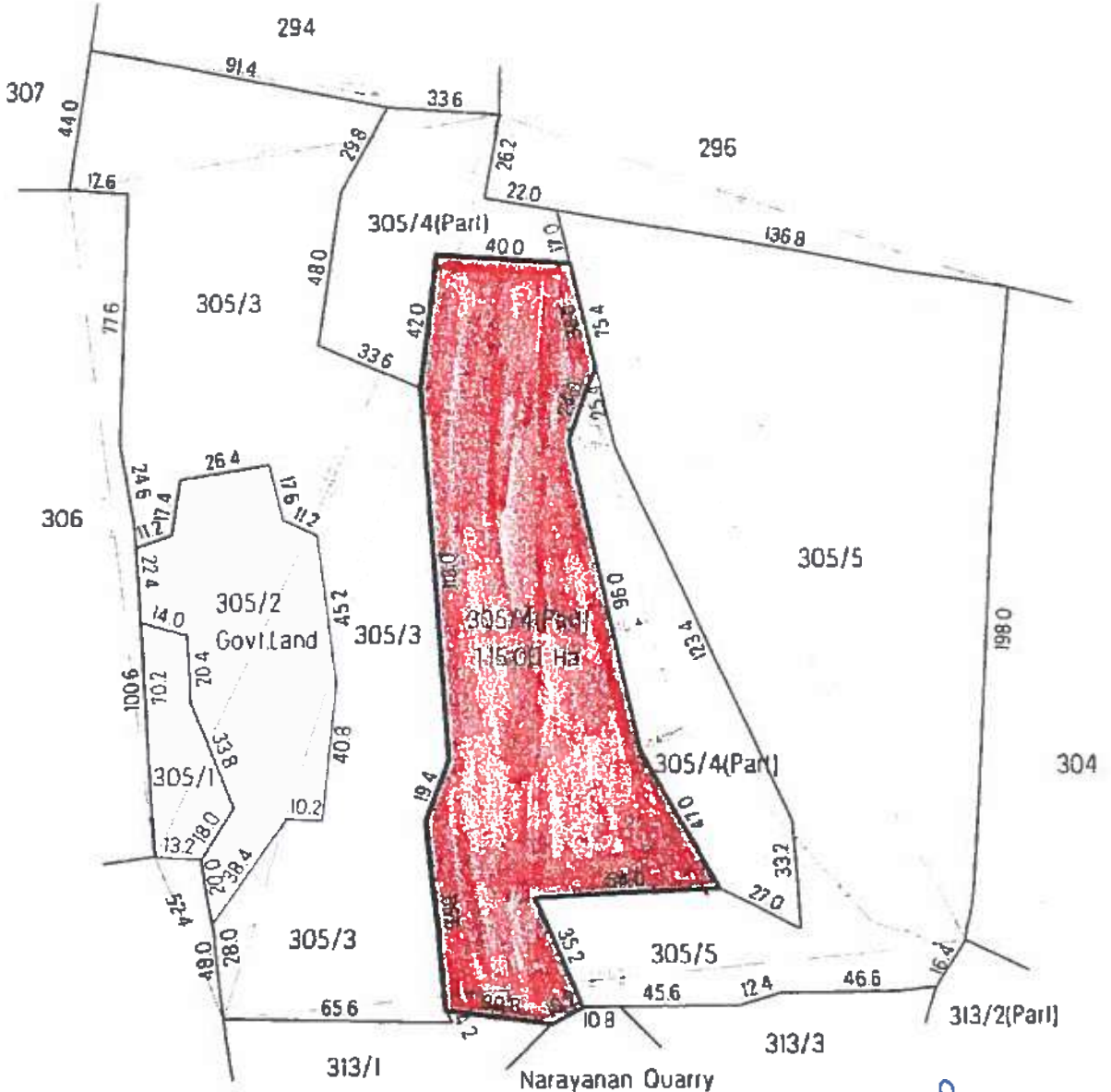
S. DHANASEKAR, M.Sc.,(Geo)
Qualified Person

ANNEXURE - IV

Krishnagiri District
Shoolagiri Taluk
Berigai Village
S.F.No: 305/4
Extent= 1.89.00 Hectares
Classificatin: UAW-Parai

07 SEP 2025

SCALE 1:1500



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

K. NEELAKANDAN
Sub-Inspector of Survey,
O/o. Deputy Director, Geology and Mining,
Krishnagiri District.

LEGEND:

PROPOSED FOR TENDER AREA
S.F.No.305/4(Part) =1.15.00 Ha

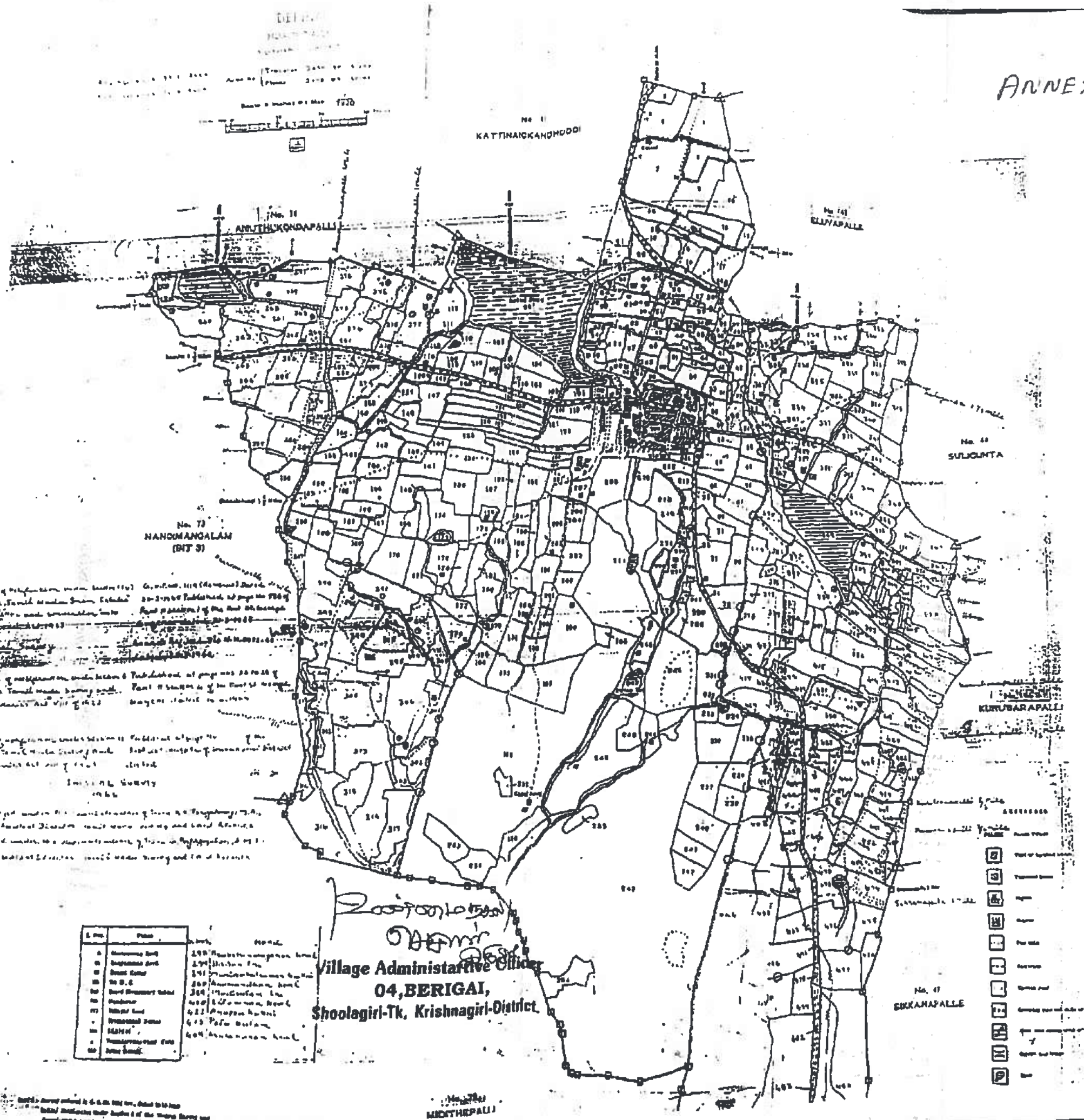
SEASONAL ODAI

Remarks
All Dimension in meters



ANNEXURE V

தலை மண்டல அலுவலகம்
07 SEP 2025
திருவனந்தபுரம்
பதிவியல் மற்றும் தணிக்கைத்துறை



Village Administrative Officer
04,BERIGAI,
Shoolagiri-Tk, Krishnagiri-District.

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

ANNEXURE- VI

கிராமக் கணக்கு

– ஆம் பசலியில் இருவுனகிரி மாவட்டம் கிருஷ்ணகிரி வட்டம் 42 பேரிகை

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.					கைப்பற்று தாரருடைய பெயரும் எண்ணும் அல்லது அனுபோக தாரருடைய பெயர்.	சாகுபடியாளரின் பெயர்.	முதல் போகம்.				
நில அளவை எண்.	உட்பிரிவு எண்.	பரப்பு.	நீர்வரை.	ஒரு போகம் அல்லது இரு போகம்.		நிலத்தின் எந்த பகுதி யாவது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது அறுவடை செய்யப்பட்டது.	பயிரின் பெயர்.	பயிராக / அறுவடை யான பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விபரக்காடு.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
305	4	1.89.0	–		–				தரிசு.		
								1 கல்லமரநேல்			

Village Administartive Officer
04, BERIGAI,
Shoolagiri-Tk, Krishnagiri-District

360/26-R.F. III-A-10-50,00,000 Cps.-GBP.-Mdu-7-2018.

எண் 2

கிராமத்தில் வருடவாரி புலவாரி கைப்பற்று சாகுபடி அடங்கல் கணக்கு

இரண்டாம் போகம்.					கிராம அலுவலரின் குறிப்புரை :– (1) புலன்களின் பகுதிகளில் மட்டும் பயிரிடப்பட்ட விவரங்கள் அளவில், (2) கைப்பற்றில் இவ்வாறு நிலம்– களின் சாகுபடியின் தன்மையும் பரப்பு (3) முந்தைய மாதத்தில் பாய்ச்சல் உதவியின்றி பயிரிடப்பட்டவை என்று பதிவாகியுள்ள நிலங்– களும் பிந்தைய மாதங்களில் நீர் பாய்ச்சப்பட்ட விவரங்கள்.	கீழ்க்கண்டவகையில் பயிர் செய்யாது உள்ள நிலத்தின் தன்மையும் மற்றும் பரப்பின் விவரங்கள் ஒவ்வொரு நிலை– அளவை எண் அல்லது அதன் பகுதியில்.	பயிர் அறுவடை செய்த நாள்.
எந்த மாதத்தில் பயிர் செய்யப்பட்டது அறுவடை செய்யப்பட்டது.	பயிரின் பெயர்.	பயிராக / அறுவடையான பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விபரக்காடு.	(18)	(18அ)	(19)
(13)	(14)	(15)	(16)	(17)			
					1.89.0 நானை		

07 SEP 2025



	4B	301-4B					2	15	0 05·5	0 13		
									2 23·5	4 43		
302	1	302-1	அ	புற	...	...	...	...	0 52·0	...	...	ஒளி.
	2	-2	ஏ	ப	...	8-3	15	2 15	0 96·0	2 06	207 க. சுப்ர மணியம்	
									1 48·0	2 06		
303	...	303	அ	புற	...	...	...	...	1 02·5	...	...	ஒளி.
304	1	304-1	அ	இ.எ.த	...	...	...	...	2 10·0	...	...	பாறை.
	2	-2	ஏ	ப	...	8-3	5	2 15	1 18·5	2 55	287 அ. முனிவெங்க டப்பா மனைவி தாகப்பாள்.	
	3	-3	ஏ	ஈ	...	8-3	5	2 15	1 91·0	4 11	44 அன்னையா (எ) அ. முனிவெங்க டப்பா.	வட்டக்கிணறு.
	4	-4	ஏ	ப	...	8-3	5	2 15	0 31·5	0 68	207 K. சுப்ர மனியம்.	வட்டக்கிணறு.
	5	-5	அ	புற	...	...	...	...	0 13·5	...	...	வரி. ✓
	6	-6	ஏ	ஈ	...	8-3	5	2 15	0 09·5	0 20	207 K. சுப்ர மனியம்.	
									5 74·0	7 54	✓	
305	1	305-1	ஏ	ப	...	8-4	7	1 09	0 12·0	0 13	44 அன்னையா (எ) அ. முனிவெங்க டப்பா.	
	2	-2	அ	இ.எ.த	...	...	...	...	0 45·5	...	...	பாறை. ✓
	3	-3	ஏ	ப	...	8-4	7	1 09	1 71·0	1 86	44 அன்னையா (எ) அ. முனிவெங்க டப்பா.	
	4	-4	அ	இ.எ.த	...	8-4	7	1 09	1 89·0	...	...	பாறை.
	5	-5	ஏ	ப	...	8-4	7	1 09	2 18·0	2 38	44 அன்னையா (எ) அ. முனிவெங்க டப்பா.	
									6 36·5	4 37	✓	
306	...	306	ஏ	ப	...	8-4	5	1 09	1 46·0	1 59	102 மு. சேஷாத்ரி மாணிக்கம்.	

Village Administartive Officer
PERIGAI
Shoolagiri.Tk. Krishnagiri District

16.83.5 Ans

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

மாவட்ட ஆட்சியர் அலுவலகம்
04 SEP 2025
திருவண்ணாமலை
புனிதமும் மற்றும் சுற்றுச்சூழல்

भारत सरकार

आधार

இந்திய அரசாங்கம்
Government of India

இந்திய தனிப்பட்ட அடையாள ஆணைய அமைப்பு
Unique Identification Authority of India

பதிவேட்டு எண்/ Enrolment No.: 2193/11103/89192

To
சங்கர்
SANKAR
S/O: Nagaraj,
D.NO.1/45A,
BITHIREDDY,
PACHAPPANATTI,
VTC: Pachapanatti,
PO: Pachappanatti,
Sub District: Denkanikottai,
District: Krishnagiri,
State: Tamil Nadu,
PIN Code: 635113,
Mobile: 7708835834

Signature valid

உங்கள் ஆதார் எண் / Your Aadhaar No. :
7597 3939 2758
VID : 9143 4800 0013 9254

எனது ஆதார், எனது அடையாளம்

Government of India

AADHAAR

தகவல் / INFORMATION

- ஆதார் என்பது அடையாளத்திற்கான சான்றாகும். குடியுரிமை அல்லது பிறந்த தேதிக்கான சான்றல்ல. பிறந்த தேதி என்பது ஆதார் எண் வைத்திருப்பவரால் சமர்ப்பிக்கப்பட்ட விதிமுறைகளில் குறிப்பிடப்பட்டுள்ள பிறந்த தேதி ஆவணத்தின் ஆதாரம் மூலம் ஆதரிக்கப்படும் தகவலின் அடிப்படையில் அமைந்துள்ளது
- இந்த ஆதார் கடிதத்தை UIDAI நியமித்த அங்கீகார நிறுவனத்தால் ஆன்லைன் அங்கீகாரம் அல்லது ஆப் ஸ்டோர்களில் கிடைக்கும் எம் ஆதார் அல்லது ஆதார் QR ஸ்கேனர் செயலியை பயன்படுத்தி QR குறியீடு ஸ்கேனிங் அல்லது www.uidai.gov.in ல் கிடைக்கும் பாதுகாப்பான QR குறியீடு ரீடர் செயலியை பயன்படுத்தி சரிபார்க்க வேண்டும்
- ஆதார் தனித்துவமானது மற்றும் பாதுகாப்பானது
- ஆதார் பதிவு செய்யப்பட்ட நாளிலிருந்து ஒவ்வொரு 10 வருடங்களுக்குப் பிறகும் ஆதாரில் அடையாளம் மற்றும் முகவரிக்கான ஆவணங்கள் புதுப்பிக்கப்பட வேண்டும்
- பல்வேறு அரசு மற்றும் அரசு சாரா பலன்கள் / சேவைகளைப் பெற ஆதார் உங்களுக்கு உதவுகிறது
- உங்கள் மொபைல் எண் மற்றும் மின்னஞ்சல் ஐடியை ஆதாரில் புதுப்பிக்கவும்
- ஆதார் சேவைகளைப் பெற mAadhaar செயலியை பதிவிறக்கவும்
- ஆதார்பயோமெட்ரிக்களைப் பயன்படுத்தாதபோது பாதுகாப்பை உறுதிசெய்ய ஆதார்பயோமெட்ரிக்ஸ் லாக்/அன்லாக் அம்சத்தைப் பயன்படுத்தவும்
- ஆதார் கோரும் நிறுவனங்கள் ஒப்புதலைப் பெற வேண்டிய கட்டாயம் உள்ளது.
- Aadhaar is proof of identity, not of citizenship or date of birth (DOB). DOB is based on information supported by proof of DOB document specified in regulations submitted by Aadhaar number holder.
- This Aadhaar letter should be verified through either online authentication by UIDAI-appointed authentication agency or QR code scanning using mAadhaar or Aadhaar QR Scanner app available in app stores or using secure QR code reader app available on www.uidai.gov.in.
- Aadhaar is unique and secure.
- Documents to support identity and address should be updated in Aadhaar after every 10 years from date of enrolment for Aadhaar.
- Aadhaar helps you avail of various Government and Non-Government benefits/services.
- Keep your mobile number and email id updated in Aadhaar.
- Download mAadhaar app to avail of Aadhaar services.
- Use the feature of Lock/Unlock Aadhaar/biometrics to ensure security when not using Aadhaar/biometrics.
- Entities seeking Aadhaar are obligated to seek consent.



சங்கர்
SANKAR
பிறந்த நாள்/DOB: 01/06/1989
ஆண்/ MALE

ஆதார் எனது அடையாளத்திற்கான சான்றாகும். குடியுரிமை, அல்லது பிறந்த தேதிக்கான சான்றல்ல. பிறந்த தேதியுடன் கூடுதல் ஆவணத்தைப் பயன்படுத்தவும் வேண்டும் பாதுகாப்பான அங்கீகார் அல்லது QR குறியீட்டை ஸ்கேன் செய்வதன் மூலம்
Aadhaar is proof of identity, not of citizenship or date of birth. It should be used with verification (online authentication, or scanning of QR code / offline XML).

7597 3939 2758

எனது ஆதார், எனது அடையாளம்

Aadhaar no. issued: 25/04/2013

முகவரி:
S/O: நாகராஜ், கண்.1/45ஏ, பிதிரெட்டி,
பச்சப்பனட்டி, பச்சனப்பட்டி,
பச்சப்பனட்டி, கிருஷ்ணகிரி,
தமிழ் நாடு - 635113

Address:
S/O: Nagaraj, D.NO.1/45A, BITHIREDDY,
PACHAPPANATTI, Pachapanatti, PO: Pachappanatti,
DIST: Krishnagiri,
Tamil Nadu - 635113

Details as on: 27/08/2025

7597 3939 2758
VID : 9143 4800 0013 9254

1947 | help@uidai.gov.in | www.uidai.gov.in

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

Reg. No 01BBB1005
Col Code 106 / 106

07 SEP 2023

பெரியார் பல்கலைக்கழகம்
Periyar University

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

துணைவேந்தர்
Vice-Chancellor

Processed by	
Read by	
Examined by	

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

PRITHVI MINERALS,

O : 04288 - 262489
VARAVALLAMPALAYAM,
ALATHUR POST - 636 303,
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

ANN

07 SEP 2025

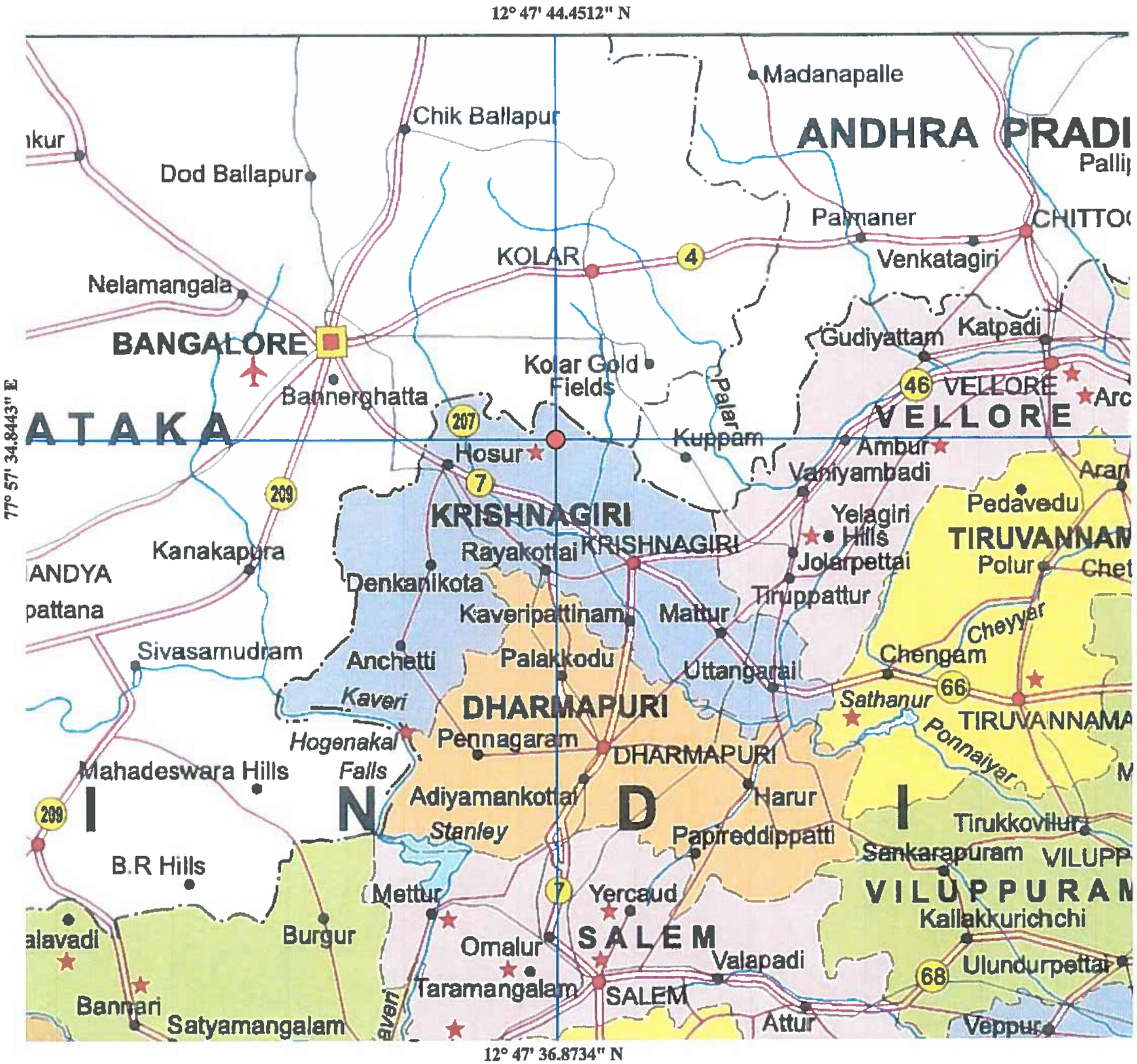
PHOTO SHOWN PROPOSED APPLIED LEASE AREA VIEW-1



PHOTO SHOWN PROPOSED APPLIED LEASE AREAVIEW-2



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



07 SEP 2025

N
W
S

PLATE NO:I

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE AREA :

TOPO SHEET NO. : 57-H/13,

LATITUDE : 12° 47' 44.4512" N to 12° 47' 36.8734" N

LONGITUDE : 77° 57' 37.7112" E to 77° 57' 34.8443" E

LOCATION MAP

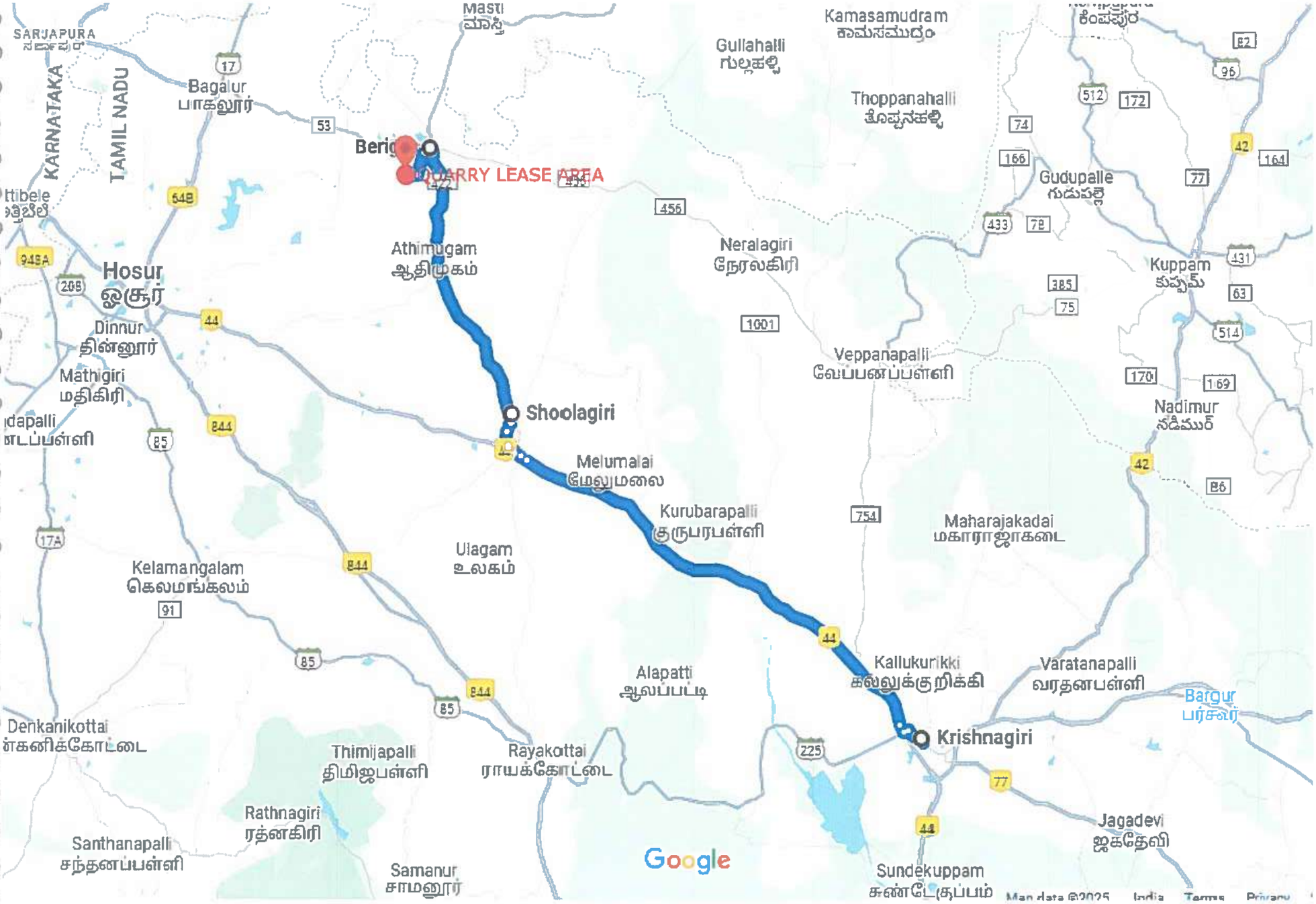
NOT TO SCALE

PREPARED BY:

I DO HEREBY CERTIFY THAT THE PLATE HAS BEEN CHECKED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

07 SEP 2025



N

W E

S

PLATE NO:IA

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT	: 1.15.00 HECT
S.F.NO	: 305/4(PART)
VILLAGE	: BERIGAI,
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.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

12° 47' 44.4512" N

77° 57' 34.8443" E

77° 57' 37.7112" E

12° 47' 36.8734" N

BERIKAI R F

MITTERAIN R F

BERIKAI EXTENSION R F

N

W E

S

PLATE NO:IB

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU. K. SANKAR,
S/o. NAGAPPA,
BITHIREDDI VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

DY.DEE 2025

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE AREA :

5KM RADIUS

TOPO SHEET NO. : 57-H/13,

LATITUDE : 12° 47' 44.4512" N to 12° 47' 36.8734" N

LONGITUDE : 77° 57' 37.7112" E to 77° 57' 34.8443" E

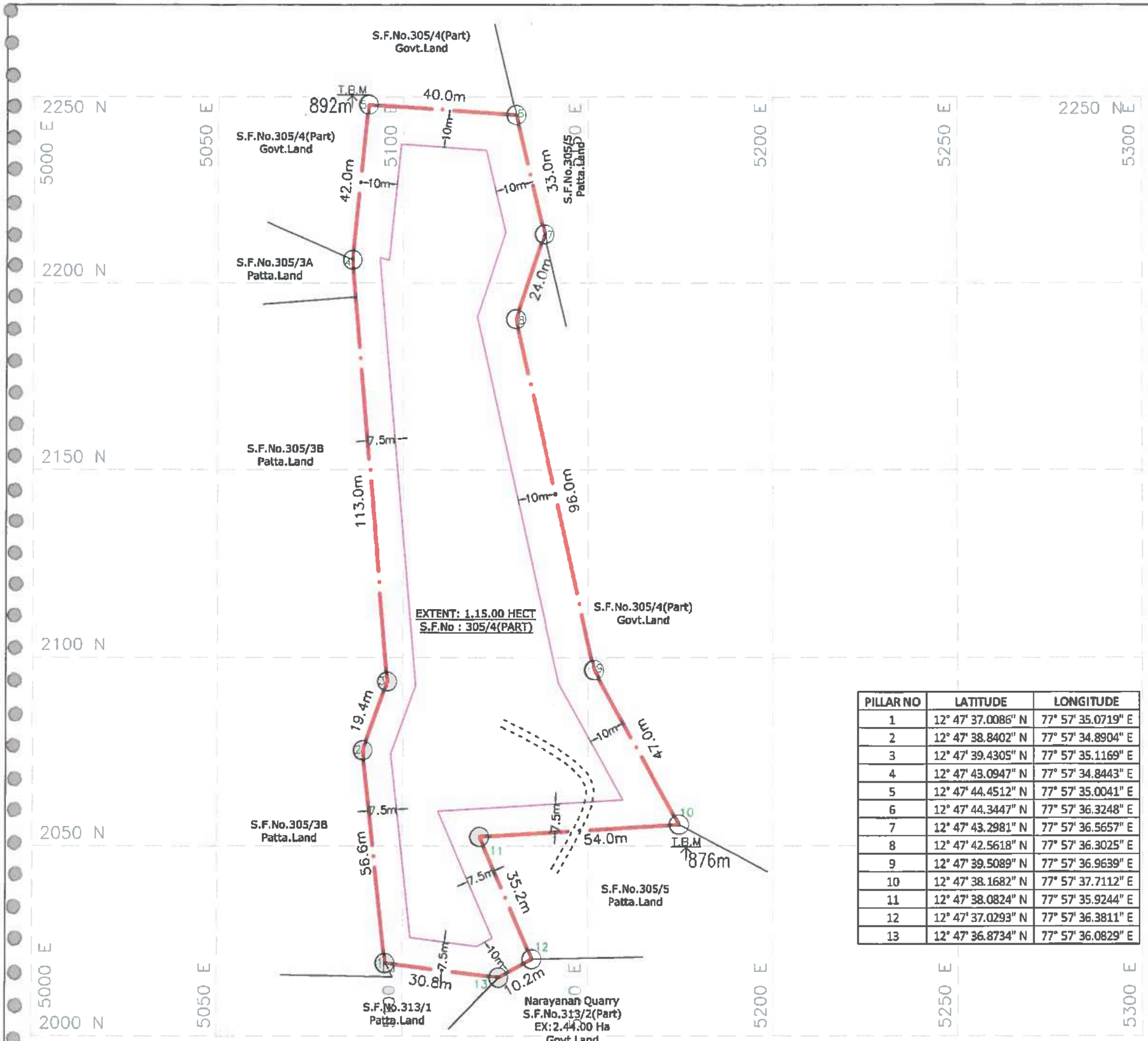
TOPO SHEET MAP OF THE LEASE AREA

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

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



07 SEP 2025

PILLAR NO	LATITUDE	LONGITUDE
1	12° 47' 37.0086" N	77° 57' 35.0719" E
2	12° 47' 38.8402" N	77° 57' 34.8904" E
3	12° 47' 39.4305" N	77° 57' 35.1169" E
4	12° 47' 43.0947" N	77° 57' 34.8443" E
5	12° 47' 44.4512" N	77° 57' 35.0041" E
6	12° 47' 44.3447" N	77° 57' 36.3248" E
7	12° 47' 43.2981" N	77° 57' 36.5657" E
8	12° 47' 42.5618" N	77° 57' 36.3025" E
9	12° 47' 39.5089" N	77° 57' 36.9639" E
10	12° 47' 38.1682" N	77° 57' 37.7112" E
11	12° 47' 38.0824" N	77° 57' 35.9244" E
12	12° 47' 37.0293" N	77° 57' 36.3811" E
13	12° 47' 36.8734" N	77° 57' 36.0829" E

PLATE NO:II

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE BOUNDARY

7.5m & 10.0m SAFETY DISTANCE

BOUNDARY PILLARS ① ①

TEMPORARY BENCH MARK TBM 876m

APPROACH ROAD

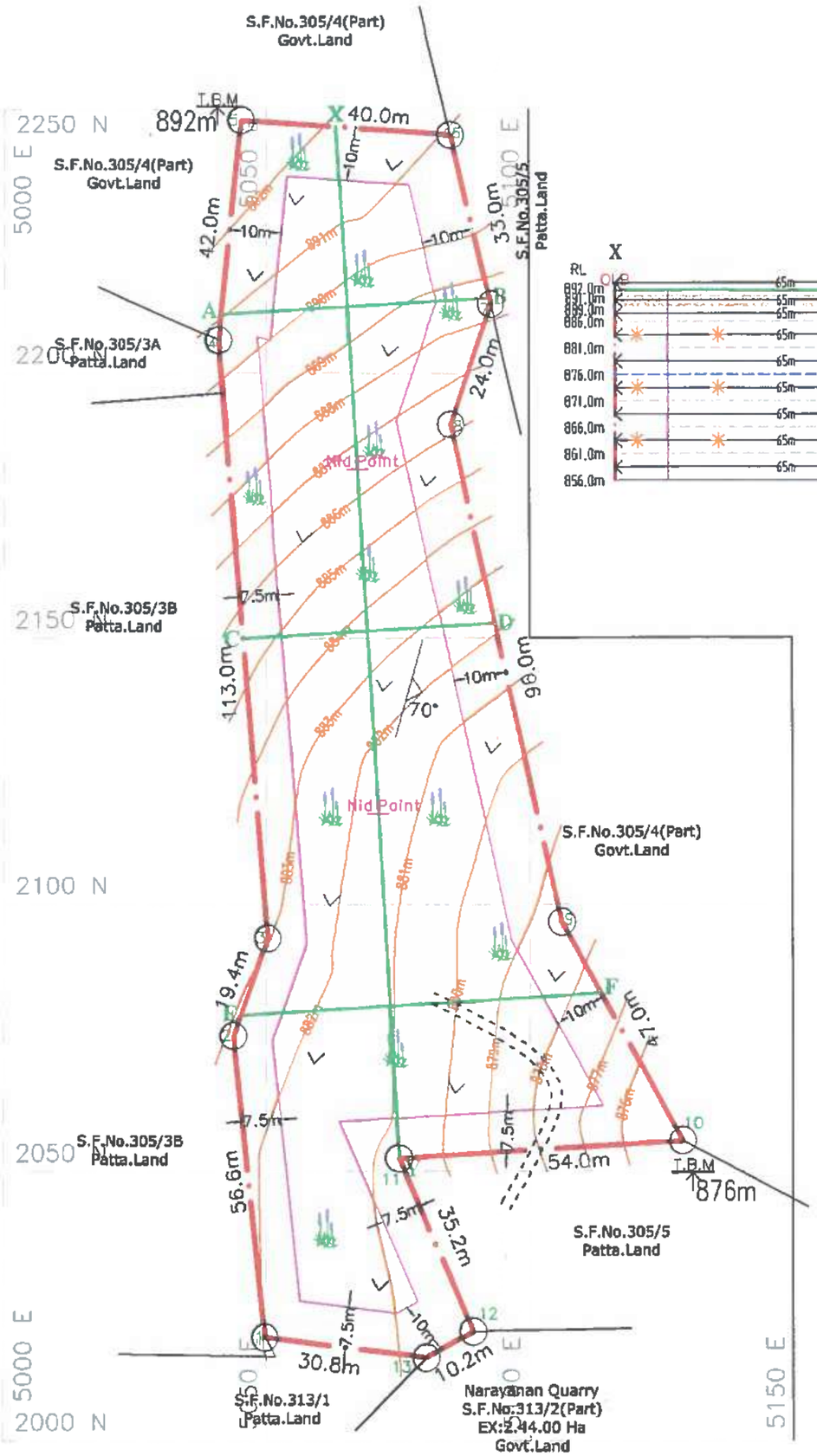
MINE LEASE PLAN

SCALE: 1:1000

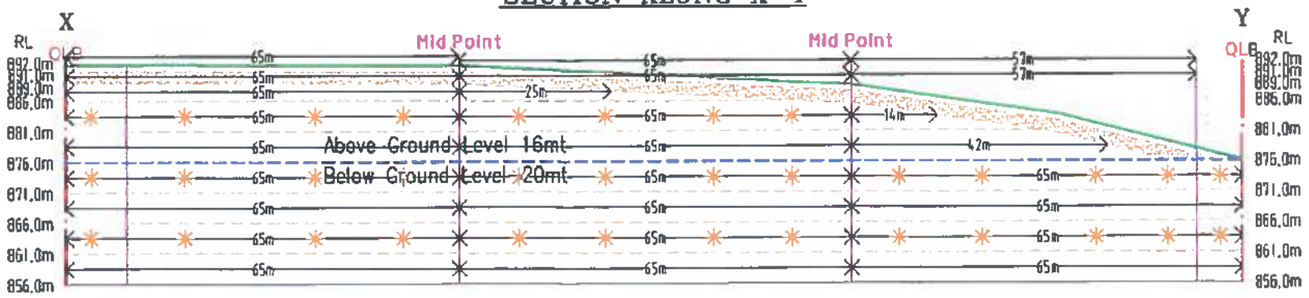
PREPARED BY:

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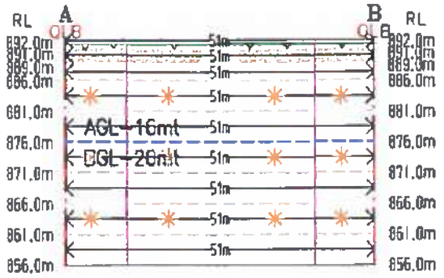
S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



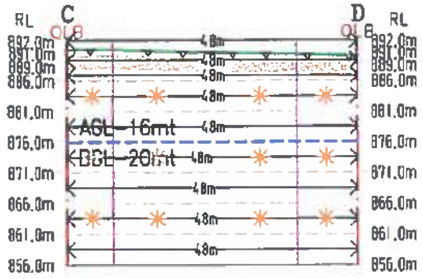
SECTION ALONG X-Y



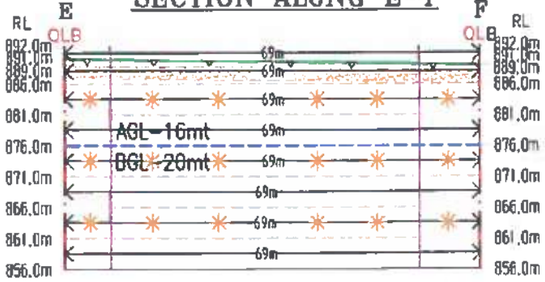
SECTION ALONG A-B



SECTION ALONG C-D



SECTION ALONG E-F





TOTAL DEPTH = 36m
ABOVE SURFACE GROUND LEVEL - 16m
BELOW SURFACE GROUND LEVEL - 20m

PLATE NO:III

DATE OF SURVEY: 27-03-2025

07 SEP 2025

APPLICANT ADDRESS:

THIRU.N.SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m & 10.0m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK (TBM B76m)
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- STRIKE AND DIP (70°)
- CONTOUR LINE (892.0M)
- QUARRY ROAD
- SHRUB

PILLAR NO	LATITUDE	LONGITUDE
1	12° 47' 37.0086" N	77° 57' 35.0719" E
2	12° 47' 38.8402" N	77° 57' 34.8904" E
3	12° 47' 39.4305" N	77° 57' 35.1169" E
4	12° 47' 43.0947" N	77° 57' 34.8443" E
5	12° 47' 44.4512" N	77° 57' 35.0041" E
6	12° 47' 44.3447" N	77° 57' 36.3248" E
7	12° 47' 43.2981" N	77° 57' 36.5657" E
8	12° 47' 42.5618" N	77° 57' 36.3025" E
9	12° 47' 39.5089" N	77° 57' 36.9639" E
10	12° 47' 38.1682" N	77° 57' 37.7112" E
11	12° 47' 38.0824" N	77° 57' 35.9244" E
12	12° 47' 37.0293" N	77° 57' 35.3811" E
13	12° 47' 36.8734" N	77° 57' 35.0829" E

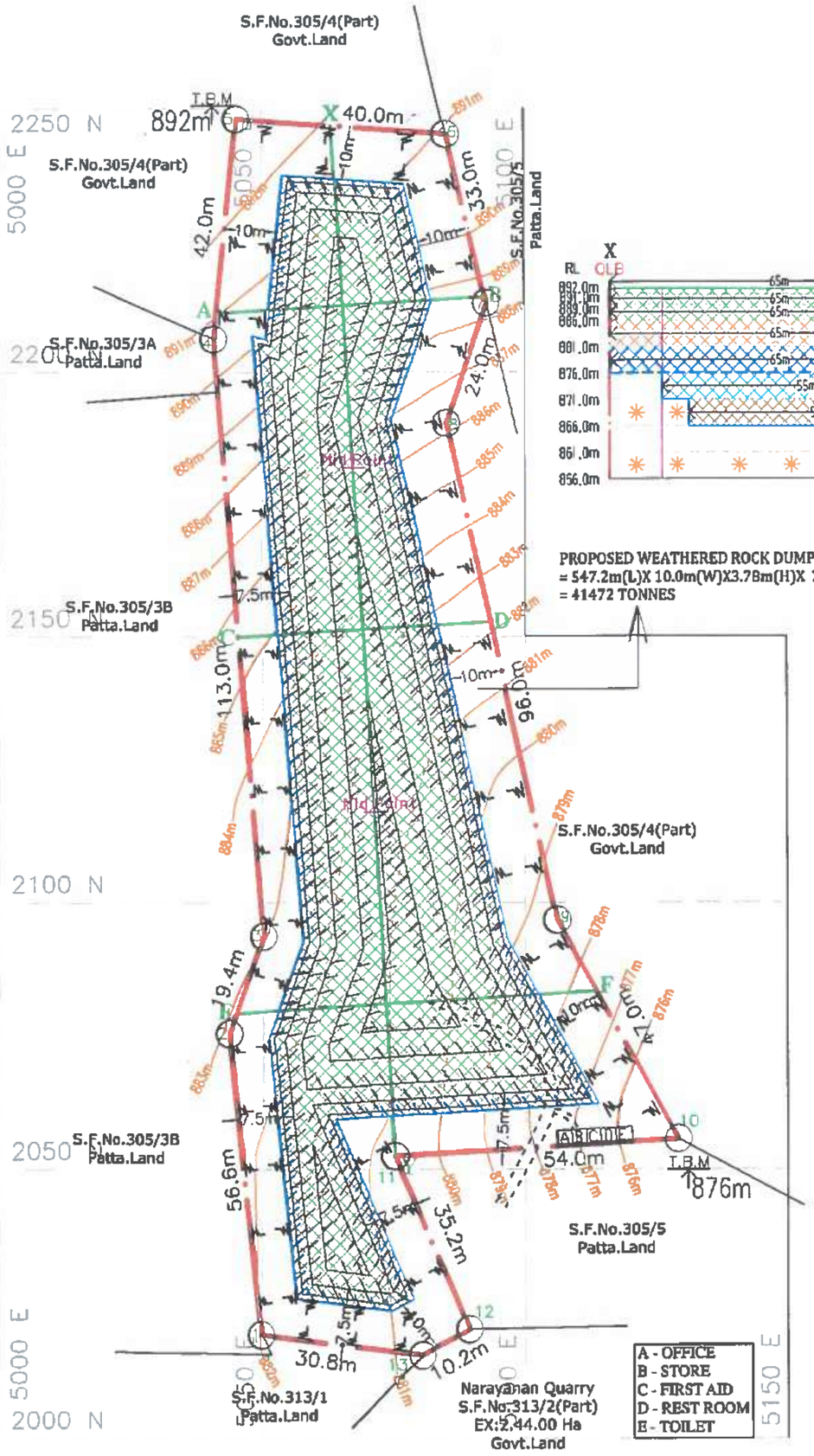
SURFACE AND GEOLOGICAL PLAN & SECTIONS

SCALE: 1:1000

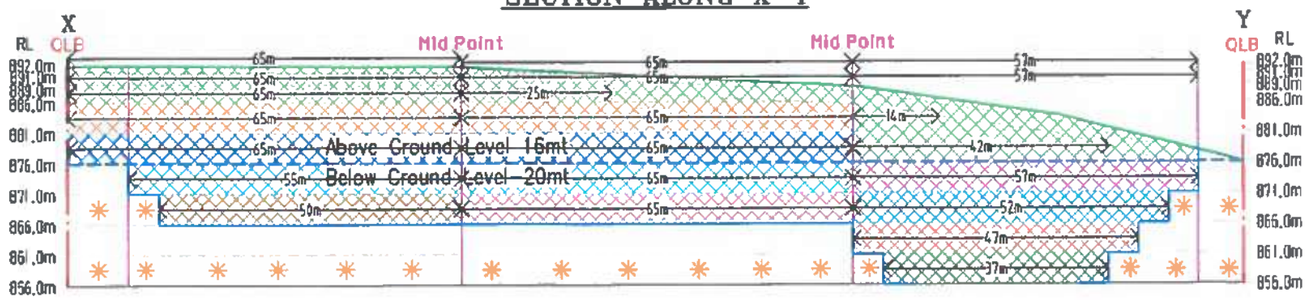
PREPARED BY:

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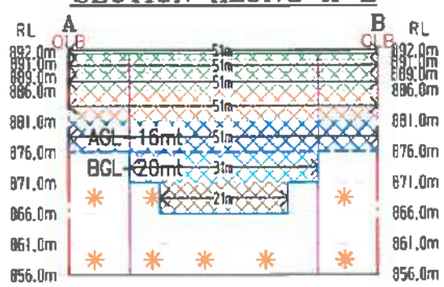
S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



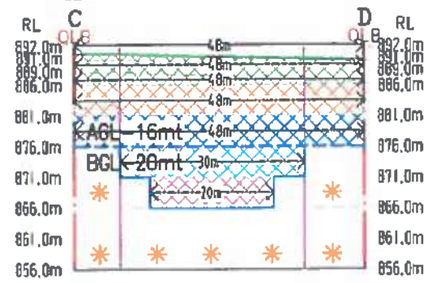
SECTION ALONG X–Y



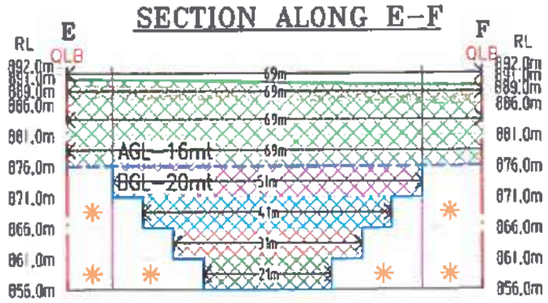
SECTION ALONG A–B



SECTION ALONG C–D



SECTION ALONG E–F



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	

TOTAL DEPTH = 36m
ABOVE SURFACE GROUND LEVEL - 16m
BELOW SURFACE GROUND LEVEL - 20m

07 SEP 2025

PLATE NO.V

DATE OF SURVEY: 31.03.2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT	: 1.15.00 HECT
S.F.NO	: 305/4(PART)
VILLAGE	: BERIGAI,
TALUK	: SHOOLAGIRI,
DISTRICT	: KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m & 10.0m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK (TBM 876m)
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR LINE
- QUARRY ROAD
- PROPOSED WEATHERED ROCK DUMP

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 CORRECT TO THE BEST OF MY KNOWLEDGE

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

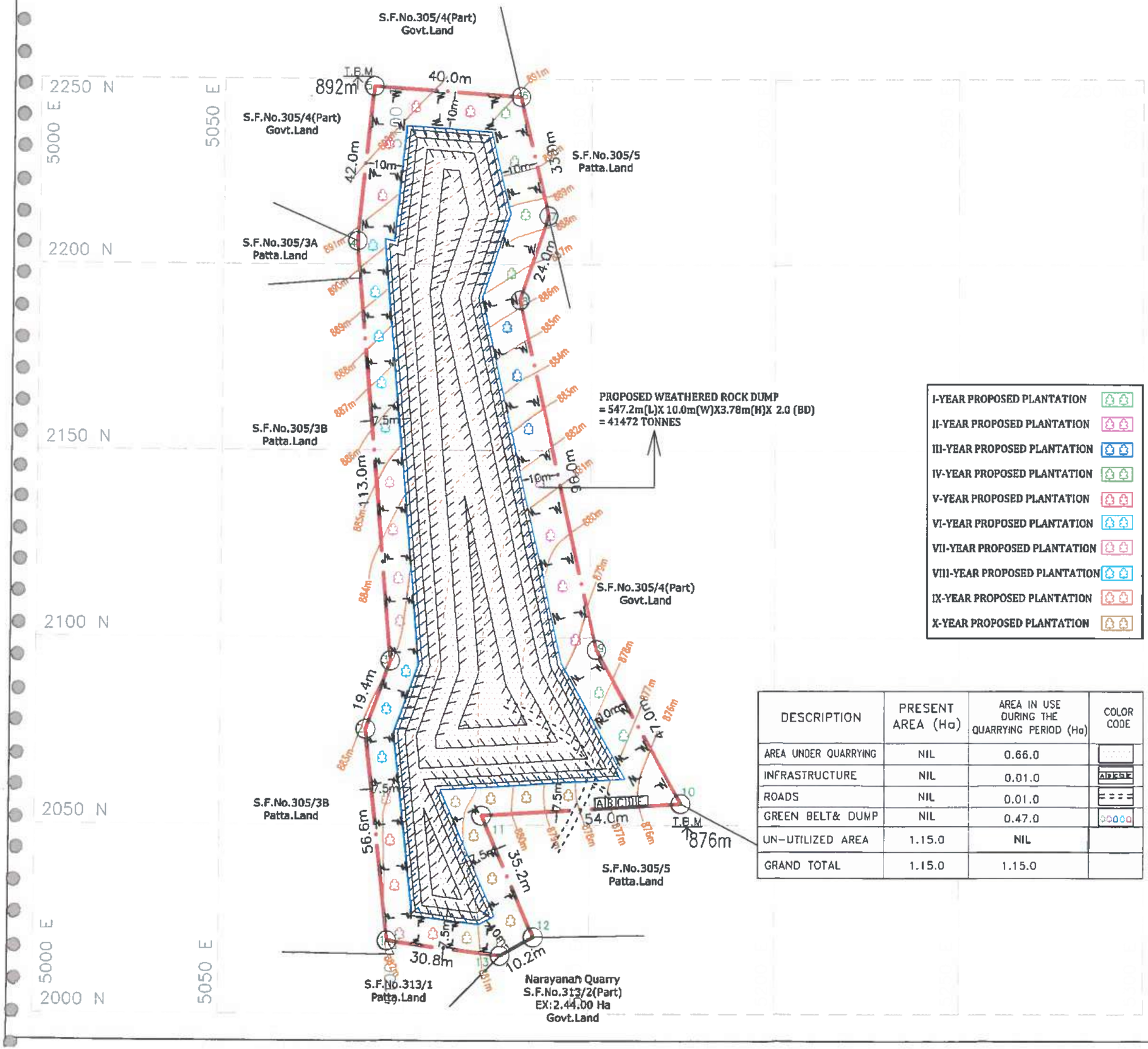


YEARWISE DEVELOPMENT AND PRODUCTION

Year	Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in M3	Recoverable Reserve in m3 @ 100%	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
I-YEAR	XY-AB	I	65	51	1	3315		3315		2		6630	
		II	65	51	2	6630			6630	2			13260
		III	65	51	3	9945	9945			2.75	27348.75		
	XY-CD	I	65	48	1	3120		3120		2		6240	
		II	65	48	2	6240			6240	2			12480
		III	25	48	3	3600	3600			2.75	9900.00		
	XY-EF	I	57	69	1	3933		3933		2		7866	
		II	57	69	2	7866			7866	2			15732
		III	14	69	3	2898	2898			2.75	7969.50		
		IV	42	69	5	14490	14490			2.75	39847.50		
		Total				**62037**	**30993**	**10368**	**20736**		**85065.75**	**20736**	**41472**
II-YEAR	XY-AB	IV	65	51	5	16575	16575			2.75	45581.25		
	XY-CD	IV	65	48	5	15600	15600			2.75	42900.00		
		Total				**32175**	**32175**				**88481.25**		
III-YEAR	XY-AB	V	65	51	5	16575	16575			2.75	45581.25		
	XY-CD	V	65	48	5	15600	15600			2.75	42900.00		
		Total				**32175**	**32175**				**88481.25**		
IV-YEAR	XY-AB	VI	55	31	5	8525	8525			2.75	23443.75		
	XY-CD	VI	65	30	5	9750	9750			2.75	26812.50		
		Total				**18275**	**18275**				**50256.25**		
V-YEAR	XY-EF	V	57	51	5	14535	14535			2.75	39971.25		
		Total				**14535**	**14535**				**39971.25**		
VI-YEAR	XY-AB	VII	50	21	5	5250	5250			2.75	14437.50		
		Total				**5250**	**5250**				**14437.50**		
VII-YEAR	XY-CD	VII	65	20	5	6500	6500			2.75	17875.00		
		Total				**6500**	**6500**				**17875.00**		
VIII-YEAR	XY-EF	VII	52	41	5	10660	10660			2.75	29315.00		
		31				**10660**	**10660**				**29315.00**		
IX-YEAR	XY-EF	VIII	47	31	5	7285	7285			2.75	20033.75		
		Total				**7285**	**7285**				**20033.75**		
X-YEAR	XY-EF	IX	37	21	5	3885	3885			2.75	10683.75		
		Total				**3885**	**3885**				**10683.75**		
GRAND TOTAL						**192777**	**161673**	**10368**	**20736**		**444600.75**	**20736**	**41472**

PREPARED BY:

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



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

DESCRIPTION	PRESENT AREA (Ha)	AREA IN USE DURING THE QUARRYING PERIOD (Ha)	COLOR CODE
AREA UNDER QUARRYING	NIL	0.66.0	
INFRASTRUCTURE	NIL	0.01.0	
ROADS	NIL	0.01.0	
GREEN BELT& DUMP	NIL	0.47.0	
UN-UTILIZED AREA	1.15.0	NIL	
GRAND TOTAL	1.15.0	1.15.0	

TOTAL DEPTH = 36m
ABOVE SURFACE (GROUND LEVEL) = 16m
BELOW SURFACE (GROUND LEVEL) = 20m

07 SEP 2025

PLATE NO:

DATE OF SURVEY: 22-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m & 10.0m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK (TBM 876m)
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR LINE (892.0m)
- QUARRY ROAD
- PROPOSED WEATHERED ROCK DUMP
- 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.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

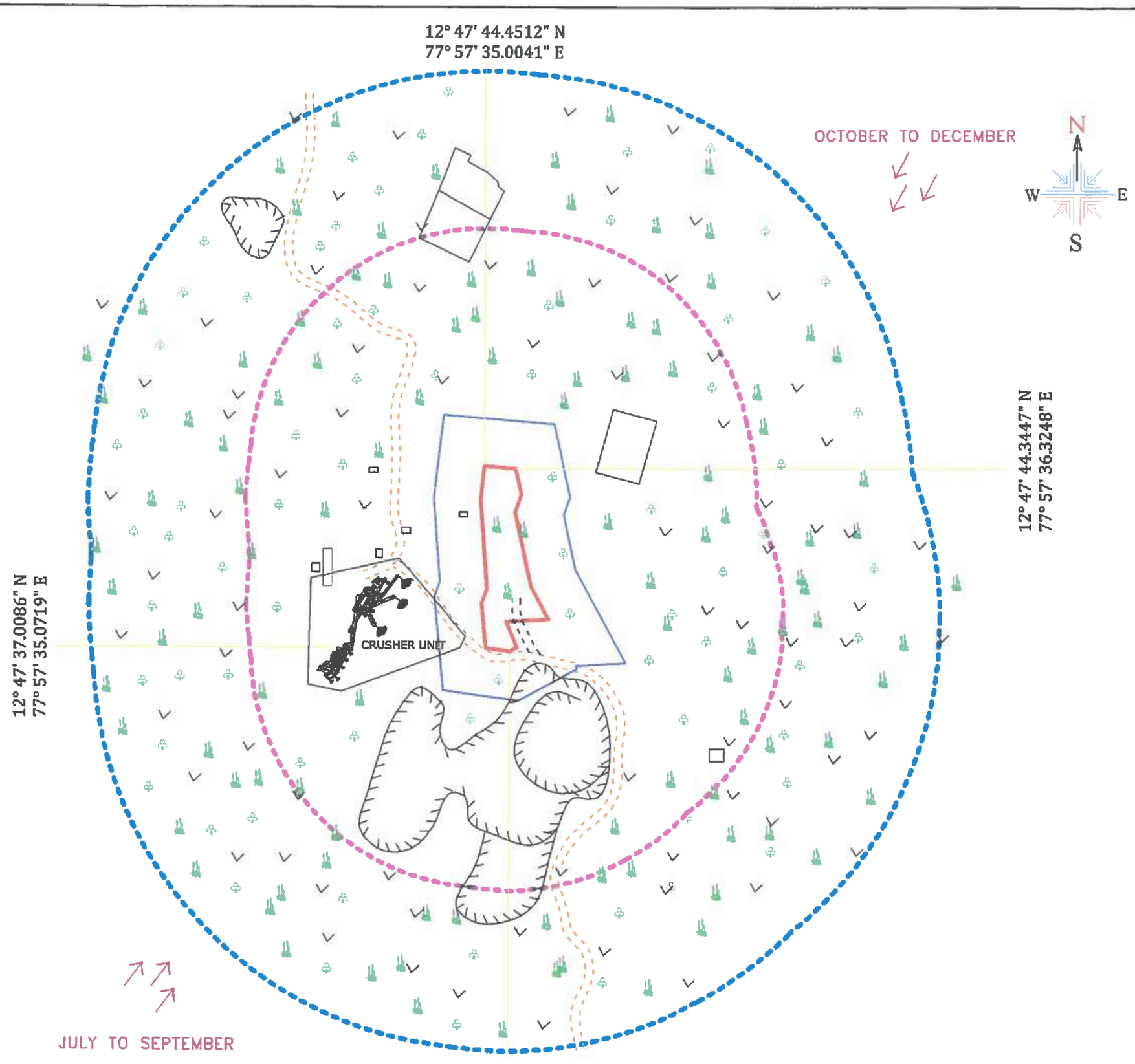


PLATE NO:VI

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDYVILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

17 SEP 2025

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

- Q.L.BOUNDARY
- 500M RADIUS
- 300M RADIUS
- 60M RADIUS
- VILLAGE ROAD
- QUARRY ROAD
- TREES
- DRY AGRICUTURAL LAND
- WIND DIRECTION
- CRUSHER UNIT
- SHRUB
- ADJACENT QUARRY
- INFRASTRUCTURES

ENVIRONMENT PLAN

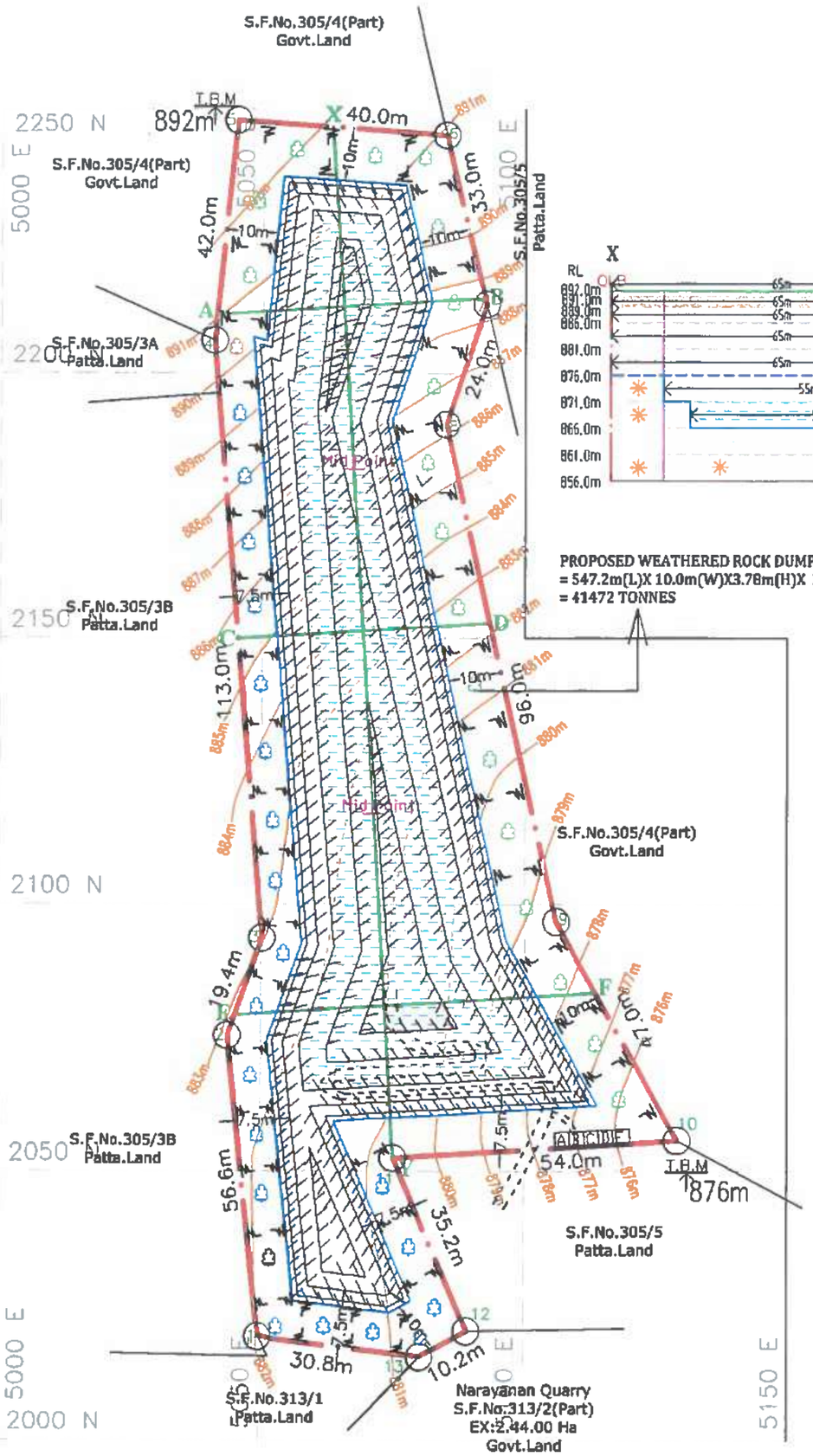
SCALE 1:5000

PREPARED BY:

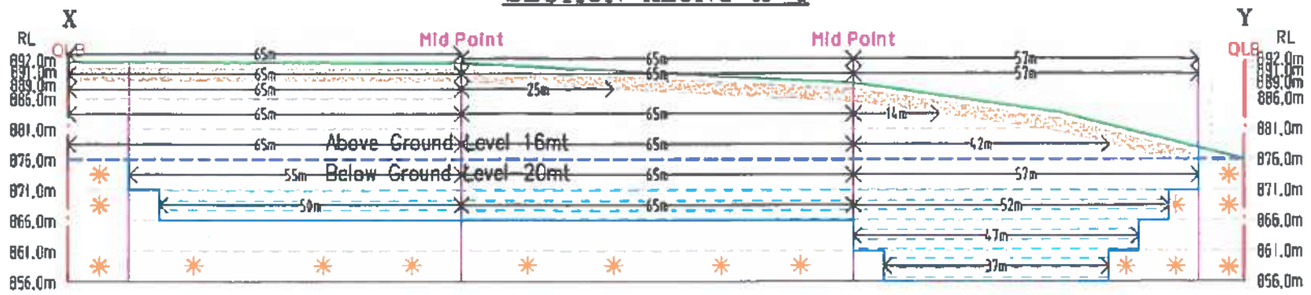
I DO HEREBY CERTIFY THAT THE PLATE HAS BEEN CHECKED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

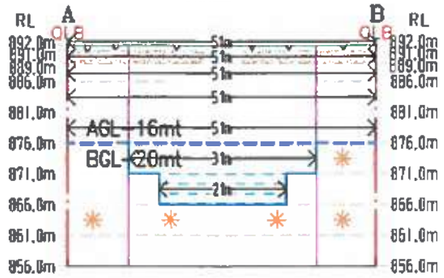
TOTAL DEPTH = 36m
ABOVE SURFACE GROUND LEVEL - 16m
BELOW SURFACE GROUND LEVEL - 20m



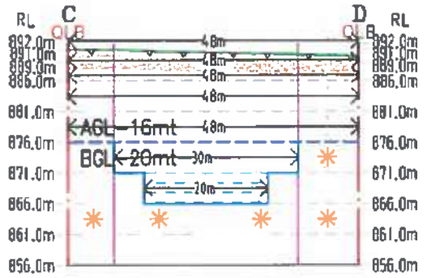
SECTION ALONG X–Y



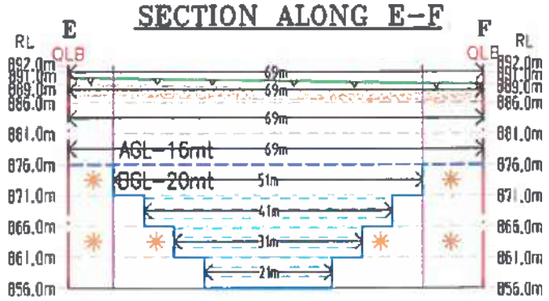
SECTION ALONG A–B



SECTION ALONG C–D



SECTION ALONG E–F



ULTIMATE PIT DIMENSION
= 177.0m(L) X 37.0m(W)Avg X 36.0m(D)

1st V Yr Afforestation

2nd V Yr Afforestation

PLATE NO: I

07 SEP 2025

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT	: 1.15.00 HECT
S.F.NO	: 305/4(PART)
VILLAGE	: BERIGAI,
TALUK	: SHOOLAGIRI,
DISTRICT	: KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
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- TEMPORARY BENCH MARK (TBM 876m)
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR LINE
- QUARRY ROAD
- FENCING
- PARAPET WALL
- ULTIMATE PIT LIMIT
- PROPOSED WEATHERED ROCK DUMP
- PROPOSED WATER STORAGE
- ULTIMATE PIT SLOPE

CONCEPTUAL AND FINAL MINE CLOSURE PLAN & SECTIONS

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.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

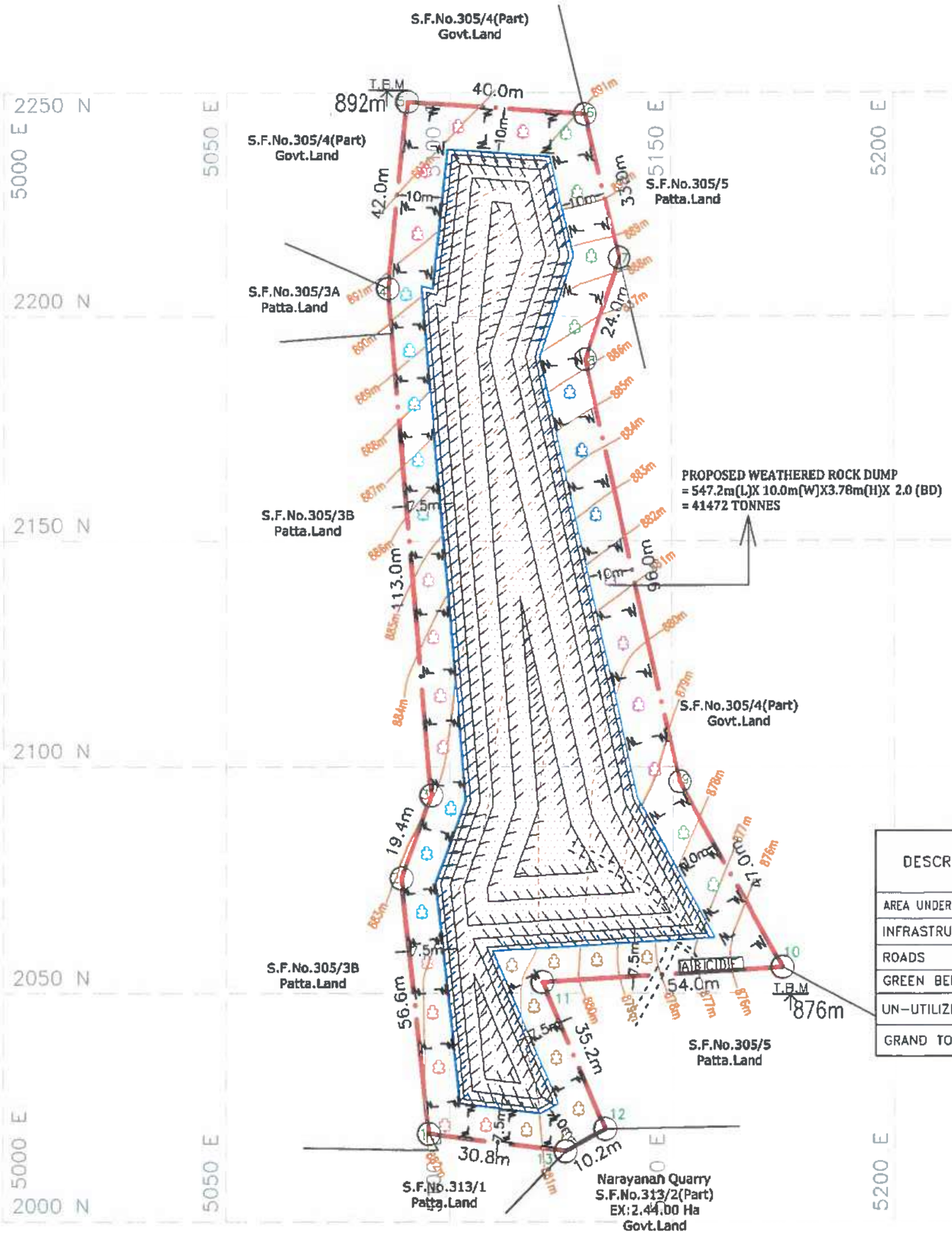


MINEABLE RESERVES

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in M3	Mineable Reserves in m3 @ 100%	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
XY-AB	I	65	51	1	3315		3315		2		6630	
	II	65	51	2	6630			6630	2			13260
	III	65	51	3	9945	9945			2.75	27348.75		
	IV	65	51	5	16575	16575			2.75	45581.25		
	V	65	51	5	16575	16575			2.75	45581.25		
	VI	55	31	5	8525	8525			2.75	23443.75		
	VII	50	21	5	5250	5250			2.75	14437.50		
TOTAL					**66815**	**56870**	**3315**	**6630**	-	**156392.50**	**6630**	**13260**
XY-CD	I	65	48	1	3120		3120		2		6240	
	II	65	48	2	6240			6240	2			12480
	III	25	48	3	3600	3600			2.75	9900.00		
	IV	65	48	5	15600	15600			2.75	42900.00		
	V	65	48	5	15600	15600			2.75	42900.00		
	VI	65	30	5	9750	9750			2.75	26812.50		
	VII	65	20	5	6500	6500			2.75	17875.00		
TOTAL					**60410**	**51050**	**3120**	**6240**	-	**140387.50**	**6240**	**12480**
XY-EF	I	57	69	1	3933		3933		2		7866	
	II	57	69	2	7866			7866	2			15732
	III	14	69	3	2898	2898			2.75	7969.50		
	IV	42	69	5	14490	14490			2.75	39847.50		
	V	57	51	5	14535	14535			2.75	39971.25		
	VI	52	41	5	10660	10660			2.75	29315.00		
	VII	47	31	5	7285	7285			2.75	20033.75		
	VIII	37	21	5	3885	3885			2.75	10683.75		
TOTAL					**65552**	**53753**	**3933**	**7866**	-	**147820.75**	**7866**	**15732**
GRAND TOTAL					**192777**	**161673**	**10368**	**20736**	-	**444600.75**	**20736**	**41472**

PREPARED BY:

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



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

DESCRIPTION	PRESENT AREA (Ha)	AREA IN USE DURING THE QUARRYING PERIOD (Ha)	COLOR CODE
AREA UNDER QUARRYING	NIL	0.66.0	
INFRASTRUCTURE	NIL	0.01.0	
ROADS	NIL	0.01.0	
GREEN BELT& DUMP	NIL	0.47.0	
UN-UTILIZED AREA	1.15.0	NIL	
GRAND TOTAL	1.15.0	1.15.0	

TOTAL DEPTH = 36m
ABOVE SURFACE GROUND LEVEL - 16m
BELOW SURFACE GROUND LEVEL - 20m

07 SEP 2025

PLATE NO:VIII

DATE OF SURVEY: 27/08/2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m & 10.0m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK (TBM 876m)
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR LINE (892.5M / 892.0M)
- QUARRY ROAD
- PROPOSED WEATHERED ROCK DUMP
- 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.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

ANNEXURE - X

REVISED MINING PLAN REPORT & REVISED PLATES

REVISED MINING PLAN

FOR

GRANT OF ROUGH STONE

GOVERNMENT PORAMBOKE LAND

TOTAL LEASE GRANTED PERIOD 10 YEARS

PERIOD OF MINING 10 YEARS

(Prepared Under Rule 8(6)(b) Tamil Nadu Minor Mineral Concession Rules, 1959 & As Per Amendment Under Rule 41 & 42)

LOCATION OF THE APPLIED AREA

EXTENT : 1.15.0 Ha.

S. F. No. : 305/4 (PART).

VILLAGE : BERIGAI.

TALUK : SHOOLAGIRI.

DISTRICT : KRISHNAGIRI.

STATE : TAMIL NADU.

APPLICANT

THIRU. N. SANKAR,

S/o. NAGARAJ,

BITHIREDDY VILLAGE,

PACHAPPANATTI POST,

DENKANIKOTTAI TALUK,

KRISHNAGIRI DISTRICT.

PREPARED BY

S. DHANASEKAR, M.Sc.,

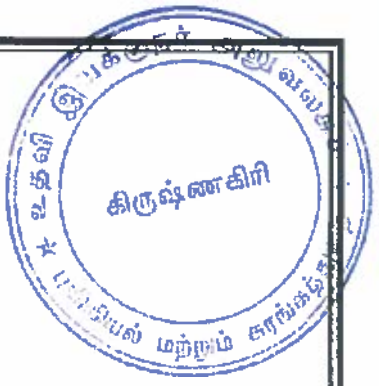
QUALIFIED PERSON,
NO. 5/30-7 B, AVVAI NAGAR,

PONKUMAR MINES ROAD,

JAGIR AMMAPALAYAM,

SALEM DISTRICT – 636 302.
Email: geodhana@yahoo.co.in

CELL : 98946-28970 & 73733-74702.



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Sl. No.	Description	Page No.
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2.0	Executive Summary	10
3.0	General Information	11
4.0	Location	12
5.0	Geology and Mineral Reserves	12
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7.0	Blasting	20
8.0	Mine Drainage	22
9.0	Other Permanent Structures	22
10.0	Employment Potentials & Welfare Measures	23
11.0	Environment Management Plan	25
12.0	Mine Closure Plan	28
13.0	Any Other Details Intend to furnish by the Applicant	29

ANNEXURES

Sl. No.	Description	Annexure No.
1.	Precise Area Communication letter	I
2.	Copy of Krishnagiri District Gazette	II
3.	Copy of DFO letter	III
4.	Copy of FMB	IV
5.	Copy of Combined Sketch	V
6.	Copy of Adangal & 'A' Register	VI
7.	Copy of ID Proof	VII
8.	Copy of 640th SEAC meeting minutes	VIII
9.	Copy of Qualification Certificate	IX
10.	Copy of Experience Certificate	X
11.	Copy of Applied Lease Area Photos	XI

LIST OF PLATES

Sl. No.	Description	Plate No.	Scale
1.	Location Map	I	Not to Scale
2.	**Route Map**	IA	Not to Scale
3.	Topo Sheet Map of the Lease Area	IB	1:50,000
4.	Satellite Image (500m Radius)	IC	1:5000
5.	Mine Lease Plan	II	1:1000
6.	Surface and Geological Plan & Sections	III	1:1000
7.	Year Wise Development and Production Plan & Sections	IV	1:1000
8.	Mine Layout, Land use Pattern & Afforestation Plan	V	1:1000
9.	Environment Plan	VI	1:5000
10.	Conceptual/Final Mine Closure Plan & Sections	VII	1:1000
11.	Progressive Mine Closure Plan	VIII	1:1000

N. Sankar,
S/o. Nagaraj,
Bithiredy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District.

CONSENT LETTER FROM THE APPLICANT

I hereby give my consent for preparing the Revised Mining Plan in respect of **Rough Stone** quarry over an extent of **1.15.0 Hectares** of **Government Poramboke Land** in **S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District, Tamil Nadu State has been prepared by Shri. **S. Dhanasekar, M.Sc.,** Qualified Person.

I request the Deputy Director, Department of Geology and Mining, KRISHNAGIRI District to make further correspondence regarding the Revised 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 - 636 302.
E-Mail: geodhana@yahoo.co.in
Cell: 98946-28970

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

Place: Krishnagiri
Date:

(N. Sankar)
Singnature of Applicant

N. Sankar,
S/o. Nagaraj,
Bithireddy Village,
Pachappanatti Post,
Denkanikottai Taluk,
Krishnagiri District.

DECLARATION

I hereby declare that the Revised Mining Plan in respect of **Rough Stone** quarry over an extent **1.15.0 Hectares** of **Government Poramboke Land** in **S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District, and Tamil Nadu State has been prepared with my consultation and I have understood the contents and agree to implement the same in accordance with the Mining Laws.

(N. Sankar)
Singnature of Applicant

Place: Krishnagiri

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 Revised Mining Plan for the grant of **Rough Stone** quarry lease over an extent of **1.15.0 Hectares** of **Government Poramboke Land** in **S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District, Tamil Nadu State obtained by **N. Sankar** 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 granting 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 Revised Mining Plan for **Rough Stone** quarry over an extent of **1.15.0 Hectares** of **Government Poramboke Land** in **S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District, Tamil Nadu State for **N.Sankar** 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:

REVISED MINING PLAN FOR MINOR MINERALS

ROUGH STONE

TOTAL LEASE GRANTED PERIOD 10 YEARS

PROPOSED PERIOD OF MINING 10 YEARS

Over an extent of 1.15.0 Hectares of Government Poramboke Land in S.F. No.305/4 (Part) of Berigai Village, Shoolagiri Taluk, Krishnagiri District, Tamilnadu State.

(Prepared Under Rule 8(6)(b) Tamil Nadu Minor Mineral Concession Rules, 1959 & As Per Amendment Under Rule 41 & 42)

1.0 INTRODUCTION AND EXECUTIVE SUMMARY:

1. **Thiru. N. Sankar,** S/o. Nagaraj, Bithireddy Village, Pachappanatti Post, Denkanikottai Taluk, Krishnagiri District. has applied for the grant of quarry lease to quarry **Rough Stone** over an extent of **1.15.0 Hectares** of **Government Poramboke Land in S.F.No.305/4 (Part)** of **Berigai** Village, **Shoolagiri** Taluk, **Krishnagiri** District of Tamil Nadu State for a period of Ten Years under Tender cum Auction.

2. The Applicant has been declared the **Successful Highest Bidder** for an amount of **Rs. 1,29,04,608/- in an E-Tender cum Auction** conducted by the Government of Tamil Nadu, as notified in Gazette No. 12 (English) & 20 (Tamil) dated 16.11.2024. A specific area has been designated for the proposed grant of a Rough Stone Quarry Lease to **Thiru. N. Sankar** over an extent of 1.15.0 hectares of Government Poramboke land in S.F.No.305/4 (Part), Berigai Village, Shoolagiri Taluk. Krishnagiri District, Tamil Nadu. The quarry lease is granted for a period of **Ten years**, as per Letter **Rc.No.14/2025/Mines dated 27.02.2025**. As per the conditions of the grant, the applicant is required to submit an approved Mining Plan and obtain an Environmental Clearance Certificate from the State Environment Impact Assessment Authority (SEIAA) for the final issuance of the quarry lease.

3. Accordingly, the Mining Plan has been prepared in compliance with Rule 8(6)(b) of the Tamil Nadu Minor Mineral Concession Rules, 1959, incorporating the amendments under Rules 41 & 42. The plan encompasses all conditions specified in the Precise Area Communication Letter and integrates the necessary details required to obtain Environmental Clearance from the State Environment Impact Assessment Authority (SEIAA). This plan was approved by the Deputy Director (FAC), Geology & Mining, Krishnagiri, vide letter Rc.No.14/2025/Mines dated 01.09.2025.

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

4. During the 640th meeting of the State Expert Appraisal Committee (SEAC), Tamil Nadu, held on 10.11.2025, the applicant was instructed to incorporate the formation of benches above ground level (AGL) and include the same in the EIA report. In compliance with this direction, the **Revised Mining Plan**, along with revised plates reflecting the required benches, is submitted for approval.

5. This Revised Mining Plan is prepared by considering the TNMMCR 1959, and as per the EIA Notification 2006 and subsequent amendments and relevant judgments.

6. **Reserves after leaving Safety Distance**

Description		Rough stone (Ts)	Weathered Rock (Ts)	Top Soil (Ts)
Estimated Geological Resources		1201750	46000	23000
Tentative Mineable Reserves		225277.25	31080	15540
Proposed production for Ten years lease period	Proposal for Ten Years	225277.25	31080	15540
	Peak Production	41456.25	18792	9396

7. Environmental measures to be adopted shall be,
   i) Dust Control at source while drilling and Proposed Control Blasting,
   ii) Dust suppression at loading point and transport haul roads,
   iii) Noise Control in Proposed Control Blasting, control of fly rock missiles and vibration by doing peak particle velocity within standard as prescribed by the DGMS and MoEF.
   iv) Unnecessary land degradation should be avoided or damaged land should be reclaimed or rehabilitated.
   v) Avoid uneven rat hole mining and follow scientific and systematic mining by safe bench system of open cast mining.
   vi) Mining near major fracture zones if any should be avoided to control ground water fluctuation in the adjacent agricultural lands.
   vii) Emission test of vehicles should be in stack to maintain minimum emission level of flue gases.
   viii) Noise level should not exceed 80db and the vehicles should 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 adhered to.

x) And any other conditions as stipulated by the concerned authorities should be followed to protect the environment.

2.0 EXECUTIVE SUMMARY:

a.	Name of the Village	:	Berigai
b.	Name of the Panchayat / Union	:	Berigai / Shoolagiri
c.	The proposed total Mineable Reserves	:	**225277.25Ts**
d.	The proposed quantity of reserves (level of production) for **Ten Years** to be mined is (Recoverable reserves)	:	**225277.25Ts**
e.	Total extent of the area	:	**1.15.0 Ha.**
f.	Proposed Period of mining	:	**Ten years**
g.	**Proposed Depth of mining**	:	Mining Reserves Calculated upto **41m** (Top Soil **1.0m** + **2.0m** Weathered Rock + **38.0m** Rough stone). Surface Ground Level Above-16m & Surface Ground Level Below -25m.
h.	Existing Pit Dimension		**Nil**
i.	Peak Production	:	**41456.25Ts**
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.1.31,74,608/- Rs.40,00,000/- Rs.3,50,000/-

m.	The Applied lease area is bounded by four corners and the coordinates are	:	Toposheet No. 57 – H/13
	Latitude	:	**12° 47' 44.4512"N to 12° 47' 36.8734"N**
	Longitude	:	**77° 57' 37.7112"E to 77° 57' 34.8443"E**
	North East	:	12° 47' 43 .2981" N 77° 57' 36.5657"E
	South East	:	12° 47' 38. 1682" N 77° 57' 37.7112"E
	North West	:	12° 47' 43. 0947" N 77° 57' 34.8443"E
	South West	:	12° 47' 38. 8402" N 77° 57' 34.8904"E

3.0 GENERAL INFORMATION:

3.1	a.	Name of the Applicant	:	**Thiru. N. Sankar**
	b.	**Address of the Applicant with phone No and e-mail id if any**	:	**N. Sankar,** S/o. Nagaraj, Bithireddy Village, Pachappanatti Post, Denkanikottai Taluk, Krishnagiri District.
	c.	Status of the Applicant	:	Individual
3.2	a.	Mineral Which the applicant intends to mine	:	**Rough Stone**
	b.	Precise area communication letter No.	:	**Rc. No.14/2025/Mines dated 27.02.2025**
	c.	Period of permission	:	10 Years
	d.	**Name and Address of the Qualified Person preparing the Mining Plan**	:	**S.Dhanasekar, M.Sc.,** Qualified Person No.5/30-7B, Avvai Nagar, Ponkumar Mines Road, Jagir Ammapalayam, Salem District - 636 302. E-Mail: geodhana@yahoo.co.in Cell: 98946-28970 & 73733-74702

4.0 LOCATION:

a. **Details of the Area:**

State	District	Panchat / Union	Taluk	Village	S.F.No.	Extent in Ha.
Tamilnadu	Krishnagiri	Berigai/ Shoolagiri	Shoolagiri	Berigai	305/4 (Part)	1.15.0
TOTAL =						**1.15.0**

b.	Classification of the Area (Ryotwari / poramboke / others)	:	It is a Government Poramboke Land, which is not fit for vegetation/cultivation.
c.	Ownership / Occupancy of the Applied Lease area (Surface rights)	:	It is a Government Poramboke land. The applicant had been given precise area for the proposed grant of Rough Stone Quarry Lease.
d.	Toposheet No. with Latitude and Longitude	: : :	**Toposheet No. 57 – H/13** **12° 47' 44.4512"N to 12° 47' 36.8734"N** **77° 57' 37.7112"E to 77° 57' 34.8443"E**
e.	Existence of Public Road / Railway line if any nearby the area and approximate distance	:	Krishnagiri -Shoolagiri = 26.0 Kms Shoolagiri – Midithepalli = 12.7 Kms Quarry site is located in Northern side at a distance of 1.5 km from Midithepalli village.

PART - A

5.0 GEOLOGY AND MINERAL RESERVES:

5.1	a.	Topography:		1. The area applied for quarry lease is elevated terrain area sloping towards Southeastern side covered with Rough Stone which does not sustain any type of vegetation. The altitude of the area is Maximum 892m and Minimum 876m above MSL. 2. No major river is found nearby the lease area. 3. Water table is noticed at a depth of **82m** from the below surface ground level in the adjacent open wells and bore wells of the area. 4. Temperature of the area is reported to be 18^0C to a maximum of 38^0C during summer.

				5. Rainfall of this area is about 860mm to 900 mm during the monsoons in a year
	b.	Infrastructures nearby the applied Lease area.		
		1. Post Office	:	Berigai – 2.2 Kms
		2. Police Station	:	Berigai – 2.0 Kms
		3. G.H	:	Berigai – 2.5 Kms
		4. Fire service	:	Malur – 28.6 Kms
		5. Railway Station	:	Hosur – 21.7 Kms
		6. School	:	Berigai – 4.1 Kms
		7. Airport	:	Bangalore – 157.6 Kms
		8. Seaport	:	Chennai – 256.0 Kms
	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, Charnockite 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.

	Age	Rock Formation
1.	Recent to Sub recent	Soil, Alluvium
2.	**Archaean**	Granites, basic granulites, Peninsular Gneiss, Calc Gneiss and Charnockites

<table>
<tr><td></td><td>d.</td><td>Geology of the Lease Area</td><td></td><td>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 NE – SW and dip towards SE-70^0.
The general geological succession of the area is given as under.
<table>
<tr><td></td><td>Age</td><td>Rock Formation</td></tr>
<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>
</table>
</td></tr>
<tr><td>5.2</td><td></td><td>Details of Exploration already carried out if any</td><td>:</td><td>Since the Rough Stone is seen from the Surface itself, no exploration is needed. However, the area was personally examined by the Geologist who prepared the Mining Plan.</td></tr>
<tr><td>5.3</td><td>a.</td><td>Already excavated pit dimensions</td><td></td><td>Nil</td></tr>
</table>

5.3 b. GEOLOGICAL RESOURCES:

Top Soil :

The Thickness of Top soil in this area is 1.0m and the total volume of topsoil will be **23000Ts**.

Rough Stone :

The Geological Reserve within the applied lease area is estimated as **1201750Ts**, considering a 100% Recovery rate upto the permissible depth. The reserve estimation is calculated upto a depth of **41m** (**1.0m** Top soil + **2.0m** Weathered Rock + **38.0m** Rough Stone).

GEOLOGICAL RESERVES								
Area Sq.mt	Depth in (m)	Geological Reserves of Rough stone in m3	TopSoil in m3	Weathered Rock in m3	Bulk Density	Geological Reserves of Rough stone in (Ts)	TopSoil in(Ts)	Weathered Rock in (Ts)
11500	1		11500		2		23000	
	2			23000	2			46000
	38	437000			2.75	1201750		
Total		437000	11500			1201750	23000	46000

c. MINEABLE RESERVES

The Mineable reserve is calculated upto **41m** (**1.0m** Top soil + **2.0m** Weathered Rock + **38.0m** Rough Stone).

The mineable reserves after leaving safety distance and benches have been estimated as **225277.25Ts** of Rough stone, **31080Ts** of Weathered Rock and **15540Ts** of Top soil at the rate of 100% recovery upto a depth of 41m(Surface Ground Level Above-16m & Surface Ground Level Below-25m).

MINEABLE RESERVES												
Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume In M3	Mineable Reserves in m3 @ 100%	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
XY-AB	I	96	32	1	3072		3072		2		6144	
	II	96	32	2	6144			6144	2			12288
	III	34	32	3	3264	3264			2.75	8976.00		
	IV	91	22	5	10010	10010			2.75	27527.50		
	V	86	12	5	5160	5160			2.75	14190.00		
TOTAL					**27650**	**18434**	**3072**	**6144**	-	**50693.50**	**6144**	**12288**
XY-CD	I	81	58	1	4698		4698		2		9396	
	II	81	58	2	9396			9396	2			18792
	V	82	21	5	8610	8610			2.75	23677.50		
	VI	77	55	5	21175	21175			2.75	58231.25		
	VII	67	45	5	15075	15075			2.75	41456.25		
	VIII	57	35	5	9975	9975			2.75	27431.25		
	IX	47	25	5	5875	5875			2.75	16156.25		
	X	37	15	5	2775	2775			2.75	7631.25		
TOTAL					77579	63485	4698	9396	-	174583.75	9396	18792
GRAND TOTAL					105229	81919	7770	15540	-	225277.25	15540	31080

6.0 MINING:

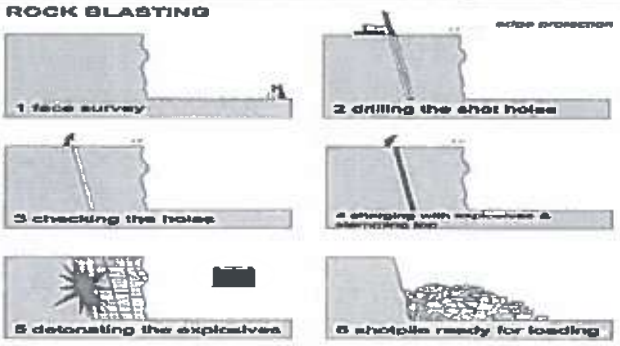
6.1	Method of Mining	:	1. Opencast method of semi mechanized mining is adopted to extract Rough Stone. 2. Machineries like Tractor mounted compressor attached with Jack hammers is being used to drilling and Proposed Control Blasting. Excavators are operated for quarrying of Rough Stone and Tippers / Lorries are used for transportation of Rough Stone 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, smooth blasting. Rough Stone are removed using Hydraulic excavator and loaded directly to the tippers and transported to the nearby end users.
6.3	Proposed bench height & Width	:	Bench height = 5mts. Bench width = 5mts.
6.4	Details of Overburden / Mineral Production proposed for **Ten year**	:	**Top Soil / Overburden production details follows:** The entire lease area is covered with **1.0m of Topsoil.** It will be effectively utilized for **afforestation and filling low-lying areas along roads.** This lease area is covered with **2.0m** of Weathered Rock. Weathered Rock will be dumped in all side boundary barrier of the lease area.
	Year wise reserves calculations : **Rough stone & Topsoil production details as follows:** The proposed rate of production of Rough Stone is estimated as **225277.25Ts** for Ten years. The Peak production of **Rough Stone** is about **41456.25Ts**. Reserves Calculated upto **41m (1.0m** Top soil + **2.0m** Weathered Rock + **38.0m** Rough stone).		

YEARWISE DEVELOPMENT AND PRODUCTION													
Year	Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume In M3	Recoverable Reserve in m3 @ 100%	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
I-YEAR	XY-AB	I	96	32	1	3072		3072		2		6144	
		II	96	32	2	6144			6144	2			12288
		III	34	32	3	3264	3264			2.75	8976.00		
		IV	91	22	5	10010	10010			2.75	27527.50		
	TOTAL					**22490**	**13274**	**3072**	**6144**	-	**36503.50**	**6144**	**12288**
II-YEAR	XY-AB	V	86	12	5	5160	5160			2.75	14190.00		
	XY-CD	I	81	58	1	4698		4698		2		9396	
		II	81	58	2	9396			9396	2			18792
		V	82	21	5	8610	8610			2.75	23677.50		
		Total				**27864**	**13770**	**4698**	**9396**		**37867.50**	**9396**	**18792**
III-YEAR	XY-CD												
		VI	38	55	5	10450	10450			2.75	28737.50		
		Total				**10450**	**10450**				**28737.50**		
IV-YEAR	XY-CD	VI	39	55	5	10725	10725			2.75	29493.75		
		Total				**10725**	**10725**				**29493.75**		
V-YEAR	XY-CD	VII	67	45	5	15075	15075			2.75	41456.25		
		Total				**15075**	**15075**				**41456.25**		
VI-YEAR	XY-CD	VIII	29	35	5	5075	5075			2.75	13956.25		
		Total				**5075**	**5075**				**13956.25**		
VII-YEAR	XY-CD	VIII	28	35	5	4900	4900			2.75	13475.00		
		Total				**4900**	**4900**				**13475.00**		
VIII-YEAR	XY-CD	IX	29	25	5	3625	3625			2.75	9968.75		
		Total				**3625**	**3625**				**9968.75**		
IX-YEAR	XY-CD	IX	18	25	5	2250	2250			2.75	6187.50		
		X	8	15	5	600	600			2.75	1650.00		
		Total				**2850**	**2850**				**7837.50**		
X-YEAR	XY-CD	X	29	15	5	2175	2175			2.75	5981.25		
		Total				**2175**	**2175**				**5981.25**		
GRAND TOTAL						**105229**	**81919**	**7770**	**15540**		**225277.25**	**15540**	**31080**

<table>
<tr><td>6.5</td><td>a.</td><td>Mining</td><td>:</td><td>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.
<table>
<tr><th>Type</th><th>Nos</th><th>Dia of hole</th><th>Size / Capacity</th><th>Make</th><th>Motive power</th><th>H.P.</th></tr>
<tr><td>Jack Hammer</td><td>2</td><td>25.5 mm</td><td>Hand held</td><td>Atlas copco 2Nos</td><td>Diesel</td><td>60</td></tr>
</table></td></tr>
<tr><td></td><td>b.</td><td>Loading</td><td>:</td><td>Loading of waste and rough stone shall be carried out by 10 tonne capacity tippers from the working place periodically. Details of loading equipment are given as under.
<table>
<tr><th>Type</th><th>Nos</th><th>Bucket Capacity (MT)</th><th>Make</th><th>Motive power</th><th>H.P.</th></tr>
<tr><td>Hydraulic excavator</td><td>1</td><td>1.2 M^3</td><td>L&T or Ex200</td><td>Diesel</td><td>120</td></tr>
</table></td></tr>
<tr><td></td><td>c.</td><td>Transportation</td><td>:</td><td>Transport of raw materials and waste shall be done by Tipper of 10 M.T. capacity
<table>
<tr><th>Type</th><th>Nos</th><th>Size / Capacity</th><th>Make</th><th>Motive power</th><th>H.P.</th></tr>
<tr><td>Tipper</td><td>2</td><td>10 M.T</td><td>Ashok Leyland</td><td>Diesel</td><td>110</td></tr>
</table></td></tr>
<tr><td>6.6</td><td></td><td>Disposal of Overburden</td><td>:</td><td>The estimated quantity of Top soil is 15540Ts. It will be effectively utilized for afforestation and filling low-lying areas along roads.</td></tr>
<tr><td>6.7</td><td></td><td>Brief Note on Conceptual Mining Plan for the entire lease period</td><td>:</td><td>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,
<table>
<tr><th>ULTIMATE PIT DIMENSIONS</th></tr>
<tr><td>177.0m(L) X 45.0m(W) Avg X41.0m(D)</td></tr>
</table>
Ultimate pit size is designed based on certain practical factors such as the economical depth of mining, safety zones, permissible areas etc.</td></tr>
</table>

				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 will be 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.
			
7.2	Types of Explosives	:	Following explosives are recommended for efficient Proposed Control Blasting with safe practice.

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 32
3.	Safety fuse	Class - 6	Blue sump fuse coils of 10mts each	

7.3	Measures proposed to minimize ground vibration due to Proposed Control Blasting	:	The following steps shall be adopted to control ground vibration due to Proposed Control 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. 2. In case of electronic detonators, which are inherently much more accurate delays (+/- 0.2 milliseconds delay) to minimizes the ground vibration. 3. Use of Ammonium nitrate fuel oil mixture for shot holes may be avoided because which cause for high fly of rocks in view critical diameter problem. Only high strength explosives like slurry will be used in the form of cartridge. 4. Charge per hole should exceed the powder factor designed for each hole based on the quantum of Proposed Control Blasting, strength of rocks, fracture pattern etc.
7.4	Storage of Explosives and safety measures to be taken while Proposed Control Blasting.	:	1. The Applicant stores the explosives as per the Indian Explosives Act, 1958. 2. An authorized explosive agency is engaged to carry out blasting. 3. The blasting time in a day is between 5 PM to 6 PM. 4. First Aid Box is kept ready at all the time. 5. Necessary precautionary announcement is being carried out before the blasting operation. operation.

8.0 MINE DRAINAGE:

8.1	Depth of Water table	:	The ground water table is reported as **82m** below ground level in nearby open wells and bore wells of this area. Mining reserves calculated taken upto 41m. Now, proposed quarry depth is above the water table. Hence, quarrying may not affect the ground water.
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 out periodically by a stand by diesel powered Centrifugal pump motivated with 7.5 H.P. Motor. The quality of water is potable and it is not contaminated with any hazardous things.

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,

Direction	Village	Distance in Kms	Population
North	Vanamangalam	3.3Kms	300
East	Madivalam	2.27Kms	150
South	Midithepalli	1.7Kms	350
West	Nariganapuram	2.0Kms	280

9.2	Power lines (HT/LT)	:	No power line is located in the lease area.
9.3	Water bodies (River, Pond, Lake, Odai, Channel etc)	:	There is no Water bodies (River, Pond, Lake, Odai, Channel etc) located within a radius of 500m.
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 = 26.0 Kms Shoolagiri – Midithepalli = 12.7 Kms Quarry site is located in Northern side at a distance of 1.5 km from Midithepalli village.
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.,	:	Distance between Reserve Forest Berigai and the applied area = 0.30km. Distance from Cauvery North Wild life Sanctuary = 28.27 kms. Distance from Cauvery South Wild life Sanctuary = 51.22 kms.
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	:	**Distance from Cauvery North Wild life Sanctuary = 28.27 kms.** **Distance from Cauvery South Wild life Sanctuary = 51.22 kms.**
9.9	Any Other Structures	:	Nil

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 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 to the provisions of the Government norms.

				1.	Skilled	Operator	2 No.
						Mechanic	1No.
						Blaster/Mate	1 No.
				2.	Semi – skilled	Driver	2 Nos
				3.	Unskilled	Musdoor Labours	5 Nos
						Cleaners	3Nos
						Office Boy	1No
				4.	Management & Supervisory staff		3No.
					Total =		18Nos
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 are also 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 will be 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.	**Labour 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 been provided as per the circulars and amendments made for Mine labours under the guidance of DGMS being a semi-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:

<table>
<tr><td>11.1</td><td>Existing Land Use Pattern</td><td>:</td><td>The existing land use pattern is given as under.
<table>
<tr><th>Sl. No.</th><th>Land Use</th><th>Present Area (Hect)</th><th>Area in use during the quarrying period (Hect)</th></tr>
<tr><td>1.</td><td>Area under quarrying</td><td>Nil</td><td>0.66.0</td></tr>
<tr><td>2.</td><td>Infrastructure</td><td>Nil</td><td>0.01.0</td></tr>
<tr><td>3.</td><td>Roads</td><td>Nil</td><td>0.01.0</td></tr>
<tr><td>4.</td><td>Green Belt & Dump</td><td>Nil</td><td>0.47.0</td></tr>
<tr><td>5.</td><td>Unutilized Area</td><td>1.15.0</td><td>Nil</td></tr>
<tr><td></td><td>Total =</td><td>1.15.0Ha</td><td>1.15.0Ha</td></tr>
</table></td></tr>
<tr><td>11.2</td><td>Water Regime</td><td>:</td><td>The water table in this area is observed at a depth of 82 meters below the surface. The proposed quarrying of rough stone is planned up to a depth of 41 meters, which is well above the groundwater level. Therefore, the mining activity will not impact groundwater depletion in this area.</td></tr>
<tr><td>11.3</td><td>Flora and Fauna</td><td>:</td><td>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.</td></tr>
<tr><td>11.4</td><td>Climatic conditions</td><td>:</td><td>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 18^0C during winter and to a maximum of 38^0C during the summer.</td></tr>
<tr><td>11.5</td><td>Human Settlement</td><td>:</td><td>The nearest habitations with the population is given.
<table>
<tr><th>Direction</th><th>Village</th><th>Distance in Kms</th><th>Population</th></tr>
<tr><td>North</td><td>Vanamangalam</td><td>3.3Kms</td><td>300</td></tr>
<tr><td>East</td><td>Madivalam</td><td>2.27Kms</td><td>150</td></tr>
<tr><td>South</td><td>Midithepalli</td><td>1.7Kms</td><td>350</td></tr>
<tr><td>West</td><td>Nariganapuram</td><td>2.0Kms</td><td>280</td></tr>
</table></td></tr>
</table>

11.6	Plan for Air, Dust Suppression	:	Air or dust expected to be generated from drilling process, hauling roads, places of excavation etc.., will be suppressed by periodical wetting of land by water spraying. For the sampling of air, high volume air sampler (Model VFC-PM10) was used (10 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 will be carried out by drilling and Proposed Control Blasting by using low power explosives, and hence, noise will be 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 Ten years shall be less than **1.15.0Ha.**

			Afforestation will be started during the first year of mining operation itself.
	c. Stabilization and vegetation of dumps	:	The topsoil 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, small dia explosives are used for breaking the hard rock and boulders, the noise and vibration will be 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 proposed mining is planned to a depth of **41m** (surface ground level above-16m & Surface Ground Level Below-25m). 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, Punga & Panai etc will be planted along the lease boundary and avenues as well as over non active dumps at a rate100 trees per annum 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 **A. Fixed Asset Cost**: Land Cost Labour Shed Sanitary Facility Fencing cost Total:=	 : : : : :	 Rs. 1,29,04,608/-(Leased tender amount for Government Poramboke Land) Rs. 1,20,000/- Rs. 70,000/- Rs. 80,000/- **Rs.1,31,74,608/-**

	B. Operational Cost:		
	Machinery cost	:	**Rs.40,00,000/-**
	C. EMP Cost:		
	1. Drinking water facility	:	Rs. 1,10,000/-
	2. Safety kits	:	Rs. 75,000/-
	3. Water sprinkling	:	Rs. 50,000/-
	4. Afforestation	:	Rs. 25,000/-
	5. Water quality test	:	Rs. 30,000/-
	6. Air quality test	:	Rs. 30,000/-
	7. Noise/vibration test	:	Rs. 30,000/-
	Total=	:	**Rs. 3,50,000/-**
	Total Project cost(A+B+C)	:	**Rs.1,75,24,608/-**

12.0 MINE CLOSURE PLAN:

12.1	Steps proposed for phased restoration, reclamation of already mined out area.	:	The proposed mining is planned to a depth of **41m**. 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 quarry with a mineable depth of **41m** for Ten years only 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 the adjecting 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 endeavour 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 8(6)(b) Tamil Nadu Minor Mineral Concession Rules, 1959 & As per Amendment under Rule 41 & 42 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 Level Environmental Impact Assessment Authority.

(v) This Revised Mining Plan is prepared for the Applied Rough Stone 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. 14/2025/ Mines Dated 15.05.2026 of the Duputy 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.

15/5/2026

ASSISTANT DIRECTOR
Department of geology and Mining
Collectorate, Krishnagiri.

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

Letter Roc. No. 14/2025/mines Dated 15.5.26

15.5.26

ANNEXURE-1

Rc.No.14/2025/Mines dated:27.02.2025

O/o. Deputy Director of
Geology & Mining,
Collectorate, Krishnagiri.

Precise Area Communication

Sub : Mines and Minerals – Minor Mineral – Rough Stone – Krishnagiri District – Shoolagiri Taluk - Berigai Village – SF.No.305/4(Part) – over an extent of 1.15.0 hectare of Government poramboke land – e-Tender cum Auction conducted – Highest bid amount offered by Thiru.N.Sankar – successful bidder declared - entire bid amount remitted - Precise area communicated -Reg.

Ref :
1. Krishnagiri District Gazette (Extra-ordinary) No.12 & 20 dated: 16.11.2024.
2. e-auction (live) conducted on 03.01.2025.
3. Notice Rc.No.16/2025/Mines dated: 07.01.2025 and 09.01.2025
4. Connected Records.

****

Yours attention is invited to the reference cited.

2) Based on the recommendations of the Special Committee report dated: 13.11.2024, the District Collector, Krishnagiri has issued notice inviting tender under District Gazette No.12(English) & 20(Tamil) dated: 16.11.2024 and received applications through online from the interested bidders for conducting e-Tender cum auction.

3) Subsequently, after due processes envisaged in G.O(Ms)No.21 Natural Resources (MMC1) Department dated: 31.07.2024, e-Tender cum auction has been conducted on 03.01.2025. Since, Thiru.N.Sankar has quoted highest bid amount of Rs.1,29,04,608/- (Rupees One crore twenty nine lakhs four thousand six hundred and eight only) for the proposed lease area in Government poramboke land over an extent of 1.15.0 hectares in

SF.No.305/4(Part), Berigai Village, Shoolagiri Taluk, Krishnagiri District, Thiru.N.Sankar after careful scrutinization has been declared as the successful bidder.

4) In this regard, the highest bidder Thiru.N.Sankar vide reference 3rd cited has been directed to remit the quoted highest bid amount to the proper head of Government Account. Accordingly, the Thiru.N.Sankar has remitted the entire bid amount of Rs.1,29,04,608/- (Rupees One crore twenty nine lakhs four thousand six hundred and eight only) as detailed below;

Challan Date	E-challan No.	Bank	Category	Amount in Rs.
EMD remitted during application through online			EMD	12,53,461
07.01.2025	20250107008843	SBI, Krishnagiri	10% of Bid amount	12,90,461
29.01.2025	20250128006547	SBI, Krishnagiri	90% of Bid amount	51,80,343
24.01.2025	20250122031751	SBI, Krishnagiri		51,80,343
	-		**Total**	**1,29,04,608**

5) Since the subject area in SF.No.305/4(Part) over an extent of 1.15.0 hects of Government poramboke land situated in Berigai Village, Shoolagiri Taluk, Krishnagiri District has been considered as qualified area for grant of lease for the period of 10 years, this precise area under Rule 41(4) of TNMMCR 1959 is hereby communicated to the successful bidder Thiru.N.Sankar. They are hereby directed to submit a draft mining plan within a period of 90 days from the date of receipt of this communication as required under rule 41 of TNMMCR 1959 for approval of the Deputy Director of Geology and Mining, Krishnagiri and further directed to obtain prior environment clearance from the State Level Environment Impact Assessment Authority, (SEIAA) Chennai as required under rule 42 of TNMMCR 1959 for

further process to grant of lease in the proposed lease area subject to the following conditions:-

1) A safety distance of 7.5 meters is to be maintained to the adjacent patta lands and a safety distance of 10 meters to be maintained to the adjacent Government lands and should not cause any hindrance to them while quarrying and transportation.
2) All conditions stipulated in the District Gazette Extra ordinary notification No.12 (English) & 20 (Tamil) dated: 16.11.2024 should be adhered by the bidder.
3) Environment clearance should be obtained from the State Level Environmental Impact Assessment Authority before grant of quarry lease as per rule 42 of the Tamil Nadu Minor Mineral Concession Rules 1959.
4) The bidder should fence the lease granted area with barbed wire before the execution of lease deed as follows:
    - The pillar post shall be firmly grounded with concrete foundation of height not less than 2 meters with a distance between two pillars shall not be more than 3 meters.
    - The applicant firm shall incorporate the DGPS readings for the entire boundary pillars of the area and the same should be clearly shown in the Mining Plan
    - A soft copy of digitalized map with DGPS readings should be submitted in the CD form to the Deputy / Assistant Director, Krishnagiri.
5) As per Rule 12 (V) of Minerals (other than Atomic & Hydrocarbon Energy Minerals) Concession Rules, 2016, the applicant firm shall at his own expenses erect, maintain and keep in repair all the boundary pillars for entire period of lease.

6) The applicant should use mild explosives during quarrying.

7) Child labourers should not be engaged in the quarry works.

8) If any violation is found during quarrying operation, the Rule 36(5)(h) and the penal provisions of the Tamil Nadu Minor Mineral Concession Rules, 1959 and connected Act and rules in force will attract.

Encl: Demarcated Map showing the proposed lease area.

27/2/25

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

27/2/25

To,

Thiru.N.Sankar,
S/o. Nagaraj,
Bithireddy Village,
Pachappanatti – Post,
Denkanikottai-Taluk,
Krishnagiri District.

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

ANNEXURE 5

பதிவெண்:
கிருஷ்ணகிரி

தமிழ்நாடு அரசு
2024

கிருஷ்ணகிரி மாவட்ட அரசிதழ்

சிறப்பு வெளியீடு

ஆணையின்படி வெளியிடப்பட்டது

கிருஷ்ணகிரி, நவம்பர் 16, 2024
[குரோதி, கார்த்திகை 1 – திருவள்ளுவர் ஆண்டு 2055] [எண் 20

மாவட்ட ஆட்சியர் அறிவிக்கை

[ந.க.எண்.2023/2023/(கனிமம்). நாள் : 15.11.2024.]

(மின்அஞ்சல் (mine.takgi@nic.in)

ஒப்பந்தப்புள்ளி வரவேற்கும் அறிவிக்கை

கிருஷ்ணகிரி மாவட்டத்தில் அரசு புறம்போக்கு நிலங்களில் அமைந்துள்ள சாதாரண வகை கற்குவாரிகளில் பொதுப் பயன்பாட்டிற்காக உடைகல் / சாதாரண வகை கற்கள் குவாரி கனிமக் குத்தகை தொடர்பான விண்ணப்பங்கள் வரவேற்கும் அறிவிக்கை

கனிமங்களும் குவாரிகளும் (மேம்படுத்துதல் மற்றும் ஒழுங்குபடுத்துதல்) சட்டம் 1957-ன் பிரிவு 15 மற்றும் அரசாணை (எம்.எஸ்) எண்.21 இயற்கை வளங்கள் (எம்.எம்.சி.1) துறை நாள்: 31.07.2024 மற்றும் தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959-ன் விதி எண்.8-ன் படியும், அவ்வப்போது ஏற்படுத்தப்படும் அதன் திருத்தங்களின்படியும், கிருஷ்ணகிரி மாவட்ட நிர்வாகம் இவ்வறிக்கையின் இணைப்பில் கண்டுள்ளவாறு அரசுப்புறம்போக்கு நிலங்களில் அமைந்துள்ள 20 இனங்களில் உள்ள உடைகல் / சாதாரண வகை கற்களை குவாரி செய்து பொதுப் பயன்பாட்டிற்கு, பயன்படுத்தும் பொருட்டு (e-auction) மின்னணு ஏலம் முறையில் கனிமக் குத்தகைக்கு அளிக்க ஒப்பந்தப் புள்ளிகள் வரவேற்கப்படுகின்றன.

மேற்படி கல்குவாரி குத்தகை மின்னணு ஏலத்தில் கலந்து கொள்ள உரிய படிவத்தில் ரூ.5000- (ரூபாய் ஐந்தாயிரம் மட்டும்) விண்ணப்பக் கட்டணத்துடன் அளிக்கப்படும் ஒப்பந்தப்புள்ளிகள் மூலம் தேர்ந்தெடுக்கப்படும் தகுதியான நபர்கள் தொழில்நுட்ப அடிப்படையிலான பரிசீலனை மூலம் உறுதிசெய்யப்பட்டு மின்னணு ஏலக்கேட்பில் கலந்துகொள்ள அனுமதிக்கப்படுவார்கள்.

ஒப்பந்தப்புள்ளி ஆவணத்தில் (Tender Document) தகுதிகள் குறித்த நிபந்தனைகள், மின்னணு ஏலத்தில் கலந்து கொள்ள குறிக்கப்பட்டுள்ள நாள் மற்றும் நேரம் ஆகியவை தெரிவிக்கப்பட்டுள்ளன. விளக்கங்களுடன் ஒப்பந்தப்புள்ளி படிவம், மின்னணு ஏலம் தொடர்பான அறிவிக்கை, காலமுறை, முன்கொணர்வுகள் மற்றும் நடைமுறைகள் ஆகியவற்றை வலைதள முகவரி website https://tntenders.gov.in-ல் இருந்து பதிவிறக்கம் செய்துகொள்ளலாம்.

மின்னணு ஏலம் கேட்பில் கலந்து கொள்ள ஆர்வமுள்ள மற்றும் தகுதியான நபர்கள் மேற்படி வலைதளத்தில் தாங்களாகவே பதிவு செய்து கொள்ள வேண்டும். அவ்வாறு பதிவு செய்துகொண்ட பின்னர் தகுதியான ஏலக் கேட்பு நபர்கள் உள்நுழைவு அடையாளக் குறியீடு (Login ID) மற்றும் கடவுச் சொல் (Password) ஆகியவற்றை பெற்ற பின்னர் மின்னணு ஏல நடவடிக்கைகளில் பங்குபெறலாம். ஒப்பந்தபுள்ளி படிவ மாதிரி மற்றும் கனிமப் பகுதியில் சுருக்கமான விவரங்களை கட்டணம் ஏதுமின்றி website https://tntenders.gov.in என்ற வலைதளத்தில் பதிவிறக்கம் செய்துகொள்ளலாம். எண்ம கையொப்பம் சான்று (Digital Signature certificate) பெற்றிருக்க வேண்டும்.

இவ்வினத்தில் விருப்பமுள்ள ஏலக்கேட்பு நபர்கள் தேவையான விவரங்கள் மற்றும் தொடர்புடைய ஆவணங்கள் ஆகியவற்றை மின்னணு ஏலம் – டெண்டர் வழிகாட்டு முறை கையேட்டின் பிற்சேர்க்கை 2-ல் கண்டுள்ளவாறு சரியான குறியீடு மற்றும் கடவுச் சொல் பயன்படுத்தி சமர்ப்பிக்க வேண்டும். ஏலக்கேட்பு நபர்கள் ஏலக்கேட்பு கையேட்டினை பார்வையிட்டு மின்னணு ஏலம் மற்றும் ஒப்பந்தப்புள்ளி ஆகியவற்றை இணைய வழி நுழைவாயில் (e-Portal) உரிய முறையில் சமர்ப்பிக்க வேண்டும்.

மின்னணு ஒப்பந்தப்புள்ளி, தொழில்நுட்ப மதிப்பீடு ஆகியவற்றிற்கு வழங்கப்படும் கால அளவு ஒப்பந்தப்புள்ளி வரவேற்கும் அறிவிக்கை வெளியிடப்பட்ட நாளிலிருந்து, தினசரி பத்திரிக்கைகளில் பிரசுரம் செய்தல் மற்றும் புவியியல் மற்றும் சுரங்கத் துறை வலைதளத்தில் பதிவேற்றம் செய்யப்படும் நாளிலிருந்தும் கணக்கிடப்படும்.

மின்னணு பொது ஏலத்தில் கலந்து கொள்ளும் ஏலதாரர்கள் மற்றும் உயர்ந்தபட்ச ஏலதாரர்கள் ஆகியோருக்கு மாவட்ட ஆட்சியரின் ஏல ஆவண வழிகாட்டு நெறிமுறைகள் தொகுப்பு எண்.001/MM/2024-1 நாள். 15.11.2024-ன் படி தெரிவிக்கப்பட்டுள்ளது.

கால வரையரை

மின்னணு ஒப்பந்தப்புள்ளிக்கான காலவரையரை ஒப்பந்தப்புள்ளி தொடர்பான ஆவணத்தில் உள்ளவை.

மின்னணு ஒப்பந்தப்புள்ளி விண்ணப்பம் சமர்பிக்க இறுதி நாள் – 06.12.2024

விண்ணப்பங்களை (தொழில்நுட்ப கேட்புகளுக்காக திறக்கும் நாள் – 09.12.2024

மின்னணு ஏல நாள் – பின்னர் அறிவிக்கப்படும்

இணைப்பு – மின்னணு ஒப்பந்தப்புள்ளி மற்றும் மின்னணு ஏலத்தின் மூலம் கல்குவாரி கனிமக் குத்தகை அளிக்கப்படக் கூடிய குவாரிகளின் விவரம்.

இயக்குநர் அலுவலகம் கிருஷ்ணகிரி

அட்டவணை – சாதாரண கற்குவாரி பட்டியல்

1. கிருஷ்ணகிரி வருவாய் கோட்டம்

கிருஷ்ணகிரி வட்டம்

வ. எண்.	கிராமம்	புல எண்	மொத்த பரப்பு	குவாரி குத்தகை வழங்கும் பரப்பு	வகைப்பாடு	குத்தகை உரிமம் காலம்
(1)	(2)	(3)	(4) (ஹெக்டேர்)	(5) (ஹெக்டேர்)	(6)	(7) (வருடங்கள்)
1	கல்லுகுறுக்கி	354 (பகுதி–1)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10
2	கல்லுகுறுக்கி	354 (பகுதி–2)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10
3	கல்லுகுறுக்கி	354 (பகுதி–3)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10
4	கல்லுகுறுக்கி	354 (பகுதி–4)	46.61.0	1.00.0	தீ.ஏ.த (மலை)	10

2. ஓசூர் வருவாய் கோட்டம்

ஓசூர் வட்டம்

5	அச்செட்டிப்பள்ளி	886, 887 (பகுதி), 896 மற்றும் 895 (பகுதி)	8.78.5	4.00.0	கல்லாங்குத்து	10

சூளகிரி வட்டம்

6	பேரிகை	305/4 (பகுதி)	1.89.0	1.15.0	தீ.ஏ.த (பாறை)	10
7	உல்லட்டி	122 (பகுதி–1)	4.31.0	1.00.0	தீ.ஏ.த (பாறை)	10
8	காமன்தொட்டி	653 (பகுதி–1)	7.56.0	3.35.0	தீ.ஏ.த (தரிசு)	5
9	காமன்தொட்டி	754 மற்றும் 760 (பகுதி–6)	36.46.50	4.00.0	தீ.ஏ.த (மலை)	10
10	மாரண்டப்பள்ளி	71/2	1.15.0	1.15.0	தீ.ஏ.த (பாறை)	10
11	வெங்கடேசபுரம்	132 (பகுதி–1)	3.90.0	1.55.0	தீ.ஏ.த (பாறை)	10
12	வெங்கடேசபுரம்	132 (பகுதி–2)	3.90.0	1.45.0	தீ.ஏ.த (பாறை)	10
13	வெங்கடேசபுரம்	135 (பகுதி)	42.34.0	1.70.0	தீ.ஏ.த (காடு)	10

(1)	(2)	(3)	(4) (ஹெக்டேர்)	(5) (ஹெக்டேர்)	(6)	(7) (வருடங்கள்)
14	வெங்கடேசபுரம்	294 (பகுதி-1)	18.36.5	3.00.0	தீ.ஏ.த (கரடு)	10
15	மதிநாயக்கன் பாளையம்	53 (பகுதி-1)	86.01.5	1.70.0	தீ.ஏ.த (கரடு)	10
16	மதிநாயக்கன் பாளையம்	53 (பகுதி-2)	86.01.5	2.00.0	தீ.ஏ.த (கரடு)	10
17	வெங்கடேசபுரம்	136 (பகுதி-10)	69.36.0	2.00.0	தீ.ஏ.த (கரடு)	5
		தேன்கனிக்கோட்டை வட்டம்				
18	ஓசபுரம்	359 (பகுதி)	3.03.5	1.50.0	தீ.ஏ.த (தரிசு)	10
19	தண்டரை	738 (பகுதி-2)	61.78.0	2.00.0	தீ.ஏ.த (மலை)	10
20	தண்டரை	738 (பகுதி-3)	61.78.0	1.50.0	தீ.ஏ.த (மலை)	10

கிருஷ்ணகிரி,
15.11.2024.

கே.எம். சரயு,
மாவட்ட ஆட்சியர்,
கிருஷ்ணகிரி மாவட்டம்.

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

தமிழ்நாடு எழுதுபொருள் மற்றும் அச்சுத்துறை ஆணையரால் சேலம் அரசினர் கிளை அச்சகத்தில் அச்சிடப்பட்டு மாவட்ட ஆட்சியரால் வெளியிடப்பட்டது.

ANNEXURE - III

தொலைபேசி எண். 04344-290590
இமெயில்-dfohosur@gmail.com

தமிழ்நாடு வனத்துறை

அனுப்புநர்,
செல்வி. க. கார்த்திகேயனி, இ.வ.ப.,
வனஉயிரினகாப்பாளர்,
ஒசூர் வனக்கோட்டம்,
மத்திகிரி, ஒசூர் – 635 110.

பெறுநர்,
மாவட்ட ஆட்சியர்,
கிருஷ்ணகிரி மாவட்டம்,
கிருஷ்ணகிரி.

ந.க.எண். 1162/2023/எல் நாள்.01.03.2024
ஸ்ரீ சோபகிருது வருடம், மாசி மாதம் 18, திருவள்ளுவர் ஆண்டு 2055)

அய்யா/அம்மையீர்,

பொருள் : கனிமங்களும் குவாரிகளும் – கிருஷ்ணகிரி மாவட்டம் – அரசு புலங்களில் உரிமம் முடிவடைந்த குவாரிகள் மற்றும் புதிய குவாரிகளை டெண்டர் மற்றும் பொது ஏலத்தில் கொண்டுவர வனப்பகுதி மற்றும் சரணாலயத்திற்கு உள்ள தொலைவு விவரம் மற்றும் இதர விவரங்கள் கோரியது –தொடர்பாக.

பார்வை : மாவட்ட ஆட்சியர், கிருஷ்ணகிரி, ந.க.எண்.2023/2023/கனிமம், நாள்.07.10.2023, 21.11.2023, 13.12.2023 (ம) 15.02.2024

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பார்வையில் காணும் கடிதத்தில், தெரிவிக்கப்பட்ட அரசு புலங்களில் உரிமம் முடிவுற்ற குவாரிகள் மற்றும் புதிய குவாரிகளுக்கு டெண்டர் மற்றும் பொது ஏலத்தில் கொண்டுவர. வனப்பகுதி மற்றும் சரணாலயப் பகுதியிலிருந்து உள்ள தொலைவு விவரம் கோரப்பட்டுள்ளது. இது தொடர்பான விவரம் பின்வருமாறு தெரிவிக்கப்படுகிறது.

அட்டவணை 1

டெண்டர் / பொது ஏலம் விடுவதற்கு பரிந்துரை செய்யப்படும் குவாரி பகுதிகள் விவரம்

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWS (km)	Distance from ESZ of CNWS (km)	Distance from CSWS (km)
	KRISHNAGIRI TALUK									
1	Kallukurukki	Un-assessed waste-Malai	354 (Part-1)	1.00.00	12.575047	78.209328	Kundarapalli 0.46	26.5	25.5	42.17

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWS (km)	Distance from ESZ of CNWS (km)	Distance from CSWS (km)
2	Kallukurukki	Un-assessed waste-Malai	354 (Part-2)	1.00.00	12.575315	78.208633	Kundarapalli 0.38	26.44	25.44	42.12
3	Kallukurukki	Un-assessed waste-Malai	354 (Part-3)	1.00.00	12.575546	78.207938	Kundarapalli 0.31	26.37	25.37	42.08
4	Kallukurukki	Un-assessed waste-Malai	354 (Part-4)	1.00.00	12.575803	78.207241	Kundarapalli 0.23	26.30	25.30	42.05
5	Kallukurukki	Un-assessed waste-Malai	354(Part-5)	0.95.00	12.574730	78.206858	Kundarapalli 0.30	26.30	25.30	42
	SHOOLAGIRI TALUK									
6	Berigai	Un-assessed waste-Parai	305/4 (Part)	1.15.00	12.793944	77.960446	Berigai 0.30	28.27	27.27	51.22
7	Ullatti	Un-assessed waste-Parai	122/1 (Part)	1.00.00	12.613170	77.991782	Shoolagiri 5.84 Samanapalli RL 0.68	9.22	8.22	33.16
8	Kamandoddi	Un-assessed waste-Tharisu	653 (Part-1)	3.35.00	12.664700	77.949852	Settipalli 2.78	13.70	12.70	37.48
9	Marandapalli	Un-assessed waste-Tharisu	71/2	1.15.00	12.677092	78.057920	Thekkalapalli 1.80	19.16	18.16	42.40
10	Venkatesapuram	Un-assessed waste-Parai	132 (Part-1)	1.55.00	12.757128	77.954216	Athimugam – I 0.63	24.20	23.20	47.91
11	Venkatesapuram	Un-assessed waste-Parai	132 (Part-2)	1.45.00	12.756039	77.955732	Athimugam – I 0.48	24.10	23.10	47.94

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWS (km)	Distance from ESZ of CNWS (km)	Distance from CSWS (km)
12	Venkatesapuram	Un-assessed waste-Karadu	135 (Part)	1.70.00	12.753081	77.952074	Athimugam – I 0.41	23.76	22.76	47.39
13	Venkatesapuram	Un-assessed waste-Karadu	294 (Part-1)	3.00.00	12.757003	77.956107	Athimugam – I 0.57	24.20	23.20	47.93
14	Venkatesapuram	Un-assessed waste-Karadu	86 (Part-2)	2.00.00	12.756083	77.947017	Athimugam – I 0.99	24.08	23.08	47.27
	DENKANIKOTTAI TALUK									
15	Hosapuram	Un-assessed waste-Tharisu	359 (Part)	1.00.00	12.641910	77.817775	Sanamavu 6.06	13.50	12.50	28.34

மேற்கண்ட அட்டவணை 1ல் உள்ள குவாரி பகுதிகள், காவேரி வடக்கு வனஉயிரின சரணாலயத்திற்கான சூழல் உயர்திரன் மண்டலத்திற்குள் (Eco-Sensitive Zone) வருவதில்லை.

அட்டவணை 2

டெண்டர் / பொது ஏலம் மூலம் குத்தகை அனுமதி வழங்குவதை தற்காலிகமாக நிறுத்திவைக்க பரிந்துரை செய்யப்படும் குவாரிகளின் விவரப் பட்டியல்

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWLS (km)	Distance from ESZ of CNWLS (km)	Distance from CSWLS (km)
	KRISHNAGIRI TALUK									
1	Kallukurukki	Un-assessed waste-Malai	701 (Part-2)	1.00.00	12.555435	78.224247	Kundarapalli 3.15	27.70	26.70	41.85
2	Kallukurukki	Un-assessed waste-Malai	701 (Part-3)	1.00.00	12.555448	78.224813	Kundarapalli 3.19	27.75	26.75	41.90

Sl. No.	Village	Classification of the proposed site (As per Revenue Record)	S.F. No.	Extent Proposed for Quarry Lease (ha)	Latitude	Longitude	Name and distance from nearest RF (km)	Distance from CNWLS (km)	Distance from ESZ of CNWLS (km)	Distance from CSWLS (km)
3	Kallukurukki	Un-assessed waste-Malai	701 (Part-5)	3.50.00	12.550433	78.228441	Kundarapalli 3.85	28.05	27.05	41.82
	SHOOLAGIRI TALUK									
4	Athimugam	Un-assessed waste-Karadu	367/2 (Part)	2.85.00	12.745869	77.957477	Athimugam – II 0.06	22.74	21.74	46.51
5	Berigai	Un-assessed waste-Parai	316/1 (Part)	2.20.00	12.791011	77.961650	Midithepalli 0.043	27.88	26.88	50.95
6	Chinnaballnaickn palayam	Un-assessed waste-Karadu	1/1 (Part)	1.70.00	12.666448	78.087067	Kariyanapalli - II 0.070	20.15	19.15	42.50
7	Sanamavu	Un-assessed waste-Karadu	967/2 (Part)	1.65.00	12.660059	77.900915	Sanamavu 0.22	12.72	11.72	36.28

RF – Reserved Forest
CNWLS – Cauvery North Wildlife Sanctuary
ESZ – Eco-sensitive Zone
CSWLS – Cauvery South Wildlife Sanctuary

- மேற்கண்ட அட்டவணை 2ல் குறிப்பிட்டுள்ள இடங்களில் வரிசை எண்கள்.01 முதல் 03 வரையில் உள்ள புல எண்.701 அருகில் சுமார் 145 ஹெக்டேர் பரப்பளவில் ஈரநிலம் (பதேதல்லா ஏரி) அமைந்துள்ளது. மேலும் இந்த மலையை ஒட்டி கிருஷ்ணகிரி காப்பு நிலம்–1 உள்ளது. இப்புலமானது கிருஷ்ணகிரி நகராட்சிபகுதிக்கு மிக அருகில் (1.5கி.மீ தொலைவில்) உள்ளது. இந்த மலை ஈரநிலத்தின் நீர்ப்பிடிப்பு பகுதியாக உள்ளதால், கிருஷ்ணகிரி நகரின் நிலத்தடி நீர்க்கு ஆதாரமாக உள்ளது. மேலும் இப்புலத்தினை குவாரி பணி செய்வதற்கு குத்தகை அனுமதி வழங்க மாவட்ட ஈரநில குழுவின் பரிந்துரையின்படி நடவடிக்கை எடுக்கலாம்.
- வரிசை எண்.4ல் உள்ள புலமானது அத்திமுகம்–1 மற்றும் அத்திமுகம் –2–ஆகிய காப்புகாட்டிற்கு இணைப்பாக உள்ளது. இப்பகுதியில் வன உயிரின நடமாட்டம்

உள்ளதால், வன உயிரினம் இரண்டு காப்புக்காடுகளுக்கிடையில் நடமாடும் பகுதியாகும். இப்புலத்தை குவாரி குத்தகை அனுமதி வழங்கும் நிலையில் மனித விலங்கு மோதல்கள் ஏற்பட வாய்ப்புள்ளது.

- வரிசை எண்.5ல் உள்ள புலமானது மிடிதேப்பள்ளி மற்றும் பேரிகை ஆகிய காப்புகாட்டிற்கு இணைப்பாக உள்ளது. இப்பகுதியில் வன உயிரின நடமாட்டம் உள்ளதால், வன உயிரினம் இரண்டு காப்புக்காடுகளுக்கிடையில் நடமாடும் பகுதியாகும். இப்புலத்தை குவாரி குத்தகை அனுமதி வழங்கும் நிலையில் மனித விலங்கு மோதல்கள் ஏற்பட வாய்ப்புள்ளது.
- அட்டவணை 2ல் வரிசை எண்.6ல் சின்னநாயக்கன்பாளையம் கிராம புலத்தை சுற்றி காப்புக்காடுகள் அமைந்துள்ளது. இப்பகுதியானது எர்ரண்டப்பள்ளி காப்புக்காடு மற்றும் கரியாணப்பள்ளி காப்புக்காடுகளின் தொடர்ச்சி உள்ளது. மேலும் இந்தப்பகுதியான சிறுத்தைக்கு (Schedule 1 Species) உகந்த வாழ்விடமாகும்.
- வரிசை எண்.7ல் உள்ள புலமானது சானமாவு காப்புக்காட்டிற்கு அருகில் உள்ளது. இங்கு தற்போது யானை நடமாட்டம் அதிகமாக உள்ள பகுதி என்பதால் மனித விலங்கு மோதல்கள் ஏற்பட வாய்ப்புள்ளது.

மேற்படி காரணங்களினால் அட்டவணை 2ல் உள்ள 7 குவாரிகளை ஏலம் விடுவதற்கு உத்தேசிக்கப்பட்டுள்ள கிராமங்களில் டெண்டர் மற்றும் பொது ஏலத்தில் விடுவதை தற்சமயம் நிறுத்தி வைக்க பரிந்துரைக்கப்படுகிறது

குறிப்பு:- மேலும் அட்டவணை 1ல் அனுமதி வழங்கப்படும் 15 குவாரிகளுக்கு அருகில் உள்ள காப்புக்காடுகளுக்குள் அமைந்துள்ள, கிராம மக்கள் / ரோந்து பணிக்கு பயன்படுத்தப்படும் மண் சாலையை குவாரி வாகனங்கள் பயன்படுத்த அனுமதி இல்லை என்பதை அன்புடன் தெரிவித்துக்கொள்கிறேன்.

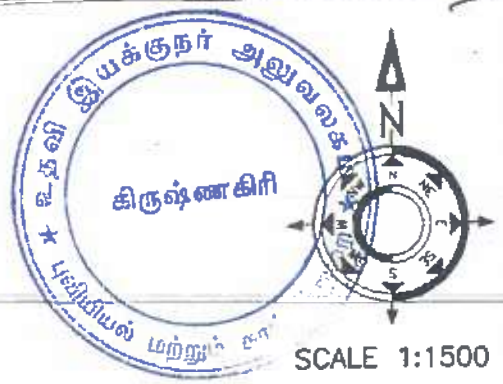
தங்கள் அன்புள்ள,

வன உயிரினக்காப்பாளர்,
ஓசூர் வனக்கோட்டம்.

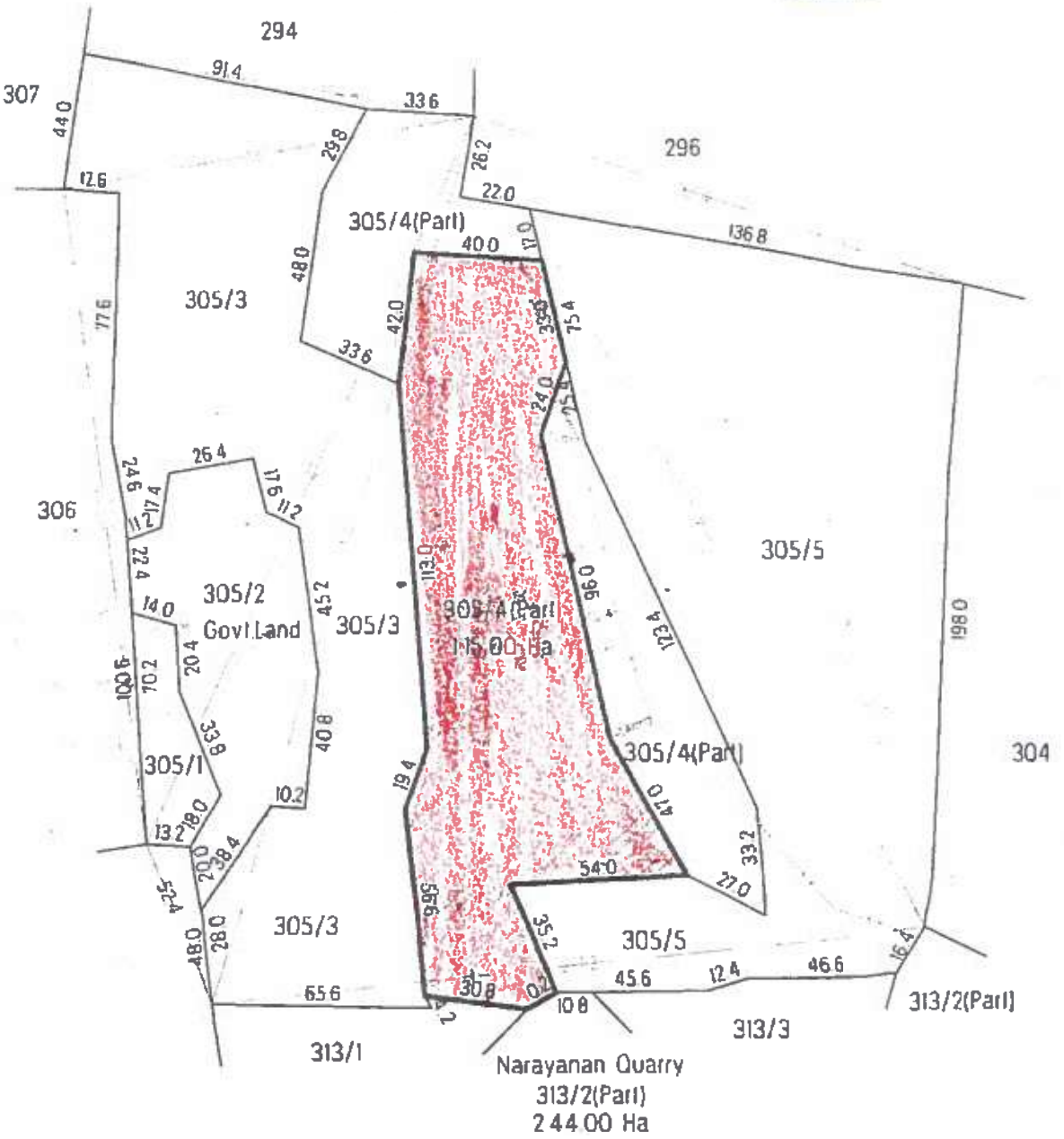
S.DHANASEKAR, M.Sc.,(Geo)
Qualified Person

ANNEXURE - IV

Krishnagiri District
Shoolagiri Taluk
Berigai Village
S.F.No: 305/4
Extent= 1.89.00 Hectares
Classificatin: UAW-Parai



SCALE 1:1500



K. NEELAKANDAN
Sub-Inspector of Survey,
O/o. Deputy Director, Geology and Mining,
Krishnagiri District.

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

LEGEND:

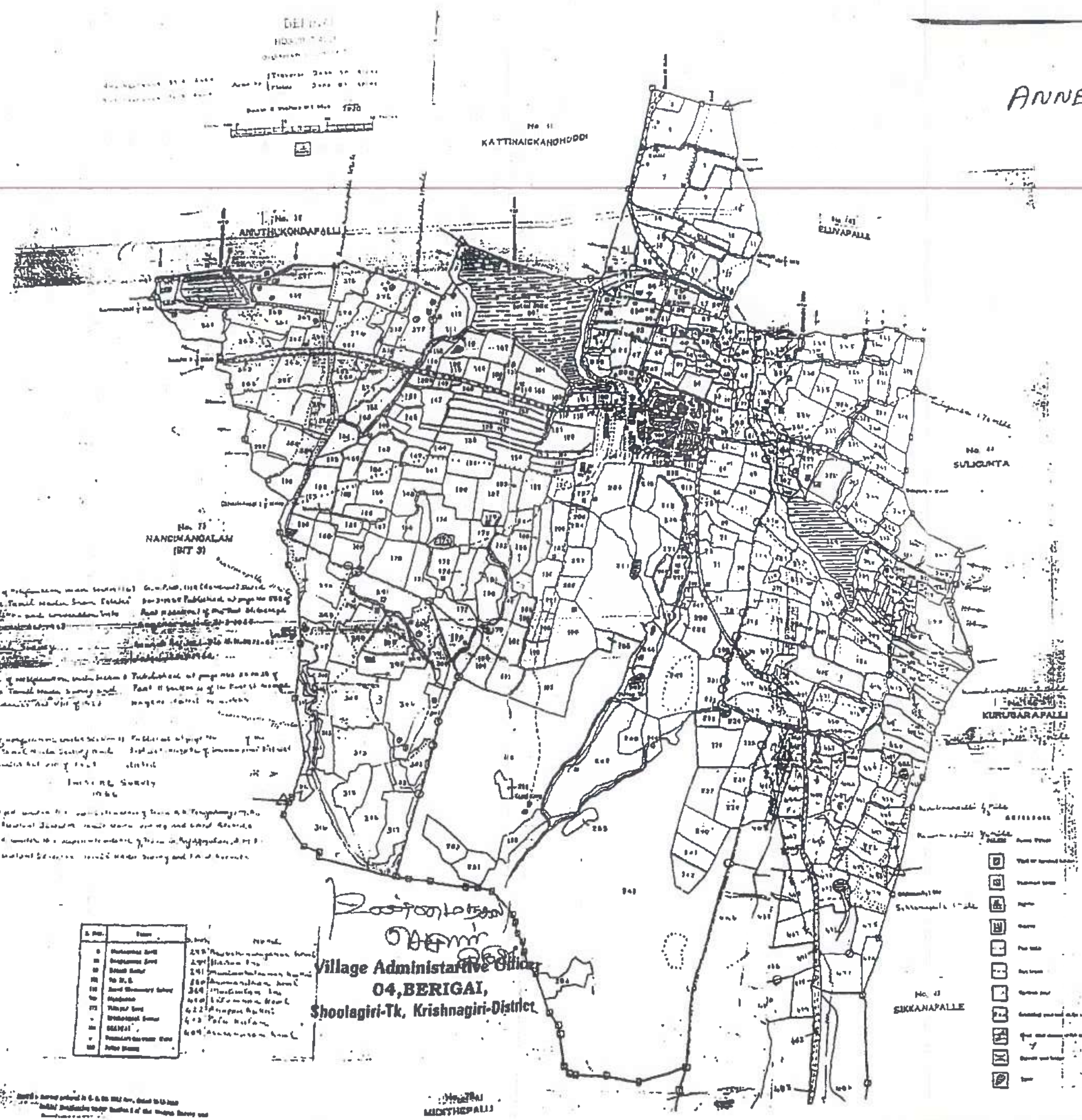
PROPOSED FOR TENDER AREA
S.F.No.305/4(Part) =1.15.00 Ha

SEASONAL ODAI

Remarks
All Dimension in meters

ANNEXURE V

இயக்குநர் அலுவலகம்
கிருஷ்ணகிரி
புவியியல் மற்றும் சுரங்கத்துறை



Village Administartive Officer
04,BERIGAI,
Shoolagiri-Tk, Krishnagiri-District

S.DHANASEKAR, M.Sc.,(Geol
Qualified Person

ANNEXURE-VI

கிராமக் கணக்கு

– ஆம் பசலியில் இருளனகிரி மாவட்டம் கிருஷ்ணகிரி வட்டம் 42 பேரிகை

நில வரித் திட்டத்தின்படி புலன்களின் விபரம்.						சாகுபடியாளரின் பெயர்.	முதல் போகம்.				
நில அளவை எண்.	உட்பிரிவு எண்.	பரப்பு.	நீர்மை.	ஒரு போகம் அல்லது இரு போகம்.	கைப்பற்று தாருடைய பெயரும் எண்ணும் அல்லது அனுபோக தாருடைய பெயர்.	நிலத்தின் எந்த பகுதி யாலது சாகுபடியாளரால் பயிரிடப்பட்டுள்ளதா.	எந்த மாதத்தில் பயிர் செய்யப்பட்டது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது.	பயிரின் பெயர்.	பயிராக / அறுவடை யான பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விழுக்காடு.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
305	4	1.89.0	–		–				தரிசு.		
							ஒன்னைமநூல்				

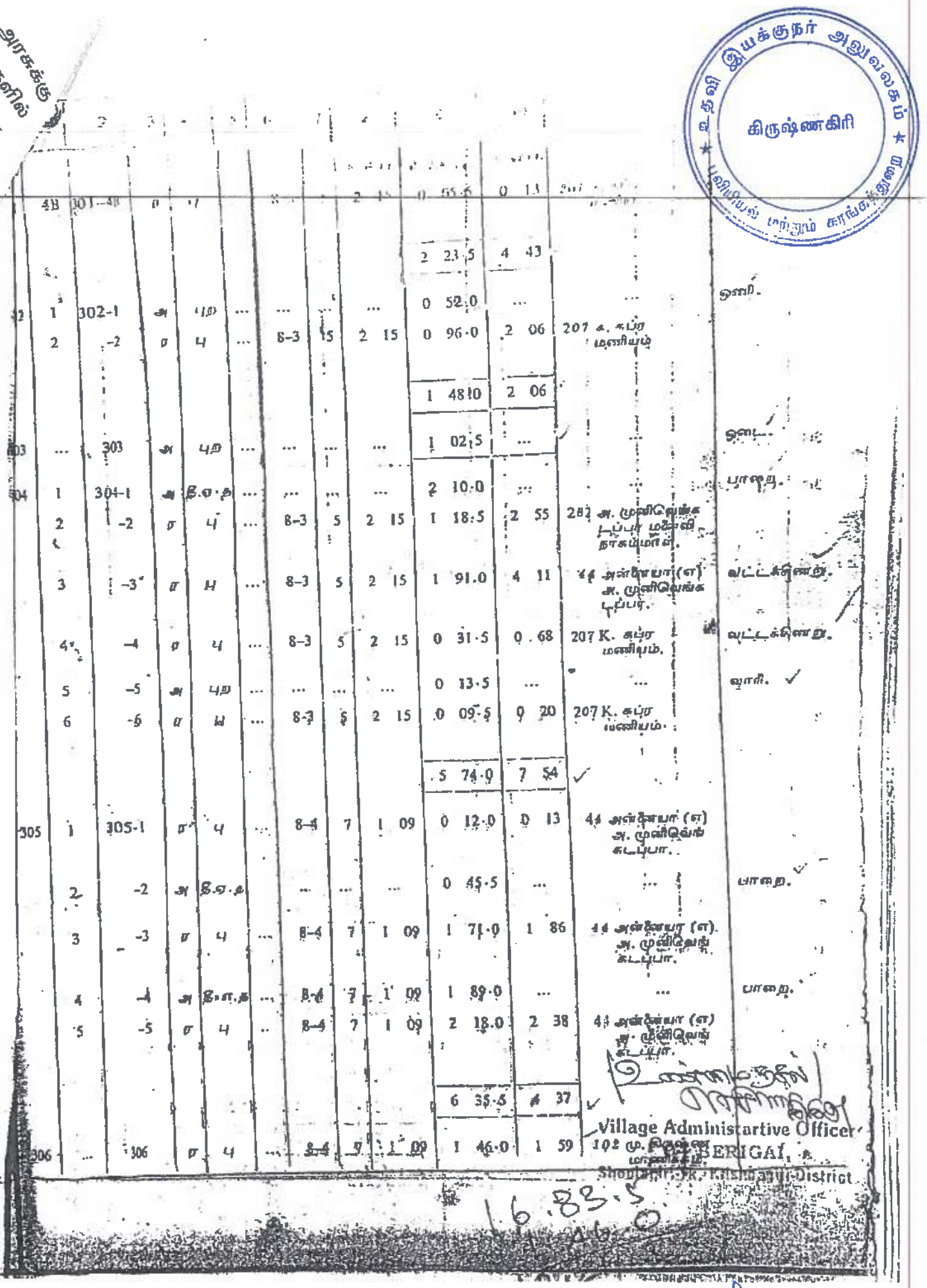
Village Administartive Officer
04, BERIGAI,
Shoolagiri-Tk, Krishnagiri-District

எண் 2

கிராமத்தில் வருடவாரி புலவாரி கைப்பற்று சாகுபடி அடங்கல் கணக்கு

இரண்டாம் போகம்.						கிழ்க்கண்டவகையில் பயிரிடப்படாது உள்ள நிலத்தின் தன்மை மற்றும் பரப்பின் விவரங்கள் ஒவ்வொரு நிலத்தின் அளவை எண் அல்லது அதன் பகுதியில்.	பயிர் பார்வையிடும் அலுவலர் குறிப்புகள்.
எந்த மாதத்தில் பயிர் செய்யப்பட்டது எந்த மாதத்தில் அறுவடை செய்யப்பட்டது.	பயிரின் பெயர்.	பயிராக / அறுவடையான பரப்பு.	உண்மையான பாய்ச்சல் ஆதாரம்.	விளைச்சல் அளவு விழுக்காடு.	கிராம அலுவலரின் குறிப்புரை :– (1) புலன்களின் பகுதிகளில் மட்டும் பயிரிடப்பட்ட விவரங்கள் அளவில். (2) வகைப்பாடில் நிலவாத நிலங்– களின் சாகுபடியின் தன்மையும் (3) முந்தைய மாதத்தில் பயிரிடப்பட்டவை என்று பதிவாகியுள்ள ஆனால் பின்பருவத்து மாற்றப்பட்ட நிர் பாய்ச்சப்பட்ட விவரங்கள்.	(அ) ஏனம், (ஆ) பயனற்ற பயிர் செய்ய இயலாத நிலம், (இ) விவசாயம் மற்றும் இதர காரியங்களுக்கு பயன் படுத்தப் படும் நிலம், (ஈ) பயிரிடத்தக்க தரிசு (உ) நிலையான புல் தரைகளும் மற்றும் இதர மேய்ச்சல் நிலங்களும். (ஊ) விதைக்கப்பட்ட நிகர பரப்பில் சேர்க்கப்படாத மரவகைப் பயிர்களும் தோப்புகளும், (எ) நடப்புத் தரிசுகள் (ஏ) இதர தரிசு நிலங்கள்.
(13)	(14)	(15)	(16)	(17)	(18)	(18அ)	(19)
					1.89.0		
					டாண		

380/26-R.F. III-A-10-50,00,000 Cps.–GBP.-Mdu-7–2018.



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	2	-2	ஏ	ப	...	8-3	15	2 15	0 96·0	2 06	207 க. சுப்ர மணியம்	
									1 48·0	2 06		
303	...	303	அ	புற	...	...	...	...	1 02·5	...		ஓடை.
304	1	304-1	அ	இ.ஏ.த	...	...	...	...	2 10·0	...		பாறை.
	2	-2	ஏ	ப	...	8-3	5	2 15	1 18·5	2 55	281 அ. முனிவெங்க டப்பா மதினி நாகம்மாள்.	
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	4	-4	ஏ	ப	...	8-3	5	2 15	0 31·5	0 68	207 K. சுப்ர மணியம்.	வட்டக்கிணறு.
	5	-5	அ	புற	...	...	...	...	0 13·5	...	...	வாரி. ✓
	6	-6	ஏ	ப	...	8-3	5	2 15	0 09·5	0 20	207 K. சுப்ர மணியம்.	
									5 74·0	7 54	✓	
305	1	305-1	ஏ	ப	...	8-4	7	1 09	0 12·0	0 13	44 அன்னையா (எ) அ. முனிவெங் கடப்பா.	
	2	-2	அ	இ.ஏ.த	...	...	...	...	0 45·5	...	...	பாறை. ✓
	3	-3	ஏ	ப	...	8-4	7	1 09	1 71·0	1 86	44 அன்னையா (எ). அ. முனிவெங் கடப்பா.	
	4	-4	அ	இ.ஏ.த	...	8-4	7	1 09	1 89·0	...	...	பாறை.
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Village Administartive Officer
PALAVERIGAI,
Shoolagiri, Dt. Krishnagiri District

16.83.5

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

ANNEXURE-5

மாவட்ட ஆட்சியர் அலுவலகம் கிருஷ்ணகிரி புலம்பெயர் தமிழர் நலத்துறை

இந்திய அரசாங்கம்
Government of India

இந்திய தனிப்பட்ட அடையாள ஆணைய அமைப்பு
Unique Identification Authority of India

பதிவேட்டு எண்/ Enrolment No.: 2193/11103/89192

To
சங்கர்
SANKAR
S/O: Nagaraj,
D.NO.1/45A,
BITHIREDDY,
PACHAPPANATTI,
VTC: Pachapanatti,
PO: Pachappanatti,
Sub District: Denkanikottai,
District: Krishnagiri,
State: Tamil Nadu,
PIN Code: 635113,
Mobile: 7708835634

Signature valid

உங்கள் ஆதார் எண் / Your Aadhaar No. :
7597 3939 2758
VID : 9143 4800 0013 9254

எனது ஆதார், எனது அடையாளம்

Aadhaar no. issued: 20/04/2013

சங்கர்
SANKAR
பிறந்த நாள்/DOB: 01/06/1989
ஆண்/ MALE

Aadhaar is proof of identity, not of citizenship or date of birth. It should be used with verification (online authentication, or scanning of QR code / offline XML).

7597 3939 2758

எனது ஆதார், எனது அடையாளம்

Government of India

தகவல் / INFORMATION

- ஆதார் என்பது அடையாளத்திற்கான சான்றாகும். குடியுரிமை அல்லது பிறந்த தேதிக்கான சான்றல்ல பிறந்த தேதி என்பது ஆதார் எண் வைத்திருப்பவரால் சமர்ப்பிக்கப்பட்ட விதிமுறைகளில் குறிப்பிடப்பட்டுள்ள பிறந்த தேதி ஆவணத்தின் ஆதாரம் மூலம் ஆதரிக்கப்படும் தகவலின் அடிப்படையில் அமைந்துள்ளது.
- இந்த ஆதார் கடிதத்தை UIDAI நியமித்த அங்கீகார நிறுவனத்தால் ஆன்லைன் அங்கீகாரம் அல்லது ஆப் ஸ்டோர்களில் கிடைக்கும் எம் ஆதார் அல்லது ஆதார் QR ஸ்கேனர் செயலியை பயன்படுத்தி QR குறியீடு ஸ்கேனிங் அல்லது www.uidai.gov.in இல் கிடைக்கும் பாதுகாப்பான QR குறியீடு ரீடர் செயலியை பயன்படுத்தி சரிபார்க்க வேண்டும்.
- ஆதார் தனித்துவமானது மற்றும் பாதுகாப்பானது.
- ஆதார் பதிவு செய்யப்பட்ட நாளிலிருந்து ஒவ்வொரு 10 வருடங்களுக்குப் பிறகும் ஆதாரில் அடையாளம் மற்றும் முகவரிக்கான ஆவணங்கள் புதுப்பிக்கப்பட வேண்டும்.
- பல்வேறு அரசு மற்றும் அரசு சாரா பலன்கள் / சேவைகளைப் பெற ஆதார் உங்களுக்கு உதவுகிறது.
- உங்கள் மொபைல் எண் மற்றும் மின்னஞ்சல் ஐடியை ஆதாரில் புதுப்பிக்கவும்.
- ஆதார் சேவைகளைப் பெற mAadhaar செயலியை பதிவிறக்கவும்.
- ஆதாரபயோமெட்ரிக்களைப் பயன்படுத்தாதபோது பாதுகாப்பை உறுதிசெய்ய, ஆதாரபயோமெட்ரிக்ஸ் லாக்/அன்லாக் அம்சத்தைப் பயன்படுத்தவும்.
- ஆதார் கோரும் நிறுவனங்கள் ஒப்புதலைப் பெற வேண்டிய கடமை உள்ளது.
- Aadhaar is proof of identity, not of citizenship or date of birth (DOB). DOB is based on information supported by proof of DOB document specified in regulations, submitted by Aadhaar number holder.
- This Aadhaar letter should be verified through either online authentication by UIDAI-appointed authentication agency or QR code scanning using mAadhaar or Aadhaar QR Scanner app available in app stores or using secure QR code reader app available on www.uidai.gov.in.
- Aadhaar is unique and secure.
- Documents to support identity and address should be updated in Aadhaar after every 10 years from date of enrolment for Aadhaar.
- Aadhaar helps you avail of various Government and Non-Government benefits/services.
- Keep your mobile number and email id updated in Aadhaar.
- Download mAadhaar app to avail of Aadhaar services.
- Use the feature of Lock/Unlock Aadhaar/biometrics to ensure security when not using Aadhaar/biometrics.
- Entities seeking Aadhaar are obligated to seek consent.

Government of India

முகவரி:
S/O: நாகராஜ், கஎண்.1/45ஏ, பிதிரெட்டி,
பச்சப்பனட்டி, பச்சனப்பட்டி,
பச்சப்பனட்டி, கிருஷ்ணகிரி,
தமிழ் நாடு - 635113

Address:
S/O: Nagaraj, D.NO.1/45A, BITHIREDDY,
PACHAPPANATTI, Pachapanatti, PO: Pachappanatti,
DIST: Krishnagiri,
Tamil Nadu - 635113

Details as on: 17/08/2025

7597 3939 2758
VID : 9143 4800 0013 9254

1947 | help@uidai.gov.in | www.uidai.gov.in

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

ANNEXURE-VIII



Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Level Expert Appraisal
Committee(SEAC),
TAMIL NADU)
***



Minutes of 640th SEAC Approved schedule State Level Expert Appraisal Co mmittee meeting held from 10/11/2025 to 10/11/2025 Date: 15/11/2025

MoM ID: EC/MOM/SEAC/829206/11/2025

Agenda ID: EC/AGENDA/SEAC/829206/11/2025

Meeting Venue: MetroS, CMRL Building, Nandanam

Meeting Mode: Hybrid

Date & Time:

10/11/2025	10:00 AM	02:00 PM

1. Opening remarks

The 640th meeting of the State Expert Appraisal Committee (SEAC) held at SEAC Conference Hall, 9th Floor, MetroS (CMRL building), Nandanam, Chennai-600035 for Mining projects.

2. Confirmation of the minutes of previous meeting

The Minutes of the 639th SEAC meeting held on 04.11.2025 were circulated to the Members in advance. The Committee decided to confirm the minutes.

3. Details of proposals considered by the committee

Day 1 -10/11/2025

3.1. Agenda Item No 1:

	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) All documents to 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

3.2. Agenda Item No 2:

3.2.1. Details of the proposal

Thiru. N. Sankar Rough Stone Quarry by Sankar N located at KRISHNAGIRI,TAMIL NADU

Proposal For		Fresh ToR	
Proposal No	File No	Submission Date	Activity Sub-Activity (Schedule Item)
SIA/TN/MIN/555007/2025	12880	10/11/2025	Mining of minerals Non-Coal Mining (Minor Minerals-other than river bed mining) (1(a))

3.2.2. Project Salient Features

null

3.2.3. Deliberations by the committee in previous meetings

N/A

3.2.4. Deliberations by the SEAC in current meetings

The SEAC-1 noted the following:

1. The Project Proponent, Thiru. N. Sankar, has applied for Terms of Reference for the Proposed Rough Stone quarry over an extent of 1.15.0 Ha of in S.F. Nos: 305/4 (Part) in Berigai Village, Shoolagiri Taluk, Krishnagiri District, Tamil Nadu.
2. The project/activity is covered under Category "B1" of Item 1(a) "Mining of minerals" of the Schedule to the EIA Notification, 2006.
3. The lease period is 10 years. The mining plan is for a period of 10 years, and the production should not exceed **161673 m^3** of rough stone with an ultimate mining depth of 36m. The annual peak production is 32175 m^3 of rough stone.

Committee Decision:

Based on the presentation made by the project proponent, **SEAC-I decided to recommend for grant of Terms of Reference (TOR) with Public Hearing.**

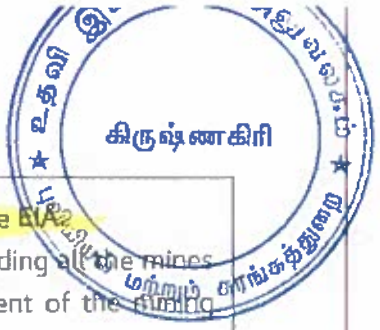
3.2.5. Recommendation of SEAC

Recommended

3.2.6. Details of Terms of Reference

3.2.6.1. Specific

SEAC conditions - Site specific	
1.	1. The proponent shall submit a revised Mining Plan incorporating the formation of



benches at above ground level (AGL), and include the same in the EIA.

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.

SEAC Standard Conditions

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.

1.

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, 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 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.
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.

3.2.6.2. Standard

1(a)	**Mining of minerals**
null	
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/ toposheet, topographic sheet, geomorphology and geology of the areashould 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 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
6.	Details about the land proposed for mining activities should be givenwith 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 rea 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 rea 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.	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 State 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 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
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
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)
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
3	Measures of socio economic significance and influence to the local community proposed to be provided

7.	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 and 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) All documents to 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

3.3. Agenda Item No 3:

3.3.1. Details of the proposal

Rough Stone Quarry Project Belongs to M/s. ANJANEYAA MINERLAS by ANJANEYAA MINERALS located at PERAMBALUR,TAMIL NADU	
Proposal For	Fresh ToR

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

ANNEXURE IX

Reg. No 01BBB1005
Col Code 106 / 106

இயக்குநர் அலுவலகம் No. 038673 கிருஷ்ணகிரி

பெரியார் பல்கலைக்கழகம்
Periyar University

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 i/c

துணைவேந்தர்
Vice-Chancellor

S.DHANASEKAR, M.Sc.,(Geo
Qualified Perso

ANNEXURE - X

PRITHVI MINERALS,

✆ : 04288 - 262489

VARANALAMPALAYAM
ALATHUR 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-XI

PHOTO SHOWN PROPOSED APPLIED LEASE AREA VIEW-1



PHOTO SHOWN PROPOSED APPLIED LEASE AREAVIEW-2



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

12° 47' 44.4512" N

77° 57' 34.8443" E

77° 57' 37.7112" E

12° 47' 36.8734" N



N
W
E
S

PLATE NO:I

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT	: 1.15.00 HECT
S.F.NO	: 305/4(PART)
VILLAGE	: BERIGAI,
TALUK	: SHOOLAGIRI,
DISTRICT	: KRISHNAGIRI.

INDEX

QUARRY LEASE AREA :

TOPO SHEET NO. : 57-H/13,

LATITUDE : 12° 47' 44.4512" N to 12° 47' 36.8734" N

LONGITUDE : 77° 57' 37.7112" E to 77° 57' 34.8443" E

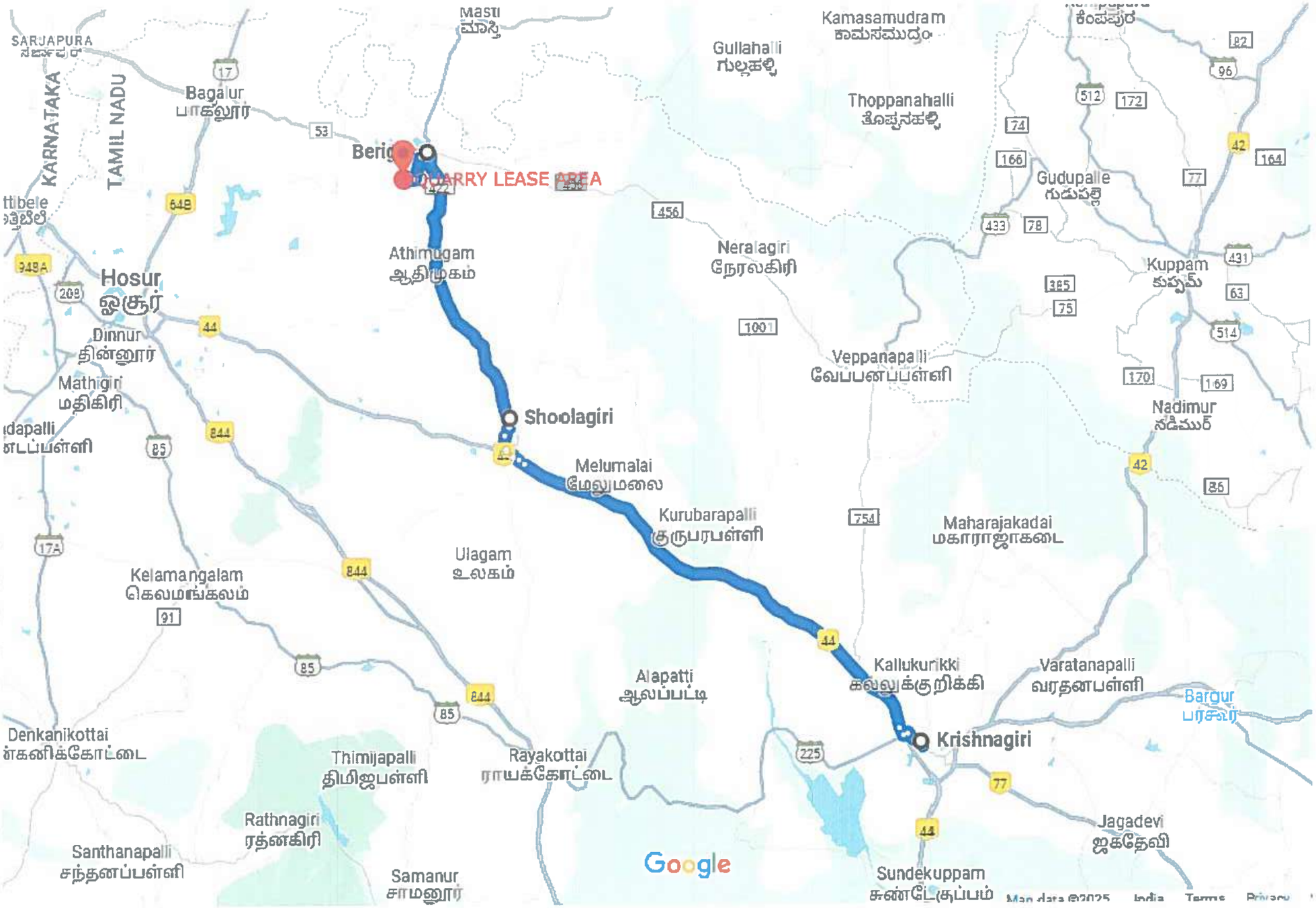
LOCATION MAP

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

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



இயக்குநர்
நிலவியல் மற்றும் சுரங்கம்
கிருஷ்ணகிரி

N
W E
S

PLATE NO:IA

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT	: 1.15.00 HECT
S.F.NO	: 305/4(PART)
VILLAGE	: BERIGAI,
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.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

12° 47' 44.4512" N



77° 57' 34.8443" E

77° 57' 37.7112" E

12° 47' 36.8734" N

N

W E

S

PLATE NO:IB

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

கிருஷ்ணகிரி

LOCATION OF QUARRY

EXTENT	: 1.15.00 HECT
S.F.NO	: 305/4(PART)
VILLAGE	: BERIGAI,
TALUK	: SHOOLAGIRI,
DISTRICT	: KRISHNAGIRI.

INDEX

QUARRY LEASE AREA :

5KM RADIUS

TOPO SHEET NO. : 57-H/13,

LATITUDE : 12° 47' 44.4512" N to 12° 47' 36.8734" N

LONGITUDE : 77° 57' 37.7112" E to 77° 57' 34.8443" E

CONTOUR INTERVAL

TOPO SHEET MAP OF THE LEASE AREA

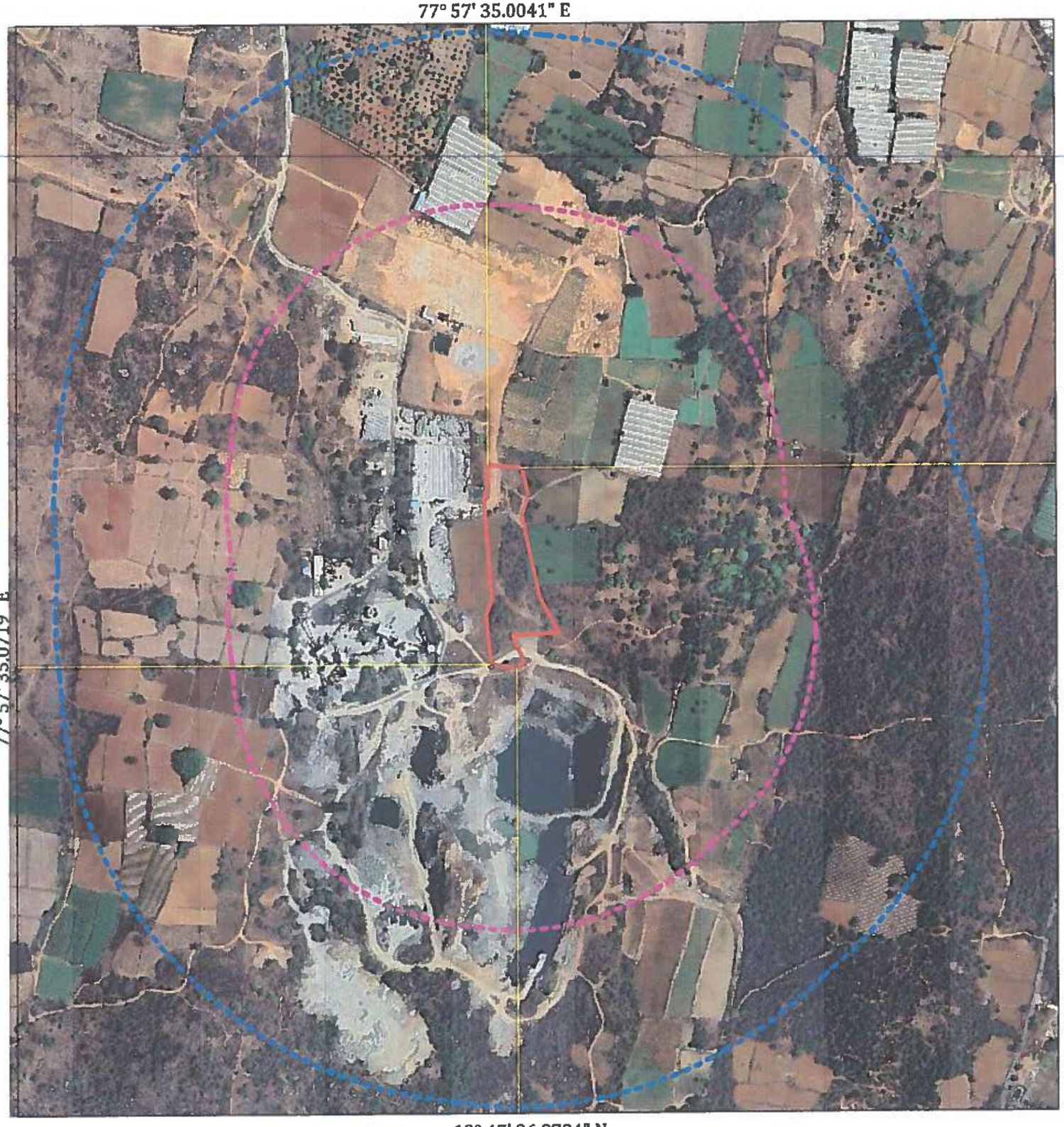
SCALE- 1:50,000

PREPARED BY:

I DO HEREBY CERTIFY THAT THE PLATE HAS BEEN CHECKED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

12° 47' 44.4512" N
77° 57' 35.0041" E



12° 47' 44.3447" N
77° 57' 36.3248" E

12° 47' 37.0086" N
77° 57' 35.0719" E

12° 47' 36.8734" N
77° 57' 36.0829" E

உதவி இயக்குநர் அலுவலகம்
கிருஷ்ணகிரி
புவியியல் மற்றும் சுரங்கத்துறை

N
W E
S

PLATE NO:IC

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE BOUNDARY

500M RADIUS

300M RADIUS

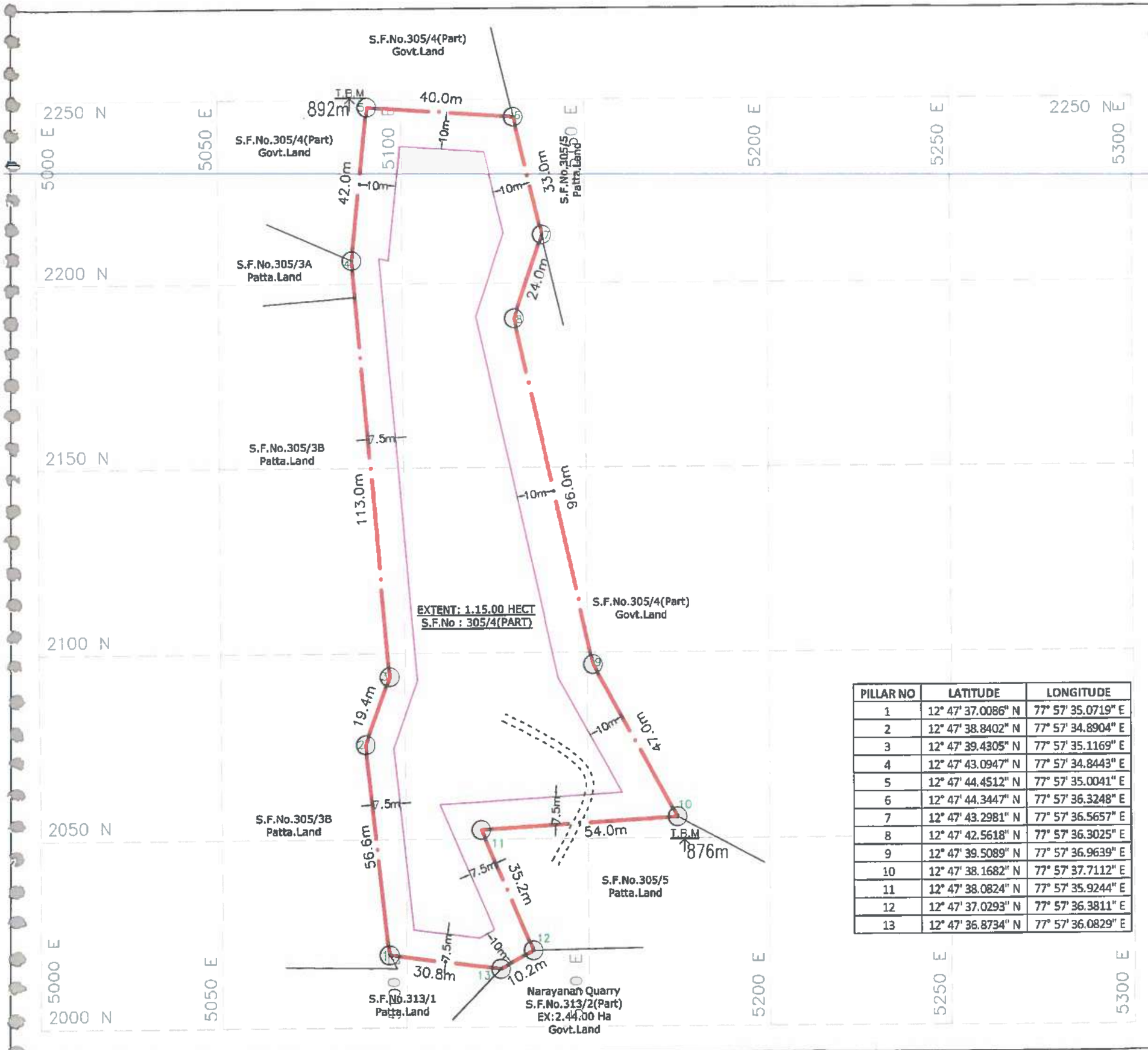
SATELLITE IMAGE
(500m RADIUS)

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

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



PILLAR NO	LATITUDE	LONGITUDE
1	12° 47' 37.0086" N	77° 57' 35.0719" E
2	12° 47' 38.8402" N	77° 57' 34.8904" E
3	12° 47' 39.4305" N	77° 57' 35.1169" E
4	12° 47' 43.0947" N	77° 57' 34.8443" E
5	12° 47' 44.4512" N	77° 57' 35.0041" E
6	12° 47' 44.3447" N	77° 57' 36.3248" E
7	12° 47' 43.2981" N	77° 57' 36.5657" E
8	12° 47' 42.5618" N	77° 57' 36.3025" E
9	12° 47' 39.5089" N	77° 57' 36.9639" E
10	12° 47' 38.1682" N	77° 57' 37.7112" E
11	12° 47' 38.0824" N	77° 57' 35.9244" E
12	12° 47' 37.0293" N	77° 57' 36.3811" E
13	12° 47' 36.8734" N	77° 57' 36.0829" E

PLATE NO:II

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

QUARRY LEASE BOUNDARY

7.5m & 10.0m SAFETY DISTANCE

BOUNDARY PILLARS

TEMPORARY BENCH MARK — TBM 876m

APPROACH ROAD

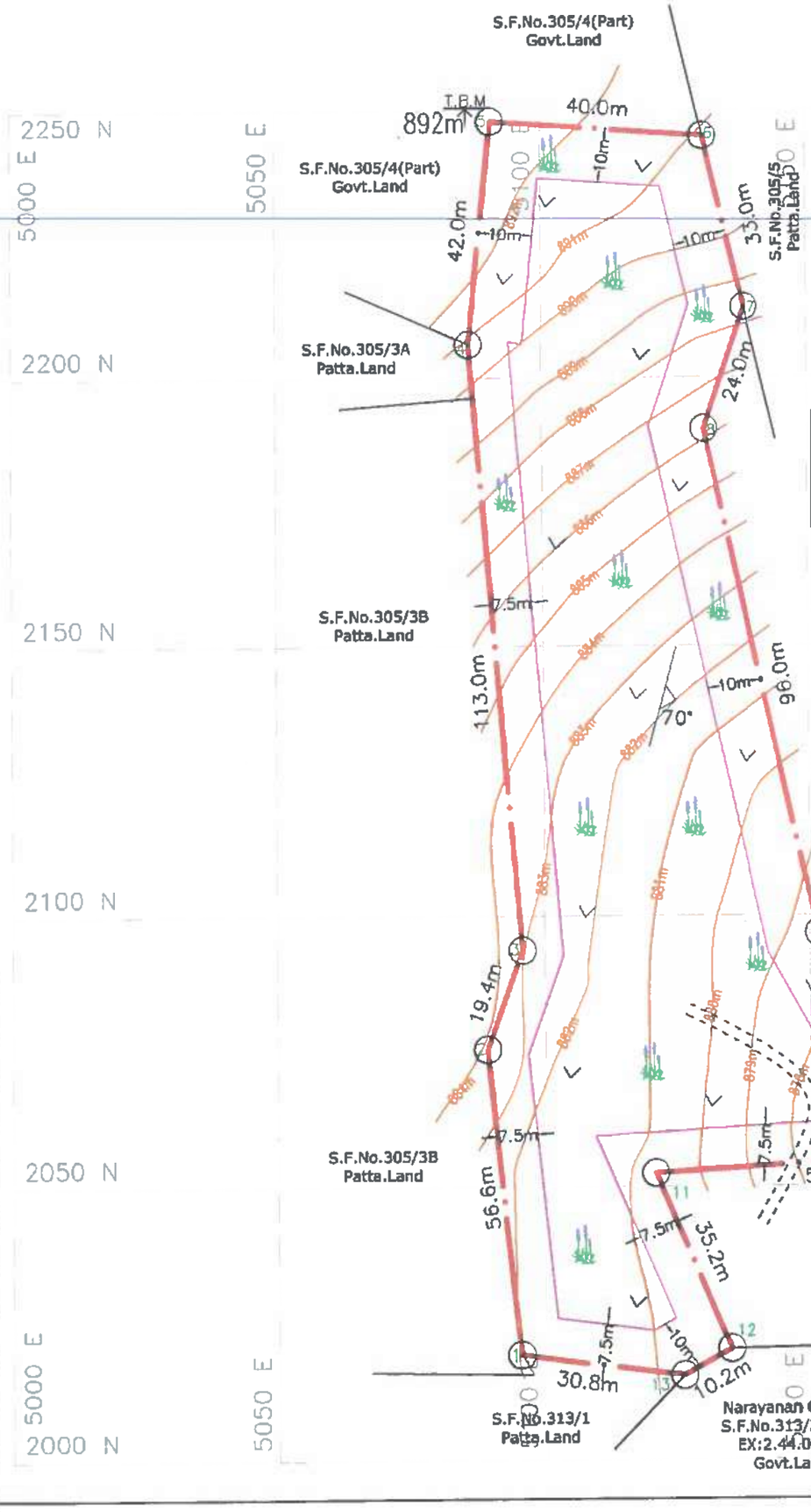
MINE LEASE PLAN

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.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



TOTAL DEPTH = 41m
ABOVE SURFACE GROUND LEVEL - 16m
BELOW SURFACE GROUND LEVEL - 25m

PLATE NO:III

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

GEOLOGICAL RESERVES

Area Sq.mt	Depth in (m)	Geological Reserves of Rough stone in m3	TopSoil in m3	Weathered Rock in m3	Bulk Density	Geological Reserves of Rough stone in (Ts)	TopSoil in(Ts)	Weathered Rock in (Ts)
11500	1		11500		2		23000	
	2			23000	2			46000
	38	437000			2.75	1201750		
Total		437000	11500			1201750	23000	46000

PILLAR NO	LATITUDE	LONGITUDE
1	12° 47' 37.0086" N	77° 57' 35.0719" E
2	12° 47' 38.8402" N	77° 57' 34.8904" E
3	12° 47' 39.4305" N	77° 57' 35.1169" E
4	12° 47' 43.0947" N	77° 57' 34.8443" E
5	12° 47' 44.4512" N	77° 57' 35.0041" E
6	12° 47' 44.3447" N	77° 57' 36.3248" E
7	12° 47' 43.2981" N	77° 57' 36.5657" E
8	12° 47' 42.5618" N	77° 57' 36.3025" E
9	12° 47' 39.5089" N	77° 57' 36.9639" E
10	12° 47' 38.1682" N	77° 57' 37.7112" E
11	12° 47' 38.0824" N	77° 57' 35.9244" E
12	12° 47' 37.0293" N	77° 57' 36.3811" E
13	12° 47' 36.8734" N	77° 57' 36.0829" E

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m & 10.0m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK (TBM 876m)
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- STRIKE AND DIP (70°)
- CONTOUR LINE (892.0M)
- QUARRY ROAD
- SHRUB

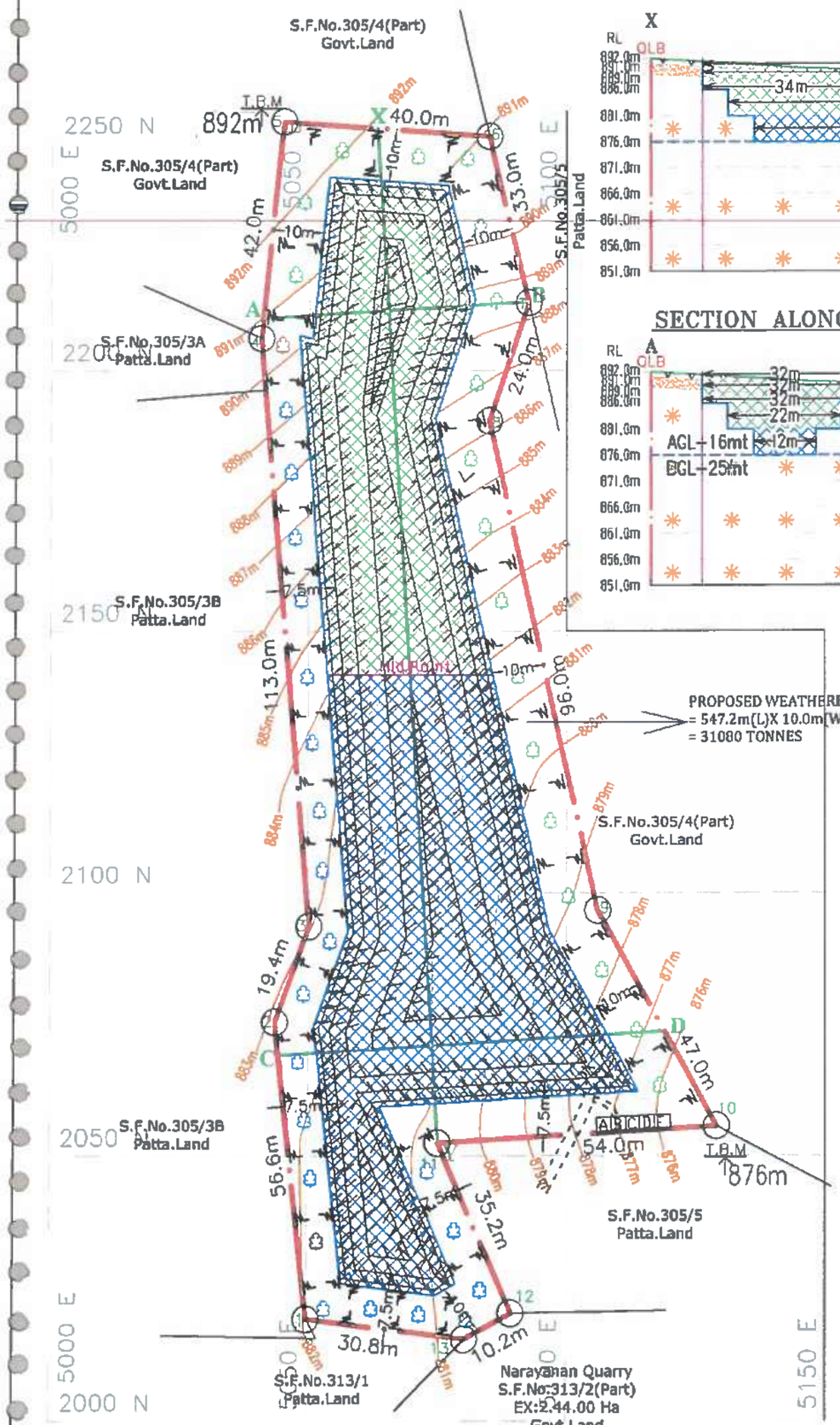
SURFACE & GEOLOGICAL PLAN

SCALE: 1:1000

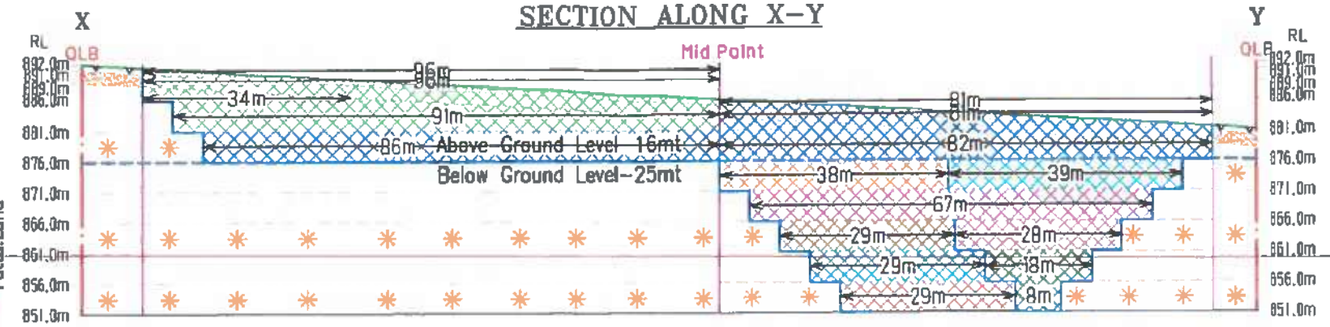
PREPARED BY:

I DO HEREBY CERTIFY THAT THE PLATE HAS BEEN CHECKED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE

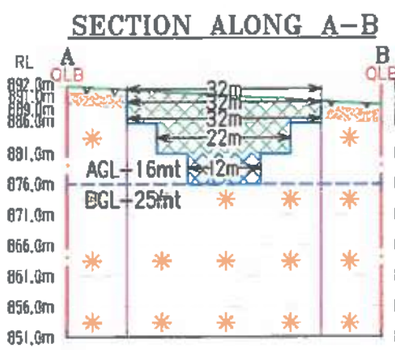
S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



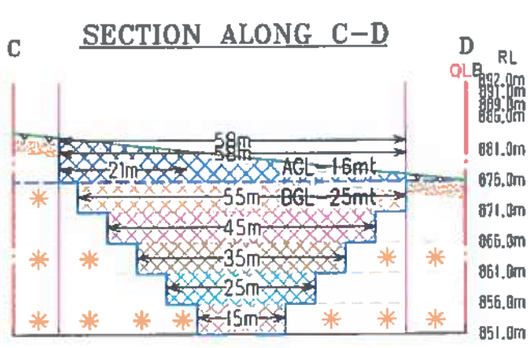
SECTION ALONG X–Y



SECTION ALONG A–B



SECTION ALONG C–D



TOTAL DEPTH = 41m
ABOVE SURFACE GROUND LEVEL - 16m
BELOW SURFACE GROUND LEVEL - 25m

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

YEARWISE DEVELOPMENT AND PRODUCTION

Year	Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in M3	Recoverable Reserve in m3 @ 100%	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
I-YEAR	XY-AB	I	96	32	1	3072		3072		2		6144	
		II	96	32	2	6144			6144	2			12288
		III	34	32	3	3264	3264			2.75	8976.00		
		IV	91	22	5	10010	10010			2.75	27527.50		
	TOTAL					22490	13274	3072	6144	-	36503.50	6144	12288
II-YEAR	XY-AB	V	86	12	5	5160	5160			2.75	14190.00		
	XY-CD	I	81	58	1	4698		4698		2		9396	
		II	81	58	2	9396			9396	2			18792
		V	82	21	5	8610	8610			2.75	23677.50		
	Total					27864	13770	4698	9396		37867.50	9396	18792
III-YEAR	XY-CD												
		VI	38	55	5	10450	10450			2.75	28737.50		
	Total					10450	10450				28737.50		
IV-YEAR	XY-CD	VI	39	55	5	10725	10725			2.75	29493.75		
	Total					10725	10725				29493.75		
V-YEAR	XY-CD	VII	67	45	5	15075	15075			2.75	41456.25		
	Total					15075	15075				41456.25		
VI-YEAR	XY-CD	VIII	29	35	5	5075	5075			2.75	13956.25		
	Total					5075	5075				13956.25		
VII-YEAR	XY-CD	VIII	28	35	5	4900	4900			2.75	13475.00		
	Total					4900	4900				13475.00		
VIII-YEAR	XY-CD	IX	29	25	5	3625	3625			2.75	9968.75		
	Total					3625	3625				9968.75		
IX-YEAR	XY-CD	IX	18	25	5	2250	2250			2.75	6187.50		
		X	8	15	5	600	600			2.75	1650.00		
	Total					2850	2850				7837.50		
X-YEAR	XY-CD	X	29	15	5	2175	2175			2.75	5981.25		
	Total					2175	2175				5981.25		
GRAND TOTAL						105229	81919	7770	15540		225277.25	15540	31080

PLATE NO:IV

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m & 10.0m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK (TBM 876m)
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR LINE
- QUARRY ROAD
- PROPOSED WEATHERED ROCK DUMP

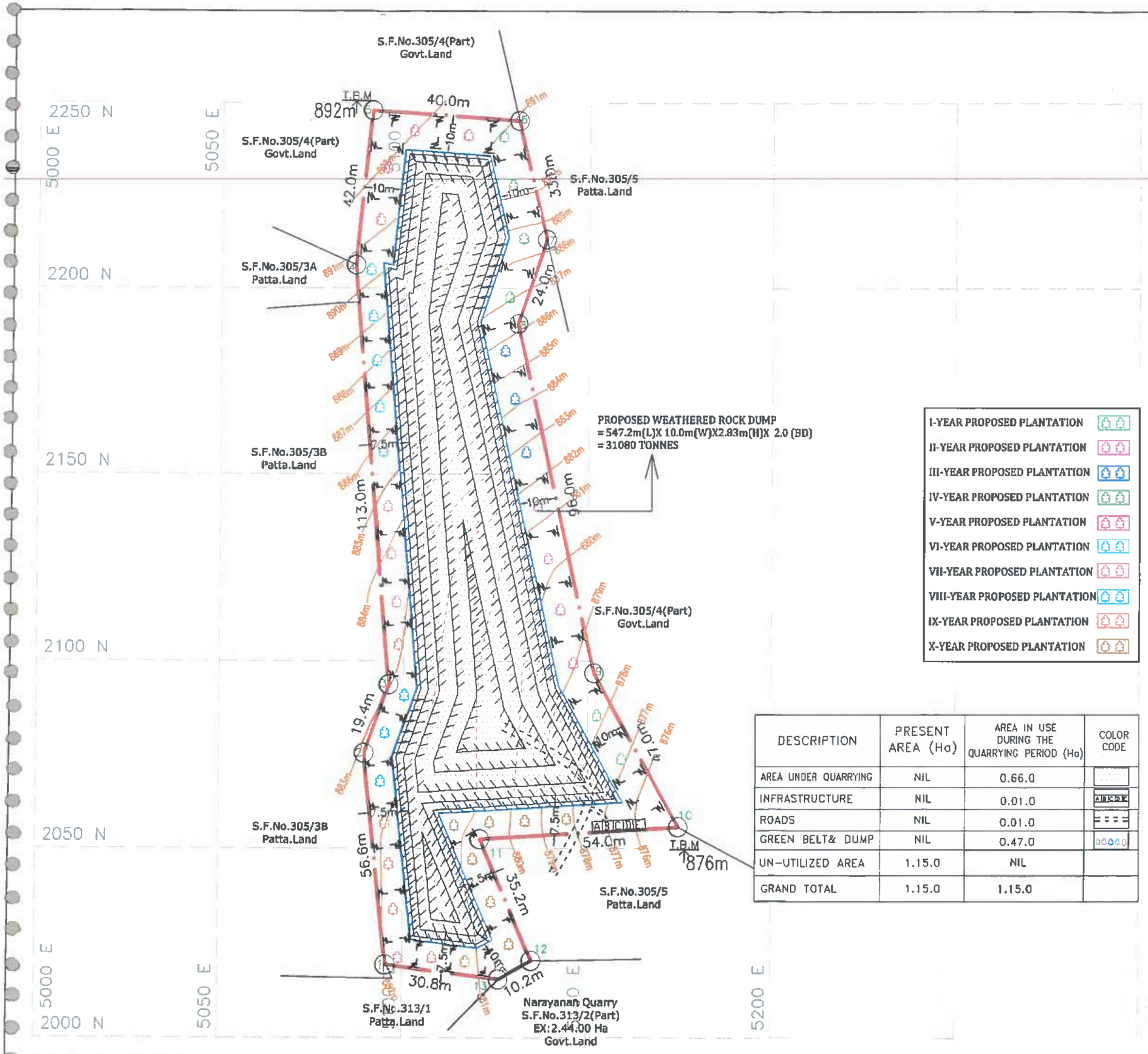
YEARWISE DEVELOPMENT AND PRODUCTION PLAN & SECTIONS

SCALE: 1:1000

PREPARED BY:

I DO HEREBY CERTIFY THAT THE PLATE HAS BEEN CHECKED BY ME AND IS CORRECT TO THE BEST OF MY KNOWLEDGE

S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



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	

DESCRIPTION	PRESENT AREA (Ha)	AREA IN USE DURING THE QUARRYING PERIOD (Ha)	COLOR CODE
AREA UNDER QUARRYING	NIL	0.66.0	
INFRASTRUCTURE	NIL	0.01.0	
ROADS	NIL	0.01.0	
GREEN BELT& DUMP	NIL	0.47.0	
UN-UTILIZED AREA	1.15.0	NIL	
GRAND TOTAL	1.15.0	1.15.0	

உதவி இயக்குநர் அலுவலகம்
கிருஷ்ணகிரி
பகுப்பியல் மற்றும் சுரங்கத்துறை

PLATE NO:V

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m & 10.0m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR LINE
- QUARRY ROAD
- PROPOSED WEATHERED ROCK DUMP
- 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.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

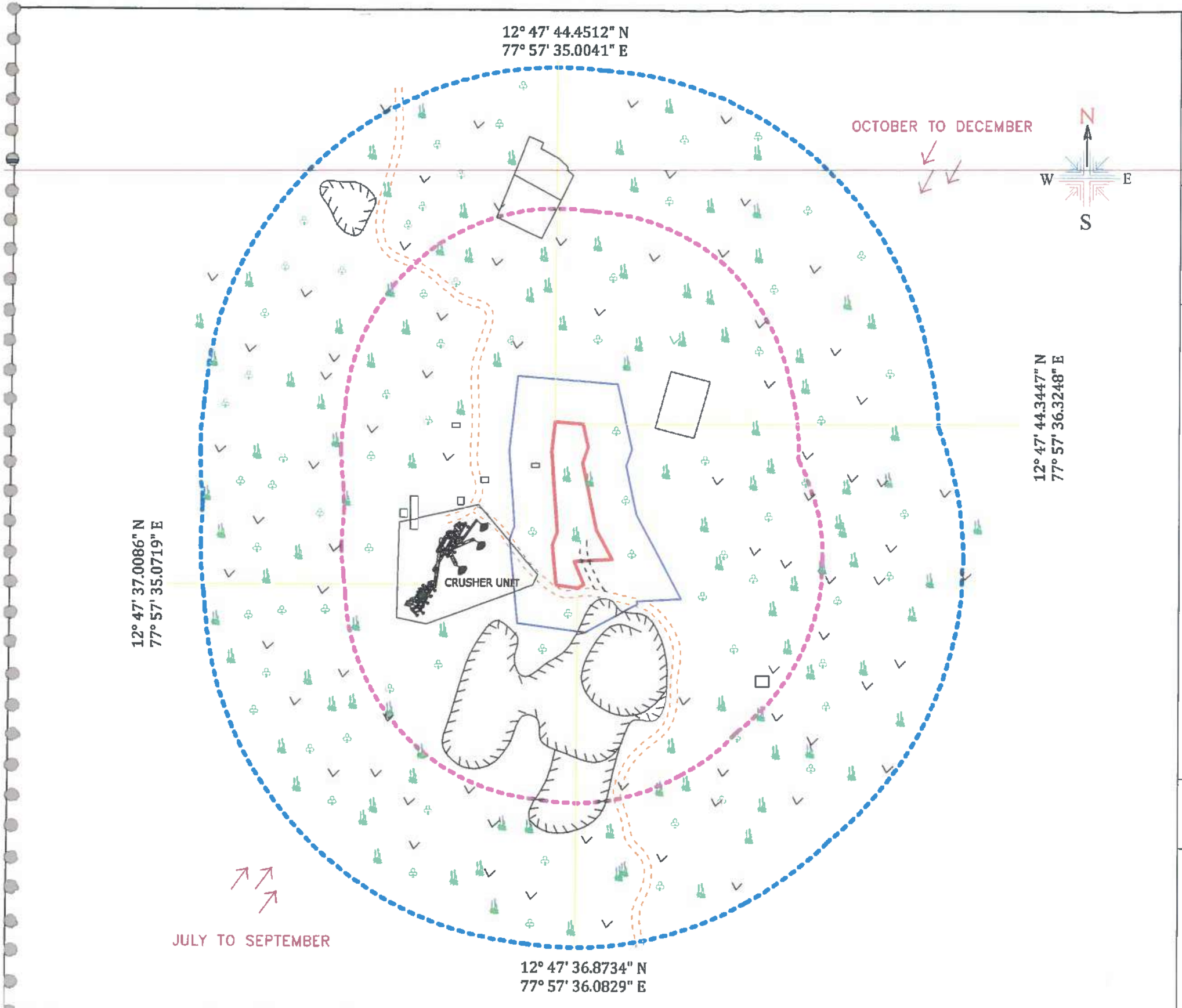


PLATE NO:VI

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT	: 1.15.00 HECT
S.F.NO	: 305/4(PART)
VILLAGE	: BERIGAI,
TALUK	: SHOOLAGIRI,
DISTRICT	: KRISHNAGIRI.

INDEX

- Q.L.BOUNDARY
- 500M RADIUS
- 300M RADIUS
- 60M RADIUS
- VILLAGE ROAD
- QUARRY ROAD
- TREES
- DRY AGRICUTURAL LAND
- WIND DIRECTION
- CRUSHER UNIT
- SHRUB
- ADJACENT QUARRY
- INFRASTRUCTURES

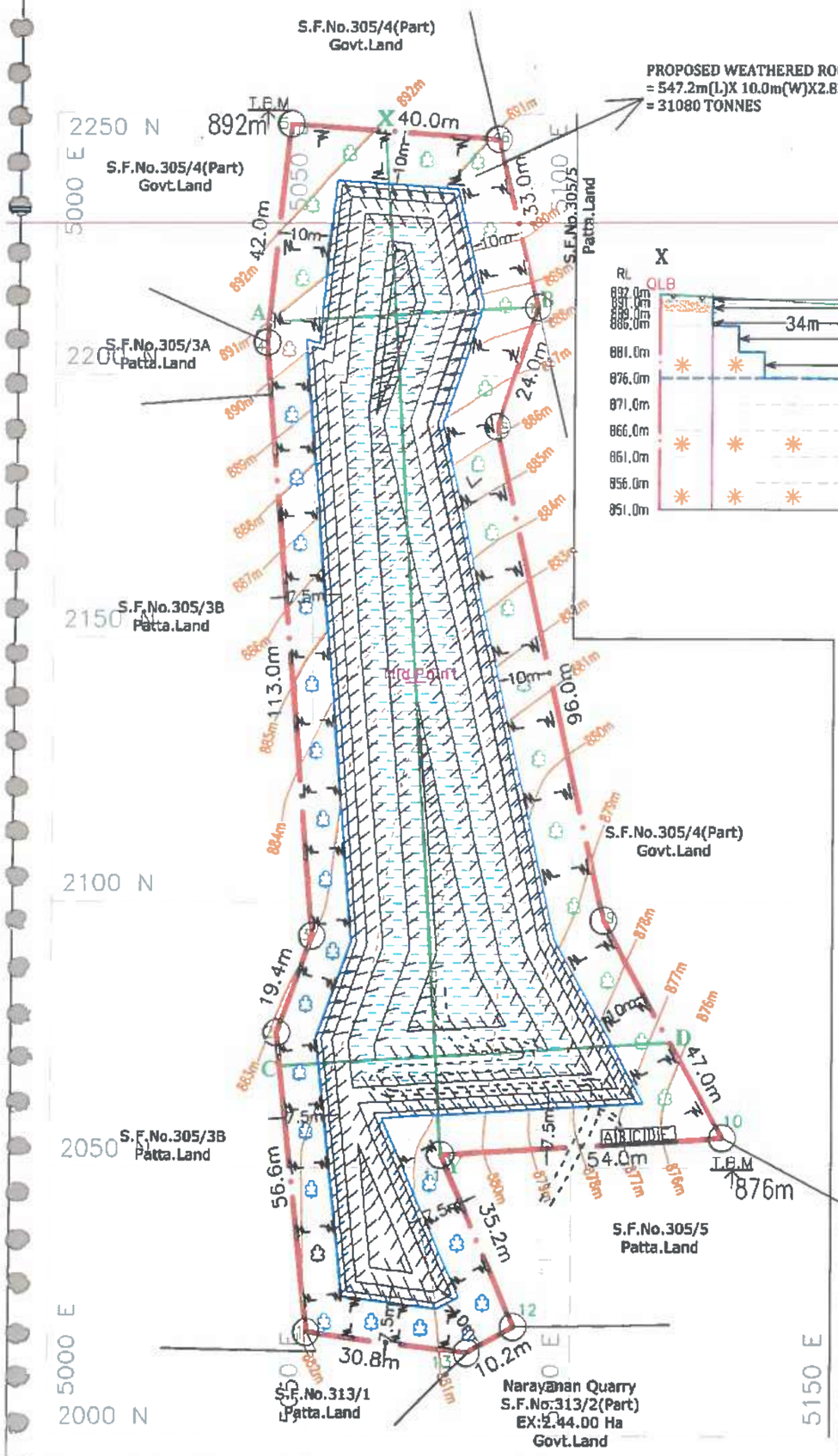
ENVIRONMENT PLAN

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

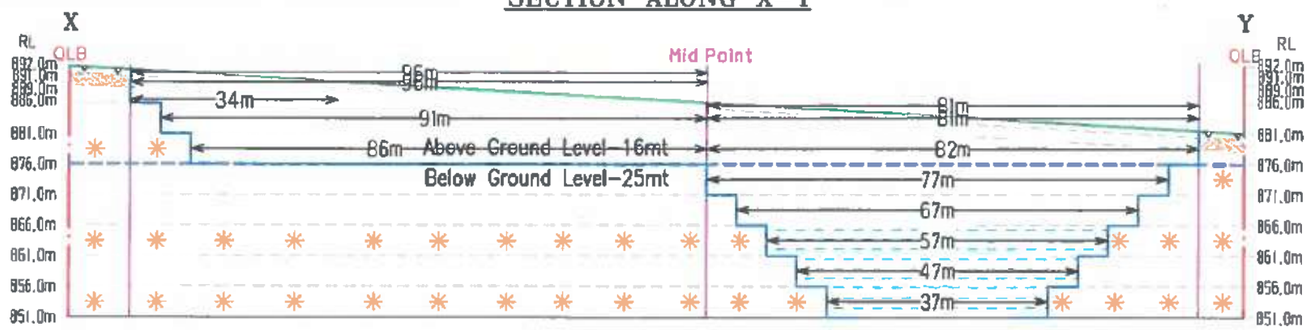
S.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



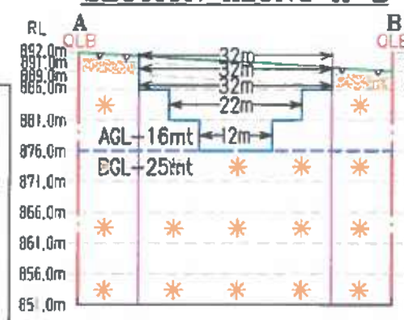
TOTAL DEPTH = 41m
ABOVE SURFACE GROUND LEVEL - 16m
BELOW SURFACE GROUND LEVEL - 25m

N
W
E
S

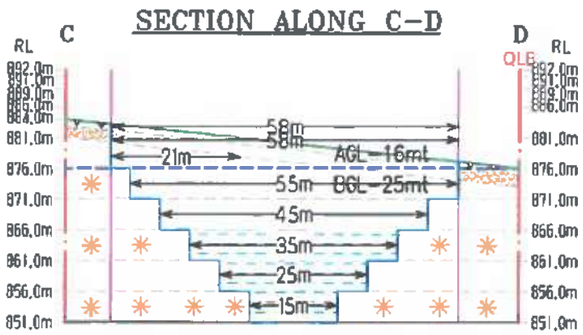
SECTION ALONG X-Y



SECTION ALONG A-B



SECTION ALONG C-D



ULTIMATE PIT DIMENSION
= 177.0m(L) X 45.0m(W)Avg X 41.0m(D)

1st V Yr Afforestation

2nd V Yr Afforestation

MINEABLE RESERVES

Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in M3	Mineable Reserves in m3 @ 100%	Top Soil in m3	Weathered Rock in m3	Bulk Density	Rough Stone @ 100% Recovery (Ts)	Top Soil in (Ts)	Weathered Rock in (Ts)
XY-AB	I	96	32	1	3072		3072		2		6144	
	II	96	32	2	6144			6144	2			12288
	III	34	32	3	3264	3264			2.75	8976.00		
	IV	91	22	5	10010	10010			2.75	27527.50		
	V	86	12	5	5160	5160			2.75	14190.00		
TOTAL					27650	18434	3072	6144	-	50693.50	6144	12288
XY-CD	I	81	58	1	4698		4698		2		9396	
	II	81	58	2	9396			9396	2			18792
	V	82	21	5	8610	8610			2.75	23677.50		
	VI	77	55	5	21175	21175			2.75	58231.25		
	VII	67	45	5	15075	15075			2.75	41456.25		
	VIII	57	35	5	9975	9975			2.75	27431.25		
	IX	47	25	5	5875	5875			2.75	16156.25		
	X	37	15	5	2775	2775			2.75	7631.25		
TOTAL					77579	63485	4698	9396	-	174583.75	9396	18792
GRAND TOTAL					105229	81919	7770	15540	-	225277.25	15540	31080

PLATE NO:VII

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m & 10.0m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK (TBM 876m)
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR LINE
- QUARRY ROAD
- FENCING
- PARAPET WALL
- ULTIMATE PIT LIMIT
- PROPOSED WEATHERED ROCK DUMP
- PROPOSED WATER STORAGE
- ULTIMATE PIT SLOPE

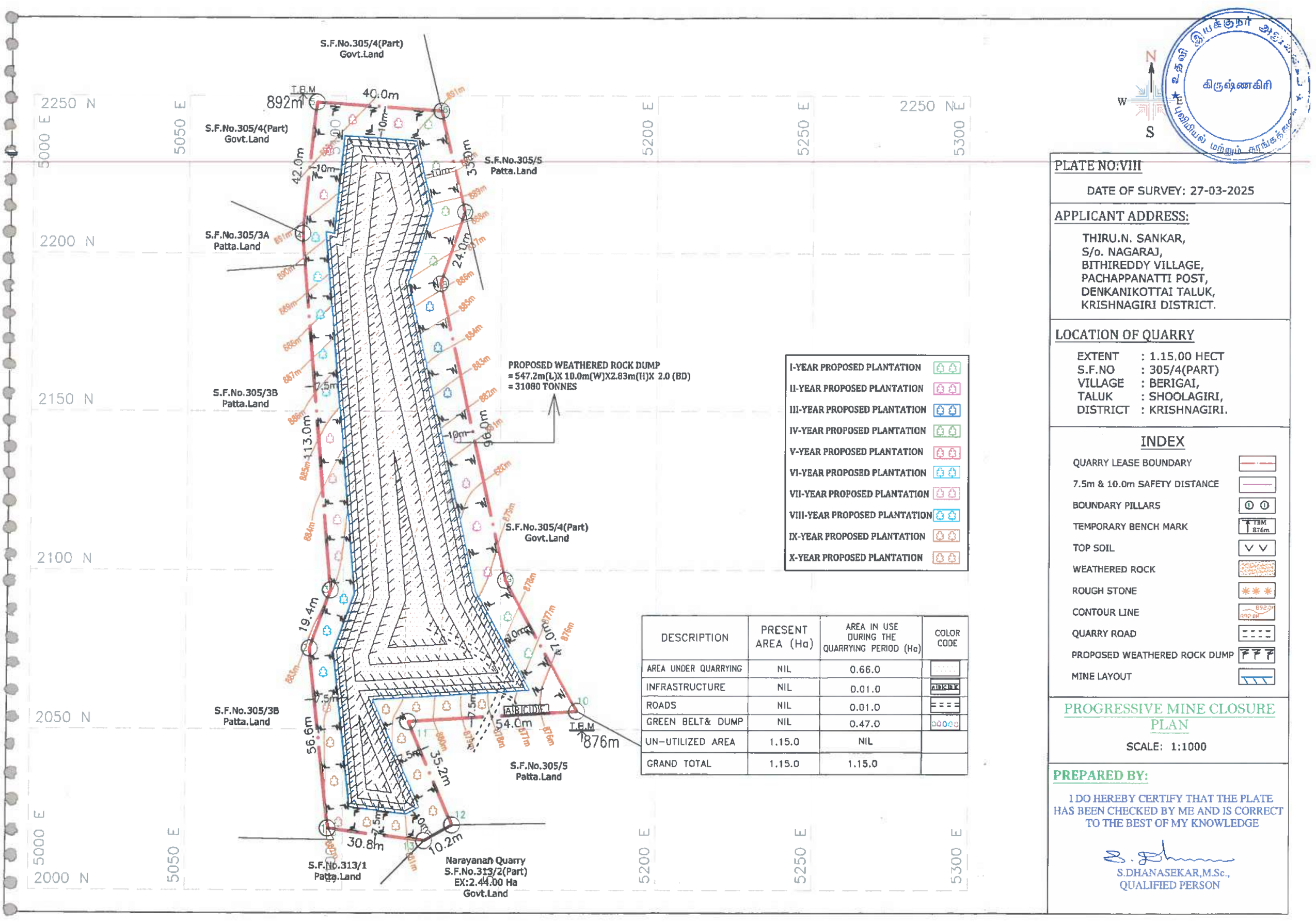
CONCEPTUAL AND FINAL MINE CLOSURE PLAN & SECTIONS

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.DHANASEKAR,M.Sc.,
QUALIFIED PERSON



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

DESCRIPTION	PRESENT AREA (Ha)	AREA IN USE DURING THE QUARRYING PERIOD (Ha)	COLOR CODE
AREA UNDER QUARRYING	NIL	0.66.0	
INFRASTRUCTURE	NIL	0.01.0	
ROADS	NIL	0.01.0	
GREEN BELT& DUMP	NIL	0.47.0	
UN-UTILIZED AREA	1.15.0	NIL	
GRAND TOTAL	1.15.0	1.15.0	

PLATE NO:VIII

DATE OF SURVEY: 27-03-2025

APPLICANT ADDRESS:

THIRU.N. SANKAR,
S/o. NAGARAJ,
BITHIREDDY VILLAGE,
PACHAPPANATTI POST,
DENKANIKOTTAI TALUK,
KRISHNAGIRI DISTRICT.

LOCATION OF QUARRY

EXTENT : 1.15.00 HECT
S.F.NO : 305/4(PART)
VILLAGE : BERIGAI,
TALUK : SHOOLAGIRI,
DISTRICT : KRISHNAGIRI.

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m & 10.0m SAFETY DISTANCE
- BOUNDARY PILLARS
- TEMPORARY BENCH MARK (TBM 876m)
- TOP SOIL
- WEATHERED ROCK
- ROUGH STONE
- CONTOUR LINE
- QUARRY ROAD
- PROPOSED WEATHERED ROCK DUMP
- 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.DHANASEKAR,M.Sc.,
QUALIFIED PERSON

கிருஷ்ணகிரி

ANNEXURE - XI
VAO CERTIFICATE

சான்று

கிருஷ்ணகிரி மாவட்டம், சூளகிரி வட்டம், பேரிகை கிராமத்தில் உள்ள சர்வே எண்-305/4(P), பரப்பு- 1.15.0 Ha. இடத்தில் அமையவுள்ள – Thiru. N. Sankar - சாதாரண கல் குவாரியை சுற்றி 300m சுற்றளவில் கோவில்களோ, புராதன சின்னங்களோ, குடியிருப்புகளோ, பள்ளிக்கூடங்களோ, அரசு கட்டிடங்களோ இல்லை என புலத்தணிக்கை அறிக்கை மூலம் அறியப்பட்டு இந்த சான்று வழங்கப்படுகிறது.

22/9/25

Village Administartive Officer
04,BERIGAI,
Shoolagiri-Tk, Krishnagiri-District

ANNEXURE - XII
NABET CERTIFICATE

भारतीय गुणवत्ता परिषद्
QUALITY COUNCIL® OF INDIA
Creating an Ecosystem for Quality

NABET

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

Varinder Kanwar

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.