

DRAFT EIA / EMP REPORT

FOR

ROUGH STONE AND GRAVEL QUARRY

Extent	3.32.50 Ha
SF.Nos.	37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P)
Location	Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu
Land Type	Consent Registered Patta Land
Production	4,32,760m³/11,90,090MT of Rough Stone and 90,520m³/ 1,81,040MT of Gravel up to depth of 44 m depth for the five years lease period.

- **Terms Identification No – TO25B0108TN5511208 N dated 13.02.2026**
- **Baseline Monitoring–Postmonsoon Season(October 2025–December2025)**

PROJECT PROPONENT

**TVL. OM VINAYAGA SUPPLIER,
PROP:K. DHAKSHANAMURTHI**

**PlotNo:14,GF 7,S.V.Complex, Vanthavasi Road, Sothupakkem,
Cheyyur Taluk, Chengalpattu District**

CONSULTANT

CREATIVE ENGINEERS & CONSULTANTS

NABET ACCREDITED CONSULTANCY, NABL ACCREDITED TESTING LAB

9B/4, Bharathwajar Street, East Tambaram, Chennai-600059.

Mobile: 09444133619 Email : cecgiri@yahoo.com,



Date:

From,

TVL. OM VINAYAGA SUPPLIER, PROP.K. DHAKSHANAMURTHI,
PlotNo:14,GF 7,S.V.Complex,
Vanthavasi Road, Sothupakkem,
Cheyyur Taluk,
Chengalpattu

To

District Environmental Engineer (Chengalpattu District)
TamilNadu Pollution Control Board,
Maraimalai Nagar,
Chengalpattu District- 603209

Sub: Submission of Draft EIA/EMP report and Summary for Roughstone & Gravel Quarry of Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi, in S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) Over an Area of 3.32.50ha in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu – Public Hearing_ Reg

Ref: ToR granted by SEIAA, Tamil Nadu vide letter No - TO25B0108TN5511208 N dated 13.02.2026

Sir,

With reference to the abovementioned subject, I am herewith submitting the Draft EIA/EMP report and Summary of EIA/EMP report in English and Tamil for Roughstone & Gravel Quarry of Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi, in S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) Over an area of 3.32.50ha in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu. As per the terms of reference issued by SEIAA, Tamil Nadu referred to as (1) above, point no. 39 stipulates conduction of public hearing. Hence, I request you to consider conducting a public hearing for my project at the earliest.

Here with enclosed D.D No – dated for public hearing.

Thank you.

Yours Faithfully,



Tvl. Om Vinayaga Supplier,
Prop:K. Dhakshanamurthi
Encl: as above

REVISIONS OF EIA/EMP REPORT

Revision number	Report Status	Date of submission
00/APR/26	Draft EIA /EMP Report	29.04.2026

Environmental Impact Assessment & Environmental Management Plan Report for Rough stone and Gravel Quarry of Tvl. Om Vinayaga Supplier, Prop: K. Dhakshanamurthi, over an area of 3.32.50ha in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu was prepared by Creative Engineers & Consultants and authorized for submission by G.Sandhya, EIA-Coordinator, of Creative Engineers & Consultants on 29.04.2026 after due review by the personnel and consultation with Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi, Current Revision number of the EIA/EMP report is 00/APR/26, signifying as per the revision mentioned in the above table that this is a draft EIA/EMP report.

Signature:



G.Sandhya, EIA-Coordinator
Date: 29.04.2026

PROJECT PROPONENT DECLARATION

I, Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi, received Terms of Reference under EIA Notification 2006 from SEIAA, Tamil Nadu vide their letter No - TO25B0108TN5511208 N dated 13.02.2026 for Roughstone & Gravel Quarry in S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) Over an area of 3.32.50ha in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu.

We have entrusted the EIA study to M/s. Creative Engineers & Consultants (CEC), Chennai who have been accredited by the National Accreditation Board for Education & Training (NABET), Quality Council of India with their accreditation valid upto 23.12.2026

The Environmental Impact Assessment (EIA) and Environmental Management Plan (EMP) have been prepared as per the generic structure proposed in the EIA notification 2006, ToR issued by SEIAA, Tamil Nadu. The prescribed ToR along with compliance is also incorporated in the EIA/EMP Report.

This report is prepared based on the information and data obtained from the Mining Plan and other records and the field study carried out by various consultant that have been engaged. The data given in the EIA/EMP report are factually correct to the best of my knowledge.

Signature:

For Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi



Date: 29.04.2026



CREATIVE ENGINEERS & CONSULTANTS

(NABET ACCREDITED, NABL ACCREDITED TESTING LABORATORY,
DEPARTMENT OF INDUSTRIES AND COMMERCE REGISTERED COMPANY)

EIA Consultant Undertaking

[In compliance with MoEF Office Memorandum No. J-11013/41/2006-IA.II (I) dated 04.08.2009]

Creative Engineers & Consultants (CEC) is an NABL accredited testing Laboratory, and also NABET accredited Category-A environment consultancy organization for preparing EIA/EMP reports for the sectors Mining of minerals, Thermal power plants, Mineral Beneficiation & Cement plants.

CEC has been accredited by the National Accreditation Board for Education & Training (NABET), Quality Council of India for empanelment of EIA Consultants with accreditation valid upto 23.12.2026.

Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi received Terms of Reference under EIA Notification 2006 from SEIAA, Tamil Nadu vide their letter No - TO25B0108TN5511208 N dated 13.02.2026 for Roughstone & Gravel Quarry in S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) Over an area of 3.32.50ha in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu.

The prescribed TOR is complied with and incorporated in the EIA Report and submitted. This report is based on the information and data obtained from Approved Mining Plan, other records and data from the field study by CEC. The data generated and given in the EIA/EMP Report are factually correct. The sample analyses are carried out through CEC's laboratory.

(P.Giri)

Chief Executive & EIA Coordinator

Creative Engineers & Consultants

Date: **29.04.2026**

Annexure – VII

Declaration by Experts contributing to the EIA Report for

Roughstone & Gravel Quarry of Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi, in S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) Over an area of 3.32.50ha in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu.

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

EIA coordinator: **G.Sandhya**

Name:

Signature and Date:

Period of involvement: **September 2025 onwards**

Contact information: **09444133619**

Functional area experts:

S. No.	Functional areas	Name of the expert/s	Involvement (period and task**)	Signature and date
1	AP*	P.Giri	• Identification of baseline monitoring stations and study of the monitored data with respect to the applicable standards. • Identification of sources of air pollution comprising dust, gaseous emission due to mining & other activities • Identification of Impacts & suggestion of mitigation measures Period: October 2025 onwards	
		B.Swamynathan	• Data interpretation of Micro meteorological data for wind rose. • Identification of polluting source and suggestion of suitable mitigation measures. Period: October 2025 onwards	

2	WP*	G.Sandhya	• Study of the monitored data with respect to the applicable standards. • Identification of Water requirement & Source • Preparation of water balance diagram • Identification of Water polluting sources • Impact of the project on the water quality, both surface and groundwater • Suggestion of Mitigation measures to control water pollution Period: September 2025 onwards	
3	SHW*	P.Giri	• Quantification of mineral & waste from mining operation • Waste disposal method evaluation • Providing dump management plan • Providing Surface Runoff Management Structure Requirements. • Identification of Hazardous waste and its details of disposal Period: October 2025 onwards	
4	SE*	R.Baburaj	• Identification of villages in the study area and finalization of demographic profile of the villages within the study area. • Preparation of sections relevant to SE functional area in the EIA/EMP report Period: October 2025 onwards	
5	EB*	B.Swamynathan	• Perusal of existing data relevant to this project. • Studying the details of flora and fauna, separately for core, buffer zone and forest area based on primary field survey. • Identification of species , Indicating the Schedule of the fauna present in the study area • Assessment of impact on Biological environment and suggestion of mitigative measures • Collecting & providing details of existing and proposed Green belt development /plantation in the core zone Period: October 2025 onwards	
6	HG*	N.Suresh	• 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	

			• Perusal of site specific ground water table details for the core zone and the study area. • Studied the hydrological aspects of surface and groundwater in study area • Study about impact on the hydrology due to mining operation • Suggesting mitigative measures like RWH for enhancement of ground water level Period: October 2025 onwards	
7	GEO*	N.Suresh	• Study of geology of the ML area and the surrounding areas. • Provide details about Mineral composition Period: October 2025 onwards	N Suresh
8	SC*	B.Swamynathan	• Study of soil profile • Assessment of Impact on soil and suggesting plantation scheme. Period: October 2025 onwards	B.Swamynathan
9	AQ*	G.Sandhya	• Quantification of emission particulars • Air quality modelling for post project impact on the air quality prediction of the study area. Analysis of the Isopleth generated • Arriving at the post project concentration at the AAQ monitoring locations • Preparation of meteorological data in suitable form for input into the model • Simulation of model for generation of Isopleth and data interpretation. • Studying the impact on AAQ monitoring locations due to the generated emissions. • Preparation of sections relevant to AQ functional area in the EIA/EMP report. Period: September 2025 onwards	G.Sandhya
10	NV*	P.Giri	• Identification of baseline monitoring stations and study of the monitored data with respect to the applicable standards. • Predict the noise level and vibration level due to proposed mining operation based on scientific evaluation. • Suggesting the Mitigation measures to control noise pollution, Suggesting the Mitigation measures to	P.Giri

			control ground vibration Period: October 2025 onwards	
11	LU	B.Swamynathan	• Collection of Remote sensing satellite data to study the land use pattern. • Primary field survey and limited field verification • Preparation of Land use map using Satellite data of the project area separately for the core zone and the buffer zone and providing the land use pattern. Period: October 2025 onwards	<i>B.Swamynathan</i>
12	RH*	K.Shankar & G.Sandhya	• Identified Major risks involved in the project Mitigation measures suggested to avoid risk. • Preparation of onsite and offsite emergency management plan Period: September 2025 onwards	<i>K.Shankar</i> <i>G.Sandhya</i>

*One TM against each FAE may be shown

**Please attach additional sheet if required

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

I,P.Giri hereby, confirm that the above mentioned experts prepared the EIA report for Roughstone& Gravel Quarry of Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi, in S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) Over an area of 3.32.50ha in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu.

I also confirm that EIA Coordinator (EC) has gone through the report, and the consultant organization shall be fully accountable for any misleading information.It is certified that no unethical practices, plagiarism involved in carrying out the work and external data / text has not been used without proper acknowledgement while preparing this EIA report.

Signature: *P.Giri*

Name: **P.Giri**

Designation:**Chief Executive**

Name of the EIA consultant organization:**Creative Engineers & Consultants, Chennai – 59**

NABET Certificate No. & Issue Date:**No- NABET/EIA/23-26/RA 0331 & date 23.12.2026**

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National Accreditation Board for Education and Training

Certificate of Accreditation

Creative Engineers and Consultants, Chennai

9B/4, Bharathwajar street, East Tambaram, Chennai, Tamil Nadu

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- opencast mining only	1	1 (a) (i)	A
2.	Thermal power plants	4	1 (d)	A
3.	Mineral beneficiation	7	2 (b)	A
4.	Cement plants	9	3 (b)	A

Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RAAC minutes dated May 03, 2024, 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/24/3250 dated May 24, 2024. The accreditation needs to be renewed before the expiry date by Creative Engineers and Consultants, Chennai following due process of assessment.

Issue Date
May 24, 2024

Valid up to
December 23, 2026



Mr. Ajay Kumar Jha
(Sr. Director, NABET)

Certificate No.
NABET/EIA/23-26/RA 0331

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.

TERMS OF REFERENCE & ITS COMPLIANCE



File No: 13085
Government of India
Ministry of Environment, Forest and Climate Change
(Issued by the State Environment Impact Assessment Authority(SEIAA),
TAMIL NADU)



Dated: 13/02/2026



To,

Prop: Thiru. K. Dhakshanamurthi
Tvl. OM VINAYAGA SUPPLIER
Plot No: 14, GF 7, S.V.Complex, Vanthavasi Road, Sothupakkem, Cheyyur Taluk, Chengalpattu
District - 603319. TAMIL NADU.
omvinayagasupplymurthik@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 and Gravel quarry over an area of 3.32.50 ha of in S.F.No's: 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) In Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu by Tvl. Om Vinayaga Supplier, Prop: K. Dhakshanamurthi- 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/559868/2025, Dated: 02/12/2025.

2. Your application submitted for Terms of Reference dated: 02.12.2025

3. Minutes of the 665th SEAC -I Meeting held on 19.01.2026.

4. Minutes of the 957th Authority meeting held on 05.02.2026

2. The particulars of the proposal are as below:

(i) TOR Identification No.	TO25B0108TN5511208N
(ii) File No.	13085
(iii) Clearance Type	TOR
(iv) Category	B1
(v) Project/Activity Included Schedule No.	1(a) Mining of minerals Roughstone and Gravel Quarry of Tvl. OM VINAYAGA SUPPLIER, Prop: K. Dhakshanamurthi
(vii) Name of Project	DHAKSHANAMURTHI
(viii) Name of Company/Organization	CHENGALPATTU, TAMIL NADU
(ix) Location of Project (District, State)	SEIAA
(x) Issuing Authority	

(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 05.02.2026. 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 **Tvl. Om Vinayaga Supplier, Prop: K. Dhakshanamurthi** 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.

Annexure 1

Specific Terms of Reference s for (Mining Of Minerals)

1. Seac Conditions - Site Specific

S. No	Terms of Reference
1.1	1. The Project Proponent shall ensure complete clearance of the existing dump prior to submission of the Environmental Impact Assessment (EIA) report. 2. The Project Proponent shall carry out DGPS survey for boundary demarcation, and the boundary markings shall be rechecked and confirmed during the appraisal of the Environmental Impact Assessment (EIA). 3. 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. 4. The PP shall ensure the installation of CCTV at the proposed quarry site and ensure its inclusion during the EIA presentation.

2. Seac Standard Conditions

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

S. No	Terms of Reference
	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

S. No	Terms of Reference
	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

S. No	Terms of Reference
	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. Seiaa Specific Conditions :

S. No	Terms of Reference
3.1	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 4,32,760 m³ of rough stone & 90,520 m³ of gravel upto the depth of 44m BGL 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 conditions & the SEIAA Specific & Standard conditions

4. Seiaa Standard Conditions :

S. No	Terms of Reference
4.1	<u>Cluster Management Committee</u> - 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. - The members must coordinate among themselves for the effective implementation of EMP as committed including Green Belt Development, Water sprinkling, tree plantation, blasting etc., - 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. - 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. - 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. - 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. - The committee shall furnish action plan regarding the restoration strategy with respect to the individual quarry falling under the cluster in a holistic manner. - The committee shall deliberate on the health of the workers/staff involved in the mining as well as the health of the public in the vicinity. <u>Agriculture & Agro-Biodiversity</u> - Impact on surrounding agricultural fields around the proposed mining Area. - Impact on soil flora & vegetation around the project site. - 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. - 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. - Action should specifically suggest for sustainable management of the area and restoration of

S. No	Terms of Reference
	ecosystem for flow of goods and services. 14. The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock. <u>Forests</u> 15. The project proponent shall detailed study on impact of mining on Reserve forests and free ranging wildlife. 16. The Environmental Impact Assessment should study impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna. 17. The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection. 18. The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site. <u>Water Environment</u> 19. Hydro-geological study considering the contour map of the water table detailing the number of ground water pumping & open wells, and surface water bodies such as rivers, tanks, canals, ponds etc. within 1 km (radius) so as to assess the impacts on the nearby waterbodies due to mining activity. Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided, covering the entire mine lease period. 20. Erosion Control measures. 21. Detailed study shall be carried out in regard to impact of mining around the proposed mine lease area on the nearby Villages, Water-bodies/ Rivers, & any ecological fragile areas. 22. The project proponent shall study impact on fish habitats and the food WEB/ food chain in the water body and Reservoir. 23. The project proponent shall study and furnish the details on potential fragmentation impact on natural Environment, by the activities. 24. The project proponent shall study and furnish the impact on aquatic plants and animals in water bodies and possible scars on the landscape, damages to nearby caves, heritage site, and archaeological sites possible land form changes visual and aesthetic impacts. 25. The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components. 26. The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites. 27. The EIA shall include the impact of mining activity on the following: - Hydrothermal/Geothermal effect due to destruction in the Environment. - Bio-geochemical processes and its foot prints including Environmental stress. - Sediment geochemistry in the surface streams. <u>Energy</u> 28. The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished. <u>Climate Change</u> 29. The Environmental Impact Assessment shall study in detail the carbon emission and also suggest the measures to mitigate carbon emission including development of carbon sinks and temperature reduction including control of other emission and climate mitigation activities. 30. The Environmental Impact Assessment should study impact on climate change, temperature rise, pollution and above soil & below soil carbon stock, soil health and physical, chemical & biological soil features. 31. Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood. <u>Mine Closure Plan</u> 32. Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication order issued.

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

Standard Terms of Reference for (Mining of minerals)

1.

S. No	Terms of Reference
1.1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994
1.2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given
1.3	All documents including approved mine plan, EIA and Public Hearing should be compatible with one another in terms of the mine lease area, production levels, waste generation and its management, mining technology etc. and should be in the name of the lessee
1.4	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone)
1.5	Information should be provided in Survey of India Toposheet in 1:50,000 scale indicating

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

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

S. No	Terms of Reference
	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 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

S. No	Terms of Reference
1.34	Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report
1.35	Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed
1.36	Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations
1.37	Measures of socio economic significance and influence to the local community proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation
1.38	Detailed environmental management plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project
1.39	Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project
1.40	Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given
1.41	The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out
1.42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report
1.43	Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc
1.44	Besides the above, the below mentioned general points are also to be followed:- a) All documents to 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

S. No	Terms of Reference
	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



STANDARD TERMS OF REFERENCE

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

- 9) The study area will comprise of 10 km zone around the mine lease from lease periphery and the data contained in the EIA such as waste generation etc. should be for the life of the mine / lease period.
- 10) Land use of the study area delineating forest area, agricultural land, grazing land, wildlife sanctuary, national park, migratory routes of fauna, water bodies, human settlements and other ecological features should be indicated. Land use plan of the mine lease area should be prepared to encompass preoperational, operational and post operational phases and submitted. Impact, if any, of change of land use should be given.
- 11) Details of the land for any Over Burden Dumps outside the mine lease, such as extent of land area, distance from mine lease, its land use, R&R issues, if any, should be given.
- 12) Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.
- 13) Status of forestry clearance for the broken-up area and virgin forestland involved in the Project including deposition of Net Present Value (NPV) and Compensatory Afforestation (CA) should be indicated. A copy of the forestry clearance should also be furnished.
- 14) Implementation status of recognition of forest rights under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 should be indicated.
- 15) The vegetation in the RF / PF areas in the study area, with necessary details, should be given.
- 16) A study shall be got done to ascertain the impact of the Mining Project on wildlife of the study area and details furnished. Impact of the project on the wildlife in the surrounding and any other protected area and accordingly, detailed mitigative measures required, should be worked out with cost implications and submitted.
- 17) Location of National Parks, Sanctuaries, Biosphere Reserves, Wildlife Corridors, Ramsar site Tiger/ Elephant Reserves/(existing as well as proposed), if any, within 10 km of the mine lease should be clearly indicated, supported by a location map duly

authenticated by Chief Wildlife Warden. Necessary clearance, as may be applicable to such projects due to proximity of the ecologically sensitive areas as mentioned above, should be obtained from the Standing Committee of National Board of Wildlife and copy furnished.

- 18) A detailed biological study of the study area [core zone and buffer zone (10 km radius of the periphery of the mine lease)] shall be carried out. Details of flora and fauna, endangered, endemic and RET Species duly authenticated, separately for core and buffer zone should be furnished based on such primary field survey, clearly indicating the Schedule of the fauna present. In case of any scheduled-I fauna found in the study area, the necessary plan along with budgetary provisions for their conservation should be prepared in consultation with State Forest and Wildlife Department and details furnished. Necessary allocation of funds for implementing the same should be made as part of the project cost.
- 19) Proximity to Areas declared as 'Critically Polluted' or the Project areas likely to come under the 'Aravali Range', (attracting court restrictions for mining operations), should also be indicated and where so required, clearance certifications from the prescribed Authorities, such as the SPCB or State Mining Department should be secured and furnished to the effect that the proposed mining activities could be considered.
- 20) Similarly, for Coastal Projects, a CRZ map duly authenticated by one of the authorized agencies demarcating LTL, HTL, CRZ area, location of the mine lease with respect to CRZ, coastal features such as mangroves, if any, should be furnished. (Note: The Mining Projects falling under CRZ would also need to obtain approval of the concerned Coastal Zone Management Authority).
- 21) R&R Plan/compensation details for the Project Affected People (PAP) should be furnished. While preparing the R&R Plan, the relevant State/National Rehabilitation & Resettlement Policy should be kept in view. In respect of SCs /STs and other weaker sections of the society in the study area, a need-based sample survey, family-wise, should be undertaken to assess their requirements, and action programmes prepared and submitted accordingly, integrating the sectoral programmes of line departments of the State Government. It may be clearly brought out whether the village(s) located in the mine lease area will be shifted or not. The issues relating to shifting of village(s) including their R&R and socio-economic aspects should be discussed in the Report.
- 22) One season (non-monsoon) [i.e. March-May (Summer Season); October-December (post monsoon season) ; December-February (winter season)]primary baseline data on

ambient air quality as per CPCB Notification of 2009, water quality, noise level, soil and flora and fauna shall be collected and the AAQ and other data so compiled presented date-wise in the EIA and EMP Report. Site-specific meteorological data should also be collected. The location of the monitoring stations should be such as to represent whole of the study area and justified keeping in view the pre-dominant downwind direction and location of sensitive receptors. There should be at least one monitoring station within 500 m of the mine lease in the pre-dominant downwind direction. The mineralogical composition of PM10, particularly for free silica, should be given.

- 23) Air quality modeling should be carried out for prediction of impact of the project on the air quality of the area. It should also take into account the impact of movement of Vehicles for transportation of mineral. The details of the model used and input parameters used for modeling should be provided. The air quality contours may be shown on a location map clearly indicating the location of the site, location of sensitive receptors, if any, and the habitation. The wind roses showing pre-dominant wind direction may also be indicated on the map.
- 24) The water requirement for the Project, its availability and source should be furnished. A detailed water balance should also be provided. Fresh water requirement for the Project should be indicated.
- 25) Necessary clearance from the Competent Authority for drawl of requisite quantity of water for the Project should be provided.
- 26) Description of water conservation measures proposed to be adopted in the Project should be given. Details of rainwater harvesting proposed in the Project, if any, should be provided.
- 27) Impact of the Project on the water quality, both surface and groundwater, should be assessed and necessary safeguard measures, if any required, should be provided.
- 28) Based on actual monitored data, it may clearly be shown whether working will intersect groundwater. Necessary data and documentation in this regard may be provided. In case the working will intersect groundwater table, a detailed Hydro Geological Study should be undertaken and Report furnished. The Report inter-alia, shall include details of the aquifers present and impact of mining activities on these aquifers. Necessary permission from Central Ground Water Authority for working below ground water and for pumping of ground water should also be obtained and copy furnished.
- 29) Details of any stream, seasonal or otherwise, passing through the lease area and

modification / diversion proposed, if any, and the impact of the same on the hydrology should be brought out.

- 30) Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.
- 31) A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear and quantitative coverage, plant species and time frame) and submitted, keeping in mind, the same will have to be executed up front on commencement of the Project. Phase-wise plan of plantation and compensatory afforestation should be charted clearly indicating the area to be covered under plantation and the species to be planted. The details of plantation already done should be given. The plant species selected for green belt should have greater ecological value and should be of good utility value to the local population with emphasis on local and native species and the species which are tolerant to pollution.
- 32) Impact on local transport infrastructure due to the Project should be indicated. Projected increase in truck traffic as a result of the Project in the present road network (including those outside the Project area) should be worked out, indicating whether it is capable of handling the incremental load. Arrangement for improving the infrastructure, if contemplated (including action to be taken by other agencies such as State Government) should be covered. Project Proponent shall conduct Impact of Transportation study as per Indian Road Congress Guidelines.
- 33) Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.
- 34) Conceptual post mining land use and Reclamation and Restoration of mined out areas (with plans and with adequate number of sections) should be given in the EIA report.
- 35) Occupational Health impacts of the Project should be anticipated and the proposed preventive measures spelt out in detail. Details of pre-placement medical examination and periodical medical examination schedules should be incorporated in the EMP. The project specific occupational health mitigation measures with required facilities proposed in the mining area may be detailed.
- 36) Public health implications of the Project and related activities for the population in the impact zone should be systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations.
- 37) Measures of socio-economic significance and influence to the local community

proposed to be provided by the Project Proponent should be indicated. As far as possible, quantitative dimensions may be given with time frames for implementation.

- 38) Detailed Environmental Management Plan (EMP) to mitigate the environmental impacts which, should inter-alia include the impacts of change of land use, loss of agricultural and grazing land, if any, occupational health impacts besides other impacts specific to the proposed Project.
- 39) Public Hearing points raised and commitment of the Project Proponent on the same along with time bound Action Plan with budgetary provisions to implement the same should be provided and also incorporated in the final EIA/EMP Report of the Project.
- 40) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.
- 41) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.
- 42) A Disaster management Plan shall be prepared and included in the EIA/EMP Report.
- 43) Benefits of the Project if the Project is implemented should be spelt out. The benefits of the Project shall clearly indicate environmental, social, economic, employment potential, etc.
- 44) Besides the above, the below mentioned general points are also to be followed: -
 - a) Executive Summary of the EIA/EMP Report
 - b) All documents to be properly referenced with index and continuous page numbering.
 - c) Where data are presented in the Report especially in Tables, the period in which the data were collected and the sources should be indicated.
 - d) Project Proponent shall enclose all the analysis/testing reports of water, air, soil, noise etc. using the MoEF&CC/NABL accredited laboratories. All the original analysis/testing reports should be available during appraisal of the Project.
 - e) Where the documents provided are in a language other than English, an English translation should be provided.
 - f) The Questionnaire for environmental appraisal of mining projects as devised earlier by the Ministry shall also be filled and submitted.
 - g) While preparing the EIA report, the instructions for the Proponents and instructions for the Consultants issued by MoEF&CC vide O.M. No. J-11013/41/2006-IA.II(I) dated 4th August, 2009, which are available on the website of this Ministry, should be followed.

- h) Changes, if any made in the basic scope and project parameters (as submitted in Form-I and the PFR for securing the TOR) should be brought to the attention of MoEF&CC with reasons for such changes and permission should be sought, as the ToR may also have to be altered. Post Public Hearing changes in structure and content of the draft EIA/EMP (other than modifications arising out of the P.H. process) will entail conducting the PH again with the revised documentation.
- i) As per the circular no. J-11011/618/2010-IA.II(I) dated 30.5.2012, certified report of the status of compliance of the conditions stipulated in the Environment Clearance for the existing operations of the project, should be obtained from the Regional Office of Ministry of Environment, Forest and Climate Change, as may be applicable.
- j) The EIA report should also include (i) surface plan of the area indicating contours of main topographic features, drainage and mining area, (ii) geological maps and sections and (iii) sections of the mine pit and external dumps, if any, clearly showing the land features of the adjoining area.

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

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

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

10. EIA report should strictly follow the Environmental Impact Assessment Guidance Manual for Mining of Minerals published February 2010.
11. Detail plan on rehabilitation and reclamation carried out for the stabilization and restoration of the mined areas.
12. The EIA study report shall include the surrounding mining activity, if any.
13. Modeling study for Air, Water and noise shall be carried out in this field and incremental increase in the above study shall be substantiated with mitigation measures.
14. A study on the geological resources available shall be carried out and reported.
15. A specific study on agriculture & livelihood shall be carried out and reported.
16. Impact of soil erosion, soil physical chemical and biological property changes may be assumed.
17. Site selected for the project - Nature of land - Agricultural (single/double crop), barren, Govt./ private land, status of its acquisition, nearby (in 2-3 km.) water body, population, within 10km other industries, forest, eco-sensitive zones, accessibility, (note - in case of industrial estate this information may not be necessary)
18. Baseline environmental data - air quality, surface and ground water quality, soil characteristic, flora and fauna, socio-economic condition of the nearby population
19. Identification of hazards in handling, processing and storage of hazardous material and safety system provided to mitigate the risk.
20. Likely impact of the project on air, water, land, flora-fauna and nearby population
21. Emergency preparedness plan in case of natural or in plant emergencies
22. Issues raised during public hearing (if applicable) and response given
23. CER plan with proposed expenditure.
24. Occupational Health Measures
25. Post project monitoring plan
26. The project proponent shall carry out detailed hydro geological study through intuitions/NABET Accredited agencies.
27. A detailed report on the green belt development already undertaken is to be furnished and also submit the proposal for green belt activities.
28. The proponent shall propose the suitable control measure to control the fugitive emissions during the operations of the mines.
29. A specific study should include impact on flora & fauna, disturbance to migratory pattern of animals.
30. Reserve funds should be earmarked for proper closure plan.

31. A detailed plan on plastic waste management shall be furnished. Further, the proponent should strictly comply with, Tamil Nadu Government Order (Ms) No.84 Environment and forests (EC.2) Department dated 25.06.2018 regarding ban on one time use and throw away plastics irrespective of thickness with effect from 01.01.2019 under Environment (Protection) Act, 1986. In this connection, the project proponent has to furnish the action plan.

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

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

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



**DRAFT EIA/EMP REPORT FOR ROUGHSTONE & GRAVEL QUARRY OF
TVL. OM VINAYAGA SUPPLIER, PROP.K. DHAKSHANAMURTHI, IN S.F.NOS. 37/15, 16, 18(P),
19(P), 20, 21, 22 & 23(P) OVER AN AREA OF 3.32.50HA IN NALLAMUR MADURA KOLATHUR
VILLAGE, MADURANTHAKAM TALUK, CHENGALPATTU DISTRICT, TAMIL NADU.**

TOR COMPLIANCE

S.No	ToR Points	Reply	Pg.No
1. SEAC CONDITIONS - SITE SPECIFIC			
1	The Project Proponent shall ensure complete clearance of the existing dump prior to submission of the Environmental Impact Assessment (EIA) report.	No mining is carried out in the lease area. Crusher materials from the nearby crusher were temporarily stored in the lease area and it is being cleared.	4-5
2	The project shall carry out DGPS survey for boundary demarcation, and the boundary markings shall be rechecked and confirmed during the appraisal of the Environmental Impact Assessment (EIA).	Agreed	
3	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 statutory personnel, appropriate environmental monitoring, good maintenance of haul roads and village/panchayat roads, authorized blasting operation etc. The PP shall submit the following details in the form of an Affidavit during the EIA appraisal: a) Copy of the agreement forming CMC. b) The Organisation chart of the Committee with defining the role of the members c) The 'Standard Operating Procedures' (SoP) executing the planned activities.	Environmental Management Cell of projects in the cluster will act as a Cluster Management Committee. The various activities to be undertaken by this committee are detailed in para 10.2.2, Chapter – X. Affidavit in this regard will be submitted during EIA appraisal.	10.3
4	The PP shall ensure the installation of CCTV at the proposed quarry site and ensure its inclusion during the EIA presentation.	• Agreed	-
2. 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: a) Original pit dimension b) Quantity achieved Vs EC Approved Quantity c) Balance Quantity as per Mineable Reserve calculated. d) Mined out Depth as on date Vs EC Permitted depth e) Details of illegal/illicit mining f) Violation in the quarry during the past working. g) Quantity of material mined out outside the mine lease area h) Condition of Safety zone/benches i) Revised/Modified Mining Plan showing the benches of not exceeding 6 m height and ultimate	• Fresh lease. No mining carried out in the lease so far.	2-14



**DRAFT EIA/EMP REPORT FOR ROUGHSTONE & GRAVEL QUARRY OF
TVL. OM VINAYAGA SUPPLIER, PROP.K. DHAKSHANAMURTHI, IN S.F.NOS. 37/15, 16, 18(P),
19(P), 20, 21, 22 & 23(P) OVER AN AREA OF 3.32.50HA IN NALLAMUR MADURA KOLATHUR
VILLAGE, MADURANTHAKAM TALUK, CHENGALPATTU DISTRICT, TAMIL NADU.**

	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.	• Letter from VAO is obtained and given as Annexure – 4.	A-39
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.	• Details of the features within 500m radius are provided in Figure 2.3, Chapter-II.	2-7
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.	• Hydrogeological Study is detailed under Section 3.6, Chapter-III.	3-39
5	The Proponent shall carry out Bio diversity study through reputed Institution and the same shall be included in EIA Report.	• A detailed study of flora and fauna composition in the core and buffer zone of the project has been made through primary field surveys. The details are furnished in para 3.5, Chapter III.	3-33
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.	• There area no Protected Areas, Sanctuaries, Tiger reserve etc., within 10km Radius.The details are furnished in Table no 3.2, Chapter III.	3.2
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.	• This is a proposed quarry. No mining activities have been carried out in this lease area.	2-15
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.	• Pit slope stability plan has been provided under Section 7.7, Chapter-VII	7-11
9	The PP shall furnish the affidavit stating that the blasting operation in the proposed quarry is carried out by the	• Will be submitted along with the final report	--



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	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.	• Controlled blasting will be adopted in this project and details of the same has been provided in Section 4.4.2, Chapter-IV	4-14
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.	• Agreed	--
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,	• This is a proposed quarry. No mining activities have been carried out in this lease area.	2-18
13	What was the period of the operation and stoppage of the earlier mines with last work permit issued by the AD/DD mines?	• Replied above in point no.12	--
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.	• Replied above in point no.12	--
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).	• Project coordinates superimposed in satellite imagery and given as Figure No - 2.4 in Chapter – II. • The 10km Radius Index plan showing buffer zone is given in Figure No.3.1 in Chapter – III. • Geology Map, Geomorphology, Lithology map are enclosed as Figure No.3.16, 3.17 and 3.18, Chapter-III.	2-6 3-1 3-41& 3-43
16	The PP shall carry out Drone video survey covering the cluster, Green belt, fencing etc.,	• Agreed	--
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.	• Site photographs have been provided in Chapter-II.	2-7
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	• The details of geological and mineable reserves are provided in Table 2.4, Chapter-II. • The production schedule is provided in Table	2-14 2-16



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	operations on the surrounding environment and the proposed mitigation measures for the same.	2.7, Chapter-II. • The working methodology is detailed under Section 2.8, Chapter-II. • Anticipated impacts of mining operations on surrounding environment is provided under Chapter-IV. •	2-15 4-1
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 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.	• The organization chart has been provided in Figure No.10.1, Chapter-X.	10-3
20	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. 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.	• Details of hydrogeological scenario of this project is provided under section 3.6, Chapter-III.	3-39
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.	• The baseline data on micro- meteorology, ambient air quality, Water quality, noise level, soil and flora & fauna are collected during Postmonsoon Season (October 2025 to December 2025) and detailed in Section 3.3 to 3.5 of Chapter-III. The details of Traffic Study is provided under Section 4.9, Chapter-IV.	3-13 & 3-33 4-23
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.	• The details of the quarries located within the 500m radius of the project is given vide Annexure-3. • A cumulative impact study has been carried out and furnished in Para 7.6, Chapter-VII. • Environmental Management Plan is provided under Chapter-X.	A-5 7-5 10-1
23	Rain water harvesting management with recharging details along with water balance (both monsoon & non-monsoon) be submitted.	• The rain water falling in the quarries will be harvested in the sump at the lowest level of the respective quarry. This sump will act as a settling pond to prevent solids escaping along with discharge, before outlet. etc. • Towards surface runoff management, garland drain will be constructed which will be connected to settling ponds with silt traps. • Water requirement for this project is 10 KLD.	4-11



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		The required water will be procured initially from outside agencies. Later Rain water harvested in the mine sump can also be used. • Details of rainwater harvesting are provided under Section 4.3.4.2, Chapter-IV.	
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.	• The land use of the study area was studied to demarcate various LULC categories and its details are provided under section 3.4, Chapter-III. • The land use pattern at present and at the end of the quarrying period has been provided under section 4.5.1, Chapter-IV. • The post mining land use has been provided in Table No. 4.13. The post mining land use plan showing afforestation and water body is shown in Figure No- 4.5.	3-27 4-16
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.	• There is no waste generation anticipated in this quarry. As such there are no OB dumps involved.	--
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.	• Not Applicable	--
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.	• The rain water falling in the quarry will be harvested in the sump at the lowest level of the quarry. This sump will act as a settling pond to prevent solids escaping along with discharge, before outlet. etc. • Towards surface runoff management, garland drain will be constructed around the quarry and will be connected to a settling pond with silt traps. The supernatant clear water from the settling pond will be flow to the downstream users. The surface runoff management structures diagram is given in Figure No 4.4, Chapter-IV. • The methods for reducing water consumption and rainwater harvesting is provided in section 4.3.4, Chapter-IV.	4-11 4-9
28	Impact on local transport infrastructure due to the Project should be indicated.	• From this proposed quarry the entire output will be transported to the crusher units and other buyers etc. Since the production from this lease will be 3 to 4 trip per hour of additional truck traffic. The existing road can absorb this traffic due to this project Details	4.23



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		are provided under section 4.9, Chapter-IV.	
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.	• An ecological survey of the study area was conducted with reference to listing of species and assessment of the existing baseline ecological conditions. Details are provided under section 3.5.1, Chapter-III.	3-33
30	A detailed mine closure plan for the proposed project shall be included in EIA/EMP report which should be site-specific.	• Details of Mine Closure Plan is provided under section 7.5, Chapter-VII.	7-4
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.	• An ecological survey of the study area was conducted with reference to listing of species and assessment of the existing baseline ecological conditions. Details are provided under section 3.5.1, Chapter-III.	3-33
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.	• Agreed	--
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.	• Agreed	--
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.	• The disaster management plan has been provided under section 7.3.1, Chapter-VII.	7-3
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.	• Various risks likely to arise due to mining activities are detailed under section 7.3, Chapter-VII.	7-1
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	• Details of occupational health and safety aspects are given under the subsections of Para 4.8, Chapter-IV.	4-21



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	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.	• Details of the socio-economic survey conducted in the buffer zone has been provided in Para 3.2.4, Chapter-III. • Public health facilities will be further aimed to be developed through CER activities wherein periodic health checkups, medical camps for the locals will be conducted.	3-8
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.	• Nearby villages were visited for conducting study to know about socio-economic conditions, including aspirations and requirements of the people for a better living and collected relevant data. The details are provided under section 3.2.4, Chapter-III.	3-8
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.	• PP informed that there is no litigation pending against the project.	--
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.	• The Roughstone and Gravel Quarry will benefit this region in the fields of employment opportunities, improved per capita income for local people, improved social welfare facilities in respect of education, health, infrastructural etc. • Direct employment to about 35 people and indirect employment to scores of people. • By means of carrying out the socio-economic development activities, local community development is expected. Towards the same, the proponent has planned to allocate Rs.5 Lakhs for various activities under CER for all the three projects together. From the CER activities allocated for various social welfare activities, the villages near the lease area will be benefited.	8-1
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.	• This is a proposed quarry. As such no mining activities have been carried out in this lease area.	2-12
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.	• EMP is prepared for the entire life of the mine. Affidavit will be provided along with the final EIA/ EMP report.	--
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	• Agreed	--



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	provisions in the Environment (Protection) Act, 1986.		
3. SEIAA SPECIFIC CONDITONS			
1	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 4,32,760 m ³ of rough stone & 90,520 m ³ of gravel upto the depth of 44m BGL 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 conditions & the SEIAA Specific & Standard conditions.	•	
4. SEIAA STANDARD CONDITONS			
Cluster Management Committee			
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.	• Details of the cluster management committee is provided under Section 10.2.2, Chapter-X.	10-2
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.,	• Agreed	-
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.	• Agreed	-
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	-
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.	• Agreed	-
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	• Agreed	-



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	be given in detail in the EIA Report.		
7	The committee shall furnish action plan regarding the restoration strategy with respect to the individual quarry falling under the cluster in a holistic manner.	• Agreed	-
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.	• Agreed	-
Agriculture & Agro-Biodiversity			
9	Impact on surrounding agricultural fields around the proposed mining Area.	• Since the lease and its nearby area is of rocky type , it remain uncultivated and only in patches of land away from the lease area, agricultural activities are carried during monsoon rainfall. Due to poor quality of the soil, inconsistent rainfall, high agricultural labor cost, manpower shortage and less yield are reason for very little agricultural activity in this region. By adoption of systematic mining adhering to all the environmental mitigation measures as explained earlier, no adverse impact on the far away agricultural or surrounding environs envisaged.	4-17
10	Impact on soil flora & vegetation around the project site.	• The impact of mining on biological environment is provided under Table 4.14, Chapter-IV.	4-17
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.	• The details of flora in the core zone is provided in Table 3.24, Chapter-III. There is no major clearance of vegetation or transplantation involved.	3-35
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.	• An ecological survey of the study area was conducted with reference to listing of species and assessment of the existing baseline ecological conditions. Details are provided under Section 3.5.1, Chapter-III.	3-33
13	Action should specifically suggest for sustainable management of the area and restoration of ecosystem for flow of goods and services.	• The post mining land use has been provided in Table No. 4.14.	4-16
14	The project proponent shall study and furnish the impact of project on plantations in adjoining patta lands, Horticulture, Agriculture and livestock.	• Replied in sl no 13 above.	4-18
Forests			
15	The project proponent shall detailed study on impact of mining on Reserve forests free ranging wildlife.	• There are no reserve forest within 10km radius and as such no impact on this front envisaged.	--
16	The Environmental Impact Assessment should study	• An ecological survey of the study area was	3-33



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	impact on forest, vegetation, endemic, vulnerable and endangered indigenous flora and fauna.	conducted with reference to listing of species and assessment of the existing baseline ecological conditions. Details are provided under Section 3.5.1, Chapter-III.	
17	The Environmental Impact Assessment should study impact on standing trees and the existing trees should be numbered and action suggested for protection.	• Replied in point 20. Above	--
18	The Environmental Impact Assessment should study impact on protected areas, Reserve Forests, National Parks, Corridors and Wildlife pathways, near project site.	• There are no national parks or corridors in the 10k radius. There are no reserve forest in the proximity of the lease area	3-2
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.	• The details of hydrogeological study is provided under Section 3.6, Chapter-III.	3-39
20	Erosion Control measures.	• Since the entire material from the quarry face will be directly dispatched to the consumers, there will not be any stockpiles. There are no waste dumps in this quarry. As such there will not be any wash out due to stock pile or waste dumps. • Towards surface runoff management, a garland drain will be constructed around the quarry and will be connected to a settling pond with silt traps. The supernatant clear water from the settling pond will be flow to the downstream users	4-10
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.	• There is no proposal to discharge any effluent into this waterbody. No major impact is envisaged on the nearby water bodies due to project operations	11-12
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 major perennial waterbody in close proximity of the lease area.	7-3
23	The project proponent shall study and furnish the details on potential fragmentation impact on natural	• The post mining land use has been provided in Table No. 4.13. The post mining land use plan	4-16&



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	environment, by the activities.	showing afforestation and water body is shown in Figure No- 4.5.	4-20
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.	• An ecological survey of the study area was conducted with reference to listing of species and assessment of the existing baseline ecological conditions. Details are provided under section 3.5.1, Chapter-III.	3-33
25	The Terms of Reference should specifically study impact on soil health, soil erosion, the soil physical, chemical components and microbial components.	• Soil samples were collected in 5 locations in the core and buffer zone to analyse the physiochemical characteristics of the soil in the area. The soil quality data is provided in Table No.3.18, Chapter-III.	3-27
26	The Environmental Impact Assessment should study on wetlands, water bodies, rivers streams, lakes and farmer sites.	• The nearest major water bodies is provided in Table No.3.1, Chapter-III. • There are no perineal water courses in lease areas. The mining area consists of hard compact rock, hence no major water seepage within the mine is expected from the periphery. The ground water table in this area is below the ultimate pit level. Hence, ground water intersection in not envisaged and ground water will not be affected appreciably due to the quarrying operation.	3-1
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.	• As the production from this lease is very low to cause any appreciable impact. • No adverse impact on the surrounding environment is envisaged since the number of equipments to be used to achieve this small production is very less and the magnitude of operation is of very small level. • Besides, as is it a mining project, no adverse generation of heat is envisaged. • Certified vehicles with low carbon emissions will only be used. These equipments will be properly and regularly maintained. Besides, regular vehicular emission tests will be done for the transport vehicles to ensure minimal impact due to carbon emissions. To further mediate the carbon emissions, a good greenbelt and plantation plan has been planned. • Geologically the area in and around the lease area contains charnokite type rock formation containing mostly fallow land. As such there no major vegetation or agricultural activities are observed. • There are no Protected or Eco-Sensitive	4-18



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		Zone or forest land nearby wherein it can have an impact. - It will be ensured that mining will be carried out adhering to all the statutory rules and regulations and maintaining the environmental quality within the prescribed standards by effective implementation of various mitigative measures. - These mitigative measures will be continued for the entire lease period ensuring no impact on the environment. As such release of Greenhouse gases (GHG), rise in temperature, affecting livelihood of the local people, loss of Agriculture, Forestry and Traditional Practices is not envisaged. Such a limited scope will not induce any climatic change leading to droughts, floods etc.	
Energy			
28	The measures taken to control Noise, Air, Water, Dust Control and steps adopted to efficiently utilise the Energy shall be furnished.	The dust control measures are listed under Table 4.1, Water pollution control measures under Section 4.3.2, and noise pollution control measures under Section 4.4.1.2, Chapter-IV. Besides, energy consumption in this project will be optimum and as per requirement.	4-2
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.	Certified vehicles with low carbon emissions will only be used. These equipments will be properly and regularly maintained. Besides, regular vehicular emission tests will be done for the transport vehicles to ensure minimal impact due to carbon emissions. To further mediate the carbon emissions, a good greenbelt and plantation plan has been planned wherein 1000 number of plants will be planted in and around the lease area.	7-16
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.	Replied in point no.29 above	--
31	Impact of mining on pollution leading to GHGs emissions and the impact of the same on the local livelihood.	Replied in point no.29 above	
Mine Closure Plan			
32	Detailed Mine Closure Plan covering the entire mine lease period as per precise area communication	Details of Mine Closure Plan is provided under section 7.5, Chapter-VII.	7-4



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	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	•Detailed environmental management plan is provided under Chapter-X.	10-1
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.	•Detailed environmental management plan is provided under Chapter-X.	10-1
Risk Assessment			
35	To furnish risk assessment and management plan including anticipated vulnerabilities during operational and post operational phases of Mining.	•Various risks likely to arise due to mining activities are detailed under section 7.3, Chapter-VII.	7-1
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.	•The disaster management plan has been provided under section 7.3.1, Chapter-VII.	7-3
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.	•Given in Vide Annexure No – 14 of EIA EMP report	A-39
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.	Will be provided in the Final EIA/EMP Report after completion of public hearing.	--
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.	•Single use plastics/ use and throwaway plastics will be banned in the site as directed by the Tamil Nadu Government vide GO(Ms)No.84 regarding ban on use of plastic products. The employees will be encouraged to use compostable material or reusable material.	11-16



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A. Standard ToR			
1	Year-wise production details since 1994 should be given, clearly stating the highest production achieved in any one year prior to 1994. It may also be categorically informed whether there had been any increase in production after the EIA Notification 1994 came into force, w.r.t. the highest production achieved prior to 1994.	• This is a fresh lease area. No mining has been carried out in this lease area so far by the proponent.	2-11
2	A copy of the document in support of the fact that the Proponent is the rightful lessee of the mine should be given	• Precise Area Communication letter received from the Assistant Director, Dep. of Geology & Mining, Coimbatore vide Rc.No. 131/Mine/2025 dated 30.10.2025 (Annexure-1)	A-3
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.	• The production capacity, quantity of waste, its management and mining technology in mine plan and EIA, etc., are compatible with one another.	--
4	All corner coordinates of the mine lease area, superimposed on a High Resolution Imagery/ toposheet, topographic sheet, geomorphology and geology of the area should be provided. Such an Imagery of the proposed area should clearly show the land use and other ecological features of the study area (core and buffer zone).	• Project coordinates superimposed in satellite imagery and given as Figure No - 2.4 in Chapter – II. • The geology and geomorphology map is provided in Figure No.3.16, 3.17, Chapter-III. The Lithology map and Soil map are provided under Figure No. 3.18, 3.19, Chapter-III. • The 10km Radius Index plan showing buffer zone is given in Figure No.3.1 in Chapter – III.	2-6 3-41 3-42 3-43 3-44 3-2
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.	• Replied in Standard ToR point no.4	--
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.	• Not Applicable	--
7	It should be clearly stated whether the proponent Company has a well laid down Environment Policy approved by its	• The proponent will frame a well-planned environmental policy. Its details are provided	10-1



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	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.	under Section 10.2.1, Chapter-X. • The Mines Manager will undertake effective monitoring and implementation of various environmental control measures promptly and effectively and to oversee various environmental management schemes for air quality control, water quality status, noise level control, plantation programme, social development schemes, etc in the mine. The organizational chart for the same has been provided in Figure No.10.1, Chapter-X.	10-3
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.	• Various risks likely to arise due to mining activities are detailed under section 7.4, Chapter-VII. This being an opencast mine, subsidence is not applicable. The impact due to ground vibrations due to blasting is given in para 4.3.2, Chapter-IV.	7-4 4-9
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.	• The study area chosen for collecting existing environmental status covers 10 km radial distance from the project periphery (Figure No - 3.1). Data given in the report is for the life of the mine.	3-2
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.	• The land use of the study area was studied to demarcate various LULC categories and its details are provided under section 3.4, Chapter-III. • The land use pattern at present and at the end of the quarrying period has been provided under section 4.5, Chapter-IV. • In the post mining stage, the mine pit area of 2.65.70Ha will be left as a water body. Plantation will be carried out over 0.02.00Ha and 0.02.00Ha will be left as road and infrastructure. 0.62.80 Ha will be covered with vegetation..	3-27 4-18
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.	• There is no waste generation anticipated in this quarry operation since the entire excavated material will be utilized. Hence, there is no external overburden dump involved. Besides, there is no proposal for overburden dump outside the lease area.	2-15



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12	A Certificate from the Competent Authority in the State Forest Department should be provided, confirming the involvement of forest land, if any, in the project area. In the event of any contrary claim by the Project Proponent regarding the status of forests, the site may be inspected by the State Forest Department along with the Regional Office of the Ministry to ascertain the status of forests, based on which, the Certificate in this regard as mentioned above be issued. In all such cases, it would be desirable for representative of the State Forest Department to assist the Expert Appraisal Committees.	• There is no forest land in the lease area.	--
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.	• There is no forest land in the lease area.	--
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	--
15	The vegetation in the RF / PF areas in the study area, with necessary details, should be given.	• There is no forest land in the lease area.	--
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.	• The mining lease area and the 10 km buffer zone from the periphery of the core zone is devoid of declared ecologically sensitive features like national parks, biospheres, sanctuaries, etc.	4-19
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.	• Replied in Standard ToR point No.16	--
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	• A detailed study of flora and fauna composition in the core and buffer zone of the project has been made through primary field surveys. The details are furnished in para 3.5, Chapter III.	3-36



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	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.	• Not Applicable	--
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).	• Not Applicable	--
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 shilling of village(s) including their R&R and socio-economic aspects should be discussed in the Report.	• The mining activities will be carried out within the mine lease area only. The entire mine lease area is a patta land in proponent's possession. There is no population within the ML area. Hence, the question of R& R does not arise.	7-4
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	• The baseline data on micro- meteorology, ambient air quality, Water quality, noise level, soil and flora & fauna are collected during Postmonsoon Season (October 2025 to December 2025) and detailed in para 3.3 to 3.5 of Chapter-III. • Monitoring stations were selected taking into account, wind direction and location of sensitive receptors. • Free silica composition in PM10 sample has been done and the values are found to be Below Detectable Limit (DL 0.05mg/m3) which is well within the prescribed limit of 5mg/m3.	3-1 & 3-16





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		constructed around the quarry and will be connected to a settling pond with silt traps. The supernatant clear water from the settling pond will be flow to the downstream users. The surface runoff management structures diagram is given in Figure No 4.4, Chapter-IV. • The methods for reducing water consumption and rainwater harvesting is provided in section 4.3.4, Chapter-IV.	4-9 4-11
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.	• There will be no generation of effluent or its discharge from the mining operation in this lease area and as such no impact on surface or ground water is expected. • The ultimate pit depth of mining is 44m. The ground water table in this area is below this level. Hence, ground water intersection in not envisaged and ground water will not be affected appreciably due to the quarrying operation.	4-10 2-18
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.	• The occurrence of groundwater mainly in the porous soil are weathered layers, very negligible amount of groundwater percolated through the poorly fractured layer, after that there is no existence of groundwater. Since the mining area consists of hard compact rock, no major water seepage within the mine is expected from the periphery. • The ultimate pit depth of mining is 44m. The ground water table in this area is below this level. Hence, ground water intersection in not envisaged and ground water will not be affected appreciably due to the quarrying operation. • Details of hydro geological study are given in Para 3.6.2 Chapter – III.	2-12 3-46
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 are no streams passing through the lease area.	--
30	Information on site elevation, working depth, groundwater table etc. Should be provided both in AMSL and bgl. A schematic diagram may also be provided for the same.	• The area applied for mining lease is a gentle plain terrain.. • The ultimate pit depth of mining is 44m. The ground water table in this area is below this level.	2-2
31	A time bound Progressive Greenbelt Development Plan shall be prepared in a tabular form (indicating the linear	• Greenbelt / Plantation will be carried out to enhance the vegetative growth and aesthetic	4-19



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	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. Phasc-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.	in the safety zone area. About 1000 trees will be planted in and around the lease area. Details of the same is provided under TableNo.4.16, Chapter-IV.	
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.	From this proposed quarry the entire output will be transported to the crusher units and other buyers etc. Details of the traffic study is provided under section 4.9, Chapter-IV.	4-23
33	Details of the onsite shelter and facilities to be provided to the mine workers should be included in the EIA Report.	This is a proposed project. Site services like mine office, first aid room, rest shelters, toilets etc. will be provided as semi-permanent structures.	2-17
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.	In the post mining stage, the mine pit area of 2.65.70Ha will be left as a water body. Plantation will be carried out over 0.02.00Ha and 0.02.00Ha will be left as road and infrastructure. 0.62.80 Ha will be covered with vegetation. Entire mined out area will be properly fenced to prevent inadvertent entry of men and animals. In the post mining stage the rainwater harvested in the mined out void shall be utilized in the area.	4-19
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	Details of occupational health and safety aspects are given under the subsections of Para 4.8, Chapter-IV.	4-22
36	Public health implications of the Project and related activities for the population in the impact zone should be	Details of the socio economic survey conducted in the buffer zone has been	3-9



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	systematically evaluated and the proposed remedial measures should be detailed along with budgetary allocations	provided in Para 3.2.4, Chapter-III. • Public health facilities will be further aimed to be developed through CER activities wherein periodic health checkups, medical camps for the locals will be conducted.	
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.	• Towards the socio economic development of the surrounding area, the proponent has earmarked an amount of Rs 5 Lakhs under Corporate Environmental Responsibility. The activities identified under CER will be implemented in a phased manner in the nearby Government schools. In consultation with the locals based on the need & priority it will be implemented. Its details are provided in Para 4.7, Chapter-IV	4-21
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.	• Detailed Environmental Management plan and its implementation, etc., are furnished in Chapter X.	10-1
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.	• This draft EIA/EMP report will be exposed to public consultation as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures. • The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.	7-1
40	Details of litigation pending against the project, if any, with direction /order paced by any Court of Law against the Project should be given.	• PP informed that there is no litigation pending against the project.	--
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.	• The cost of the project is Rs. 57,15,000/- Towards EMP measures, Rs. Rs.25.60 Lakhs is allocated under capital cost. Besides, Rs.26.51 lakhs per annum will be spent under recurring cost. All the recurring cost of maintenance of pollution control measures, environmental monitoring etc., will be met from revenue.	4-21 10-12



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42	A Disaster management Plan shall be prepared and included in the EIA/EMP Report.	• The disaster management plan has been provided under section 7.3.1, Chapter-VII.	7-3
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	• The proposed Rough Stone Quarry will benefit this region in the fields of employment opportunities, improved per capita income for local people, improved social welfare facilities in respect of education, health, infrastructural etc. • Direct employment to 35 people and indirect employment to scores of people. • By means of carrying out the socio economic development activities, local community development is expected. Towards the same, the proponent has planned to allocate Rs. 5 Lakhs for various activities under CER. From the CER activities allocated for various social welfare activities, the villages near the lease area will be benefited.	
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 Besides the above, the below	• Agreed	8-1



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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 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	



CHAPTER - I

INTRODUCTION

CHAPTER 1

INTRODUCTION

1.1 PURPOSE OF THE REPORT:

Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi proposes to operate a Rough Stone and Gravel Quarry over an area of 3.32.50 Ha in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu and has initiated action towards obtaining environmental clearance. Proposed Production for the five years lease period is 4,32,760 m³/11,90,090 MT of Rough Stone and 90,520 m³/ 1,81,040 MT of Gravel up to depth of 44 m with the peak production capacity of 1,17,300m³/ 3,22,575.00 MT (Year 4) of Rough stone and 45,448m³ /90,896.00 MT (Year 2) of Gravel.

Although the individual lease area of this project is less than 5 Ha, the other existing and proposed quarries within the 500m radius cluster along with this subject project works out to >5 Ha. Hence, this proposal is considered under Category – B1 and as per MoEF& CC notification necessitates preparation of EIA/EMP report and public hearing. This EIA/EMP report is prepared based on standard and additional Terms of Reference issued by SEIAA, Tamil Nadu vide TOR Identification No – **TO25B0108TN5511208N dated 13.02.2026** and is in conformance of the generic structure prescribed by MOEF&CC in their notification of September 2006 and the approved mining plan.

1.2 IDENTIFICATION OF PROJECT &PROJECT PROPONENT:

Table 1.1 Identification of project

1	Project Name	Roughstone and Gravel Quarry of Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi
2	Extent	3.32.50 Ha
3	Production	The Proposed Production for the five years lease period is 4,32,760 m ³ /11,90,090 MT of Rough Stone and 90,520 m ³ / 1,81,040 MT of Gravel up to depth of 44 m
4	Ultimate Depth	44m for 5 years
5	Land Classification	It is a patta land (No – 1604) in the name of Soma Sekar Reddy, one of the Partner of Naveen Enterprises. Registration of Consent from Pattadhars obtained and got registered.
6	Location	Survey Number: 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) Village: Nallamur Madura Kolathur



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	Taluk: Maduranthakam
	District: Chengalpattu
	State: Tamil Nadu

Table 1.2: Identification of Project Proponent

1	Proponent Name	Tvl. Om Vinayaga Supplier, Prop: K. Dhakshanamurthi
2	Address	Plot No: 14, GF 7, S.V.Complex, Vanthavasi Road, Sothupakkem, Cheyyur Taluk, Chengalpattu District – 603319.
3	Contact Number	99403 45689
4	Email-ID	omvinayagasupplymurthik@gmail.com

The Proponent can meet the financial requirement of this project and will ensure that the mining activities are carried out as per statutory requirements.

Table 1.3: Statutory Approvals

Name	Issuing Authority	Status	Letter number	Date	Reference
Precise Area Communication	Assistant Director, Department of Geology & Mining	Received	Rc.No. 131/Mine/2025	30.10.2025	Annexure-1
Mining Plan Approval	Assistant Director, Department of Geology & Mining	Approved	Rc.No. 131/Mine/2025	19.11.2025	Annexure-2
Details of other quarries within 500m radius	Assistant Director, Department of Geology & Mining	Obtained	Rc.No. 131/Mine/2025	19.11.2025	Annexure-3
District survey report	Collector, Assistant director, Geology & Mining	Authenticated	As per S.O. 3611(E) dated 25.07.2018	-	
VAO Letter	VAO	Obtained	--	25.11.2025	Annexure-4

Mining plan adhering the precise area condition is prepared and got approved.



DRAFT EIA/EMP REPORT FOR ROUGHSTONE & GRAVEL QUARRY OF TVL. OM VINAYAGA SUPPLIER, PROP.K. DHAKSHANAMURTHI, IN S.F.NOS. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) OVER AN AREA OF 3.32.50HA IN NALLAMUR MADURA KOLATHUR VILLAGE, MADURANTHAKAM TALUK, CHENGALPATTU DISTRICT, TAMIL NADU.

1.3 BRIEF DESCRIPTION OF NATURE, SIZE, LOCATION & PROJECT IMPORTANCE

Table 1.4: Brief Description of Nature of project

1.	Sector	1(a), Non-Coal Mining
2.	Type	Fresh EC
3.	Category	B1
4.	Mineral Mined	Roughstone& Gravel Quarry
5.	Major/Minor Mineral	Minor
6.	Mining method	Opencast Semi Mechanized Mining
7.	End use	The top Gravel will be loaded into tipper and marketed to needy customers. The rough stone will be excavated and loaded into tipper to the needy buyers for producing crusher aggregates, M Sand.

Table 1.5: Location of the project

S.No	Particulars	Details
1.	Location	Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu
2.	Corner Coordinates	Latitude :12° 25' 12.24" N to 12° 25' 19.90" N Longitude :79° 55' 20.20" E to 79° 55' 27.88" E
3.	Toposheet Number	57- P/15

Location details are elaborated in Para 2.3, Chapter-II.

1.3.1 IMPORTANCE TO THE COUNTRY AND REGION:

Rough stone from these quarries will meet the domestic demand. The production and method of mining is planned considering the geological factors, availability of proven technology, demand for the material etc. Safety barriers as per State Government order is left in the planning stage itself. Systematic and scientific mining will be carried out. This project will provide employment opportunities to many people. The proponent will carry out CER activities which will help the surrounding villages to derive socio economic benefits. The activities will be customized based on local needs and prioritized. Hence, livelihood development and employment will arise due to this project.



1.4 SCOPE OF THE STUDY:

Particulars	Details
Proposal no	SIA/TN/MIN/559868/2025, Dated: 02/12/2025
File no	13085
SEAC meeting for issue of TOR	665th meeting of SEAC held on 19.01.2026.
SEIAA meeting for issue of TOR	957th SEIAA meeting held on 05.02.2026.
Terms of Reference	Received from SEIAA, Tamil Nadu vide TOR Identification No – TO25B0108TN5511208N dated 13.02.2026
Baseline Data Collection	Carried out by Creative Engineers & Consultants, post monsoon season (October 2025- December 2025)

Based on the terms of reference, data collection, the Environmental Impact Assessment was carried out for the project area (core zone and the buffer zone (10km radius from the core zone) and the following studies were covered:

- Collection of primary and secondary data relevant to the project.
- One-Season baseline monitoring for environmental parameters such as air, water, noise, soil, flora & fauna, etc. Analysis of parameters in in-house laboratory.
- Documentation of EIA/EMP report with inclusion of relevant studies conducted by other bodies into the EIA/EMP report.
- Identification of significant environmental parameters that are prone to get affected due to pollution. Namely, Air, Water, Noise, Soil, Biological and Land Environment.
- Evaluation and determination of suitable mitigation measures to reduce and control the said pollution.
- Prediction of post project concentration (baseline + incremental) with respect to air environment for core zone and buffer zone.(on Individual as well as cumulative basis)
- Formulation of an Environmental Management plan including administrative aspects for proposed implementation of mitigative measures in time.



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This draft EIA/EMP report will be submitted for public consultation, as per rules and procedures in this respect, as per the EIA notification 2006. The opinions, concerns and objections, if any, of the surrounding public and other stake holders connected, will be taken into consideration and compliance report thereon will be submitted to SEIAA, Tamil Nadu in the final EIA/EMP report.

* * * * *



CHAPTER - II

PROJECT DESCRIPTION

CHAPTER 2

PROJECT DESCRIPTION

2.1 TYPE OF PROJECT:

This proposal involves quarrying of Roughstone and Gravel by Tvl. Om Vinayaga Supplier, Prop.K. Dhakshanamurthi using Opencast Semi Mechanized Mining method for the lease period of 5 years.

2.2 NEED & JUSTIFICATION FOR THE PROJECT:

There is a huge demand for construction material and the entire material produced from this quarry will be used in the local construction/ infrastructure sector. Considering the following favorable factors it is practically possible to achieve the proposal within the planned period and this proposal is fully justified.

- Availability of good quality proved reserves
- Techno economic viability of the scheme
- Better approachability to the project, availability of logistic facility in proximity to the site
- Economic and Socio Economic Benefits to the region

2.3 LOCATION:

A brief description of the mining area, along with the location, coordinates, accessibility, etc. has been details below in Table No.2.1.

Table 2.1: Mine site description

Location	Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu
Survey No.	37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P)
Coordinates	Latitude :12° 25' 12.24" N to 12° 25' 19.90" N Longitude :79° 55' 20.20" E to 79° 55' 27.88" E
Nearest Village	Kolathur -1.0km (SW)
Nearest Town	Melmaruvathur - 9.0km (NW)
Nearest Highway	NH-179B –9.0Km– NW



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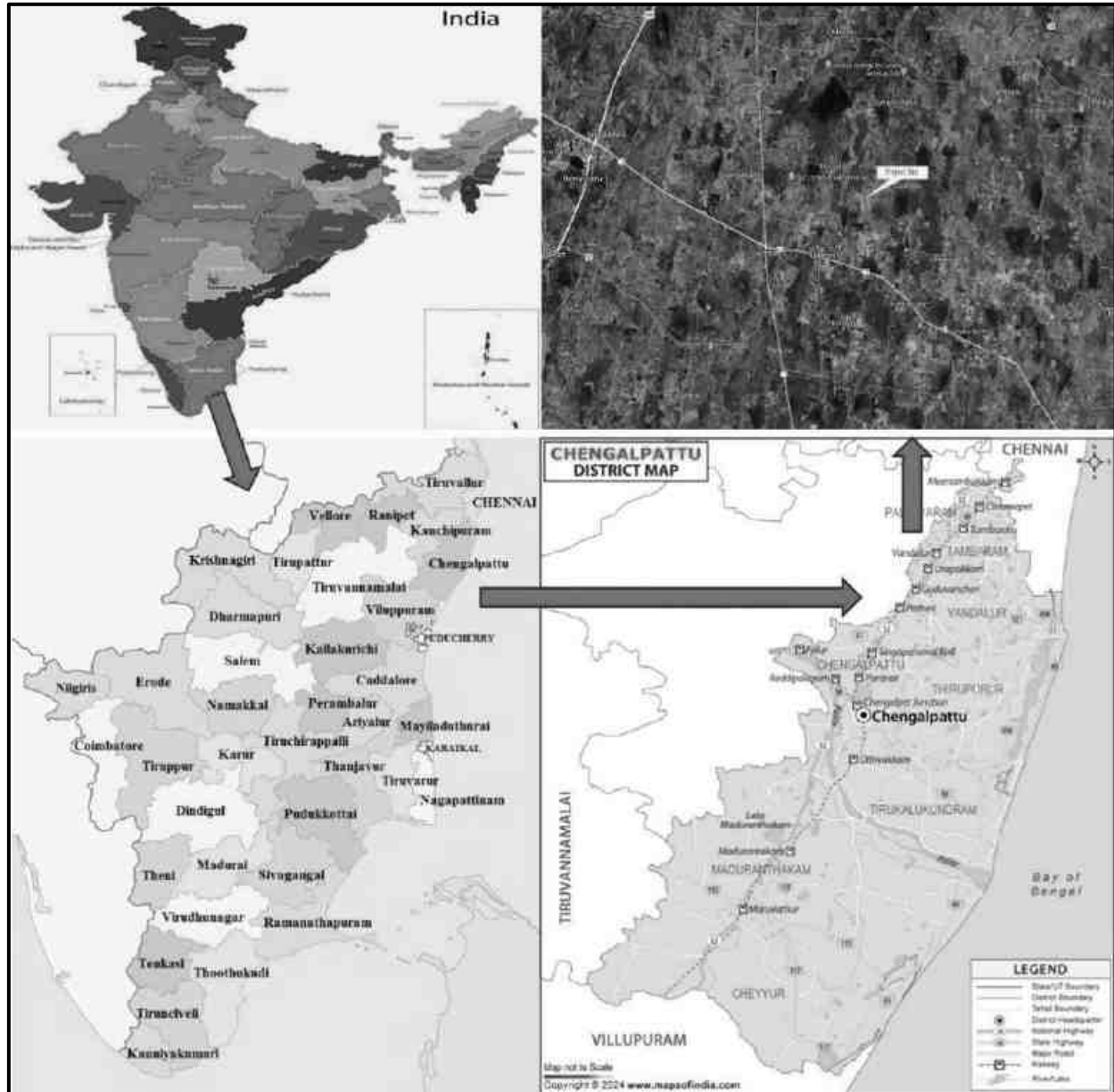
	SH-115–2.0Km–S
Nearest Railway Station	Melmaruvathur - 9.0km (NW)
Nearest Airport	Chennai – 67km - NE
Accessibility	The Lease area is approachable from Peruveli – Nallamur Keel karanai road which is connected to SH-115 Sothupakkam to Cheyyur road located about 1.7 Km on the South side of the lease applied area.
Topography& Drainage	The lease applied area exhibits Plain topography covered by Roughstone & gravel formation with the altitude of the area is above 60.0m MSL. Other than few first order and second order streams no major drainage pattern is observed around the lease area.

Location map is provided in **Figure No.2.1**.The approachability map is provided in **Figure No.2.2**. Corner co-ordinates of the lease area and satellite imagery are shown in **Figure No. 2.3 & 2.4** respectively. Village map for 500m radius from the lease is shown in **Figure No. 2.5**.



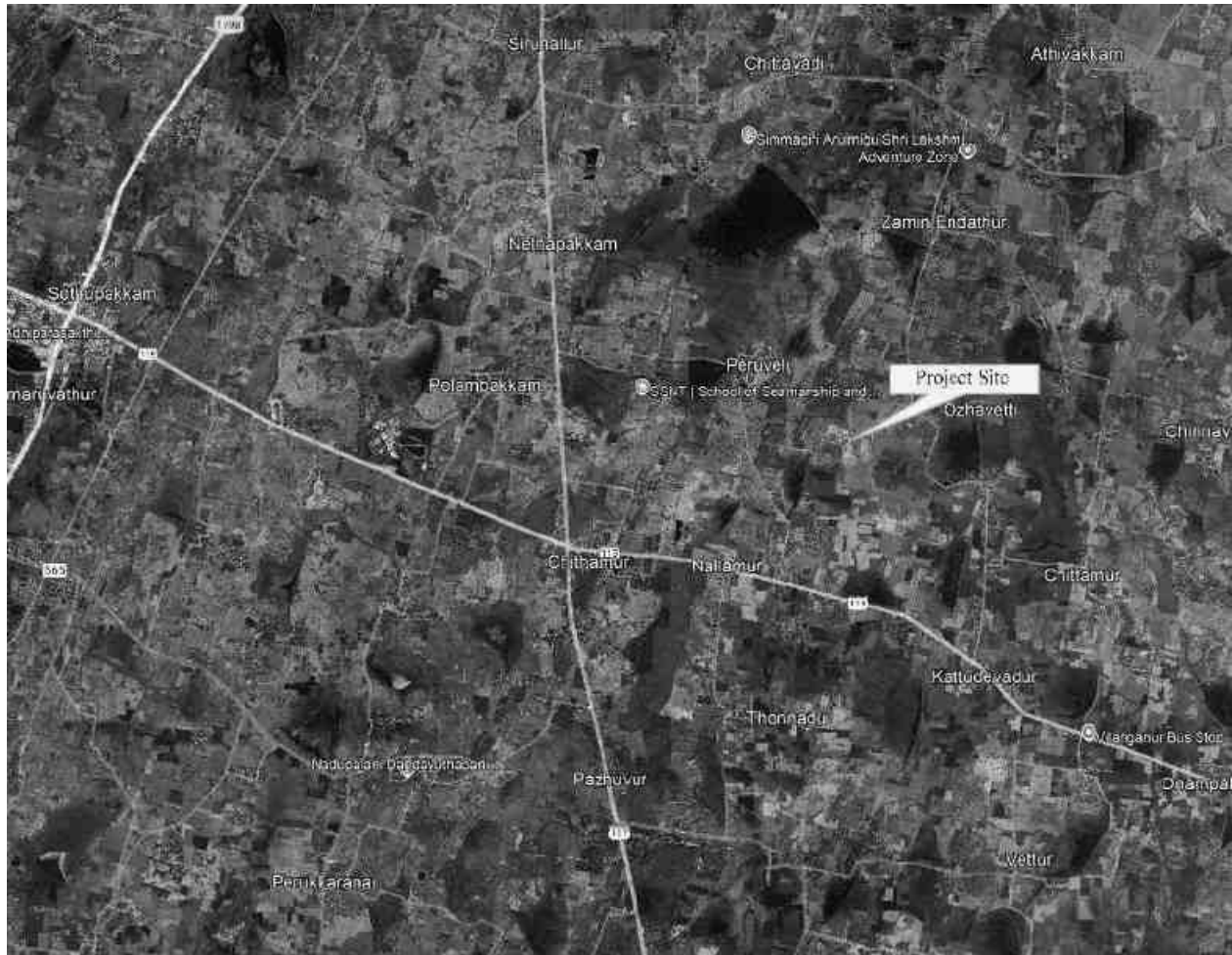
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Figure 2.1: Location Map



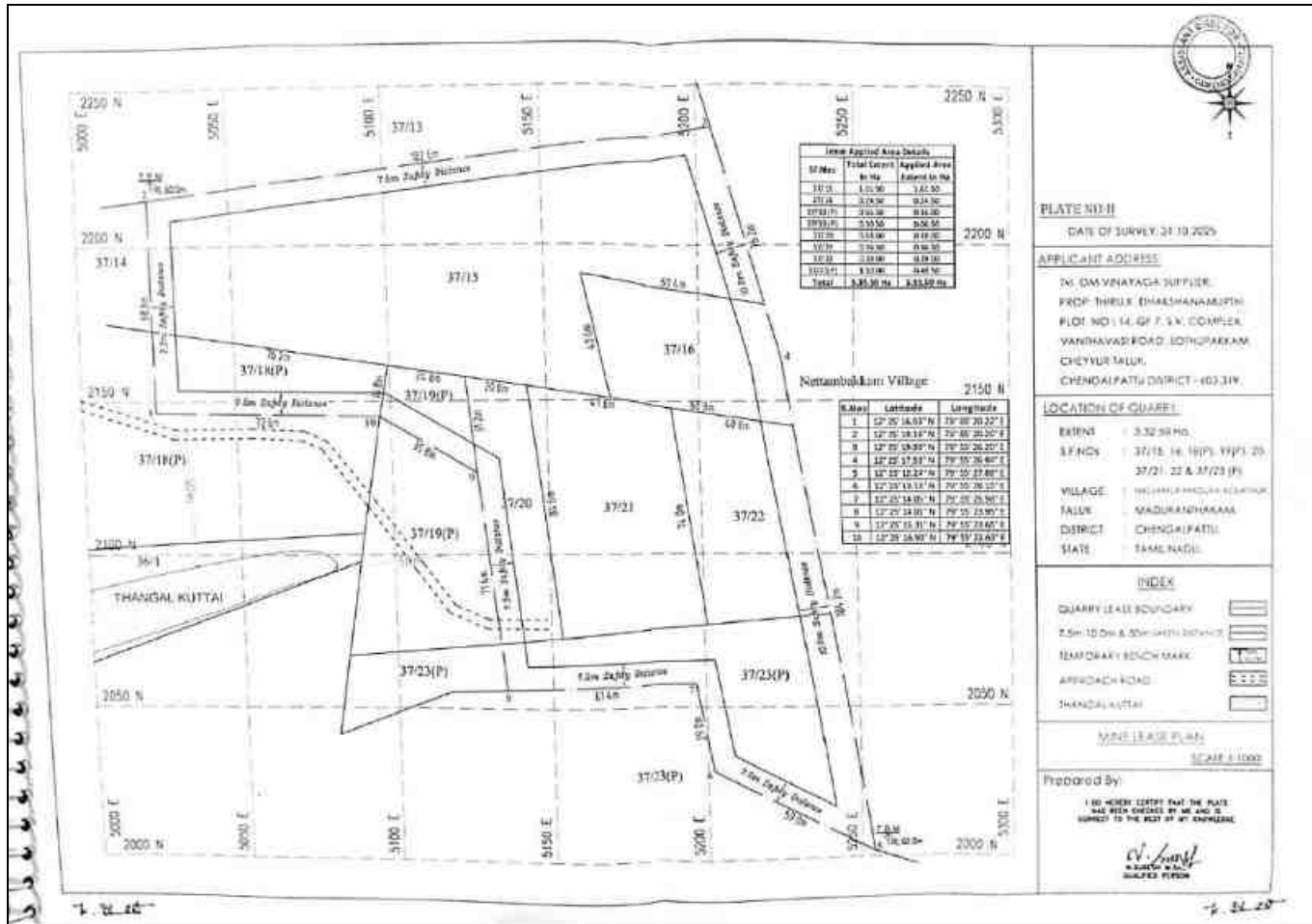
DRAFT EIA/EMP REPORT FOR ROUGHSTONE & GRAVEL QUARRY OF TVL. OM VINAYAGA SUPPLIER, PROP.K. DHAKSHANAMURTHI, IN S.F.NOS. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) OVER AN AREA OF 3.32.50HA IN NALLAMUR MADURA KOLATHUR VILLAGE, MADURANTHAKAM TALUK, CHENGALPATTU DISTRICT, TAMIL NADU.

Figure 2.2: Approachability Map



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Figure 2.3: Lease Plan



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Figure 2.4: Satellite Imagery Showing Corner Co-ordinates of the Project Area



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SITE PHOTOGRAPH



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Figure 2.5: Village Map

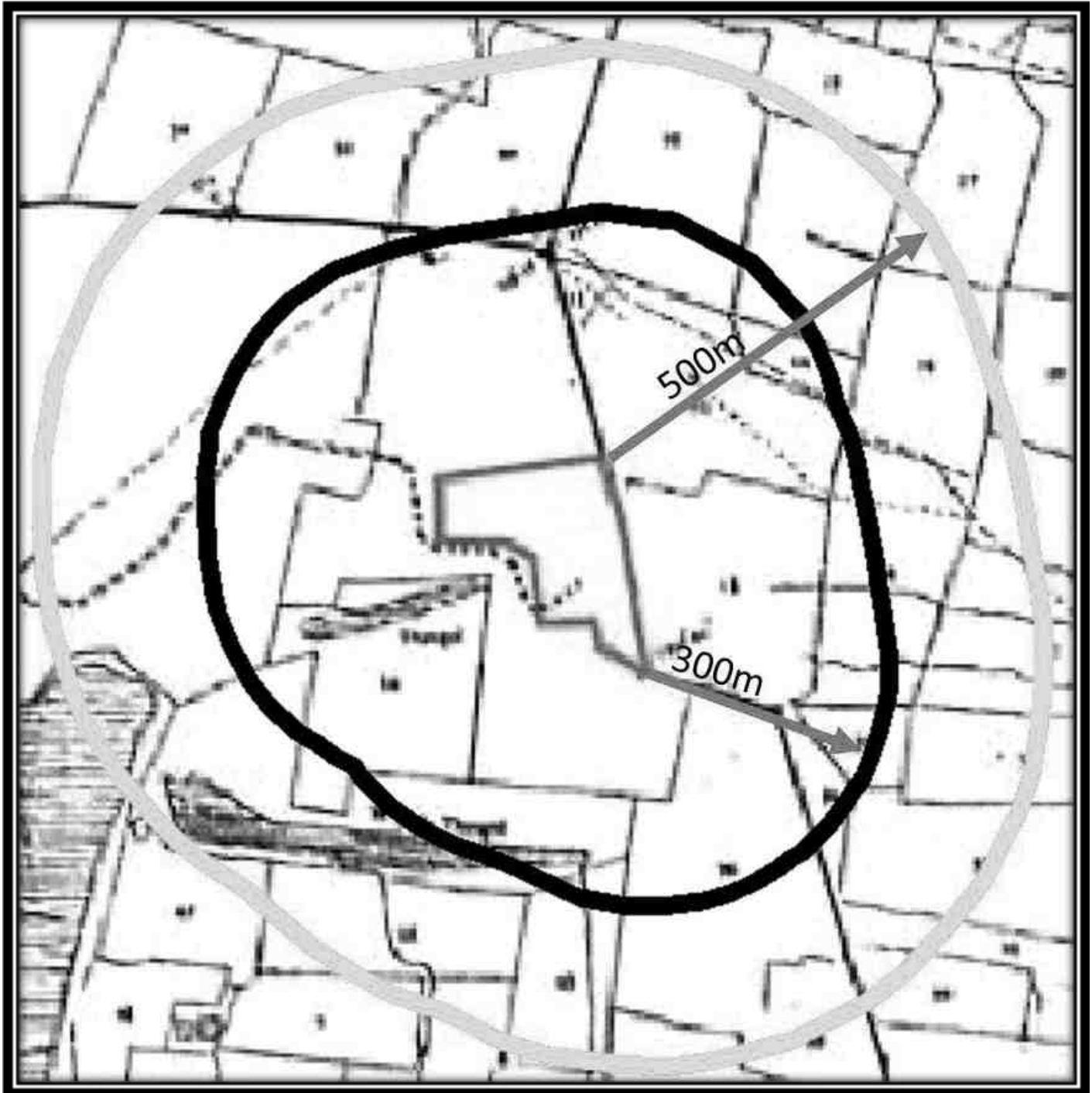
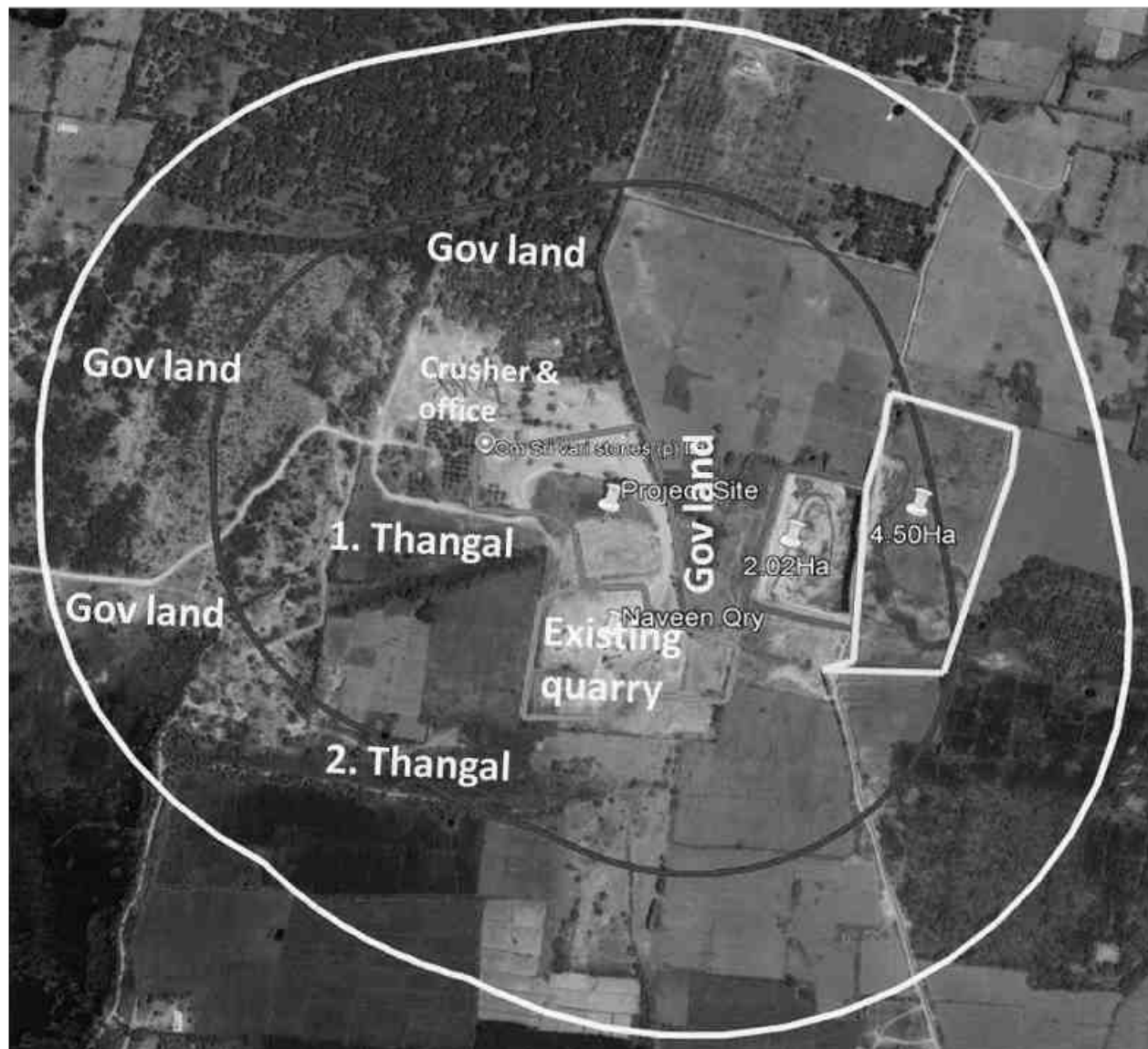


Figure 2.6: Details of features within 300m radius



As per the conditions of the Terms of Reference, the details of structures located within the 100m, 200m, 300m, radius are provided below.

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Table 2.2: Features within 300m radius

S.No	Features	Distance	Photos
1	Thangal – West of mine area	50m	
2	Thangal – West of mine area	230m	

2.4 LAND CLASSIFICATION:

The lease area of 3.32.50 Hectares in S.F.Nos. 37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22 & 37/23(P) is a Patta land, (No – 1604) in the name of Soma Sekar Reddy, one of the Partner of Naveen Enterprises. Registration of Consent from Pattadhars obtained and got registered. The survey no. wise area breakup has been provided below:



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Table 2.3: Survey Number wise Area Breakup

District	Taluk	Village	Survey Nos	Area in Ha	Ownership
Chengalpattu	Maduranthakam	Nallamur Madura Kolathur	37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22 &37/23(P)	1.61.50 0.24.50 0.16.00 0.06.50 0.18.00 0.36.50 0.29.00 0.40.50	It is a patta land(No – 1604) in the name of Soma Sekar Reddy, one of the Partner of Naveen Enterprises (Annexure no.IV of mine plan report). Consent from pattadar obtained and got registered..
Total Area in (Hectares)				3.32.50	

2.5 GEOLOGY:

The area is mainly composed of crystalline metamorphic complex. The rock type majorly noticed in the area for lease is Biotite Gneiss. Which is mainly composed Hornblende, biotite mica, Quartz, and Feldspar with some ferromagnesian minerals. The grain size is medium to coarse. The strike of the Charnockite formation is N35°E-S35°W with dipping towards 60°S.

The Biotite gneiss is part of peninsular gneisses, a high grade metamorphic rock. It is typically brown to black colour and grain size is coarse grained. It is suitable of construction purposes because of its high strength, colour, high density, low porosity etc.

The geological sequence:

Age	Formation
Recent	- Gravel – (2m)
	----- Unconformity -----
Archaean	- Migmatite, Charnockite & Khondalite



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Figure 2.7: Surface & Geological Plan

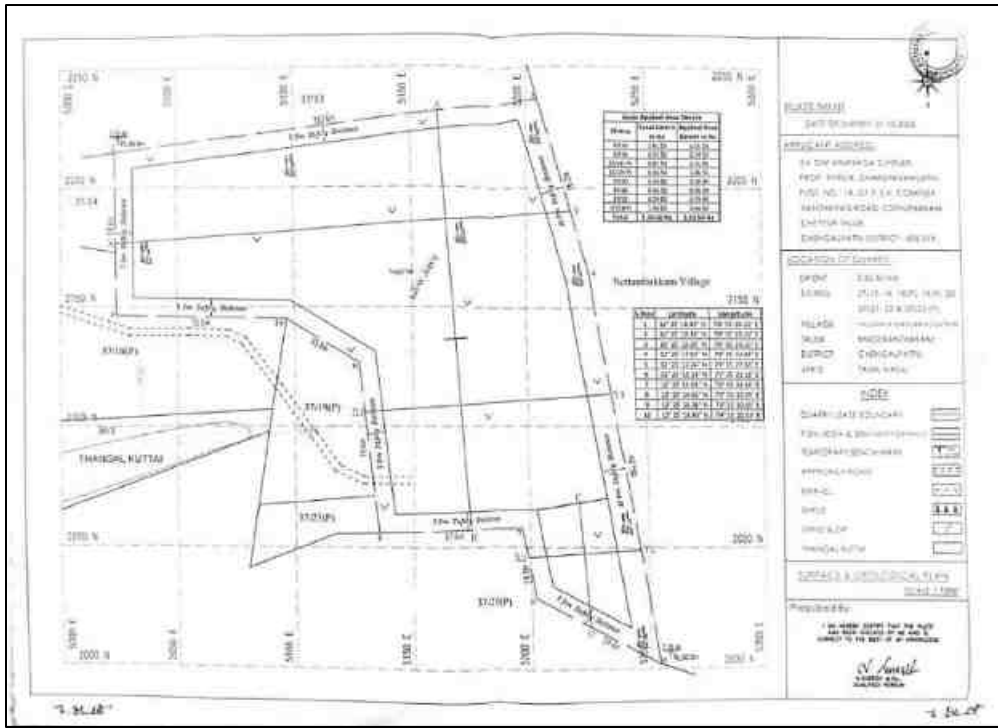
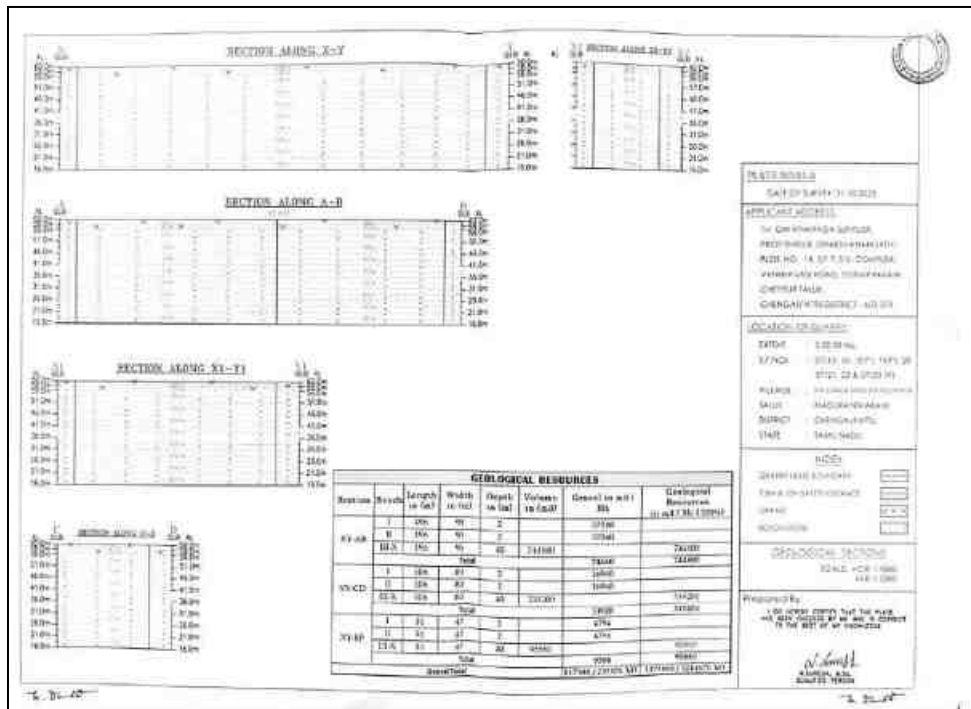


Figure 2.8: Geological Cross Section



2.6 SIZE AND MAGNITUDE OF THE OPERATION:

- The proposed mining will be done by open cast semi mechanized mining method.
- Life of mine will be 5 years.
- The Proposed Production for the 4,32,760 m³/11,90,090 MT of Rough Stone and 90,520 m³/ 1,81,040 MT of Gravel for the depth of 44 m
- There is no waste generation anticipated in this quarry operation since the entire excavated material will be utilised.

2.6.1 RESERVES:

Table 2.4: Geological and Mineable Reserves

Type of reserves	Rough stone in Cu.m.	Rough stone in MT.	Gravel in Cu.m.	Gravel in MT
Geological Resources	11,79,880	32,44,670	1,17,988	2,35,976
Mineable reserves	4,32,760	11,90,090	90,520	1,81,040

The mineable reserves is arrived after considering the safety distance as per the Precise area letter.

2.6.2 MINING METHOD:

Open cast semi mechanized mining using jackhammer drilling, blasting, and excavation through excavator & mineral transport through tippers will be carried out. The top gravel is soft and can be directly excavated. The rough stone will be blasted and then excavated. Bench height of 5.0m & 5m width is considered.

Table 2.5: Details of Equipments

SI. NO	NAME OF THE EQUIPMENT	CAPACITY	REQUIRED
1	Excavator	0.90m ³	2
2	Tipper	10/20T	4
3	Compressor	400psi	2
	Jack Hammer	32mm dia	6

2.7 PROPOSED SCHEDULE FOR APPROVAL AND IMPLEMENTATION:

The proponent propose to implement the production immediately after obtaining all the statutory approvals such as CTE, CTO, etc. The proponent will comply with the environmental clearance conditions during mining operations. The schedule of project implementation envisaged for this

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project is provided below. This is a tentative schedule subject to various factor, hence unforeseen variations may occur.

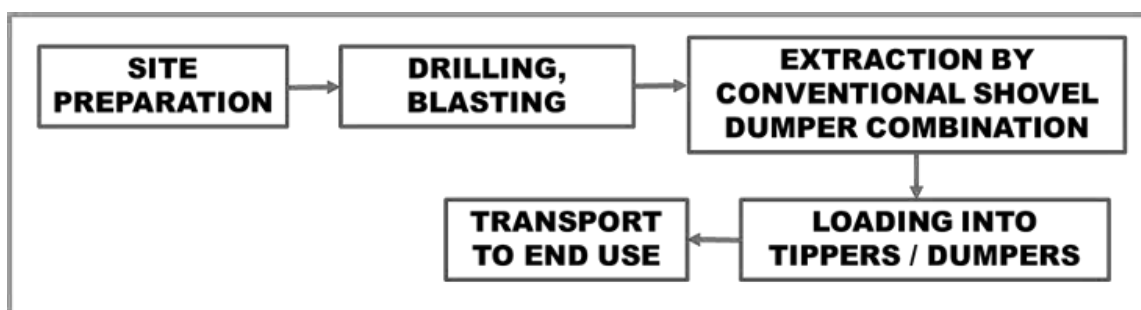
Table 2.6: Proposed Schedule of Implementation

Activities	Months					
	Zero Date	1	2	3	4	5
Obtaining Environmental Clearance						
Obtaining Consent from State Pollution Control Board						
Lease Execution						
Equipment mobilization and Commencement of Mining activity after following all the Statutory Requirements						

2.8 TECHNOLOGY AND PROCESS DESCRIPTION:

The quarry operations involve drilling, blasting, excavation, loading and transportation of Rough stone to buyers. The production of Rough stone in this quarry involves jackhammer drilling and blasting. The primary boulders are removed from the pits by excavators and further made to smaller sizes by rock breakers attached in excavators. It is a conventional opencast mechanized method of mining. The process flow diagram of this project is provided below.

Figure 2.9: Process Flow Diagram



2.9 PROJECT DESCRIPTION:

2.9.1 PAST PRODUCTION:

This is a fresh proposed quarry. No mining is carried out in the lease area. Crusher materials from the nearby crusher are temporarily stored in the lease area. For the crusher hopper on the northern side, part of the ramp is falling in the north periphery of the lease area which will be moved outside the lease.



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2.9.2 PRODUCTION & WASTE DISPOSAL:

The year wise production has been provided below:

Table 2.7: Production Schedule During Plan Period

Year	Roughstone (m3)	Gravel (m3)	Roughstone (MT)	Gravel (MT)
I	49,300	45,072	1,35,575.00	90,144.00
II	53,770	45,448	1,47,867.50	90,896.00
III	1,03,300	---	2,84,075.00	
IV	1,17,300	---	3,22,575.00	
V	1,09,090	---	2,99,997.50	
Total	4,32,760	90,520	11,90,090.00	1,81,040.00

Waste Disposal during Plan Period:

There is no waste generation anticipated in this quarry operation since the entire excavated material will be utilized. The top overburden in the form of Gravel will be loaded into tipper and marketed to needy customers on payment of necessary fees to Government. The rough stone will be excavated and loaded into tipper to the needy buyers for producing crusher aggregates, M Sand.



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Figure 2.10: Year wise Plan

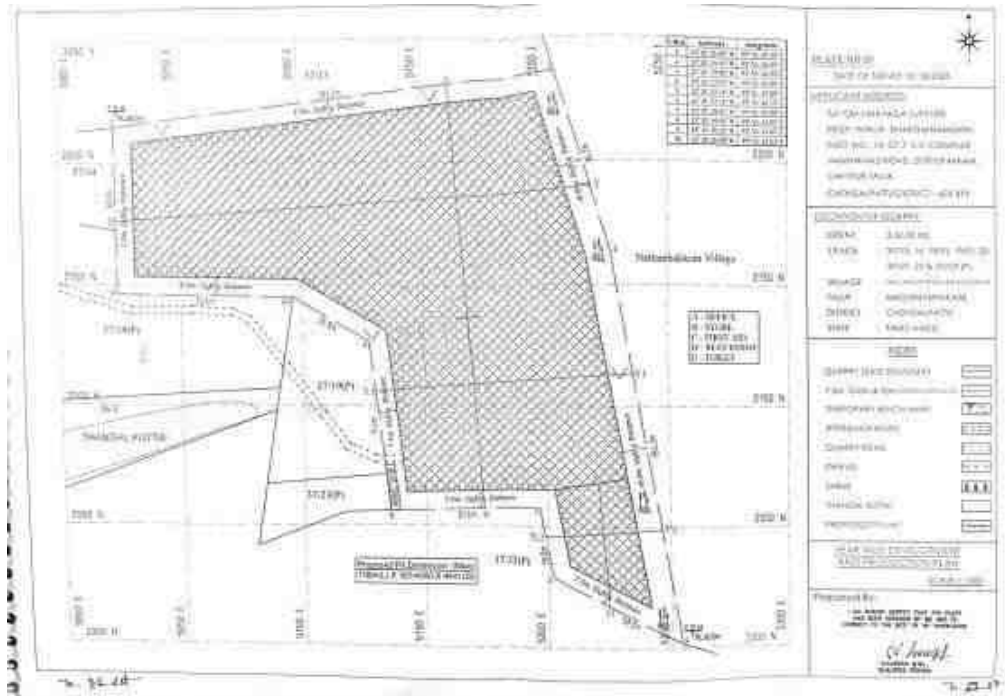
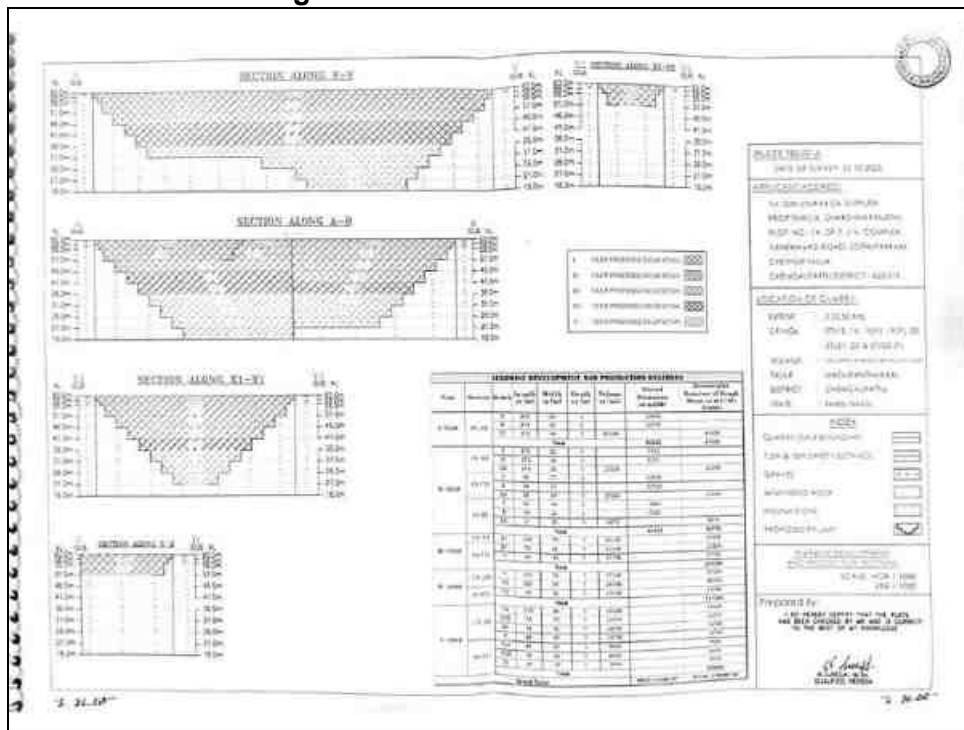


Figure 2.11: Year wise Cross Section



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CHAPTER-2: PROJECT DESCRIPTION

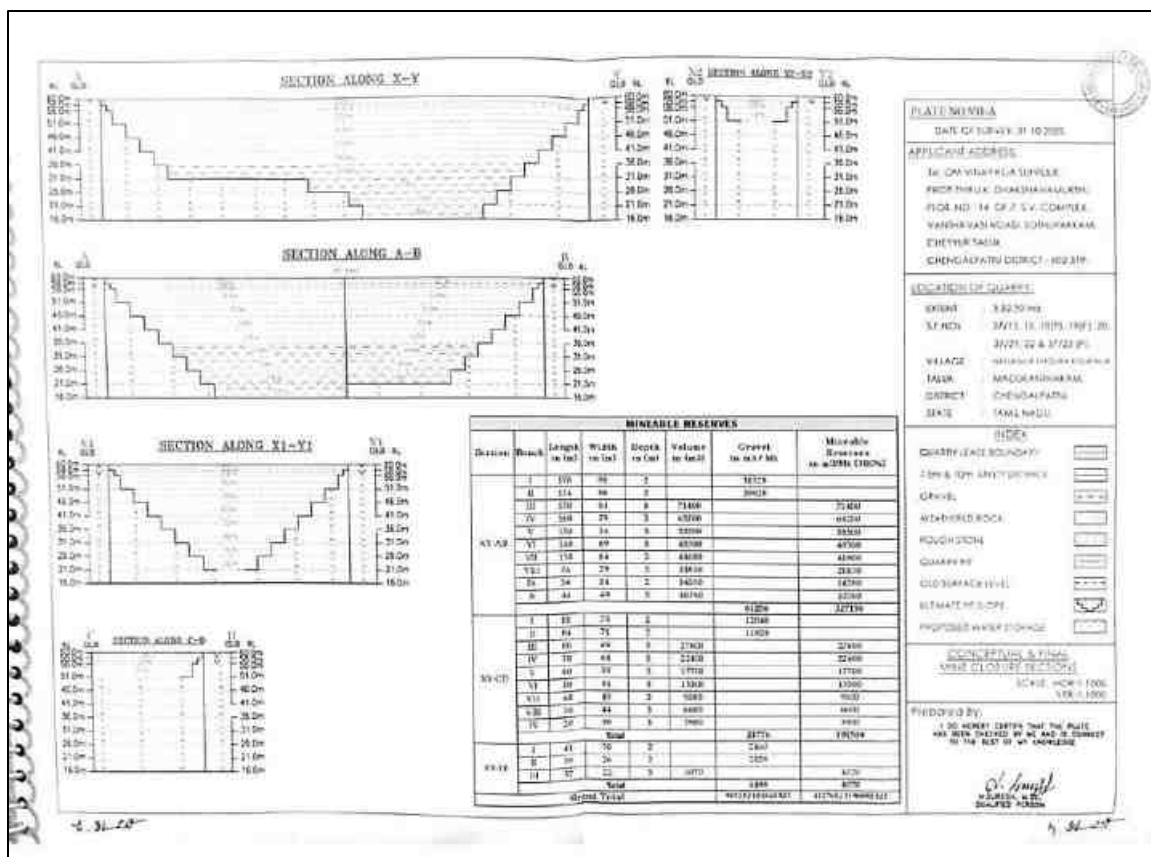
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Figure 2.13: Conceptual Cross Section



2.9.4 LAND DEGRADATION/UTILIZATION:

The land use pattern at the end of the 5 years period has been provided below:

Table 2.9: Land Use

Sl. No.	Land Use	Present Area (Hect)	Area in use during the 5 year period (Ha)
1.	Quarrying Pit	-	2.65.70
2.	Infrastructure	-	0.02.00
3.	Roads	-	0.02.00
4.	Green Belt	-	0.62.80
5.	Unutilized	3.32.50	-
	Total	3.32.50Ha	3.32.50Ha



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In the post mining stage, the mine pit area of 2.65.70Ha will be left as a water body. Plantation will be carried out over 0.02.00Ha and 0.02.00Ha will be left as road and infrastructure. 0.62.80 Ha will be covered with vegetation.

2.9.5 PROJECT REQUIREMENTS:

Table 2.10: Project Requirements

Manpower	35 people persons directly and indirectly.	
Water Requirement and Source	Water Requirement: 10 KLD	
	Details	Quantity (KLD)
	Drinking water and Domestic Use	1.0
	Dust Suppression	6.0
	Green belt	3.0
	Total	10.0
	Source: The required water will be sourced from rainwater collected in the mine pit.	
Power Requirement	All the equipment will be diesel operated. No electricity is needed for mining operation. The minimum power requirement for office, etc are and will be met from state grid.	
Site Services	This is a proposed project. Site services like mine office, first aid room, rest shelters, toilets etc. will be provided as semi-permanent structures.	
Project Cost	Rs. 57,15,000/-	
Funds allocated for socio-economic development	Rs.5.0 Lakhs is allocated under CER budget.	

2.10 DESCRIPTION OF MITIGATION MEASURES:

Scientific and systematic development of mines will be carried out by the project authorities for preserving as well as improving the environmental conditions in and around the mining lease area. Elaborate analysis on impacts and mitigation measures to be adopted on implementation of this project and the same has been dealt in Chapter- IV.

2.11 ASSESSMENT OF NEW & UNTESTED TECHNOLOGY:

There is no new technology that is being implemented. Opencast method of mining which is the proposed method of mining is a proven technology which is technologically and economically viable. No major technological failures are anticipated. A disaster management plan shall be put into place to take care of any unforeseen situation.



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2.12 CONCLUSION:

As good environmental preservation is one of the prime motive of the project proponent. It is expected that the project activity will not have any adverse impact on environmental equilibrium in the nearby area.

* * * * *



CHAPTER - III

DESCRIPTION OF ENVIRONMENT

CHAPTER 3

DESCRIPTION OF ENVIRONMENT

3.1 GENERAL: The existing environmental baseline data for the various environmental components were collected in the study area for the purpose of assessing the future impact on present environment due to the project activities.

Monitoring was carried out systematically and meticulously as per relevant IS codes, CPCB, MoEF&CC guidelines during **Postmonsoon Season (October 2025 to December 2025)** by Creative Engineers & consultants, Chennai. The details of the study are given in this chapter. For the purposes of this study, the area has been divided into two zones, namely, core and buffer zones. The entire lease area is considered to be the core zone while the buffer zone encompasses a 10 km radius from the periphery of the core zone. The details of villages falling in the study area and other features are given in Index Plan in Figure No - 3.1

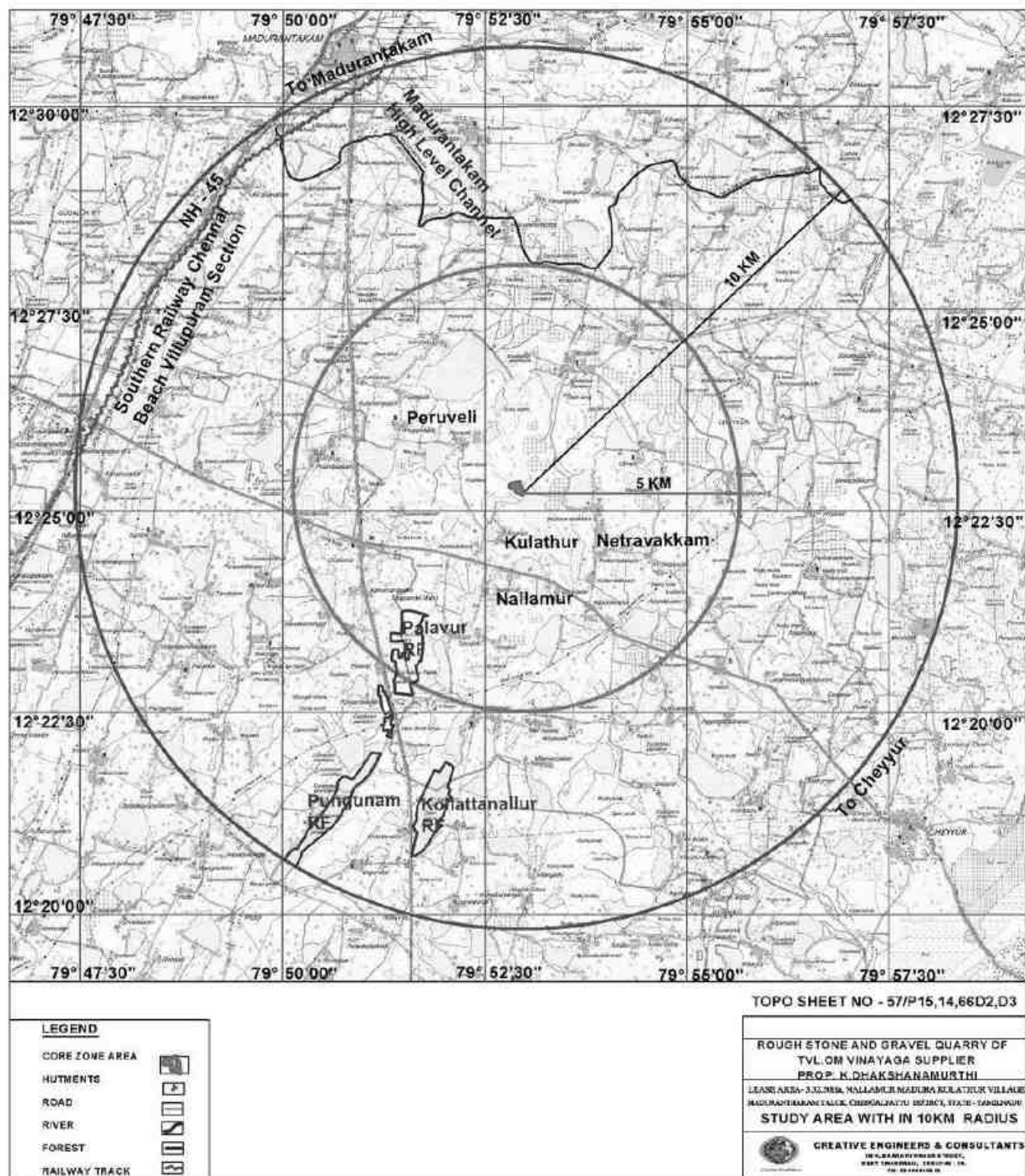
The primary data collection was done by means of field monitoring and the secondary data collection was obtained from published sources and government documents. The details of the baseline data collection which has been elaborated through the course of this chapter has been concised below:

Table 3.1: Type of Baseline Data

S.No	Studies	Parameters / Study	Location
1	Socio Economy	Demographic Data from Census 2011	Core and Buffer Zone
		Sample Survey	Buffer Zone
2	Micro Meteorology	Rainfall Data from IMD, Chengalpattu	Chengalpattu District
		Temperature, Humidity, Wind Speed, Wind Direction	1 Representative Location
3	Ambient Air Quality	PM10, PM2.5, SO2, NOx, CO	1 Core Zone, 4 Buffer Zone
4	Water Quality	Physical and Chemical Parameters	1 Core Zone, 4 Buffer Zone
5	Noise Levels	Ambient Noise	1 Core Zone, 4 Buffer Zone
6	Soil Quality	Physical and Chemical Parameters	1 Core Zone, 4 Buffer Zone
7	Land Use and Land Cover	Land use pattern within 10km study area using RS Satellite	Core and Buffer Zone
		Land use based on Census 2011	Core and Buffer Zone
8	Biological Environment	Flora and Fauna	Core Zone and Buffer Zone
9	Hydrology & Hydro Geology	Hydrogeological profile of the area	Core Zone and Buffer Zone

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Figure 3.1: Study Area Map



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Table 3.2: Environmental Setting of the Study Area

S.No	PARTICULARS	DETAILS
1	Nearest highway	➤ NH-179B –9.0Km– NW ➤ SH-115–2.0Km–S
2	Nearest Railway station	➤ Melmaruvathur - 9.0km (NW)
3	Nearest Airport	➤ Chennai – 67km - NE
4	Nearest major water bodies	➤ Thangal Kuttai – 50m – SW, ➤ Madurantakam high level channel – 5.10Km - N
5	Nearest town/City	➤ Melmaruvathur - 9.0km (NW)
6	Nearest villages	➤ Kulathur Village -1.0km (SW) ➤ Peruveli Village - 1.4km -NW ➤ Netravakkam Village - 1.7km -SE ➤ Nallamur Village - 2.2km - SW
7	Notified Archaeologically important places, Monuments	Nil within 10km radius
8	Local Places of Historical and Tourism Interest	Jain Caves – 6.7 km, NW
9	Environmental sensitive areas, Protected areas as per Wildlife Protection Act, 1972 (Tiger reserve, Elephant reserve, Biospheres, National parks, Wildlife sanctuaries, community reserves and conservation reserves)	Wild Life Sanctuary: Nil within 10Km radius, Vedanthangal Bird Sanctuary – >15km,NW
10	Reserved / Protected Forests	➤ Palavur RF – 3.50Km – SW, ➤ Kollattanallur RF – 6.40Km – SW ➤ Pungunam RF – 6.80Km - SW
11	Defence Installations	Nil within 10m radius
12	Seismic Zone	Zone – II (Least Active)
13	Other Industries in the study area	Other than crushers, Roughstone quarries, no other major industries are located in the study area, etc in the area.

3.2 SOCIO-ECONOMIC CONFIGURATIONS OF THE AREA:

3.2.1 GENERAL:

The Socio-Economic details of the study area are collected through:

- Identification of villages falling from the study area map with combined Taluk map.
- Collection of primary data through sample survey, village meetings and discussion.
- Collection of the demographic pattern of villages falling in the area through NIC 2011 census data.



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- Occupational structure of villages falling in the study area through NIC 2011 census data.
- Details of the amenities available in villages falling in the study area through NIC 2011 census data. The findings of the study are illustrated below:

3.2.2 SECONDARY DATA DESCRIPTION:

The proposed Roughstone and gravel quarry is located in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District. Based on 2011 census data, in the 10km radius there are 79 Rural villages from Two Taluks namely Maduranthakam, Cheyyur and 1 urban area namely Maduranthakam (M) belonging to (Kancheepuram) Chengalpattu District. The demographic profile of the study area is given below:

Table 3.3: Social, Economic and Demographic Profile of the Study Area

Details	Population	Percentage
A. Gender-wise distribution		
Male Population	72797	50.06
Female Population	72614	49.94
Total	145411	100
B. Caste-wise population distribution		
Scheduled Caste	62864	43.23
Scheduled Tribes	1651	1.14
Others	80896	55.63
Total	145411	100
C. Literacy Levels		
Total Literate Male	55031	37.84
Total Literate Female	45654	31.40
Others	44726	30.76
Total	145411	100
D. Occupational structure		
Main workers	46026	31.70
Marginal workers	23966	16.50
Total Workers	69992	48.20
Total Non-workers	75419	51.90
Total	145411	100

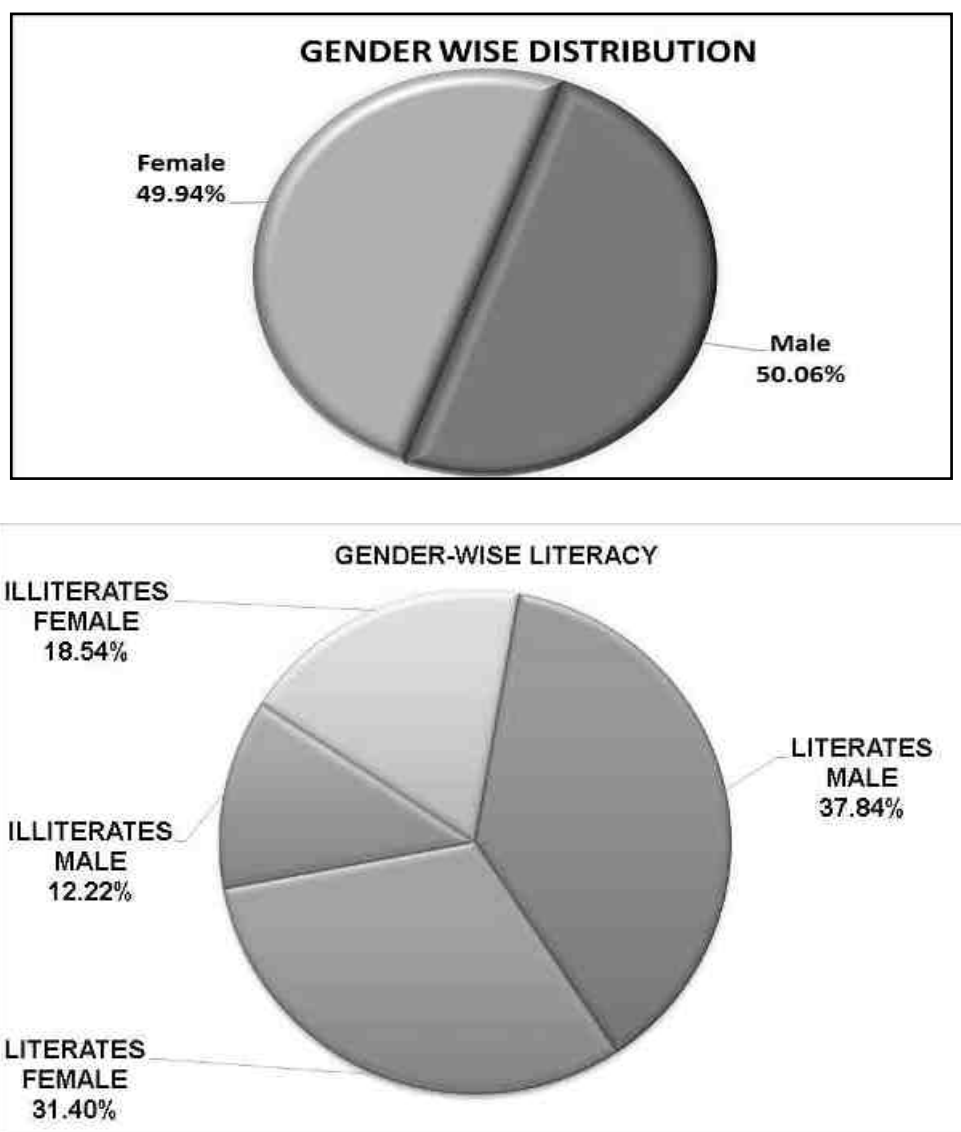
The total population of these 79 rural villages and 1 urban areas is 145411 in which the male population is 72797 (50.06%) and the female population is 72614 (49.94%). This shows that the male and female population ratio is almost equal. Among the total population 1.14% belong to Scheduled Tribes, 43.23% are Scheduled Caste and the balance 55.63% people belong to other castes. Among the total population, 69.24% of the people are literate.

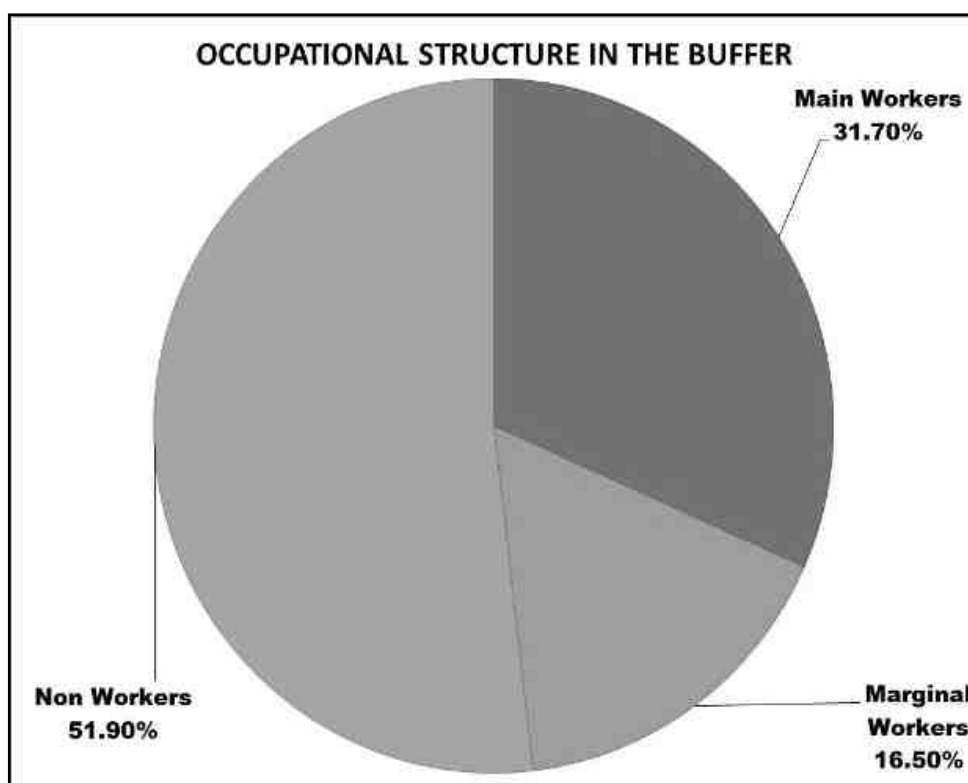
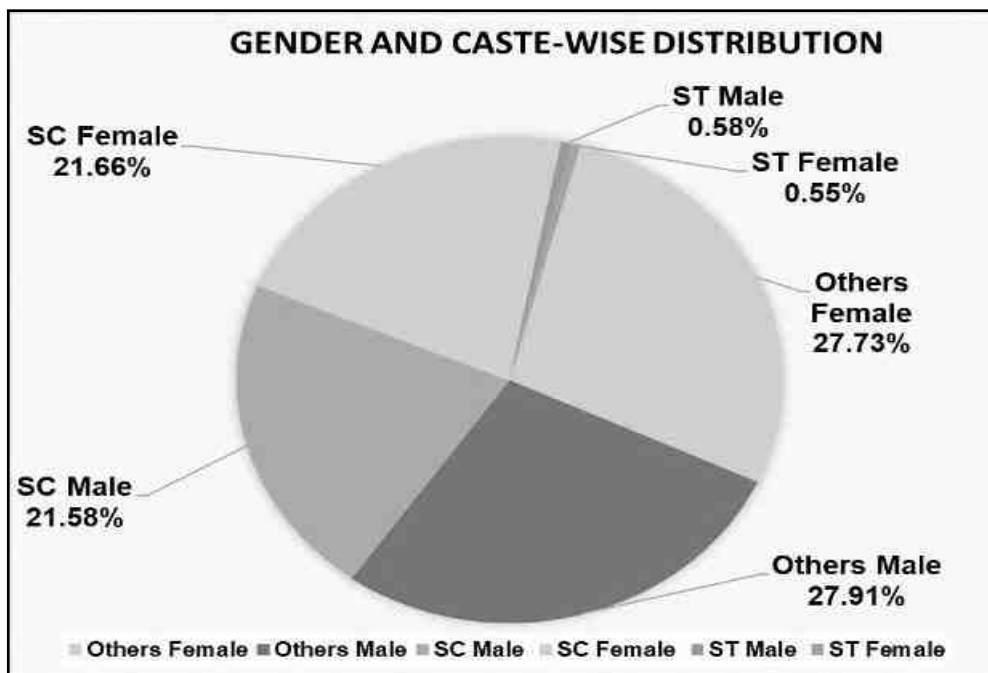


Among the total population, 37.84% are literate males and 31.40% are literate females. This shows that the male literates are slightly more than the female literates.

The village wise population, literacy levels and occupational structure details are given in **Annexures 4 and 5**. The demographic structure within the buffer zone is shown diagrammatically in **Figure No – 3.2**.

Figure 3.2: Demographic Structure in Buffer Zone





3.2.3 DETAILS OF AMENITIES:

Based on 2011 census data, regarding the educational facilities, there are totally 87 Primary Schools functioning in these 79 rural villages. Among them 54 villages have one primary school, 4 villages have 2 primary schools, 5 villages have 3 primary schools, 1 villages have 4 primary schools, 1 villages have 6 primary schools.

Table 3.4: Primary Schools in the Buffer Zone Rural Villages

S.No	No of Rural Villages	Number of primary schools	Totals
1	14	0	0
2	54	1	54
3	4	2	8
4	5	3	15
5	1	4	4
6	1	6	6
Total	79		87

Table 3.5: Education Facility Availability

PARTICULARS	Available in village
Govt Primary School	65
Govt Middle School	32
Govt Secondary School	0
Govt Senior Secondary School	0

Table 3.6: Healthcare Amenities Availability

PARTICULARS	Available in village
Community Health Centre	2
Primary Health Centre	5
Primary Health Sub Centre	28
Maternity And Child Welfare Centre	7
TB Clinic	5
Hospital Allopathic	0
Hospital Alternative Medicine	0
Dispensary	5
Veterinary Hospital	3
Mobile Health Clinic	0
Family Welfare Centre	5

Presently Melmaruvathur & Madhuranthagam have better Healthcare.

Table 3.7: Infrastructure Facilities

Particulars	Available in village
Tap Water-Treated	73
Covered Well	39
Hand Pump	24
Tube Wells/Borehole	31
Post office	4
bus services	25
Commercial Bank	5
Cooperative bank	14

The details of the educational, medical and infrastructural facilities available in the buffer zone is provided in **Annexures- 6-8**. The above figures area based on 2011 census data , however drastic improvements in the above said amenities are observed in the area.

3.2.4 SOCIO ECONOMIC SURVEY:

Study of the nearby villages to know about socio-economic conditions, including aspirations and requirements of the people show the following:

- Entire study area is well developed with reasonably good amenities like approach road bus facility, electricity, mobile phone connectivity, public distribution system, banks etc.
- Majority of the people are small farmers; land labourers and others are working in companies. Other occupations include construction workers, vendors, etc.
- Agriculture is predominantly rainfed, tank fed and largely dependent on the rain water.
- Dominant agricultural activities area observed proximate to the available irrigation source.
- Due to inconsistent rainfall, non availability of adequate labours, poor economics and other issues agriucultural activites have declined.
- Other allied activities livestock rearing and poultry farming are also found.
- Well, Bore well are the main source for drinking water. There are OHT's, Ground level tanks, public taps are available .

3.2.4.3 IDENTIFIED CER ACTIVITIES:

The following activities are identified based on the survey, which will be modified and implemented based on the needs and requirements of the local people:

- Desilting of nearby eri and its strengthening

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- Improvements in facilities in nearby schools

PHOTOS OF FACILITIES AVAILABLE NEARBY



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3.3 EXISTING ENVIRONMENTAL QUALITY

3.3.1 MICRO-METEOROLOGY

3.3.1.1 General:

The meteorological conditions in an area regulate the dispersion of air pollutants being released into the atmosphere. The principal variables are horizontal convective transport i.e. wind speed and direction and vertical convective transport, i.e. mixing height, stability class and topography of the area.

3.3.1.2 Historical Meteorological Data:

A. Cyclones And Depressions

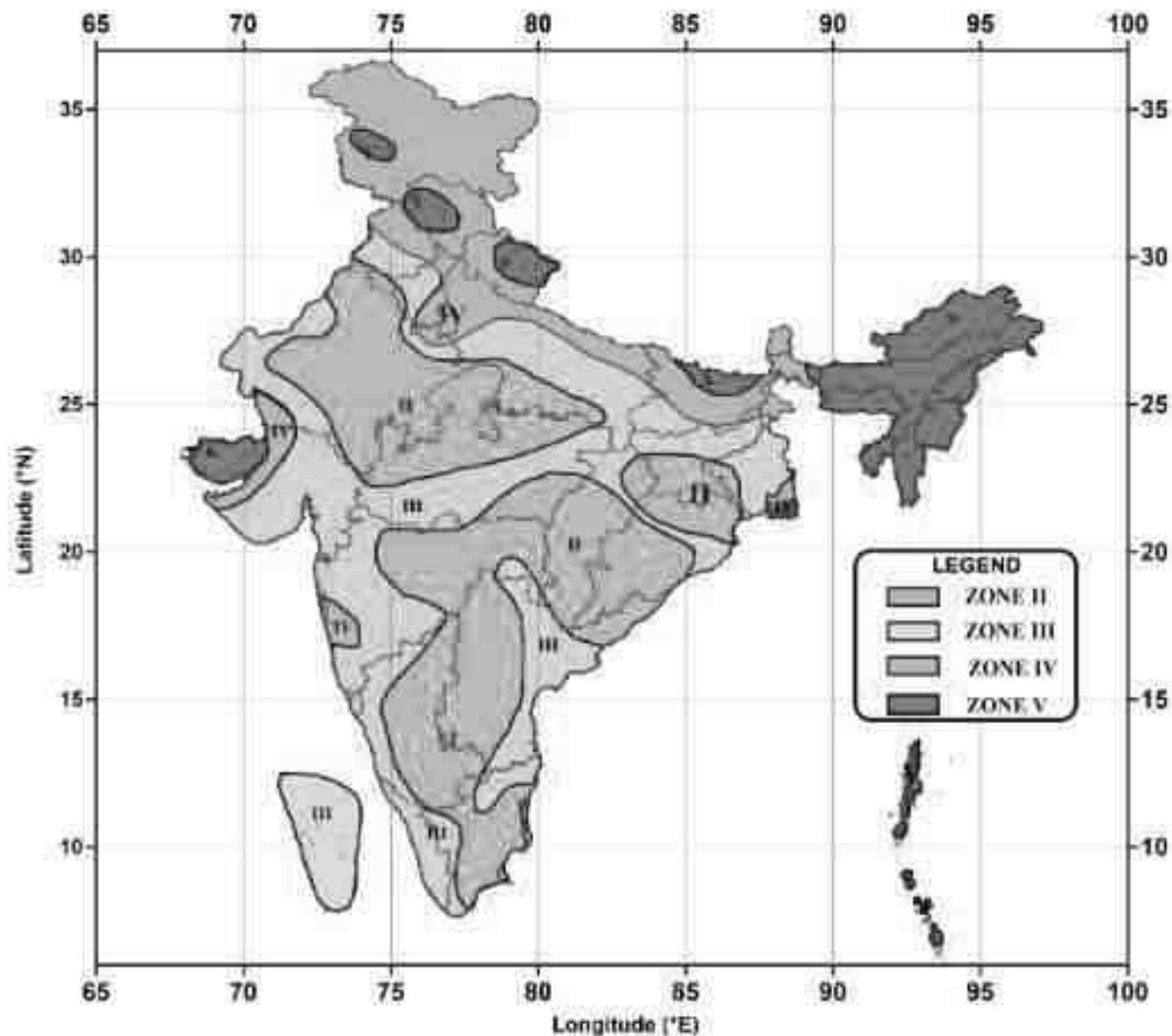
Cyclonic storms and depressions in Bay of Bengal affect the East Coast of India. Isolated ones, forming in January to March in the South Bay of Bengal move West-North-westwards and hit Tamil Nadu coast. In April and May, cyclonic storms and depressions form in the South and adjoining Central Bay and move initially to the Northwest, then North and then recurve to the Northeast striking the Arakan coasts in April and Andhra Pradesh (AP)-Orissa-West Bengal (WB) – Bangladesh coasts in May. Most of the monsoon (June – September) storms develop in the central and in the north bay and move west – north - westwards affecting AP – Orissa – WB coasts. Post monsoon (October – December) storms form mostly in the south and central Bay, recurve between 150 and 180 N affecting Tamil Nadu – AP – Orissa – WB – Bangladesh coasts. **Figure No - 3.3** depicts the history of cyclonic storms, which have struck the Indian coast during the months of October, November and December during the last 75 years. (Source: **Vulnerability Atlas of India series, above figure accessed from www.maps of india.com**). East coast is prone to cyclonic storms round the year but mostly these occur prior to SW i.e., in May and after SW monsoon i.e., in October and November.



B. SEISMIC DATA

From the seismic zone map of India as depicted in the **Figure No - 3.4**, it can be seen that the project site and study area falls in the Zone – II and is described as least active zone.

Figure 3.4: Seismic Zone Map of India



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C. Climate and Rainfall Data:

Rainfall

Kancheepuram district generally experiences hot and humid climatic conditions. The district receives the rain under the influence of both southeast and northeast monsoons. Most of the precipitation occurs in the form of cyclonic storm caused due to the depressions in Bay of Bengal chiefly during northeast monsoon period. The southwest monsoon rainfall is highly erratic and summer rains are negligible. The normal annual rainfall over the district varies from 1105 mm to 1214mm.

Temperature

High relative humidities between 58 and 84% prevail throughout the year. Relative humidity is maximum in the morning and minimum in the evening. The minimum and maximum temperature are 20°C & 37°C. The daytime heat is oppressive and the temperature is as high as 43°C. Rainfall data collected by kanchipuram Rain gauge station for the period of 2011 to 2023 is given in below Table:3.8

Table 3.8: Average Annual Rainfall Data (2011 – 2023)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Cumulative
	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)	Actual (mm)
2011	6.37	51.44	0	42.51	23.82	57.75	167.88	231.13	116.9	196.37	320.6	130.94	1346
2012	4.31	0	1.8	46.05	7.7	63.62	118.63	144.5	129.86	255.19	190.05	218.88	1181
2013	0.05	28.82	13.56	0.17	19.56	68.68	132.87	139.29	160.92	141.1	126.66	70.64	902.3
2014	0.7	7.09	0	0	37.88	98.12	52.85	113.97	129.27	204.08	141.35	123.53	908.8
2015	1.03	0	0.09	54	39.83	28.01	95.28	123.29	65.75	177.14	1098.4	625.56	2308
2016	0.22	0	0	0	188.74	60.8	65.2	130.95	215.02	24.61	26.64	229.11	941.3
2017	4.87	0	0.01	0	1.85	35.26	79.09	137.3	44.71	141.31	232.8	63.62	740.8
2018	1.21	0.47	3.98	0.71	0.44	41.11	35.06	162.62	53.53	142.18	228.08	44.44	713.8
2019	0.01	0.24	0.01	0.34	3.05	34.86	140.4	127.11	93.13	317.81	204.02	212.06	1133
2020	51.19	0.45	0	9.54	1.03	32.61	197.65	67.54	90.82	153.66	496.96	256.44	1358
2021	179.77	12.09	0	17.25	32.48	34.4	145.04	140.28	111.76	259.83	950.87	114.58	1998
2022	39.98	0	4.05	0.93	43.17	70.67	110.88	133.81	74.36	187.99	400.5	224.83	1291
2023	3.05	0.37	27.86	5.87	72.49	131.44	108.69	141.33	298.11	54.23	362.54	346.12	1552
Normal	22.4	9.7	4.7	14.2	41.2	56.6	116.1	157.9	132.1	247.5	317.4	132.3	1252.1

Source – IMD GRID – Kanchipuram Report



Figure 3.5: Total Rainfall

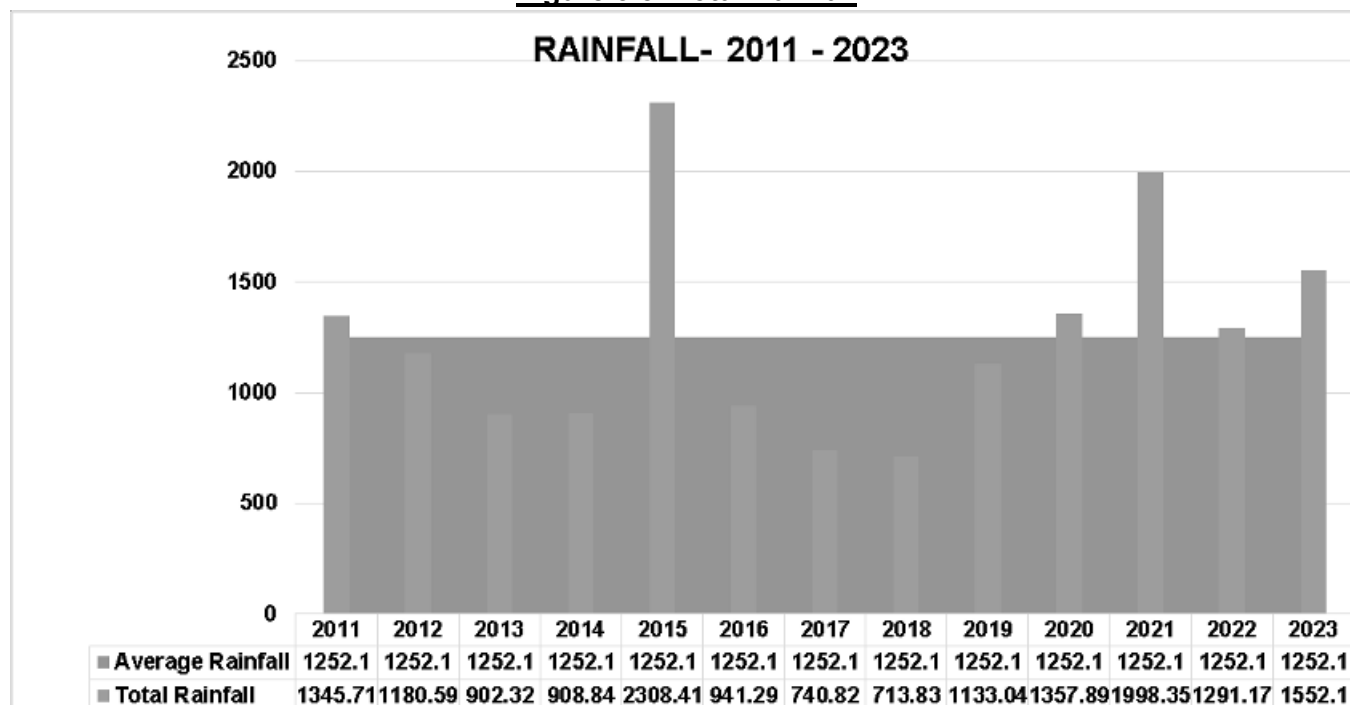
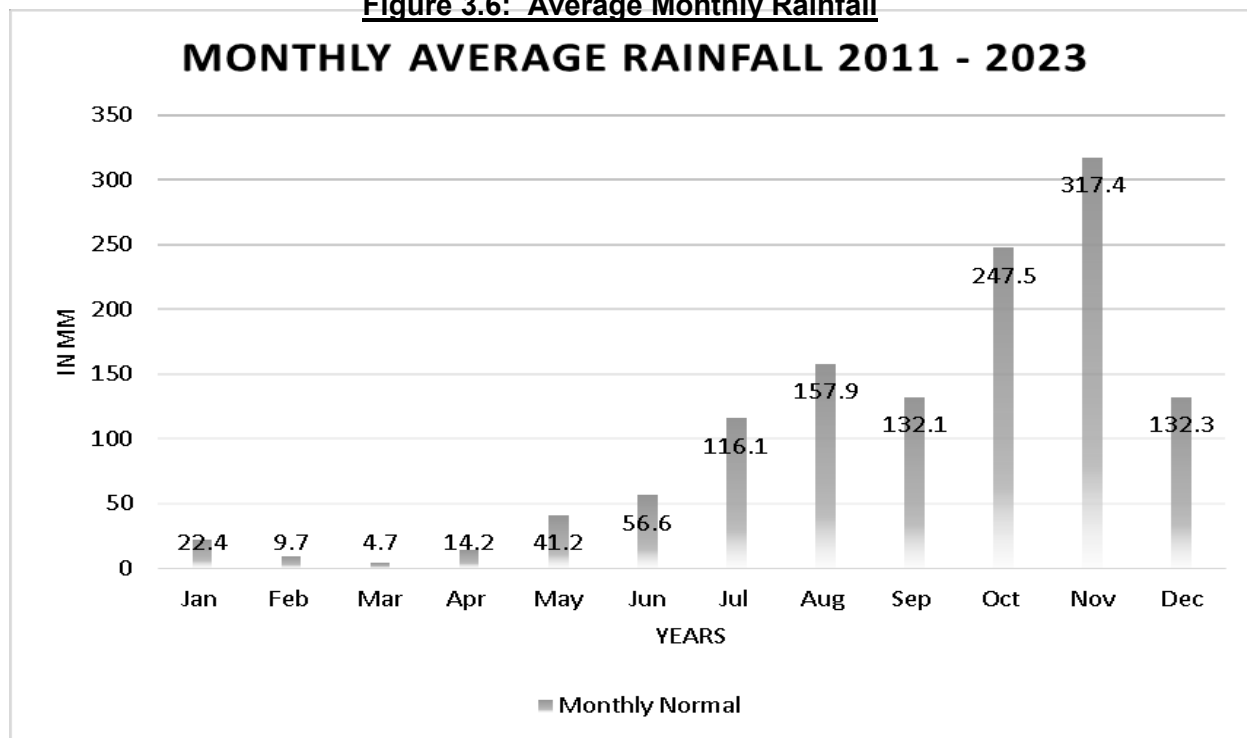


Figure 3.6: Average Monthly Rainfall



3.3.1.3 SITE SPECIFIC METEOROLOGICAL DATA:

Micrometeorology and microclimatic parameters of wind velocity, wind direction, ambient temperature, relative humidity, were collected throughout the monitoring period.

DATA ANALYSIS:

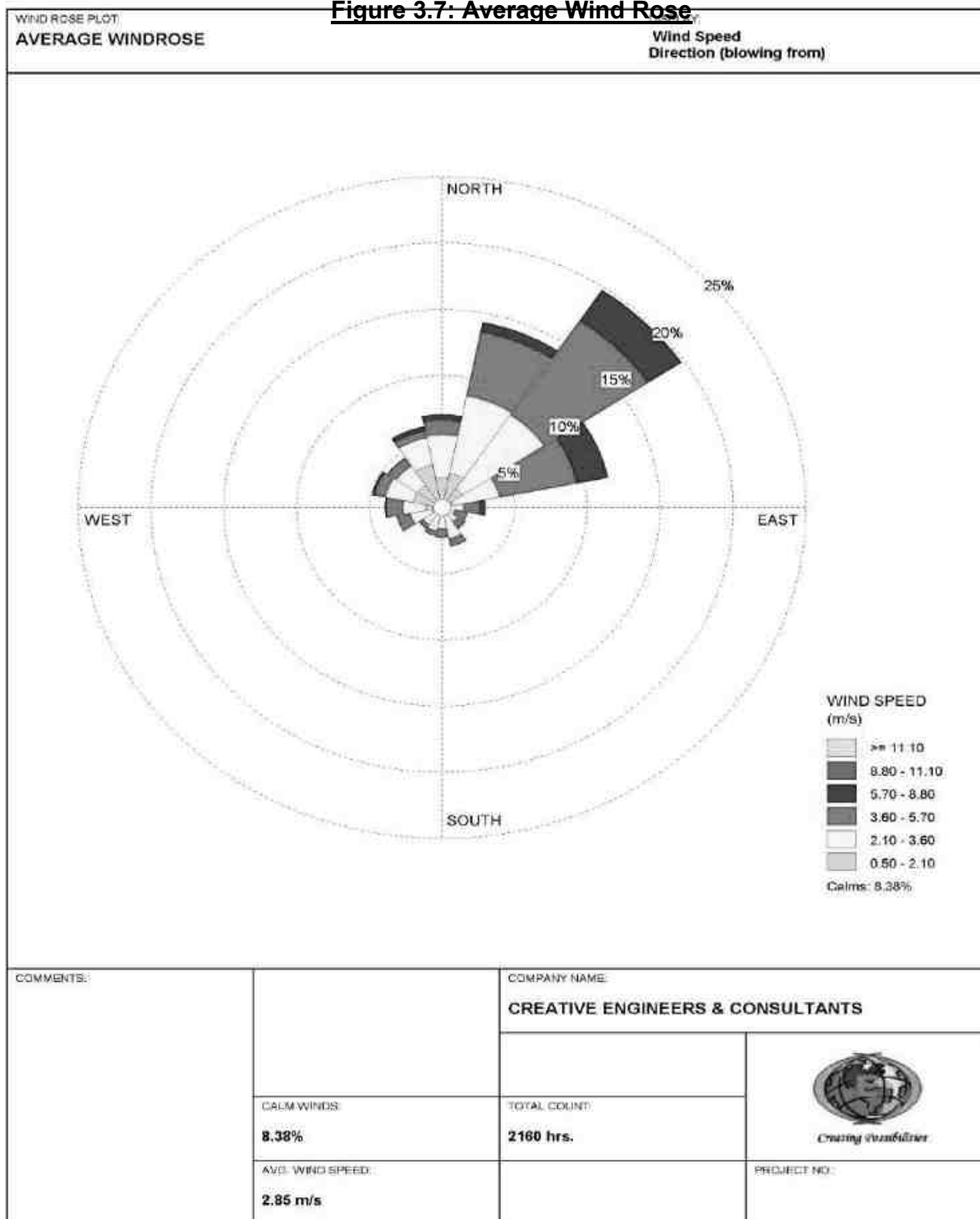
The temperature in the area during the study period ranged from 19.9°C to 35.0°C while the relative humidity varied between 51.0 - 98%. The wind speed during the study period ranged from <1.8 to 26.6 km/h. The predominant wind direction is from NE. The meteorological data are presented in **Table no – 3.9**. The average wind rose is depicted in **Figure No - 3.7**.

Table 3.9: Meteorological Data

Season: Winter Season (October 2025 to December 2025)			
S.NO	PARAMETERS	MIN	MAX
1	Temperature In °c	18.0	35.0
2	Humidity in %	51.0	98.0
3	Wind speed in km/hr	<1.8	26.6
4	Predominant wind direction from	NE	

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Figure 3.7: Average Wind Rose



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3.3.2 AMBIENT AIR QUALITY (AAQ):

Ambient Air quality has been assessed through a network of 5 ambient air quality stations. The following methodology has been considered for design of ambient air quality monitoring network in the area. Based on these criteria, 5 numbers of air sampling stations were selected in the area as shown below in Table No.3.10.

- ❖ Topography / terrain of study area.
- ❖ Populated areas within study area.
- ❖ Residential /sensitive areas within study area.
- ❖ Magnitude of surrounding industries.
- ❖ Representation of regional background levels.
- ❖ Representation of cross sectional distribution in down wind direction.
- ❖ Predominant wind direction and wind pattern.

Table 3.10: Air Quality Monitoring

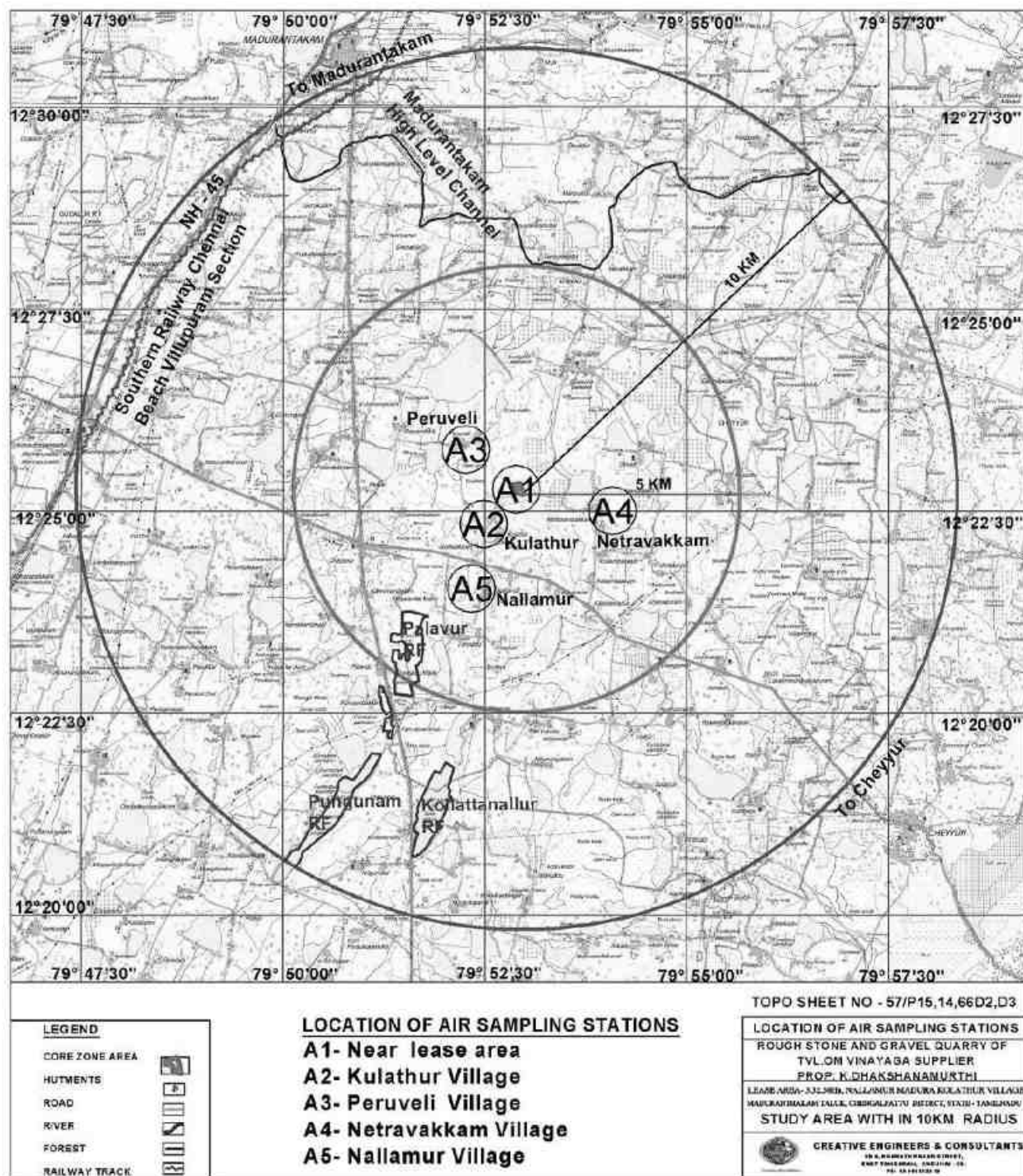
1.	Monitoring Period	Postmonsoon Season (October 2025 to December 2025)
2.	Monitoring Location	The location map showing Ambient Air Quality study stations are shown in Figure No- 3.8 .
3.	Methodology	
	Parameter	Protocol
	a. Particulate Matter (PM10)	Gravimetric (IS 5182: Part 23:2017)
	b. Particulate Matter PM2.5	Gravimetric (IS 5182: Part 24:2019)
	c. Sulphur Dioxide	Colorimetric (West & Gaeke Method) (IS 5182: Part 02: 2017)
	d. Nitrogen Dioxide	Colorimetric(Modified Jacob & Hocheiser Method) (IS 5182: Part 06:2017)
	e. Carbon Monoxide	CO Monitor
	f. Silica	Colorimetric (Molybdate Method) NIOSH 7601 -2003
4.	Monitoring Frequency	2 days in a week, 4 weeks in a month for 3 months in a season.

Table 3.11: Air Quality Monitoring Locations

S.NO	LOCATION CODE	LOCATION	DISTANCE FROM CORE ZONE (KM)	DIRECTION
1	A1	Near Lease Area	-	-
2	A2	Kulathur Village	1.0Km	SW
3	A3	Peruveli Village	1.4km	NW
4	A4	Netravakkam Village	1.7km	SE
5	A5	Nallamur Village	2.2km	SW

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Figure 3.8: Ambient Air Quality Study Stations



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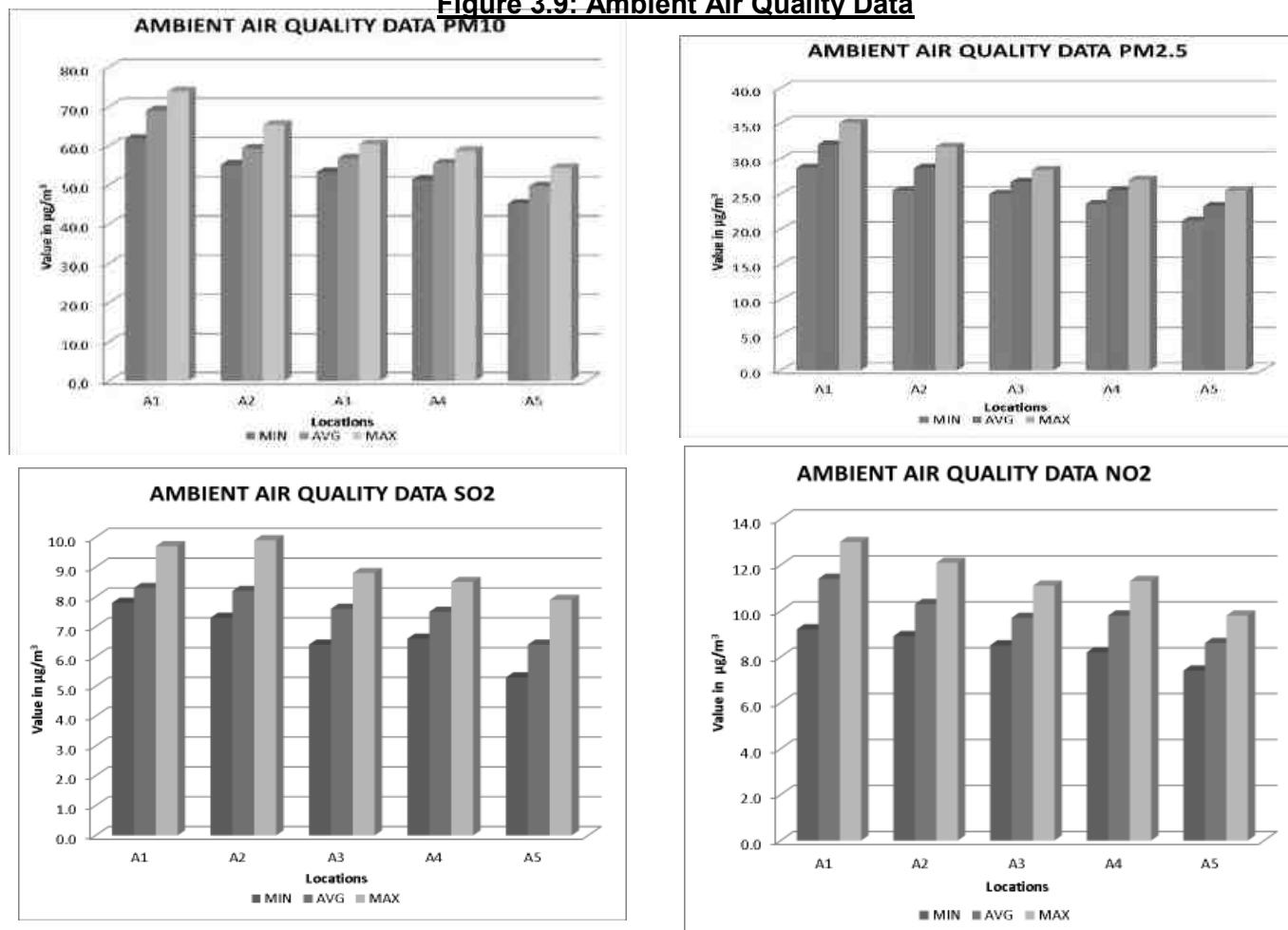
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Table 3.12: Ambient Air Quality Data

PARAMETERS	Cat.*	All Value in $\mu\text{g}/\text{m}^3$											
		PM ₁₀			PM _{2.5}			SO ₂			NO ₂		
LOCATIONS		MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX	MIN	AVG	MAX
A1-Near Lease Area	I	61.7	69.0	73.8	28.7	32.0	35.1	7.8	8.3	9.7	9.2	11.4	13.0
A2-Kulathur Village	R	55.1	59.3	65.3	25.5	28.7	31.7	7.3	8.2	9.9	8.9	10.3	12.1
A3-Peruveli Village	R	53.2	56.7	60.4	25.0	26.7	28.4	6.4	7.6	8.8	8.5	9.7	11.1
A4-Netravakkam Village	R	51.3	55.5	58.7	23.6	25.5	27.0	6.6	7.5	8.5	8.2	9.8	11.3
A5-Nallamur Village	R	45.2	49.6	54.3	21.2	23.3	25.5	5.3	6.4	7.9	7.4	8.6	9.8
NAAQ Limits		PM ₁₀			PM _{2.5}			SO ₂			NO ₂		
	*	100			60			80			80		
	**	100			60			80			80		

***Note:** Category: * - Industrial, Residential, Rural and other area, ** – Ecologically Sensitive Area (notified by Central Government)

Figure 3.9: Ambient Air Quality Data



3.3.2.1 Results and Discussion:

The AAQ monitored data for all locations for above parameters are shown in **Table No - 3.12** and in **Figure No - 3.9**. Ambient Air Quality data during the study period is given in **Annexure-9**. From the table it is seen that, in the ambient air, the PM₁₀ values were in the range of 45.2-73.8 µg/m³. PM_{2.5} values were in the range of 21.2 – 35.1 µg/m³. SO₂ levels were ranging from 5.3– 9.9 µg/m³. NO₂ levels were ranging from 7.4-13.0 µg/m³. The existing Ambient Air Quality levels for PM₁₀, PM_{2.5}, SO₂ and NO₂, are within the NAAQ standards prescribed CPCB limits of 100 µg/m³, 60 µg/m³, 80 µg/m³ & 80 µg/m³. The CO values in all the locations were found to be below detectable limit. Silica values in the study area are found to be below detectable limit. (Detection limit – 0.05 mg/m³)

3.3.3 WATER ENVIRONMENT:

Assessment of baseline data on water environment includes Identification of water resources, Collection of water samples and Analyzing water samples collected for physico-chemical parameters as per standards. The water sampling was carried out for 5 locations. Details of the same has been provided below:

Table 3.13: Water Quality Monitoring

1.	Monitoring Period		Postmonsoon Season (October 2025 to December 2025)		
2.	Monitoring Location		The location map showing water sampling locations are given in Figure No.3.10.		
	Code	Location	Sample Type	Distance	Direction
	W1	Near Lease Area	Bore Well	-	-
	W2	Kulathur Village	Borewell	1.0Km	SW
	W3	Peruveli Village	Borewell	1.4km	NW
	W4	Netravakkam Village	Borewell	1.7km	SE
	W5	Nallamur Village	Borewell	2.2km	SW
3.	Methodology		Sampling - IS 3025 Part - I		
			Analysis – IS 3025 relevant parts / APHA 23rd Edition		

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Figure 3.10: Location of Water Sampling Stations



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Table 3.14: Summary of Water Quality Data

Season	Postmonsoon Season (October 2025 to December 2025)	
Monitoring Locations	5 locations	
Parameters	Range of values	Limits*
pH at 25 °C	7.22 – 7.66	6.5-8.5
Total Dissolved Solids, mg/L	472 – 750	2000
Chloride as Cl-, mg/L	96.9 – 230	1000
Total Hardness (as CaCO ₃), mg/L	293 – 498	600
Total Alkalinity (as CaCO ₃), mg/L	256– 329	600
Sulphates as SO ₄ ²⁻ , mg/L	64.5 – 169	400
Iron as Fe, mg/L	0.02 - 0.07	0.3
Nitrate as NO ₃ , mg/L	2.47 – 5.64	45
Fluoride as F, mg/L	0.35 – 0.58	1.5

Note : * IS: 10500 Norms in the absence of an alternative source as per Drinking Water Specifications.

3.3.3.1 Results and Discussion:

The results of the water sample analysis are shown in Table No - 3.14. The pH values were ranging in between 7.22 – 7.66, TDS values were in the range of 472 – 750mg/L. Chloride values were ranging from 96.9 – 230mg/L. Iron content was found to be in the range 0.02-0.07mg/L. The water quality of ground water is found to be within the prescribed Permissible limits of IS: 10500 Norms in the absence of an alternative source as per Drinking Water Specifications. The water quality data is provided in **Annexure-10**.

3.3.4 NOISE ENVIRONMENT:

Opearional phase of this project may lead to increase noise levels from the existing levels at least in and around the project area. As noise level beyond permissible limits will cause adverse impacts on the environment, it has become imperative to assess the noise levels in and around the mine area. Noise level measurements were taken at the 5 locations during the monitoring period. Details of the same are provided below:

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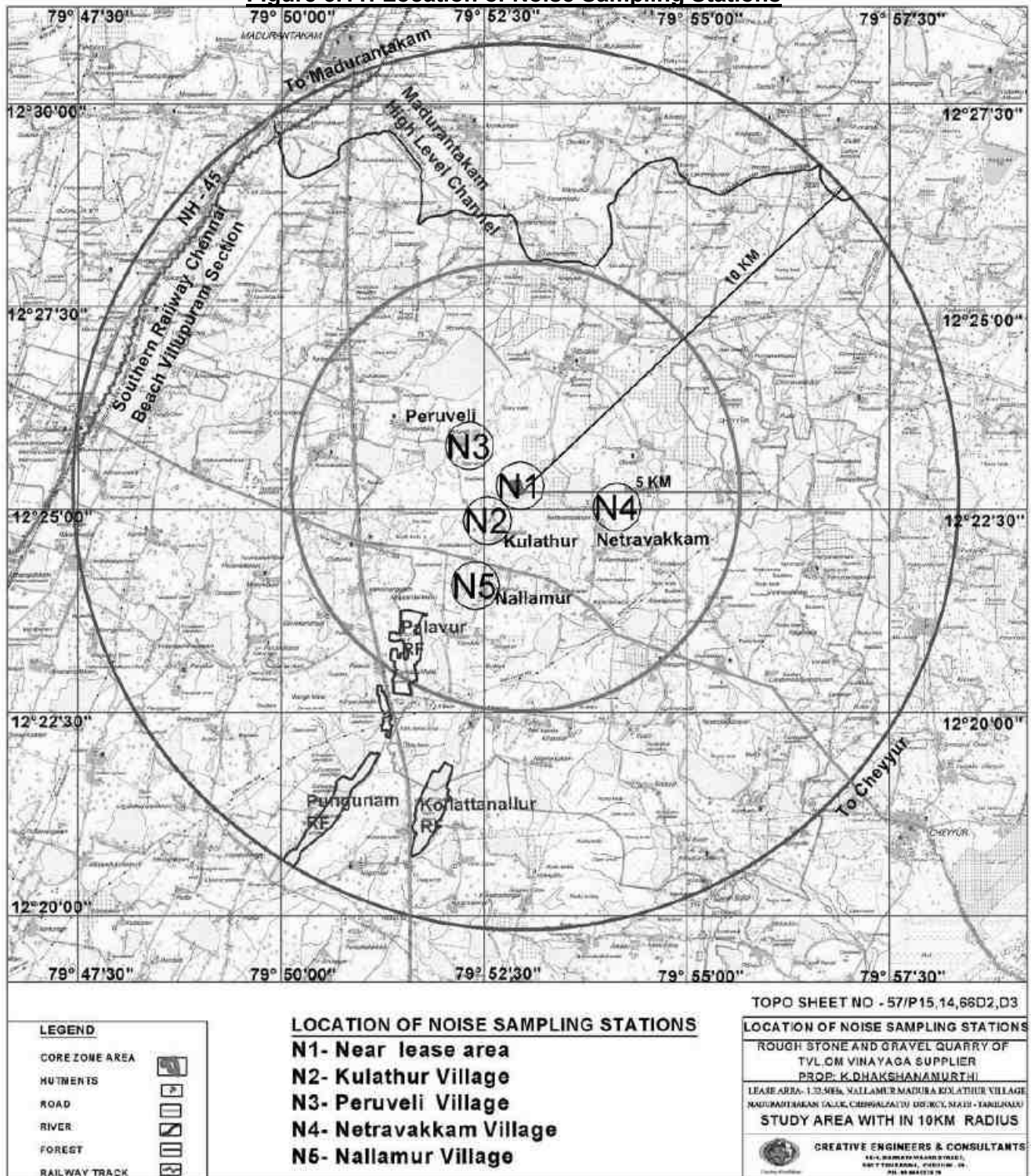
Table 3.15: Noise Level Monitoring

1.	Monitoring Period	Postmonsoon Season (October 2025 to December 2025)		
2.	Monitoring Location	The location map showing noise monitoring locations are given in Figure No.3.11.		
	Code	Location	Distance	Direction
	N1	Near Lease Area	-	-
	N2	Kulathur Village	1.0Km	SW
	N3	Peruveli Village	1.4km	NW
	N4	Netravakkam Village	1.7km	SE
	N5	Nallamur Village	2.2km	SW
3.	Methodology	Noise levels were measured using sound level meter manufactured by (Model No - SL- 4001, Make - Lutron). Sound Pressure Level (SPL) measurements were measured at all locations where ambient air quality monitored; one reading for every hour was taken for 24 hours.		
4.	Monitoring Frequency	Once during monitoring period		



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Figure 3.11: Location of Noise Sampling Stations



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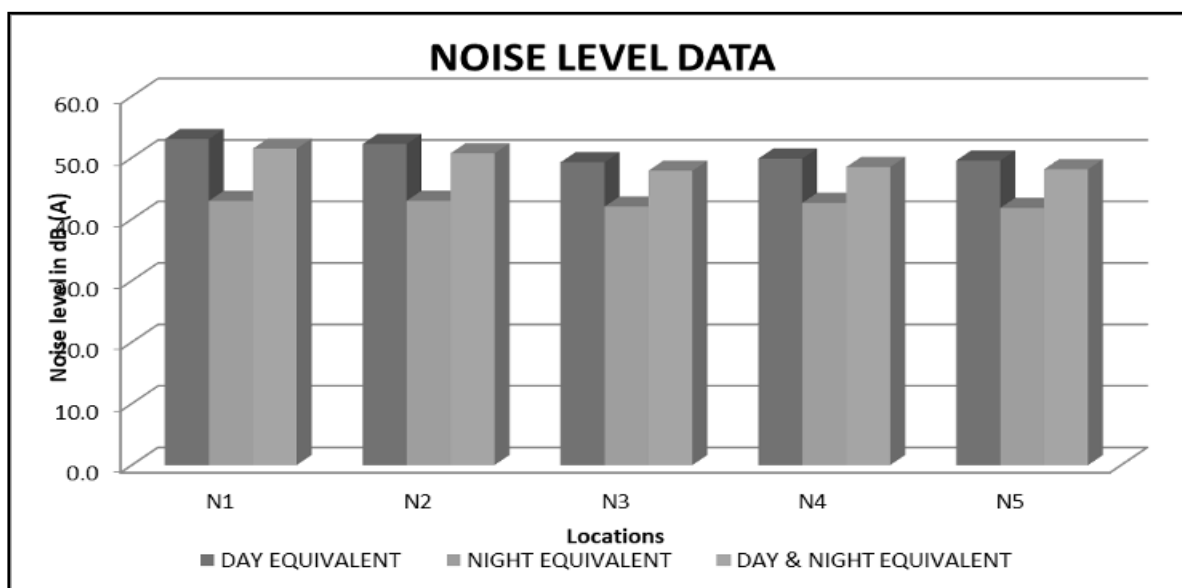
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Table 3.16: Ambient Noise Level in dB (A)

Date and time of monitoring	N1	N2	N3	N4	N5
Day Equivalent	53.0	52.2	49.3	49.9	49.5
Night Equivalent	43.0	43.0	42.0	42.7	41.8
Day & Night Equivalent	51.5	50.7	47.9	48.5	48.1
Limits: As per CPCB: Work zone Exposure in 8 hr - 90 dB(A)					
As per MoEF&CC: Residential: Day equivalent - 55 dB(A); Night equivalent - 45 dB(A)					

Figure 3.12: Noise Level Data



3.3.4.1 Results and Discussion:

The results of noise levels for all locations are given in **Table No-3.16**. The noise values for all above locations are shown in a comparative chart given in **Figure No - 3.12**. In the buffer zone, day Equivalent Noise (Leq-d) noise levels were ranging from 49.3 dB(A) to 53.0 dB(A) and night Equivalent Noise (Leq-d) levels ranged between 41.8 dB(A) to 43.0 dB(A). While comparing with the MOEF&CC Norm of 55 dB(A) for day time and 45 dB(A) for night time, the monitored ambient noise levels were within the limit values for Residential areas.

3.3.5 SOIL CHARACTERISTICS:

Soil samples were collected in 5 locations in the core and buffer zone to analyse the physiochemical characteristics of the soil in the area. Elaborate details of the same has been provided below.

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Table 3.17: Soil Quality Monitoring

1.	Monitoring Period	Postmonsson Season (October 2025 to December 2025)		
	Monitoring Location	The location map showing soil sampling locations are given in Figure No.3.13.		
	Code	Location	Distance	Direction
2.	S1	Near Lease Area	-	-
	S2	Kulathur Village	1.0Km	SW
	S3	Peruveli Village	1.4km	NW
	S4	Netravakkam Village	1.7km	SE
	S5	Nallamur Village	2.2km	SW
3.	Methodology	Composite soil samples using sampling augers and field capacity apparatus.		
4.	Monitoring Frequency	Once during monitoring period		



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Figure 3.13: Location of Soil Sampling Stations



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Table 3.18: Soil Quality Data

S.No	Parameters	Unit	S1	S2	S3	S4	S5
1	pH at 25°C	-	6.20	7.86	5.26	7.67	7.24
2	Electrical Conductivity	(µmhos/cm)	166.90	184.3	209.2	220.9	134.8
3	Dry Matter	%	91.6	91.9	97.6	86.4	91.2
4	Water Content	%	8.4	8.1	2.1	13.6	8.8
5	Organic Matter	%	0.65	0.76	0.36	0.54	0.24
6	Soil texture	-	Clay	Clay	Silty Clay	Clay	Silty Clay Loam
7	Grain Size Distribution i. Sand	%	8.98	11.16	7.52	8.80	9.91
8	ii. Silt	%	34.48	40.30	48.00	36.57	48.21
9	iii. Clay	%	56.54	48.54	43.58	54.63	41.89
10	Phosphorous	µg/g	1.06	0.92	0.76	1.32	1.15
11	Sodium	mg/kg	109	261	181	578	140
12	Potassium	mg/kg	247	927	368	772	338
13	Total Nitrogen	mg/kg	120	79	240	156	142
14	Water holding capacity	Inc/foot	40.0	42.0	42.0	38.0	40.0
15	Porosity	%	24	26	28	23	25

3.3.5.1 Results and Discussion:

Results of the soil samples show that the pH values were ranging between 5.26 to 7.86 and Electrical Conductivity values were ranging between 134.80 – 220.90 µmhos/cm. Soils are generally Silty Clay Loam type. Organic matter values were ranging between 0.24 – 0.76%. Total Nitrogen values were ranging between 78.60 - 240mg/kg. Phosphorus values were ranging between 0.76 – 1.32µg/g. Potassium values were ranging between 247 - 927 mg/kg. Sodium values were ranging between 109- 578 mg/kg. The soil quality data for the 5 samples collected and analyzed are provided in **Table No – 3.18**.



3.4 LAND ENVIRONMENT - LANDUSE & LAND COVER

For preparing an impact statement, aspects of the land conditions are covered under land use. An industrial project / mine can cause changes in land use, soil process in different intensities depending upon the size of the project and distance involved between the industries and the area. Here, land use status for a radius of 10 km has been studied.

3.4.1 DATA USED AND METHODOLOGY

For the present study on land use pattern of buffer area around the proposed stone and gravel quarry, an archived historical data of Landsat-8 data has been used as base data acquired on DEC 2025(Figure No.3.14) has been used to generate the require landuse map showing their spatial pattern within the buffer area. The table showing data used for generation of information on landuse and subsequent GIS analysis is given below

Table 3.19: RS satellite image used for the present study

S.No	Type of Data	Date	Generated Map
1.	Landsat-8	DEC 2025	Landuse (LU) Map showing 10 Km around the ML area

Interpretation of satellite image requires understanding of relationship between image elements and their respective terrain elements. Since, in the present study, the landuse information is obtained using visual interpretation, an interpretation key is generated. The image elements such as color, tone, texture, size, shape and associated elements have been used to delineate various landuse categories. The landuse categorization and nomenclature used in the present study is based on the national level landuse classification system, which is adopted for the entire country as recommended by National Remote Sensing Centre (NRSC), Department of Space, Government of India.

Figure 3.14 : Landsat 8 Satellite Data of the Study Area

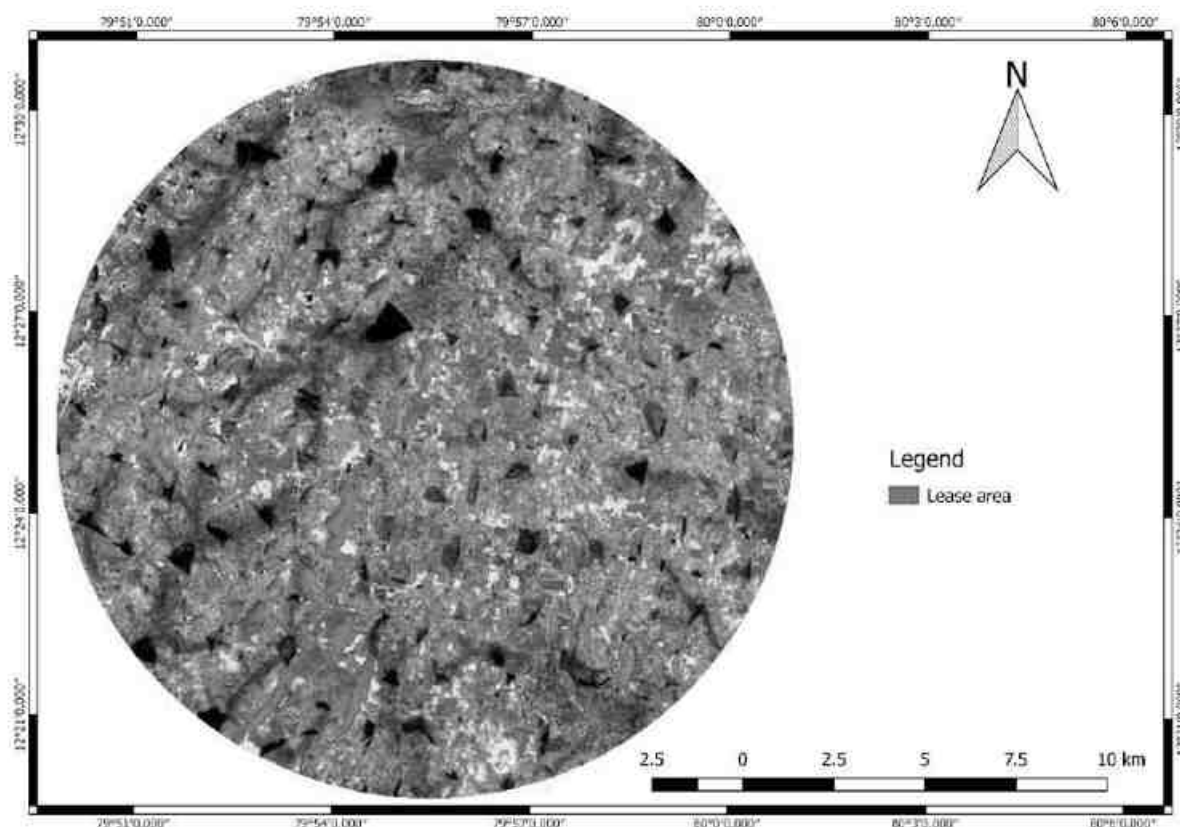


Table 3.20: Major Landuse Units of the Study Area

S.No	Major Category	Landuse unit
1	Built-Up Land	Village, Town, Industrial / Vacant Area
2	Agricultural Land	Crop Land Fallow Land Plantation Farm Land
3	Forest Land	Open Scrub Forest
4	Waste Land Mining Area	Land With Scrub/ Land Without Scrub Barren Rocky/ Stony Waste Quarries / Abandoned Quarries
5	Waterbodies	Tanks/ Rivers / Streams

Such LandUse and Land cover (LULC) categories have been verified using field check and identified sample sites within the buffer area, verified on field and transferred into gis geo-coordinates using observation coordinates received from hand held GPS (global positioning system) instrument. Thus, an interpreted final landuse map has been generated (Figure No. 3.15) using above such elaborate procedure and transformed into GIS environment for its spatial distribution and area estimation. Spatial nature and extent of various landuse categories within the buffer area is discussed is given below:

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Figure 3.15: Map Showing Land Use Categories around 10km Buffer

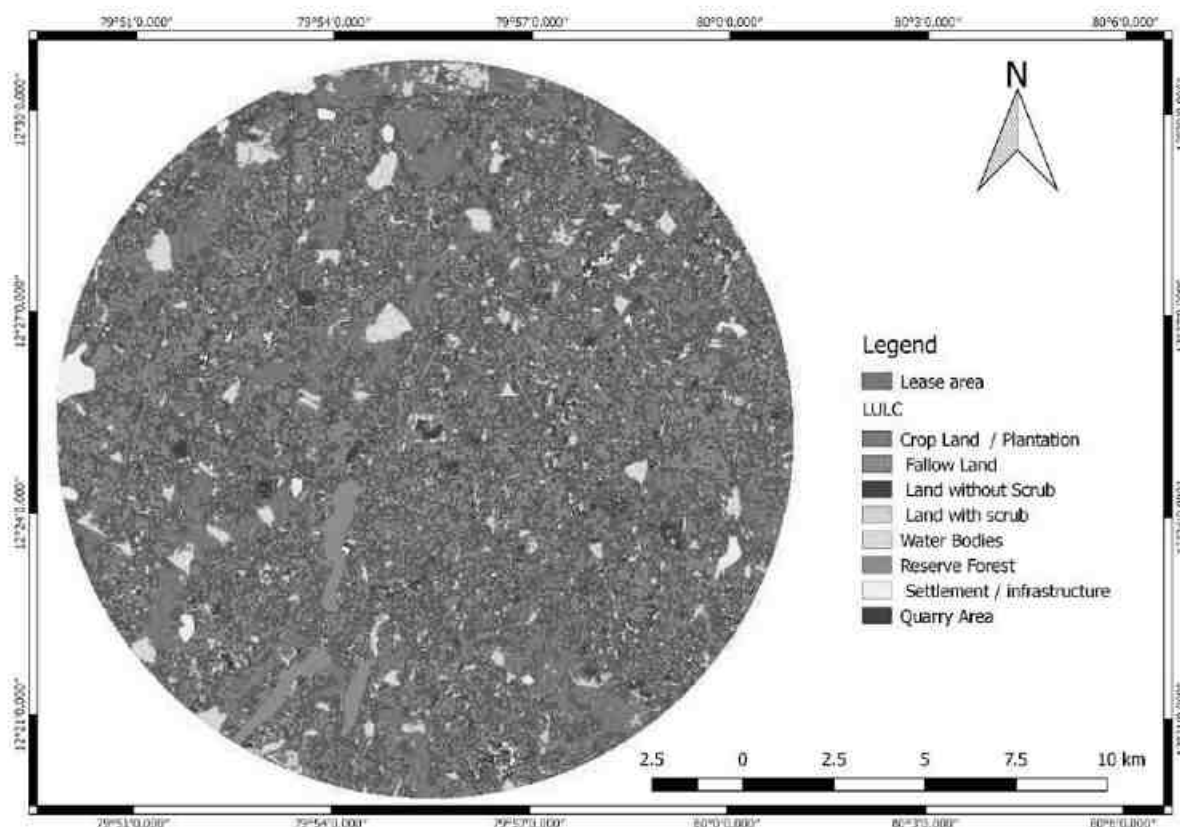


Table 3.21: Area Estimation of Landuse Categories in Buffer Zone

S.No	Landuse Feature	Area (Sq.Km)	Percentage
1	Crop Land / Plantation	163.85	50.84
2	Fallow Land	100.87	31.30
3	Land Without Scrub	4.50	1.39
4	Land With Scrub	16.02	4.97
5	Water bodies	13.64	4.23
6	Reserve Forest	4.38	1.36
7	Settlement & Infrastructure	4.89	1.54
8	Mining Area	14.08	4.37
	Total	322.23	100

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LULC PHOTOS



From the above table it is seen that 50.84 % of the study area is crop / plantation land followed by 31.30 % of fallow land. Land with scrub constitutes 4.97 %, lands without scrub constitute 1.39 %, waterbodies constitute 4.23 % & others constitute 7.27 %.



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3.4.2 LAND USED BASED ON REVENUE RECORDS:

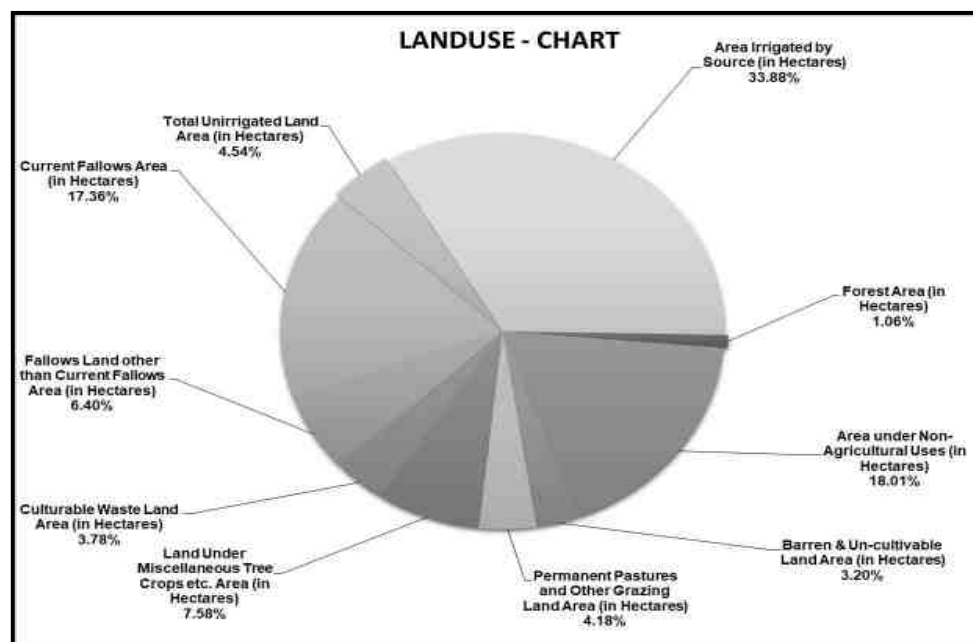
The lease area falls in Nallamur Madura Kolathur village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu state and the study area for the land use pattern (10 km radius) has been divided into four zones viz. Zone-I (0-2 km), Zone-II (2-5 km), Zone-III (5-10 km) and Zone-IV (0-10 km) respectively. The land use pattern of the study area falling within 10 km radius around the proposed project area is presented in Table no - 3.22. Village wise land use pattern is provided in **Annexure-11**.

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Table 3.22: Land Use Pattern of the Study Area Falling Within 10 Km Area in (Ha)

Study Area	Total Geographic al Area	Forest Area	Area under Non-Agricultural Uses	Barren & Un-cultivable Land Area	Permanent Pastures and Other Grazing Land Area	Land Under Miscellaneous Tree Crops etc. Area	Culturable Waste Land Area	Fallows Land other than Current Fallows Area	Current Fallows Area	Total Un irrigated Land Area	Area Irrigated by Source
0- 2 KM	2478.94	57.36	627.87	135.36	136.99	225.81	54.4	97	185.47	5.58	953.1
2 - 5 KM	6988.2	92.39	1104.4	228.42	272.89	1143.41	22.37	418.83	1230.92	204.68	2269.89
5-10 KM	27239.16	239.36	4878.32	812.27	1125.62	1414.05	1311.02	1832.89	4956.32	1454.6	9214.71
0-10 KM	36706.3	389.11	6610.59	1176.05	1535.5	2783.27	1387.79	2348.72	6372.71	1664.86	12437.7
	100.00	1.06	18.01	3.20	4.18	7.58	3.78	6.40	17.36	4.54	33.88

Figure 3.16: Landuse within the Buffer Zone Area



3.5 BIOLOGICAL ENVIRONMENT:

Study of the biological environment of any area comprises of well-planned ecological survey for the floristic and faunal composition of the areas through various scientifically planned techniques. Accordingly the ecological survey for the proposed quarry area including core and buffer zone were carried out to identify various species occurring in the area.

3.5.1 FLORA:

An ecological survey of the study area was conducted with reference to listing of species and assessment of the existing baseline ecological conditions. The objective of the survey is as follows:

- ❖ Generate existing data from field observations of various terrestrial floristic occurrences.
- ❖ Collect secondary data from Government records as well as through discussion with Forest officials, knowledgeable public etc.,
- ❖ Compare the data with authentic past records to identify changes, if any.
- ❖ Identify the impact of project operations on the biological aspects.

To accomplish the above objectives, a general ecological survey covering an area of 10 km radius was conducted. The locations were identified for phyto-sociological aspects to assess the current status.

A.CORE ZONE:

Other than peripheral plantation carried out by the PP, there are no vegetation in the lease area. Major part of the lease area was earlier used by the applicant for storage of crusher materials.

Table 3.23: List of Flora in the Core Zone

Sl.No	Species Name	Common Name	Family
Trees			
1	Borassus flabelliformis	Arecaceae	Panna-maram
2.	Acacia nilotica	Fabaceae	Karuveali
3	Prosopis juliflora	Fabaceae	Velikathan
4	Azadirachta indica	Meliaceae	Veppai
5	Cocos nucifera	Arecaceae	Tennai
6	Tectona grandis	Lamiaceae	Tekku
Shrubs			
1	Cassia auriculata	Fabaceae	Avarai

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Sl.No	Species Name	Common Name	Family
2	Adhatoda vasica	Acanthaceae	Adhatoda
3	Lantana camara	Verbenaceae	Unnichi
4	Calotropis gigantea	Asclepiadaceae	Erukku
5	Dodonaea viscosa	Sapindaceae	viraali
Herbs			
1	Tridax procumbens	Asteraceae	Kenathuppoondu
2	Sida acuta	Malvaceae	Palambasi
3	Cassia tora	Caesalpinaceae	Senavu
4	Parthenium spp	Asteraceae	Tiruvottukkay

PHOTOS OF CORE ZONE



C.BUFFER ZONE:

Buffer Zone comprise of Government thangal land, rocky waste land, barren land and mined out pits. Immediate area surrounding the lease is mainly Government land and it contains bushes, shrubs & eucalyptus trees. Agriculture is predominantly rainfed, tank fed and largely dependent on the rain water. Dominant agricultural activities area observed proximate to the available irrigation source. Crops like Rice, vegetables, watermelon, ground nut, banana etc. are cultivated in the lands with better water source & soil condition.



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The Dominated species in the study area are Azadirachta indica, Acacia auriculiformis Pongamia pinnata, Prosopis juliflora, Morinda tinctoria, Delonix elata, etc. The detailed list of plants found in the buffer zone is given below:

Table 3.24: List of Floristic Species in the Buffer Zone

Sl. No.	Botanical name	Family	Local Name
Trees			
1	Delonix elata	Fabaceae	Vathanarayanan
2	Murraya koenigii	Rutaceae	Curry leaf
3	Peltophorum pterocarpum	Fabaceae	Perunkonrai
4	Morinda tinctoria	Rubiaceae	Manchanari
5	Delonix regia	Fabaceae	Mayil konrai
6	Acacia auriculiformis	Fabaceae	Pencile tree
7	Borassus flabelliformis	Arecaceae	Panna-maram
8	Albizia odoratissima	Fabaceae	karu-vakai
9	Acacia catechu	Fabaceae	Karanagalli
10	Atalantia monophylla	Rutaceae	Kattu Elumeachi
11	Ziziphus mauritiana	Rhamanaceae	Elandhai
12	Acacia nilotica	Fabaceae	Karuveali
13	Ficus benghalensis	Moraceae	Alai Maram
14	Terminalia chebula	Combretaceae	Kadukkai
15	Prosopis juliflora	Fabaceae	Velikathan
16	Acacia horrida	Fabaceae	Karuvelai
17	Cassia siamea	Caesalpinaceae	Manjal konrai
18	Bambusa vulgaris	Poaceae	Bamboo
19	Bauhinia racemosa	Fabaceae	Tataki
20	Syzygium cumini	Myrtaceae	Naval
21	Mangifera indica	Anacardiaceae	Ma Maram
22	Thespesia lampas	Malvaceae	Puvarasu
23	Musa paradisiaca	Musaceae	Valzhilai
24	Ficus religiosa	Moraceae	Arasa Maram
25	Cassia fistula	Fabaceae	Konrai
26	Albizza amara	Fabaceae	Vagai
27	Casuarina equisetifolia	Casuarinaceae	Savukku
28	Polyalthia longifolia	Annonaceae	Nietilingam
29	Azadirachta indica	Meliaceae	Veppai
30	Pongamia pinnata	Fabaceae	Pungai



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Sl. No.	Botanical name	Family	Local Name
31	Acacia leucophloea	Fabaceae	Valvelam
32	Eucalyptus grandis	Myrtaceae	Gum tree
33	Carica papaya	Caricaceae	Pappali
34	Moringa oleifera	Moringaceae	Murungai
35	Cocos nucifera	Arecaceae	Tennai
36	Tamarindus indica	Fabaceae	Puli
37	Citrus limon	Rutaceae	Lemon
38	Tectona grandis	Lamiaceae	Tekku
Shrubs			
1	Euphorbia tirucalli	Euphorbiaceae	kalli
2	Dodonaea viscosa	Sapindaceae	viraali
3	Grewia abutilifolia	Tiliaceae	Pampukonta
4	Ziziphus oenopia	Rhamnaceae	Elanthai
5	Cassia auriculata	Fabaceae	Avarai
6	Carissa carandas	Apocynaceae	Kalakkai
7	Hibiscus rosa-sinensis	Malvaceae	Chemparutti
8	Agave americana	Asparagaceae	kittanara
9	Adhatoda vasica	Acanthaceae	Adhatoda
10	Solanum xanthocarpum	Solanaceae	Kantankattiri
11	Strychnos nuxvomica	Loganiaceae	kagodi
12	Carissa carandas	Apocynaceae	Kalakkai
13	Streblus asper	Moraceae	Parai maram
14	Nerium oleander	Apocynaceae	Arali
15	Calotropis gigantea	Asclepiadaceae	Erukku
16	Vitex negundo	Verbenaceae	Nochchi
17	Lantana camara	Verbenaceae	Unnichi
18	Jatropha gossypifolia	Euphorbiaceae	Seemayavanakku
19	Opuntia dillenii	Cactaceae	Cappattukkalli
20	Canthium didymum	Rutaceae	Nanjul
21	Opuntia elatior	Cactaceae	Cappattukkalli
Climber			
1	Coccinia indica	Cucurbitaceae	Kovaikkai
2	Cissus quadrangularis	Vitaceae	Pirandai
3	Asparagus racemosus	Asparagaceae	Tannir-vittan
Herbs			
1	Leucas aspera	Lamiaceae	Thumbai



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Sl. No.	Botanical name	Family	Local Name
2	Parthenium spp	Asteraceae	Tiruvottukkay
3	Acalypha indica	Euphorbiaceae	Kuppaimeni
4	Phyllanthus niruri	Phyllanthaceae	Keelanelli
5	Tridax procumbens	Asteraceae	Kenathuppoondu
6	Cassia tora	Caesalpinaceae	Senavu
7	Mimosa pudica	Mimosaceae	Thottaccurungi
8	Achyranthes aspera	Amaranthaceae	Nayuruvi
9	Cleome viscosa	Cleomaceae	Kaattu kadugu
10	Sida cordifolia	Malvaceae	Kurunthotti
11	Lepidagathis cristata	Acanthaceae	Karappanpoondu
12	Ocimum sanctum	Lamiaceae	Thulasi
13	Sida acuta	Malvaceae	Palambasi
Grasses			
1	Cynodon dactylon	Poaceae	Arugampillu
2	Cenchrus ciliaris	Poaceae	Kollukattai
3	Cyperus sp	Poaceae	Korai

The study area is observed to be not ecologically sensitive and no endangered or endemic species as per IUCN red list is observed.

3.3.1 FAUNA:

There is no Wild Life Sanctuary or National Park within the study area of 10 km. Domesticated animals like Cows, Buffalos, Dogs, Cats etc., are commonly found. The lease and 10 Km buffer zone does not fall in the Western Ghats ESA boundary. No wild mammalian species was directly sighted during the field survey. The list of fauna within the study area is given below:

Table 3.25: List of Fauna in the Buffer Zone

Sl.No	Common name	Scientific Name	Family	IUCN/WPA Schedule
A. Mammals				
1	Cat	Felis catus	Felidae	LC /III
2	Rat	Rattus rattus	Muridae	LC /IV
3	Boar	Sus scrofa	Suidae	LC /IV
4	Squirrel	Funambulus palmarum	Sciuridae	LC /III
B. Reptiles				
1	Krait	Bungarus caeruleus	Elapidae	LC / IV



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2	Lizard	Calotes versicolor	Agamidae	LC / VII
C. Birds				
1	Indian tree pie	Dendrocitta vagabunda	Corvidae	LC
2	Spotted owlet	Athene brama	Strigidae	LC
3	Spotted dove	Streptopelia chinensis	Columbidae	LC
4	Black drongo	Dicrurus macrocercus	Dicruridae	LC
5	Cattle egret	Bubulcus ibis	Ardeidae	LC
6	House sparrow	Passer domesticus	Passeridae	LC
7	Little egret	Egretta garzetta	Ardeidae	LC
8	Small blue kingfisher	Alcedo atthis	Alcedinidae	LC
9	Rose ringed parakeet	Psittacula krameri	Psittacidae	LC
10	Crow	Corvus splendens	Corvidae	LC

LC - Least Concern

From the study it observed that the area in general consists of species of least concern only. No threatened or endemic or endangered species are observed. The area does not form the migratory path of the birds also.

3.6 HYDROGEOLOGICAL STUDY:

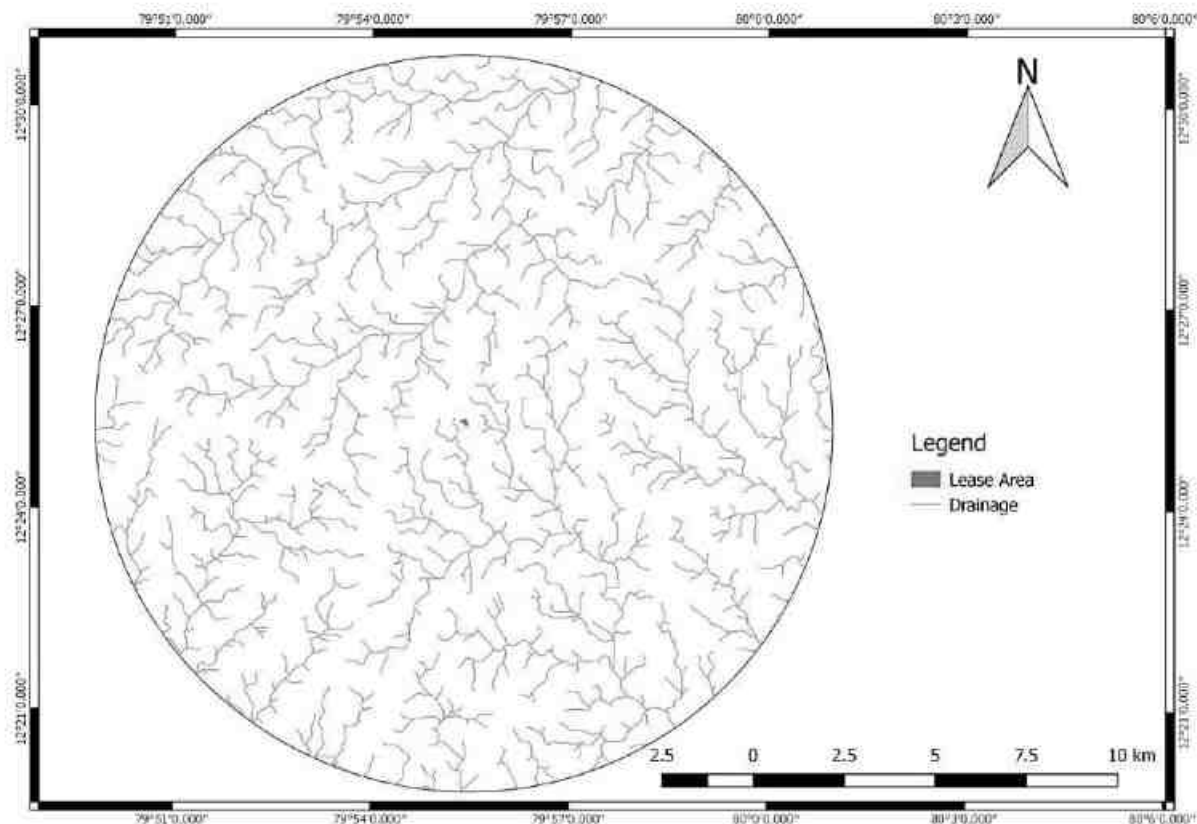
This section delves into the study of the hydrogeological scenario of the study area to evaluate the impact of mining activities on the nearby areas. The study area is considered to understand the nature of the general hydrogeological conditions of the area.

3.6.1 PHYSIOGRAPHY AND DRAINAGE:

The applied lease area is exhibits almost Plain topography with few outcrops of charnockite. The elevation of the applied lease area is 28 to 30 mRL. The drainage map of the buffer zone is given below in Figure No. 3.17.

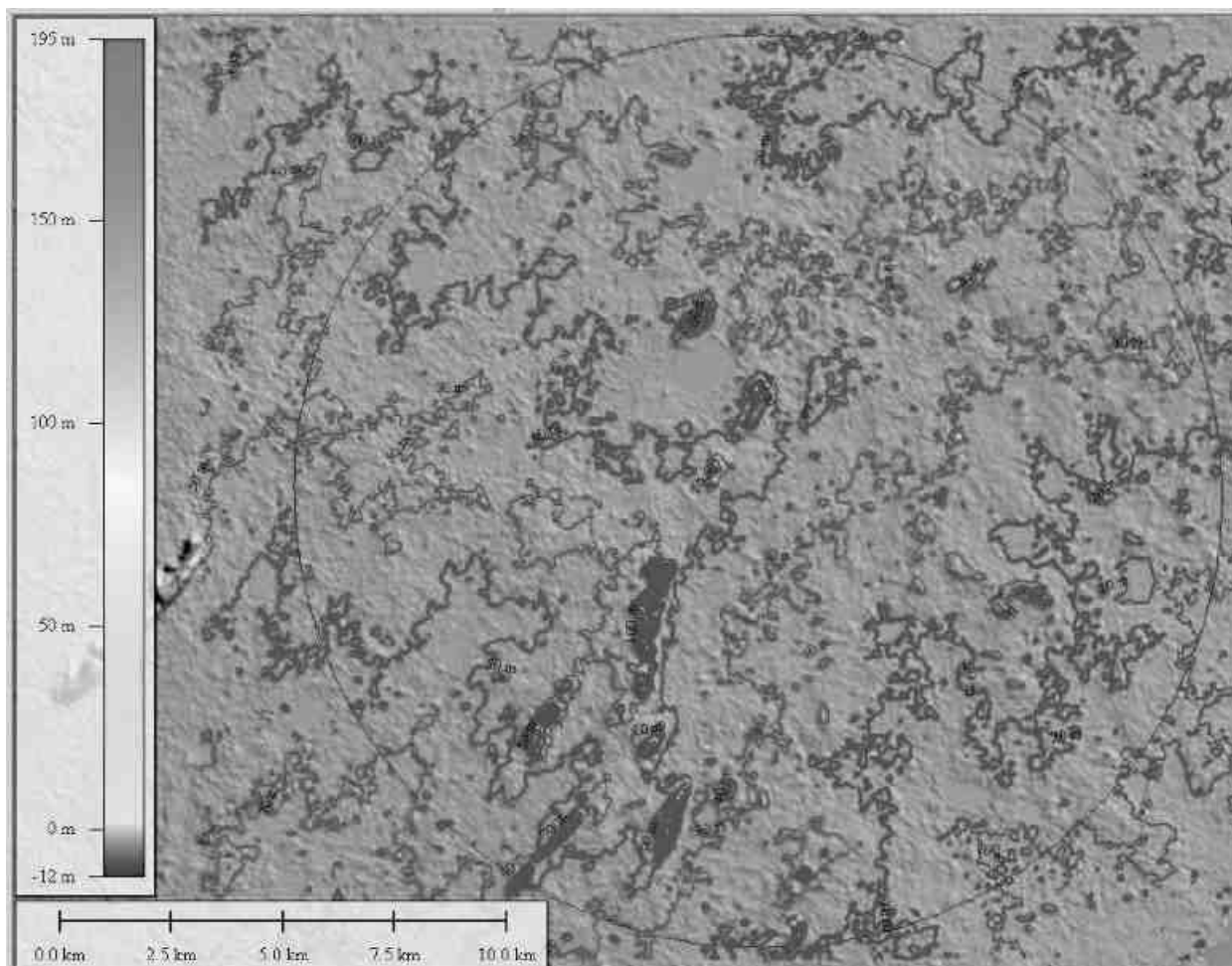


Figure 3.17: Drainage Map



Since the lease and its proximate areas are plain land, it does not form any major catchment area. The drainage of the area is controlled by only few first order streams that too located far away from the lease area (Please refer Figure 3.17) draining towards SE side. There are no river in the study area. It is proposed to form garland drain around the periphery of the lease area to collect rainwater falling in the surrounding area and connect it to the settling pond . Clear water overflow from the settling pond will be connected to the downstream users and ensured its flow.

Figure 3.18: DEM WITH CONTOUR MAP

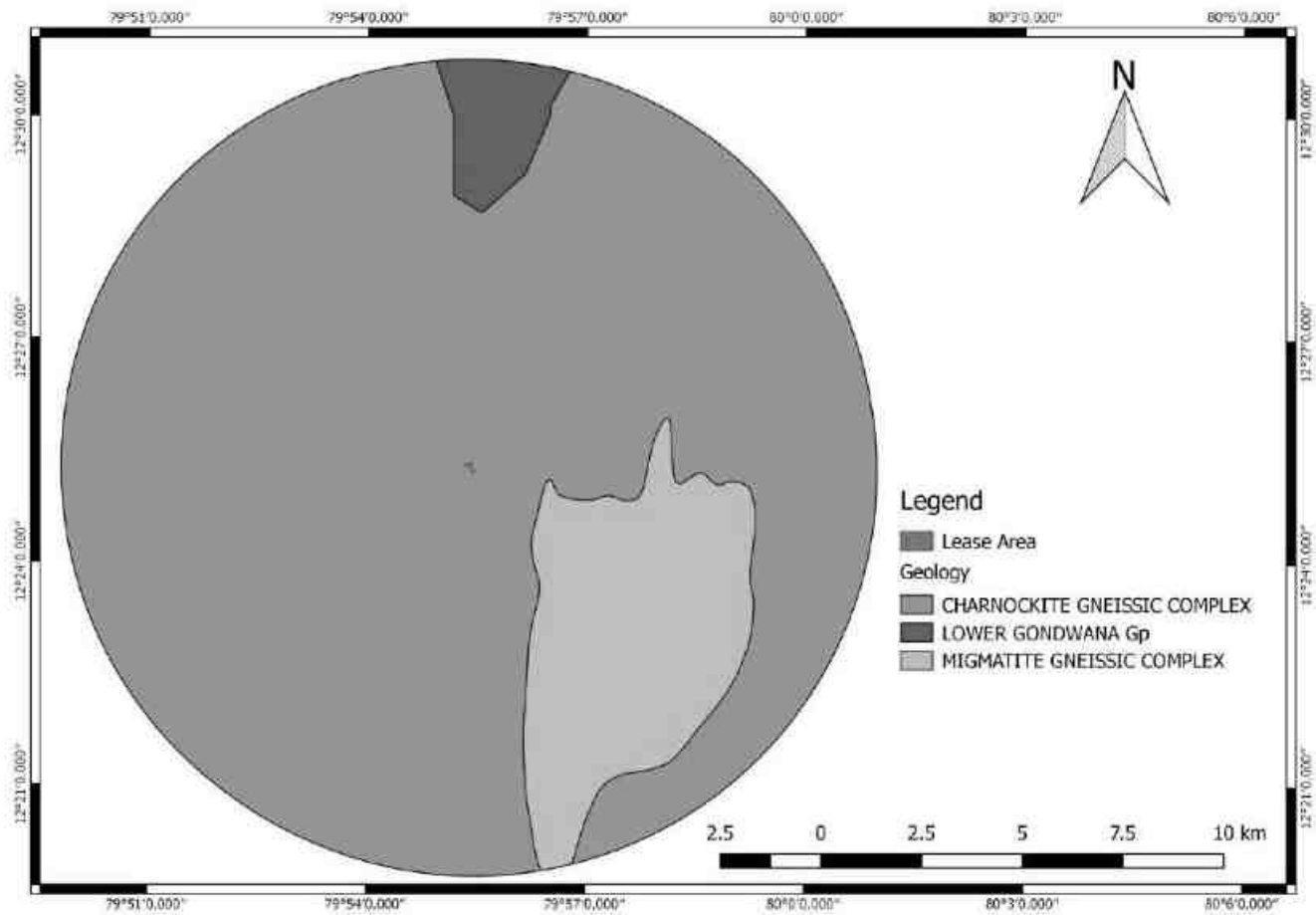


3.6.2 GEOLOGY AND GEOMORPHOLOGY

Geology: The type of rock formation in the core is composed of hard Charnockite Gneissic complex and buffer zone composed Charnockite Gneissic complex and Migmatite Gneissic complex category. The geological map is provided below in Figure No.3.19.

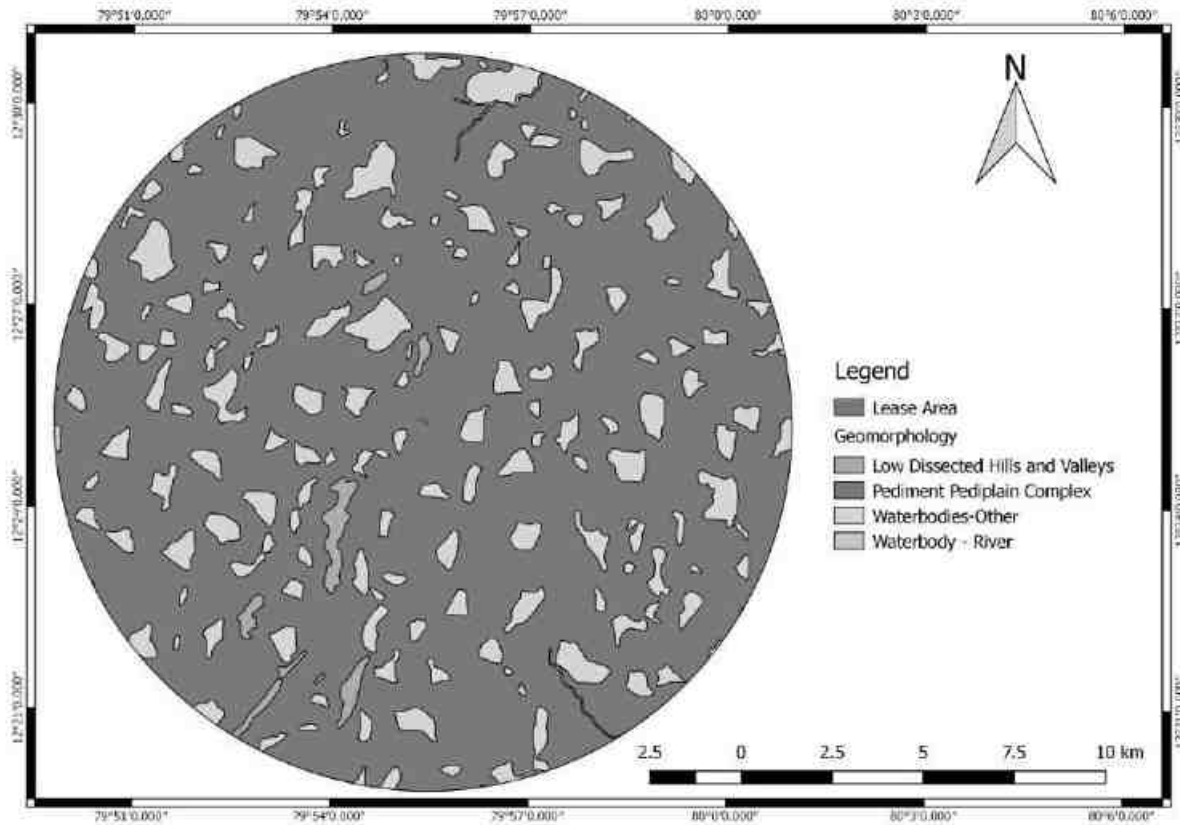
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Figure 3.19: Geology Map



Geomorphology: Lease and the study area is dominated with Pediment Pediplain complex .

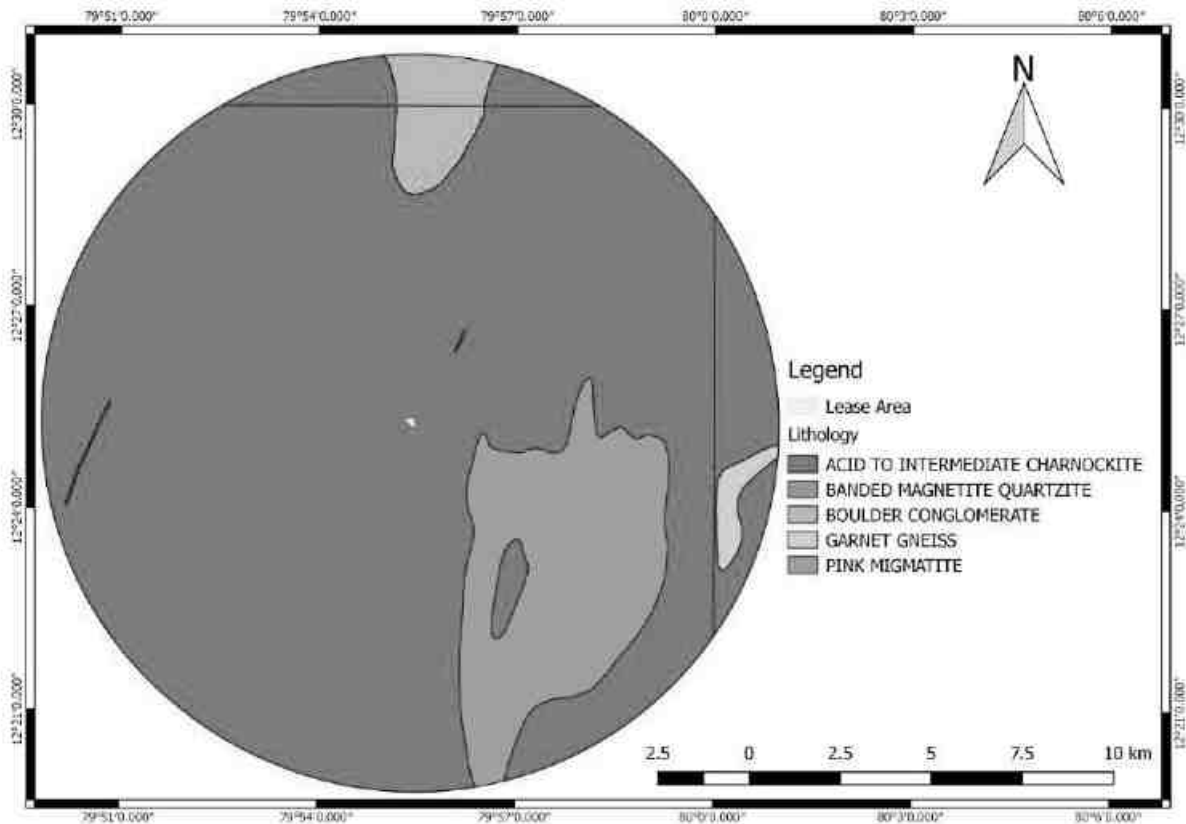
Figure 3.20: Geomorphology Map



Lithology: The study area is mainly dominated by Acid to Intermediate Charnockite.

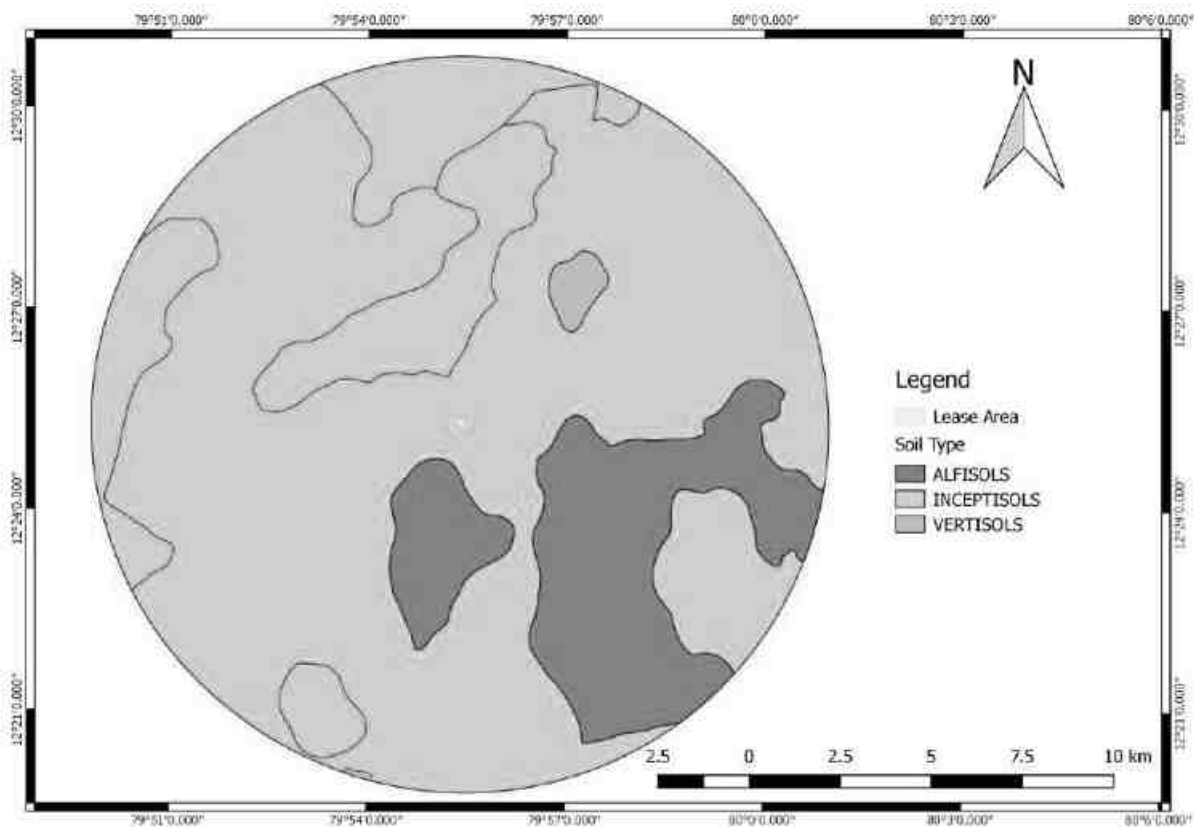
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Figure 3.21: Lithology Map



Soil: The study area is characterized by Inceptisol and Alfisols (Figure No. 3.24), the project area is dominated with Inceptisol.

Figure 3.22: Soil Map



3.6.3 HYDROLOGICAL SCENARIO OF THE STUDY AREA:

There are no perennial water courses in both the lease areas. There is an Thangal located a distance of 50m on the west side of the project. It is dry, covered with silt, bushes and not interconnected from the upstreamside.



VIEW OF THANGAL

Earthen bund will be formed within the lease area of Om vinyaga supplier on the western side. There is no proposal to discharge any effluent into either of these water bodies. No major impact is envisaged on the nearby water bodies due to project operations. The rock type noticed in the lease area is Charnockite type. The Charnockite is part of peninsular Gneisses, a high grade metamorphic rock.

The hydrological regime of the area is studied through various published documents, study of well and borewells in the area and discussion with the locals. From the study the following are observed:

Well inventory:

Due to rocky formation for a major stretch of land in and around the lease area, the ground water potential is very poor. However at far away plains, depth to water table in the that the wells are as deep as 8 ft to 35 ft. Water level after good monsoon reaches almost near the surface level whereas it lowers down substantially during summer season. Bore wells are 300-450 ft deep, give better yield post monsoon whereas the yield becomes very less later.



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WELL & BOREWELL PHOTOS



Creative Engineers & Consultants

CHAPTER-3 : DESCRIPTION OF ENVIRONMENT

PRO CODE: CEC-EMP-MI-257

REV NO : 00/APR/26

3-49

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The district is underlain by hard rock formation. Fissured and fractured crystalline rocks constitute the important aquifer systems in the district. Study area is dominated with hard Charnockite rock formation.

Study of the area shows that the sub-surface formations reveal low to medium recharge potentials. Subsequently hard and massive formations of rock are found. Based on the available information and the geophysical investigations it is observed that the study area is of poor to moderate groundwater potential up to 70m to 75m. Besides, the mining area consists of hard compact rock, no major water seepage within the mine is expected. There is no water seepage noticed in to the already quarried deeper pits situated nearby the proposed quarry area. Hence, the quarrying rough stone up to the proposed depth may not have any adverse impact in the area over ground water conditions.

* * * * *



CHAPTER - IV

ANTICIPATED ENVIRONMENTAL IMPACTS & MITIGATION MEASURES

CHAPTER 4 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

4.1 GENERAL

In this project Mechanized Open Cast mining will be carried out to quarry out Rough Stone & Gravel. The identified impacts due to this mine during mining and associated activities have been studied in relation to various environmental components like Air, water, noise, vibration, land, transport etc., and the details of the same are elaborated in this chapter.

4.2 AIR ENVIRONMENT:

4.2.1 IMPACTS DUE TO PROJECT OPERATION:

The existing ambient air quality in the area has been described in Chapter-III. The proposed mining and allied operations may cause deterioration of air quality due to pollution arising from the project operation if prompt care is not taken. The principal sources of air pollution in general due to mining and allied activities will be:

- ❖ Excavation of material.
- ❖ Movement of HEMM such as Excavators, tippers etc.
- ❖ Loading and unloading operation
- ❖ Transportation

Besides, Gas emission will occur as a result of operation of diesel driven mining equipment, compressors, transporting vehicles, etc.

Particulate matter smaller than 10 microns, referred to as PM₁₀, can settle in the bronchi and lungs and cause health problems like Bronchitis, Emphysema, Bronchial Asthma, Irritation of mucus membranes of eyes, etc. Particles smaller than 2.5 micrometers (PM_{2.5}), tend to penetrate into the lungs and very small particles (<100 nanometers) may pass through the lungs to affect other organs.

Besides the above mentioned fugitive dust emissions, atmospheric pollution can occur as a result of emission of SO₂, NO_x, CO etc., from diesel driven mining equipment, generator sets, etc. Larger suspended particles are generally filtered in the nose and throat and do not cause



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problems. Higher concentration of SO₂, NO_x, CO may cause some health effect on the human beings exposed to it. In case of this mine, the following measures will be adopted to control impact on the air quality due to mining operations in the lease area:

Table4.1: Impact and Mitigation Measures – Air Environment

S.No	Activity	Consequence	Mitigation Measures
1	Drilling	Dust Emanation	Usage of Drill bits in good condition
			Covering of drill holes with wet cloth
			Usage of sharp drill bits for drilling of holes.
			Provision of dust filters / mask to workers working at highly dust prone and affected areas.
2	Blasting	Instantaneous dust emanation	Well-designed blasting parameter, effective stemming to achieve optimum breakage occurs without generating fines.
			Use of appropriate explosives for blasting and avoiding overcharging of blast holes.
			Avoiding blasting during high wind periods where the fine dust is carried out away easily affecting the ambient air quality.
			Use of controlled blasting techniques with Nonel to keep the dust generation, noise as well as vibration level within the prescribed limits.
3	Excavation and Loading	Dust emanation, Gaseous Emission	HEMM will be operated as per the manufacturer's guidelines
			Enclosures for operator cabin.
			Imparting sufficient training to operators on safety and environmental parameters.
			Proper maintenance of hauling equipments.
4	Transportation	Dust emanation, Gaseous Emission	Avoiding overloading of dumpers.
			Regular wetting of transport road using mobile water tanker.
			Proper maintenance of haul road and other roads
			Setting up of tyre wash facility in the transport road.
			Avoiding overloading of tippers
			Covering of loaded tippers with tarpaulins during transportation
5	Others	Dust emanation, Gaseous Emission	Vehicular emissions will be controlled through regular and proper preventive maintenance schedules and emissions tests are done with diesel smoke meter equipment to ensure emission values.
			Development of greenbelt / barriers around mine in the safety zone and carrying out plantation within the lease area.



Due to adoption of all these measures, no major impact on air quality is envisaged due to this proposed opencast mining operation.

Considering that the quantum of production, 2 excavator, 4tippers will be engaged. These equipment's will be properly and regularly maintained. Besides, as mentioned earlier, regular vehicular emission tests will be done for the transport vehicles to ensure minimal impact due to carbon emissions. To further mediate the carbon emissions, a good greenbelt and plantation plan has been planned wherein 1000 number of plants will be planted in and around the lease area.

The impact on air quality due to the proposed project is estimated using AERMOD View Gaussian Plume Air Dispersion Model developed by Lakes Environmental Software which is based on steady state Gaussian plume dispersion. Details of the modeling study / estimation including the modeling technique and post project air quality values are elaborated in the following paras.

4.2.2 AIR QUALITY IMPACT PREDICTION:

The model simulations are done for the air pollutant arising from the mining operations, namely, PM₁₀, PM_{2.5}. Ground Level Concentration (GLC) have been computed using hourly meteorological data.

Table 4.2: Emission Sources

ACTIVITY	SOURCE TYPE
A. Mining operations	Open pit
B. Transportation	Line

4.2.2.1 Emission Factors

Quantification of particulate emissions has been carried out by the emission factor technique. Emission factor is a statistical average of the rate at which a pollutant is released during an activity. This factor when multiplied by the level of that activity in a given situation will give the overall effect. Fugitive emissions have been predicted by using standard equations given and suggested by AP-42, USEPA(1998), Coal S&T Project and for mining & allied activities and other factors. The modeling is done for the peak production to know the worst case scenario.

The details of the emission factors used for the same is provided below:

Table4.3: Emission Factors

S.No	Activity	PM10	PM2.5	Unit
1	Ore Loading	1.5×10^{-3}	2.1×10^{-4}	Kg/T
2	OB Loading	1.4×10^{-4}	1.5×10^{-5}	Kg/T
3	Hauling inside lease area	0.19	0.019	g/VKT
4	Drilling	0.1	0.04	Kg/hole

4.2.2.2 Emission Rates:

Based on the emission factors, after adopting necessary control measures like dust suppression, Proper maintenance of HEMM, using better quality diesel, using latest equipment, proper maintenance of roads, etc. the expected emission rate due to various operations in this project is calculated and is given below:

Table4.4: Emission Rate

ACTIVITIES/POLLUTANTS	PM ₁₀ (g/sec)	PM _{2.5} (g/sec)
Ore Loading	0.06	0.01
Drilling	0.25	0.10
Hauling inside lease area	0.25	0.04
Total	0.55	0.14

A. Emission Source Coordinates: The center of mine was assumed (0, 0) in the mathematical modeling.

B. Meteorological Conditions Used In Predictions: The hourly meteorological data has been generated for the monitoring period and the same has been used in the predictions.

4.2.2.3 Results and Discussions

Table4.5: Peak Incremental Concentration

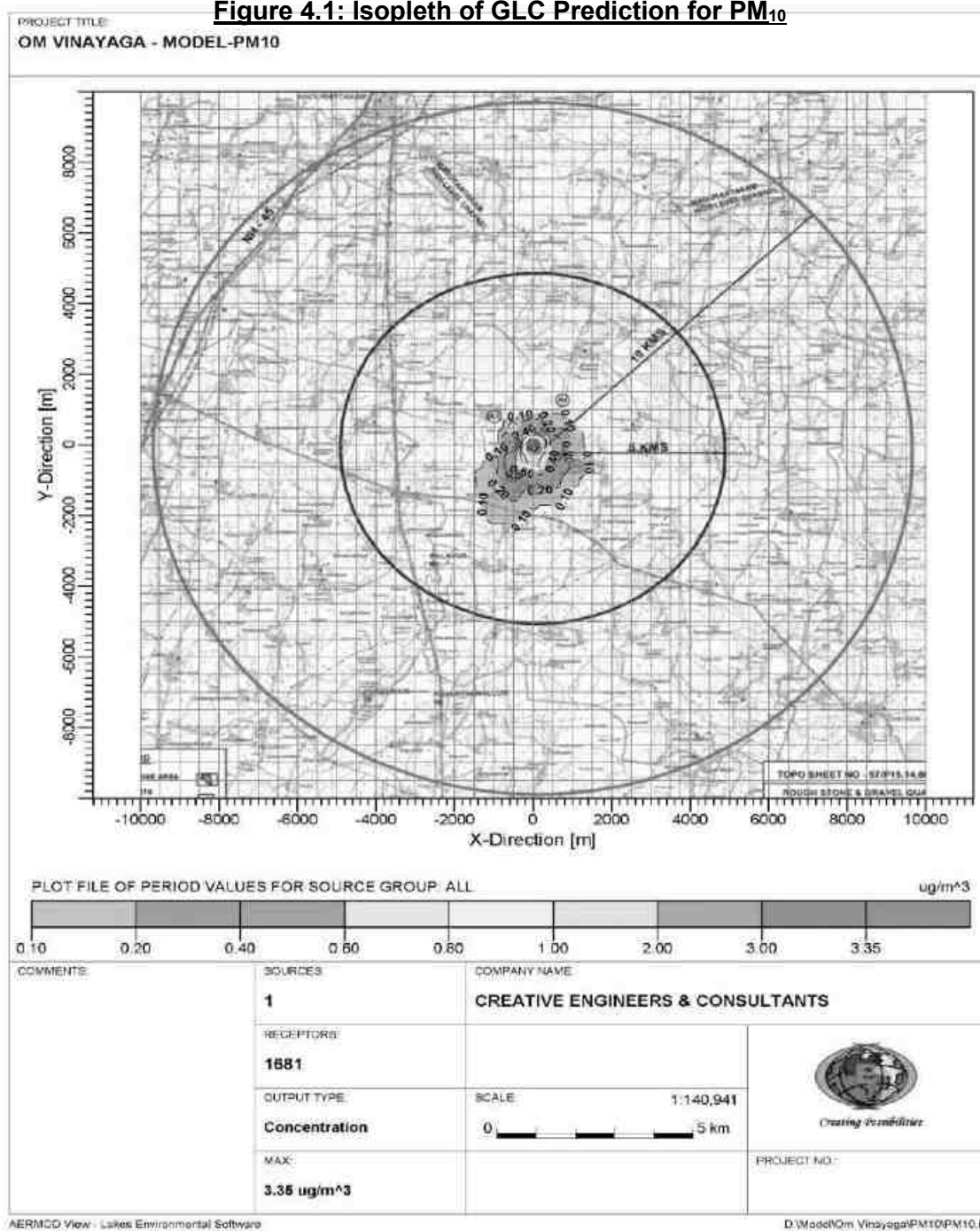
S.No	Parameters	Peak incremental concentration $\mu\text{g}/\text{m}^3$
1	PM ₁₀	3.35
2	PM _{2.5}	1.61

It is observed that the peak incremental concentration for PM₁₀, PM_{2.5} occurring very near the source. At away from the source the values are getting reduced due to dispersion effects. The Isopleths of PM₁₀, PM_{2.5} concentrations with control measures scenario have also been drawn

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and these are given in **Figure No.4.1 and 4.2**. The incremental and predicted concentrations at the locations of ambient air quality have been discussed in the following section.

Figure 4.1: Isopleth of GLC Prediction for PM₁₀



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Predicted Ambient Air Quality:

The post project Concentrations of PM₁₀, PM_{2.5}, (GLC) (base line + incremental) after adopting necessary control measures is given in Table No - 4.6 to 4.7.

Table 4.6: Concentrations Of PM₁₀ after Project Implementation

Values in $\mu\text{g}/\text{m}^3$

S. No	Location	Background Concentration	Predicted Incremental Concentration	Post Project Concentration	Statutory Limits
1	Near Lease Area	73.8	3.3	77.1	-
2	Kulathur Village	65.3	<1.0	66.3	100
3	Peruveli Village	60.4	<1.0	61.4	
4	Netravakkam Village	58.7	<1.0	59.7	
5	Nallamur Village	54.3	<1.0	55.3	

Table 4.7: Concentrations Of PM_{2.5} after Project Implementation

Values in $\mu\text{g}/\text{m}^3$

S. No	Location	Background Concentration	Predicted Incremental Concentration	Post Project Concentration	Statutory Limits
1	Near Lease Area	35.1	1.6	36.7	-
2	Kulathur Village	31.7	<1.0	32.7	60
3	Peruveli Village	28.4	<1.0	29.4	
4	Netravakkam Village	27.0	<1.0	28.0	
5	Nallamur Village	25.5	<1.0	26.5	

It can be seen that the resultant added concentrations with baseline figures even at worst scenario, show that the values of ambie

nt air quality with respect to PM₁₀ are in the range of 55.3 $\mu\text{g}/\text{m}^3$ to 77.1 $\mu\text{g}/\text{m}^3$ and with respect to PM_{2.5} are in the range of 26.5 $\mu\text{g}/\text{m}^3$ to 36.7 $\mu\text{g}/\text{m}^3$ which are within the statutory limits in each case. For preservation of environment in this mine strict enforcement of management schemes and regular air quality monitoring will be undertaken for taking corrective actions, as needed. By adopting the effective implementation of all the mitigative measures, no adverse impact on Air quality due to the mining operation in this lease area is expected.

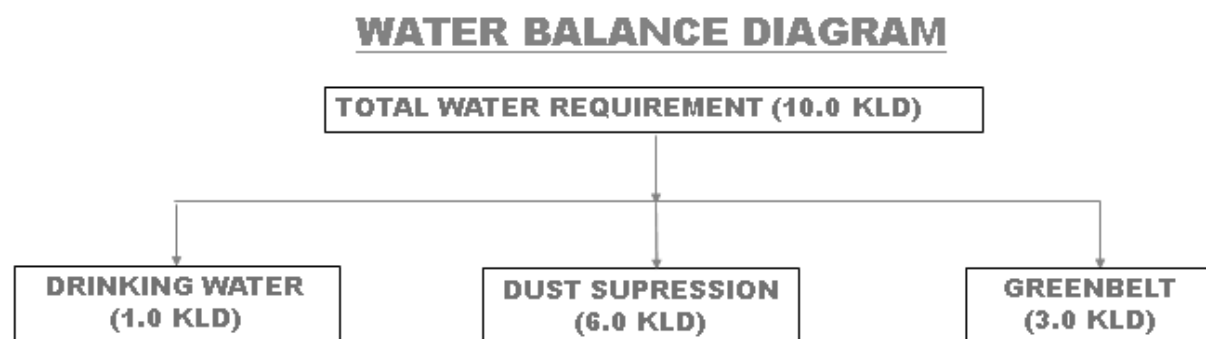


4.3 WATER ENVIRONMENT:

4.3.1 WATER REQUIREMENT:

The total water requirement for this project will be 10.0 KLD comprising 1.0 KLD for drinking water and domestic use, 6.0 KLD for dust suppression and 3.0 KLD for green belt. The water will be sourced initially from outside agencies. Later the rainwater collected in the mine pit sump will be used for this purpose. The water balance diagram for the same is shown in **Figure No 4.3**.

Figure 4.3: Water Balance Diagram



4.3.2 SOURCES OF WATER POLLUTION:

The existing water environment showing water quality at different sampling stations in the area has been described in Chapter-III.

Direct impact on human beings due to poor water quality consequent to mining operation can lead to various water borne diseases like diarrhea, jaundice, dysentery, typhoid, etc. Besides, the polluted water may not be useful for animal or human consumption, vegetation and may affect aquatic life, if effluents are not properly treated to remove the harmful pollutants.

The major sources of water pollution normally associated due to mining and allied operations are:

- a. Domestic effluent.
- b. Washouts from stockpile if any.
- c. Disturbance to drainage course in the project area
- d. Generation of mine pit water pumped out from deeper workings if any.

4.3.3 TREATMENT SCHEME:

A. Generation of domestic effluent:

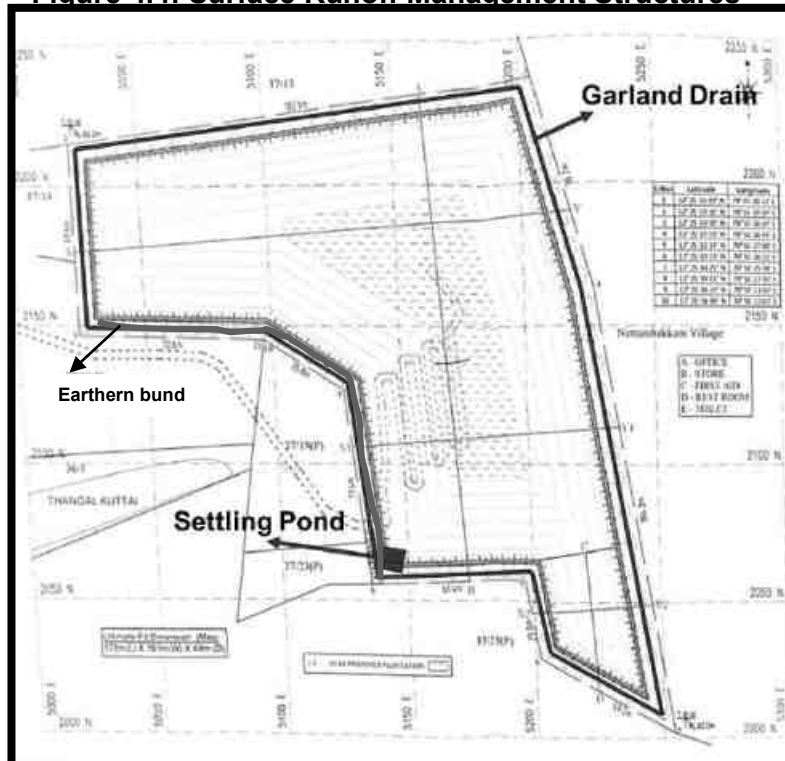
The domestic sewage to be generated from the project will be collected in septic tank with soak pits.

B. Washouts from overburden, ore stockpile, etc.

Since the entire material from the quarry face will be directly dispatched to the consumers, there will not be any stockpiles. There are no waste dumps in this quarry. As such there will not be any wash out due to stock pile or waste dumps.

The rain water falling in the quarry will be harvested in the sump at the lowest level of the quarry. This sump will act as a settling pond to prevent solids escaping along with discharge, before outlet. etc. Towards surface runoff management, a garland drain of length 850m will be constructed around the quarry and will be connected to settling pond on the SE corner with silt traps. The supernatant clear water from the settling ponds will be flow to the downstream users. The surface runoff management structures diagram is given in **Figure No 4.4**.

Figure 4.4: Surface Runoff Management Structures



C. Disturbance to drainage courses

There are no perineal water courses near the lease area. There is a Thangal Kuttai – 50m – SW of the lease area. Safety distance of 50m has been left for this Thangal. It acts more of the rainwater harvesting pond and it remains dry for most of the period. Earthen bund will be formed within the lease area in the western side in the safety zone. Besides, the intervening land will also be fenced and developed with green belt. There will be no generation or discharge of effluent into these water bodies. No major impact is envisaged on the nearby water bodies due to project operations. It is also proposed to clean & desilt the unused thangal and strengthen its peripheral bund in consultation with the authorities which will augment the water storage and ground water table.

D. Generation of mine pit water pumped out from deeper workings if any.

The occurrence and movement of groundwater in hard rock formations are restricted to the porous zones of weathered formations and the open systems of fractures, fissures and joints. Generally, in hard rock regions, occurrence of weathered thickness is discontinuous both in space and depth. Hence recharge of groundwater in hard rock formations is influenced by the intensity and depth of weathering.

Study of the area shows that the sub-surface formations are compact with less intergranular porosity and fractures leading to less permeability and transmissivity values and as such the ground water level in this area is deep from surface. Subsequently hard and massive formations of rock are found. Based on the available information and the geophysical investigations it is observed that the study area is of poor to moderate groundwater potential up to 70m to 75m. Besides, the mining area consists of hard compact rock, no major water seepage within the mine is expected. The ultimate pit depth of mining is 44m. The ground water table in this area is below this level. Hence, ground water intersection is not envisaged and ground water will not be affected appreciably due to the quarrying operation. There is no water seepage noticed in to the already quarried deeper pits situated nearby the proposed quarry area. Hence, the quarrying rough stone up to the proposed depth may not have any adverse impact in the area over ground water conditions.

As mentioned earlier, the rainfall will be collected in the mine floor sump and advantageously used. Excess water if any in the sump will be pumped to settling pond for downstream users.

4.3.4 REDUCING WATER CONSUMPTION OVER THE YEARS:

4.3.4.1 GENERAL METHODS:

Use of water will be monitored and used to the minimum required. Awareness will be spread to the employees about the importance of water conservation. Tap and showers will be turned off immediately after use and any leaks will be monitored and immediately controlled. Water requirement for greenbelt and dust suppression can be reduced by choosing the native plants/trees species with low water requirement and which can sustain in such conditions for greenbelt/ plantation and also optimum usage to the required minimum. While the dust suppression itself is an important method of pollution control for air pollution due to dust, the water consumption will be monitored strictly. The water tanker will be examined for any sources of leaks and if found will be immediately sealed so that water can be utilized for dust suppression effectively without loss.

4.3.4.2 RAINWATER HARVESTING PLAN

Since the lease proximate areas are with less water potential and the rainwater is the major source for replenishment of ground water, effective rainwater harvesting and other water augmentation measures are proposed in this project.

- a) Development of garland drain around the quarry connected to settling tank.
- b) Cleaning of drain periodically to prevent siltation
- c) The supernatant clear water from the settling pond will drain into the nearby drainage.
- d) Utilizing the rainwater harvested in the mine pit to meet the water requirement of the project.
- e) Excess water, if any in consultation with local villagers and in line with government practices shall be provided to the downstream users.

4.4 NOISE AND VIBRATION:

4.4.1 NOISE ENVIRONMENT:

The ambient noise levels in the study area have been discussed in Chapter - III. The data shows that the existing noise levels are within statutory tolerable limits. The impact prediction and control measure for noise environment due to mining and allied activities is described below:

4.4.1.1 IMPACT PREDICTION DUE TO NOISE:

Noise is one of the inevitable causes of pollution in mining operations, largely due to the extensive mechanization adopted. Besides, other operations such as drilling, blasting, movement of vehicles, etc., also produce noise of considerable magnitude in mining operations. The main sources of noise and expected levels are given below in **Table no – 4.8.**

Table4.8: Main Sources of Noise

Sl. No.	Source	Inside Cabin	Noise level at dB(A) 10 m. from source
1	Shovel	84-91	59-68
2.	Dumpers/Tippers	87-96	75-85
3.	Drill	88- 95	75-83

Prolonged exposure to a high noise level is harmful to the human auditory system and can create mental fatigue, rebellious attitude, annoyance and carelessness, which may lead to neglect of work and also result in accidents. The impact of noise level as per World Health Organization's 1986 notification is given below in **Table No-4.9.**

Table4.9: Impact of Noise Levels

NOISE LEVELS	ADVERSE EFFECTS
90-115 dB	Partial deafness and nervous irritability
> 115 dB	Permanent deafness
Impulsive noise (>90dB)	Frightens livestock grazing in the nearby areas

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OSHA (Occupational Safety and Health Administration), USA and other similar organisations stipulate that noise level up to 90 dB(A) is acceptable for eight hours exposure Leq (Equivalent sound level) (8hrs) per day. The Directorate General of Mines Safety, in circular No. DG (Tech)/18 of 1975, has prescribed the noise level in mining occupations (TLV) for workers, in an 8 hour shift period with unprotected ear as 90 dB(A) or less.

The noise will be felt only near the active sources. There will be considerable reduction in the noise level due to the absorption factor, environmental surroundings and other attenuation factors. As far as absorption factor is concerned, If the ground cover is vegetated or has a soft texture, sound will decrease at the rate of 4.5dB(A) every time the distance between the source and the observer is doubled. Besides, there will be shielding factor, which takes into account the environmental surroundings. With every 30m of dense land scape vegetation, 5dB(A) of additional attenuation can be obtained upto a maximum of 10 dB(A).As such at away places the effect of noise will not be felt.

Anticipated noise levels resulting from operation of the various machineries like excavator, tippers, drill have been computed using point source model. Computation of cumulative noise levels at the nearby villages is made based on the assumption that there are no attenuation paths between the source and the boundary.

Noise modeling is carried out using the following formula:

$Lp2 = Lp1 - 20 \log R2/R1$, Where, $Lp1$ and $Lp2$ are sound pressure levels at points located at distances $R1$ and $R2$ respectively from the source. The study results are as follows:

Table4.10: Post Project Noise Levels

Sl.No	Location	Baseline Day Eq.in dB(A)	Post project noise Eq in dB(A)	Limit dB(A) as per MoEF&CC
1.	Near Lease Area	53.0	54.2	90
2.	Kulathur Village	52.2	52.4	55
3	Peruveli Village	49.3	49.5	55
4	Netravakkam Village	49.9	50.1	55
5	Nallamur Village	49.5	49.7	55

From the studies, it is found that the predicted Noise Levels due to mining operations at the periphery of the mine lease itself will be less even without considering any attenuation factor.



However, practically there will be attenuation due to vegetation etc., and as such there will not be any adverse noise propagation outside the lease boundary. Since the habitations are also away the effect of noise due to mining operations will not be felt at all in the surrounding villages.

4.4.1.2 CONTROL MEASURES FOR NOISE ENVIRONMENT:

Hence, by following mitigative measures for noise control, the impact on noise levels will be insignificant:

- Planting rows of native trees along roads, around mine area and other noise generating centers to act as acoustic barriers.
- Sound proof operator's cabin for equipments like shovel, tippers, etc.
- Proper and regular maintenance of equipments may lead to less noise generation.
- Providing in-built mechanism for reducing sound emissions.
- Providing earplugs to workers exposed to higher noise level.
- Conducting regular health check-up of workers including Audiometry test for the workers engaged in noise prone area.
- Displaying the noise level status of operational machinery on the machines to know the extent of noise level and to control the time to which the worker is exposed to higher noise levels.
- Provision of tin net on the southern side and green net along the lease periphery on the other sides.

Further green belt and afforestation will be planned and executed to abate noise and dust propagation in the area.

4.4.2 GROUND VIBRATIONAL DUE TO BLASTING EFFECTS:

Vibrations due to blasting may cause damage to nearby structures, if appropriate control measures are not adopted. Flyrock is another possible damage causing outcome of blasting. There are many factors, which influence these, like long explosive column with little stemming



column, improper burden, loose material or pebbles near holes and long water columns in the holes.

The following control measures will be planned to reduce ground vibratory conditions to sustainable statutory limits:

- 1) Carrying out controlled blasting using Nonel delay detonator.
- 2) Optimum design for burden and spacing.
- 3) Reducing explosive charge per delay to minimum.
- 4) The peak particle velocity (PPV) of ground vibration will be kept very low through optimally controlled blasting techniques, after necessary field trials.
- 5) To contain fly rocks, stemming column to be less than burden of the hole. Blasting area will also be muffled, if necessary, to stop fly rocks propagation.
- 6) Blasting will not be carried out when strong winds are. Blasting will be done during midday time.
- 7) Controlled blasting to avoid tension cracks which may endanger the stability of bench slopes in the mine.
- 8) Proper care and supervision during blasting by a competent and experienced person to be carried out.
- 9) Having different blasting time for the leases in the cluster.

By adoption of above measures, it will be ensured that the ground level vibration due to blasting are maintained within the limits prescribed by DGMS, Dhanbad at the mining areas vide Circular No. 7 dated 29 -08-1997 as given below

Table 4.11: Permissible Peak Particle Velocity (PPV) In Mining Areas

Type of structure	Dominant excitation frequency Hz		
	<8 Hz	8-25 Hz	>25 Hz
A. Buildings/structures not belonging to owner			
Domestic houses /structures (Kuchha brick and cement)	5	10	15



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Industrial buildings (RCC and framed structures)	10	20	25
Objects of historical importance and sensitive structures.	2	5	10
B. Building belonging to owner with limited span of life			
Domestic houses/structures (Kuchha brick and cement)	10	15	25
Industrial buildings (RCC and framed structures)	15	25	50

Besides, different blasting time for the projects in the vicinity is suggested and the timing is to be mentioned in the display board in the respective mines entrance.

4.5 LAND ENVIRONMENT:

The lease area of 3.32.50 Ha is a own patta land. No mining is carried out in the lease area. Crusher materials from the nearby crusher were temporarily stored in the lease area and it is being cleared. For the crusher hopper on the northern side , Portion of the ramp of the crusher falling in the north periphery of the lease area is being moved outside the lease. The present land use pattern, and the post mining land use pattern is shown below:

Table 4.12: Land Use Table

Sl. No.	Land Use	Present Area (Hect)	Area in use during the 5 year period (Ha)
1.	Quarrying Pit	-	2.65.70
2.	Infrastructure	-	0.02.00
3.	Roads	-	0.02.00
4.	Green Belt	-	0.62.80
5.	Unutilized	3.32.50	-
	Total	3.32.50Ha	3.32.50Ha

4.5.1 LAND RECLAMATION:

There is no waste generation anticipated in this quarry operation since the entire excavated material will be utilized. Hence, there is no external overburden dump involved. At the end of the period, In the post mining stage, the mine pit area of 2.65.70Ha will be left as a water body. Plantation will be carried out over 0.02.00Ha and 0.02.00Ha will be left as road and infrastructure. 0.62.80 Ha will be covered with vegetation.

Table4.13: Land Use During Post Operational Period

S.No	Description	Land use (Ha.)			
		Plantation	Water body	Others	Total
1	Quarrying Pit	-	2.65.70	-	2.65.70
2	Infrastructure	0.02.00	-	-	0.02.00
3	Road		-	0.02.00	0.02.00
4	Green Belt	0.62.80	-	-	0.62.80
5	Unutilized	-		-	-
	TOTAL	0.64.80	2.65.70	0.02.00	3.32.50

Entire mined out area will be properly fenced to prevent inadvertent entry of men and animals. In the post mining stage the entire mined out area shall be used as a rainwater harvesting pond.

Mine closure :

At the end of the life of the mine, the following points will be ensured:

- The mine benches will be properly dressed, loose material in the face if any and the mine site will also be cleared.
- Mine Closure activities will be carried out progressively by way of fencing, laying of garland drain around the lease periphery & plantation.
- The peripheral barbed wire fencing, will be strengthened to prevent inadvertent entry of public and animal. surface runoff management arrangements will be improved so as not to disturb the hydrological cycle of the area post mining.
- Besides, to prevent any access to the mined out void, entrance will be secured with tall gate and a blockage bund across the access road.
- No entry / safety board will be erected all around the lease area.
- Benches will be kept intact and haul road accessibility will be maintained.
- Regular checking to prevent inherent entry in to the lease area post mining will be done.
- PP will ensure effective post closure monitoring.

4.6 BIOLOGICAL ENVIRONMENT:

4.6.1 EXISTING FLORA AND FAUNA:

The core zone area is barren with grasses and bushes. Details of flora/fauna pattern in core and buffer zones have been described in chapter - III.

4.6.2 IMPACT OF MINING ON BIOLOGICAL ENVIRONMENT:

The significance of impact on biological environment due to mining and allied activities on various fronts is described below:

Table 4.14: Impact on Biological Environment

S.No	ISSUES	OBSERVATIONS
1	Clearance of vegetation due to mining and allied activities	No clearance of major vegetation is involved.
2	Retardation of tree growth, tip burning, etc, due to deposition of dust and the Particulate matter generated from the mining operation.	Necessary mitigative measures like dust suppression, proper maintenance of equipment's, roads will be carried out to prevent dust generation.
3	Proximity to national park/ wildlife sanctuary/reserve forest/mangroves/Coastline/estuary/ sea	The mining lease area and the 10 km buffer zone from the periphery of the core zone is devoid of declared ecologically sensitive features like national parks, biospheres, sanctuaries, etc.
4	Release of effluents into water body that also supplies water to wildlife	There is no proposal to discharge any effluent into nearby water bodies.
5	Proposed project could increase siltation that would affect nearby biodiversity area	Surface runoff management structures like garland drain, settling pond etc. as explained above will be constructed and as such there will not be any appreciable impact on surface water quality which in turn can affect the bio diversity of the area.
6	Activities of the project affects the breeding/nesting sites of birds and animals	In the present ML area, there is no wetland. A migratory bird needs sufficient wetlands with sufficient food, shelter, roosting places and nesting places which is not possible here.
7	Located near an area populated by rare or endangered species	There are no rare or endangered species in the nearby area
8	Risk of fall/slip or cause death to wild animals due to project activities	In the post mining stage, barbed wire fencing is proposed all around the mined-out void to prevent falling of animals in the mine pits.
9	Project affects the forest-based livelihood/any specific forest product on which local livelihood depends	Not applicable



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10	Project likely to affect migration routes	No migration routes are in the area.
11	Project likely to affect flora of an area, which have medicinal value	No such significantly important medicinal value species within the ML area and its nearby region.
12	The project likely to affect wetlands, fish breeding grounds, marine ecology	There are no any wetlands, fish breeding grounds, marine ecology nearby the ML area which will be affected due to this project.
13	Project affects the Agriculture, Forestry and Traditional Practices	Due to rocky land formation, undependable rainfall, poor soil condition, absence of irrigational source or water bodies, deep ground water occurrence, little seasonal agricultural activities are carried out in the area. By adoption of systematic mining adhering to all the environmental mitigation measures as explained earlier, no adverse impact on the far away agricultural or surrounding environs envisaged.
14	Impact on soil health and biodiversity	The lease area is Plain topography land only (Photograph of the site attached in Chapter-II). Besides, there is no waste generation, disposal or stacking involved in this project. As such no loss of soil health and Bio-diversity is expected.
15	Climate change leading to droughts, floods, etc.	•No adverse impact on the surrounding environment is envisaged since the number of equipment's to be used to achieve this production is moderate and the magnitude of operation is of maintainable level. •Besides, as is it a mining project, no adverse generation of heat is envisaged. •Certified vehicles with low carbon emissions will only be used. These equipment's will be properly and regularly maintained. Besides, regular vehicular emission tests will be done for the transport vehicles to ensure minimal impact due to carbon emissions. To further mediate the carbon emissions, a good greenbelt and plantation plan has been in and around the lease area. •Geologically the area in and around the lease area contains charnokite type rock formation containing mostly fallow land. As such there no major vegetation or agricultural activities are observed. •There are no Protected or Eco-Sensitive Zone or forest land nearby wherein it can have an impact. •It will be ensured that mining will be carried out adhering to all the statutory rules and regulations and maintaining the environmental quality within the prescribed standards by effective implementation of various mitigative measures. •These mitigative measures will be continued for the entire lease period ensuring no impact on the environment.
16	Pollution leading to release of greenhouse gases (GHG) rise in temperature (Hydrothermal/Geothermal effect due to destruction in environment, Bio-geochemical processes and its foot prints including environmental stress) and livelihood of local people.	



		•As such release of Greenhouse gases (GHG), rise in temperature, affecting livelihood of the local people ,loss of Agriculture, Forestry and Traditional Practices is not envisaged. Such a limited scope will not induce any climatic change leading to droughts, floods etc.
17	Possibilities of water contamination and impact on aquatic ecosystem health and impact on Sediment geochemistry in the surface streams	•This being a mining project no process effluent will be generated. •Water generation is expected to be due to ✓ Direct rainfall falling within the pit ✓ Rain water draining near the lease area. •Direct rain fall will be collected in the mine floor sump. Water from sump will be pumped to settling pond for downstream users. •Rainwater from the mine periphery will be collected through peripheral garland drain. Garland drain will be connected to a settling pond. Supernatant clear water from settling pond confirming to applicable limits will be let out to downstream users for agricultural or other purposes. •Due to above mentioned reasons and absence of perinnial water bodies nearby where in any marine ecosystem is observed, no effect on this front is expected.

There are no migratory corridors, migratory avian-fauna, rare endemic and endangered species. Therefore there shall be no impacts due to mining activity on them. Even though there are no adverse impact on bio diversity and flora/fauna status due to project operations, positive impacts will arise due to well-planned reclamation measures for restoration of land status in the area ultimately to productive land category with elaborately planned green belt development activities.

4.6.3 CONTROL MEASURES FOR BIOLOGICAL ASPECTS:

To reduce the adverse effects on flora/fauna status of the area due to deposition of dust generated from mining operations, mobile water tanker systems will be ensured in all dust prone areas to arrest dust generation, .Methodical and well-planned plantation scheme will be carried out depending upon the immediate need, priority and availability of land. The plantation will be done along the lease boundary in a phased manner.

4.6.4GREEN BELT& PLANTATION:

In the safety zone within the lease area and in the nearby areas including mineral transport road plantation of local trees will be carried out about 1000trees will be planted in and around the lease area.

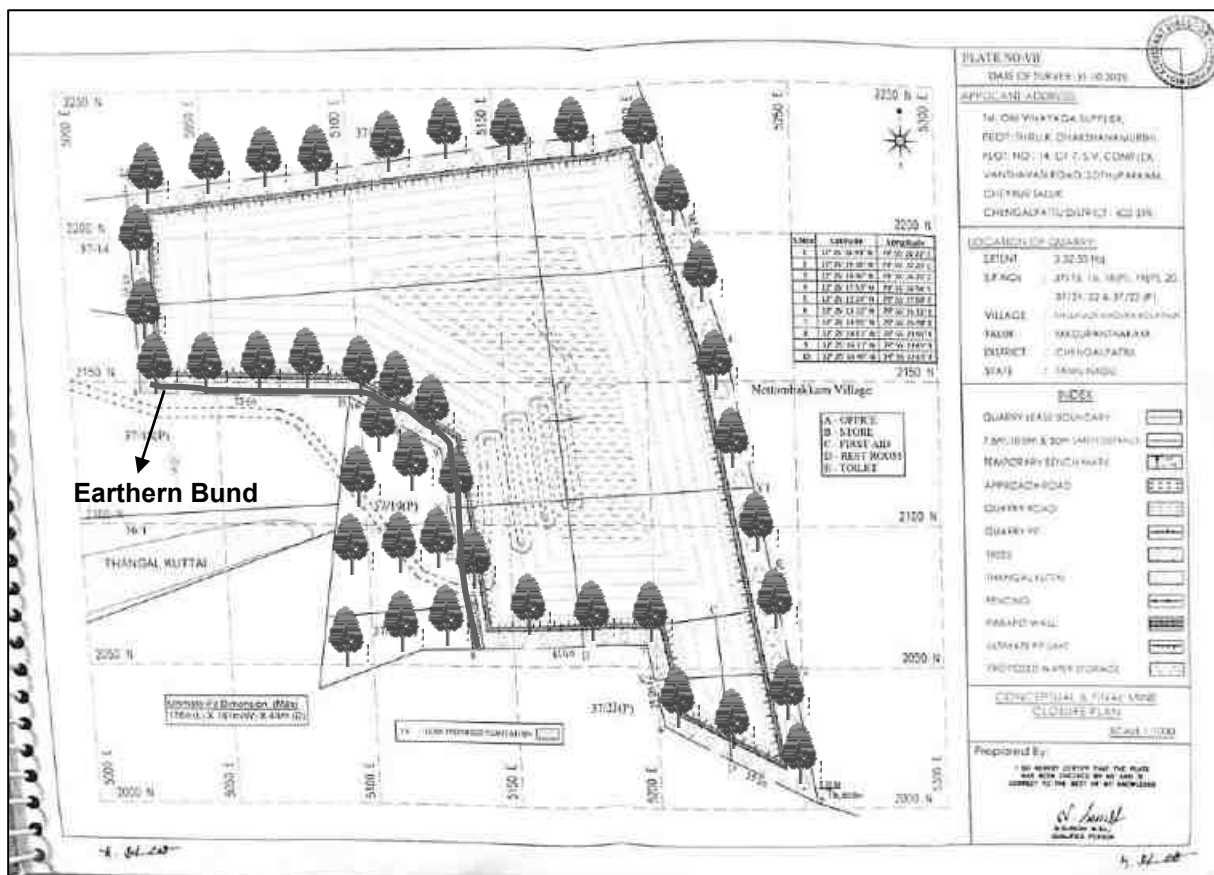
Table4.15: Proposed Plantation

Year	Species	No Of Trees
1	Pungai, vagai, Vembu etc	200
2		200
3		200
4		200
5		200
	Total	1000

In the post mining stage, the mine pit area of 2.65.70Ha will be left as a water body. Plantation will be carried out over 0.02.00Ha and 0.02.00Ha will be left as road and infrastructure. 0.62.80 Ha will be covered with vegetation.The post mining land use plan showing afforestation and water body is shown in **Figure No- 4.5.**

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Figure 4.5: Mine Closure Plan



4.7 SOCIO ECONOMIC ENVIRONMENT:

The entire lease area is in the proponent's possession. There are no habitations or hutments in the core zone area and no rehabilitation or resettlement is involved.

The mining operations in the proposed mine will employ about 16 persons directly and about 50 persons on indirect basis through allied opportunities in logistics, trading, repairing works etc. good employment potential will arise in this area, which will provide raising income levels and standards of living in the area through various service related activities connected with the project operations as shown under.



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CHAPTER-4: ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

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- Project related logistical operations for transport of Rough Stone, etc,
- Various trading services for consumer goods, spare parts, sundry items, etc.
- Contractual services connected with the project.
- Green belt and horticultural works in the project.
- Casual labor needs for various activities.

Besides, there will be improvement in the following aspects due to project operation:

- ❖ Improvement in infrastructural facilities, providing education aids etc. in nearby schools
- ❖ Betterment of drinking water facilities.
- ❖ Benefit to the State and the Central governments through financial revenues by way of royalty, tax, duties, etc from this project directly and also indirectly.

From above details, it is clear that the project operations will have highly beneficial positive impact in the area.

Table 4.16: CER Cost

Project Cost (Rs.)	Rs. 57,15,000/-
CER Cost Requirement (2% of the Project Cost) (Rs.)	Rs. 1,14,300/-
Revised CER cost allocated (Rs.)	Rs.5,00,000/-

However, towards the socio economic development of the surrounding area, the proponent has earmarked an amount of Rs.5 Lakhs under Corporate Environmental Responsibility. The activities identified under CER will be implemented in a phased manner in provision of facilities in nearby Government School.

4.8 OCCUPATIONAL HEALTH AND SAFETY:

4.8.1 BASELINE STATUS:

Primary data collection through field survey conducted in the study area reveals that there is no reported incident of any occupational diseases in the area. Hazardous jobs like blasting,



loading, etc. are planned to be executed safely and with all precautionary measures as prescribed in Metalliferous Mines Regulations of 1961, so as to minimize hazards and incidences of health problems.

4.8.2 IMPACTS ON OCCUPATIONAL HEALTH DUE TO PROJECT OPERATIONS:

Anticipated occupational illness sequel to mining activities can be as follows:

- Dust related pneumonia
- Tuberculosis
- Rheumatic arthritis
- Segmental vibration
- Miner's Nystagamus

4.8.3 MITIGATIVE MEASURES FOR OCCUPATIONAL HEALTH:

To reduce pollution emanation from the project, following measures are being and will be taken:

- Water sprinkling on haul roads etc.
- Green belt creation to arrest dust and reduce noise propagation.
- Acceptance of good control measures for reducing air pollution, as mentioned earlier in the chapter.
- Control of noise levels through good preventive maintenance of machineries, green belt creation, provision of ear plug to workers, etc.
- In addition to above measures, the following remedial steps are being and will be enforced to ensure minimization of occupational health and safety problems.
- Medical examination of workers by qualified doctors, as per DGMS circulars.
- Regular awareness campaigns amongst staff and workers
- Staff will be provided with PPE to guard against excess noise levels, Dust generation and inhalation, etc., as per standards prescribed by DGMS.

4.8.4 MITIGATIVE MEASURES FOR SAFETY ASPECTS:

The following safety gadgets will be provided to the staff and workers based on their area of operation and work& requirement:

SI No	Safety Equipments
1.	Helmets
2.	Shoes
3.	Goggles
4.	Dust Mask
5.	Hand Gloves
6.	Reflective Jackets
7.	Ear Muffs
8.	Signal Lights/Flags

4.9 LOGISTICAL SYSTEM:

From this proposed quarry the entire output will be transported to the crusher units for producing stone aggregates of different sizes or construction of roads, bridges, buildings and other buyers etc. The expected peak transport will be as follows:

Table 4.17: Details of Transportation

Sl.no	Particulars of activity	Quantity
A	Yearly material transport (T/year)	175000
B	No of days in a year	300
C	Transport hours per day	8 to 10
D	Truck capacity in T	20 to 25
	Trips per hour	3 to 4 Trips /hr

From the above table it is seen that there will be about 3 to 4 trip per hour additional truck traffic. Since production from this lease will be more of a substitute for the existing arrangements, practically no adverse impact due to logistics is envisaged. The existing road can absorb this traffic due to this project. However, the following mitigative measures are suggested:

- ❖ Water sprinkling on material in the transport vehicles before transporting, so that no dust nuisance during transport will arise.
- ❖ Plantation on either side of the transport road in consultation with the concerned department.

- ❖ Proper maintenance of transport roads
- ❖ Proper maintenance of transport vehicles.
- ❖ Avoiding overloading of material
- ❖ Covering of loaded vehicles with tarpaulins sheet.
- ❖ Limiting of speed
- ❖ Provision of tyre washing facility at the mine outlet

4.10 WASTE MANAGEMENT:

Solid Waste: Since the entire mined out material will be used there will not be any solid waste generation from this project.

Liquid waste: There is no process effluent generation from this mine. Hence no liquid waste is generated.

Hazardous waste management: In this project the following management practices will be followed:

- Ensuring availability of different colour bins for collection of different types of waste.
- Storing of Hazardous waste material in a separate storage area with impervious containers for waste oil, oil contaminated clothes, used lead acid batteries, scraps, tyre storage etc.
- Ensure that there are no leakages/spillages of hazardous wastes.
- Ensuring that the fire extinguisher system is available at hazardous material storage area.

The hazardous waste if any will be disposed through authorized recyclers or re-processors periodically. The hazardous wastes will be transported in accordance with the provisions of rules. By effective implementation of above said mitigation measures no major impact due to Hazardous waste is expected.

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Plastic waste: Single use plastics/ use and throwaway plastics will be banned in the site as directed by the Tamil Nadu Government vide GO(Ms)No.84 regarding ban on use of plastic products. The employees will be encouraged to use compostable material or reusable material.

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CHAPTER - V

ANALYSIS OF ALTERNATIVES (TECHNOLOGY & SITE)

CHAPTER 5 ANALYSIS OF ALTERNATIVES

5.1 ALTERNATE TECHNOLOGY:

This is a proposed Rough Stone and Gravel Quarry in which Mechanized Open Cast mining will be carried out. It involves jack hammer drilling, blasting, excavation, loading and transportation of Rough stone to the crushing units. As this method is techno economically proven, consideration of an alternate technology is not warranted.

5.2 ALTERNATE SITE:

The mineral deposits are site specific in nature; hence question of seeking alternate site does not arise.

CHAPTER - VI

ENVIRONMENTAL MONITORING PROGRAMME

CHAPTER 6 ENVIRONMENTAL MONITORING PROGRAMME

6.1 GENERAL

In this project, appropriate environmental monitoring programme are framed. Regular, systematic and sustained programme schedules for implementation and monitoring of various control measures are devised with clear cut guidelines of various concerned plans for keeping a continuous surveillance on the various environmental quality parameters in the area.

The monitoring schedules are planned to aim at regular and systematic study of various pollution levels with respect to air and water quality, noise levels etc., to ensure that they conform to the standards laid down by the Environment Protection Act, 1986 and various Central and State Pollution Control Board Limits.

The various methodologies and frequency of studies of all environmental quality parameters will be as per prescribed norms laid down by MOEF&CC and State Pollution Control Board. This being a small quarry operation, the Mines in-charge will take care of all the environmental related works also.

Environmental control measures include components like air, water and soil quality, noise levels, afforestation measures, etc. For monitoring of environment over the life of the mine, a set of stations for study of quality parameters are fixed as per the actual requirements and prevailing conditions of environmental factors, as dictated from time to time, depending on the prevailing pollution levels.

6.2 MONITORING SCHEDULES FOR VARIOUS PARAMETERS

The monitoring schedules are planned for systematic study of various pollution levels with respect to air and water qualities, noise levels, etc. to ensure that they conform to the standards laid down by Environmental Protection Act and various statutory Limits. However, based on the need and priority it may be suitably modified / improved in consultation with local authorities. The monitoring schedules to be adopted in this quarry are given below.



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Table 6.1: Environmental Monitoring Schedule

S.No	Environmental Parameters	Parameters to be monitored	Monitoring area coverage /locations	Frequency of monitoring
1	Air Quality	Sulphur dioxide (SO ₂), Oxides of Nitrogen (NO ₂), Respirable Particulate Matter (PM _{2.5} and PM ₁₀).	2 locations in the buffer zone and 1 work zone locations.	Once in a year in each location.
2	Water Quality	General, Physical, and chemical parameters	Ground Water samples (around the project area) and Mine Pit water samples	Once in a year
3	Water Table Fluctuations	Water Levels	Nearby wells and Borewells	On yearly basis pre and post monsoon level
4	Noise	Leq. Lmax Lmin, Leq Day & Leq Night dB(A)	Work zone locations and buffer zone villages	Once in a year
5	Vibration	Peak Particle Velocity	Mine periphery	Once to arrive at optimum blasting parameters
6	Socio Economic Environment	Socio Economic Survey, Review of implementation of CER activities proposed	Buffer Zone	Yearly basis
7	Occupational Health	Occupational health survey to detect early incidence of diseases, Audiometry Test for workers in noise prone area and review of safety matters.	Staff and Workers involved in the project	Once in a year
8	Greenbelt	Maintenance	Within the lease area	Regularly

6.3 LEGISLATIVE AND REGULATORY FRAME WORK:

The project will have environmental policy declaring its responsibility and commitment to protect the environment and to ensure public safety. The existing policy will be available with all concerned officials of the plant. The following environmental standards as per methodologies prescribed, by MOEF/CPCB/TNPCB will be enforced in this project:



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Table 6.2: Environmental Standards

Standards	Issued By	Reference
National Ambient Air Quality Standards	Central Pollution Control Board	Table No. 6.3
Water quality standards per IS 10500:2012	Bureau of Indian Standards	Table No.6.4
Noise Standards	CPCB / MoEF&CC	Table No.6.5
Permissible Peak Particle Velocity	DGMS, Dhanbad	Table No.6.6

Table 6.3: National Ambient Air Quality Standards

[MPPT III] - [2009/4]

[3]

NATIONAL AMBIENT AIR QUALITY STANDARDS
CENTRAL POLLUTION CONTROL BOARD
NOTIFICATION
New Delhi, the 18th November, 2009

No. B-29616/2009/PC-I.-In exercise of the powers conferred by Sub-section (2) (b) of section 16 of the Air (Prevention and Control of Pollution) Act, 1981 (Act No.14 of 1981), and in supersession of the Notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998, the Central Pollution Control Board hereby notify the National Ambient Air Quality Standards with immediate effect, namely:-

NATIONAL AMBIENT AIR QUALITY STANDARDS

S. No.	Pollutant	Time Weighted Average	Concentration in Ambient Air		
			Industrial, Residential, Rural and Other Area	Ecologically Sensitive Areas (notified by Central Government)	Methods of Measurement
(1)	(2)	(3)	(4)	(5)	(6)
1	Sulphur Dioxide (SO ₂), µg/m ³	Annual* 24 hours**	50 80	20 80	- Improved West and Gaeke - Ultraviolet fluorescence
2	Nitrogen Dioxide (NO ₂), µg/m ³	Annual* 24 hours**	40 80	30 80	- Modified Jacob & Hochheiser (Na-Arsenite) - Chemiluminescence
3	Particulate Matter (size less than 10µm) or PM ₁₀ , µg/m ³	Annual* 24 hours**	60 100	60 100	- Gravimetric - TOEM - Beta attenuation
4	Particulate Matter (size less than 2.5µm) or PM _{2.5} , µg/m ³	Annual* 24 hours**	40 60	40 60	- Gravimetric - TOEM - Beta attenuation
5	Ozone (O ₃), µg/m ³	8 hours** 1 hour**	100 180	100 180	- UV photometric - Chemiluminescence - Chemical Method
6	Lead (Pb), µg/m ³	Annual* 24 hours**	0.50 1.0	0.50 1.0	- AAS/ICP method after sampling on EPM 2000 or equivalent filter paper - ED-XRF using Teflon filter
7	Carbon Monoxide (CO), mg/m ³	8 hours** 1 hour**	02 04	02 04	- Non Dispersive Infra Red (NDIR) spectroscopy
8	Ammonia (NH ₃), µg/m ³	Annual* 24 hours**	100 400	100 400	- Chemiluminescence - Indophenol blue method



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THE GAZETTE OF INDIA : EXTRAORDINARY

[PART III—Sec. 4]

(1)	(2)	(3)	(4)	(5)	(6)
9	Benzene (C ₆ H ₆) µg/m ³	Annual*	05	05	- Gas chromatography based continuous analyzer - Adsorption and Desorption followed by GC analysis
10	Benzo[a]Pyrene (BaP) - particulate phase only, ng/m ³	Annual*	01	01	- Solvent extraction followed by HPLC/GC analysis
11	Arsenic (As), ng/m ³	Annual*	06	06	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper
12	Nickel (Ni), ng/m ³	Annual*	20	20	- AAS /ICP method after sampling on EPM 2000 or equivalent filter paper

* Annual arithmetic mean of minimum 104 measurements in a year at a particular site taken twice a week 24 hourly at uniform intervals.

** 24 hourly or 08 hourly or 01 hourly monitored values, as applicable, shall be complied with 98% of the time in a year. 2% of the time, they may exceed the limits but not on two consecutive days of monitoring.

Note. — Whenever and wherever monitoring results on two consecutive days of monitoring exceed the limits specified above for the respective category, it shall be considered adequate reason to institute regular or continuous monitoring and further investigation.

SANT PRASAD GAUTAM, Chairman
[ADVT-III/4/184/09/Exy.]

Note: The notifications on National Ambient Air Quality Standards were published by the Central Pollution Control Board in the Gazette of India, Extraordinary vide notification No(s). S.O. 384(E), dated 11th April, 1994 and S.O. 935(E), dated 14th October, 1998.



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CHAPTER-6: ENVIRONMENTAL
MONITORING PROGRAMME

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Table 6.4: IS – 10500 :2012 Standards

Table 1 Organoleptic and Physical Parameters
(Foreword and Clause 4)

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to Part of IS 3025	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Colour, Hazen units, <i>Max</i>	5	15	Part 4	Extended to 15 only, if toxic substances are not suspected in absence of alternate sources
ii)	Odour	Agreeable	Agreeable	Part 5	a) Test cold and when heated b) Test at several dilutions
iii)	pH value	6.5-8.5	No relaxation	Part 11	—
iv)	Taste	Agreeable	Agreeable	Parts 7 and 8	Test to be conducted only after safety has been established
v)	Turbidity, NTU, <i>Max</i>	1	5	Part 10	—
vi)	Total dissolved solids, mg/l, <i>Max</i>	500	2 000	Part 16	—

NOTE — It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.



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Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts
(Foreword and Clause 4)

Sl No.	Characteristic	Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source	Method of Test, Ref to	Remarks
(1)	(2)	(3)	(4)	(5)	(6)
i)	Aluminium (as Al), mg/l, <i>Max</i>	0.03	0.2	IS 3025 (Part 55)	—
ii)	Ammonia (as total ammonia-N), mg/l, <i>Max</i>	0.5	No relaxation	IS 3025 (Part 34)	—
iii)	Anionic detergents (as MBAS) mg/l, <i>Max</i>	0.2	1.0	Annex K of IS 13428	—
iv)	Barium (as Ba), mg/l, <i>Max</i>	0.7	No relaxation	Annex F of IS 13428* or IS 15302	—
v)	Boron (as B), mg/l, <i>Max</i>	0.5	1.0	IS 3025 (Part 57)	—
vi)	Calcium (as Ca), mg/l, <i>Max</i>	75	200	IS 3025 (Part 40)	—
vii)	Chloramines (as Cl ₂), mg/l, <i>Max</i>	4.0	No relaxation	IS 3025 (Part 26)* or APHA 4500-Cl G	—
viii)	Chloride (as Cl), mg/l, <i>Max</i>	250	1 000	IS 3025 (Part 32)	—
ix)	Copper (as Cu), mg/l, <i>Max</i>	0.05	1.5	IS 3025 (Part 42)	—
x)	Fluoride (as F) mg/l, <i>Max</i>	1.0	1.5	IS 3025 (Part 60)	—
xi)	Free residual chlorine, mg/l, <i>Min</i>	0.2	1	IS 3025 (Part 26)	To be applicable only when water is chlorinated. Tested at consumer end. When pro- tection against viral infec- tion is required, it should be minimum 0.5 mg/l
xii)	Iron (as Fe), mg/l, <i>Max</i>	0.3	No relaxation	IS 3025 (Part 53)	Total concentration of man- ganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
xiii)	Magnesium (as Mg), mg/l, <i>Max</i>	30	100	IS 3025 (Part 46)	—
xiv)	Manganese (as Mn), mg/l, <i>Max</i>	0.1	0.3	IS 3025 (Part 59)	Total concentration of man- ganese (as Mn) and iron (as Fe) shall not exceed 0.3 mg/l
xv)	Mineral oil, mg/l, <i>Max</i>	0.5	No relaxation	Clause 6 of IS 3025 (Part 39) Infrared partition method	—
xvi)	Nitrate (as NO ₃), mg/l, <i>Max</i>	45	No relaxation	IS 3025 (Part 34)	—
xvii)	Phenolic compounds (as C ₆ H ₅ OH), mg/l, <i>Max</i>	0.001	0.002	IS 3025 (Part 43)	—
xviii)	Selenium (as Se), mg/l, <i>Max</i>	0.01	No relaxation	IS 3025 (Part 56) or IS 15303*	—
xix)	Silver (as Ag), mg/l, <i>Max</i>	0.1	No relaxation	Annex J of IS 13428	—
xx)	Sulphate (as SO ₄) mg/l, <i>Max</i>	200	400	IS 3025 (Part 24)	May be extended to 400 pro- vided that Magnesium does not exceed 30
xxi)	Sulphide (as H ₂ S), mg/l, <i>Max</i>	0.05	No relaxation	IS 3025 (Part 29)	—
xxii)	Total alkalinity as calcium carbonate, mg/l, <i>Max</i>	200	600	IS 3025 (Part 23)	—
xxiii)	Total hardness (as CaCO ₃), mg/l, <i>Max</i>	200	600	IS 3025 (Part 21)	—
xxiv)	Zinc (as Zn), mg/l, <i>Max</i>	5	15	IS 3025 (Part 49)	—

NOTES

1 In case of dispute, the method indicated by '*' shall be the referee method.

2 It is recommended that the acceptable limit is to be implemented. Values in excess of those mentioned under 'acceptable' render the water not suitable, but still may be tolerated in the absence of an alternative source but up to the limits indicated under 'permissible limit in the absence of alternate source' in col 4, above which the sources will have to be rejected.



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Table 6.5: Noise Level Standards

Area Code	Category of Area	Limits in dB(A) Leq	
		Day Time	Night Time
(A)	Industrial area	75	70
(B)	Commercial area	65	55
(C)	Residential area	55	45
(D)	Silence Zone	50	40

Note :

1. Day time shall mean from 6 a.m. and 10.0 p.m.
2. Night time shall mean from 10.0 p.m. and 6 a.m.
3. Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority.
4. Mixed categories of areas may be average as one of the four above mentioned categories by the competent authority.

* dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which is relatable to human hearing.

A “decibel” is a unit in which noise is measured.

“A”, in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.

Leq: It is energy mean of the noise level over a specified period.

Table 6.6: Permissible Noise For Industrial Workers As Laid Down By CPCB

Exposure time (in hr. per day)	Limit in dB(A)
8	90
4	93
2	96
1	99
1/2	102
1/4	105
1/8	108
1/16	111
1/32	114



Table 6.7: Permissible Peak Particle Velocity (PPV) In Mining Areas

In mm/sec.

Type of structure	Dominant excitation frequency Hz		
	<8 Hz	8-25 Hz	>25 Hz
A. Buildings/structures not belonging to owner			
Domestic houses /structures (Kuchha brick and cement)	5	10	15
Industrial buildings (RCC and framed structures)	10	20	25
Objects of historical importance and sensitive structures.	2	5	10
B. Building belonging to owner with limited span of life			
Domestic houses/structures (Kuchha brick and cement)	10	15	25
Industrial buildings (RCC and framed structures)	15	25	50

The above said monitoring location and the frequency of monitoring shall be suitably modified in consultation with the nodal agency as per the actual requirements and prevailing conditions of the mine and environmental factors, as dictated from time to time, depending on the prevailing pollution levels, if required.

6.4 ENVIRONMENTAL MONITORING COST:

Towards environmental monitoring it is proposed to allocate a budget of Rs. 50,000 per annum for this project. Further details of the capital and recurring cost of environmental management has been provided in in Table No. 10.2, Chapter-X.

* * * * *



CHAPTER - VII

ADDITIONAL STUDIES

CHAPTER 7 ADDITIONAL STUDIES

7.1 GENERAL:

The additional studies covered for this EIA / EMP report are:

1. Public consultation of the project as per MoEF&CC mandates.
2. Risk Assessment
3. Cumulative Impact Study
4. R&R Plan
5. Mine closure planning

7.2 PUBLIC CONSULTATION:

This draft EIA/EMP report will be exposed to public consultation as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures. The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.

7.3 RISK ASSESSMENT:

For the various risks, likely to arise, detailed analysis of causes and control measures is given in below:

S.No	Factors	Causes of risks	Control measures
1.	Removal of material	a) Bench may slide due to its unconsolidated nature. b) Vibration due to movement of vehicles in the benches.	Overall bench slope angle will be maintained optimally as per DGMS requirement. Working bench width will be more than bench height.
2.	Drilling	a)Due to high pressure of compressed air hoses may burst.	• Periodical preventative maintenance and replacement of worn out accessories in the compressor and drill equipment.



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S.No	Factors	Causes of risks	Control measures
		b) Down the hole drill rod may break due to improper maintenance of rod.	As per manufacturers recommendation rod to be replaced and bits will be changed.
3.	Blasting	a) Fly rock, ground vibration, noise etc. b) Improper charging of explosives	- Burden and spacing will be kept optimum on trial basis. - Explosive charge per delay will be minimized. - Controlled blasting with Nonel will be used.
4.	Excavation	a) Hauling and loading equipment are in such proximity while excavation b) Swinging of bucket over the body of tipper c) Driving of unauthorized person	- Operator shall not operate the machine when person & vehicles are in such proximity. - Shall not swing the bucket over the cab and operator leaves the machine after ensuring the bucket is on ground. - Shall not allow any unauthorized person to operate the machine by effective supervision.
5.	Transportation	a) Operating the vehicle "nose to tail" b) Overloading of material c) While reversal & overtaking of vehicle d) Operator of truck leaving his cabin when it is loaded	- It will be ensured that all these causes will be nullified by giving training to the operators. - No over loading will be done. - Audio visual reverse horn will be provided. - Proper training will be given.
6.	Fire due to electricity and Oil	a) Due to the short circuit of cables & other electrical parts b) Due to the leakage of inflammable liquid like diesel, oil etc.	- Electrical parts shall be cleaned frequently with the help of dry air blower - All fastening parts and places will be tightening. Suitable fire suppression equipment shall be provided.
7.	Natural calamities	Unexpected happenings	The mine management is capable to deal with the situation.

This being a rough stone project that too working in a safe area, no major disaster is expected.



7.3.1. DISASTER MANAGEMENT PLAN:

In General, following natural/industrial hazards may occur during normal operation.

- Inundation of mine pit due to flood/excessive rains :
- Slope failure of the pit and waste dumps
- Accident due to heavy mining equipment and
- Blasting and use of Explosives

Mining operation in this lease will be carried out under the management control and direction of a qualified mine manager. The DGMS have been issuing a number of standing orders, model standing orders and circulars to be followed by the mine management in case of disaster. All these orders statutory rules and regulations will be followed. Seismically project site and study area falls in the Zone – II and is described as least active zone. There are no perennial water body near the lease area to cause any flooding. As such no disaster due to this project is envisaged.

In order to take care of above hazard / disasters the following control measures have been adopted.

- Checking and regular maintenance of garland drains and earthen bunds to avoid any inflow of surface water in the mine pit.
- Avoiding mining during heavy monsoon period and marching of all the HEMM to the top benches during rainy period.
- Provision of high capacity standby pumps with generator sets with sufficient quantity of diesel for emergency pumping especially during monsoon.
- All safety precautions and provisions of regulations will be strictly followed during all mining operations
- Prohibiting entry of unauthorized persons.
- Provision of Fire fighting and first-aid provisions in the mines.

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- Provisions of all the safety appliances such as safety boot, helmets, goggles, dust masks, ear plugs and ear muffs etc. are made available to the employees for their use.
- Training and refresher courses for all the employees working in hazardous premises
- Observance of all safety precautions for blasting and storage of explosives as per MMR 1961.
- Working of mine, as per approved plans and regularly updating the mine plans
- Cleaning of mine faces regularly
- Proper storage, usage of explosives through competent persons.
- Regular maintenance and testing of all mining equipment as per manufacturers guidelines
- Suppression of dust on the haulage roads with frequent water sprinkling, etc.
- Increasing the awareness of safety and disaster through competitions, posters and annual safety weeks and environmental weeks, encouraged through suitable rewards and other similar drives.

The management and the EMC will be able to deal with the situations efficiently keeping in view of the likely sources of dangers in the mine.

7.4 REHABILITATION AND RESETTLEMENT (R & R) PLAN:

The mining activities will be carried out within the mine lease area only. The entire mine lease area is a Patta land. There is no population within the ML area. Hence, the question of R& R does not arise.

7.5 MINE CLOSURE PLAN:

In the mine closure stage all necessary measures will be taken as per Act & Rules, There is no proposal for back filling, reclamation and rehabilitation. The quarried pits after the end of life of mine will be properly fenced all around to prevent inherent entry of public and cattle and all the statutory requirements will be fulfilled. As already explained, in the post mining stage the



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rainwater harvested in the mined out void shall be utilized for irrigation and domestic needs locally. The mine closure plan is provided in Figure 4.5 in chapter – IV of the EIA/EMP Report.

7.6 CUMULATIVE IMPACT STUDY:

The lease area is located in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu. The details of the other quarries located within the 500m radius of the project considered for cumulative impact study now(**Annexure-3**) has been provided below:

Table 7.1: Details of quarries within 500m radius

Sl.No	Name of the lessee	Taluk & Village	S.F.Nos	Extent (in Hects)	G.O.No./Proc.No.&Date	Lease Period
I. Existing Quarries :						
1	M/s.Naveen Enterprises, P.Somasekar Reddy, (Administrative partner), Side portion, no.2/141-4, Udaiyar Street, Minnampalli, Nammakkal TK & Dist- 637019.	Nalamur, Maduranthag am	37/1, 37/23(P), 37/24(P), 37/25(P), 37/26(P)	2.83.20	Assistant Director (i/c), Dept, for Geology and Mining, Chengalpattu Proceddings Rc.no.2183/Mines/2022, dated 09.05.2023	09.05.2023 To 08.05.2023
2	Tvl.Triway Ware House & Holding Pvt.Ltd., No.14, Jaffer Street, Chennai – 600001.	Netrampakka m, Maduranthag am	13/2	2.02.50	Deputy Director (Addl.charge), Dept, for Geology and Mining, Chengalpattu Proceddings Rc.no.61/Mines/2024, dated 05.12.2024	03.10.2024 To 02.10.2029
3	Tvl.Triway Ware House & Holding Pvt.Ltd., No.14, Jaffer Street, Chennai – 600001.	Netrampakka m, Maduranthag am	14/1A, 14/1B, 14/2, 15/3	4.54.00	Deputy Director Dept, for Geology and Mining, Chengalpattu Proceddings Rc.no.1944/Mines/2022, dated 04.06.2025	04.06.2025 To 03.06.2035
II.Abandoned quarries :						
-----Nil-----						
III. Details of Proposed quarries :						
1	Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi, PlotNo:14,GF 7,S.V.Complex, Vanthavasi Road, Sothupakkem, Cheyyur Taluk, Chengalpattu -603319	Nallamur Madhra Kolathur, Maduranthag am	37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22 37/23(P)	3.32.5	Rougestone & gravel Quarry	Instant Proposal



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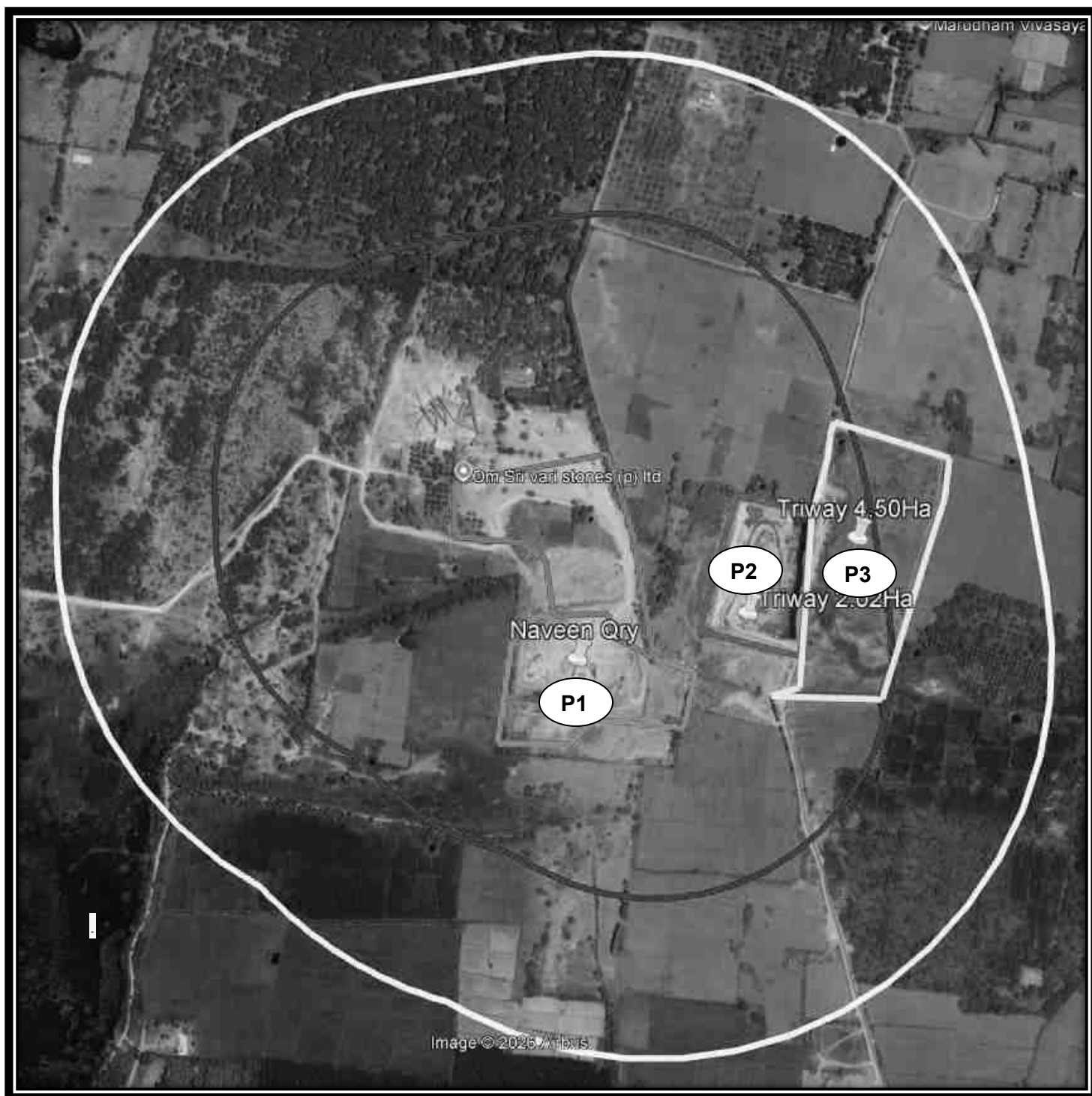
From that above it is seen that, although the individual lease area of this project is less than 5 Ha, the other existing and proposed quarries within the 500m radius along with this subject project works out to >5 Ha. As such cluster situation applicable and this EMP is prepared.

For cumulative impact assessment, impact of the present proposal as given in Chapter – IV of this report and for other proposals from their respective report are correlated and given below:



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Figure 7.1: Vicinity Map



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Table 7.2: Salient details of the proposed quarries

S. No	Project Name	OM Vinayaga Suppliers	P1-Naveen Qry	P2-Triway – 2.02Ha	P3-Triway – 4.50 Ha
1	Survey No.	37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22 & 37/23(P)	263/1A(P) & 264/1(P)	13/2	14/1A, 14/1B, 14/2 & 15/3
2	Village	Nallamur Madura Kolathur	Nallamur	Netrampakkam	Netrampakkam
3	Taluk	Maduranthakam	Maduranthakam	Maduranthakam	Maduranthakam
4	District	Chengalpattu	Chengalpattu	Chengalpattu	Chengalpattu
5	State	Tamilnadu	Tamilnadu	Tamilnadu	Tamilnadu
6	Lease Area in Ha	3.32.50	2.83.20	2.02.50	4.54.0
7	Mineable reserves	4,32,760	10,80,264	2,60,202	9,93,285
8	Peak Production	1,17,300	97,475	58,845	1,29,890
9	Method of mining	Opencast mechanized mining	Opencast mechanized mining	Opencast mechanized mining	Opencast mechanized mining
10	Lease Period	5 years	10 years	5 years	10 years
11	Ultimate Depth	44m	50m	47m	47m
12	Project cost	Rs. 57,15,000/-	Rs. 1,21,55,000/-	Rs. 1,34,80,000 /-	Rs.3,50,37,000 /-

7.6.1 AIR ENVIRONMENT:

The mining and allied activities particularly excavation, hauling, loading and un loading etc. lead to emission of particulate matter. However, effective mitigative measures are provided in the EIA/EMP reports to obviate these effects. The impact on ambient air quality for PM₁₀ and PM_{2.5} due to the operations of both these proposed projects are predicted based on Air Quality Model simulations. The modeling is done for the peak production to know the worst scenario.

It is observed that the peak incremental concentration for PM₁₀, PM_{2.5} is occurring very near the source. At away from the source the values are getting reduced due to dispersion effects.



Baseline data given in Chapter – III reflects the cumulative impact on AAQ due to existing operations in the area.

7.6.2 WATER ENVIRONMENT:

Water requirement for all the projects is mainly for dust suppression and green belt development. Only negligible quantity of water is required for this purpose. Initially it will be procured from outside agencies for these projects and later rainwater collected in the mine pit will be used. Groundwater intersection is not envisaged due to the quarrying operations in these mines. These being mining project there will not be any effluent discharge outside. There are no streams passing through the lease areas. Hence, no major impact is expected on groundwater and surface water regime due to the cumulative project operations.

7.6.3 NOISE ENVIRONMENT:

Normally noise is felt only near the active source and at away places it gets dissipated rapidly. Besides, due to attenuation at mine benches, elevation difference in pits, green belt and dissipation effect, noise levels due to mining operations at its periphery itself become insignificant.

Post project noise in the core zone has already been provided under para 4.4, Chapter-IV where it is seen that the predicted Noise Levels due to mining operations at the periphery of the mine lease itself will be less even without considering any attenuation factor. However, practically there will be attenuation due to vegetation etc., and as such there will not be any adverse noise propagation outside the lease boundary. Hence, the cumulative post project noise levels are also expected to be insignificant.

7.6.4 VIBRATION:

By carrying out controlled blasting using Nonel milli second delay detonators, optimum design for burden and spacing, reducing the explosive charge per delay to minimum in all the projects no adverse impact due to blasting vibration is expected.

7.6.5 TRAFFIC:

The mined out minerals will be transported by means of trucks to the consumers like crusher units for producing stone aggregates of different sizes or construction of roads, bridges,



buildings and other buyers etc. Different link routes are adopted by the quarries and as such logistical load will be distributed. Totally there will be about 9trips per hour. The existing road can absorb this traffic due to this project. Various measures like proper maintenance of road, covering of the loaded truck with tarpaulin, water sprinkling will be carried out to ensure no adverse impact on the logistical front.

7.6.6 LAND ENVIRONMENT:

In the post mining stage, entire mined out area of all the leases will be left as water body. Safety zone will be developed with plantation. It will be ensured that the entire mined out area will be properly fenced to prevent inadvertent entry of men and animals. The rainwater harvested in the mined-out void shall be utilized to meet the water requirement.

7.7 PIT SLOPE STABILITY PLAN

- Factors affecting slope stability of the mine are
 - Geological structure comprising dip, intervening shear zone formation, clay intrusion, joints / discontinuities, faults etc.,
 - Lithology of formation
 - slope geometry
 - Ground water availability which may cause increased thrust on the faces
- Site specific analysis
 - Since the formation is of homogeneous rock type probability of slope failure is low and can be avoided if proper measures are adopted.
 - There will be a 7.5m wide barrier zone which will form a ridge which can also take care of the top section and as such no risk is envisaged on this front.
 - During future workings the following measures will be ensured:
 - Regular inspection of the mine faces to be carried out by mines manager for ensuring absence of any structural features like faults, joints, dyke, intrusive material in the rock strata which may affect the slope stability and cleared.



- No loose material or boulders is to be stacked on the mine top or pit benches.
- Height of the benches should be 5m. Working bench width should be at least 2.5 times the bench height. Ultimate pit bench width will be 5m & slope is kept at 45° to ensure slope stability.
- Haul road formation will be at 1 in 16 slope with adequate road width.
- There will be no ground water table intersection. No seepage is expected due to formation. Adequate drainage management system comprising peripheral garland drain, settlingpond to regulate monsoon water will be created to prevent saturation of compact layers, apparent drainage over the bench slope to avert damages to quarry face and manage the water flow.

The above will ensure safe and stable mine prospects.

7.8 CONCLUSION:

It can be concluded that lot of mining and its allied activities are taking place in the hard rocky formation nearby surroundings. The proposed lease may act as a substitute for the recently expired or to be expired leases in the region.

No adverse impact on the surrounding environment is envisaged from this project due to enforcing all the mitigative measures during mining.

Certified vehicles with low carbon emissions will only be used. These equipment's will be properly and regularly maintained. Besides, regular vehicular emission tests will be done for the transport vehicles to ensure minimal impact due to carbon emissions. To further mediate the carbon emissions, a good greenbelt and plantation plan has been planned

Geologically the area in and around the lease area contains charnokite type rock formation containing mostly fallow land. As such there no major vegetation or agricultural activities are observed. There are no Protected or Eco-Sensitive Zone or forest land nearby wherein it can have an impact.

It will be ensured that mining will be carried out adhering to all the statutory rules and regulations, appointing statutory personnel's like qualified mines manager, blaster, informing DGMS before commencement of mining operations and maintaining the environmental quality



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within the prescribed standards by effective implementation of various mitigative measures.

As such release of Greenhouse gases (GHG), rise in temperature, affecting livelihood of the local people, loss of Agriculture, Forestry and Traditional Practices is not envisaged. Such a limited scope will not induce any climatic change leading to droughts, floods etc.

Mine closure plan is prepared for the lease period and already included in the approved mine plan.

Due to absence of perennial water bodies nearby where in any marine ecosystem is observed, no effect on this front is also expected. Hydrological investigation carried out and as given in Para 3.6 of Chapter III & para 4.3 Chapter – IV shows that the all-time ground water table in this area is much below the mining level. Hence, ground water intersection is not envisaged for the entire life of the mine and ground water will not be affected due to the quarrying operation. As such there will not be any adverse impact on the ground water regime. Besides, this being a mining project, there will not be any process effluent. As mentioned earlier, the rainfall will be collected in the mine floor sump and gainfully used as per CGWA requirement. Excess water if any in the sump will be pumped to settling pond and supernatant clear water let out for downstream users.

It will be ensured that mining will be carried out adhering to all the statutory rules and regulations, appointing statutory personnel's like qualified mines manager, blaster, informing DGMS before commencement of mining operations and maintaining the environmental quality within the prescribed standards by effective implementation of various mitigative measures for the entire lease period.

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CHAPTER - VIII

PROJECT BENEFITS

CHAPTER 8 PROJECT BENEFITS

The proposed Rough stone and Gravel Quarry of Tvl. Om Vinayaga Supplier, Prop.K. Dhakshanamurthi will improve physical and social infrastructures in the area like:

- Direct employment to 35 people.
- Indirect employment to scores of people.
- Financial gains for the governments, through collection of various taxes like royalty, GST, etc.,
- Increase in General Awareness of the People.
- Continual improvements of the local amenities for the local society
- Improvement of the General Living Standard of the People in the Vicinity
- Overall Improvement in HDI (Human Development Index)
- Growth of Allied Industries in the Area.
- Improvement in Per Capita Income.
- Providing certain facilities for the local schools and panchyats

In short, the proposed Rough Stone & Gravel Quarry will benefit this region in the fields of employment opportunities, improved per capita income for local people, and improved social welfare facilities in respect of education, medical systems, infrastructural build-up, etc in its own way.

By means of carrying out the socio-economic development activities, local community development is expected. Towards the same, the proponent has planned to allocate Rs.5.0Lakhs for various activities under CER. From the CER activities allocated for various social welfare activities, the villages near the lease area will be benefited.

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CHAPTER - IX

ENVIRONMENTAL COST BENEFIT ANALYSIS

CHAPTER 9 ENVIRONMENTAL COST BENEFIT ANALYSIS

Appendix-III of the MoEF notification S.O. 1533 dated 14.09.2006, which describes the generic structure of Environmental Impact Assessment document, states that the chapter 'Environmental cost benefit analysis' is applicable if it is recommended during scoping stage.

ToR for this project has been received from SEIAA, Tamil Nadu vide their letter No. **TO25B0108TN5511208 N dated 13.02.2026**. Environmental cost benefit analysis is not prescribed in the terms of reference. Hence, it is not applicable for this project.

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CHAPTER - X

ENVIRONMENTAL MANAGEMENT PLAN

CHAPTER 10 ENVIRONMENTAL MANAGEMENT PLAN

10.1 INTRODUCTION:

This chapter describes the implementation strategies of the environmental management measures described through the course of this EIA/EMP report for the purpose of mitigating significant impacts due to the proposed mining operations.

10.2 COMPONENTS OF THE ENVIRONMENTAL MANAGEMENT PLAN:

The environmental management plan comprises identification of the major impacts due to project operations and their suitable mitigative measures. (Provided in an elaborate manner in Chapter-IV) Based on the environmental policy of the company, the environmental management cell will oversee the implementation of these mitigative measures. The details of the proponent's environmental policy, environmental management cell and also the budgetary allocation towards various environmental management measures has been elaborated in this chapter.

10.2.1 ENVIRONMENTAL POLICY:

The proponent will frame a well-planned environmental policy. The salient features of this policy will be.

- ❖ Ensuring risk-free and safe mining operations by following all rules and conditions prescribed in the Indian mines Act, metalliferous mining regulation, mineral conservation and development rules, etc,
- ❖ Ensuring environmental preservation by adoption of remedial measures for control of air, water quality, noise status, biological improvements, green belt creation, etc,.
- ❖ Extending CER activities to cater to the needs of local community for various benefits like improvement of physical and social infrastructures for the welfare of local community.



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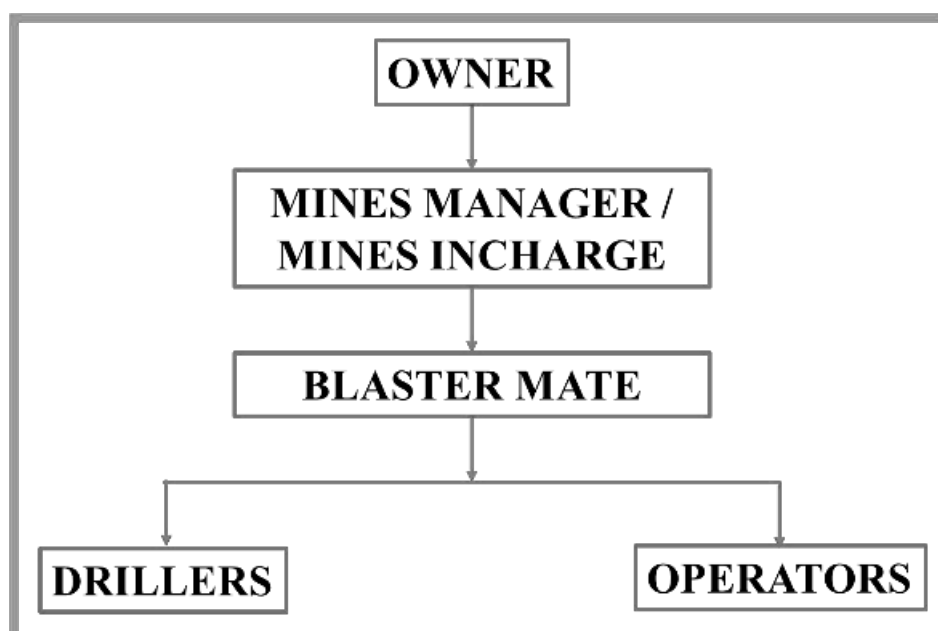
- ❖ Ensuring that all mining operations such as deployment of HEMM, conduct of drilling and blasting operations, etc are strictly conducted keeping with regulatory standards & maintaining safe working environment in the area.
- ❖ Providing periodical training on safety, Health, & Environment to all employers.
- ❖ Any infringement / violation of any rule or unsafe mining operations should be reported mines manager, should be reported by the foremen/ blaster mate etc, who will take immediate corrective measures for avoiding major disasters. The report will ultimately reach the owner through upwardly hierarchical communicative channels from the lowest level to superior levels in a quick time bound duration.
- ❖ The mines manager will exercise overall control over entire mining and connected operations and all infringements / violations on any count pertaining to unsafe operations, environmental degradation, etc, should be brought to the notice of the owner of the quarry. Remedial measures for such violations and deviations should be taken care by the mines manager to avoid any hazards or disasters in the mine and nearby areas. The persons responsible for such violations will be punished through appropriate disciplinarily penal actions.
- ❖ The EC conditions and stipulations will be strictly observed by Mines manager of the mine in various issues like prescribed environmental monitoring schedules conducting of vibratory studies due to blasting, creation of green belt, management of mined area, occupational health review, etc.
- ❖ Penalty actions will be taken by the proponent in cases of continuous negligence resulting in violations deviations in this respect.
- ❖ A time schedule of once in 90 days for review of all operational factors as mentioned above is to be enforced, for proper and quick corrective actions needed in the matter.



10.2.2 ENVIRONMENTAL MANAGEMENT CELL:

The Mines Manager/Mine Incharge will undertake effective monitoring and implementation of various environmental control measures promptly and effectively and to oversee various environmental management schemes for air quality control, water quality status, noise level control, plantation programme, social development schemes, etc in the mine. The organizational chart for the same has been provided below:

Figure 10.1: Organization Chart



The Mines Manager/Mines In charge in the mine project site will be directly responsible for various environmental activities in the mine. The owner will correlate and oversee the environmental activities and their effective implementation in consonance with the guidelines in the EMP. The Mines Manager/Mines In charge will oversee the environmental administration at the mine and he will directly supervise all activities of environmental administration on environmental issues. Necessary assistance from sub ordinates, external consultants and laboratories shall be taken.

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Environmental control measures will span various factors like land degradation, air, water and soil quality, noise levels, effective land reclamation for excavated areas, afforestation measures, etc. The administrative functions are given below.

- ❖ To observe the implementation of environmental control measures.
- ❖ To study the effects of project activities on the environment.
- ❖ To ensure implementation of Plantation Programme. Regular monitoring of survival rate of plants is carried out to achieve the desired result.
- ❖ To keep records of monitoring etc., in a systematic way, so as to facilitate easy access, when needed by statutory agencies, etc. Also send prescribed returns to statutory authorities.
- ❖ To ensure that adequate fencing and plantation is carried out in the safety zones.
- ❖ Conducting environmental studies and reporting to SPCB.
- ❖ To interact and liaise with Government Departments.
- ❖ To evaluate the performance of existing pollution control equipment and systems periodically and take timely action to keep the equipment at its optimum performance condition.
- ❖ To take immediate preventive action in case of some unforeseen environmental pollution attributable to the project.
- ❖ Conducting safety audits and programmes to create safety awareness in workers/ staff.
- ❖ Conducting annual health audits to detect any health problems promptly in the workers/staff. This will reduce occupational health problems.
- ❖ Imparting training on safety and conduct safety drills to educate employees. Firefighting equipment and system has to be kept in 'ready-to-fight' condition.



- ❖ Carrying out socio economic study in the surrounding areas to find out the benefits derived by the society due to the project and also to fulfill the deficiency, if any, immediately.
- ❖ Ensuring proper mine closure arrangements

Considering the other mines in the cluster, the Environmental Management Cell of this project will also act as a Cluster Management Committee. The various activities undertaken to be undertaken by this committee are detailed below:

- Effective implementation of the environmental management measures in a holistic manner
- Devising an operation plan for mining and transportation activities.
- Various natural calamities like rain, flooding, evacuation plans etc. will also be deliberated by this committee to form risk management and emergency management plan pertaining to the cluster.
- The environmental policy of the company will be implemented and proper sustainable mining in accordance with statutory regulations will be enforced for the quarries in the cluster.
- Furnishing action plan regarding restoration strategy
- Deliberate on the health of the workers involved in the mining and also the health of the public
- Carrying out detailed study on the impact of mining on:
 - Soil health & biodiversity
 - Climate change leading to droughts, floods, etc.
 - Pollution leading to release of greenhouse gases (GHG) rise in temperature and livelihood of local people
 - Possibilities of water contamination and impact on aquatic ecosystem health.



- Agriculture, Forestry & Traditional practices.
- Hydro geothermal /Geothermal effect due to destruction in the Environment.
- Bio-geochemical process and its footprints including environmental stress.
- Sediment geochemistry
- Furnishing action plan to achieve sustainable development goals with regards to water, sanitation and safety.
- Furnishing fire safety and evacuation plans in case of fire accidents.
- Implementation of steps to effectively utilize energy.

10.2.3 ENVIRONMENTAL MANAGEMENT PLAN:

10.2.3.1 General:

Systematic monitoring systems and well-conceived and efficient Environment Management Plan will ensure that during the project operations, the various environmental parameters, are well within the statutorily sustainable limits. The environmental control measures proposed to keep various environmental parameters of the project in terms of air, water, noise, land, biological environment, etc. has been described below.

10.2.3.2 Air Quality:

With regards to air quality, to mitigate the fugitive and gaseous emission resulting from mining and allied activities, the following control measures are proposed to be undertaken:

- Regular water sprinkling in the transport roads using mobile tankers for dust suppression.
- Controlled blasting techniques with NONEL.
- Provision of dust filters / mask to workers working at highly dust prone and affected areas.
- Covering of drill holes with wet cloth, using sharp drill bits



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- Avoiding blasting during high wind periods where the fine dust is carried out away easily affecting the ambient air quality.
- Proper maintenance of haul roads, HEMM and dumpers.
- Covering of loaded tippers with tarpaulins during transportation
- Vehicular emissions will be controlled through regular and proper preventive maintenance schedules and emissions tests are done with diesel smoke meter equipment to ensure emission values.
- Besides, there will be good green belt cover will be developed around mine periphery and in safety zone.

10.2.3.3 Water Environment:

There will be no process effluent generated from this project. The domestic sewage to be generated will be collected in septic tank with soak pit arrangements. Besides, there will be no waste dumps or stockpiles within the lease area as the entire material will be directly dispatched to the consumers.

Surface runoff management structures such as garland drain connected to a settling pond will be constructed around the quarry to collect the rain water. The supernatant clear water from the settling pond will be provided to nearby downstream users. Towards rainwater harvesting, the rainwater harvested in the mine will be used to meet the water requirements during mining and excess water in consultation with villagers and in line with government practices will be out in to the nearby stream or shall be distributed to the nearby villages as per their need.

10.2.3.4 Noise Environment:

During the project operations, various control measures as listed below will be carried out to mitigate adverse impact due to the noise generated due to mining and allied activities:

- Good plantation will be carried out in the safety zone areas
- Noise protectors, insulation of operator cabins, installation of silencers in machineries, etc.



- Proper and regular maintenance of equipment's
- Providing earplugs to workers exposed to higher noise level.
- Providing in-built mechanism for reducing sound emissions.
- Conducting regular health check-up of workers including Audiometry test for the workers engaged in noise prone area.
- Displaying the noise level status of operational machinery on the machines to know the extent of noise level and to control the time to which the worker is exposed to higher noise levels.

10.2.3.5 Ground Vibration

Since the production from this lease is less, the no of holes and the quantum of explosives to be used will also be negligible. During the project operations, various control measures as listed below will be carried out to mitigate adverse impact due to the ground vibration caused due to blasting activities:

- ❖ Controlled blasting techniques to maintain the peak particle velocity (PPV) below DGMS prescribed levels.
- ❖ Ideally formulating drilling and charging pattern and ensuring using less charge per delay.
- ❖ To contain fly rocks, stemming column will not be less than burden of the hole. Blasting area will also be muffled, if necessary, to stop fly rocks propagation.
- ❖ Blasting will not be carried out when strong winds are blowing towards the inhabited areas. Blasting will be done during midday time and never at night.
- ❖ Proper care and supervision during blasting by a competent and experienced person.
- ❖ Besides, different blasting time for the projects in the vicinity is suggested and the timing is to be mentioned in the display board in the respective mines entrance.

Further details regarding the same has been provided under section 4.4.2, Chapter-IV.



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10.2.2.6 Biological Environment:

The mining lease area and 10km buffer zone are devoid of declared ecologically sensitive features such as national parks, sanctuaries etc. Besides, endangered or endemic species are observed in the core and buffer zone. There will be no major clearance of vegetation involved in this project. However, good greenbelt and plantation programmes are planned in and around the lease area.. Greenbelt / Plantation will be carried out to enhance the vegetative growth and aesthetic in the safety zone area. This will boost the biological, visual and aesthetic outlook of the area. Elaborate details regarding the same is provided under section 4.6.4, Chapter-IV..

10.2.2.7 Socio-Economic Environment:

The proposed project operation will provide positive impacts in the region on the employment area as well as on physical and social infrastructural status. Many other tangible benefits will be gained by the local people in the surrounding areas due to ancillary units, trading operations, contractual needs, casual labor, green belt development, etc. Towards the socio economic development of the surrounding area, the proponent has earmarked an amount of Rs.5.0 Lakhs under Corporate Environmental Responsibility. The activities identified under CER will be implemented in a phased manner.

10.3 ENVIRONMENTAL POLLUTION CONTROL COST:

In this proposed quarry Implementation of environmental control measures as stated above involves capital as well as recurring expenses. The probable capital and recurring environmental control cost are calculated and given below **Table No – 10.1**

Table 10.1: Environmental Control Cost

Activities	Mitigation Measure	Provision for Implementation	Rs. In lakhs	
			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	0.33	0.33
	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	8.00	0.50
	Muffle blasting – To control fly rocks during blasting	Blasting face will be covered with sand bags / steel mesh / old tyres / used conveyor belts	0.00	0.05



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Activities	Mitigation Measure	Provision for Implementation	Capital	Recurring
	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	1.50	0.15
	No overloading of trucks/tippers/tractors	Manual Monitoring through Security guard	0.00	0.05
	Stone carrying trucks will be covered by tarpaulin	Monitoring if trucks will be covered by tarpaulin	0.00	0.10
	Enforcing speed limits of 20 km/hr within ML area	Installation of Speed Governors @ Rs. 5000/- per Tipper/Dumper deployed - 2 Units	0.10	0.00
	Regular monitoring of exhaust fumes as per RTO norms	Monitoring of Exhaust Fumes by Manual Labour	0.00	0.05
	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	-	0.67
	Installing wheel wash system near gate of quarry	Installation + Maintenance + Supervision	0.50	0.20
Sub-Total			10.43	2.10
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	-	-
	Oiling & greasing of Transport vehicles and HEMM at regular interval will be done	Provision made in Operating Cost	-	-
	Adequate silencers will be provided in all the diesel engines of vehicles.	Provision made in Operating Cost	-	-
	It will be ensured that all transportation vehicles carry a fitness certificate.	Provision made in Operating Cost	-	-
	Safety tools and implements that are required will be kept adequately near blasting site at the time of charging.	Provision made in OHS part	-	-
	Line Drilling all along the boundary to reduce the PPV from blasting activity and implementing controlled blasting.	Provision made in Operating Cost	-	-
	Proper warning system before blasting will be adopted and clearance of the area before blasting will be ensured.	Blowing Whistle by Mining Mate / Blaster / Competent Person	-	-
	Provision for Portable blaster shed	Installation of Portable blasting shelter	0.50	0.02



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**CHAPTER-10: ENVIRONMENTAL
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Activities	Mitigation Measure	Provision for Implementation	Capital	Recurring
	NONEL Blasting will be practiced to control Ground vibration and fly rocks	Rs. 30/- per 6 Tonnes of Blasted Material	-	14.66
Sub-Total			0.50	14.68
Waste Management	Waste management (Spent Oil, Grease etc.,)	Provision for domestic waste collection and disposal through authorized agency	0.25	0.20
		Installation of dust bins	0.05	0.02
	Bio toilets will be made available outside mine lease on the land of owner itself	Provision made in Operating Cost		
Sub-Total			0.30	0.22
Mine Closure	1. Progressive Closure Activity - Surface Runoff managent	Provision for garland drain @ Rs. 10,000/- per Hectare with maintenance of Rs. 5,000/- per annum	0.33	0.05
	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	6.65	0.10
	3. Progressive Closure Activity Green belt development - Proposal for 1000 Trees - (200 Inside Lease Area & 800 Outside Lease Area)	Site clearance, preparation of land, digging of pits / trenches, soil amendmets, transplantation of saplings @ 100 per plant (capital) for plantation inside the lease area and @ 30 per plant maintenance (recurring)	0.20	0.06
		Avenue Plantation @ 150 per plant (capital) for plantation outside the lease area and @ 30 per plant maintenance (recurring)	1.20	0.24
	4. Implementation of Final Mine Closure Activity as per Approved Mining Plan on Last Year	Few activities already covered as progressive closure activities as greenbelt development, wire fencing, garland drain. *For Final Closure Activities 15% of the proposed closure cost will be spent during the final mine closure stage - Last Year	1.26	-
	5. Contribution towards Green Fund. As per TNMMCR 1959, Rule 35 A	The Contribution towards Green Funds @ 10% of peak production Seigniorage fee are indicated as part of EMP Budge and not necessarily implemented in the Project Site	10.56	-
Sub-Total			8.38	0.45
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	0.10	0.01
	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	0.00	0.50
	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)	1.92	0.48



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**CHAPTER-10: ENVIRONMENTAL
MANAGEMENT PLAN**

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Activities	Mitigation Measure	Provision for Implementation	Capital	Recurring
	Slope stability action plan	Slope stability action plan in the end of fourth year plan period	2.00	0.00
	Health check up for workers will be provisioned	IME & PME Health check up @ Rs. 1000/- per employee	0.00	0.48
	First aid facility will be provided	Provision of 2 Kits per Hectare @ Rs. 2000/-	0.00	0.13
	Mine will have safety precaution signages, boards.	Provision for signages and boards made	0.10	0.02
	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	1.66	0.10
	Installation of CCTV cameras in the mines and mine entrance	Camera 4 Nos, DVR, Monitor with internet facility	0.30	0.05
	Implementation as per Mining Plan and ensure safe quarry working	Mines Manager (1 st Class / 2 nd Class / Mine Foreman) under regulation 34 / 34 (6) of MMR, 1961 and Mining Mate under regulation 116 of MMR, 1961 @ 40,000/- for Manager & @ 25,000/- for Foreman / Mate	0.00	7.80
Conservation Measures			NA	NA
Sub-Total			5.98	9.06
TOTAL			25.60	26.51

Towards EMP measures, Rs.25.60Lakhs is allocated under capital cost. Besides, Rs.26.51Lakhs per annum will be spent under recurring cost. All the recurring cost of maintenance of pollution control measures, environmental monitoring etc., will be met from revenue and will be spent for the entire lease period.

10.4 CONCLUSION:

Since the production from this lease is very less, the no of equipments required, magnitude of mining operation and consequent impact on environment is expected to be negligible. As such no adverse impact on environment is expected. Systematic mining and ensuring adoption of various mitigative measures given in the report will ensure that the future environmental quality in the area will be maintained within statutory limits. The environmental management strategy as explained above will prove that industrial growth, if properly planned with all environmental concerns and appropriate remedial measures can go a long way to improve life pattern and living conditions of the local community around the project.



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REV NO : 00/APR/26

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**CHAPTER-10: ENVIRONMENTAL
MANAGEMENT PLAN**

CHAPTER-XI

SUMMARY AND CONCLUSION

CHAPTER 11 SUMMARY & CONCLUSION

11.1 INTRODUCTION:

Tvl. Om Vinayaga Supplier, Prop:K. Dhakshanamurthi proposes to operate a Rough Stone and Gravel Quarry over an area of 3.32.50 Ha in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, and Tamil Nadu and has initiated action towards obtaining environmental clearance.

Proposed Production for the five years lease period is 4,32,760 m³/11,90,090 MT of Rough Stone and 90,520 m³/ 1,81,040 MT of Gravel up to depth of 44 m with the peak production capacity of 1,17,300m³/ 3,22,575.00 MT (Year 4) of Rough stone and 45,448m³ /90,896.00 MT (Year 2) of Gravel..

Although the individual lease area of this project is less than 5 Ha, the other existing and proposed quarries within the 500m radius cluster along with this subject project works out to >5 Ha. Hence, this proposal is considered under Category – B1 and as per MoEF & CC notification necessitates preparation of EIA/EMP report and public hearing.

This EIA/EMP report is prepared based on standard and additional Terms of Reference issued by SEIAA, Tamil Nadu and is in conformance of the generic structure prescribed by MOEF&CC in their notification of September 2006 and the approved mining plan.

11.1.1 STATUTORY APPROVALS:

S.No	Statutory Approval	Authority	Letter Number and Date	Reference
1.	Precise Area Communication Letter	Assistant Director, Dep. of Geology & Mining	Rc.No. 131/Mine/2025	30.10.2025
2.	Mining Plan Approval	Assistant Director, Dep. of Geology & Mining	Rc.No. 131/Mine/2025	19.11.2025
3.	Details of other quarries within 500m radius	Assistant Director, Dep. of Geology & Mining	Rc.No. 131/Mine/2025	19.11.2025

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11.1.2 ENVIRONMENTAL CLEARANCE APPLICATION:

Particulars	Details
Terms of Reference	Received from SEIAA, Tamil Nadu vide their Lr No. TO25B0108TN5511208 N dated 13.02.2026
Baseline Data Collection	Carried out by creative Engineers & Consultants, Postmonsoon season (October 2025- December 2025)

11.2 SALIENT FEATURES OF THE PROJECT:

Table 11.1: Site Details

Location	Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu
Survey No.	37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P)
Coordinates	Latitude :12° 25' 12.24" N to 12° 25' 19.90" N Longitude :79° 55' 20.20" E to 79° 55' 27.88" E
Nearest Village	Kolathur -1.0km (SW)
Nearest Town	Melmaruvathur - 9.0km (NW)
Nearest Highway	NH-179B –9.0Km– NW, SH-115–2.0Km–S
Nearest Railway Station	Melmaruvathur - 9.0km (NW)
Nearest Airport	Chennai – 67km - NE
Accessibility	The Lease area is approachable from Peruveli – Nallamur Keel karanai road which is connected to SH-115 Sothupakkam to Cheyyur road located about 1.7 Km on the South side of the lease applied area.
Topography & Drainage	The lease applied area is exhibits Plain topography Other than few first order and second order streams no major drainage pattern is observed around the lease area.



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Table 11.2: Environment Setting of The Study Area

S.No	PARTICULARS	DETAILS
1	Nearest highway	➤ NH-179B –9.0Km– NW ➤ SH-115–2.0Km–S
2	Nearest Railway station	➤ Melmaruvathur - 9.0km (NW)
3	Nearest Airport	➤ Chennai – 67km - NE
4	Nearest major water bodies	➤ Thangal Kuttai – 50m – SW, ➤ Madurantakam high level channel – 5.10Km - N
5	Nearest town/City	➤ Melmaruvathur - 9.0km (NW)
6	Nearest villages	➤ Kulathur Village - 1.0km -SW ➤ Peruveli Village - 1.4km -NW ➤ Netravakkam Village - 1.7km -SE ➤ Nallamur Village - 2.2km - SW
7	Notified Archaeologically important places, Monuments	Nil within 10km radius
8	Local Places of Historical and Tourism Interest	Jain Caves – 6.7 km, NW
9	Environmental sensitive areas, Protected areas as per Wildlife Protection Act, 1972 (Tiger reserve, Elephant reserve, Biospheres, National parks, Wildlife sanctuaries, community reserves and conservation reserves)	Wild Life Sanctuary: Nil within 10Km radius, Vedanthangal Bird Sanctuary – >15km,NW
10	Reserved / Protected Forests	➤ Palavur RF – 3.50Km – SW, ➤ Kollattanallur RF – 6.40Km – SW ➤ Pungunam RF – 6.80Km - SW
11	Defence Installations	Nil within 10m radius
12	Seismic Zone	Zone – II (Least Active)
13	Other Industries in the study area	Other than crushers, Roughstone quarries, no other major industries are located in the study area, etc in the area.



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Table 11.3: Technical Description

PARTICULARS	DETAILS				
Geological reserve	11,79,880 m3/32,44670 MT Roughstone & 1,17,988 m3/2,35,976 MT Gravel				
Mineable reserve	4,32,760 m3/11,90,090 MT Roughstone & 90,520 m3/ 1,81,040 Gravel				
Method of Mining	Open cast mechanized mining method with drilling, blasting, excavation, loading and transportation of Rough stone to needy buyers.				
Production	Year	Roughstone (m3)	Gravel (m3)	Roughstone (MT)	Gravel (MT)
	I	49,300	45,072	1,35,575.00	90,144.00
	II	53,770	45,448	1,47,867.50	90,896.00
	III	1,03,300	---	2,84,075.00	
	IV	1,17,300	---	3,22,575.00	
	V	1,09,090	---	2,99,997.50	
	Total	4,32,760	90,520	11,90,090.00	1,81,040.00
Waste Generation and Management	There is no waste generation anticipated in this quarry operation since the entire excavated material will be utilized. The Gravel will be loaded into tipper and marketed to needy customers on payment of necessary Fees to Government. The roughstone will be excavated and loaded into tipper to the needy buyers for producing crusher aggregates, M Sand.				
Ultimate Depth	44m				
Man power	35People directly and more than 50 people indirectly				
Mode of transport	By Road				
Waterrequirement	10KLD				
Source of water	The required water will be procured from outside agencies initially. Later, water collected in the mine pit will be used to meet the needs.				
Power requirement	All the equipment will be diesel operated. No electricity is needed for mining operation. The minimum power requirement for office, etc will be met from state grid.				
Life of the mine	5 Years				
Project cost	Rs. 57,15,000/-				



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11.3 EXISTING ENVIRONMENTAL SCENARIO:

11.3.1 GENERAL:

The studies and data collection have been carried out systematically and meticulously as per relevant IS codes, CPCB and MoEF&CC guidelines and as per approved ToR during **Postmonsoon Season (October 2025 – December 2025)**. For the purpose of this study, the area has been divided into two zones, namely, core and buffer zones. Core zone is considered as the total lease area, while buffer zone encompasses an area of 10 km radius distance from the periphery of core zone.

11.3.2 SOCIO-ECONOMIC STATUS:

The proposed Roughstone and gravel quarry is located in Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, and Tamil Nadu. The details of the 10Km radius study area has been provided below:

Table 11.4: Social, Economic and Demographic Profile of the Study Area

Details	Population	Percentage
A. Gender-wise distribution		
Male Population	72797	50.06
Female Population	72614	49.94
Total	145411	100
B. Caste-wise population distribution		
Scheduled Caste	62864	43.23
Scheduled Tribes	1651	1.14
Others	80896	55.63
Total	145411	100
C. Literacy Levels		
Total Literate Male	55031	37.84
Total Literate Female	45654	31.40
Others	44726	30.76
Total	145411	100
D. Occupational structure		
Main workers	46026	31.70
Marginal workers	23966	16.50
Total Workers	69992	48.20
Total Non-workers	75419	51.90
Total	145411	100



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Further developments in this area with respect to these various facilities has occurred over the years.

11.3.2.1 SAMPLE SURVEY:

Nearby villages were visited for conducting sample Village survey on all socio-economic aspects and requirements of the people. The existing socio-economic scenario is studied and CER activities are also suggested to the proponent. The study details are given in **Para 3.2.4, Chapter – III.**

11.3.3 EXISTING ENVIRONMENTAL QUALITY:

Table 11.5: Baseline Data

A) AMBIENT AIR QUALITY		Monitoring Location – 5 locations	
PARAMETER	RESULT (µg/m3)		*LIMIT (µg/m3)
Location	Core Zone	Buffer Zone	
Particulate Matter (Size <10 µm)	61.7 – 73.8	45.2 – 65.3	100
Particulate Matter (Size <2.5 µm)	28.7 – 35.1	21.2– 31.7	60
Sulphur Dioxide (as SO ₂)	7.8 – 9.7	5.3– 9.9	80
Nitrogen Dioxide (as NO ₂)	9.2 -13.0	7.4 – 12.1	80
Conclusion: The existing Ambient Air Quality levels for PM10, PM2.5, SO2 and NO2, are within the NAAQ standards prescribed CPCB limits of 100 µg/m3, 60 µg/m3, 80 µg/m3 & 80 µg/m3. The CO values in all the locations were found to be below detectable limit. Silica values in the study area are found to be below detectable limit. (Detection limit – 0.05 mg/m3)			
B) WATER QUALITY		Monitoring Location – 5 locations	
PARAMETER	Result	*LIMIT (µg/m3)	
pH at 25 °C	7.22 – 7.66	6.5-8.5	
Total Dissolved Solids, mg/L	472 – 750	2000	
Chloride as Cl-, mg/L	96.9 – 230	1000	
Total Hardness (as CaCO3), mg/L	293 – 498	600	
Total Alkalinity (as CaCO3), mg/L	256– 329	600	
Sulphates as SO42-, mg/L	64.5 – 169	400	
Iron as Fe, mg/L	0.02 - 0.07	0.3	
Nitrate as NO3, mg/L	2.47 – 5.64	45	
Fluoride as F, mg/L	0.35 – 0.58	1.5	
Conclusion: The water quality of ground water is found to be within the prescribed Permissible limits of IS: 10500 Norms in the absence of an alternative source as per Drinking Water Specifications.			
C) NOISE LEVELS		Monitoring Location – 5 locations	
PARAMETER	RESULT dB(A)		*LIMIT (µg/m3)
	Day Equivalent	Night Equivalent	
Core Zone	53.0	43.0	90



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Buffer Zone	49.3- 52.2	41.8– 43.0	Day Equivalent - 55dB(A), Night Equivalent - 45dB(A)
*Permissible noise for industrial workers as laid down by CPCB (at 8 hrs Exposure Time).While comparing with the MoEF&CC Norms, the monitored ambient noise levels are generally within the limit values.			
D) SOIL QUALITY		Monitoring Location – 5 locations	
PARAMETER		Range of values	
pH		5.26 to 7.86	
Electrical Conductivity (µmho/cm)		134.80 – 220.90	
Organic matter (%)		0.24 – 0.76	
Total Nitrogen (mg/kg)		79 - 240	
Phosphorus (mg/kg)		0.76 – 1.32	
Sodium (mg/kg)		109- 578	
Potassium (mg/kg)		247 - 927	
Soil is of Clay type.			

F) LAND ENVIRONMENT:

For the present study on land use pattern in the study area, remote sensing satellite data have been used. The area estimated of land use categories around the 10km buffer zone is provided below:

Table 11.6: Land Use in 10Km Buffer Zone

S.No	Landuse Feature	Area (Sq.Km)	Percentage
1	Crop Land / Plantation	163.85	50.84
2	Fallow Land	100.87	31.30
3	Land Without Scrub	4.50	1.39
4	Land With Scrub	16.02	4.97
5	Water bodies	13.64	4.23
6	Reserve Forest	4.38	1.36
7	Settlement & Infrastructure	4.89	1.54
8	Mining Area	14.08	4.37
	Total	322.23	100

From the above table it is seen that 50.84 % of the study area is crop / plantation land followed by 31.30 % of fallow land.Land withscrub constitutes 4.97 %, lands without scrub constitute1.39 %, waterbodies constitute 4.23 % & others constitute 7.27 %.



G) BIOLOGICAL ENVIRONMENT:

Flora: The lease area is a non-forest, private patta land. The lease area is a non-forest, private patta land. Major part of the lease area was earlier used by the applicant for storage of crusher materials. Other than peripheral plantation carried out by the PP, there are no vegetation in the lease area. Dominated species in the buffer zone are Prosopis juliflora, Morinda tinctoria, Azadirachta indica, Acacia auriculiformis, Pongamia pinnata, Delonix elata, etc etc. The detailed list of plants found in the Buffer zone is given in Table no – 3.26.

Fauna: There is no Wild Life Sanctuary or National Park within the study area of 10 km. Domesticated animals are commonly found. No wild mammalian species was directly sighted during the field survey. The list of fauna within the study area is given in Table No – 3.27.

H) HYDROLOGICAL STUDY:

The district is underlain by hard rock formation. Fissured and fractured crystalline rocks constitute the important aquifer systems in the district. Study area is dominated with hard Charnockite rock formation.

Due to rocky formation for a major stretch of land in and around the lease area, the ground water potential is moderate only. At away plains, depth to water table in the wells are as deep as 8 ft to 35 ft. Water level after good monsoon reaches almost near the surface level whereas it lowers down substantially during summer season. Bore wells are 300-450 ft deep, give better yield post monsoon whereas the yield becomes very less later.

Study of the area shows that the sub-surface formations reveal low to medium recharge potentials. Subsequently hard and massive formations of rock are found. Based on the available information and the geophysical investigations it is observed that the study area is of poor to moderate groundwater potential up to 70m to 75m. Besides, the mining area consists of hard compact rock, no major water seepage within the mine is expected. There is no water seepage noticed in to the already quarried deeper pits situated nearby the proposed quarry area. Hence, the quarrying rough stone up to the proposed depth may not have any adverse impact in the area over ground water conditions.



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Direct rainfall falling into the mine pit during monsoon season and intermittent seepage from phreatic top layer if any will be collected in the bottom of the mine pit and gainfully used for Greenbelt development, Dust suppression etc..

11.4 ANTICIPATED ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES:

11.4.1 GENERAL:

The identified impacts due to this mine during mining and associated activities have been studied in relation to various environmental components like Air, water, noise, vibration, land, transport etc.

11.4.2 AIR ENVIRONMENT:

The principal sources of air pollution in the area due to mining and allied activities are dust generation in the mine due to various activities such as excavation of material, movement of HEMM, loading, unloading and transportation operations.. Besides, Gas emission also occur as a result of emission of SO₂, NO_x, CO etc., from diesel driven mining equipment, compressors, generator sets, etc. The following measures will be adopted to control impact on the air quality due to mining operations in the lease area:

Table 11.7: Mitigation Measures – Air Environment

S.No	Activity	Mitigation Measures
1	Drilling	Usage of Drill bits in good condition
		Covering of drill holes with wet cloth
		Usage of sharp drill bits for drilling of holes.
		Provision of dust filters / mask to workers working at highly dust prone and affected areas.
2	Blasting	Well-designed blasting parameter, effective stemming to achieve optimum breakage occurs without generating fines.
		Use of appropriate explosives for blasting and avoiding overcharging of blast holes.
		Avoiding blasting during high wind periods where the fine dust is carried out away easily affecting the ambient air quality.
		Use of controlled blasting techniques with Nonel to keep the dust generation, noise as well as vibration level within the prescribed limits.
3	Excavation and Loading	Proper maintenance of HEMM
		Enclosures for operator cabin.



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		Imparting sufficient training to operators on safety and environmental parameters.
		Proper maintenance of hauling equipments.
		Avoiding overloading of dumpers.
4	Transportation	Regular wetting of transport road using mobile water tanker.
		Proper maintenance of haul road and other roads
		Setting up of tyre wash facility in the transport road.
		Avoiding overloading of tippers
		Covering of loaded tippers with tarpaulins during transportation
		Vehicular emissions will be controlled through regular and proper preventive maintenance schedules and emissions tests are done with diesel smoke meter equipment to ensure emission values.
5	Others	Development of greenbelt / barriers around mine in the safety zone and carrying out plantation within the lease area.

Due to adoption of all these measures, no major impact on air quality is envisaged due to this proposed opencast mining operation.

The impact on air quality due to the proposed project is estimated using AERMOD View Gaussian Plume Air Dispersion Model developed by Lakes Environmental Software which is based on steady state Gaussian plume dispersion. Ground Level Concentration (GLC) have been computed using hourly meteorological data for particulate matter PM₁₀ and PM_{2.5}.

The resultant added concentrations with baseline figures even at worst scenario, show that the values of ambient air quality with respect to PM₁₀ are in the range of 55.3 µg/m³ to 77.1 µg/m³ and with respect to PM_{2.5} are in the range of 26.5 µg/m³ to 36.7 µg/m³ which are within the statutory limits in each case.

For preservation of environment in this mine strict enforcement of management schemes will be undertaken for taking corrective actions, as needed. By adopting the effective implementation of all the mitigative measures, no adverse impact on Air quality due to the mining operation in this lease area is expected.

11.4.3 WATER ENVIRONMENT:

Water Requirement: The total water requirement for this project will be 10.0 KLD comprising 1.0 KLD for drinking water and domestic use, 6.0 KLD for dust suppression and 3.0 KLD for



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greenbelt. The water will be sourced initially from outside agencies. Later the rainwater collected in the mine pit sump will be used for this purpose.

The activity / source of pollution, its impact / consequence, proposed control measures are explained below:

Table 11.8: Mitigation Measures – Water Pollution

S.No	Source	Consequence	Mitigation Measures
A	Domestic use	Generation of waste water	The domestic sewage to be generated from the project will be collected in septic tank with soak pits.
B	Rainfall	Runoff from waste dump and stack	Towards surface runoff management, a garland drain of length 850m will be constructed around the quarry and will be connected to settling ponds with silt traps. The supernatant clear water from the settling pond will be flow to the downstream users.
		Rainwater Harvesting	The rain water falling in the quarry will be harvested in the sump at the lowest level of the quarry. This sump will act as a settling pond to prevent solids escaping along with discharge, before outlet. etc.
C	Drainage Course	Disturbance to drainage course	There are no perineal water courses near the lease area. There is a Thangal Kuttai – 50m – SW of the lease area. Safety distance of 50m has been left for this Thangal. It acts more of the rainwater harvesting pond and it remains dry for most of the period. Earthen bund will be formed within the lease area in the western side in the safety zone. Besides, the intervening land will also be fenced and developed with green belt. There will be no generation or discharge of effluent into these water bodies..

Generation of mine pit water: Study of the area shows that the sub-surface formations are compact with less intergranular porosity and fractures leading to less permeability and transmissivity values and as such the ground water level in this area is deep from surface. Subsequently hard and massive formations of rock are found. Based on the available information and the geophysical investigations it is observed that the study area is of poor to moderate groundwater potential up to 70m to 75m. Besides, the mining area consists of hard compact rock, no major water seepage within the mine is expected. The ultimate pit depth of mining is 44m. The ground water table in this area is below this level. Hence, ground water



intersection in not envisaged and ground water will not be affected appreciably due to the quarrying operation. There is no water seepage noticed in to the already quarried deeper pits situated nearby the proposed quarry area. Hence, the quarrying rough stone up to the proposed depth may not have any adverse impact in the area over ground water conditions.

Rainfall will be collected in the mine floor sump and advantageously used. Excess water if any in the sump will be pumped to settling pond for downstream users.

11.4.4 NOISE ENVIRONMENT:

Anticipated noise levels resulting from operation of the various machineries like excavator, tippers, drill have been computed using point source model. Computation of cumulative noise levels at the nearby villages is made based on the assumption that there are no attenuation paths between the source and the boundary. From the studies, it is found that the predicted Noise Levels due to mining operations at the periphery of the mine lease itself will be less even without considering any attenuation factor. However, practically there will be attenuation due to vegetation etc., and as such there will not be any adverse noise propagation outside the lease boundary. Since the habitations are also away the effect of noise due to mining operations will not be felt at all in the surrounding village. Hence, by implementing the following mitigative measures for noise control, the impact on noise levels will continue to be insignificant:

- Planting rows of native trees along roads, around mine area and other noise generating centres to act as acoustic barriers.
- Sound proof operator's cabin for equipments like shovel, tippers, etc.
- Proper and regular maintenance of equipments may lead to less noise generation.
- Providing in-built mechanism for reducing sound emissions.
- Providing earplugs to workers exposed to higher noise level.
- Conducting regular health check-up of workers including Audiometry test for the workers engaged in noise prone area.

- Displaying the noise level status of operational machinery on the machines to know the extent of noise level and to control the time to which the worker is exposed to higher noise levels.
- Provision of green net in lease periphery

Further green belt and afforestation will be planned and executed to abate noise and dust propagation in the area.

11.4.5. VIBRATION:

Vibrations due to blasting may cause damage to nearby structures, if appropriate control measures are not adopted. Since the production from this lease is very low, the no of holes and the quantum of explosives to be used for blasting will be negligible .

The following control measures will be planned to reduce ground vibratory conditions to sustainable statutory limits:

- 1) Carrying out controlled blasting using Nonel delay detonator.
- 2) Optimum design for burden and spacing.
- 3) Reducing explosive charge per delay to minimum.
- 4) The peak particle velocity (PPV) of ground vibration will be kept very low through optimally controlled blasting techniques, after necessary field trials.
- 5) To contain fly rocks, stemming column to be less than burden of the hole. Blasting area will also be muffled, if necessary, to stop fly rocks propagation.
- 6) Blasting will not be carried out when strong winds are. Blasting will be done during midday time.
- 7) Controlled blasting to avoid tension cracks which may endanger the stability of bench slopes in the mine.
- 8) Proper care and supervision during blasting by a competent and experienced person to be carried out.
- 9) Having different blasting time for the leases in the cluster.

By adoption of above measures, it will be ensured that the ground level vibration due to blasting are maintained within the limits prescribed by DGMS, Dhanbad . Elaborate details regarding the same are provided under section 4.4.2, Chapter-IV.

11.4.6 IMPACT ON LAND ENVIRONMENT:

The lease area of 3.32.50 Ha is a patta land. No mining is carried out in the lease area. Crusher materials from the nearby crusher were temporarily stored in the lease area and it is being cleared. For the crusher hopper on the northern side , Portion of the ramp of the crusher falling in the north periphery of the lease area is being moved outside the lease.. There is no waste generation anticipated in this quarry operation since the entire excavated material will be utilized. Hence, there is no external overburden dump involved. Plantation will be carried out in this safety zone area. In the post mining stage, the mine pit area of 2.65.70Ha will be left as a water body. Plantation will be carried out over 0.02.00Ha and 0.02.00Ha will be left as road and infrastructure. 0.62.80 Ha will be covered with vegetation. Entire mined out area will be properly fenced to prevent inadvertent entry of men and animals. In the post mining stage the rainwater harvested in the mined out void shall be utilized.

11.4.7 BIOLOGICAL ENVIRONMENT:

The lease area is a non-forest, private patta land. Major part of the lease area was earlier used by the applicant for storage of crusher materials., Necessary mitigative measures like dust suppression, proper maintenance of equipment's, greenbelt and plantation etc., will be carried out to prevent dust generation & any further impact on the vegetation. In the safety zone within the lease area and in the nearby areas including mineral transport road plantation of local trees will be carried out about 1000 trees will be planted in and around the lease area.

.11.4.8 SOCIO ECONOMIC ENVIRONMENT:

The entire lease area is a private patta land. There are no habitations or hutments in the core zone area and as such no rehabilitation or resettlement is involved. The mining operations in the proposed quarry will employ about 35 people. Besides through allied opportunities in logistics, trading, repairing works etc. good employment potential will arise in this area, which

will provide raising income levels and standards of living in the area through various service related activities connected with the project operations.

Towards the socio economic development of the surrounding area, the proponent has earmarked an amount of Rs.5.0 Lakhs under Corporate Environmental Responsibility. The activities identified under CER will be implemented in the nearby Government school. In consultation with the locals based on the need & priority it will be implemented.

11.4.9 OCCUPATIONAL HEALTH AND SAFETY ASPECTS:

In order to ensure minimisation of occupational health and safety problems in the project operation, the following preventive remedial measures will be effectively exercised in the project operations, so as to comply with applicable standards.

- Medical examination of workers at pre-entry level stage of workers, etc., by qualified doctors, with periodical examination of all workers/staff at least once a year, as per DGMS circulars.
- Regular awareness campaigns amongst staff and workers
- Staff will be provided with PPE to guard against excess noise levels, Dust generation and inhalation, etc., as per standards prescribed by DGMS.

11.4.10 IMPACT ON LOCAL LOGISTICAL SYSTEM DUE TO PROJECT:

From this proposed quarry the entire output will be transported to the consumers .There will be just 3 to 4 trip per hour of additional truck traffic. The transport route can easily absorb this negligible traffic due to this project since this proposal is more of a substitute for the existing arrangements. The following mitigative measures are suggested for mitigation of adverse impacts on the logistical aspect of the project:

- ❖ Water sprinkling on Rough stone in the transport vehicles before transporting, so that no dust nuisance during transport will arise.
- ❖ Proper maintenance of transport roads
- ❖ Proper maintenance of transport vehicles.
- ❖ Avoiding overloading of material

- ❖ Covering of loaded vehicles with tarpaulins sheet.
- ❖ Limiting of speed
- ❖ Provision of tyre washing facility at the mine outlet

11.4.11 WASTE MANAGEMENT:

Since the entire mined out material will be used there will not be any solid waste generation from this project. There is no process effluent generation from this mine. Hence no liquid waste is generated.

The hazardous waste generated in this mine will be stored in a separate storage area with impervious containers for waste oil, oil contaminated clothes, used lead acid batteries, scraps, tyre storage etc. It will be disposed through authorized recyclers or re-processors periodically. The hazardous wastes will be transported in accordance with the provisions of rules. By effective implementation of above said mitigation measures no major impact due to Hazardous waste is expected.

Single use plastics/ use and throwaway plastics will be banned in the site as directed by the Tamil Nadu Government vide GO(Ms)No.84 regarding ban on use of plastic products. The employees will be encouraged to use compostable material or reusable material.

11.5 ENVIRONMENTAL MONITORING PROGRAMME:

The monitoring schedules are planned for systematic study of various pollution levels with respect to air and water qualities, noise levels, etc. to ensure that they conform to the standards laid down by Environmental Protection Act and various statutory Limits.

Monitoring location and the frequency of monitoring shall be suitably modified in consultation with the nodal agency as per the actual requirements and prevailing conditions of the mine and environmental factors, as dictated from time to time, depending on the prevailing pollution levels, if required.

Towards EMP measures, Rs.25.60Lakhs is allocated under capital cost. Besides, Rs.26.51Lakhs per annum will be spent under recurring cost. All the recurring cost of maintenance of pollution control measures, environmental monitoring etc., will be met from

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revenue. Further details of the capital and recurring cost of environmental management has been provided in in Table No. 10.2, Chapter-X.

11.6 ADDITIONAL STUDIES:

The additional studies covered for this EIA / EMP report are:

1. Public consultation of the project as per MoEF&CC mandates.
2. Risk Assessment
3. R&R Plan
4. Mine closure plan

This draft EIA/EMP report will be exposed to public consultation as per mandatory procedures through the District Collector and State Pollution Control Board officials after giving 30 days advance notice in two local newspapers about the scheduled date and time for conduct of the public hearing procedures. The opinions, concerns and objections of stakeholders will be recorded during the public hearing. All the public queries and the replies to the query by the project proponent and officials concerned will be recorded and incorporated in the EIA/EMP report for approval by SEIAA, Tamil Nadu.

Elaborate description in respect of Risk Assessment and Mine closure plan are given in **Chapter -VII.**

Although the individual lease area of this project is less than 5 Ha, the other existing and proposed quarries within the 500m radius along with this subject project works out to >5 Ha. As such cluster situation applicable and this EMP is prepared. The baseline monitoring carried out for this project reflects the cumulative impact of the existing quarry. For the proposed quarries, a cumulative impact study has been carried out.

Baseline data given in Chapter – III reflects the existing operations in the area. Cumulative impact on various environmental attributes due to the present proposed project and other 3 Existing projects are studied. For this purpose the impact of the present proposal as given in Chapter – IV of this report and for other proposals from their respective report are correlated



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and given in para 7.6 of Chapter – VII. From the study it is observed that due to adoption of various mitigative measures there will not be adverse impact on cumulative basis also.

11.7 CONCLUSION:

Systematic mining and ensuring adoption of various mitigative measures given in the report will ensure that the future environmental quality in the area will be maintained within statutory limits. The environmental management strategy as explained above will prove that industrial growth, if properly planned with all environmental concerns and appropriate remedial measures can benefit this region in the fields of potential employment opportunities, improved per capita income for local people, improved social welfare facilities etc. in its own way and also revenue to Government through royalty, taxes etc. Besides, it will meet the raw material requirement of the construction industry also.

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CHAPTER - XII

DISCLOSURE OF CONSULTANTS ENGAGED

CHAPTER 12 DISCLOSURE OF CONSULTANTS ENGAGED

Creative Engineers & Consultants, Chennai is an **NABL** accredited testing laboratory and **NABET** accredited EIA consultancy. Established over 25 years ago, this company has steadily made good strides in the environmental impact assessment fields, and is also one of the first companies to get accredited by NABET as an Accredited Consultant Organization as early as 2011. Creative Engineers & Consultants has to its credit, successful completion of numerous EIA/EMP reports, grant of environmental clearances and periodic environmental monitoring works. Presently, the company has been accredited by NABET as a 'Category-A' organization for the sectors of Mining of Minerals (opencast only), Thermal Power Plants, Mineral Beneficiation and Cement Plants with the accreditation valid upto 23.12.2026. The team of experienced professionals that are a part of this organization has been detailed below.

Figure 12.1: Disclosure of consultants engaged

EXPERT NAME	QUALIFICATION	POSITION	EXPERIENCE
Mr. P. Giri	AMIE (Mining)	EIA Coordinator & Functional area Expert (AP,NV,HW),	Over 30 years of experience in EIA/EMP report, mine plan preparation, including modeling
Mr. K. Shankar	M.Sc (Geology). PGMEMG	Functional area Expert (GEO, HG, SHW, RH) & IBM approved RQP.	Over 25 years of experience in EIA/EMP report, Mine plan, hydrological report preparation
Mr.S.S.Rajendran	M.Sc. (Pharmaceutical Chemistry)	Lab head	More than 9 years of experience in Environmental laboratory.
Mr. R. Babu raj	M.A (Sociology), B.Com(Y.L&Cost), ITI, Advance Diploma in Computer application	Functional Area Expert (Socio Economy)	Over 15 years of experience in dispersion modeling, computer applications. Specialized in CAD and computer software, applications. 5years experience in the field of socio economy and its allied report preparation.



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TVL. OM VINAYAGA SUPPLIER, PROP.K. DHAKSHANAMURTHI, IN S.F.NOS. 37/15, 16, 18(P),
19(P), 20, 21, 22 & 23(P) OVER AN AREA OF 3.32.50HA IN NALLAMUR MADURA KOLATHUR
VILLAGE, MADURANTHAKAM TALUK, CHENGALPATTU DISTRICT, TAMIL NADU.**

EXPERT NAME	QUALIFICATION	POSITION	EXPERIENCE
Mr. B. Govindaraman	B.Sc.	Field technician	Over 20 years of field monitoring & data collection experience
Dr.B.Swamynathan	M.Sc (Ecology & Environmental Sciences), M.Phill (Botany), Ph.D (Ecology & Environmental Sciences)	EIA Coordinator& Functional Area Expert (EB,SC,LU&AP)	More than 12years of experience in Environment and allied fields.
Ms. G. Sandhya	B. Tech Chemical Engineering M.Tech Environmental Engineering	EIA Coordinator & Functional Area Expert (AQ&WP)	Over 6 years experience in preparation of EIA/EMP reports
Mr. N.Suresh	M.Sc (Geology).	Functional area Expert (GEO, HG,).	Over 10 years of experience in Mine plan, hydrological report preparation.

TM- EC					
S. No	Name of TM (EC)	Sector(s) proposed	Approved (to work under)	Period of involvement	Type of work Signature
1.	Baburaj R	1	P.GIRI	Period:From October 25.	Associated with EIA Coordinator in overall preparation of EIA/EMP report.

TM- FAE:					
S. No	Name of TM (FAE)	Functional Area	Approved FAE (to work under)	Period of involvement	Type of work
1	P Giri	RH	Shankar	Period: From October 25.	Associated with Experts in Identified Major risks involved in the project Mitigation measures suggested to avoid risk. Preparation of onsite and offsite emergency management plan

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ANNEXURES



நக.எண்.131/கனிமம்/2025
நாள்.30.10.2025.

உதவி இயக்குநர் அலுவலகம்,
புவியியல் மற்றும் சுரங்கத்துறை,
செங்கல்பட்டு.

குறிப்பாணை

பொருள்:- கனிமங்களும் குவாரிகளும் - சிறுகனிமங்கள் - சாதாரண கற்கள் மற்றும் கிராவல் - செங்கல்பட்டு மாவட்டம் - மதுராந்தகம் வட்டம் - நல்லாமுர் மதுரா கொளத்தூர் கிராமம் - பட்டா புல எண்கள். 37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22, 37/23(P) - மொத்த பரப்பு 3.32.50 ஹெக்டேர்ஸ் பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் குவாரி செய்ய தி/ள். ஓம் விநாயகா சப்ளையர் என்ற நிறுவனத்தினர் 10 ஆண்டுகளுக்கு அனுமதி கோரி விண்ணப்பம் செய்தது - கள அலுவலர்களின் அறிக்கைகள் வரப்பெற்றது - குவாரி குத்தகை உரிமம் வழங்க தகுதியான நிலப்பரப்பாக கருதி, மனுதாரரின் கோரிக்கையின் அடிப்படையில் 05 ஆண்டுகளுக்கு உரிமம் வழங்க ஏற்பளிக்கப்பட்ட சுரங்கதிட்டம் மற்றும் சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணைய தடையின்மை சான்று பெற்று சமர்ப்பிக்க கோருதல் - தொடர்பாக.

- பார்வை:-**
1. அரசாணை எண். Ms.No.169, தொழில் (எம்.எம்.சி.1) துறை, நாள். 04.08.2020.
 2. தி/ள்.ஓம் விநாயகா சப்ளையர், திரு.கோ.தஷ்ணாமூர்த்தி (உரிமையாளர்), பிளாட் எண்.14, GF7, எஸ்.வி.காம்ப்ளாக்ஸ், வந்தவாசி ரோடு, சோத்துப்பாக்கம், செய்யூர் வட்டம், செங்கல்பட்டு மாவட்டம் 603 319 என்ற நிறுவனத்தினரின் விண்ணப்பம் நாள்.26.03.2025
 3. இவ்வலுவலக நக.எண்.131/கனிமம்/2025, நாள்.26.03.2025.
 4. அரசாணை எண். Ms.No.37, இயற்கைவளங்கள் (எம்.எம்.சி.1) துறை, நாள்.22.04.2025
 5. வட்டாட்சியர் மதுராந்தகம் அவர்களின் கடித நக.எண்.1659-2025-அ1 நாள்.29.05.2025
 6. மதுராந்தகம் வருவாய் கோட்டாட்சியர் அவர்களின் கடித நக. எண். நக.எண்.1286/2025/ஆ நாள். 06.09.2025.
 7. தி/ள்.ஓம் விநாயகா சப்ளையர் என்ற நிறுவனத்தினரின் மனு நாள்.16.09.2025
 8. உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, செங்கல்பட்டு அவர்களின் புலத்தணிக்கை அறிக்கை நாள்.18.09.2025.
 9. மற்றும் தொடர்புடைய ஆவணங்கள்.

(Handwritten signature)



பார்வையில் காணும் கடிதங்களின்பால் கனிவான

கவனம்

வேண்டப்படுகிறது.

2. செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், நல்லாமூர் கிராமம், பட்டா புல எண்கள். 37/15 (1.61.50), 37/16 (0.24.50), 37/18(பு) (0.16.00), 37/19(பு) (0.06.50), 37/20 (0.18.00), 37/21 (0.36.50), 37/22 (0.29.00), 37/23(பு) (0.40.50) மொத்தப் பரப்பு 3.32.50 ஹெக்டேர் பட்டா நிலத்தில் சாதாரண கற்கள் மற்றும் கிராவல்மண் வெட்டியெடுக்க தி/எ.ஓம் விநாயகா சப்ளையர், திரு.கோ.தஷ்ணாமூர்த்தி (உரிமையாளர்) என்பவர் பத்து ஆண்டுகளுக்கு குவாரி குத்தகை உரிமம் கோரி 26.03.2025 நாளிட்ட மனுவின் மூலம் தமிழ்நாடு சிறுகனிமச் சலுகை விதிகள் 1959 விதி எண்.19(1)-ன் கீழ் விண்ணப்பம் செய்துள்ளனர். மேலும் தி/எ.ஓம் விநாயகா சப்ளையர், திரு. கோ.தஷ்ணாமூர்த்தி (உரிமையாளர்) என்ற நிறுவனத்தினரின் 16.09.2025 நாளிட்ட கடிதத்தில், பத்து ஆண்டுகளுக்கு அனுமதி கோரிய விண்ணப்பத்தினை ஐந்தாண்டுகளுக்கு மட்டும் குவாரிப்பணி மேற்கொண்டு சாதாரணகற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க அனுமதி வழங்குமாறு கோரியுள்ளார்.

3. மேற்கண்ட விண்ணப்பம் தொடர்பாக, வருவாய் கோட்டாட்சியர், மதுராந்தகம், மற்றும் உதவி இயக்குநர், புனியியல் மற்றும் சுரங்கத்துறை, செங்கல்பட்டு ஆகியோர் புலத்தணிக்கை மேற்கொண்டு அறிக்கைகளின் அடிப்படையில் செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், நல்லாமூர் மதுரா கொளத்தூர் கிராமம், புல எண்கள். 37/15 (1.61.5), 37/16 (0.24.5), 37/18 (பகுதி) (0.16.0), 37/19 (பகுதி) (0.06.5), 37/20 (0.18.0), 37/21 (0.36.5), 37/22 (0.29.0) மற்றும் 37/23 (பகுதி) (0.40.5) மொத்த விஸ்தீரணம் 3.32.50 ஹெக்டரில் மட்டும் சாதாரண கற்கள் மற்றும் கிராவல் வெட்டியெடுக்க தி/எ. ஓம் விநாயகா சப்ளையர் என்ற நிறுவனத்தினருக்கு கீழ்க்கண்ட நிபந்தனைகளுக்கு உட்பட்டு அனுமதி வழங்கலாம் என அறிக்கை அளித்துள்ளனர்.

K. S. S.



நிபந்தனைகள்

- a. 1959-ம் வருடத்திய தமிழ்நாடு சிறு கனிம சலுகை விதிகள், அட்டவணை II-ல் கண்டுள்ளபடி குவாரி செய்யப்படும் கனிமங்களுக்கு சீனியரேஜ் தொகை மற்றும் இதர கட்டணங்களை அவ்வப்போது செலுத்தி கனிமம் கொண்டு செல்லப்பட வேண்டும்.
- b. அனுபவம் வாய்ந்த வெடிபொருள் பயன்படுத்துவோர் மூலம் குறைந்த அளவு சக்தி கொண்ட வெடிபொருட்களை பயன்படுத்தி அருகிலுள்ள பட்டா தாரர்களுக்கு எவ்வித இடையூறுமின்றி / அருகிலுள்ள பட்டா மற்றும் அரசு புலங்களில் எவ்வித ஆக்கிரமிப்பும் இன்றி குவாரிப் பணி மேற்கொள்ள வேண்டும்.
- c. விண்ணப்பப் புலங்களைச் சுற்றியுள்ள பட்டா நிலங்களுக்கு 7.5 மீட்டரும், அரசு புறம்போக்கு நிலங்கள், வண்டிப்பாதை மற்றும் மேய்க்கால் நிலங்களுக்கு 10 மீட்டர் பாதுகாப்பு இடைவெளி விட வேண்டும். மேலும் விண்ணப்பப் புலத்திற்கு தென்மேற்கே புல எண்.36/1-ல் உள்ள தாங்கல் குட்டைக்கு 50 மீட்டர் பாதுகாப்பு இடைவெளிவிட்டு குவாரிப்பணி மேற்கொள்ளப்பட வேண்டும்.
- d. 1959 ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.41-ன் படி ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தினை 90 தினங்களுக்குள் விண்ணப்பதார நிறுவனம் சமர்ப்பிக்க வேண்டும்.
- e. 1959 ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.42-ன்படி விண்ணப்ப புலத்திற்கு மாநில அளவிலான சுற்றுச் சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் சுற்றுச்சூழல் ஒப்புதல் பெற்று சமர்ப்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும்.

4. இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, சென்னை அவர்களின் 10.08.2020 நாளிட்ட கடிதத்துடன் இணைத்து வரப்பெற்ற அரசாணை எண்.169 தொழில் துறை (எம்.எம்.சி-1) நாள் 04.08.2020-ன்படி பட்டா புலங்களில் கிராவல்மண் சாதாரண வகை கற்கள் ஆகிய சிறுகனிம உரிமம் வழங்கும் நேர்வுகளில் நடவடிக்கை எடுக்க விதி எண்.19 மற்றும் 33-ல் மாவட்ட ஆட்சியருக்கு வழங்கப்பட்ட அதிகாரம் தற்போது சம்மந்தப்பட்ட உதவி/ துணை இயக்குநர் அவர்களுக்கு மாற்றி வழங்க உத்திரவிடப்பட்டுள்ளது.

5. எனவே, வருவாய் கோட்டாட்சியர், மதுராந்தகம், மற்றும் உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, செங்கல்பட்டு ஆகியோரின்

K. S. S.

பரிந்துரை மற்றும் நிபந்தனைகளின் அடிப்படையில் செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், நல்லாமூர் மதுரா கொளத்தூர் கிராமம், புல எண்கள், 37/15 (1.61.5), 37/16 (0.24.5), 37/18 (பகுதி) (0.16.0), 37/19 (பகுதி) (0.06.5), 37/20 (0.18.0), 37/21 (0.36.5), 37/22 (0.29.0) மற்றும் 37/23 (பகுதி) (0.40.5) மொத்த விஸ்தீரணம் 3.32.50 ஹெக்டேர் பரப்பில் 1959-ம் வருட தமிழ்நாடு சிறுகனிம விதிகள், விதி எண்.19(1), 20, 33-ன்படி கீழ்க்கண்ட நிபந்தனைகளுக்குட்பட்டு, மனுதாரரின் கோரிக்கையின் அடிப்படையில் 05 (ஐந்து) வருட காலத்திற்கு தி/ள்.ஓம் விநாயகா சப்ளையர் என்ற நிறுவனத்தினருக்கு சாதாரண கற்கள் மற்றும் கிராவல் குவாரி உரிமம் வழங்குவதற்குரிய தகுதியான நிலப்பரப்பாக கருதப்படுகிறது.

6. மேலும், தமிழ்நாடு சிறுகனிம சலுகை விதிகள் -1959 விதி எண்.41-ன்படி குவாரிப் பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்க திட்டத்தினை 90 தினங்களுக்குள் சமர்ப்பிக்குமாறு மனுதாரரைக் கேட்டுக் கொள்ளப்படுகிறது. மேலும் ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தின் தொடர்ச்சியாக 1959-ம் வருடத்திய தமிழ்நாடு சிறு கனிம சலுகை விதிகள், விதி எண்.42-ன்படி மாநில அளவிலான சுற்றுச் சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் தடையின்மை சான்று பெற்று சமர்ப்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும் என இதன் மூலம் தெரிவிக்கப்படுகிறது.

சி. ஜெனார்
30/10/2025
உதவி இயக்குநர்,
புவியியல் மற்றும் சுரங்கத்துறை,
செங்கல்பட்டு.

பெறுநர்

தி/ள்.ஓம் விநாயகா சப்ளையர்,
திரு. கோ.தஷ்ணாமூர்த்தி (உரிமையாளர்),
பிளாட் எண்.14, GF7, எஸ்.வி.காம்பளாக்ஸ்,
வந்தவாசி ரோடு,
சோத்துப்பாக்கம், செய்யூர் வட்டம்,
செங்கல்பட்டு மாவட்டம் 603 319.

நகல்.

1. தலைவர், மாநில சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையம், சென்னை.
2. இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, சென்னை-32.

ச. சி. சி.

Annexure- 2

From

Thiru. G. Dheivaarul, M.Sc.,
Assistant Director,
Dept of Geology and Mining,
Chengalpattu.

To

M/s. Om Vinayaka Supplier,
Thiru. G. Dhakshanamurthi, Proprietor,
Plot No.14, GF&, SV Complex,
Sothupakkam, Cheyyur Taluk,
Chengalpattu 603 319.

Rc.No.131/Mines/2022, Dated:19.11.2025.

Sir,

Sub: Mines and Minerals – Minor Mineral - Rough Stone and Gravel – Chengalpattu District – Madhuranthagam Taluk – Nallamur Madhra Kolathur Village- Patta land in S.F. Nos. 37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22, 37/23(P) - Over an extent of 3.32.50 Hects - Application preferred by M/s. Om Vinayaka Supplier, Thiru. G. Dhakshanamurthi, Proprietor- Precise area communicated - Draft Mining Plan submitted – approval – accorded - reg.

Ref: 1 Application prepared by M/s. Om Vinayaka Supplier, Thiru. G. Dhakshanamurthi, Proprietor, Plot No.14, GF&, SV Complex, Sothupakkam, Cheyyur Taluk, Chengalpattu 603 319 Dated.03.06.2024.

2 This Office Memorandum Letter No.131/Mines/2025, dated.30.10.2025

3 Draft Mining plan submitted by Thiru. N.MKumar, dated: 17.11.2025

Kind attention is invited to the references cited above.

2. M/s. Om Vinayaka Supplier, Thiru. G. Dhakshanamurthi, Proprietor has preferred an application for quarrying Rough stone and Gravel over an extent of 3.32.50 Hects of patta land in S.F.Nos. 37/15 (1.61.50), 37/16 (0.24.50), 37/18(P) (0.16.00), 37/19(P) (0.06.50), 37/20 (0.18.00), 37/21 (0.36.50), 37/22 (0.29.00), 37/23(P) (0.40.50) in Nallamur Madhra Kolathur Village, Madhuranthagam Taluk, Chengalpattu District for a period of 05 years under the provisions of Rule 19 (1) of Tamil Nadu Minor Mineral

Concession Rules, 1959. In this regard, the precise area communication has been issued vide letter dated. 30.10.2025 with a direction to submit approved mining plan and Environment Clearance.

3. Accordingly, M/s. Om Vinayaka Supplier has submitted three copies of draft Mining Plan vide letter dated: 17.11.2025 and the same has been examined in details and it is found correct.

4. As per the mining plan the year wise production for the proposed Five years as detailed below.

Year	Roughstone in (m³)	Gravel in (m³)
1 st Year	49,300	45,072
2 nd year	53,770	45,448
3 rd year	1,03,300	-
4 th year	1,17,300	-
5 th year	1,09,090	-
Total	4,32,760	90,520

5. Hence, as per the power delegated under Rule 41 of TNMMCR, 1959 and as per the guidelines/instructions issued by the Commissioner of Geology and Mining, vide letter Rc.No.3868/LC/2012 dated.19.11.2012, the said mining plan submitted by the applicant firm is hereby approved subject to the following conditions;

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

ii) This approval of the mining plan does not in any way imply the approval of the Government in terms of any other provisions of Mines and Minerals Development and Regulation) Act 1957, or any other connected laws including Forest (Conservation) Act 1957, or any other connected Laws industry Forest (Conservation) Act 1980, Forest Conservation Rules 1981

Environment protection Act 1980, Indian Explosive Act 1884 (Central Act IV of 1884) and the rules made there under, Minor Mineral Conservation and Development Rules, and The Tamil Nadu Minor Mineral Concession rules, 1959.

iii) That the mining plan is approved without prejudice to any other order or directions from any court of competent jurisdiction.

iv) All the conditions stipulated in the precise area communication letter should be followed during quarry operation as per rules.

v) The applicant should get prior Environmental clearance from the appropriate authority and same has to be submit to the Assistant Director, Geology and Mining, Chengalpattu for further action.

R. Jeyamohan
19/11/2025
Assistant Director,
Geology and Mining,
Chengalpattu.

Copy submitted to The Director,
Dept of Geology and Mining,
Guindy, Chennai -32.

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19/11/2025

Annexure- 3

From

Thiru. G. Dheivaarul, M.Sc.,
Assistant Director,
Dept of Geology and Mining,
Chengalpattu.

To

M/s. Om Vinayaka Supplier,
Thiru. G. Dhakshanamurthi, Proprietor,
Plot No.14, GF&, SV Complex,
Sothupakkam, Cheyyur Taluk,
Chengalpattu 603 319.

Rc.No.131-2/Mines/2025, Dated: 19.11.2025

Sir,

Sub: Mines and Minerals – Minor Mineral - Rough Stone and Gravel – Chengalpattu District – Madhuranthagam Taluk – Nallamur Madhra Kolathur Village- Patta land in S.F. Nos. 37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22, 37/23(P) - Over an extent of 3.32.50 Hects - Application preferred by M/s. Om Vinayaka Supplier, Thiru. G. Dhakshanamurthi, Proprietor- - Precise area communicated - Mining Plan approved - Existing / Proposed / abandoned quarries details requested – reply furnished - reg.

- Ref:**
- 1 Application prepared by M/s. Om Vinayaka Supplier, Thiru. G. Dhakshanamurthi, Proprietor, Plot No.14, GF&, SV Complex, Sothupakkam, Cheyyur Taluk, Chengalpattu 603 319 Dated.03.06.2024.
 - 2 This Office Memorandum Letter No.131/Mines/2025, dated.30.10.2025
 - 3 Draft Mining plan submitted by M/s. Om Vinayaka Supplier, dated:23.05.2025.
 - 4 Mining plan approved by the Assistant Director, Dept. of Geology and Mining, Chengalpattu in Letter.No.131/Mines/2025, dated.19.11.2025.

Kind attention is invited to the references cited above.

2. M/s. Om Vinayaka Supplier, Thiru. G. Dhakshanamurthi, Proprietor has preferred an application for quarrying Rough stone and Gravel over an extent of 3.32.50 Hects of patta land in S.F.Nos. 37/15 (1.61.50), 37/16 (0.24.50), 37/18(P) (0.16.00), 37/19(P) (0.06.50), 37/20 (0.18.00), 37/21 (0.36.50), 37/22 (0.29.00), 37/23(P) (0.40.50) in Nallamur Madhra Kolathur Village, Madhuranthagam Taluk, Chengalpattu District for a period of 05 years under the provisions of Rule 19 (1) of Tamil Nadu Minor Mineral Concession Rules, 1959. In this regard, the precise area communication has

been issued vide letter dated. 30.10.2025 with a direction to submit approved mining plan and Environment Clearance.

3. Accordingly, M/s. Om Vinayaka Supplier has submitted three copies of draft Mining Plan vide letter dated: 23.05.2025 and the same has been examined in detail and approved by Assistant Director, Dept. of Geology and Mining, Chengalpattu vide Letter.No.131/Mines/2025, dated. 19.11.2025.

4) Further, The applicant firm has requested the details of existing, proposed, abandoned quarries situated within 500 mts from the applied area and the details are furnished as follows:-

I. Details of Existing quarries.

Sl. No	Name of the Lessee	Village & Taluk	SF. Nos.	Extent in Hect	G.O. No./Proc. No. & Date	Lease Period
1	M/s. Naveen Enterprises, P. Somasekar Reddy, (Administrative Partner), Side Portion, No.2/141-4, Udaiyar Street, Minnampalli, Nammakkal Tk & Dist - 637 019	Nallamur, Maduranthagam	37/1, 37/23(P), 37/24(P), 37/25(P), 37/26(P)	2.83.20	Assistant Director (i/c), Dept. of Geology and Mining, Chengalpattu Proceedings Rc.No.2185/ Mines/2022, dated 09.05.2023	09.05.2023 To 08.05.2033
2	Tvl. Triway Ware House & Holdings Pvt. Ltd., No.14, Jaffer Street, Chennai - 600 001.	Netrampakkam, Maduranthagam	13/2	2.02.50	Deputy Director (Addl. Charge), Dept. of Geology and Mining, Chengalpattu Proceedings Rc.No.61/Mines/ 2024 dated:05.12.2024	03.10.2024 To 02.10.2029
3	Tvl. Triway Ware House & Holdings Pvt. Ltd., No.14, Jaffer Street, Chennai - 600 001.	Netrampakkam, Maduranthagam	14/1A, 14/1B, 14/2, 15/3	4.54.00	Deputy Director, Dept. of Geology and Mining, Chengalpattu Proceedings Rc.No.1944/Mine s/2022, Dated.04.06.2025.	04.06.2025 To 03.06.2035

II. Details of abandoned/Old quarries.

Sl. No	Name of the Lessee	Village & Taluk	SF. Nos.	Extent in Hect	G.O. No./ Proc. No. & Date	Lease Period
--- Nil ---						

III. Details of other Proposed/applied quarries

Sl. No.	Name of the lessee	Name of the Mineral	Village & Taluk	S.F No.	Extent in Het	Lease period.
1.	M/s. Om Vinayaka Supplier, Thiru. G. Dhakshanamurthi, Proprietor, Plot No.14, GF&, SV Complex, Sothupakkam, Cheyyur Taluk, Chengalpattu 603 319.	Rough stone & Gravel	Nallamur Madhra Kolathur, Maduranthagam	37/15, 37/16, 37/18 (P), 37/19 (P), 37/20, 37/21, 37/22, 37/23 (P)	3.32.5	Instant Proposal.

B. Jeyamohan
19/11/2025
Assistant Director,
Dept. of Geology and Mining,
Chengalpattu.

Copy to:-

The Chairman,
SEIAA-TN, 3rd Floor,
Panakal Maligai,
No.1, Jeenes Road,
Saidapet, Chennai -15.

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19/11/2025

POPULATION BREAKUP & LITERACY LEVEL IN THE BUFFER ZONE

Sl.No	No. of Villages	Name of village	Rural / urban	HOUSE HOLDS	POPULATION			POPULATION BELOW 6 AGE GROUP			SCHEDULE CASTE			SCHEDULE TRIBE			LITRERATES			ILLITRERATES		
					TOTAL	MALE	F.MALE	TOTAL	MALE	F.MALE	TOTAL	MALE	F.MALE	TOTAL	MALE	F. MALE	TOTAL	MALE	F.MALE	TOTAL	MALE	F.MALE
0-2 km,Maduranthakam Sub-District,Kancheepuram District																						
1	1	Netrambakkam	Rural	424	1666	831	835	185	82	103	846	415	431	0	0	0	1120	617	503	546	214	332
2	2	Peruveli	Rural	858	3381	1671	1710	342	183	159	2175	1075	1100	5	2	3	2414	1286	1128	967	385	582
3	3	Nallamur Keelakaranai	Rural	743	3122	1545	1577	303	166	137	2540	1246	1294	4	2	2	2148	1136	1012	974	409	565
		total (A)		2025	8169	4047	4122	830	431	399	5561	2736	2825	9	4	5	5682	3039	2643	2487	1008	1479
2-5 km,Maduranthakam Sub-District,Kancheepuram District																						
4	1	Avirimedu	Rural	146	562	285	277	67	34	33	170	83	87	11	6	5	315	194	121	247	91	156
5	2	Chitravadi	Rural	198	828	411	417	83	39	44	379	198	181	20	10	10	551	299	252	277	112	165
6	3	Z.Endathur	Rural	726	3014	1539	1475	270	134	136	1552	803	749	69	35	34	1882	1049	833	1132	490	642
7	4	Melakandai	Rural	195	812	408	404	88	42	46	472	236	236	12	5	7	507	281	226	305	127	178
8	5	Chinnavenmani	Rural	207	794	388	406	66	33	33	385	183	202	15	5	10	549	291	258	245	97	148
9	6	Ozhavetti	Rural	265	1104	561	543	126	68	58	936	479	457	32	16	16	703	400	303	401	161	240
10	7	Chitamur	Rural	67	315	166	149	25	10	15	211	117	94	0	0	0	189	120	69	126	46	80
11	8	Kattudevadur	Rural	891	3398	1700	1698	373	194	179	1419	717	702	0	0	0	2074	1152	922	1324	548	776
12	9	Kilvasalai	Rural	343	1351	686	665	126	59	67	1147	589	558	7	4	3	898	506	392	453	180	273
13	10	Neerpair	Rural	530	2090	1024	1066	236	123	113	1096	545	551	31	18	13	1285	699	586	805	325	480
Cheyyur Sub-District,Kancheepuram District																						
14	1	Kannimangalam	Rural	229	983	501	482	115	61	54	616	313	303	175	92	83	602	336	266	381	165	216
15	2	Chithamur	Rural	123	445	224	221	48	29	19	34	16	18	0	0	0	359	189	170	86	35	51
16	3	Polambakkam	Rural	570	2242	1117	1125	240	125	115	1073	533	540	23	12	11	1409	791	618	833	326	507
17	4	Magundagiri	Rural	274	1067	548	519	122	69	53	430	221	209	0	0	0	761	439	322	306	109	197
		total (B)		4764	19005	9558	9447	1985	1020	965	9920	5033	4887	395	203	192	12084	6746	5338	6921	2812	4109
5-10 km,Maduranthakam Sub-District,Kancheepuram District																						
18	1	Munuthikuppam	Rural	129	477	238	239	62	32	30	293	143	150	2	1	1	299	164	135	178	74	104
19	2	Mulli	Rural	68	286	144	142	34	13	21	184	95	89	4	1	3	185	103	82	101	41	60
20	3	Valarbirai	Rural	43	171	85	86	11	7	4	107	50	57	0	0	0	134	74	60	37	11	26
21	4	Vilagam	Rural	38	141	75	66	18	10	8	0	0	0	27	12	15	67	41	26	74	34	40
22	5	Kavadur	Rural	256	1033	528	505	121	69	52	675	346	329	57	27	30	604	341	263	429	187	242
23	6	Murukkambakkam	Rural	259	942	482	460	79	43	36	690	345	345	39	22	17	609	350	259	333	132	201
24	7	Mariputhur	Rural	230	901	470	431	61	31	30	393	202	191	0	0	0	665	373	292	236	97	139
25	8	Devadur	Rural	333	1298	647	651	114	61	53	661	329	332	38	17	21	810	449	361	488	198	290
26	9	Arungunam	Rural	578	2129	1063	1066	164	79	85	935	475	460	73	39	34	1438	813	625	691	250	441
27	10	Sholamthangal	Rural	76	289	148	141	31	15	16	213	113	100	9	5	4	194	105	89	95	43	52
28	11	Unamalai	Rural	441	1751	910	841	222	115	107	764	413	351	90	44	46	1079	619	460	672	291	381
29	12	Sirungalur	Rural	183	688	329	359	48	28	20	385	186	199	0	0	0	549	276	273	139	53	86
30	13	Pakkam	Rural	452	1864	908	956	177	84	93	765	372	393	0	0	0	1192	664	528	672	244	428
31	14	Pulikkoradu	Rural	80	325	160	165	29	14	15	259	130	129	0	0	0	200	117	83	125	43	82
32	15	Amayambattu	Rural	62	225	109	116	24	12	12	0	0	0	0	0	0	132	76	56	93	33	60
33	16	Vasanthavadi	Rural	133	513	255	258	47	25	22	290	149	141	3	2	1	336	200	136	177	55	122
34	17	Nethapakkam	Rural	197	756	370	386	69	31	38	521	262	259	0	0	0	403	226	177	353	144	209
35	18	Sirunallur	Rural	550	2163	1079	1084	193	101	92	791	394	397	10	5	5	1440	798	642	723	281	442
36	19	Puliyaranankottai	Rural	185	701	356	345	67	34	33	348	181	167	5	3	2	481	264	217	220	92	128
37	20	Nesapakkam	Rural	185	671	348	323	68	41	27	436	230	206	0	0	0	400	236	164	271	112	159
38	21	Ariyanur	Rural	171	669	340	329	61	33	28	382	201	181	0	0	0	398	223	175	271	117	154
39	22	Venmari	Rural	304	1215	625	590	121	64	57	761	393	368	12	7	5	691	394	297	524	231	293
40	23	Vellarai	Rural	56	236	121	115	21	10	11	174	87	87	0	0	0	174	97	77	62	24	38
41	24	Nallur	Rural	161	625	309	316	81	47	34	356	168	188	9	5	4	425	236	189	200	73	127
42	25	Erumbedu	Rural	660	2614	1299	1315	225	111	114	2246	1110	1136	15	11	4	1905	1056	849	709	243	466
43	26	Z.Budur	Rural	788	2873	1422	1451	283	145	138	1243	604	639	0	0	0	1985	1086	899	888	336	552

Maduranthakam Sub-District,Kancheepuram District

44	1	Maduranthakam (M)	Urban	7699	30796	15254	15542	3184	1615	1569	5010	2423	2587	342	179	163	23221	12395	10826	7575	2859	4716
Cheyyur Sub-District,Kancheepuram District																						
45	1	Seevadi	Rural	284	1205	602	603	116	59	57	781	389	392	0	0	0	734	395	339	471	207	264
46	2	Pavunjur	Rural	351	1409	729	680	145	78	67	395	209	186	8	4	4	966	541	425	443	188	255
47	3	Uludamangalam	Rural	329	1380	687	693	154	66	88	635	320	315	0	0	0	981	522	459	399	165	234
48	4	Periavelikadu	Rural	198	802	410	392	107	57	50	540	266	274	0	0	0	533	282	251	269	128	141
49	5	Chinnavelikadu	Rural	305	1152	585	567	114	71	43	200	104	96	1	1	0	695	392	303	457	193	264
50	6	Thiruvadur	Rural	462	1887	949	938	200	112	88	929	457	472	16	12	4	1193	660	533	694	289	405
51	7	Kadugupattu	Rural	450	1765	874	891	196	105	91	908	459	449	0	0	0	1022	561	461	743	313	430
52	8	Pudupattu	Rural	123	443	220	223	42	24	18	381	190	191	0	0	0	275	149	126	168	71	97
53	9	Iranyasidhi	Rural	189	712	368	344	75	41	34	285	153	132	0	0	0	419	252	167	293	116	177
54	10	Nemanadam	Rural	153	538	267	271	50	26	24	37	17	20	0	0	0	312	189	123	226	78	148
55	11	Pakkavancheri	Rural	87	357	181	176	31	16	15	59	28	31	0	0	0	211	122	89	146	59	87
56	12	Sengattur	Rural	412	1745	875	870	154	77	77	888	436	452	0	0	0	1322	727	595	423	148	275
57	13	Thirupurakoil	Rural	42	211	112	99	19	10	9	0	0	0	0	0	0	153	86	67	58	26	32
58	14	Cheyyur	Rural	2626	10664	5274	5390	1024	535	489	5188	2549	2639	131	65	66	7936	4190	3746	2728	1084	1644
59	15	Ammanur	Rural	589	2334	1167	1167	219	104	115	940	449	491	10	7	3	1622	915	707	712	252	460
60	16	Maruderi	Rural	42	152	74	78	13	7	6	0	0	0	0	0	0	109	62	47	43	12	31
61	17	Kokkaranthangal	Rural	705	2846	1433	1413	262	134	128	1657	830	827	48	20	28	2176	1171	1005	670	262	408
62	18	Pondur	Rural	372	1557	762	795	181	89	92	1176	574	602	41	16	25	982	531	451	575	231	344
63	19	Vilangadu	Rural	135	554	292	262	75	46	29	473	251	222	0	0	0	343	200	143	211	92	119
64	20	Porur	Rural	305	1191	584	607	95	53	42	720	362	358	0	0	0	799	431	368	392	153	239
65	21	Poongunam	Rural	552	2212	1096	1116	291	143	148	1264	637	627	10	4	6	1568	848	720	644	248	396
66	22	Puoriampakkam	Rural	218	901	460	441	92	45	47	578	291	287	10	4	6	605	345	260	296	115	181
67	23	Kurambarai	Rural	121	528	267	261	54	25	29	465	238	227	0	0	0	258	140	118	270	127	143
68	24	Maluvankaranai	Rural	243	1050	529	521	119	59	60	522	252	270	27	15	12	682	378	304	368	151	217
69	25	Poraiyur	Rural	402	1703	859	844	195	110	85	898	464	434	0	0	0	1140	643	497	563	216	347
70	26	Sothupakkam	Rural	993	3847	1962	1885	397	216	181	1128	568	560	41	22	19	3074	1636	1438	773	326	447
71	27	Melmaruvathur	Rural	287	3367	1758	1609	99	51	48	478	194	284	7	4	3	3165	1688	1477	202	70	132
72	28	Keelmaruvathur	Rural	523	2125	1066	1059	244	122	122	594	295	299	18	9	9	1502	822	680	623	244	379
73	29	Irumbili	Rural	454	1947	1022	925	216	113	103	1402	745	657	13	7	6	1113	667	446	834	355	479
74	30	Perambakkam	Rural	281	1096	560	536	125	61	64	387	204	183	5	3	2	801	443	358	295	117	178
75	31	Perukkaranai	Rural	586	2366	1172	1194	226	116	110	491	234	257	4	2	2	1521	868	653	845	304	541
76	32	Parukkal	Rural	332	1398	706	692	129	78	51	819	409	410	0	0	0	903	493	410	495	213	282
77	33	Thandalam	Rural	259	1147	593	554	101	58	43	786	407	379	65	36	29	683	402	281	464	191	273
78	34	Vettamperumbakkam	Rural	158	627	310	317	75	42	33	452	222	230	5	2	3	355	187	168	272	123	149
79	35	Kayapakkam	Rural	789	3123	1556	1567	313	170	143	1224	603	621	52	25	27	1783	1009	774	1340	547	793
80	36	Periakalakadi	Rural	348	1544	757	787	197	102	95	821	397	424	0	0	0	967	523	444	577	234	343
		total (C)		29022	118237	59192	59045	11760	6091	5669	47383	23604	23779	1247	638	609	82919	45246	37673	35318	13946	21372
		Grand Total (A+B+C)		35811	145411	72797	72614	14575	7542	7033	62864	31373	31491	1651	845	806	100685	55031	45654	44726	17766	26960

**Source: District Primary Census Abstract, Kancheepuram District of Tamilnadu State-2011*

OCCUPATIONAL STRUCTURE IN THE BUFFER ZONE

Annexure - 5

Sl.No	No. of Villages	Name of village	Rural / urban	MAIN WORKERS		CULTIVATORS		AGRI LABOURS		HOUSE HOLD		OTHERS		MARGINAL WORKERS		NON WORKERS	
				MALE	F.MALE	MALE	F.MALE	MALE	F.MALE	MALE	F.MALE	MALE	F.MALE	MALE	F.MALE	MALE	F.MALE
0-2 km,Maduranthakam Sub-District,Kancheepuram District																	
1	1	Netrambakkam	Rural	179	12	19	1	104	2	2	1	54	8	364	427	288	396
2	2	Peruveli	Rural	861	301	82	12	317	144	13	14	449	131	64	343	746	1066
3	3	Nallamur Keelakaranai	Rural	488	232	188	26	171	182	1	1	128	23	423	465	634	880
		total (A)		1528	545	289	39	592	328	16	16	631	162	851	1235	1668	2342
2-5 km,Maduranthakam Sub-District,Kancheepuram District																	
4	1	Avirimedu	Rural	119	31	47	0	12	12	4	2	56	17	90	161	76	85
5	2	Chitravadi	Rural	123	18	39	3	47	2	0	0	37	13	135	202	153	197
6	3	Z.Endathur	Rural	861	435	65	16	531	337	10	4	255	78	79	137	599	903
7	4	Melakandai	Rural	245	102	9	3	41	27	7	1	188	71	0	0	163	302
8	5	Chinnavenmani	Rural	268	250	81	15	104	200	0	0	83	35	1	1	119	155
9	6	Ozhavetti	Rural	217	127	16	1	149	102	0	0	52	24	127	120	217	296
10	7	Chitamur	Rural	112	63	8	3	96	59	4	0	4	1	0	0	54	86
11	8	Kattudevadur	Rural	807	550	42	14	572	501	8	0	185	35	172	146	721	1002
12	9	Kilvasalai	Rural	278	83	139	21	11	2	5	1	123	59	117	88	291	494
13	10	Neerpair	Rural	90	25	2	1	4	2	3	1	81	21	543	359	391	682
Cheyyur Sub-District,Kancheepuram District																	
14	1	Kannimangalam	Rural	157	49	13	5	74	31	2	0	68	13	136	164	208	269
15	2	Chithamur	Rural	126	26	16	1	4	0	2	0	104	25	3	13	95	182
16	3	Polambakkam	Rural	538	303	60	14	290	263	22	3	166	23	125	119	454	703
17	4	Magundagiri	Rural	119	74	10	6	77	56	4	3	28	9	225	152	204	293
		total (B)		4060	2136	547	103	2012	1594	71	15	1430	424	1753	1662	3745	5649
5-10 km,Maduranthakam Sub-District,Kancheepuram District																	
18	1	Munuthikuppam	Rural	134	28	45	1	17	15	1	0	71	12	29	125	75	86
19	2	Mulli	Rural	78	14	23	1	35	4	1	0	19	9	2	2	64	126
20	3	Valarbirai	Rural	45	14	0	0	23	6	0	0	22	8	2	0	38	72
21	4	Vilagam	Rural	25	1	19	0	0	0	0	0	6	1	21	18	29	47
22	5	Kavadur	Rural	172	37	38	7	30	2	0	2	104	26	144	151	212	317
23	6	Murukkambakkam	Rural	183	157	67	28	47	104	3	1	66	24	114	98	185	205
24	7	Mariputhur	Rural	255	130	46	5	197	120	1	2	11	3	14	54	201	247
25	8	Devadur	Rural	156	49	7	0	58	18	5	1	86	30	241	244	250	358
26	9	Arungunam	Rural	426	147	84	14	144	72	10	14	188	47	220	346	417	573
27	10	Sholamthangal	Rural	88	55	8	3	47	43	0	0	33	9	3	15	57	71
28	11	Unamalai	Rural	504	311	89	51	143	183	1	2	271	75	73	97	333	433
29	12	Sirungalur	Rural	158	90	38	10	6	20	1	1	113	59	17	22	154	247
30	13	Pakkam	Rural	418	293	176	166	20	48	12	6	210	73	163	164	327	499
31	14	Pulikkoradu	Rural	9	1	0	0	1	0	0	0	8	1	97	120	54	44
32	15	Amayambattu	Rural	13	0	0	0	1	0	0	0	12	0	59	85	37	31
33	16	Vasanthavadi	Rural	126	23	12	5	50	7	1	2	63	9	43	111	86	124
34	17	Nethapakkam	Rural	227	148	2	0	127	129	0	0	98	19	6	6	137	232
35	18	Sirunallur	Rural	251	165	20	3	147	131	3	5	81	26	445	456	383	463
36	19	Puliyaranankottai	Rural	47	20	6	3	1	0	0	1	40	16	198	215	111	110
37	20	Nesapakkam	Rural	224	217	97	78	115	125	4	5	8	9	5	5	119	101
38	21	Ariyanur	Rural	200	105	19	2	129	92	8	1	44	10	4	0	136	224
39	22	Venmari	Rural	354	173	72	18	226	128	8	1	48	26	47	100	224	317
40	23	Vellarai	Rural	35	1	16	0	4	0	0	0	15	1	29	19	57	95

Sl.No	No. of Villages	Name of village	Rural / urban	MAIN WORKERS		CULTIVATORS		AGRI LABOURS		HOUSE HOLD		OTHERS		MARGINAL WORKERS		NON WORKERS	
				MALE	F.MALE	MALE	F.MALE	MALE	F.MALE	MALE	F.MALE	MALE	F.MALE	MALE	F.MALE	MALE	F.MALE
41	24	Nallur	Rural	33	15	4	1	3	0	0	0	26	14	147	104	129	197
42	25	Erumbedu	Rural	505	358	54	35	263	269	2	4	186	50	137	117	657	840
43	26	Z.Budur	Rural	793	416	148	54	430	276	5	11	210	75	125	146	504	889
Maduranthakam Sub-District,Kancheepuram District																	
44	1	Maduranthakam (M)	Urban	7470	2077	112	46	655	385	185	98	6518	1548	1491	1097	6293	12368
Cheyyur Sub-District,Kancheepuram District																	
45	1	Seevadi	Rural	361	319	19	13	226	241	1	2	115	63	7	10	234	274
46	2	Pavunjur	Rural	325	157	26	5	94	113	20	2	185	37	101	66	303	457
47	3	Uludamangalam	Rural	367	65	175	26	34	2	10	1	148	36	43	57	277	571
48	4	Periavelikadu	Rural	73	55	11	5	15	11	4	1	43	38	182	191	155	146
49	5	Chinnavelikadu	Rural	200	53	33	2	95	20	4	4	68	27	145	248	240	266
50	6	Thiruvadur	Rural	393	77	4	2	160	20	4	0	225	55	180	218	376	643
51	7	Kadugupattu	Rural	485	394	49	31	302	314	0	3	134	46	63	49	326	448
52	8	Pudupattu	Rural	113	74	26	9	67	52	0	2	20	11	36	44	71	105
53	9	Iranyasidhi	Rural	163	17	17	1	71	3	8	1	67	12	62	170	143	157
54	10	Nemanadam	Rural	138	107	45	38	83	57	1	3	9	9	31	45	98	119
55	11	Pakkavancheri	Rural	9	2	0	1	0	0	1	1	8	0	114	79	58	95
56	12	Sengattur	Rural	383	222	61	20	129	126	30	26	163	50	216	264	276	384
57	13	Thirupurakoil	Rural	64	38	17	13	44	21	0	1	3	3	14	20	34	41
58	14	Cheyyur	Rural	1711	672	170	39	313	158	65	36	1163	439	1314	913	2249	3805
59	15	Ammanur	Rural	445	185	122	16	166	143	1	1	156	25	309	401	413	581
60	16	Maruderi	Rural	24	0	7	0	6	0	1	0	10	0	18	7	32	71
61	17	Kokkaranthangal	Rural	745	447	218	52	404	350	3	0	120	45	225	332	463	634
62	18	Pondur	Rural	262	111	50	2	78	75	38	10	96	24	211	280	289	404
63	19	Vilangadu	Rural	162	152	1	0	130	138	0	1	31	13	5	15	125	95
64	20	Porur	Rural	258	118	65	16	123	72	10	4	60	26	99	109	227	380
65	21	Poongunam	Rural	425	323	14	17	244	241	1	2	166	63	303	311	368	482
66	22	Puoriampakam	Rural	302	231	58	47	185	165	1	2	58	17	0	0	158	210
67	23	Kurambarai	Rural	163	104	46	20	74	76	3	6	40	2	0	0	104	157
68	24	Maluvankaranai	Rural	91	34	6	1	12	4	4	2	69	27	243	193	195	294
69	25	Poraiyur	Rural	66	19	11	5	8	7	3	1	44	6	371	351	422	474
70	26	Sothupakkam	Rural	1004	312	94	23	44	46	16	16	850	227	96	105	862	1468
71	27	Melmaruvathur	Rural	74	67	47	35	5	9	3	2	19	21	226	222	1458	1320
72	28	Keelmaruvathur	Rural	557	208	83	26	50	77	12	3	412	102	27	18	482	833
73	29	Irumbili	Rural	576	399	110	49	309	292	2	6	155	52	29	55	417	471
74	30	Perambakkam	Rural	160	82	4	5	102	48	2	2	52	27	134	106	266	348
75	31	Perukkarantai	Rural	780	627	111	36	544	564	8	2	117	25	8	4	384	563
76	32	Parukkal	Rural	104	77	7	11	13	20	3	4	81	42	300	115	302	500
77	33	Thandalam	Rural	351	281	30	3	274	265	2	0	45	13	0	0	242	273
78	34	Vettamperumbakkam	Rural	28	14	0	0	0	0	0	0	28	14	158	133	124	170
79	35	Kayapakkam	Rural	940	712	132	67	482	472	161	150	165	23	34	62	582	793
80	36	Periakalakadi	Rural	409	317	95	62	185	157	14	66	115	32	63	112	285	358
		total (C)		25640	12117	3166	1229	7990	6536	687	520	13797	3832	9243	9222	24309	37706
		Grand Total (A+B+C)		31228	14798	4002	1371	10594	8458	774	551	15858	4418	11847	12119	29722	45697

*Source: District Primary Census Abstract, Kancheepuram District of Tamilnadu State-2011

EDUCATIONAL FACILITIES IN THE STUDY AREA

Sl.No	No. of Villages	Name of village	Educational Facilities (A(1)/ NA(2))	Govt Pre - Primary School (Nursery/LKG/UKG) (Numbers)	Govt Primary School (Numbers)	Govt Middle School (Numbers)	Govt Secondary School (Numbers)	Govt Senior Secondary School (Numbers)	Govt Arts and Science Degree College (Numbers)	Govt Engineering College (Numbers)	Govt Medicine College (Numbers)	Govt Management Institute (Numbers)	Govt Polytechnic (Numbers)	Govt Vocational Training School/ITI (Numbers)	Government Non Formal Training Centre (Numbers)	Government School For Disabled (Numbers)
0-2 km,Maduranthakam Sub-District,Kancheepuram District																
1	1	Netrambakkam	1	1	1	0	0	0	0	0	0	0	0	0	1	0
2	2	Peruveli	1	3	2	1	0	0	0	0	0	0	0	0	1	0
3	3	Nallamur Keelakaranai	1	1	1	1	0	0	0	0	0	0	0	0	1	0
		total (A)		5	4	2	0	0	0	0	0	0	0	0	3	0
2-5 km,Maduranthakam Sub-District,Kancheepuram District																
4	1	Avirimedu	1	1	1	0	0	0	0	0	0	0	0	0	1	0
5	2	Chitravadi	1	1	0	0	0	0	0	0	0	0	0	0	0	0
6	3	Z.Endathur	1	1	1	1	1	0	0	0	0	0	0	0	1	0
7	4	Melakandai	1	1	1	0	0	0	0	0	0	0	0	0	1	0
8	5	Chinnavenmani	1	1	1	0	0	0	0	0	0	0	0	0	1	0
9	6	Ozhavetti	1	1	1	0	0	0	0	0	0	0	0	0	1	0
10	7	Chitamur	1	1	1	0	0	0	0	0	0	0	0	0	1	0
11	8	Kattudevadur	1	2	2	1	1	0	0	0	0	0	0	0	1	0
12	9	Kilvasalai	1	2	3	0	0	0	0	0	0	0	0	0	1	0
13	10	Neerpair	1	2	2	1	1	1	0	0	0	0	0	0	1	0
Cheyyur Sub-District,Kancheepuram District																
14	1	Kannimangalam	1	1	0	0	0	0	0	0	0	0	0	0	0	0
15	2	Chithamur	1	1	1	0	0	0	0	0	0	0	0	0	1	0
16	3	Polambakkam	1	2	1	1	1	1	0	0	0	0	0	0	1	0
17	4	Magundagiri	1	1	1	0	0	0	0	0	0	0	0	0	1	0
		total (B)		18	16	4	4	2	0	0	0	0	0	0	12	0
5-10 km,Maduranthakam Sub-District,Kancheepuram District																
18	1	Munuthikuppam	1	1	1	1	0	0	0	0	0	0	0	0	1	0
19	2	Mulli	1	1	1	0	0	0	0	0	0	0	0	0	1	0
20	3	Valarbirai	1	1	1	0	0	0	0	0	0	0	0	0	1	0
21	4	Vilagam	2	0	0	0	0	0	0	0	0	0	0	0	0	0
22	5	Kavadur	1	1	1	1	0	0	0	0	0	0	0	0	1	0
23	6	Murukkambakkam	1	1	1	0	0	0	0	0	0	0	0	0	1	0
24	7	Mariputhur	1	1	1	0	0	0	0	0	0	0	0	0	1	0
25	8	Devadur	1	1	1	1	0	0	0	0	0	0	0	0	1	0
26	9	Arungunam	1	1	1	1	0	0	0	0	0	0	0	0	1	0
27	10	Sholamthangal	1	1	1	1	0	0	0	0	0	0	0	0	1	0
28	11	Unamalai	1	2	1	1	0	0	0	0	0	0	0	0	1	0
29	12	Sirungalur	1	1	1	0	0	0	0	0	0	0	0	0	1	0
30	13	Pakkam	1	1	1	1	0	0	0	0	0	0	0	0	1	0
31	14	Pulikkoradu	2	0	0	0	0	0	0	0	0	0	0	0	0	0
32	15	Amayambattu	2	0	0	0	0	0	0	0	0	0	0	0	0	0
33	16	Vasanthavadi	1	1	1	0	0	0	0	0	0	0	0	0	1	0
34	17	Nethapakkam	1	1	1	0	0	0	0	0	0	0	0	0	1	0
35	18	Sirunallur	1	3	1	1	0	0	0	0	0	0	0	0	1	0
36	19	Puliyaranankottai	1	1	1	0	0	0	0	0	0	0	0	0	1	0
37	20	Nesapakkam	1	1	1	0	0	0	0	0	0	0	0	0	1	0
38	21	Ariyanur	1	1	1	0	0	0	0	0	0	0	0	0	1	0
39	22	Venmari	1	2	1	1	0	0	0	0	0	0	0	0	1	0
40	23	Vellarai	2	0	0	0	0	0	0	0	0	0	0	0	0	0
41	24	Nallur	1	1	1	0	0	0	0	0	0	0	0	0	1	0

Sl.No	No. of Villages	Name of village	Educational Facilities (A(1)/ NA(2))	Govt Pre - Primary School (Nursery/LKG/UKG) (Numbers)	Govt Primary School (Numbers)	Govt Middle School (Numbers)	Govt Secondary School (Numbers)	Govt Senior Secondary School (Numbers)	Govt Arts and Science Degree College (Numbers)	Govt Engineering College (Numbers)	Govt Medicine College (Numbers)	Govt Management Institute (Numbers)	Govt Polytechnic (Numbers)	Govt Vocational Training School/ITI (Numbers)	Government Non Formal Training Centre (Numbers)	Government School For Disabled (Numbers)
42	25	Erumbedu	1	2	3	1	1	0	0	0	0	0	0	0	1	0
43	26	Z.Budur	1	3	4	1	0	0	0	0	0	0	0	0	1	0
Cheythur Sub-District,Kancheepuram District																
44	1	Seevadi	1	2	1	1	0	0	0	0	0	0	0	0	1	0
45	2	Pavunjur	1	1	1	0	0	0	0	0	0	0	0	0	1	0
46	3	Uludamangalam	1	2	1	0	0	0	0	0	0	0	0	0	1	0
47	4	Periavelikadu	1	1	1	1	0	0	0	0	0	0	0	0	1	0
48	5	Chinnavelikadu	1	3	0	0	0	0	0	0	0	0	0	0	0	0
49	6	Thiruvadur	1	3	1	1	1	1	0	0	0	0	0	0	1	0
50	7	Kadugupattu	1	3	1	1	0	0	0	0	0	0	0	0	1	0
51	8	Pudupattu	1	1	0	0	0	0	0	0	0	0	0	0	0	0
52	9	Iranyasidhi	1	1	1	0	0	0	0	0	0	0	0	0	1	0
53	10	Nemanadam	1	1	1	0	0	0	0	0	0	0	0	0	1	0
54	11	Pakkavancheri	1	1	0	0	0	0	0	0	0	0	0	0	0	0
55	12	Sengattur	1	3	2	1	0	0	0	0	0	0	0	0	1	0
56	13	Thirupurakoil	2	0	0	0	0	0	0	0	0	0	0	0	0	0
57	14	Cheythur	1	10	6	4	4	2	0	0	0	0	0	0	1	0
58	15	Ammanur	1	4	3	0	0	0	0	0	0	0	0	0	1	0
59	16	Maruderi	2	0	0	0	0	0	0	0	0	0	0	0	0	0
60	17	Kokkaranthangal	1	3	3	1	0	0	0	0	0	0	0	0	1	0
61	18	Pondur	1	3	1	1	1	0	0	0	0	0	0	0	1	0
62	19	Vilangadu	1	1	1	0	0	0	0	0	0	0	0	0	1	0
63	20	Porur	1	1	1	0	0	0	0	0	0	0	0	0	1	0
64	21	Poongunam	1	2	1	1	0	0	0	0	0	0	0	0	1	0
65	22	Puorimpakkam	1	1	1	0	0	0	0	0	0	0	0	0	1	0
66	23	Kurambarai	1	1	0	0	0	0	0	0	0	0	0	0	0	0
67	24	Maluvankaranai	1	1	1	0	0	0	0	0	0	0	0	0	1	0
68	25	Poraiyur	1	2	1	1	0	0	0	0	0	0	0	0	1	0
69	26	Sothupakkam	1	2	1	2	1	1	0	0	0	0	0	0	1	0
70	27	Melmaruvathur	1	1	1	0	0	0	0	0	0	0	0	0	1	0
71	28	Keelmaruvathur	1	1	1	0	0	0	0	0	0	0	0	0	1	0
72	29	Irumbili	1	1	1	1	0	0	0	0	0	0	0	0	1	0
73	30	Perambakkam	1	1	1	0	0	0	0	0	0	0	0	0	1	0
74	31	Perukkarantai	1	1	1	1	0	0	0	0	0	0	0	0	1	0
75	32	Parukkal	1	2	1	1	0	0	0	0	0	0	0	0	1	0
76	33	Thandalam	1	1	1	0	0	0	0	0	0	0	0	0	1	0
77	34	Vettamperumbakkam	1	1	0	0	0	0	0	0	0	0	0	0	0	0
78	35	Kayapakkam	1	3	3	1	1	1	0	0	0	0	0	0	1	0
79	36	Periakalakadi	1	2	0	0	0	0	0	0	0	0	0	0	0	0
		total (C)		96	67	30	9	5	0	0	0	0	0	0	50	0
		Grand Total (A+B+C)		119	87	36	13	7	0	0	0	0	0	0	65	0

**Source: District Primary Census Abstract, Kancheepuram District of Tamilnadu State-2011*

MEDICAL FACILITIES WITHIN THE STUDY AREA

Sl.No	No. of Villages	Name of village	Medical Facilities (A(1)/NA(2))	Community Health Centre (Numbers)	Primary Health Centre (Numbers)	Primary Health Sub Centre (Numbers)	Maternity And Child Welfare Centre (Numbers)	TB Clinic (Numbers)	Hospital Allopathic (Numbers)	Hospital Alternative Medicine (Numbers)	Dispensary (Numbers)	Veterinary Hospital (Numbers)	Mobile Health Clinic (Numbers)	Family Welfare Centre (Numbers)
0-2 km, Maduranthakam Sub-District, Kancheepuram District														
1	1	Netrambakkam	2	0	0	0	0	0	0	0	0	0	0	0
2	2	Peruveli	1	0	0	1	0	0	0	0	0	0	0	0
3	3	Nallamur Keelakaranai	1	0	0	1	0	0	0	0	0	0	0	0
		total (A)		0	0	2	0	0	0	0	0	0	0	0
2-5 km, Maduranthakam Sub-District, Kancheepuram District														
4	1	Avirimeedu	2	0	0	0	0	0	0	0	0	0	0	0
5	2	Chitravadi	2	0	0	0	0	0	0	0	0	0	0	0
6	3	Z.Endathur	1	1	1	1	1	1	0	0	1	0	0	1
7	4	Melakandai	1	0	0	1	0	0	0	0	0	0	0	0
8	5	Chinnavenmani	2	0	0	0	0	0	0	0	0	0	0	0
9	6	Ozhavetti	1	0	0	0	0	0	0	0	0	1	0	0
10	7	Chitamur	2	0	0	0	0	0	0	0	0	0	0	0
11	8	Kattudevadur	1	0	0	2	0	0	0	0	0	1	0	0
12	9	Kilvasalai	2	0	0	0	0	0	0	0	0	0	0	0
13	10	Neerpair	2	0	0	0	0	0	0	0	0	0	0	0
Cheyyur Sub-District, Kancheepuram District														
14	1	Kannimangalam	2	0	0	0	0	0	0	0	0	0	0	0
15	2	Chithamur	1	0	0	1	0	0	0	0	0	0	0	0
16	3	Polambakkam	1	0	1	1	1	1	0	0	1	0	0	1
17	4	Magundagiri	1	0	0	1	0	0	0	0	0	0	0	0
		total (B)		1	2	7	2	2	0	0	2	2	0	2
5-10 km, Maduranthakam Sub-District, Kancheepuram District														
18	1	Munuthikuppam	2	0	0	0	0	0	0	0	0	0	0	0
19	2	Mulli	2	0	0	0	0	0	0	0	0	0	0	0
20	3	Valarbirai	2	0	0	0	0	0	0	0	0	0	0	0
21	4	Vilagam	2	0	0	0	0	0	0	0	0	0	0	0
22	5	Kavadur	2	0	0	0	0	0	0	0	0	0	0	0
23	6	Murukkambakkam	1	0	0	1	0	0	0	0	0	0	0	0
24	7	Mariputhur	2	0	0	0	0	0	0	0	0	0	0	0
25	8	Devadur	2	0	0	0	0	0	0	0	0	0	0	0
26	9	Arungunam	1	0	0	1	0	0	0	0	0	0	0	0
27	10	Sholamthangal	2	0	0	0	0	0	0	0	0	0	0	0
28	11	Unamalai	2	0	0	0	0	0	0	0	0	0	0	0
29	12	Sirungalur	2	0	0	0	0	0	0	0	0	0	0	0
30	13	Pakkam	1	0	0	1	0	0	0	0	0	0	0	0
31	14	Pulikkoradu	2	0	0	0	0	0	0	0	0	0	0	0
32	15	Amayambattu	2	0	0	0	0	0	0	0	0	0	0	0
33	16	Vasanthavadi	2	0	0	0	0	0	0	0	0	0	0	0
34	17	Nethapakkam	1	0	0	1	0	0	0	0	0	0	0	0
35	18	Sirunallur	2	0	0	0	0	0	0	0	0	0	0	0
36	19	Puliyaranankottai	2	0	0	0	0	0	0	0	0	0	0	0
37	20	Nesapakkam	2	0	0	0	0	0	0	0	0	0	0	0
38	21	Ariyanur	2	0	0	0	0	0	0	0	0	0	0	0
39	22	Venmari	1	0	0	1	1	0	0	0	0	0	0	0
40	23	Vellarai	2	0	0	0	0	0	0	0	0	0	0	0
41	24	Nallur	2	0	0	0	0	0	0	0	0	0	0	0

Sl.No	No. of Villages	Name of village	Medical Facilities (A(1)/NA(2))	Community Health Centre (Numbers)	Primary Health Centre (Numbers)	Primary Health Sub Centre (Numbers)	Maternity And Child Welfare Centre (Numbers)	TB Clinic (Numbers)	Hospital Allopathic (Numbers)	Hospital Alternative Medicine (Numbers)	Dispensary (Numbers)	Veterinary Hospital (Numbers)	Mobile Health Clinic (Numbers)	Family Welfare Centre (Numbers)
42	25	Erumbedu	1	0	1	1	1	1	0	0	1	0	0	1
43	26	Z.Budur	1	0	0	1	0	0	0	0	0	0	0	0
Cheyyur Sub-District,Kancheepuram District														
44	1	Seevadi	1	0	0	1	0	0	0	0	0	0	0	0
45	2	Pavunjur	1	1	1	1	1	1	0	0	1	0	0	1
46	3	Uludamangalam	2	0	0	0	0	0	0	0	0	0	0	0
47	4	Periavelikadu	1	0	0	1	0	0	0	0	0	0	0	0
48	5	Chinnavelikadu	2	0	0	0	0	0	0	0	0	0	0	0
49	6	Thiruvadur	1	0	0	1	1	0	0	0	0	1	0	0
50	7	Kadugupattu	1	0	0	1	0	0	0	0	0	0	0	0
51	8	Pudupattu	2	0	0	0	0	0	0	0	0	0	0	0
52	9	Iranyasidhi	1	0	0	1	0	0	0	0	0	0	0	0
53	10	Nemanadam	2	0	0	0	0	0	0	0	0	0	0	0
54	11	Pakkavancheri	2	0	0	0	0	0	0	0	0	0	0	0
55	12	Sengattur	1	0	0	1	0	0	0	0	0	0	0	0
56	13	Thirupurakoil	2	0	0	0	0	0	0	0	0	0	0	0
57	14	Cheyyur	1	0	2	8	2	2	0	0	2	1	0	2
58	15	Ammanur	1	0	0	1	0	0	0	0	0	0	0	0
59	16	Maruderi	2	0	0	0	0	0	0	0	0	0	0	0
60	17	Kokkaranthangal	1	0	0	1	0	0	0	0	0	0	0	0
61	18	Pondur	1	0	0	1	0	0	0	0	0	0	0	0
62	19	Vilangadu	2	0	0	0	0	0	0	0	0	0	0	0
63	20	Porur	2	0	0	0	0	0	0	0	0	0	0	0
64	21	Poongunam	2	0	0	0	0	0	0	0	0	0	0	0
65	22	Puoriampakkam	2	0	0	0	0	0	0	0	0	0	0	0
66	23	Kurambarai	2	0	0	0	0	0	0	0	0	0	0	0
67	24	Maluvankaranai	2	0	0	0	0	0	0	0	0	0	0	0
68	25	Poraiyur	2	0	0	0	0	0	0	0	0	0	0	0
69	26	Sothupakkam	1	0	0	1	0	0	0	0	0	1	0	0
70	27	Melmaruvathur	1	0	0	1	0	0	0	0	0	0	0	0
71	28	Keelmaruvathur	2	0	0	0	0	0	0	0	0	0	0	0
72	29	Irumbili	2	0	0	0	0	0	0	0	0	0	0	0
73	30	Perambakkam	1	0	0	1	0	0	0	0	0	0	0	0
74	31	Perukkarantai	2	0	0	0	0	0	0	0	0	0	0	0
75	32	Parukkal	2	0	0	0	0	0	0	0	0	0	0	0
76	33	Thandalam	2	0	0	0	0	0	0	0	0	0	0	0
77	34	Vettamperumbakkam	2	0	0	0	0	0	0	0	0	0	0	0
78	35	Kayapakkam	1	0	1	1	1	1	0	0	1	1	0	1
79	36	Periakalakadi	2	0	0	0	0	0	0	0	0	0	0	0
		total (C)		1	5	29	7	5	0	0	5	4	0	5
		Grand Total (A+B+C)		2	7	38	9	7	0	0	7	6	0	7

**Source: District Primary Census Abstract, Kancheepuram District of Tamilnadu State-2011*

Note : A: Available, NA- Not Available

INFRASTRUCTURAL FACILITIES IN THE STUDY AREA

Sl.No	No. of Villages	Name of village	Tap Water-Treated (Status A(1)/NA(2))	Covered Well (Status A(1)/NA(2))	Hand Pump (Status A(1)/NA(2))	Tube Wells/Borehole (Status A(1)/NA(2))	Spring (Status A(1)/NA(2))	River/Canal (Status A(1)/NA(2))	Tank/Pond/Lake (Status A(1)/NA(2))	Post Office (Status A(1)/NA(2))	Sub Post Office (Status A(1)/NA(2))	Post And Telegraph Office (Status A(1)/NA(2))	Telephone (landlines) (Status A(1)/NA(2))	Mobile Phone Coverage (Status A(1)/NA(2))	Public Bus Service (Status A(1)/NA(2))	Railway Station (Status A(1)/NA(2))	Commercial Bank (Status A(1)/NA(2))	Cooperative Bank (Status A(1)/NA(2))	Agricultural Credit Societies (Status A(1)/NA(2))
0-2 km,Maduranthakam Sub-District,Kancheepuram District																			
1	1	Netrambakkam	1	1	2	2	1	2	2	2	2	2	1	1	2	2	2	2	2
2	2	Peruveli	1	1	1	2	2	2	2	2	1	2	1	1	1	2	2	2	1
3	3	Nallamur Keelakaranai	1	2	1	1	2	2	2	2	2	2	1	1	2	2	2	2	2
2-5 km,Maduranthakam Sub-District,Kancheepuram District																			
4	1	Avirimedu	1	2	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2
5	2	Chitravadi	1	2	1	2	2	2	2	2	2	2	1	1	1	2	2	2	1
6	3	Z.Endathur	1	1	1	1	1	2	1	1	2	1	1	1	1	2	2	1	1
7	4	Melakandai	1	2	1	2	2	2	2	2	2	2	1	1	1	2	2	2	2
8	5	Chinnavenmani	1	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
9	6	Ozhavetti	1	1	1	2	2	2	2	2	1	2	1	1	1	2	2	2	2
10	7	Chitamur	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2
11	8	Kattudevadur	1	1	2	1	2	2	1	2	1	2	1	1	1	2	2	2	2
12	9	Kilvasalai	1	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
13	10	Neerpair	1	2	2	2	2	2	2	2	1	2	1	1	1	2	2	1	2
Cheyyur Sub-District,Kancheepuram District																			
14	1	Kannimangalam	2	1	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2
15	2	Chithamur	2	2	2	1	2	2	2	2	1	2	1	1	1	2	1	1	1
16	3	Polambakkam	1	1	2	2	2	2	2	2	1	2	1	1	1	2	2	1	1
17	4	Magundagiri	1	1	2	2	2	2	2	2	1	2	1	1	2	2	2	2	2
5-10 km,Maduranthakam Sub-District,Kancheepuram District																			
18	1	Munuthikuppam	1	1	1	1	1	2	2	2	2	2	1	1	2	2	2	2	2
19	2	Mulli	1	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
20	3	Valarbirai	1	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2
21	4	Vilagam	1	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2
22	5	Kavadur	1	2	2	2	2	1	2	2	2	2	1	1	1	2	2	2	2
23	6	Murukkambakkam	1	2	2	2	2	2	2	2	1	2	2	1	1	2	2	2	2
24	7	Mariputhur	1	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
25	8	Devadur	1	1	1	2	2	2	2	2	2	2	1	1	1	2	2	2	1
26	9	Arungunam	1	2	1	2	2	2	2	2	1	2	1	1	1	2	2	1	2
27	10	Sholamthangal	1	1	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2
28	11	Unamalai	1	1	1	1	2	2	2	2	1	2	1	1	1	1	2	2	2
29	12	Sirungalur	1	1	2	1	2	2	2	2	1	2	1	1	2	2	2	2	1
30	13	Pakkam	1	1	1	1	2	2	2	2	1	2	1	1	1	1	2	2	2
31	14	Pulikkoradu	1	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
32	15	Amayambattu	1	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2
33	16	Vasanthavadi	1	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
34	17	Nethapakkam	1	1	1	1	2	1	2	2	2	2	1	1	1	2	2	2	2
35	18	Sirunallur	1	1	2	2	2	2	1	2	2	2	1	1	1	2	2	2	2
36	19	Puliyaranankottai	1	1	1	2	2	2	2	2	2	2	1	1	1	2	2	1	2
37	20	Nesapakkam	1	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
38	21	Ariyanur	1	2	2	2	2	2	2	2	1	2	1	1	2	2	2	2	2
39	22	Venmari	1	1	1	2	2	2	1	2	1	2	1	1	2	2	2	2	2
40	23	Vellarai	1	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2
41	24	Nallur	1	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
42	25	Erumbedu	1	2	1	2	2	2	2	2	1	2	1	1	1	2	2	2	2

Sl.No	No. of Villages	Name of village	Tap Water-Treated (Status A(1)/NA(2))	Covered Well (Status A(1)/NA(2))	Hand Pump (Status A(1)/NA(2))	Tube Wells/Borehole (Status A(1)/NA(2))	Spring (Status A(1)/NA(2))	River/Canal (Status A(1)/NA(2))	Tank/Pond/Lake (Status A(1)/NA(2))	Post Office (Status A(1)/NA(2))	Sub Post Office (Status A(1)/NA(2))	Post And Telegraph Office (Status A(1)/NA(2))	Telephone (landlines) (Status A(1)/NA(2))	Mobile Phone Coverage (Status A(1)/NA(2))	Public Bus Service (Status A(1)/NA(2))	Railway Station (Status A(1)/NA(2))	Commercial Bank (Status A(1)/NA(2))	Cooperative Bank (Status A(1)/NA(2))	Agricultural Credit Societies (Status A(1)/NA(2))
43	26	Z.Budur	1	2	2	1	2	2	2	2	1	2	1	1	1	2	2	2	2
Cheyyur Sub-District,Kancheepuram District																			
44	1	Seevadi	1	2	2	2	2	2	2	2	1	2	1	1	1	2	2	2	1
45	2	Pavunjur	1	1	2	1	1	2	2	1	2	1	1	1	1	2	2	2	2
46	3	Uludamangalam	1	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2
47	4	Periavelikadu	1	1	1	1	2	2	2	2	2	2	1	1	1	2	2	2	2
48	5	Chinnavelikadu	1	2	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2
49	6	Thiruvadur	1	2	1	1	2	2	2	2	2	2	1	1	2	2	2	1	1
50	7	Kadugupattu	1	1	2	1	2	2	2	2	2	2	1	1	2	2	2	1	1
51	8	Pudupattu	2	2	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2
52	9	Iranyasidhi	1	2	2	2	2	2	2	2	1	2	1	1	2	2	2	2	2
53	10	Nemanadam	1	1	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
54	11	Pakkavancheri	2	2	2	2	2	2	2	2	2	2	2	1	2	2	2	2	2
55	12	Sengattur	1	1	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2
56	13	Thirupurakoil	1	1	1	1	2	2	1	2	2	2	2	2	1	2	2	2	2
57	14	Cheyyur	1	1	1	1	2	2	2	1	1	1	1	1	1	2	1	1	1
58	15	Ammanur	1	1	1	2	2	2	2	2	2	2	1	1	1	2	2	2	2
59	16	Maruderi	1	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2
60	17	Kokkaranthangal	1	1	1	1	2	2	2	2	2	2	1	1	2	2	2	1	1
61	18	Pondur	1	2	1	2	2	2	1	2	2	2	1	1	1	2	2	2	2
62	19	Vilangadu	1	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2
63	20	Porur	1	2	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2
64	21	Poongunam	1	1	2	2	2	2	2	2	1	2	1	1	1	2	2	2	1
65	22	Puoriamppakkam	1	1	2	1	2	2	2	2	2	2	2	1	1	2	2	2	2
66	23	Kurambarai	2	2	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
67	24	Maluvankaranai	1	1	2	2	2	2	2	2	2	2	1	1	1	2	2	2	2
68	25	Poraiyur	1	1	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2
69	26	Sothupakkam	1	1	2	1	1	2	2	2	2	2	1	1	1	2	1	1	1
70	27	Melmaruvathur	1	1	2	1	2	2	2	1	2	1	1	1	1	1	1	1	2
71	28	Keelmaruvathur	1	1	1	1	2	2	2	2	2	2	1	1	2	1	2	1	2
72	29	Irumbili	1	2	2	2	2	2	2	2	1	2	1	1	2	2	2	2	2
73	30	Perambakkam	1	1	2	1	2	2	2	2	1	2	1	1	2	2	2	2	2
74	31	Perukkarantai	1	1	2	1	2	2	2	2	1	2	1	1	1	2	2	2	2
75	32	Parukkal	1	2	2	2	2	2	2	2	1	2	1	1	2	2	2	2	2
76	33	Thandalam	1	1	2	2	2	2	2	2	2	2	1	1	2	2	2	2	2
77	34	Vettamperumbakkam	1	2	2	1	2	2	2	2	2	2	1	1	2	2	2	2	2
78	35	Kayapakkam	1	1	1	1	1	2	2	2	1	2	1	1	1	2	1	1	1
79	36	Periakalakadi	1	1	2	1	2	2	2	2	2	2	1	1	1	2	2	2	2

**Source: District Primary Census Abstract, Kancheepuram District of Tamilnadu State-2011*

Note : A: Available, NA- Not Available

Status: A(1)/NA(2)



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Annexure- 9

AMBIENT AIR QUALITY

Project	:	Rough Stone and Gravel Quarry Of Tvl. Om Vinayaga Supplier, Prop.K. Dhakshanamurthi
Name of the Location	:	Near Lease Area
Station Code	:	A1

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	10/7/2025	69.3	30.9	8.5	11.4
2	10/8/2025	66.5	28.7	7.8	12.3
3	10/18/2025	65.0	31.3	8.1	11.1
4	10/19/2025	72.7	32.5	8.5	11.5
5	10/21/2025	69.8	33.2	8.2	11.3
6	10/22/2025	61.7	29.7	9.4	12.3
7	11/1/2025	67.5	33.8	8.0	9.2
8	11/2/2025	62.4	30.5	8.1	10.9
9	11/4/2025	70.6	32.8	7.9	11.3
10	11/5/2025	65.0	29.4	8.1	10.6
11	11/15/2025	69.9	33.7	9.1	10.9
12	11/16/2025	73.4	32.3	8.1	11.3
13	11/18/2025	64.6	30.7	7.8	11.4
14	11/19/2025	71.7	32.2	8.4	11.5
15	11/29/2025	65.6	29.9	7.8	11.7
16	11/30/2025	72.5	31.2	8.5	10.9
17	12/2/2025	70.9	34.5	8.2	11.3
18	12/3/2025	73.5	32.5	8.5	11.7
19	12/13/2025	70.0	34.2	7.8	11.1
20	12/14/2025	72.5	33.3	9.7	13.0
21	12/16/2025	70.9	35.1	8.1	12.3
22	12/17/2025	65.6	30.0	7.8	11.6
23	12/27/2025	71.7	33.3	7.9	10.9
24	12/28/2025	73.8	32.2	8.2	11.5
	MIN	61.7	28.7	7.8	9.2
	AVE	69.0	32.0	8.3	11.4
	MAX	73.8	35.1	9.7	13.0

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

Prepared by



9B/4, Bharathwajar Street, East Tambaram, Chennai 600 059.

Ph : 22395170, 9444133619, Fax : 91-44-22396643.

e-mail : cecgiri@yahoo.com, web : www.creativeengineers.co.in



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AMBIENT AIR QUALITY

Project	:	Rough Stone and Gravel Quarry Of Tvl. Om Vinayaga Supplier, Prop.K. Dhakshanamurthi
Name of the Location	:	Kulathur Village
Station Code	:	A2

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	10/7/2025	55.4	28.4	8.0	9.3
2	10/8/2025	57.5	25.7	7.4	9.7
3	10/18/2025	56.3	28.9	8.1	11.3
4	10/19/2025	55.1	26.4	7.8	9.9
5	10/21/2025	58.7	28.8	8.1	9.6
6	10/22/2025	56.3	25.5	7.7	10.5
7	11/1/2025	55.4	28.5	8.3	9.7
8	11/2/2025	57.0	27.5	8.0	11.7
9	11/4/2025	58.4	29.3	7.4	11.2
10	11/5/2025	55.6	27.7	8.0	10.9
11	11/15/2025	57.7	26.7	8.4	9.5
12	11/16/2025	60.7	28.2	8.8	9.1
13	11/18/2025	63.5	30.2	9.6	11.6
14	11/19/2025	60.4	31.7	9.1	11.2
15	11/29/2025	61.3	30.2	7.8	9.5
16	11/30/2025	58.5	28.2	9.9	8.9
17	12/2/2025	60.7	30.3	8.8	9.9
18	12/3/2025	63.0	29.3	7.4	11.7
19	12/13/2025	61.4	29.5	7.8	9.4
20	12/14/2025	65.3	30.2	8.4	9.7
21	12/16/2025	62.5	28.4	7.4	12.1
22	12/17/2025	60.8	27.5	7.3	10.4
23	12/27/2025	57.3	29.2	9.4	9.5
24	12/28/2025	63.5	31.3	8.0	11.6
	MIN	55.1	25.5	7.3	8.9
	AVE	59.3	28.7	8.2	10.3
	MAX	65.3	31.7	9.9	12.1

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

Prepared by



9B/4, Bharathwajar Street, East Tambaram, Chennai 600 059.

Ph : 22395170, 9444133619, Fax : 91-44-22396643.

e-mail : cecgiri@yahoo.com, web : www.creativeengineers.co.in



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AMBIENT AIR QUALITY

Project	:	Rough Stone and Gravel Quarry Of Tvl. Om Vinayaga Supplier, Prop.K. Dhakshanamurthi
Name of the Location	:	Peruveli Village
Station Code	:	A3

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	10/9/2025	55.2	25.9	6.9	9.1
2	10/10/2025	56.5	26.6	7.5	9.6
3	10/16/2025	59.2	27.8	8.4	10.5
4	10/17/2025	57.7	27.1	7.9	10
5	10/23/2025	53.2	25.0	6.4	8.5
6	10/24/2025	55.3	26.0	7.1	9.2
7	10/30/2025	58.3	27.4	8.1	10.2
8	10/31/2025	55.9	26.3	7.3	9.4
9	11/6/2025	53.5	25.1	6.5	8.6
10	11/7/2025	55.6	26.1	7.2	9.3
11	11/13/2025	53.8	25.3	6.6	8.7
12	11/14/2025	56.2	26.4	7.4	9.5
13	11/20/2025	57.1	26.8	7.7	9.8
14	11/21/2025	59.8	28.1	8.6	10.7
15	11/27/2025	54.4	25.6	6.8	8.9
16	11/28/2025	57.4	27.0	7.8	9.9
17	12/4/2025	60.1	28.2	8.7	10.9
18	12/5/2025	54.1	25.4	6.7	8.8
19	12/11/2025	56.8	26.7	7.6	9.7
20	12/12/2025	60.4	28.4	8.8	11.1
21	12/18/2025	54.7	25.7	6.9	9.1
22	12/19/2025	58.9	27.7	8.3	10.4
23	12/25/2025	58.2	27.4	8.1	10.1
24	12/26/2025	59.5	28.0	8.5	10.6
	MIN	53.2	25.0	6.4	8.5
	AVE	56.7	26.7	7.6	9.7
	MAX	60.4	28.4	8.8	11.1

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

Prepared by



9B/4, Bharathwajar Street, East Tambaram, Chennai 600 059.

Ph : 22395170, 9444133619, Fax : 91-44-22396643.

e-mail : cecgiri@yahoo.com, web : www.creativeengineers.co.in



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AMBIENT AIR QUALITY

Project	:	Rough Stone and Gravel Quarry Of Tvl. Om Vinayaga Supplier, Prop.K. Dhakshanamurthi
Name of the Location	:	Netravakkam Village
Station Code	:	A4

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	10/9/2025	57.3	26.4	7.8	9.1
2	10/10/2025	55.4	25.5	7.5	9.9
3	10/16/2025	53.2	24.5	8.5	9.1
4	10/17/2025	55.6	25.6	8.0	9.7
5	10/23/2025	54.8	25.2	7.3	10.7
6	10/24/2025	58.4	26.9	7.9	10.9
7	10/30/2025	52.5	24.2	7.2	9.6
8	10/31/2025	51.4	23.6	6.7	8.3
9	11/6/2025	53.4	24.6	6.9	9.7
10	11/7/2025	58.7	27.0	7.3	9.1
11	11/13/2025	51.3	23.6	6.6	9.0
12	11/14/2025	53.5	24.6	7.2	8.2
13	11/20/2025	58.6	27.0	7.0	8.6
14	11/21/2025	52.2	24.0	6.9	9.7
15	11/27/2025	58.4	26.9	8.1	10.1
16	11/28/2025	53.6	24.7	6.9	10.9
17	12/4/2025	56.2	25.9	7.6	9.7
18	12/5/2025	55.4	25.5	7.5	10.9
19	12/11/2025	58.5	26.9	8.1	10.2
20	12/12/2025	57.3	26.4	7.7	11.3
21	12/18/2025	58.4	26.9	8.1	10.1
22	12/19/2025	55.6	25.6	7.8	10.7
23	12/25/2025	58.7	27.0	7.9	9.1
24	12/26/2025	53.4	24.6	8.0	9.7
	MIN	51.3	23.6	6.6	8.2
	AVE	55.5	25.5	7.5	9.8
	MAX	58.7	27.0	8.5	11.3

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

Prepared by



9B/4, Bharathwajar Street, East Tambaram, Chennai 600 059.

Ph : 22395170, 9444133619, Fax : 91-44-22396643.

e-mail : cecgiri@yahoo.com, web : www.creativeengineers.co.in



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AMBIENT AIR QUALITY

Project	:	Rough Stone and Gravel Quarry Of Tvl. Om Vinayaga Supplier, Prop.K. Dhakshanamurthi
Name of the Location	:	Nallamur Village
Station Code	:	A5

SL.NO	DATE	PM10	PM2.5	SO2	NO2
1	10/11/2025	51.7	24.3	6.4	8.9
2	10/12/2025	45.2	21.2	5.8	8.4
3	10/14/2025	46.6	21.9	7.9	8.8
4	10/15/2025	54.3	25.5	5.8	9.5
5	10/25/2025	48.6	22.8	7.5	9.0
6	10/26/2025	46.6	21.9	5.8	9.8
7	10/28/2025	49.4	23.2	6.1	8.2
8	10/29/2025	51.7	24.3	6.5	7.4
9	11/8/2025	47.7	22.4	5.5	8.0
10	11/9/2025	53.4	25.1	6.7	8.9
11	11/11/2025	45.2	21.2	5.8	8.7
12	11/12/2025	53.4	25.1	6.4	7.9
13	11/22/2025	49.8	23.4	5.5	8.2
14	11/23/2025	47.4	22.3	6.1	9.8
15	11/25/2025	52.6	24.7	5.3	7.6
16	11/26/2025	50.3	23.6	5.8	8.4
17	12/6/2025	51.8	24.3	7.1	9.6
18	12/7/2025	49.9	23.5	6.7	8.8
19	12/9/2025	53.6	25.2	7.5	7.8
20	12/10/2025	52.3	24.6	7.1	9.3
21	12/20/2025	47.2	22.2	6	8.4
22	12/21/2025	47.3	22.2	6.7	8.8
23	12/23/2025	49.5	23.3	6.4	8.4
24	12/24/2025	45.6	21.4	7.7	7.5
	MIN	45.2	21.2	5.3	7.4
	AVE	49.6	23.3	6.4	8.6
	MAX	54.3	25.5	7.9	9.8

Note: BDL – Below Detectable Limit, DL: Detectable Limit.

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9B/4, Bharathwajar Street, East Tambaram, Chennai 600 059.

Ph : 22395170, 9444133619, Fax : 91-44-22396643.

e-mail : cecgiri@yahoo.com, web : www.creativeengineers.co.in



CREATIVE ENGINEERS & CONSULTANTS Annexure- 10

(NABET ACCREDITED, NABL ACCREDITED TESTING LABORATORY,
DEPARTMENT OF INDUSTRIES AND COMMERCE REGISTERED COMPANY)

WATER QUALITY DATA

Project Name	:	Rough Stone and Gravel Quarry Of Tvl. Om Vinayaga Supplier, Prop.K. Dhakshanamurthi	
Location Name	:		
		Location Code	Location Name
		GW1	Near Lease Area
		GW2	Kulathur Village
		GW3	Peruveli Village
		GW4	Netravakkam Village
		GW5	Nallamur Village

S. No.	Parameter	Unit	GW1	GW2	GW3	GW4	GW5	*Permissible Limits
1	pH	-	7.59	7.32	7.22	7.66	7.27	6.5-8.5
2	Electrical Conductivity	µmhos/cm	783.2	1208	1248	922.6	1123	-
3	Odor	-	AGREEABLE	AGREEABLE	AGREEABLE	AGREEABLE	AGREEABLE	AGREEABLE
4	Turbidity	NTU	<1	<1	<1	<1	<1	5.0
5	Total Hardness as CaCO ₃	mg/L	293	426	498	319	402	600
6	Calcium Hardness CaCO ₃	mg/L	155	275	323	199	143	-
7	Magnesium Hardness CaCO ₃	mg/L	137	151	175	120	259	-
8	Calcium Ca	mg/L	62.0	110	129	79.6	57.2	200
9	Magnesium Mg	mg/L	32.9	36.2	42.0	28.8	62.2	100
10	Alkalinity CaCO ₃	mg/L	279	256	286	261	329	600

9B/4, Bharathwajar Street, East Tambaram, Chennai 600 059.

Ph : 22395170, 9444133619, Fax : 91-44-22396643.

e-mail : cecgiri@yahoo.com, web : www.creativeengineers.co.in



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(NABET ACCREDITED, NABL ACCREDITED TESTING LABORATORY,
DEPARTMENT OF INDUSTRIES AND COMMERCE REGISTERED COMPANY)

S. No.	Parameter	Unit	GW1	GW2	GW3	GW4	GW5	*Permissible Limits
11	Chloride Cl ⁻	mg/L	96.9	212	230	165	186	1000
12	Sulphate SO ₄ ²⁻	mg/L	64.5	169	152	76.5	138	400
13	Iron Fe	mg/L	0.05	0.07	0.06	0.02	0.03	0.3
14	Nitrate NO ₃	mg/L	2.75	3.11	2.78	2.47	5.64	45
15	Fluoride F	mg/L	0.35	0.58	0.49	0.49	0.55	1.5
16	Total Dissolved Solids	mg/L	472	726	750	556	676	2000
17	Free Residual Chlorine Cl ⁻	mg/L	BDL (D.L-0.2)	BDL (D.L-0.2)	BDL (D.L-0.2)	BDL(D.L-0.2)	BDL(D.L-0.2)	1.0
18	Manganese Mn	mg/L	BDL (D.L-0.05)	BDL (D.L-0.05)	BDL (D.L-0.05)	BDL (D.L-0.05)	BDL (D.L-0.05)	0.3

Note: * The water quality of the collected ground water samples were found to be within the prescribed permissible limits of IS: 10500:2012 Norms for Drinking in the absence of an alternative source.


Prepared by



9B/4, Bharathwajar Street, East Tambaram, Chennai 600 059.

Ph : 22395170, 9444133619, Fax : 91-44-22396643.

e-mail : cecgiri@yahoo.com, web : www.creativeengineers.co.in

LAND USE PATTERN OF THE STUDY AREA WITHIN 10 KM RADIUS AROUND THE PROPOSED PROJECT AREA

Sl.No	No. of Villages	Name of village	Total Geographical Area (in Hectares)	Forest Area (in Hectares)	Area under Non-Agricultural Uses (in Hectares)	Barren & Un-cultivable Land Area (in Hectares)	Permanent Pastures and Other Grazing Land Area (in Hectares)	Land Under Miscellaneous Tree Crops etc. Area (in Hectares)	Culturable Waste Land Area (in Hectares)	Fallows Land other than Current Fallows Area (in Hectares)	Current Fallows Area (in Hectares)	Total Unirrigated Land Area (in Hectares)	Area Irrigated by Source (in Hectares)
0-2 km, Maduranthakam Sub-District, Kancheepuram District													
1	1	Netrambakkam	353.87	0	62.33	0	35.71	22.4	5.26	21.89	45.27	0	161.01
2	2	Peruveli	984.96	0	294.54	0	55.08	123.97	1.67	65.82	112.73	0	331.15
3	3	Nallamur Keelakaranai	1140.11	57.36	271	135.36	46.2	79.44	47.47	9.29	27.47	5.58	460.94
		total (A)	2478.94	57.36	627.87	135.36	136.99	225.81	54.4	97	185.47	5.58	953.1
2-5 km, Maduranthakam Sub-District, Kancheepuram District													
4	1	Avirimedu	337.44	0	125.83	12.81	25.75	36.04	0.99	0.99	33.72	0	101.31
5	2	Chitravadi	156.93	0	13.59	14.61	23.85	2.85	0	0	52.89	0	49.14
6	3	Z.Endathur	1172.47	0	218.15	0	1.09	360.84	5.49	163.49	150.68	0	272.73
7	4	Melakandai	331.66	0	11.96	16.51	19.54	51.16	0	10	99.16	0	123.33
8	5	Chinnavenmani	419.98	0	49.39	12.81	66.17	0	5.06	0	57.97	0	228.58
9	6	Ozhavetti	554.21	0	132.11	16.34	0.52	42.79	0	1.75	105.22	0	255.48
10	7	Chitamur	306.54	0	71.3	12.81	0	30.48	1.83	13.15	67.48	0	109.49
11	8	Kattudevadur	1049.57	0	79.96	33.81	9.23	328.24	7.9	0	268.19	0	322.24
12	9	Kilvasalai	692.43	0	202.05	41.49	11.41	150.59	0	0	52.97	0.15	233.77
13	10	Neerpair	711.97	92.39	69.74	51.5	13.75	40	0	0	206.5	57.27	180.82
Cheyyur Sub-District, Kancheepuram District													
14	1	Kannimangalam	120.63	0	1.52	15.73	8.93	19.73	1.1	15.73	0	3.4	54.49
15	2	Chithamur	177.95	0	3.93	0	21.05	66.85	0	6.12	0	63.78	16.22
16	3	Polambakkam	656.72	0	118.71	0	51.26	0	0	120.4	136.14	8.63	221.58
17	4	Magundagiri	299.7	0	6.16	0	20.34	13.84	0	87.2	0	71.45	100.71
		total (B)	6988.2	92.39	1104.4	228.42	272.89	1143.41	22.37	418.83	1230.92	204.68	2269.89
5-10 km, Maduranthakam Sub-District, Kancheepuram District													
18	1	Munuthikuppam	142.66	0	23.02	0	8.31	0	0	6.1	45.66	0	59.57
19	2	Mulli	285.65	0	48.19	25.62	12.51	0	2.94	19.02	49.75	0	127.62
20	3	Valarbirai	87.1	0	33.57	0	12.61	0	2.76	3.06	2.07	0	33.03
21	4	Vilagam	170.39	0	18.84	0	0	0	9.88	0	94.19	0	47.48
22	5	Kavadur	352.4	0	50.13	19.33	44.35	2.43	4.21	28.29	55.28	0	148.38
23	6	Murukkambakkam	612.57	0	110.57	12.81	20.73	52	0	85.57	71.02	25	234.87
24	7	Mariputhur	390.29	0	89.64	0	41.42	0	7.13	0	98.63	0	153.47
25	8	Devadur	205.18	0	59.88	12.81	0	0	0.75	0	50.52	0	81.22
26	9	Arungunam	674.79	0	130.85	29.81	1.59	0	0	42.52	71.73	0	398.29
27	10	Sholamthangal	47.8	0	3.67	0	0	0	0.89	0	1.35	0	41.89
28	11	Unamalai	482.13	48.92	218.08	1.18	42.23	2.89	0	1.37	54.79	10.04	102.63
29	12	Sirungalur	239.81	0	105.35	0.46	0	0	0	0.53	61.36	11.36	60.75
30	13	Pakkam	544.36	0	145.81	88.13	0	2.76	4.84	23.66	14.93	0	264.23
31	14	Pulikkoradu	129.11	0	4.93	15.08	11.66	9.02	0	15.08	1.55	0	71.79
32	15	Amayambattu	53.51	0	8.91	12.81	2.14	2.21	0	0	4.15	0	23.29

33	16	Vasanthavadi	142.42	0	1.63	5.35	14.62	0.6	4	1.49	87.06	1.16	26.51
34	17	Nethapakkam	372.86	0	50.76	12.81	56.68	84.45	4.9	0	25.56	0.41	137.29
35	18	Sirunallur	487.91	0	92.96	29.81	54.26	27.3	0	119.42	13.59	0	150.57
36	19	Puliyaranankottai	129.12	0	37.7	0	11.24	14.66	0	3.25	17.14	2.5	42.63
37	20	Nesapakkam	167.81	0	26.34	0.08	3.97	0	0	5.36	49.09	0	82.97
38	21	Ariyanur	266.43	0	44.1	0	21.32	0	2.26	0	38.34	0	160.41
39	22	Venmari	540.2	0	85.88	3.52	78.7	0	0	8.55	170.13	5.58	187.84
40	23	Vellarai	84.01	5.7	7.43	0	4.56	11.91	0	0	18.29	12.49	23.63
41	24	Nallur	217.08	0	60.93	0	28.17	8.73	0.99	0	10.14	21.2	86.92
42	25	Erumbedu	877.41	0	223.78	42.98	25.32	70.36	4.15	106.75	7.25	1.5	395.32
43	26	Z.Budur	1001.41	0	385.79	19.12	11.47	93.09	4.08	8	131.72	134.08	214.06
Cheyur Sub-District,Kancheepuram District													
44	1	Seevadi	327.49	0	75.2	0	14.74	0	3.57	0	84.39	30.06	119.53
45	2	Pavunjur	709.86	0	6.98	217.77	15.02	99.61	0	0.51	57.89	169.1	142.98
46	3	Uludamangalam	466.21	0	74.64	0	1.81	0	0	17.39	198.85	34.59	138.93
47	4	Periavelikadu	493.01	0	109.61	0	1.04	28.41	24.85	0	132.76	105.45	90.89
48	5	Chinnavelikadu	478.58	0	91.24	0	8.69	0	0	41.48	66.5	0	270.67
49	6	Thiruvadur	465.41	0	64.1	0	45.09	0	34.38	0.32	143.86	0	177.66
50	7	Kadugupattu	532	0	86.17	0	8.51	0	1.44	0	104.5	0	331.38
51	8	Pudupattu	185.28	0	69.62	0	7.49	0	0.37	0	9.85	0	97.95
52	9	Iranyasidhi	268.21	0	64.29	0	5.3	0	52.22	0	0	74.36	72.04
53	10	Nemanadam	131.67	0	43.96	0	11.72	0	0	0	15.66	0	60.33
54	11	Pakkavancheri	83.39	0	50.12	0	1.69	0	0	0	10.09	0	21.49
55	12	Sengattur	401.01	0	10.22	0	18.21	0	30.83	1.4	103.04	43.5	193.81
56	13	Thirupurakoil	56.28	0	11.01	0	5.27	0	0.08	0	9.48	0	30.44
57	14	Cheyur	3385.24	0	114.31	0	33.55	0	586.88	54.09	2136.64	110.85	348.92
58	15	Ammanur	571.82	0	140.5	0	4.13	0	4.25	0	93.32	2.47	327.15
59	16	Maruderi	180.27	0	25.57	0	8.91	0	0	20	2.41	0	123.38
60	17	Kokkaranthangal	897.07	0	128.2	225.95	10.5	73.12	5.82	0.01	62.45	201.02	190
61	18	Pondur	320.85	0	42.67	22.82	5.59	1.5	3.8	35	26.12	95.79	87.56
62	19	Vilangadu	532.1	0	176.58	0	20.9	0	80.73	36.41	17.48	0	200
63	20	Porur	462.83	59.61	76.99	0	7.19	0	0	179.3	19.74	0	120
64	21	Poongunam	1211.08	125.13	123.29	0	12.35	103.05	146.75	250.51	0	0	450
65	22	Puoriampakkam	350.15	0	74.46	8.24	0.69	116.04	0	5.72	0	115.57	29.43
66	23	Kurambarai	204.33	0	5.47	0	17.14	66.35	0	28.99	0	73.12	13.26
67	24	Maluvankaranai	278.26	0	70.94	1.46	36.25	74.86	0.14	2.36	27.74	0	64.51
68	25	Poraiyur	483.41	0	96.98	0	43.74	0	0	149.95	45.04	62.8	84.9
69	26	Sothupakkam	276.36	0	24.09	0	38.74	0	2.49	156.68	5.06	3.15	46.15
70	27	Melmaruvathur	149.61	0	9.85	0	31.4	52.35	0	0	18.8	15.45	21.76
71	28	Keelmaruvathur	223.01	0	22.05	0	17.9	109.02	0	4.04	0	0	70
72	29	Irumbili	738.56	0	209.73	0	44.38	169.76	2.42	0.03	167.16	0	145.08
73	30	Perambakkam	392.09	0	60.28	0	11.96	5.18	59.4	82.96	3	29.31	140
74	31	Perukkarana	869.65	0	253.02	0	28.87	0	0	114.76	3	0	470
75	32	Parukkal	380.15	0	82.19	0	15.62	33.28	0	5	0	0	244.06
76	33	Thandalam	235.66	0	9.86	0	25.72	0	0	61.42	0	0	138.66

77	34	Vettamperumbakkam	247.14	0	16.37	0	10.9	0	0	94.08	0	0.68	125.11
78	35	Kayapakkam	971.14	0	287.02	0.38	31.14	99.11	12.54	12.46	18.49	0	510
79	36	Periakalakadi	575.57	0	2	3.94	15.61	0	204.28	0	127.71	62.01	160.02
		total (C)	27239.16	239.36	4878.32	812.27	1125.62	1414.05	1311.02	1832.89	4956.32	1454.6	9214.71
		Grand Total (A+B+C)	36706.3	389.11	6610.59	1176.05	1535.5	2783.27	1387.79	2348.72	6372.71	1664.86	12437.7

**Source: District Primary Census Abstract, Kancheepuram District of Tamilnadu State-2011*



குத்தகைப்பத்திரம்

A31



தமிழ்நாடு TAMILNADU
பெயர்: OM VINAYAGA SUPPLIER
முகர் : செந்திரப்பாக்கம்
தேதி : 19.03.2025
எண் : 124

AC 164779
M. ஆதிநாராயணன்
ஐ.தா விற்பனையாளர்
உ.எண் 16/CGL/2008
மதுராத்தகம்-603 306

..2..

செங்கல்பட்டு மாவட்டம் - 603319, செம்பூர் வட்டம், 3நெ.சோத்துப்பாக்கம், வந்தவழி ரோடு, பிளாட் எண். 14, கதவு எண். G7 என்ற விலாசத்தில் இயங்கும் "OM VINAYAGA SUPPLIER" என்ற நிறுவனத்திற்காக, மேற்படி நிறுவனத்தின் இயக்குனரும், திரு. P.கோதண்டராமன், அவர்களின் குமாரருமான 45 வயதுள்ள திரு. K.தஷ்ணாமூர்த்தி (ஆதார் எண். 9724 6689 3739, Pan No. CUYPD0545H, லகப்பேசி எண்.9940345689) அவர்கள் 2வது பார்ட்டியாகவும்,

ஆக நாம் இரு பார்ட்டிகளும் சேர்ந்து ஏற்படுத்திக்கொண்ட குத்தகைப்பத்திரம் என்னவென்றால்,

1வது பார்ட்டி

For NAVEEN ENTERPRISES

P.S. h.v.
Authorized Signatory

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தூக்களைக் கொண்டது
வது தாள் பதிவு அலுவலர் செம்பூர்

2வது பார்ட்டி

For OM VINAYAGA SUPPLIER

K. D. S.
Proprietor





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தமிழ்நாடு தமிழ்நாடு TAMILNADU

பெயர் : OM VINAYAGA SUPPLIER

உவர் : இராஜ்ஜப்பாக்கம்

தேதி : 19.03.2025

எண் : 1625

AC 164780

Y. சுவாமிநாதராயன்
உ.தா விநாயகாசுப்பாளர்
உ.எண் 18/CGL/2008
மதுராந்தகம்-603 306

..3..

சொத்து விலகத்தில் விவரிக்கப்பட்டுள்ள சொத்தானது, நம்மில் 1வது பார்ட்டி மேற்படி நிறுவனத்திற்காக கடந்த 09.03.2022 தேதியில் மதுராந்தகம் சார்பதிவாளர் அலுவலக 1 புத்தகம் 1122 பத்திர எண்ணாக பதிவு செய்யப்பட்ட கிரையப்பத்திரத்தின் மூலம் திரு. ஸ்ரீராமுலு அவர்களின் குமாரர் திரு. S.மணிகண்டன் என்பவரிடமிருந்து கிரையம் பெற்றும்,

05.01.2022 தேதியில் மதுராந்தகம் சார்பதிவாளர் அலுவலக 1 புத்தகம் 38 பத்திர எண்ணாக பதிவு செய்யப்பட்ட கிரையப்பத்திரத்தின் மூலம் ஸ்ரீராமுலு அவர்களின் குமாரர் 46 வயதுள்ள S.மணிகண்டன் என்பவரிடமிருந்து கிரையம் பெற்றும்,

1வது பார்ட்டி

For NAVEEN ENTERPRISES

Authorized Signatory

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
அலுவலம் 93... தாக்கனைக் கொண்டது
3 வது தான் பதிவு அலுவலர் பெயர்

2வது பார்ட்டி

For OM VINAYAGA SUPPLIER

K. R. S.

Proprietor



AC 164781

TAMILNADU
பெயர்: OM VINAYAGA SUPPLIER

ஊர்: சேந்திசுலாம்பு

தேதி: 19.03.2025

எண்: 1626

A
வ. ஆதிநாராயணன்
உ.தா சிறப்பணியாளர்
உ.எண் 18/CGL/2008
கனராந்தகம்-503 306

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மேற்படி நிறுவனத்தின் பெயரில் 1504 எண் பட்டா தாக்கலாகி, மேற்படி நிறுவனத்தின் அனுபோகத்திலும் கவாதீனத்திலும் இருந்து வருகிற சொத்து விவரத்தில் விவரிக்கப்பட்டுள்ள மொத்தப்பரப்பளவு கொண்ட ஹெக்டேர் 4.26.0 ஏர்ஸ் ஏக்கர் 10.53 செண்ட். நிலத்தினை அரசின் அனுமதி பெற்று சிறுவகைக் கனிமங்களான கல், மண், கிராவல் மற்றும் பிற கனிமங்களை குவாரி செய்து எடுத்துக்கொள்ள நம்மில் 2வது பார்ட்டியுடன் மனப்பூர்வமாக சம்மதித்து எழுதிக்கொண்ட குத்தகைப்பத்திரம் பின்வரும் நிபந்தனைகளுடன் சம்மதித்து நம் இரு பார்ட்டியாளராலும் இன்று 19 ஆம் தேதி மார்க் மாதம் 2025 வருடம் கையொப்பம் செய்யவேண்டியது.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

For OM VINAYAGA SUPPLIER

P.S.W.
Authorized SignatoryK. S. S.
Proprietor

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தாக்களைக் கொண்டது
A வது தாள் பதிவு ஆவணம் பெற்று





தமிழ்நாடு தமிழ்நாடு TAMILNADU
 பெயர்: OM VINAYAGA SUPPLIER
 ஊர் : சேஞ்சேல்மட்டம்
 தேதி : 19.03.2024
 எண் : 1627

AC 164782
 VI ஆதிநாராயணன்
 ஸ.தா விற்பனையாளர்
 2.எண் 18/CGL/2008
 உதாரணம்-603 306

முதலாவது பார்ட்டியின் நிபந்தனைகள்:-

1. அரசிடம் அனுமதிபெற்று கல், மண், கிராவல் மற்றும் பிற வகை கனிமங்கள் குவாரி செய்து எடுத்துக்கொள்ள 15 (பதினைந்து) வருடத்திற்கான குத்தகை ஒப்பந்தப் பத்திரம். தமிழ்நாடு சிறுகனிமச் சலுகை விதிகள் 1959 -ன் பிற்சேர்க்கை V - இல் இலாபட்ட ஆட்சியர் செங்கல்பட்டு அவர்களுடன் நிறைவேற்றும் நாளிலிருந்து 10 (பத்து) வருடங்களுக்கு இந்த குத்தகைப்பத்திரம் நிறைவேற்றித் தரப்படுகிறது.
2. மேற்படி குத்தகை ஒப்பந்தம் வழங்கப்பட்ட நாளிலிருந்தும் மற்றும் அரசு வழங்குகின்ற குத்தகை காலம் முடியும் வரை இந்த பத்திரத்தில் எந்தவிதமான மாற்றமும் நம் இரண்டு பார்ட்டிகளும் செய்யக்கூடாது.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P.S. L. S.
 Authorised Signatory

For OM VINAYAGA SUPPLIER

H. A. S.
 Proprietor



1 முதலாம் 2025 ம் ஆண்டு	1160 ம்
ஆவணம் 83	தாக்கவைத் கொண்டது
5 வது தரள்	பதிவு செய்யப்பட்டது

K. S. L. S.

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3. மேற்படி நிலம் குத்தகை ஒப்பந்தத்திற்கான காலங்களில் ஏக்கர் ஒன்றுக்கு வருடம் ஒன்றுக்கு ரூபாய் 50,000/- (ரூபாய் ஐம்பதாயிரம் மட்டும்) குத்தகை தொகையாக பெற்றுக்கொள்ள சம்மதிக்கப்படுகிறது. மேலும் குத்தகை ஒப்பந்தத்திற்காக முன்பணமாக ரூபாய் 1,00,000/- (ரூபாய் ஒரு இலட்சம் மட்டும்) தொகையினை யூனியன் வங்கி, சோத்துப்பாக்கம் கிளையின் RIGS / NLI-I மூலமாக (UITR No. UBINJ25078794703, நாள் 19.03.2025) நம்மில் 2வது பார்ட்டியிடமிருந்து நம்மில் 1வது பார்ட்டி பெற்றுக்கொள்கிறார்.
4. மேற்படி நில குத்தகை ஒப்பந்த காலத்தில் அரசின் அனுமதிபெற்று குவாரி செய்து எடுத்துக்கொள்ள அரசு சார்பில் நில உரிமையாளரால் நிறைவேற்றப்பட வேண்டிய அனைத்து நடவடிக்கைகளுக்கும் எவ்வித கணக்கமும் இன்றி முதலாவது பார்ட்டி வருகை தந்து அனைத்து நடவடிக்கைகளுக்கும் கட்டுப்படுவதாக உறுதி பூண்டுள்ளார்.
5. மேற்படி நில குத்தகை ஒப்பந்த காலத்தில் அரசு அனுமதிபெற்று குவாரித் தொழில் செய்யவுள்ள நடவடிக்கைகளில் நம்மில் 1வது பார்ட்டி எந்தவகையிலும் சம்பந்தப்படமாட்டார்.
6. நம்மில் 1வது பார்ட்டி, கல், கிராவல், மண், குவாரி செய்வதால் நிலம் பாதிப்படையும் என்றும் அறிவார்.
7. அரசின் விதிகளுக்கு உட்பட்டு ஏற்படும் கல்குவாரி, மண் மற்றும் கிராவல் குத்தகை காலம் முடிவற்ற பின்னர், மேற்படி குத்தகைக்கு அளிக்கப்பட்ட நிலங்களை பராமரித்து வரவேண்டியது நம்மில் 1வது பார்ட்டியின் பொறுப்பாகும்.
8. கனிமக் குத்தகை தொடர்பாக அரசு எடுக்கும் எல்லாவிதமான நடவடிக்கைகளுக்கும் நம்மில் 1வது பார்ட்டி பொறுப்பானவர் அல்ல செலுத்தப்படவேண்டிய அனைத்து வரிகளும் நம்மில் 2வது பார்ட்டியையே சார்ந்தது.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P.S.N.V.
Authorized Signatory

For OM VINAYAGA SUPPLIER

K. S. S.
Proprietor

1 புத்தகம் 2025 ம் ஆண்டு.....1160.....ம்
ஆணைம் 93..... துணைகளைக் கொண்டது
.....6..... வது நாள் பதிவு செய்யப்பட்டது

K. S. S.





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9. நில குத்தகை ஒப்பந்த காலத்தில் நம்மில் 1வது பார்ட்டி பங்குதாரராக உள்ள நவீன் எண்டர்பிரைசஸ் என்ற நிறுவனத்திற்கோ அல்லது அதன் பிற பங்குதாரர்களுக்கோ மேற்படி ஒப்பந்தத்தில் எவ்விதமான தொடர்பும் கிடையாது நம்மில் 1வது பார்ட்டியின் குடும்பத்தாருக்கும் எவ்விதமான உரிமையும் கிடையாது.
10. அரசால் வழங்கப்பட்ட கனிமக் குத்தகை முடிந்தபின்னர் நம்மில் 2வது பார்ட்டிக்கு நில குத்தகை சம்மதத்தின்பேரில் வழங்கப்பட்ட ஹெக்டேர் 4.26.0 ஏர்ஸ் பரப்பளவு நிலத்தில் எவ்வித சம்மந்தமும் கிடையாது. ஒருவேளை மேற்படி குத்தகை நீட்டித்துத் தரக்கேட்டால் அந்த சமயம் உள்ள சூழ்நிலைகளைப் பொறுத்து தக்க முடிவுகள் எடுக்கப்படும்.

இரண்டாவது பார்ட்டியின் நிபந்தனைகள்

1. நம்மில் 2வது பார்ட்டி அவரது சொந்தச் செலவில் அனைத்து ஏற்பாடுகளையும் செய்து, நம்மில் 1வது பார்ட்டிக்கு சொந்தமான, செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், 190நெ.நல்லாமூர் குருப்பைச் சேர்ந்த கொளத்தூர் கிராமத்தில் பட்டா எண். 1604 - ல் ஹெக்டேர் 4.26.0 ஏர்ஸ் ஏக்கர் 10.53 செண்ட் மொத்த பரப்பில் தேவைப்படும் பரப்பிற்கு உரிய புல எண்களுக்கு அரசிடம் விண்ணப்பித்து கனிமக் குத்தகை அனுமதி பெற்றுக்கொள்வார்.
2. நம்மில் 2வது பார்ட்டி மேற்படி நில குத்தகைக்கு 1வது பார்ட்டியால் வழங்கப்படும் நிலங்களில் நிலையான அமைப்பான, கட்டிடம் கட்டுவது, கிரவுர் தொடர்பான அனைத்து நடவடிக்கைகளையும் மேற்கொள்ளவும், அரசு சட்டங்களுக்கு உட்பட்டு கல், மண், கிராவல் குவாரி செய்து கொள்ளவும் உரிமையுண்டு.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P. S. V. V.
Authorized Signatory

For OM VINAYAGA SUPPLIER
K. S. V. V.
Proprietor

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆணைம் 83 தாக்களைக் கொண்டது
1 வது தாள் பதிவு செய்யப் பெற்றுள்ளது



K. S. V. V.



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3. நம்மில் 2வது பார்ட்டி 1வது பார்ட்டிக்கு தரவேண்டிய நில குத்தகை தொடர்பான பண விவகாரங்களை ஒவ்வொரு வருடமும் மார்ச் 19-ஆம் தேதிக்குள் பணம் செலுத்தி இரகசிய பெற்றுக்கொள்ளுவார். மேற்படி குத்தகைத் தொகையால் மாற்றம் இருப்பின் நம்மில் இரண்டு பார்ட்டிகளும் மனம் ஒத்து பேசி தீர்த்துக்கொண்டு பண மதிப்பை மாற்றி கொள்ளலாம்.
4. குத்தகை ஆவணத்தில் உள்ள நிலங்களில் அரசு குத்தகை தரும் இடம் போக மீதமுள்ள உபரி நிலங்களை 2வது பார்ட்டி விரும்பும்போல் பயன்படுத்திக்கொள்ள 2வது பார்ட்டிக்கு உரிமை உண்டு.
5. வெட்டியெடுக்கப்படும் கனிமங்களை கல், மண், கிராவல் மற்றும் பிற கனிமங்களின் முழு உரிமையும் 2வது பார்ட்டிக்கு மட்டுமே உரியதாகும்.
6. நம்மில் 2வது பார்ட்டி அவரது பெயரில் அல்லது அவரால் முன்மொழியப்படும் பெயரில் மேற்படி 1வது பார்ட்டி குத்தகைக்கு அளிக்கும் ஹெக்டேர் 4.26.0 ஏர்ஸ் ஏக்கர் 10.53 சென்ட் நிலங்களில் பல வகையான மற்றும் விரும்பும் தொழில் செய்யவும், மின் இணைப்பு பெறவும், GST எண் பெறவும், பஞ்சாயத்து வரி மற்றும் பிற வரிகளை செலுத்தவும் உரிமை உண்டு.
7. கனிய குத்தகை நடைபெறும் காலத்தில் குவாரி தொடர்பான அனைத்து அரசு நடவடிக்கைகளுக்கும் 2வது பார்ட்டியே பொறுப்பேற்றுக்கொள்ளும்.
8. கனிமக் குத்தகை முடிவற்ற பின்னரும், நில குத்தகை காலம் தொடர்ந்தால் அந்த காலங்களில் மீண்டும் கனிமக் குத்தகை விண்ப்பம் செய்யவும், இருப்பில் உள்ள கனிமங்களை எடுத்துக்கொள்ளவும், கல் உடைக்கும் கிரஷர், எம்.சாண்ட் இயந்திரம், கட்டிடங்கள் மற்றும் அனைத்து வகையானவைகளையும் பயன்படுத்திக் கொள்ளவும் 2வது பார்ட்டிக்கு உரிமையுண்டு.
9. கனிமக் குத்தகையும், நிலம் தொடர்பான 1வது பார்ட்டியுடன் ஏற்படுத்திக்கொண்ட குத்தகையும் ஒரு சேர முடிந்தால் அன்றைய சூழ்நிலைகளைப் பொறுத்து மீண்டும் 2வது பார்ட்டி கனிமக் குத்தகை பெற 1வது பார்ட்டியின் சம்மத்துடன் நடவடிக்கை மேற்கொள்ள உரிமை உண்டு.

1வது பார்ட்டி

For NAVEEN ENTERPRISES

A. C. V. K.
Authorized Signatory

K. S. S.

1 முதல் 2025 ம் ஆண்டு.....	1166
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2வது பார்ட்டி
For OM VINAYAGA SUPPLIES

K. S. S.
Proprietor





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10. கனிமக் குத்தகை காலம் தேவைப்படாவிட்டால் நம்மில் 2வது பார்ட்டி குத்தகைப்பத்திரத்தின் மூலம் 1வது பார்ட்டியிடம் கூறிவிட்டு வெளியேற வேண்டியது. அதன் பின் குவாரி தொடர்பாகவும், அரசு நடவடிக்கைகள் தொடர்பாகவும் எல்வித கட்டுப்பாடுயின்றி மேற்படி குத்தகை ஒப்பந்தத்தில் இருந்து விலகிக்கொள்ளுவார். எல்வித பின் தொடர்ச்சியும் 2வது பார்ட்டியை கட்டுப்படுத்தாது.

மேற்கண்ட அனைத்து நிபந்தனைகளுக்கும் சம்மதம் தெரிவித்து மனப்பூர்வமாக நம்மில் 1வது மற்றும் 2வது பார்ட்டி ஆக நம் இரு பார்ட்டிகளும் சேர்ந்து கையொப்பம் செய்து செய்யுர் சார்பதிவாளர் அலுவலகத்தில் இந்த குத்தகைப்பத்திரத்தினை பதிவு செய்து கொள்கிறோம்.

சொத்து விவரம்

செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், செய்யூர் சார்பதிவகம், மதுராந்தகம் பஞ்சாயத்து யூனியன், சரவம்பாக்கம் பஞ்சாயத்து எல்லைக்குட்பட்ட 190 நெ. நல்லாமூர் குருப்பைச் சேர்ந்த கொளத்தூர் கிராமத்தில்.

பட்டா எண். 1604 - ல் தாக்கலாகியுள்ளபடி,

புஞ்சை சர்வே எண். 37/23 - பூரா ஹெக்டேர் 1.50.0 ஏர்ஸ் ஏக்கர் 3.71 செண்டில் ஜக்குபந்தி விவரம்:-

- வடக்கில் - சர்வே எண். 37/19, 37/20, 37/21, 37/22,
- தெற்கில் - சர்வே எண். 37/23 ன் மிகுதி நிலம்,
- கிழக்கில் - நெட்ரம்பாக்கம் எல்லை,
- மேற்கில் - சர்வே எண். 36/7,

இதன் மத்தியில் ஏக்கர் 1.00 செண்ட்.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P. S. L. V.
Authorized Signatory

புத்தகம் 2025 ம் ஆண்டு 116D ம்
ஆவணம் 83... தாக்களைக் கொண்டது
9வது தான் பதிவு செய்யுர்

For OM VINAYAGA SUPPLIER

K. A. V.
Proprietor

K. A. V.





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புஞ்சை சர்வே எண். 37/22 -0.29.0 ஏர்ஸ் ஏக்கர் 0.72 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/21 -0.36.5 ஏர்ஸ் ஏக்கர் 0.90 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/20 -0.18.0 ஏர்ஸ் ஏக்கர் 0.44 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/19 -0.30.5 ஏர்ஸ் ஏக்கர் 0.75 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/16 -0.24.5 ஏர்ஸ் ஏக்கர் 0.61 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/15 - 1.61.5 ஏர்ஸ் ஏக்கர் 4.00 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/18 0.85.5 ஏர்ஸ் ஏக்கர் 2.11 செண்ட் பூரா. ✓

ஆக மொத்தம் ஹெக்டேர் 4.26.0 ஏர்ஸ் ஏக்கர் 10.53 செண்ட் (பத்து ஏக்கர் ஐம்பத்து மூன்று செண்ட்) நிலங்கள் மட்டும்.

1வது பார்ட்டி
 For NAVEEN ENTERPRISES

P. R. L.
 Authorised Signatory

சாட்சிகள்:

1. *K. R. L.*
 (K.ருத்ரகோட்டி) த/பெ. கண்ணன், வயது 34, எண். 8, டாக்டர் அம்பேத்கார் தெரு, காட்டுக்கடலூர், மதுராந்தகம் வட்டம் - 603 201. (ஆதார் எண். 6664 7586 4114)

2. *A. N. S. N.*
 (A.சதீஷ்குமார்) த/பெ. N.ஆனந்தசேகர், எண். 1, பாடசாலை தெரு, பெரிய கயப்பாக்கம் கிராமம், செம்பூர் வட்டம் - 603301. (ஆதார் எண். 3293 8767 0552)



Drafted By:-

R. Annamalai
 R. Annamalai,
 Document Writer
 LNO.A/9/CGL/1987
 Madurantakam

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
 ஆவணம் 83 தாட்சணிகக் கொண்டது
 10 வது தளம் பதிவு அலுவலர் செய்யுள்



K. R. L.



வரிசை எண்.	குத்தகை காலம் (15 வருடம்)	தொகை
1.	அட்வான்ஸ்	Rs. 1,00,000/-
2.	19.03.2025 முதல் 19.03.2026 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
3.	20.03.2026 முதல் 20.03.2027 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
4.	21.03.2027 முதல் 21.03.2028 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
5.	22.03.2028 முதல் 22.03.2029 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
6.	23.03.2029 முதல் 23.03.2030 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
7.	24.03.2030 முதல் 24.03.2031 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P. J. L. L.
Authorised Signatory

For OM VINAYAGA SUPPLIER

K. J. S. S.
Proprietor

1 முதலாம் 2025 ம் ஆண்டு 1160 ம்
ஆண்டாம் 23 நாட்களைக் கொண்டது
11 வது தரம் பதிவு செய்யப் பட்டது



K. J. S. S.



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8.	25.03.2031 முதல் 25.03.2032 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
9.	26.03.2032 முதல் 26.03.2033 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
10.	27.03.2033 முதல் 27.03.2034 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
11.	28.03.2034 முதல் 28.03.2035 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
12.	29.03.2035 முதல் 29.03.2036 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
13.	30.03.2036 முதல் 30.03.2037 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
14.	31.03.2037 முதல் 31.03.2038 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-

1வது பார்ட்டி

For NAVEEN ENTERPRISES

Authorised Signatory

புத்தம் 2025 ம் ஆண்டு 116D
ஆவணம் 23
தாக்கவைக் கொண்டது
பித்து அலுவலர் செய்பவர்



A42

2வது பார்ட்டி

For OM VINAYAGA SUPPLIER

Proprietor



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15.	01.04.2039 முதல் 01.04.2039 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
16.	02.04.2039 முதல் 02.04.2040 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
	ஆக மொத்தம் தொகை	Rs.79,97,500/-.
	முத்திரைத்தீர்வை	Rs. 80,000/-
	பதிவுக்கட்டணம் (அதிகபட்சம்)	Rs. 40,000/-

1வது பார்ட்டி
For NAVEEN ENTERPRISES

A. N. V.
Authorised Signatory

2வது பார்ட்டி

For OM VINAYAGA SUPPLIER
K. D. S.
Proprietor

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23. தாக்கணாக் கொண்டது
13 வது தாள் பதிவு அலுவலர் வய்யூர்

K. D. S.





செய்யுர்புத்தகம்-1/1160/2025

1999ம் ஆண்டு இந்திய முத்திரை சட்டம் 42வது பிரிவின் கீழான கானது

2025ம் ஆண்டு வரிசை எண் 000

கருவு எண் ஜி 7, பிளாட் எண் 14, வந்தவாசி ரோடு, சோத்துப்பாக்கம், செங்கல்பட்டு தமிழ்நாடு இந்தியா 603102ல் வசிக்கும் திரு தண்ணாமுர்த்தி என்பவரிடமிருந்து ₹ 77,500/- ரூபாய் எழுபத்தேழாயிரத்து ஐந்து மட்டும், இந்த ஆவணத்திற்காக இந்திய முத்திரை சட்டம் 42வது பிரிவின் படி குறைவாயிருந்த முத்திரை சட்டமும் வழங்கப்பட்டது என நான் இதன் மூலம் சான்றுளிக்கிறேன்

சார்பதிவாளர் : செய்யுர்
நாள்: 19/03/2025

R. Supul
சார்பதிவாளர் மற்றும் இந்திய முத்திரை சட்டம் பிரிவு
41ன் படி ஆட்சியர்

சார் பதிவாளர்

செய்யுர்-603302

2025 ஆம் ஆண்டு மார்ச் மாதம் 19ம் தேதி பி.பி. 02.54 மணியளவில் செய்யுர் சார்பதிவாளர் அலுவலகத்தில் தாக்கல் செய்து கட்டணம் ₹ 41,110/- செலுத்தியவர்

1 புத்தகம் 2025ம் ஆண்டு 1160

ஆவணம் 23. தாட்சணம் கொண்ட
..... 14 வது நாள் பதிவு அலுவலர் செய்யுர்

இடது பெருவிரல்



கூடுதல் விவரங்கள் ஆவண வாகைதில் உள்ளபடி : 9940345689

எழுதிக் கொடுத்ததாக ஒப்புக் கொண்டவர்
இடது பெருவிரல்



A. S. H
'சம்மதத்துடன் கூடிய ஆதார் அங்கீகாரம்' என்ற வழி இந்த நபரின் அடையாளம் விரல் ரேகை மூலம் ஆதார் ஆளையத்துடன் சரிபார்க்கப்பட்டது ஒப்பீட்டு எண் : UKC:55267620c691a3729a/45388e7a18aef30865bc (Details from UIDAI : P Soma Sekhar Reddy C/O: Harayana Reddy, 14-04-1974, xxxxxxxx7852)



எழுதி வாங்கியதாக ஒப்புக் கொண்டவர்
இடது பெருவிரல்



K. S. H
'சம்மதத்துடன் கூடிய ஆதார் அங்கீகாரம்' என்ற வழி இந்த நபரின் அடையாளம் விரல் ரேகை மூலம் ஆதார் ஆளையத்துடன் சரிபார்க்கப்பட்டது ஒப்பீட்டு எண் : UKC:8860924b2f02d577f894c0b9099943a15213548 (Details from UIDAI : Dhakshnamurthi K. S/O



K. S. H



R/செய்யூர்/புத்தகம்-1/1160/2025

Kadhandaraman, 21-07-1976, xxxxxxxx3739,

2025 ஆம் ஆண்டு மார்ச் மாதம் 10ம் நாள்	R. Sanyalini கல்வி நேரு சார்பதிவாளர் செய்யூர்

R/செய்யூர்/புத்தகம்-1/1160/2025 எண்ணாகப் பதிவு செய்யப்பட்டது நாள்: 10032025 செய்யூர்	50230025	சார் பதிவாளர் செய்யூர் - 603 3002 R. Sanyalini கல்வி நேரு சார்பதிவாளர் சார் பதிவாளர் செய்யூர் - 603 3002



1 புத்தகம் 2025 ம் ஆண்டு 1160 ம் ஆவணம் 23 தாக்கணாகக் கொண்டது 15 பதிவு செய்து பதிவு செய்து செய்யூர்

K. Sanyalini

भारत सरकार
Government of India

19 Datta Gaddi Gully
P. Datta Sekhar Reddy
Vidya Nagar/DOR: 14542174
Age: 41 MALE

8706 3918 7852

8706 3918 7852

8706 3918 7852

भारत सरकार
Government of India

19 Datta Gaddi Gully, P. Datta Sekhar Reddy
Vidya Nagar/DOR: 14542174
Age: 41 MALE

8706 3918 7852

8706 3918 7852

8706 3918 7852

आयकर विभाग
INCOME TAX DEPARTMENT

पंजीकृत खाता संख्या कार्ड
Permanent Account Number Card

AATEN4441R

8706 3918 7852

8706 3918 7852

8706 3918 7852

आयकर विभाग
INCOME TAX DEPARTMENT

पंजीकृत खाता संख्या कार्ड
Permanent Account Number Card

AATEN4441R

8706 3918 7852

8706 3918 7852

8706 3918 7852

For NAVEEN ENTERPRISES

P. S. H.

Authorised Signatory

1 புத்தம் 2025 ம் ஆண்டு 11.60 ம்
ஆவணம் 23. நாட்களைக் கொண்டது
16 வது நாள் பதிவு செய்யும்




Dr. K. Jayaraman
 Government of India
 Department of Health
 Dr. K. Jayaraman K.
 India govt DOB: 21/07/1976
 sex: MALE

9724 6689 3739

CTKOT 751 21/07/1976

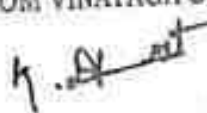

Dr. K. Jayaraman
 Government of India
 Department of Health
 Dr. K. Jayaraman K.
 India govt DOB: 21/07/1976
 sex: MALE

9724 6689 3739

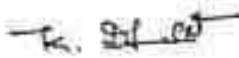
CTKOT 751 21/07/1976

आयकर विभाग
INCOME TAX DEPARTMENT
भारत सरकार
GOVT. OF INDIA
 Permanent Account Number Card
CUYPO0545H
DR. K. JAYARAMAN
 Date of Birth: 21/07/1976
 Signature: 


Please this card is lost/destroyed. Kindly inform Police in
 District Tax PAN Section, Circle 1, 111154
 The DC, Sector 11, CBD Delapal,
 New Mumbai - 400 614.
 एन सी डी टैक्स पैन कार्ड खोया/नष्ट हो, कृपया
 जिला टैक्स पैन सेक्टर, सर्कल 1, 111154
 न्यू मुंबई - 400 614 में डी सी सेक्टर 11, सीबीडी डेलपाल को सूचित करें।

For OM VINAYAGA SUPPLIER

 Proprietor

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
 ஆவணம் 23 தாக்கனைக் கொண்டது
 17 வருது தாள் பதிவு செய்ய செய்யும்







இந்திய அரசாங்கம்
Government of India



கூதநாமி K
Ruthrakotti K

தந்தை: கண்ணன் முனுசாமி
Father: KANNAN MUNUSAMY

பிறந்த நாள் DOB: 21/08/1989
ஆண் / Male

6664 7586 4114



ஆதார் - சாதாரண மனிதனின் அதிகாரம்



(மாநகர) - டாக்டர் கண்ணன் முனுசாமி
டாக்டர் க. அம்பேத்கர் ரோடு
காட்டுகுடாலுர் கட்டிடம், (காட்டுகுடாலுர்)
காட்டுகுடாலுர், காட்டுகுடாலுர்
காட்டுகுடாலுர், காட்டுகுடாலுர்
காட்டுகுடாலுர், காட்டுகுடாலுர்

Address S/O Kannan no 8
DOCTOR AMBETHKAR
STREET, KATTUKUDALUR,
Kattugudalur, Kattugudalur,
Kancheepuram, Tamil Nadu,
603301

(Signature)

6664 7586 4114

இந்திய அரசாங்கம்
Government of India

புகைப்படம்
Sathish Kumar
பிறந்த நாள் DOB: 02/06/1989
ஆண் / MALE

3293 8767 0552
VID: 9156 8670 4674 5917

எனது ஆதார். எனது அடையாளம்

இந்திய அரசாங்கம்
Unique Identification Authority of India

புகைப்படம்
S/O: Anandhasaker, 24, PADASAI STREET,
KAYAPAKKAM, Kancheepuram, Tamil Nadu - 603301
பிறந்த நாள் - 603301

Address:
S/O: Anandhasaker, 24, PADASAI STREET,
KAYAPAKKAM, Kancheepuram,
Tamil Nadu - 603301

3293 8767 0552
VID: 9156 8670 4674 5917

1847 | info@uidai.gov.in | www.uidai.gov.in

1 புள்ளி 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தாக்கனைக் கொண்டது
18 வது நாள் பதிவு செய்யப்பட்டது



A - Return Name

K. S. S.

A48



1. பருவம் 2025 முதல் 2026 வரை 1160 மீட்டர்
பருவம் 23 முதல் 2026 வரை 1160 மீட்டர்
19 மீட்டர் பருவம் 23 முதல் 2026 வரை 1160 மீட்டர்



GPS Map Camor

Neerpair, Tamil Nadu, India
Neerpair, Tamil Nadu 603313, India
Lat 12.421783° Long 79.923291°
18/03/25 03:02 PM GMT +05:30

Google

For NAVEEN ENTERPRISES

P. S. V.

Authorized Signatory

T. S. V.

For OM VINAYAGA SUPPLIER

M. S. V.

Proprietor



தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடச் மேலாண்மைத் துறை

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

மாவட்டம் : செங்கல்பட்டு

வட்டம் : மதுராத்தகம்

வருவாய் விராமம் : நல்லாழார்

பட்டா எண் : 1604 ✓

உரிமையாளர்கள் பெயர்

1. - நலிள் என்டர்பிரைசஸ் நிறுவனத்தின் பங்குதாரர்களில் ஒருவரான
2. நாராயண செட்டி மகன் சோம சேகர் செட்டி ✓

1 பத்திரம் 2025 ம் ஆண்டு 1160 ம்
 ஆவணம் ... 83 ... நாட்சுலானக் கொண்டது
 ... 80 ... ஸ்ரீ நாராயண ... பதிவு செய்து கொண்டது



7. 8. 2024



வரி	க.ச.ப.பெ	பொது		பொது		பொது		குறிப்பு
		மொத்த	பெறு	மொத்த	பெறு	மொத்த	பெறு	
		பெறு - ரூ	பெ - ரூ	பெறு - ரூ	பெ - ரூ	பெறு - ரூ	பெ - ரூ	
37	1	0 - 62.50	1.16	--	--	--	--	2022/0103 /35/246614--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM
37	15	1 - 61.50	3.00	--	--	--	--	2022/0103 /35/254904--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	16	0 - 24.50	0.45	--	--	--	--	2022/0103 /35/254904--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	17	0 - 97.00	1.80	--	--	--	--	2022/0103 /35/254904--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	18	0 - 85.50	1.58	--	--	--	--	2022/0103 /35/254904--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM

1 பிப்ரவரி 2025 இல் சந்தர்ப்பம் 1160
சுருவணம் 23 தாட்சஸ்தர் கொண்டு
21 வருட தரன் பத்திர சந்தர்ப்பம் கொண்டு



K. D. 100



37	19	0 - 30.50	0.56	--	--	--	2022/0103 /35/254904--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	20	0 - 18.00	0.34	--	--	--	2022/0103 /35/254904--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	21	0 - 36.50	0.68	--	--	--	2022/0103 /35/285812--- Digitally signed: BHARATHI R Zonal Deputy Tahsildar 15/10/2022 03:51:42:PM
37	22	0 - 29.00	0.54	--	--	--	2022/0103 /35/254904--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	23	1 - 50.00	2.78	--	--	--	2022/0103 /35/246614--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM
37	24	0 - 81.00	1.50	--	--	--	2022/0103 /35/246614--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தாக்கவாக் கொண்டு
22 ம் தாக்கவாக் கொண்டு
பத்திரம் கொண்டு கொண்டு



k.24 est



37	25	0 - 40.50	0.75	--	--	--	Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM
37	26	0 - 62.50	1.16	--	--	--	2022/0103 /35/246614-44 Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM
		6 - 79.00	16.30				

குறிப்பு :



1. மேற்கண்ட தகவல் / சான்றிதழ் தகவல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டன. இவற்றை தயக்கம் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 35/07/190/01604/10011 என்ற குறிப்பு எண்ணம் உடனீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 19-03-2025 அன்று 12:34:06 PM நேரத்தில் அச்சிடப்பட்டது.
3. மகப்பேரி சேவையின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்.

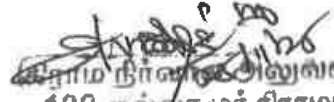
1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தாட்களைக் கொண்டது
23 வாங்கு தான் பதிவு அட்டை வைப்புகள்



K. Hest

சான்று

செங்கல்பட்டு மாவட்டம் மதுராந்தகம் வட்டம் நல்லாமூர் மதுரா கொளத்தூர் கிராமம் பட்டா எண் 1604 - ல் புல எண்கள்: 37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22, 37/23(P) - 3.32.50 ஹெக்டேர்ஸ் நிலத்தில் தி/ள். ஓம் விநாயகா சப்ளையர்ஸ் என்ற நிறுவனத்தின் பெயரில் சாதாரண கற்கள் மற்றும் கிராவல் குவாரி அமைய உள்ளது. மேற்கண்ட புல எண்களைச் சுற்றி சுமார் 300 மீட்டர் சுற்றளவில் குடியிருப்புகள், பள்ளிக்கூடங்கள், கோவில்கள், வழிபாட்டுத் தலங்கள், புராதானச் சின்னங்கள் ஏதும் இல்லை என்பது தல பார்வையின் அடிப்படையில் தெரிய வருகிறது, என்பதற்கு இச்சான்று அளிக்கப்படுகிறது.


 கிராம நிர்வாக அலுவலர்
 190. நல்லாமூர் கிராமம்
 மதுராந்தகம் வட்டம்

TVL. OM VINAYAGA SUPPLIER, over an extent of 3.32.50 Hectare, SF.No: 37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22 & 37/23(P) of Rough Stone & Gravel Quarry located at Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu State.



General View of the Proposed Lease Area Photo

கிராம நிர்வாக அலுவலர்
190, நல்லாழை கிராமம்
மதுராந்தகம் வட்டம்

MINE PLAN



MINING PLAN

FOR NALLAMUR MADURA KOLATHUR ROUGH STONE & GRAVEL QUARRY

Mining Plan Period = 5 Years

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

Lense in Consent Patta Land

IN

LOCATION OF THE LEASE APPLIED AREA

EXTENT : 3.32.50 Ha

S.F. Nos : 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P)

VILLAGE : NALLAMUR MADURA KOLATHUR

TALUK : MADURANTHAKAM

DISTRICT : CHENGALPATTU

STATE : TAMIL NADU

FOR

APPLICANT

Tvl. OM VINAYAGA SUPPLIER,

Prop: K. Dhakshanamurthi,

Plot No: 14, GF 7, S.V.Complex,

Vanthavasi Road, Sothupakkem,

Cheyyur Taluk,

Chengalpattu District - 603319.

Email-id: omvinayagasupplymurthik@gmail.com

Mobile No: 99403 45689.

PREPARED BY

Mr. N. SURESH, M.Sc., (Qualified Person)

GEO MINING & ECO SOLUTIONS

D. No. 257/2, Arthi Nager II,

Emerald Garden, Narasothipatty.

Salem-636004.

Email id: sureshhydrogeology@gmail.com

Mobile No: 9994289822





LIST OF CONTENTS

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	PART - A	
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K. S. S. S.

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T. S. S. S.



CONSENT LETTER FROM THE MINE OWNER

The Mining Plan in respect of **Rough Stone & Gravel Quarry** over an extent of **3.32.50 Ha** of **Consent Patta Land** in **S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P)** of **Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District** and **Tamil Nadu State** has been prepared by **Mr. N. Suresh, M.sc, a Qualified Person.,**

I request the Assistant Director, Department of Geology and Mining, Chengalpattu District to make further correspondence regarding modifications of the Mining Plan with the said Qualified Person on this following address.

Mr. N. Suresh, M.Sc., (Qualified Person)

GEO MINING & ECO SOLUTIONS

D. No. 257/2, Arthi Nager II, Emerald Garden,
Narasothipatty, Salem-636004.

Email id: sureshhydrogeology@gmail.com

Mobile No: 99942 89822.

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 Own and shall be acceptable to me and binding on me in all respects.

For Tvl. OM VINAYAGA SUPPLIER



Prop: K. Dhakshanamurthi

Place : Chengalpattu

Date :



Tvl. OM VINAYAGA SUPPLIER,

Prop: K. Dhakshanamurthi,
Plot No: 14, GF 7. S.V.Complex,
Vanthavasi Road, Sothupakkam,
Cheyyur Taluk,
Chengalpattu District.
Email: omvinayagasupplymurthik@gmail.com
Mobile: 99403 45689.

DECLARATION

The Mining Plan in respect of **Rough Stone & Gravel Quarry** over an extent of **3.32.50** Ha of **Consent Patta Land** in **S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P)** of **Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu 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.

For, Tvl. OM VINAYAGA SUPPLIER



Prop: K. Dhakshanamurthi

Place : Chengalpattu

Date :

K. H. S.



Mr. N. Suresh, M.Sc., (Qualified Person)

GEO MINING & ECO SOLUTIONS

D.No. 257/2, Arthi Nager II,

Emerald Garden, Narasothipatty, Salem-636004.

Email id: sureshhydrogeology@gmail.com

Mobile No: 99942 89822.

CERTIFICATE

This is to certify that, the provisions of Tamil Nadu Minor Minerals Concession Rules 1959 have been observed in the Mining Plan for the grant of **Rough Stone & Gravel Quarry** lease over an extent of **3.32.50** Ha of **Consent Patta Land** in S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) of **Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District, Tamil Nadu State** applied by

Tvl. OM VINAYAGA SUPPLIER,

Prop: K. Dhakshanamurthi,

Plot No: 14, GF 7. S.V.Complex,

Vanthavasi Road, Sothupakkam,

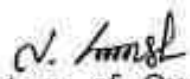
Cheyyur Taluk, Chengalpattu District.

Email: omvinayagasupplymurthik@gmail.com

Mobile No: 99403 45689.

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

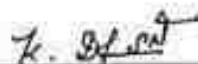
Certified


Signature of Qualified Person

N. SURESH, M.Sc., (Geology)
Qualified Person

Place : Salem

Date :





Mr. Suresh, M.Sc., (Qualified Person)

GEO MINING & ECO SOLUTIONS

D. No. 257/2, Arthi Nager II,

Emerald Garden, Narasothipatty, Salem-636004.

Email id: sureshhydrogeology@gmail.com

Mobile: 99942 89822.

CERTIFICATE

Certified that, in preparation of Mining Plan for **Rough Stone & Gravel Quarry** over an extent of **3.32.50 Ha** of **Consent Patta Land** in S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) of **Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District** and Tamil Nadu State.

Tvl. OM VINAYAGA SUPPLIER, 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.

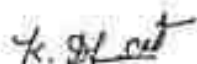
Certified


Signature of Qualified Person

N. SURESH, M.Sc.,(Geology)
Qualified Person

Place : Salem

Date:





MINING PLAN

FOR NALLAMUR MADURA KOLATHUR ROUGH STONE & GRAVEL QUARRY

Mining Plan Period 5 Years

*(Prepared under Rules 41 & 42 Tamil Nadu Minor Mineral Concession Rules, 1959
And amended Minor Mineral Conservation and Development Rules, 2010)*

1.0 INTRODUCTION

1. The present Mining Plan and Environmental Management Plan are prepared for **Tvl. OM VINAYAGA SUPPLIER**, Prop: K. Dhakshanamurthi, Plot No: 14, GF7. S.V. Complex, Vanthavasi Road, Sothupakkam, Cheyyur Taluk, Chengalpattu District, Tamil Nadu.
2. The applicant proposed to quarry Rough Stone & Gravel in over an extent of **3.32.50 Ha of Consent Patta Land** in S.F.Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P) of Nallamur Madura Kolathur Village, Maduranthakam Taluk, Chengalpattu District for a Period of Mining **5 Years** only. The excavated rough stone is used for crushing units and Gravel is used for filling and leveling of low-lying areas of Highway Road projects and other infrastructure development work in and around the district.
3. The application was meritoriously processed and precise area communication letter issued by **The Assistant Director, Department of Geology and Mining, Chengalpattu District** has passed an order vide **Rc. No.131/Mine/2025 Dated 30.10.2025**. The applicant to submit the Mining Plan and to get approval from The Assistant Director, Department of Geology & Mining, Chengalpattu District and to obtain Environmental Clearance from State Level Environment Impact Assessment Authority, Tamil Nadu State, as per EIA Notification 2006 and its amendments vide MOEF and Climate Change Notification.
4. Accordingly, Mining Plan is prepared under the provisions Rule 41 of Tamil Nadu Minor Minerals Concession Rules, 1959 for rough stone and Gravel Quarry.

K. H. cat



5. **Geological Resources** is estimated at $11,79,880\text{m}^3$ / $32,44,670$ MT of Rough Stone, & $1,17,988\text{m}^3$ / $2,35,976$ MT Gravel and **Mineable Reserves** are estimated at $4,32,760\text{m}^3$ / $11,90,090$ MT of Rough Stone, & $90,520\text{m}^3$ / $1,81,040$ MT of Gravel up to depth of 44m.
6. The proposed quantity of reserves/level of production to be mined is $4,32,760\text{m}^3$ / $11,90,090$ MT of Rough Stone, & $90,520\text{m}^3$ / $1,81,040$ MT of gravel up to a depth of 44m for a period of 5 years.
7. The Production Schedule of $4,32,760\text{m}^3$ / $11,90,090$ MT of Rough Stone, and $90,520\text{m}^3$ / $1,81,040$ MT of Gravel up to a depth of 44m (4m Gravel - 40m Rough Stone) for the permission period of Mining **5 Years** only. Under the provisions of Rule 19 (1) of Tamil Nadu Minor Mineral Concession Rules, 1959, subject to the following conditions.
- The minerals to be transported shall be subject to payment of seniority amount and other charges from time to time for minerals quarried as per the provisions of Tamil Nadu Minor Mineral Concession Rules, 1959, Section II.
 - Quarrying work should be carried out by experienced explosive users using low-energy explosives without any disturbance to nearby Pattadars/without any encroachment on nearby Patta and government lands.
 - A safety distance of 7.5 meters should be left for the Patta lands surrounding the application fields and 10 meters for the government Poramboke lands, Cart track and grazing lands. Furthermore, a safety distance of 50 meters should be left for the Thangal Kuttai in Field No. 36/1, southwest of the application field, for quarrying work.
 - The applicant company shall submit the approved mining plan within 90 days as per Tamil Nadu Minor Mineral Concession Rules, 1959.
 - As per Rule No. 42 of the Tamil Nadu Minor Mineral Concession Rules, 1959, a quarry license will be granted only if the application field is submitted with environmental clearance from the State Level Environmental Impact Assessment Authority.



8. The Safety measures under mechanized loading as per the provisions of Reg.106(2)(b) of Metalliferous Mines Regulation-1961, Labour Amenities as per the Mines Rules 1955 and amended DGMS circular shall be taken care of in preparation of Mining Plan.

ENVIRONMENTAL PARAMETERS,

(i) Forest Conservation Act, 1980:

There is no Reserve Forest within a 1.0 km radius of this quarry.

(ii) Wildlife (Protection) Act, 1972:

The area does not attract the wild life sanctuary around 10Kms radius.

(iii) The Coastal Regulation Zone (CRZ) Notification 2011:

The area does not attract the Coastal zone around 10kms radius.

(iv) Interstate Boundary: There is no interstate boundary found within radius of 10Km.

I. ENVIRONMENTAL MEASURES TO BE ADOPTED SHALL BE,

- 1) Dust Control at source while *wet drilling* and *controlled blasting*.
- 2) Dust suppression at loading point and transport haul roads.
- 3) Noise Control in Blasting, control of fly rock missiles and Vibration by doing peak particle velocity with in standard as prescribed by the DGMS and MOEF.
- 4) Unnecessary land degradation should be avoided or damaged land should be reclaimed or rehabilitated.
- 5) Avoid uneven rat hole mining and follow scientific and systematic mining by safe bench system of open cast mining.
- 6) Mining near major fracture zones if any should be avoided to control ground water fluctuation in the adjacent agricultural lands.
- 7) Emission test of vehicles should be in tack to maintain minimum emission level of fuel gases.
- 8) Noise level should not exceed 80db and the vehicles should use only permitted Air Horn while on road near residential areas.
- 9) Safety zones as prescribed by the Department of Geology and Mining from adjacent infrastructures should be strictly to adhere to.
- 10) Any other conditions as stipulated by the concerned authorities should be followed to protect the Environment and Ecology of the area.

K. Al. S. T.

2.0. EXECUTIVE SUMMARY

The area applied for lease is Rough Stone & Gravel quarry in **Consent-Padu** Land at Survey Numbers: **37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P)** of **Nallamur Madura Kolathur Village, Maduranthakam Taluk and Chengalpattu District.**

- a. Name of the Village Panchayat – Nallamur Madura Kolathur
- b. Name of the Panchayat Union – Maduranthakam
- c. The proposed total Mineable Reserves – **90,520m³/1,81,040 MT** of Gravel, & **4,32,760m³/ 11,90,090 MT** of Rough Stone.
- d. The Production Schedule of **4,32,760m³/ 11,90,090 MT** of Rough Stone, & **90,520m³/1,81,040 MT** Gravel up to a depth of **44m (4m Gravel + 40m Rough Stone)** for the permission period of Mining **5 Years** only.
- e. Total extent of the area –**3.32.50 Ha**
- f. Total Lease Period –**Five years** only
- g. Existing depth of mining –**It is fresh lease applied area.**
- h. Proposed Depth of mining –**44m (4m Gravel + 40m Rough Stone)**
- i. Method of mining / level of mechanization - Opencast, Semi-mechanized Mining with a bench height of 5.0m & width of 5.0m is proposed and involves shallow Jackhammer drilling, Shurry blasting is proposed for this quarrying operation.
- j. Types of Machineries used in the quarry –Jack hammer 30-32mm dia, Tractor mounted compressor attached with Jack hammer. Excavator of 0.90m³ bucket capacity is attached with Rock breaker is proposed to deploy for quarrying operation. Total consumption of Diesel for Rough Stone & Gravel is around **3,61,298 Liters** of HSD for the entire period of life of the quarry.
- k. No Trees will be uprooted due to this quarrying operation.
- l. The existing road from the main road to quarry is in good condition and the Same will be maintained and utilized for Transportation of Rough Stone & Gravel.
- m. There is no Export of this quarrying Rough Stone & Gravel.
- n. Topo sketch covering 10Km, 500m radius around the proposed area with markings of Habitations, Water bodies like Streams, Rivers, Roads, Major structure like Bridges, Wells, Archeological, Historical importance, Places of worship is marked and enclosed as Plate No. IB & VI.



- a. The lease applied area is **3.32.50 Ha**, the corners are designated from the North western corner and the coordinates are clearly marked in Plate no - II
 - p. The diagram showing the Mining area, dimensions of the Pit, proposed depth of mining for the mining plan period are enclosed as Plate No -IV.
 - q. The lease applied area is 10Km away from the Inter State boundary, protected area under Wildlife Production Act 1972, critically polluted area as identified by CPCB and notified Eco sensitive areas.
 - r. There are no wastages anticipated during this quarry operation; hence waste dump is not proposed in this lease applied area.
 - s. Around **35 Employees** are deploying in this quarrying operation.
- 1. The lease applied area is bounded by all corners and the DGPS coordinates are clearly marked in Plate no - II**

Table -2

S. Nos	Latitude	Longitude
1	12° 25' 16.93" N	79° 55' 20.22" E
2	12° 25' 19.16" N	79° 55' 20.20" E
3	12° 25' 19.90" N	79° 55' 26.20" E
4	12° 25' 17.53" N	79° 55' 26.94" E
5	12° 25' 12.24" N	79° 55' 27.88" E
6	12° 25' 13.13" N	79° 55' 26.15" E
7	12° 25' 14.05" N	79° 55' 25.98" E
8	12° 25' 14.01" N	79° 55' 23.95" E
9	12° 25' 16.31" N	79° 55' 23.65" E
10	12° 25' 16.90" N	79° 55' 22.63" E

PART - A

3.0. GENERAL INFORMATION:

3.1. Name of the Applicant with Address, contact no, email etc.,

Name : Tvl. OM VINAYAGA SUPPLIER,
 Prop: K. Dhakshanamurthi,
 Plot No: 14, GF 7. S.V.Complex,
 Vanthavasi Road, Sothupakkam,
 Cheyyur Taluk,
 Chengalpattu District.
 Email: omvinayagasupplymurthik@gmail.com
 Mobile No: 99403 45689.

District : Chengalpattu
 State : Tamil Nadu



3.2. Status of the Applicant (Individual / Company / Firm)

The applicant is a Proprietorship Company.

3.3. Mineral which the Applicant intends to mine

Rough Stone & Gravel only.

3.4. Precise area communication Letter details received from the competent authority of the government.

Precise area communication letter issued from the Assistant Director, Department of Geology and Mining, Chengalpattu vide Rc. No. 131/Mine/2025 Dated 30.10.2025.

3.5. Period of permission / lease to be granted

The applicant has applied permission for 5 Years. Assistant Director, Department of Geology and Mining, Chengalpattu, consider grant for a Period of Mining 5 Years only.

3.6. Name and Address of the QP/Authorized person for preparing the Mining Plan

Name : **Mr. N. Suresh, M.Sc., (Qualified Person)**

GEO MINING & ECO SOLUTIONS

Address : D. No. 257/2, Arthi Nager II, Emerald Garden,

Narasothipatty, Salem-636004, TN.

Email id: sureshhydrogeology@gmail.com

Mobile: 99942 89822.

4.0. LOCATION:

Table No: 3

State	Tamil Nadu
District	Chengalpattu
Taluk	Maduranthakam
Village	Nallamur Madura Kolathur
S.F.Nos	37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P)
Extent in (Ha)	3.32.50 Ha

4.1. Details of Existence of public road /railway line, if any nearby and approximate distance.

Table No: 4

S.No	Description	Place	Distance (Km)	Direction
1	Bus Stop	Chitamur	3.0	SW
2	Post Office	Chitamur	3.0	SW
3	Police Station	Chitamur	3.0	SW
4	Fire service	Maduranthakam	10	NW
5	Railway Station	Melmaruvathur	10	NW
6	Government Hospital	Maduranthakam	10	NW
7	Government School	Chitamur	3.0	SW
8	Airport	Puducherry	55	South



Location site of **Tvl. OM VINAYAGA SUPPLIER,**
Nallamur Madura Kolathur Village, Maduranthakam Taluk,
Chengalpattu District.



Fig.1 - Showing Location and route map of lease applied area

ROUTE MAP: → Chengalpattu 23km Maduranthakam 12Km →

Nallamur
Madura
Kolathur
2km

**Quarry
Site**

Classification of the Area (Ryotwari / Poramboke / Patta/ others)

- It is a Consent Patta Land and non-agricultural land.



a. Ownership / Occupancy of the applied area (Surface rights)

- It is Consent Patta Land registered in the name of **Soma Sekar Reddy Partner of Naveen Enterprises** Vide Patta No 1604, of S.F. Nos. 37/15, 16, 18(P), 19(P), 20, 21, 22 & 23(P).

b. Toposheet No. with Latitude and Longitude

Topo sheet No: 57P/15

Latitude :12° 25' 12.24" N to 12° 25' 19.90" N

Longitude :79° 55' 20.22" E to 79° 55' 27.88" E

5.0. GEOLOGY AND MINERAL RESERVES

5.1. Topography:

- ❖ The lease applied area is exhibits Plain topography covered by massive Charnockite formation.
- ❖ The massive Charnockite formation is clearly visible from outcrop in the lease area, The Strike direction of the rock formation is NE45° and SW45° and dip sloping towards NW side of the area, the altitude of the area is above 60m MSL.
- ❖ No major river is found nearby the lease applied area.
- ❖ Water Level is found at a depth of 70m to 75m below Ground Level, 70m in Rainy seasons and 75m in summer seasons by monitoring nearby bore hole.
- ❖ Temperature of the area is reported to be 20°C to a maximum of 37°C during summer.
- ❖ Rainfall of this area is about 1105mm to 1214mm during the both NE & SW monsoons.



5.2. General Geology of the area (with plans):

- ❖ The area is underlain 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 massive Charnockite formation is clearly visible from outcrop in the lease area, The Strike direction of the rock formation is NE45° and SW45° and dip sloping towards NW side of the area, the altitude of the area is above 60m MSL.
- ❖ The rock type noticed in the lease area is Charnockite, which is mainly composed of Quartz and Feldspar, with Orthopyroxene and minor amounts of other ferromagnesian minerals."
- ❖ The Charnockite is part of peninsular Gneisses, a high-grade metamorphic rock.

The General Geological succession of the area is given as under.

Age	Formation
Recent	- Quaternary to recent formation (Gravel)
Archaean	- Charnockite, Peninsular Gneiss complex

5.3. Details of Exploration already carried out if any:

- ❖ There is no exploration carried out in this applied quarry area.
- ❖ State Geology and Mining Department Government of Tamil Nadu has been carried out geological exploration and regional mapping study of the lease area.
- ❖ Geological Survey of India has carried out detailed mapping in Chengalpattu District.
- ❖ Besides the QP and the team members made a detailed geological study of the area; Geological map has been prepared in 1:1000 scale and enclosed plate -III.



Fig.1 - Photograph showing general view of the lease applied area



Fig.2 - Photograph showing Close view of the lease applied area

5.3. a. Estimation of Reserves (Geological Resources with geological sections on a scale of 1:1000)

- ❖ As far as Rough Stone & Gravel (Charnockite) is concerned, the only practical method is the systematic geological mapping and delineation of Rough Stone & Gravel within the field and careful evaluation of body lustre, physical properties, engineering properties, commercial aspects etc.,

- ❖ Totally **five sections** have been drawn, **three sections** drawn **length** wise as (X-Y), (X1-Y1) & (X2-Y2) another **two sections** drawn **width** wise as (A-B) & (C-D) have five sections have been drawn.
- ❖ The Topographical, Geological plan and sections demarcated the commercial, marketable Rough Stone & Gravel (Charnockite) deposit has been prepared in Scale 1:1000 and Sections have been drawn with a scale of Hor 1:1000 and Ver 1:1000 respectively.
- ❖ Please refer Plate No. IIIA, VII-A Rough Stone & Gravel are terms of Cubic Meters (Volume) and Tonnage calculations.

I. GEOLOGICAL RESOURCES:

The Geological Resources is estimated as **11,79,880m³/32,44,670 MT** of Rough Stone, & **1,17,988m³ / 2,35,976 MT** Gravel up to a depth of **44m** (4m Gravel + 40m Rough Stone).

Table No: 5

GEOLOGICAL RESOURCES							
Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in (m3)	Gravel in m3 / Mt	Geological Resources in m3 / Mt (100%)
XY-AB	I	196	95	2		37240	
	II	196	95	2		37240	
	III-X	196	95	40	744800		744800
	Total					74480	744800
XY-CD	I	106	80	2		16960	
	II	106	80	2		16960	
	III-X	106	80	40	339200		339200
	Total					33920	339200
XY-EF	I	51	47	2		4794	
	II	51	47	2		4794	
	III-X	51	47	40	95880		95880
	Total					9588	95880
Grand Total						117988 / 235976 MT	1179880 / 3244670 MT



II. MINEABLE RESERVES:

The mineable reserves are calculated by deducting the safety distance of 7.5m, 10m & 50m safety distance along the lease area and accounting for bench loss, with a height of 5.0m and width of 5.0m.

Table No-6

MINEABLE RESERVES							
Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in (m ³)	Gravel in m ³ / Mt	Mineable Reserves in m ³ /Mt (100%)
XY-AB	I	178	88	2		31328	
	II	174	86	2		29928	
	III	170	84	5	71400		71400
	IV	160	79	5	63200		63200
	V	150	74	5	55500		55500
	VI	140	69	5	48300		48300
	VII	130	64	5	41600		41600
	VIII	74	59	5	21830		21830
	IX	54	54	5	14580		14580
	X	44	49	5	10780		10780
						61256	327190
XY-CD	I	88	73	2		12848	
	II	84	71	2		11928	
	III	80	69	5	27600		27600
	IV	70	64	5	22400		22400
	V	60	59	5	17700		17700
	VI	50	54	5	13500		13500
	VII	40	49	5	9800		9800
	VIII	30	44	5	6600		6600
	IX	20	39	5	3900		3900
Total						24776	101500
XY-EF	I	41	30	2		2460	
	II	39	26	2		2028	
	III	37	22	5	4070		4070
Total						4488	4070
Grand Total						90520 / 181040 MT	432760 / 1190090 MT

The Mineable Reserves is computed as **4,32,760 m³/11,90,090 MT** of Rough Stone & **90,520m³/1,81,040 MT** of Gravel formation at the rate of 100% recovery up to a depth of 44m (4m Gravel + 40m Rough Stone).

K. S. S. S.



6.0. MINING

6.1. Method of Mining (Open cast / Underground)

Opencast method of semi mechanized mining with 5.0m vertical bench height and width 5.0m of the bench is not less than bench height.

However, as far as the quarrying of Rough Stone & Gravel is concerned, observance of the provisions of Regulation 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 Mine Act-1952.

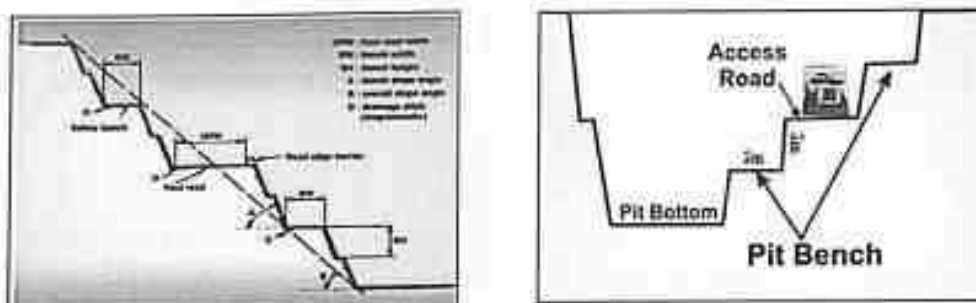


Figure No.3, shows Open pit Mining method

6.2. Mode of Working (Mechanized, Semi-mechanized, Manual)

- ❖ The Rough Stone & Gravel is proposed to quarry 5.0m bench height and 5.0m bench width with conventional opencast semi-Mechanized method. The quarrying operation involves manual Jackhammer drilling, Slurry explosives blasting, loading and transportation of Rough Stone & Gravel to the needy nearby crusher units, road formation filling purpose of low-lying area for road project works of residential and industrial customers.
- ❖ The production of Rough Stone & Gravel in this quarry involves the following method which is typical for Rough Stone & Gravel quarrying in contrast to other major mineral mining.
- ❖ The splitting of rock mass of considerable volume from the parent rock mass by jackhammer drilling and blasting, hydraulic excavators are used for loading of Rough Stone & Gravel from pithead to the needy crushers.



- ❖ The hydraulic excavators are attached with rock breakers for fragmentation to avoid secondary blasting.
- ❖ The primary boulders thus splitted are removed from the pits by excavators and further made to smaller sizes by rock breakers attached in excavators. It is a conventional opencast semi mechanized method of mining.

6.3. Proposed bench Height and Width

The quarrying of Rough Stone & Gravel is proposed to the safely bench height of 5.0m and bench width of 5.0m.

6.4. Indicate the overburden/mineral production expected pit wise as detailed as below (Composite plan and section showing pit layout, dumps, disposal of waste if any etc.,)

The excavated Rough Stone & Gravel will be directly loaded into Tippers to the needy crushers / Customers site. The Composite Plan, Development Plan and section indicating pit layout, green belt development is shown in Plate No. VII-A.

I. RECOVERABLE RESERVES:

The year-wise recoverable reserves are calculated by deducting the safety distance of 7.5m, 10m and 50m safety distance along the lease area and accounting for bench loss, with a height of 5.0m and width of 5.0m.

Table No: 7

YEARWISE DEVELOPMENT AND PRODUCTION RESERVES								
Year	Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in (m3)	Gravel Formation in m3/Mt	Recoverable Reserves of Rough Stone in m3 / Mt (100%)
I - YEAR	XY-AB	I	178	66	2		23496	
		II	174	62	2		21576	
		III	170	58	5	49300		49300
		Total					45072	49300
II - YEAR	XY-AB	I	178	22	2		7832	
		II	174	24	2		8352	
		III	170	26	5	22100		22100
	XY-CD	I	88	73	2		12848	
		II	84	71	2		11928	
		III	80	69	5	27600		27600
	XY-EF	I	41	30	2		2460	
		II	39	26	2		2028	
		III	37	22	5	4070		4070
		Total					45448	53770



III - YEAR	XY-AB	IV	160	79	5	63200		63200
	XY-CD	IV	70	64	5	22400		22400
		V	60	59	5	17700		17700
		Total						
IV - YEAR	XY-AB	V	150	74	5	55500		55500
		VI	140	69	5	48300		48300
	XY-CD	VI	50	54	5	13500		13500
		Total						
V - YEAR	XY-AB	VI	130	64	5	41600		41600
		VIII	74	59	5	21830		21830
		IX	54	54	5	14580		14580
		X	44	49	5	10780		10780
	XY-CD	VII	40	49	5	9800		9800
		VIII	30	44	5	6600		6600
		IX	20	39	5	3900		3900
		Total						
Grand Total						90520 / 181040 MT	432760 / 1190090 MT	

- The Recoverable reserves have been computed as 4,32,760m³ / 11,90,090 MT of Rough Stone and 90,520m³ / 1,81,040 MT of Gravel at 100% recovery up to depth of 44m below ground level (R.L.60m) [4m Gravel + 40m Rough Stone] for a period five years.
- Production quantity as per day (1Load=6m³ /16Mt approx) (1Year=300 Working days)

Rough Stone quantity = 11,90,090 MT
 = 11,90,090 MT / 5 years
 = 2,38,018 MT / 1500 Days
 = 159 Mt or 10 Lorry Loads per day
 Gravel quantity = 1,81,040 MT
 = 1,81,040 MT / 2 Years
 = 90,520 MT / 600 Days
 = 151 MT or 13 Lorry Loads per day



6.5. MACHINERIES TO BE USED

a. Mining

It is proposed to use the following machineries on rental basis for the development and production work in this quarrying operation.

Table No: 7A

S.No	Type	Nos	Dia Hole mm	Size capacity	Make	Motive Power
1	Jack Hammer	6	32	1.2m to 6m	Atlas Copco	Compressed air
2	Compressor	2	-	400psi	Atlas Copco	Diesel Drive

b. Loading

Loading will be carried out by (considerable Rough Stone & Gravel) by Hired front end loader like JCB) Excavator of 0.90m³ bucket capacity (with Rock breaker attachment)

S.No	Type	Nos	Bucket capacity	Make	Motive Power
1	Excavator	2	0.90m ³	Tata Hitachi - 210	Diesel Drive

c. Transportation

Tippers/Trucks = 4Nos. 5/20Tons capacity (from the quarry to destination (customer/other buyers)

S.No	Type	Nos	Capacity	Make	Motive Power
1	Tippers	4	10/20 Tons	Tata Tipper	Diesel Drive

IMAGES OF MACHINERIES EXCAVATOR



**TATA TIPPER****JACK HAMMER****6.6. Energy**

The Electricity for Mines office and Lights only at nights (working is restricted on day time only between 9 Am to 5 Pm). Diesel (HSD) will be used for quarrying machineries around **3,61,298 Liters of HSD** will be used for the entire project life. Diesel will be brought from nearby diesel pumps. Lightings on the Night time the power will be taken from nearby electric poles after obtaining permission from concerned authorities.

1. Gravel:

The Excavator will consume
The Excavator will excavate
Gravel quantity
Diesel consume
Total diesel consumption

= 10 Liters / 1 hour
= 60m³/120MT of Gravel
= 1,81,040 MT / 120MT = 1509 hours
= 1509 hours x 10liters
= **15,090 Liters of HSD will be utilized for this Gravel Excavation.**

2. Rough Stone:

The Excavator will consume
The Excavator will excavate
Rough Stone quantity
Diesel consume
Total diesel consumption

= 16 Liters / 1 hour
= 20m³/ 55 MT of Rough Stone
= **11,90,090 MT / 55MT = 21638 hours**
= 21,638 hours x 16 liters
= **3,46,208 Liters of HSD will be utilized for this Rough Stone Excavation.**

Total consumption for rough stone, & Gravel is around = **3,61,298 Liters of HSD** for the entire period of life.

6.7. Disposal of Overburden/Waste

There is no over burden in the lease applied area.

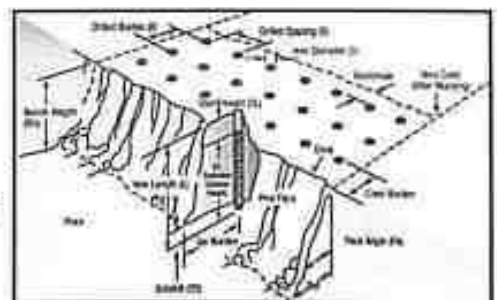
Conceptual Mining Plan is prepared with an object of (Five) 5 Years of systematic development of bench lay outs, selection of ultimate pit limit, depth of quarrying, ultimate pit slope, selection of sites for construction of infrastructures etc., Ultimate pit size is designed based on certain practical factors such as the economical depth of mining, safety zones, permissible areas etc.,

Five Years Proposed Pit Dimension	Pit ID	Length in m (Max)	Width in m (Max)	Depth in m (Max)
	I	178	161	44m below ground level (4m – Gravel, 40m–Rough stone)

7.0. BLASTING

The massive formation shall be broken into pieces of portable size by drilling and 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 Kg of explosives. Blasting parameters are as follows.

Diameter of the hole	: 30-32 mm
Spacing between holes	: 1.5m
Depth of each hole	: 1 to 1.5m
Burden for hole	: 1.0m
Inclination of hole	: 80° from the horizontal
Use of delay detonators	: 25 milliseconds
Detonating fuse	: Detonating cord
Blasting Design	: Staggered " V " Pattern





7.2. Types of Explosives

Small dia, 45mm Slurry explosive are proposed to be used for shattering and heaving effect for removal and winning of Rough Stone & Gravel. No deep hole drilling or primary blasting is proposed.

7.3. Measures proposed to minimize ground vibration due to blasting

- ❖ Controlled blasting measures will be adopted for minimizing ground vibration and fly of rocks. Shallow depth drilling and smooth blasting is proposed to carry out with minimum usage of explosive mainly to give shattering effect in Rough Stone for easy excavation and control of fly rocks.
- ❖ The following steps shall be adopted to control ground vibration due to blasting. The minimum recommended delay time of 8ms was introduced to minimize ground vibration.
- ❖ In case of electronic detonators, which are inherently much more accurate delays (± 0.2 milliseconds delay) to minimize the ground vibration reduction in air, reduction over break, improved well fragmentation and better control of fly-rocks.
- ❖ 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.

7.4. Storage of Explosives and safety measures to be taken while blasting.

- ❖ The Applicant is advised to engage an authorized explosive agency to carry out small amount of blasting and it will be supervised by the competent statutory Mining Mate /Foreman /Manager. The explosive agency should have the valid Blaster Certificate.
- ❖ He will blast holes in quarry site. After completion the blasting, the agency will take it out back the remaining quantity of explosives to the temporarily available the Magazine at the quarry site. The blasting time of the day is proposed to be 1 PM to 2.30PM.
- ❖ First Aid Box will be keeping ready at all the time in Mines Office room. Necessary precautionary announcement will be carried out before the blasting operation.



8.0. MINE DRAINAGE

8.1. Depth of Water Level

- ❖ The ground Water Level is noticed at the depth of 70m to 75m below Ground Level by monitoring nearby bore hole, during the climatic conditions, the fluctuations of water level are 70m in Rainy seasons and 75m in summer seasons of this quarry area.
- ❖ The quarry operation is proposed up to a depth of 44m (4m Gravel, & 40m Rough Stone). Hence the quarrying operation may not affect the ground water in any manner.
- ❖ It shall be ensured that quarrying shall not be carried out below ground water table under any circumstances.
- ❖ If ground water table occurs/intervenes within the permitted depth, then also the quarrying shall be stopped.

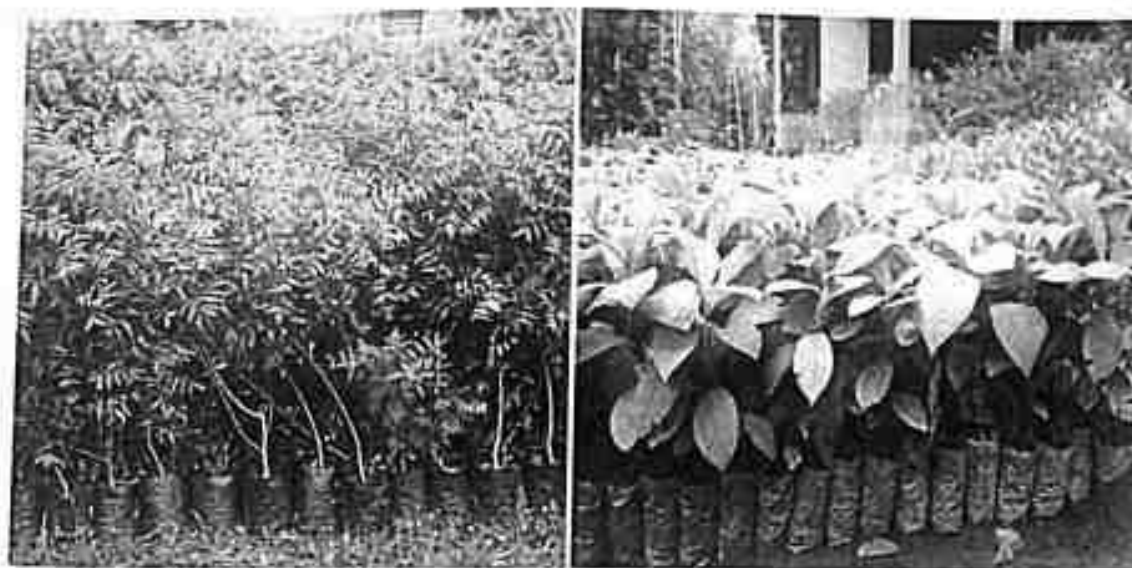
8.2. Arrangement and Places where the mine water is finally proposed to be discharged

- ❖ The ground water may not rise immediately in this type of mining. However, the rain water percolation and collection of from seepage shall be less than 150LPM and it will be pumped out periodically by a stand by diesel powered Centrifugal pump with 5HP Motor.
- ❖ The quality of water is potable and no contamination with any hazardous things.
- ❖ Hence, the water stored in quarrying pit will be pumped out the adjacent agricultural fields and further stored in old pit the water is used for Dust suppression/ Plantation purposes.

9.0. ECOLOGY AND BIODIVERSITY

The green belt in the lease area be developed taking into consideration the availability of area as the efficiency of green belt in pollution control mainly depends on tree species, its width, distance from pollution sources, side of the habitat from working place and tree height. The proposed green belt should be designed to control PM10, gaseous pollutants, noise, surface run off and soil erosion etc., While considering the above aspects due care should be taken for selecting the suitable characteristics plant species such as fast growing, locally suitable plant species, resistant to specific pollutant and those which would maintain the regional ecological balance, soil and hydrological conditions.

15. 11. 2023



Flora as observed and identified in the field are covered by mostly Neem, Erukku, Panai trees, Palmira tree is found more on regional scale. The Applicant has developed trees like Neem, Pungam, Teak, Caesarians and Eucalyptus, regional trees etc., with Proper nursery garden and plantation on vacant land. The fauna species observed around the 500m radius of the project site is given in the table.

List of Flora observed around the quarry site

(Flora Trees & Flora Shrubs)

Table No: 10

Flora - Trees			
S.No	Tamil Name	Botanical Name	Photograph
1	Neem tree	Azadirachataindica	
2	Panai tree	Borassusflabellifer	
3	MulluMaram	Prosopisjuliflora	
4	Punga Maram	Millettia pinnata	
5	Savukku Maram	Casuarina cunninghamiana	

Flora - Shrubs			
1	Korai	Cyperus Pangorei	
2	Avaram	Senna articulate	
3	Erukku	Calotropis	
4	Mookuthichedi	Tridaxprocumbens	

**List of Fauna observed around the quarry site
(Fauna Mammals & Fauna Avian)**

Table No: 11

Fauna Mammals			
S.No	Common Name	scientific name	Photograph
1	Anil	Funambulus Palmarum	
2	Thavalai	Cane toad	
3	Keeri	Herpestes Edwardsii	
4	Rabbit	Oryctolaguscuniculus	



Avian Fauna			
1	Crow	Corvus Splendens	
2	Myna	Acridotherestrictis	
3	Chittukuruvi	SaxicoloidesFulicatus	
4	Parunthu	Haliastur Indus	

10.0. OTHER PERMANENT STRUCTURES

1. *Habitations / Village Natham (300m)*

- ❖ There are no inhabited sites within the radius of 300m from the boundary of lease area under Rule 36 (1-A) (a) TNMMCR 1959.
- ❖ The Nearest Village habitation is Peruvelli Village which is about 1.5km on Northwest of the Lease applied area.
- ❖ The applicant ensures the quarrying operation will be carried out without any hindrance to the habitants and adjoining land owners.

2. *Power lines (HT/LT) (50m)*

There are no Power lines (HT/LT) within a radius of 50m

3. *Water bodies (River, Pond, Lake, Odai, Channel etc.,) (50m)*

Thangal Kuttai is located in S.F. No. 36/1, Southwest side of the lease applied area, hence safety distance 50 meters has been maintained from the Thangal Kuttai as per condition in precise area letter.

4. *Archeological / Historical Monuments (500m)*

There are no Archeological / Historical Monuments within a radius of 300m from the boundary of lease applied area.

5. *Existence of public road / (SH, NH others), Railway line if any (50m)*

- ❖ There is an existing road from the lease area leads Nallamur Village Road about 50m is Southern side of the lease applied area.

K. S. S. S.



- ❖ NH-179B road Chennai to Viluppuram which is about 9.0 Km on the North West side of the lease applied area.
- ❖ SH-115 Sathupakkam to Cheyyur road is located which is about 2.0 Km on the South side of the lease applied area.
- 6. **The Nearest Railway line**
 - ❖ The nearest railway line is Melmaruvathur station line which is about 10.0Km on the Western side of the area.
- 7. **Places of Worship (Temples, Church, Mosque etc.,) (500m)**
 - ❖ There is no Places of Worship within a radius of 500m.
- 8. **Reserved Forest / Forest / Wild Life Sanctuary etc., (10Km)**
 - ❖ There is no Reserve Forest around 1.0 Kms radius.
- 9. **Any Other Structures: Nil**

11.0. EMPLOYMENT POTENTIAL & WELFARE MEASURES:

11.1. Employment Potential (Management & Supervisory personal)

The following man powers are proposed carry out the day-to-day quarrying activities at the proposed production and also comply with the statutory provision of the MMR 1961.

Management and Supervisor:

1. Second Class Mines Manager (with valid statutory qualification)	: 1 No
2. Mines Foreman (with valid statutory qualification)	: 1 No
3. Mines Mate (with valid statutory qualification)	: 1 No
4. Blaster	: 1 No
5. Hand Jack-Hammer operator	: 12 Nos

Laborers, Skilled, Semi-Skilled & Un-skilled

a. Skilled (Operators- Excavator & Jackhammer)	: 2 Nos
b. Semi-skilled (Driver)	: 5 Nos
c. Unskilled (Musdoor/Labours, Cleaners & Watch man)	: 12 Nos

Total : 35 Nos

Allowing 10% absenteeism, the no. of men of roll will be around 31 Nos.

It is been ensured that, *Child Labours under 18 Years of age will not be engaged for any quarrying operation.*

Necessary Life Insurance policies will be taken by the applicant to all the employees up to the end of the lease period.



11.2. Welfare Measures

a. *Drinking Water*

- ❖ Drinking water is available from the nearby bore wells or from vendors in Nallamur Village which is about 2.0km on Southwest of the Lease applied area

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, 1955 separately for males and females. Washing facilities shall also be arranged as per Rule (36) of Mines Rules, 1955 and it will be maintained periodically.

c. *First Aid Facility*

- ❖ First Aid station as per provisions under Rule (44) of the Mines Rules, 1955 will be provided and First aid kits kept in mines office room, the qualified first aid personnel should be appointed or nominated to attend emergency first aid treatment.
- ❖ In case of eventuality, the victim will be given first aid immediately at the site and the injured person will be taken to the Chithamur Village is about 3.5 Km on Southwestern side. The competent and statutory of Foreman/Mate/Permit Manager will be in charge of the First aid.

d. *Labour Health*

- e. Periodic medical examination has to be arranged for occupational health once in a year in addition to attending medical treatment of occupational injuries under the Rule 45(A), Mines Rules, 1955.

f. *Precautionary safety measures to the Laborers*



- Helmets, Mine Goggles, Ear plugs, Ear muffs, Dust mask, Reflector Jackets, Safety Shoes.

K. S. S. S.



All personnel protective devices will be provided as per the specification approved by Director of mines safety. Periodically medical check-up will be conducted for all workers for any mine health related problems. Proper training and vocational education will be given by qualified and experienced safety officer to all the employees about the safety and systematic rough stone quarrying operations. The drillers and workers will be sent for vocational training periodically, to carry out the quarrying operations scientifically and to safe guard the men and machinery and to create awareness about conventional opencast quarrying operations.

PART - B

12.0. ENVIRONMENT MANAGEMENT PLAN

12.1. Existing Land Use Pattern

The area is exhibiting Plain topography. The applied area is dry barren land and devoid of agriculture and habitations and the area is not used for the specific vegetation. The surrounding area is practiced by the seasonal cultivation.

The existing Land use pattern is given as under

Table No-12

S. No.	Land Use	Present Area (Hect)	Area in use during the quarrying period (Hect)
1.	Quarrying Pit	Nil	2.65.70
2.	Infrastructure	Nil	0.02.00
3.	Roads	Nil	0.02.00
4.	Green Belt	Nil	0.62.80
5.	Unutilized	3.32.50	Nil
	Total	3.32.50 Ha	3.32.50 Ha

12.2. Water Regime

Water Level in this quarry area is noticed at a depth of 70m to 75m below Ground Level, observed nearby bore hole the quarrying of Rough Stone & Gravel is proposed up to a depth of 44m (4m Gravel, & 40m Rough Stone). Hence, it will not affect the quality of ground water depletion of this area.



12.3. Flora and Fauna

The Thorny bushes are placed in quarry area and Neem, Pungam, Panai trees are noticed around the quarry area. Except acacia bushes, no other valuable trees are noticed in the lease applied area. Further, neither flora of botanical interest nor fauna of zoological interest is noticed in this area.

12.4. Climatic conditions

The area receives annual rainfall of about 1105mm to 1214mm and the rainy season is mainly from Oct – Dec receives rain both in south west and north east monsoon. The summer is hot with maximum temperature of 43°C and during winter encounters a minimum temperature of 20°C.

12.5. Human Settlement

The nearest habitations with the population, approx. distance within 5.0Km radius from the proposed quarry site are as given under.

Table No-13

S. No	Name of the Village	Approximate distance	Direction from lease applied area	Approximate population
1.	Zamin Endathur	3.0Km	NE	3014
2.	Netrambakkam	2.0Km	SE	1666
3.	Kolathur	1.0Km	SW	298
4.	Peruvelli	1.5Km	NW	3381

12.6. Plan for Air, Dust Suppression

The air quality will be affected by the Suspended Particulate Matter (SPM) generated by the blasting, jack hammer drilling, loading and unloading during the quarrying operation. The following mitigation measures will be carried out, Mist water spraying will be carried out by means of water sprinklers to suppress dust emission in the Haul roads. The native species of Neem, Pungam, Panai etc., will be planted along the lease boundary and Safety buffer zone. The quarried-out materials will be fully covered by the Tarpaulin during transportation to avoid the spillage of materials. The Air quality will be monitored periodically as per the norms and mitigate measures carried out to prevent dust and air propagation in to the air Operators, those exposed directly to such conditions will be provide such as (PPE) Personnel Protective Equipment's like Dust mask, Ear plug, Helmet, Gloze etc., as per the Mines Act -1952.



Image of the water spray Vehicle



12.7. Plan for Noise Control:

- The quarrying of Rough Stone & Gravel will be carried out by shallow holes of 32 mm diameter and 1.5 m depth using wet drilling and conventional low-power explosives such as slurry explosives with ordinary safety fuses. Hence, ground vibration and noise pollution will be very minimal and restricted within the quarry working area. However, periodical noise level monitoring and other mitigation measures will be undertaken to further reduce noise and vibration in and around the quarry site.
- Noise levels will be regularly monitored, and at no point should the noise exceed the permissible limit of 80 dB during quarry working hours as per CPCB standards.
- Drivers will be strictly instructed to maintain a maximum speed of 40 km per hour during transportation to minimize noise and vibration. Sentries with red flags and whistles will be stationed at village junctions to regulate traffic and ensure public safety.
- Blasting operations will be scheduled only during daytime and will be carried out with proper delay detonators to reduce vibration and noise impact.
- All heavy vehicles and machinery will be periodically serviced and maintained in good condition to avoid unnecessary noise generation.
- Use of silencers and mufflers in diesel engines will be strictly enforced to control vehicular noise.
- Workers exposed to high noise areas will be provided with Personal Protective Equipment (PPE) such as earplugs and earmuffs.



- Greenbelt development along the lease boundary with dense plantation of Neem, Pungan, and other native species will act as a natural acoustic barrier.
- Awareness training programs will be conducted for workers and drivers regarding safe blasting practices, controlled vehicle movement, and noise control measures.
- A grievance redressal mechanism will be maintained for local residents to report any noise or vibration disturbance, and corrective measures will be taken immediately.

12.8. Environmental Impact Assessment Statement Describing Impact on mining on the Five years

- ❖ The mining plan proposed is for a small production of Rough Stone & Gravel without involving deep hole drilling and heavy blasting. Such limited mining activity is not likely to cause any impact adversely on environment as far as pollution of air, Water and noise is concerned, anyhow environmental impact studies will be conducted as per EIA notification issued by MOEF. It is B2 Category of mine.

12.9. Proposal for Waste Management

There are no wastes anticipated during this Rough Stone & Gravel quarry operation. The quarried-out materials 100% will be utilized.

12.10. Proposal of Reclamation of Land affected during mining activities and at the end of mining (refilling/fencing etc.)

In the proposed mining plan only a maximum depth of 44m (4m Gravel, & 40m Rough Stone) has been envisaged as workable depth for Safe & Economic mining during the lease period. Hence, after quarry reaches Ultimate Pit Limit (for this lease period) of 44m (4m Gravel, & 40m Rough Stone), Barbed wire fencing will be constructed around the quarried pits to prevent inherent entry of the public and cattle.

12.11. Program for Afforestation:

The 7.5m, 10m & 50m safety distance along the lease boundary has been identified to be utilized for Afforestation in a phased manner as described below:



Table - 14

Years	No. of trees proposed to be planted	Survival %	Area to be covered sq.m	Name of the species	No. of trees expected to be grown
I	150	80	1350	Neem, Pongamia Pinnata, Casuarina, etc.,	120
II	150	80	1350		120
III	150	80	1350		120
IV	150	80	1350		120
V	150	80	1350		120

- Nearly 6280 Sq.m area is proposed to use under Afforestation by planting 150Nos of Neem Saplings etc., every year in the spacing interval of (3m X 3m) with an anticipated survival rate of 80%.
- Appropriate native species of Neem, Pungan, Teak and Casuarinas Saplings will be planted approach roads, service roads, nearby villages, village roads, government school etc.,
- Saplings of local plants of regional trees will be planted as per the consultation of the local Forest Department.
- The Quarry Land use, Layout and Afforestation Plan are showing in Plate No. V.

12.12. Proposed Financial Estimate / Budget for (EMP) Environment Management

Table - 15

S.No	Monitory and Analysis Description	Rate per location	No. of location	Total Charges for monitoring		
				6 months	Per Year	5 Years
1	Ambient Air quality monitoring	6500	4	26000	52000	260000
2	Water sampling and analysis	9000	1	9000	18000	90000
3	Noise level monitoring	250	4	1000	2000	10000
4	Ground vibration monitoring	1000	2	2000	4000	20000
Total EMP Cost				38000	76000	3,80,000

The Environment Monitoring EMP Studies Cost would be around Rs. 3,80,000/- for a period of 5 Years only.



I. Project Cost & Investment:

1) Land cost

It is a Consent Patta land, the approximate present land cost is about Rs.5,00,000/- per Acres hence the land cost is calculated as Rs. 17,00,000/-

2) Refilling/ Fencing

There is no proposal for Refilling, after the excavation of Rough Stone & Gravel the quarried-out land will be fenced with barbed wire fencing the cost would be around Rs.1,75,000/-.

3) Laborers shed

Labours are proposed for quarrying Rough Stone & Gravel. The machine Operators and workers are from nearby local villages; hence no cost is involved. Rest shelter will be constructed as semi-permanent structure at the cost of Rs.1,10,000/-

4) Sanitary facility

Sanitary facility will be constructed as semi-permanent structure, the cost will be around Rs.1,00,000/-.

II. Machinery to be used:

The Machineries like Jack Hammer, Tractor mounted compressor attached with Jack hammer, Excavator of 0.9m³ bucket capacity attached with Rock Breaker are proposed to deploy for quarrying operation and Tippers/Trucks of 10/2Tons capacity will be used for the quarrying transportation for hired basis, the cost will be around Rs.25,00,000/-.

I. Fixed Asset Cost:

1. Land cost	= Rs. 17,00,000/-
2. Refilling/Fencing cost	= Rs. 1,75,000/-
3. Rest shelter	= Rs. 1,10,000/-
4. Sanitary Facility	=Rs. 1,00,000/-

II. Machinery Cost: -

	=Rs. 25,00,000/-
Total Project Cost	=Rs. 45,85,000/-



III. Expenditure:

1) *Drinking Water facility and other utilities for the labourers*

Packaged drinking water will be provided for all the Labours. Drinking water will be readily available at conveniently accessible points during the whole of the working shift the cost would be around Rs. 2,00,000/-

2) *Sanitary arrangement*

The latrine and urinal will keep clean and sanitary condition. The maintenance cost would be around Rs. 1,00,000/-

3) *Safety kits*

All the Safety kit such as Helmet, Earmuffs, Goggles, Reflector Jackets, Safety shoes etc., will be provided to the workers by the applicant own cost which would be around Rs. 1,00,000/-

4) *Water sprinkling (if necessary)*

Water will be sprinkled in the haul roads by water sprinklers the cost would be around Rs. 2,00,000/-

5) *Afforestation etc.,*

Afforestation is proposed within safety zones of the lease applied area and plantations will be carried out on the nearby villages and village roads, Govt School after consultation with the Panchayat authorities. The cost estimate is around Rs.1,50,000/-

Expenditure:

1. Drinking water	= Rs. 2,00,000/-
2. Sanitary Arrangements	= Rs. 1,00,000/-
3. Safety kits	= Rs. 1,00,000/-
4. Water Sprinkling	= Rs. 2,00,000/-
5. Afforestation cost	= Rs. 1,50,000/-

Environment Monitoring /5Years:

1) Air Quality Sampling	= Rs. 2,60,000/-
2) Water Quality Sampling	= Rs. 90,000/-
3) Noise Level Monitoring	= Rs. 10,000/-
4) Ground vibration test	= Rs. 20,000/-



EMP Cost Total (Expenditure Including EMP Studies)	= Rs. 11,30,000/-
Total Project Cost + EMP	= Rs. 57,15,000/-

12.13 Corporate Environment Responsibility (CER):

- ❖ The Applicant shall distribute Note books, Stationary items to nearby Govt Primary School and to conduct the medical camp, Environment awareness program, etc., to nearby villages after consultation with local panchayat authorities.
- ❖ The Applicant shall ensure that a minimum of 2.0% from the Total project cost (Rs.1,15,000/-) for the entire lease period will be utilized for the CER Activities.
- ❖ *District Mineral Fund @10% of the Royalty shall be given to the Dept. of Geology and Mining.*

13.0. MINE CLOSURE PLAN

13.1. Steps proposed for phased restoration, reclamation of already mined out area.

- ❖ This conventional Systematic, Scientific and Eco-Friendly quarrying operation for a depth of 44m (4m Gravel, & 40m Rough Stone) and not required any Backfill, Reclamation and Rehabilitation, the quarried-out lands will be used for Water storage/ Recharge purpose.
- ❖ The mined-out area will be fenced on top of open cast working with wire fencing to arrest the entry of cattle and public in to the quarry site.

13.2. Measures to be under taken on mine closure as per Act & Rules.

Measure will be taken as per Act & Rules. The quarried pit will be fenced by using Barbed wire fencing to prevent inherent entry of public and cattle.

13.3. Mitigation measures to be undertaken for safety and restoration/ reclamation of the already mined out area.

Air Quality:

- Air quality may get slightly degraded due to drilling, blasting, mining operations, and transportation activities.
- Drilling will be carried out in wet drilling mode to control dust propagation into the air.



- Blasting will be carried out on a limited scale, with proper precautions to minimize dust and gaseous emissions.
- Mist water spraying on haul roads is proposed to suppress dust generation and to maintain ambient air quality.
- Greenbelt development around the lease boundary will act as a natural barrier for dust dispersion and help in improving air quality.
- Periodic air quality monitoring will be carried out to ensure compliance with prescribed standards of the Central Pollution Control Board (CPCB).
- Transportation of minerals will be regulated by covering the trucks with tarpaulin sheets to avoid fugitive dust emissions.
- Vehicle movement inside the quarry will be maintained at low speed to minimize dust raising from haul roads.

Noise and Vibration:

- Noise will be generated mainly from drilling, blasting, loading, unloading, and movement of vehicles and machinery.
- The applicant has proposed to plant native species such as Neem along the safety zone, which will act as a natural barrier against noise.
- Wet drilling will be practiced not only to control dust emission but also to reduce noise during operations.
- All vehicles and machinery will be maintained in good condition and operated as per RTO and TNPCB norms to minimize noise, smoke, and vibration.
- Noise levels will be monitored regularly and maintained below the permissible limit of 80 dB (decibel) in working zones.
- Controlled blasting techniques with proper delay detonators will be adopted to minimize ground vibration and reduce noise levels.
- Personal protective equipment (PPE) such as ear plugs and ear muffs will be provided to workers exposed to high noise areas.
- Blasting operations will be carried out only during daytime and with prior intimation to nearby residents, if any.
- Speed limits will be imposed for vehicles inside the quarry to minimize vibration and noise due to traffic.
- Periodical monitoring of noise and vibration will be undertaken, and necessary corrective measures will be implemented if levels exceed prescribed standards.



Water Regime:

- The quarrying operation is proposed up to a maximum depth of 44m (4m Gravel, & 40m Rough Stone), which is well above the groundwater table (75m during summer and 70 m during rainy seasons). The proposed period of mining is only 5 years; hence, the groundwater table will not be affected in any manner.
- The seepage and rainwater collected in the quarry pit will be drained out by a 5 H.P. motor pump and passed through a filter media before being discharged to the boundary barrier for afforestation. Excess water will be utilized for dust suppression by spraying on haul roads to control air pollution.
- The Rough Stone & Gravel quarry will not generate any harmful or toxic effluents in the form of solid, liquid, or gas that may pollute the water regime.
- Garland drains and check dams will be constructed along the quarry boundary to prevent surface runoff and to avoid siltation in nearby lands.
- Stormwater management measures will be implemented to ensure that rainwater is properly diverted and utilized without causing soil erosion or water stagnation.
- Water consumption for quarry operations will be limited to dust suppression, greenbelt development, and domestic needs of the workers. No groundwater extraction is proposed for the quarry operations.
- Drinking water for workers will be sourced from approved local suppliers to ensure potable water quality.
- Regular monitoring of water quality in nearby open wells and bore wells will be carried out to assess any changes, and reports will be maintained as per TNPCB/CPCB guidelines.
- Adequate measures will be taken to ensure that quarry activities do not contaminate surface water or groundwater resources.
- Rainwater harvesting measures will be encouraged within the lease area to improve groundwater recharge in the long run.



14.0. ANY OTHER DETAILS INTEND TO FURNISH BY THE APPLICANT

- i. This Mining Plan for Rough stone (Charnockite) & Gravel Quarry is prepared under amended Rules 41 & 42 of Tamil Nadu Minor Mineral Concession Rules 1959.
- ii. The measures will be taken as per Mines Act & Mine Rules and Regulations and orders made there under shall be complied with, so that the safety of mine, machinery and mine workers will be protected.
- iii. It is expected that the mining will be done skillful, systematically, scientifically, and Eco-friendly quarrying operation.
- iv. There are no deep hole drilling and heavy blasting of this lease area.
- v. The Applicant will endeavor every attempt to quarry the Rough Stone & Gravel economically without any wastage and to improve the environment and ecology.
- vi. Any violation pointed out by the inspecting authorities shall be rectified as per the guidelines of the Department.

Prepared by

N. Suresh
Signature of Qualified Person

Place : Salem

Date :

This Mining Plan is approved subject to the condition / stipulations indicate in the Mining Plan approval

Letter No. 131/Mines/2025

Dated. 19.11.2025

N. SURESH, M.Sc., (Geology)
Qualified Person

This Mining Plan is approved as per the powers conferred Under Rule 41 (2) of Tamil Nadu Minor Mineral Concession Rules, 1959

S. Jeyaraman
15/11/2025
**Assistant Director of Geology and Mining,
Chengalpattu District.**

10.07/25
19/11/25

நக.எண்.131/கனிமம்/2025
நாள்.30.10.2025.

உதவி இயக்குநர் அலுவலகம்,
புவியியல் மற்றும் சுரங்கத்துறை,
செங்கல்பட்டு.



குறிப்பாணை

பொருள்:- கனிமங்களும் குவாரிகளும் - சிறுகனிமங்கள் - சாதாரண கற்கள் மற்றும் கிராவல் - செங்கல்பட்டு மாவட்டம் - மதுராந்தகம் வட்டம் - நல்லாமுர் மதுரா கொளத்தூர் கிராமம் - பட்டா புல எண்கள். 37/15, 37/16, 37/18(P), 37/19(P), 37/20, 37/21, 37/22, 37/23(P) - மொத்த பரப்பு 3.32.50 ஹெக்டேர்ஸ் பரப்பில் சாதாரண கற்கள் மற்றும் கிராவல் குவாரி செய்ய தி/ள். ஓம் விநாயகா சப்ளையர் என்ற நிறுவனத்தினர் 10 ஆண்டுகளுக்கு அனுமதி கோரி விண்ணப்பம் செய்தது - கள அலுவலர்களின் அறிக்கைகள் வரப்பெற்றது - குவாரி குத்தகை உரிமம் வழங்க தகுதியான நிலப்பரப்பாக கருதி, மனுதாரரின் கோரிக்கையின் அடிப்படையில் 05 ஆண்டுகளுக்கு உரிமம் வழங்க ஏற்பளிக்கப்பட்ட சுரங்கதிட்டம் மற்றும் சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணைய தடையின்மை சான்று பெற்று சமர்ப்பிக்க கோருதல் - தொடர்பாக.

- பார்வை:-
1. அரசாணை எண். Ms.No.169, தொழில் (எம்.எம்.சி.1) துறை, நாள். 04.08.2020.
 2. தி/ள்.ஓம் விநாயகா சப்ளையர், திரு.கோ.தஷ்ணாமூர்த்தி (உரிமையாளர்), பிளாட் எண்.14, GF7, எஸ்.வி.காம்ப்ளாக்ஸ், வந்தவாசி ரோடு, சோத்துப்பாக்கம், செய்யூர் வட்டம், செங்கல்பட்டு மாவட்டம் 603 319 என்ற நிறுவனத்தினரின் விண்ணப்பம் நாள்.26.03.2025
 3. இவ்வலுவலக நக.எண்.131/கனிமம்/2025, நாள்.26.03.2025.
 4. அரசாணை எண். Ms.No.37, இயற்கைவளங்கள் (எம்.எம்.சி.1) துறை, நாள்.22.04.2025
 5. வட்டாட்சியர் மதுராந்தகம் அவர்களின் கடித நக.எண்.1659-2025-அ1 நாள்.29.05.2025
 6. மதுராந்தகம் வருவாய் கோட்டாட்சியர் அவர்களின் கடித நக. எண். நக.எண்.1286/2025/ஆ நாள். 06.09.2025.
 7. தி/ள்.ஓம் விநாயகா சப்ளையர் என்ற நிறுவனத்தினரின் மனு நாள்.16.09.2025
 8. உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, செங்கல்பட்டு அவர்களின் புலத்தணிக்கை அறிக்கை நாள்.18.09.2025.
 9. மற்றும் தொடர்புடைய ஆவணங்கள்.

[Handwritten signature]



பார்வையில் காணும் கடிதங்களின்பால் கனிவான

கவனம்

வேண்டப்படுகிறது.

2. செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், நல்லாமூர் கிராமம், பட்டா புல எண்கள். 37/15 (1.61.50), 37/16 (0.24.50), 37/18(பு) (0.16.00), 37/19(பு) (0.06.50), 37/20 (0.18.00), 37/21 (0.36.50), 37/22 (0.29.00), 37/23(பு) (0.40.50) மொத்தப் பரப்பு 3.32.50 ஹெக்டேர் பட்டா நிலத்தில் சாதாரண கற்கள் மற்றும் கிராவல்மண் வெட்டியெடுக்க தி/எ.ஓம் விநாயகா சப்ளையர், திரு.கோ.தஷ்ணாமூர்த்தி (உரிமையாளர்) என்பவர் பத்து ஆண்டுகளுக்கு குவாரி குத்தகை உரிமம் கோரி 26.03.2025 நாளிட்ட மனுவின் மூலம் தமிழ்நாடு சிறுகனிமச் சலுகை விதிகள் 1959 விதி எண்.19(1)-ன் கீழ் விண்ணப்பம் செய்துள்ளனர். மேலும் தி/எ.ஓம் விநாயகா சப்ளையர், திரு. கோ.தஷ்ணாமூர்த்தி (உரிமையாளர்) என்ற நிறுவனத்தினரின் 16.09.2025 நாளிட்ட கடிதத்தில், பத்து ஆண்டுகளுக்கு அனுமதி கோரிய விண்ணப்பத்தினை ஐந்தாண்டுகளுக்கு மட்டும் குவாரிப்பணி மேற்கொண்டு சாதாரணகற்கள் மற்றும் கிராவல் மண் வெட்டியெடுக்க அனுமதி வழங்குமாறு கோரியுள்ளார்.

3. மேற்கண்ட விண்ணப்பம் தொடர்பாக, வருவாய் கோட்டாட்சியர், மதுராந்தகம், மற்றும் உதவி இயக்குநர், புனியியல் மற்றும் சுரங்கத்துறை, செங்கல்பட்டு ஆகியோர் புலத்தணிக்கை மேற்கொண்டு அறிக்கைகளின் அடிப்படையில் செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், நல்லாமூர் மதுரா கொளத்தூர் கிராமம், புல எண்கள். 37/15 (1.61.5), 37/16 (0.24.5), 37/18 (பகுதி) (0.16.0), 37/19 (பகுதி) (0.06.5), 37/20 (0.18.0), 37/21 (0.36.5), 37/22 (0.29.0) மற்றும் 37/23 (பகுதி) (0.40.5) மொத்த விஸ்தீரணம் 3.32.50 ஹெக்டேரில் மட்டும் சாதாரண கற்கள் மற்றும் கிராவல் வெட்டியெடுக்க தி/எ. ஓம் விநாயகா சப்ளையர் என்ற நிறுவனத்தினருக்கு கீழ்க்கண்ட நிபந்தனைகளுக்கு உட்பட்டு அனுமதி வழங்கலாம் என அறிக்கை அளித்துள்ளனர்.

K. S. S.



நிபந்தனைகள்

- 1959-ம் வருடத்திய தமிழ்நாடு சிறு கனிம சலுகை விதிகள், அட்டவணை II-ல் கண்டுள்ளபடி குவாரி செய்யப்படும் கனிமங்களுக்கு சீனியரேஜ் தொகை மற்றும் இதர கட்டணங்களை அவ்வப்போது செலுத்தி கனிமம் கொண்டு செல்லப்பட வேண்டும்.
- அனுபவம் வாய்ந்த வெடிபொருள் பயன்படுத்துவோர் மூலம் குறைந்த அளவு சக்தி கொண்ட வெடிபொருட்களை பயன்படுத்தி அருகிலுள்ள பட்டா தாரர்களுக்கு எவ்வித இடையூறுமின்றி / அருகிலுள்ள பட்டா மற்றும் அரசு புலங்களில் எவ்வித ஆக்கிரமிப்பும் இன்றி குவாரிப் பணி மேற்கொள்ள வேண்டும்.
- விண்ணப்பப் புலங்களைச் சுற்றியுள்ள பட்டா நிலங்களுக்கு 7.5 மீட்டரும், அரசு புறம்போக்கு நிலங்கள், வண்டிப்பாதை மற்றும் மேய்க்கால் நிலங்களுக்கு 10 மீட்டர் பாதுகாப்பு இடைவெளி விட வேண்டும். மேலும் விண்ணப்பப் புலத்திற்கு தென்மேற்கே புல எண்.36/1-ல் உள்ள தாங்கல் குட்டைக்கு 50 மீட்டர் பாதுகாப்பு இடைவெளிவிட்டு குவாரிப்பணி மேற்கொள்ளப்பட வேண்டும்.
- 1959 ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.41-ன் படி ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தினை 90 தினங்களுக்குள் விண்ணப்பதார நிறுவனம் சமர்ப்பிக்க வேண்டும்.
- 1959 ம் வருடத்திய தமிழ்நாடு சிறுகனிம சலுகை விதிகள், விதி எண்.42-ன்படி விண்ணப்ப புலத்திற்கு மாநில அளவிலான சுற்றுச் சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் சுற்றுச்சூழல் ஒப்புதல் பெற்று சமர்ப்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும்.

4. இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, சென்னை அவர்களின் 10.08.2020 நாளிட்ட கடிதத்துடன் இணைத்து வரப்பெற்ற அரசாணை எண்.169 தொழில் துறை (எம்.எம்.சி-1) நாள் 04.08.2020-ன்படி பட்டா புலங்களில் கிராவல்மண் சாதாரண வகை கற்கள் ஆகிய சிறுகனிம உரிமம் வழங்கும் நேர்வுகளில் நடவடிக்கை எடுக்க விதி எண்.19 மற்றும் 33-ல் மாவட்ட ஆட்சியருக்கு வழங்கப்பட்ட அதிகாரம் தற்போது சம்மந்தப்பட்ட உதவி/ துணை இயக்குநர் அவர்களுக்கு மாற்றி வழங்க உத்திரவிடப்பட்டுள்ளது.

5. எனவே, வருவாய் கோட்டாட்சியர், மதுராந்தகம், மற்றும் உதவி இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, செங்கல்பட்டு ஆகியோரின்

K. S. S.

பரிந்துரை மற்றும் நிபந்தனைகளின் அடிப்படையில் செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், நல்லாமூர் மதுரா கொளத்தூர் கிராமம், புல எண்கள், 37/15 (1.61.5), 37/16 (0.24.5), 37/18 (பகுதி) (0.16.0), 37/19 (பகுதி) (0.06.5), 37/20 (0.18.0), 37/21 (0.36.5), 37/22 (0.29.0) மற்றும் 37/23 (பகுதி) (0.40.5) மொத்த விஸ்தீரணம் 3.32.50 ஹெக்டேர் பரப்பில் 1959-ம் வருட தமிழ்நாடு சிறுகனிம விதிகள், விதி எண்.19(1), 20, 33-ன்படி கீழ்க்கண்ட நிபந்தனைகளுக்குட்பட்டு, மனுதாரரின் கோரிக்கையின் அடிப்படையில் 05 (ஐந்து) வருட காலத்திற்கு தி/ள்.ஓம் விநாயகா சப்ளையர் என்ற நிறுவனத்தினருக்கு சாதாரண கற்கள் மற்றும் கிராவல் குவாரி உரிமம் வழங்குவதற்குரிய தகுதியான நிலப்பரப்பாக கருதப்படுகிறது.

6. மேலும், தமிழ்நாடு சிறுகனிம சலுகை விதிகள் -1959 விதி எண்.41-ன்படி குவாரிப் பணி மேற்கொள்வது தொடர்பாக வரைவு சுரங்க திட்டத்தினை 90 தினங்களுக்குள் சமர்ப்பிக்குமாறு மனுதாரரைக் கேட்டுக் கொள்ளப்படுகிறது. மேலும் ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டத்தின் தொடர்ச்சியாக 1959-ம் வருடத்திய தமிழ்நாடு சிறு கனிம சலுகை விதிகள், விதி எண்.42-ன்படி மாநில அளவிலான சுற்றுச் சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் தடையின்மை சான்று பெற்று சமர்ப்பிக்கும் பட்சத்தில் மட்டுமே குவாரி உரிமம் வழங்கப்படும் என இதன் மூலம் தெரிவிக்கப்படுகிறது.

ச. சூரணம்
30/10/2025
உதவி இயக்குநர்,
புவியியல் மற்றும் சுரங்கத்துறை,
செங்கல்பட்டு.

பெறுநர்

தி/ள்.ஓம் விநாயகா சப்ளையர்,
திரு. கோ.தஷ்ணாமூர்த்தி (உரிமையாளர்),
பிளாட் எண்.14, GF7, எஸ்.வி.காம்பளாக்ஸ்,
வந்தவாசி ரோடு,
சோத்துப்பாக்கம், செய்யூர் வட்டம்,
செங்கல்பட்டு மாவட்டம் 603 319.

நகல்.

1. தலைவர், மாநில சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையம், சென்னை.
2. இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, சென்னை-32.

ச. சூரணம்



Survey: FAE 22, Nov 20

District

C. L. England

Village

No. 242

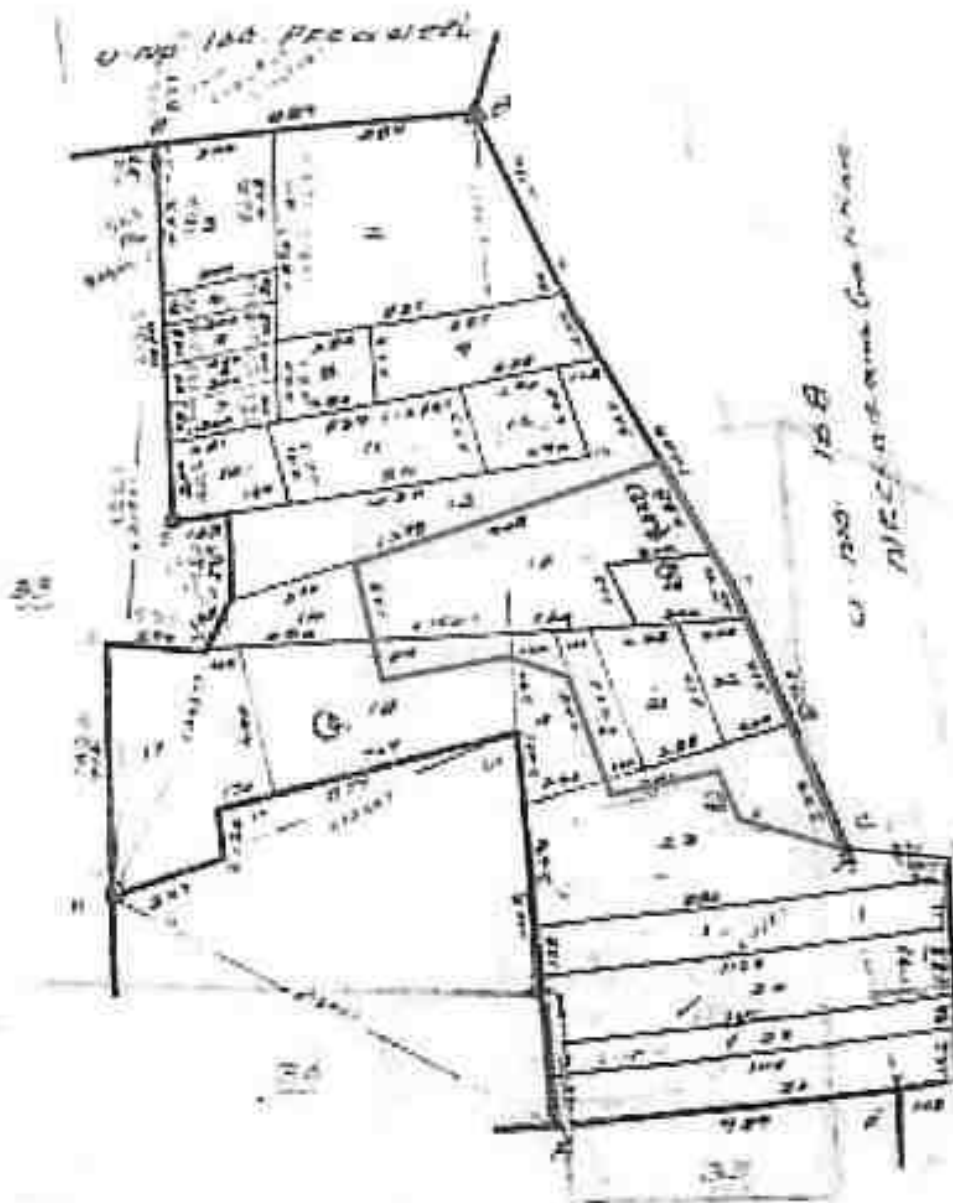
Taluk

Remained in the city for a few days.

Name, *Michael J. ...*

Field No. 37

Area 35 50 Ad



		B (1754)	
		1175	4 4-1
		1476	42 (5)
		B	
		2734	
		763	242
		496	124
		11	
		111583	
		387	
		227	12
		H	
		C	
		111583	
		744	242
		2	
		111583	
		306	
		H	
		111583	
		247	242
		B	
		111583	
		223	
		1120	12
		C	
		3	
		111583	
		48	122
		2	
		111583	
		28	
		C	
		H	
		111583	
		114	242
		1086	98
		1247	122
		70	
		202	212

1. உயிரினங்களின் பரம்பரை

Five-point

V. Ernst

26/1/1990
 190. 26/1/1990
 190. 26/1/1990

N. SURESH, M.Sc., (Geology)

Qualified Person

Lease Applied Area

N. Suresh

N. SURESH, M.Sc., (Geology)
Qualified Person

No. 173
ENDATHUR

No. 189
OZAVETTI

NETRAMBAKKAM VILLAGE

PERUVALI VILLAGE

NALLAMUR VILLAGE





தமிழ்நாடு அரசு
தமிழ்நாடு அரசுப் புதிய அரசாங்கப் பிணியைப் பிடிக்க
இலங்கைப் புதிய அரசாங்கப் பிணியைப் பிடிக்க



தமிழ்நாடு அரசு

தமிழ்நாடு அரசுப் புதிய அரசாங்கப் பிணியைப் பிடிக்க

தமிழ்நாடு அரசு

தமிழ்நாடு அரசுப் புதிய அரசாங்கப் பிணியைப் பிடிக்க

தமிழ்நாடு அரசு

தமிழ்நாடு அரசுப் புதிய அரசாங்கப் பிணியைப் பிடிக்க

தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு
தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு	தமிழ்நாடு அரசு
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153	154	155	156	157	158	159	160
161	162	163	164	165	166	167	168
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217	218	219	220	221	222	223	224
225	226	227	228	229	230	231	232
233	234	235	236	237	238	239	240
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249	250	251	252	253	254	255	256
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905	906	907	908	909	910	911	912
913	914	915	916	917	918	919	920
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929	930	931	932	933	934	935	936
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945	946	947	948	949	950	951	952
953	954	955	956	957	958	959	960
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969	970	971	972	973	974	975	976
977	978	979	980	981	982	983	984
985	986	987	988	989	990	991	992
993	994	995	996	997	998	999	1000

தமிழ்நாடு அரசு



தமிழ்நாடு அரசு / தமிழ்நாடு அரசுப் புதிய அரசாங்கப் பிணியைப் பிடிக்க
தமிழ்நாடு அரசு / தமிழ்நாடு அரசுப் புதிய அரசாங்கப் பிணியைப் பிடிக்க

https://services.tn.gov.in/services/newland/chittaExtract_en.html?lang=en

தமிழ்நாடு அரசு / தமிழ்நாடு அரசுப் புதிய அரசாங்கப் பிணியைப் பிடிக்க

தமிழ்நாடு அரசு / தமிழ்நாடு அரசுப் புதிய அரசாங்கப் பிணியைப் பிடிக்க

K. J. S.

https://services.tn.gov.in/services/newland/chittaExtract_en.html?lang=en



அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : செங்கல்பட்டு

வட்டம் : மதுராந்தகம்

கிராமம் : நல்லாமூர்

1. புல எண்	37	9. மண் வயனமும் ரகமும்	7 - 4
2. உட்பிரிவு எண்	15	10. மண் தரம்	6
3. பழைய புல உட்பிரிவு எண்		11. தீர்வை (அ + ஹெ)	1.85
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 61.50
5. அரக / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (அ + ஹெ)	3.00
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	1604
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இடு போகமா	-	16. பெயர்	1.நவீன் எண்டர்யிரைசஸ் நிறுவனத்தின் பங்குதாரர்களில் ஒருவரான
			2.சோம சேகர் ரெட்டி

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை.
இவற்றை நாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில்
35/07/190/37/15/30011 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி
செய்துகொள்ளவும்.

k. An



அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : செங்கல்பட்டு

வட்டம் : மதுராந்தகம்

இராமிம் : நல்லாமூர்

1. புல எண்	37	9. மண் வயனறம் ரகமும்	7 - 4	
2. உட்பிரிவு எண்	16	10. மண் தரம்	6	
3. பழைய புல உட்பிரிவு எண்	16	11. தீர்வை (ரூ - செ))	1.85	
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 24.50	
5. ஊரக / ஏயத்துவாரி	ஏயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.45	
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	1604	
7. பாசன ஆதாரம்	-	15. குறிப்பு	-	1.நவீன எண்டர்பிரைசஸ் நிறுவனத்தின் பங்குதாரர்களில் ஒருவரான
8. இது போகமா	-	16. பெயர்		2.சோம சோகர் ரெட்டி

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மீள் பதிவேட்டிலிருந்து பெறப்பட்டன.
1. இவற்றை நாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில்
35/07/190/37/16/30011 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி
செய்துகொள்ளவும்.

K. S. S.



அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : செங்கல்பட்டு

வட்டம் : மதுராந்தகம்

கிராமம் : நல்லாலூர்

1. புல எண்	37	9. மண் வயனமும் ரகமும்	7 - 4
2. உட்பிரிவு எண்	18	10. மண் தரம்	6
3. பழைய புல உட்பிரிவு எண்		11. தீர்வை (ரூ - பை)	1.85
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 85.50
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	1.58
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	1604
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இடு பொருள்	-	16. பெயர்	1.நவீன் எண்டர்பிரைசஸ் ரிறுவனத்தின் பங்குதாரர்களில் ஒருவரான
			2.சோம சேகர் செட்டி

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் தகவல் விவரங்கள் மீள் பதிவேட்டிலிருந்து பெறப்பட்டவை.
1. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில்
35/07/190/37/18/30011 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி
செய்துகொள்ளவும்.

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அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : செங்கல்பட்டு

வட்டம் : மதுராந்தகம்

கிராமம் : நல்லாமூர்

1. புல எண்	37	9. மண் வயனமும் ரகமும்	7 - 4	
2. உட்பிரிவு எண்	19	10. மண் தரம்	6	
3. பழைய புல உட்பிரிவு எண்	19	11. தீர்வை (ரூ - மெ) -	1.85	
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 30.50	
5. அரக / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.56	
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	1604	
7. பாசன ஆதாரம்	-	15. குறிப்பு	-	
8. இரு பொருள்	-	16. பெயர்		1.நவீன எண்டர்பிரைசஸ் நிறுவனத்தின் பங்குதாரர்களில் ஒருவரான
				2.சோம சேகர் ரெட்டி

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டன.
1. இவற்றை நாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில்
35/07/190/37/19/30011 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி
செய்துகொள்ளவும்.

k. A. A.



அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : செங்கல்பட்டு

லட்டம் : மதுராந்தகம்

கிராமம் : நல்லாமூர்

1. புல எண்	37	9. மண் வயனமும் ரகமும்	7 - 4
2. உட்பிரிவு எண்	20	10. மண் தரம்	6
3. பழைய புல உட்பிரிவு எண்	20	11. தீர்வை (ரூ - ரொ)	1.85
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 18.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.34
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	1604
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இறு போகமா	-	16. பெயர்	1.நவீன் எண்டர்பிரைசஸ் நிறுவனத்தின் பங்குதாரர்களில் ஒருவரான
			2.சோம சேகர் ரெட்டி

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை.
இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில்
35/07/190/37/20/30011 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி
செய்துகொள்ளவும்,

k. S. S.



அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : செங்கல்பட்டு

வட்டம் : மதுராந்தகம்

கிராமம் : நல்லாமூர்

1. புல எண்	37	9. மண் வயனமும் ரகமும்	7 - 4	
2. உட்பிரிவு எண்	21	10. மண் தரம்	6	
3. பழைய புல உட்பிரிவு எண்	-	11. தீர்வை (ரூ - ஹெ)	1.85	
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 36.50	
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரூ - பை)	0.68	
6. நிலத்தின் வகை	புஞ்சை	14. பட்டா எண்	1604	
7. பாசன ஆதாரம்	-	15. குறிப்பு	-	
8. இறு போகமா	7	16. பெயர்	1.நவீன் எண்டர்யிரைசஸ் நிறுவனத்தின் பங்குதாரர்களில் ஒருவரான	2.சோம சேகர் ரெட்டி

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை.
1. இவற்றைத் தாங்கள் <https://eservices.tn.gov.in> என்று இணைய தளத்தில்
35/07/190/37/21/30011 என்ற குறிப்பு எண்ணை உள்ளிடு செய்து உறுதி
செய்துகொள்ளவும்.

-k ent-



அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : செங்கல்பட்டு

வட்டம் : மதுராந்தகம்

கிராமம் : நல்லாழார்

1. புல எண்	37	9. மண் வயனமும் ரகமும்	7 - 4
2. உட்பிரிவு எண்	22	10. மண் தரம்	6
3. பழைய புல உட்பிரிவு எண்		11. நீர்வை (ரூ - செ) -	1.85
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	0 - 29.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த நீர்வை (ரூ - பை)	0.54
6. நிலத்தின் வகை	பஞ்சை	14. பட்டா எண்	1604
7. பாசன ஆதாரம்	-	15. குறிப்பு	-
8. இது போகமா	-	16. பெயர்	1.நவீன் எண்டர்பிரைசஸ் நிறுவனத்தின் பங்குதாரர்களில் ஒருவரான
			2.சோம சேகர் ரெட்டி

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மீன் பதிவேட்டிலிருந்து பெறப்பட்டன.
1. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில்
35/07/190/37/22/30011 என்ற குறிப்பு எண்ணை உள்ளீடு செய்து உறுதி
செய்துகொள்ளவும்.

k. S. S.



அ-பதிவேடு விவரங்கள் - ஊரகம்

மாவட்டம் : செங்கல்பட்டு

வட்டம் : மதுராந்தகம்

கிராமம் : நல்லாழமர்

1. புல எண்	37	9. மண் வயனமும் செழும்	7 + 4
2. உட்பிரிவு எண்	23	10. மண் தரம்	6
3. பண்டிய புல உட்பிரிவு எண்	23	11. தீர்வை (ரு - ஹெ)	1.85
4. பகுதி	-	12. பரப்பு (ஹெக்டேர் - ஏர்)	1 - 50.00
5. அரசு / ரயத்துவாரி	ரயத்துவாரி	13. மொத்த தீர்வை (ரு - வை)	2.78
6. நிலத்தின் வகை	புஞ்சா	14. பட்டா எண்	1604
7. பாசன அடாரம்	-	15. குறிப்பு	-
8. இரு போகமா	-	16. பெயர்	-
		1. நவீன எண்டர்பினைசஸ் ரிடுவனத்தின் பங்குதாரர்களில் ஒருவரான	2. சோய சேகர் செட்டி ஒருவரான

குறிப்பு:



மேற்கண்ட தகவல் / சான்றிதழ் நகல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டவை.
1. இவற்றை தாங்கள் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில்
35/07/190/37/23/30011 என்ற குறிப்பு எண்ணை உள்ளிடு செய்த உறுதி
செய்துகொள்ளவும்.

k. A. S.

1435 - ஆம் பக்கத்தில்

செய்தியை மாற்றும்

மதுரை

மார்ச் 19



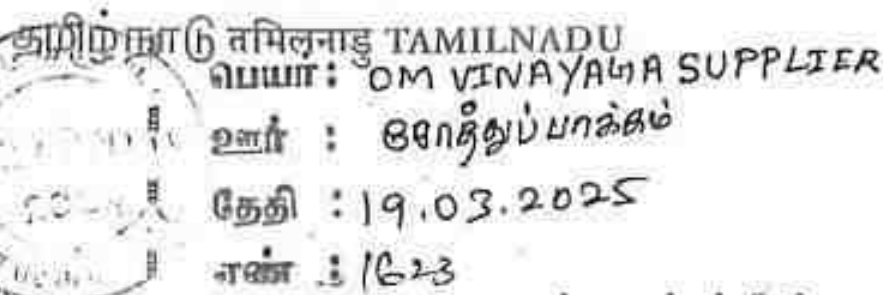
28/03/20

பின் வரித் திட்ட நிதிச் செலவுகள் வரவுகள் விவரம்					மாற்றம் பெறும்	முதல் போகும்					
(1)	(2)	(3)	(4)	(5)		(7)	(8)	(9)	(10)	(11)	(12)
37	15	1615	2.00		1604	1	1	1	1		
	16	0345	0.45		-do-	1	1	1	1		
	18	0355	1.58		-do-	1	1	1	1		
	19	0305	0.50		-do-	1	1	1	1		
	20	0180	0.34		-do-	1	1	1	1		
	21	0368	0.68		-do-	1	1	1	1		
	22	0290	0.94		-do-	1	1	1	1		
	23	0500	2.78		-do-	1	1	1	1		
/ 200000 ரூபி /											
3/11/25											
திருமதி ரிஷா க அனுவலா											
190, நல்லாடி, திருமயம்											
மதுரைக்குப் போகும்											

380/62-R.F. III-A-10-20,00,000 Cps.-GBP.-Mod.-7,-2016.

k. B. 201

TP/2138691



வி. சூ. சிதம்பரம்
 ஐ.தா. சிதம்பரம்
 பி.என் 18/CGL/2008
 மதுராந்தகம்-603 306

2025 - ஆம் ஆண்டு மார்ச் மாதம் 19 - ஆம் தேதி, அன்று
ஏற்படுத்திக்கொண்ட குத்துரைப்பத்திரம்.

நாமக்கல் மாவட்டம் - 637 019, நாமக்கல் வட்டம், மின்னாம்பள்ளி, உடையார் தெரு, கதவு எண். 2/141-4 என்ற விலாசத்தில் வசிக்கும் "M/s. NAVEEN ENTERPRISES" (Pan No. AATFN4441R) என்ற நிறுவனத்திற்காக அதன் பங்குதாரர்களின் ஒருவரும், புதுக்கோட்டை மாவட்டம் - 622 003, புதுக்கோட்டை வட்டம், புதுக்கோட்டை, ராஜகோபாலபுரம் அஞ்சல், பெரியார் நகர், கதவு எண். 318 என்ற விலாசத்தில் வசிக்கும் திரு. நாராயண ரெட்டி அவர்களின் குமாரருமான 49 வயதுள்ள திரு. P.சோம சேகர் ரெட்டி (ஆதார் எண். 8706 3918 7852, Pan No. CILPS2099J) (கைப்பேசி எண். 9894493097) அவர்கள் 1வது பார்ட்டியாகவும்,

1வது பாக்டி

For NAVEEN ENTERPRISES

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தாபகஸளக் கொண்டது
4 வருஷம் பத்திரிகைகள் எவ்வாறு

2வது பார்ட்டி

For OM VINAYAGA SUPPLIER

Proprietor:

A115



தமிழ்நாடு TAMILNADU
 பெயர்: OM VINAYAGA SUPPLIER
 உரி: சோத்துப்பாக்கம்
 தேதி: 19.03.2025
 எண்: 124

AC 164779
 V. ஆதிநாராயணன்
 ஐ.தா விற்பனையாளர்
 உ.எண் 16/CGL/2008
 மதுராத்தம்-603 306

..2..

செங்கல்பட்டு மாவட்டம் - 603319, செம்பூர் வட்டம், 3நெ.சோத்துப்பாக்கம், வந்தவசரி ரோடு, பிளாட் எண். 14, கதவு எண். G7 என்ற விலாசத்தில் இயங்கும் "OM VINAYAGA SUPPLIER" என்ற நிறுவனத்திற்காக, மேற்படி நிறுவனத்தின் இயக்குனரும், திரு. P.கோதண்டராமன், அவர்களின் குமாரருமான 45 வயதுள்ள திரு. K.தஷ்ணாமூர்த்தி (ஆதார் எண். 9724 6689 3739, Pan No. CUYPD0545H, லாகப்பேசி எண்.9940345689) அவர்கள் 2வது பார்ட்டியாகவும்,

ஆக நாம் இரு பார்ட்டிகளும் சேர்ந்து ஏற்படுத்திக்கொண்ட குத்தகைப்பத்திரம் என்னவென்றால்,

1வது பார்ட்டி

For NAVEEN ENTERPRISES

P.S. h.v.
 Authorised Signatory

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
 ஆவணம் 23 தூக்களைக் கொண்டது
 வது தாள் பதிவு ஆவணச் செவ்வூர்

2வது பார்ட்டி

For OM VINAYAGA SUPPLIER

K. D. S.
 Proprietor





भारतीय गैर न्यायिक
भारत INDIA

रु. 500

FIVE HUNDRED
RUPEES

पाँच सौ रुपये

Rs. 500

INDIA NON JUDICIAL

தமிழ்நாடு தமிழ்நாடு TAMILNADU
பெயர் : OM VINAYAGA SUPPLIER
உவர் : இராஜ்ஜப்பாக்கம்
தேதி : 19.03.2025
எண் : 1625

AC 164780

Y. சுவாமிநாதராயன்
உ.தா விநாயகாசுபாயன்
உ.எண் 16/CGL/2008
மதுராந்தகம்-603 306

..3..

சொத்து விலகத்தில் விவரிக்கப்பட்டுள்ள சொத்தானது, நம்மில் 1வது பார்ட்டி மேற்படி நிறுவனத்திற்காக கடந்த 09.03.2022 தேதியில் மதுராந்தகம் சார்பதிவாளர் அலுவலக 1 புத்தகம் 1122 பத்திர எண்ணாக பதிவு செய்யப்பட்ட கிரையப்பத்திரத்தின் மூலம் திரு. ஸ்ரீராமுலு அவர்களின் குமாரர் திரு. S.மணிகண்டன் என்பவரிடமிருந்து கிரையம் பெற்றும்,

05.01.2022 தேதியில் மதுராந்தகம் சார்பதிவாளர் அலுவலக 1 புத்தகம் 38 பத்திர எண்ணாக பதிவு செய்யப்பட்ட கிரையப்பத்திரத்தின் மூலம் ஸ்ரீராமுலு அவர்களின் குமாரர் 46 வயதுள்ள S.மணிகண்டன் என்பவரிடமிருந்து கிரையம் பெற்றும்,

1வது பார்ட்டி

For NAVEEN ENTERPRISES

Authorized Signatory

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
அலுவலகம் 93... தாக்கனைக் கொண்டது
3 வது தான் பதிவு செய்யுள்

2வது பார்ட்டி

For OM VINAYAGA SUPPLIER

Proprietor



AC 164781

TAMILNADU
பெயர்: OM VINAYAGA SUPPLIER

ஊர்: கீர்த்தியாபுரம்

தேதி: 19.03.2025

எண்: 1626

A
வ. ஆதித்யாபயணன்
உ.தா. சிறப்பணியாளர்
உ.எண் 18/CGL/2008
கனராந்தகம்-503 306

..4..

மேற்படி நிறுவனத்தின் பெயரில் 1504 எண் பட்டா தாக்கலாகி, மேற்படி நிறுவனத்தின் அனுபோகத்திலும் கவாதீனத்திலும் இருந்து வருகிற சொத்து விவரத்தில் விவரிக்கப்பட்டுள்ள மொத்தப்பரப்பளவு கொண்ட ஹெக்டேர் 4.26.0 ஏர்ஸ் ஏக்கர் 10.53 செண்ட். நிலத்தினை அரசின் அனுமதி பெற்று சிறுவகைக் கனிமங்களான கல், மண், கிராவல் மற்றும் பிற கனிமங்களை குவாரி செய்து எடுத்துக்கொள்ள நம்மில் 2வது பார்ட்டியுடன் மனப்பூர்வமாக சம்மதித்து எழுதிக்கொண்ட குத்தகைப்பத்திரம் பின்வரும் நிபந்தனைகளுடன் சம்மதித்து நம் இரு பார்ட்டியாளராலும் இன்று 19 ஆம் தேதி மார்க் மாதம் 2025 வருடம் கையொப்பம் செய்யவேண்டியது.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

For OM VINAYAGA SUPPLIER

P.S.W.
Authorized SignatoryK. S. S.
Proprietor

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தாக்களைக் கொண்டது
A வது தாள் பதிவு ஆவணம் பெற்று





தமிழ்நாடு தமிழ்நாடு TAMILNADU
 பெயர்: OM VINAYAGA SUPPLIER
 ஊர் : சேஞ்சேல்மட்டம்
 தேதி : 19.03.2024
 எண் : 1627

AC 164782
 VI ஆதிநாராயணன்
 ஓ.பி. விநாயகன்
 2.எண் 18/CGL/2008
 சென்னை-603 306

முதலாவது பார்ட்டியின் நிபந்தனைகள்:-

1. அரசிடம் அனுமதிபெற்று கல், மண், கிராவல் மற்றும் பிற வகை கனிமங்கள் குவாரி செய்து எடுத்துக்கொள்ள 15 (பதினைந்து) வருடத்திற்கான குத்தகை ஒப்பந்தப் பத்திரம். தமிழ்நாடு சிறுகனிமச் சலுகை விதிகள் 1959 -ன் பிற்சேர்க்கை V - இல் இடம்பெட்ட ஆட்சியர் செங்கல்பட்டு அவர்களுடன் நிறைவேற்றும் நாளிலிருந்து 10 (பத்து) வருடங்களுக்கு இந்த குத்தகைப்பத்திரம் நிறைவேற்றித் தரப்படுகிறது.
2. மேற்படி குத்தகை ஒப்பந்தம் வழங்கப்பட்ட நாளிலிருந்தும் மற்றும் அரசு வழங்குகின்ற குத்தகை காலம் முடியும் வரை இந்த பத்திரத்தில் எந்தவிதமான மாற்றமும் நம் இரண்டு பார்ட்டிகளும் செய்யக்கூடாது.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P.S. K. S.
 Authorised Signatory

For OM VINAYAGA SUPPLIER

H. S. S.
 Proprietor



1 முதலாம் 2025 ம் ஆண்டு	1160 ம்
ஆவணம் 83	தாக்கவைக் கொண்டது
5 வது தரள்	பதிவு செய்யப்பட்டது

K. S. S.

A119



..6..

3. மேற்படி நிலம் குத்தகை ஒப்பந்தத்திற்கான காலங்களில் ஏக்கர் ஒன்றுக்கு வருடம் ஒன்றுக்கு ரூபாய் 50,000/- (ரூபாய் ஐம்பதாயிரம் மட்டும்) குத்தகை தொகையாக பெற்றுக்கொள்ள சம்மதிக்கப்படுகிறது. மேலும் குத்தகை ஒப்பந்தத்திற்காக முன்பணமாக ரூபாய் 1,00,000/- (ரூபாய் ஒரு இலட்சம் மட்டும்) தொகையினை யூனியன் வங்கி, சோத்துப்பாக்கம் கிளையின் RIGS / NLI-I மூலமாக (UITR No. UBINJ25078794703, நாள் 19.03.2025) நம்மில் 2வது பார்ட்டியிடமிருந்து நம்மில் 1வது பார்ட்டி பெற்றுக்கொள்கிறார்.
4. மேற்படி நில குத்தகை ஒப்பந்த காலத்தில் அரசின் அனுமதிபெற்று குவாரி செய்து எடுத்துக்கொள்ள அரசு சார்பில் நில உரிமையாளரால் நிறைவேற்றப்பட வேண்டிய அனைத்து நடவடிக்கைகளுக்கும் எவ்வித கணக்கமும் இன்றி முதலாவது பார்ட்டி வருகை தந்து அனைத்து நடவடிக்கைகளுக்கும் கட்டுப்படுவதாக உறுதி பூண்டுள்ளார்.
5. மேற்படி நில குத்தகை ஒப்பந்த காலத்தில் அரசு அனுமதிபெற்று குவாரித் தொழில் செய்யவுள்ள நடவடிக்கைகளில் நம்மில் 1வது பார்ட்டி எந்தவகையிலும் சம்மந்தப்படமாட்டார்.
6. நம்மில் 1வது பார்ட்டி, கல், கிராவல், மண், குவாரி செய்வதால் நிலம் பாதிப்படையும் என்றும் அறிவார்.
7. அரசின் விதிகளுக்கு உட்பட்டு ஏற்படும் கல்குவாரி, மண் மற்றும் கிராவல் குத்தகை காலம் முடிவற்ற பின்னர், மேற்படி குத்தகைக்கு அளிக்கப்பட்ட நிலங்களை பராமரித்து வரவேண்டியது நம்மில் 1வது பார்ட்டியின் பொறுப்பாகும்.
8. கனிமக் குத்தகை தொடர்பாக அரசு எடுக்கும் எல்லாவிதமான நடவடிக்கைகளுக்கும் நம்மில் 1வது பார்ட்டி பொறுப்பானவர் அல்ல செலுத்தப்படவேண்டிய அனைத்து வரிகளும் நம்மில் 2வது பார்ட்டியையே சார்ந்தது.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P.S.N.V.
Authorized Signatory

For OM VINAYAGA SUPPLIER

K. S. S.
Proprietor

1 புத்தகம் 2025 ம் ஆண்டு.....1160.....ம்
ஆணைம் <i>ஜி</i> துணைகளைக் கொண்டது
..... <i>6</i> வது நாள்
பதிவு செய்யப்பட்டது

K. S. S.





-7-

9. நில குத்தகை ஒப்பந்த காலத்தில் நம்மில் 1வது பார்ட்டி பங்குதாரராக உள்ள நவீன் எண்டர்பிரைசஸ் என்ற நிறுவனத்திற்கோ அல்லது அதன் பிற பங்குதாரர்களுக்கோ மேற்படி ஒப்பந்தத்தில் எவ்விதமான தொடர்பும் கிடையாது நம்மில் 1வது பார்ட்டியின் குடும்பத்தாருக்கும் எவ்விதமான உரிமையும் கிடையாது.
10. அரசால் வழங்கப்பட்ட கனிமக் குத்தகை முடிந்தபின்னர் நம்மில் 2வது பார்ட்டிக்கு நில குத்தகை சம்மத்தின்பேரில் வழங்கப்பட்ட ஹெக்டேர் 4.26.0 ஏர்ஸ் பரப்பளவு நிலத்தில் எவ்வித சம்மந்தமும் கிடையாது. ஒருவேளை மேற்படி குத்தகை நீட்டித்துத் தரக்கேட்டால் அந்த சமயம் உள்ள சூழ்நிலைகளைப் பொறுத்து தக்க முடிவுகள் எடுக்கப்படும்.

இரண்டாவது பார்ட்டியின் நிபந்தனைகள்

1. நம்மில் 2வது பார்ட்டி அவரது சொந்தச் செலவில் அனைத்து ஏற்பாடுகளையும் செய்து, நம்மில் 1வது பார்ட்டிக்கு சொந்தமான, செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், 190நெ.நல்லாமூர் குருப்பைச் சேர்ந்த கொளத்தூர் கிராமத்தில் பட்டா எண். 1604 - ல் ஹெக்டேர் 4.26.0 ஏர்ஸ் ஏக்கர் 10.53 செண்ட் மொத்த பரப்பில் தேவைப்படும் பரப்பிற்கு உரிய புல எண்களுக்கு அரசிடம் விண்ணப்பித்து கனிமக் குத்தகை அனுமதி பெற்றுக்கொள்வார்.
2. நம்மில் 2வது பார்ட்டி மேற்படி நில குத்தகைக்கு 1வது பார்ட்டியால் வழங்கப்படும் நிலங்களில் நிலையான அமைப்பான, கட்டிடம் கட்டுவது, கிரஷர் தொடர்பான அனைத்து நடவடிக்கைகளையும் மேற்கொள்ளவும், அரசு சட்டங்களுக்கு உட்பட்டு கல், மண், கிராவல் குவாரி செய்து கொள்ளவும் உரிமையுண்டு.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P. S. V. V.
Authorized Signatory

For OM VINAYAGA SUPPLIER
K. S. V. V.
Proprietor

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆணைம் 83 தாக்களைக் கொண்டது
1 வது தாள் பதிவு செய்யப் பெற்றுள்ளது



K. S. V. V.

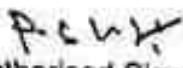


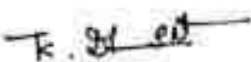
..8..

3. நம்மில் 2வது பார்ட்டி 1வது பார்ட்டிக்கு தரவேண்டிய நில குத்தகை தொடர்பான பண விவகாரங்களை ஒவ்வொரு வருடமும் மார்ச் 19-ஆம் தேதிக்குள் பணம் செலுத்தி இரகிது பெற்றுக்கொள்ளுவார். மேற்படி குத்தகைத் தொகையால் மாற்றம் இருப்பின் நம்மில் இரண்டு பார்ட்டிகளும் மனம் ஒத்து பேசி தீர்த்துக்கொண்டு பண மதிப்பை மாற்றி கொள்ளலாம்.
4. குத்தகை ஆவணத்தில் உள்ள நிலங்களில் அரசு குத்தகை தரும் இடம் போக மீதமுள்ள உபரி நிலங்களை 2வது பார்ட்டி விரும்பும்போல் பயன்படுத்திக்கொள்ள 2வது பார்ட்டிக்கு உரிமை உண்டு.
5. வெட்டியெடுக்கப்படும் கனிமங்களை கல், மண், கிராவல் மற்றும் பிற கனிமங்களின் முழு உரிமையும் 2வது பார்ட்டிக்கு மட்டுமே உரியதாகும்.
6. நம்மில் 2வது பார்ட்டி அவரது பெயரில் அல்லது அவரால் முன்மொழியப்படும் பெயரில் மேற்படி 1வது பார்ட்டி குத்தகைக்கு அளிக்கும் ஹெக்டேர் 4.26.0 ஏர்ஸ் ஏக்கர் 10.53 சென்ட் நிலங்களில் பல வகையான மற்றும் விரும்பும் தொழில் செய்யவும், மின் இணைப்பு பெறவும், GST எண் பெறவும், பஞ்சாயத்து வரி மற்றும் பிற வரிகளை செலுத்தவும் உரிமை உண்டு.
7. கனிய குத்தகை நடைபெறும் காலத்தில் குவாரி தொடர்பான அனைத்து அரசு நடவடிக்கைகளுக்கும் 2வது பார்ட்டியே பொறுப்பேற்றுக்கொள்ளும்.
8. கனியக் குத்தகை முடிவற்ற பின்னரும், நில குத்தகை காலம் தொடர்ந்தால் அந்த காலங்களில் மீண்டும் கனியக் குத்தகை விண்ப்பம் செய்யவும், இருப்பில் உள்ள கனிமங்களை எடுத்துக்கொள்ளவும், கல் உடைக்கும் கிரஷர், எம்.சாண்ட் இயந்திரம், கட்டிடங்கள் மற்றும் அனைத்து வகையானவைகளையும் பயன்படுத்திக் கொள்ளவும் 2வது பார்ட்டிக்கு உரிமையுண்டு.
9. கனியக் குத்தகையும், நிலம் தொடர்பான 1வது பார்ட்டியுடன் ஏற்படுத்திக்கொண்ட குத்தகையும் ஒரு சேர முடிந்தால் அன்றைய சூழ்நிலைகளைப் பொறுத்து மீண்டும் 2வது பார்ட்டி கனியக் குத்தகை பெற 1வது பார்ட்டியின் சம்மத்துடன் நடவடிக்கை மேற்கொள்ள உரிமை உண்டு.

1வது பார்ட்டி

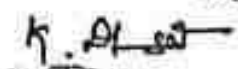
For NAVEEN ENTERPRISES


Authorized Signatory



1 புத்தகம் 2025 ம் ஆண்டு..... 1166 /ம்
ஆவணம் 83 தாக்கனைக் கொண்டது
8 வது தாள் பதிவு செய்யப் பட்டது

2வது பார்ட்டி
For OM VINAYAGA SUPPLIER


Proprietor





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10. கனிமக் குத்தகை காலம் தேவைப்படாவிட்டால் நம்மில் 2வது பார்ட்டி குத்தகைப்பத்திரத்தின் மூலம் 1வது பார்ட்டியிடம் கூறிவிட்டு வெளியேற வேண்டியது. அதன் பின் குவாரி தொடர்பாகவும், அரசு நடவடிக்கைகள் தொடர்பாகவும் எவ்வித கட்டுப்பாடுயின்றி மேற்படி குத்தகை ஒப்பந்தத்தில் இருந்து விலகிக்கொள்ளுவார். எவ்வித பின் தொடர்ச்சியும் 2வது பார்ட்டியை கட்டுப்படுத்தாது.

மேற்கண்ட அனைத்து நிபந்தனைகளுக்கும் சம்மதம் தெரிவித்து மனப்பூர்வமாக நம்மில் 1வது மற்றும் 2வது பார்ட்டி ஆக நம் இரு பார்ட்டிகளும் சேர்ந்து கையொப்பம் செய்து செய்யுர் சார்பதிவாளர் அலுவலகத்தில் இந்த குத்தகைப்பத்திரத்தினை பதிவு செய்து கொள்கிறோம்.

சொத்து விவரம்

செங்கல்பட்டு மாவட்டம், மதுராந்தகம் வட்டம், செய்யூர் சார்பதிவகம், மதுராந்தகம் பஞ்சாயத்து யூனியன், சரவம்பாக்கம் பஞ்சாயத்து எல்லைக்குட்பட்ட 190 நெ. நல்லாமூர் குருப்பைச் சேர்ந்த கொளத்தூர் கிராமத்தில்.

பட்டா எண். 1604 - ல் தாக்கலாகியுள்ளபடி,

புஞ்சை சர்வே எண். 37/23 - பூரா ஹெக்டேர் 1.50.0 ஏர்ஸ் ஏக்கர் 3.71 செண்டில் ஜக்குபந்தி விவரம்:-

- வடக்கில் - சர்வே எண். 37/19, 37/20, 37/21, 37/22,
- தெற்கில் - சர்வே எண். 37/23 ன் மிகுதி நிலம்,
- கிழக்கில் - நெட்ரம்பாக்கம் எல்லை,
- மேற்கில் - சர்வே எண். 36/7,

இதன் மத்தியில் ஏக்கர் 1.00 செண்ட்.

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P. S. L. V.
Authorised Signatory

புத்தகம் 2025 ம் ஆண்டு 116D ம்
ஆவணம் 83... தாக்களைக் கொண்டது
9வது தான் பதிவு செய்யுர்

For OM VINAYAGA SUPPLIER

K. A. V.
Proprietor

K. A. V.





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புஞ்சை சர்வே எண். 37/22 -0.29.0 ஏர்ஸ் ஏக்கர் 0.72 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/21 -0.36.5 ஏர்ஸ் ஏக்கர் 0.90 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/20 -0.18.0 ஏர்ஸ் ஏக்கர் 0.44 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/19 -0.30.5 ஏர்ஸ் ஏக்கர் 0.75 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/16 -0.24.5 ஏர்ஸ் ஏக்கர் 0.61 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/15 - 1.61.5 ஏர்ஸ் ஏக்கர் 4.00 செண்ட் பூரா. ✓
 புஞ்சை சர்வே எண். 37/18 0.85.5 ஏர்ஸ் ஏக்கர் 2.11 செண்ட் பூரா. ✓

ஆக மொத்தம் ஹெக்டேர் 4.26.0 ஏர்ஸ் ஏக்கர் 10.53 செண்ட் (பத்து ஏக்கர் ஐம்பத்து மூன்று செண்ட்) நிலங்கள் மட்டும்.

1வது பார்ட்டி
 For NAVEEN ENTERPRISES

P. R. L.
 Authorised Signatory

சாட்சிகள்:

1. *K. R. L.*
 (K.ருத்ரகோட்டி) த/பெ. கண்ணன், வயது 34, எண். 8, டாக்டர் அம்பேத்கார் தெரு, காட்டுக்கடலூர், மதுராந்தகம் வட்டம் - 603 201. (ஆதார் எண். 6664 7586 4114)

2. *A. N. S.*
 (A.சதீஷ்குமார்) த/பெ. N.ஆனந்தசேகர், எண். 1, பாடசாலை தெரு, பெரிய கயப்பாக்கம் கிராமம், செம்பூர் வட்டம் - 603301. (ஆதார் எண். 3293 8767 0552)



Drafted By:-

R. Annamalai
 R. Annamalai,
 Document Writer
 LNO.A/9/CGL/1987
 Madurantakam

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
 ஆவணம் 83 தாட்சணிகக் கொண்டது
 10 வது தளம் பதிவு செய்யப்பட்டது



K. R. L.



வரிசை எண்.	குத்தகை காலம் (15 வருடம்)	தொகை
1.	அட்வான்ஸ்	Rs. 1,00,000/-
2.	19.03.2025 முதல் 19.03.2026 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
3.	20.03.2026 முதல் 20.03.2027 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
4.	21.03.2027 முதல் 21.03.2028 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
5.	22.03.2028 முதல் 22.03.2029 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
6.	23.03.2029 முதல் 23.03.2030 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
7.	24.03.2030 முதல் 24.03.2031 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 x 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-

1வது பார்ட்டி

2வது பார்ட்டி

For NAVEEN ENTERPRISES

P. J. L. L.
Authorised Signatory

1 முதலாம் 2025 ம் ஆண்டு.....	1160
ஆவணம்.....	23
11 வது தரம்	பட்டி அலுவலர் பெயர்



For OM VINAYAGA SUPPLIER

P. J. L. L.
Proprietor

7c. 31.12



-2-

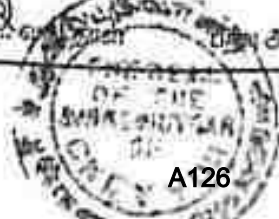
8.	25.03.2031 முதல் 25.03.2032 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
9.	26.03.2032 முதல் 26.03.2033 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
10.	27.03.2033 முதல் 27.03.2034 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
11.	28.03.2034 முதல் 28.03.2035 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
12.	29.03.2035 முதல் 29.03.2036 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
13.	30.03.2036 முதல் 30.03.2037 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
14.	31.03.2037 முதல் 31.03.2038 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-

1வது பார்ட்டி

For NAVEEN ENTERPRISES

Authorised Signatory

புத்தகம் 2025 ம் ஆண்டு 116D
ஆவணம் 23
தாங்களாகக் கொண்டது
பித்து அலுவலர் செய்யுள்



A126

2வது பார்ட்டி

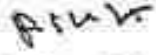
For OM VINAYAGA SUPPLIER

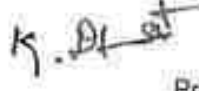
Proprietor



..3..

15.	01.04.2039 முதல் 01.04.2039 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
16.	02.04.2039 முதல் 02.04.2040 முடிய ஏக்கர் ஒன்றுக்கு (ஏக்கர் 10.53 செண்ட்) வருடம் ஒன்றுக்கு வாடகை ரூபாய். 50000 × 12 மாதம் (ஒரு வருடம்)	Rs. 5,26,500/-
	ஆக மொத்தம் தொகை	Rs.79,97,500/-.
	முத்திரைத்தீர்வை	Rs. 80,000/-
	பதிவுக்கட்டணம் (அதிகபட்சம்)	Rs. 40,000/-

1வது பார்ட்டி
For NAVEEN ENTERPRISES

Authorized Signatory

2வது பார்ட்டி
For OM VINAYAGA SUPPLIER

Proprietor

1புத்தம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23. தாக்கணக் கொண்டது
13 வது தாள் பதிவு அலுவலர் வய்யூர்

K. H. S.





செய்யுர்புத்தகம்-1/1160/2025

1999ம் ஆண்டு இந்திய முத்திரை சட்டம் 42வது பிரிவின் கீழான கானறு

2025ம் ஆண்டு வரிசை எண் 999

கருவு எண் ஜி 7, பிளாட் எண் 14, வந்தவாசி ரோடு, சோத்துப்பாக்கம், செங்கல்பட்டு தமிழ்நாடு இந்தியா 603102-ல் வசிக்கும் திரு தண்டாசுமாரத்தி என்பவரிடமிருந்து ₹ 77,500/- ரூபாய் எழுபத்தேழாயிரத்து ஐந்து மட்டும், இந்த ஆவணத்திற்காக இந்திய முத்திரை சட்டம் 42வது பிரிவின் படி குறைவாயிருந்த முத்திரை சட்டமும் வழங்கப்பட்டது என நான் இதன் மூலம் சான்றளிக்கிறேன்

சார்பதிவாளர் : செய்யுர்
நாள்: 19/03/2025

R. Supul
சார்பதிவாளர் மற்றும் இந்திய முத்திரை சட்டம் பிரிவு
41ன் படி ஆட்சியர்

சார் பதிவாளர்

செய்யுர்-603 302

2025 ஆம் ஆண்டு மார்ச் மாதம் 19ம் தேதி பி.பி. 02.54 மணியளவில் செய்யுர் சார்பதிவாளர் அலுவலகத்தில் தாக்கல் செய்து கட்டணம் ₹ 41,110/- செலுத்தியவர்

1 புத்தகம் 2025ம் ஆண்டு 1160

ஆவணம் 23. தாட்சுமாரத்தி கொண்ட
..... 14 வது நாள் பதிவு செய்து

இடது பெருவிரல்



கூடுதல் விவரங்கள் ஆவண வாகைத்தில் உள்ளபடி : 9940345689

K. S. S.



எழுதிக் கொடுத்ததாக ஒப்புக் கொண்டவர்
இடது பெருவிரல்



A. S. S.
"சம்மதத்துடன் கூடிய ஆதார் அங்கீகாரம்" என்ற வழி இந்த நபரின் அடையாளம் விரல் ரேகை மூலம் ஆதார் ஆணையத்துடன் சரிபார்க்கப்பட்டது ஒப்பீட்டு எண் : UKC:55267620c691a3729a/45388e7a18ae130865bc (Details from UIDAI : P Soma Sekhar Reddy C/O: Narayana Reddy, 14-04-1974, xxxxxxxx7852)

A. S. S.



எழுதி வாங்கியதாக ஒப்புக் கொண்டவர்
இடது பெருவிரல்



K. S. S.
"சம்மதத்துடன் கூடிய ஆதார் அங்கீகாரம்" என்ற வழி இந்த நபரின் அடையாளம் விரல் ரேகை மூலம் ஆதார் ஆணையத்துடன் சரிபார்க்கப்பட்டது ஒப்பீட்டு எண் : UKC:8860924b2f02d577f894c0b9099943a153213548 (Details from UIDAI : Dhakshanasumathi K. S/O

K. S. S.



K. S. S.



R/செய்யூர்/புத்தகம்-1/1160/2025

Kadhandaraman, 21-07-1976, xxxxxxxx3739,

2025 ஆம் ஆண்டு மார்ச் மாதம் 10ம் நாள்

R. Sanyalini
கல்வி நேரு
சார்பதிவாளர்
செய்யூர்

R/செய்யூர்/புத்தகம்-1/1160/2025 எண்ணாகப் பதிவு செய்யப்பட்டது

நாள்: 10032025
செய்யூர்



சார் பதிவாளர்
செய்யூர் - 603 3002
R. Sanyalini
கல்வி நேரு
சார்பதிவாளர்
சார் பதிவாளர்
செய்யூர் - 603 3002



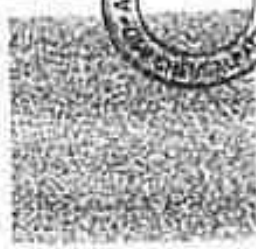
1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
அவ்வாறு 23 தாக்கவாகக் கொண்டது
15 பதிவு செய்து செய்யூர்

K. Sanyalini


 Government of India
 A2 Cardo Card City
 P. Soma Sekhar Reddy
 (Vidya Soma/DOB: 14/04/1974)
 Age: 47 MALE

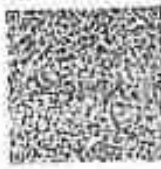

Aadhaar is proof of identity, not of citizenship
 or date of birth. It should be used with verification (online
 authentication, or scanning of QR code / offline KYC)

8706 3918 7852
 VID : 8183 0523 0053 6322


 Unique Identification Authority of India
 A2 Cardo Card City
 P. Soma Sekhar Reddy
 (Vidya Soma/DOB: 14/04/1974)
 Age: 47 MALE


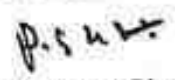
Aadhaar is proof of identity, not of citizenship
 or date of birth. It should be used with verification (online
 authentication, or scanning of QR code / offline KYC)

8706 3918 7852
 VID : 8183 0523 0053 6322

आयकर विभाग
 INCOME TAX DEPARTMENT
 भारतीय संघ शासक प्रदा
 Permanent Account Number Card
 AATFN4441R


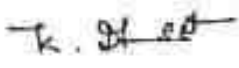
01/12/2021
 Date of Incorporation/Formation

If this card is lost / someone's lost card is found,
 please inform / return to :
 Income Tax PAN Services Unit, NSDL,
 4th Floor, Main Building,
 Plot No. 101, Convey No. 99/1,
 Model Colony, New Deep Bangalore Check,
 Pune - 411 016.
 Tel: 91-20-2321 3050, Fax: 91-20-2321 3081
 Email: info@pan.itsdl.in

For NAVEEN ENTERPRISES

 Authorised Signatory

1 புத்தகம் 2025 ம் ஆண்டு 11.60 ம்
 ஆவணம் 23. நாட்களைக் கொண்டது
 16 வது நாள் பதிவு செய்யும்






Dr. Othman Murtaza
 Othman Murtaza K.
 India govt DOB: 21/07/1976
 sex: MALE

9724 6689 3739

CTKOT (U) 21/07/1976


Dr. Othman Murtaza
 Othman Murtaza K.
 India govt DOB: 21/07/1976
 sex: MALE

9724 6689 3739

CTKOT (U) 21/07/1976

आयकर विभाग
INCOME TAX DEPARTMENT
भारत सरकार
GOVT. OF INDIA

Permanent Account Number Card
 CUYPD0545H

OTHMAN MURTAZA
 DOB: 21/07/1976
 KOTHMAN MURTAZA

21/07/1976

Please this card is lost/destroyed. Kindly inform the Income Tax Department, New Delhi, India.

Income Tax PAN Number: CUYPD0545H
 The Income Tax Department, New Delhi, India.

For OM VINAYAGA SUPPLIER

[Signature]

Proprietor

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்

ஆவணம் 23 தாக்கனைக் கொண்டது

17 வருது தான் பதிவு செய்யுள்

[Signature]





இந்திய அரசாங்கம்
Government of India



கூதாம்பி K
Ruthrakott K

தந்தை: கண்ணன் முனுசாமி
Father: KANNAN MUNUSAMY

பிறந்த நாள் DOB: 21/08/1989
ஆண் / Male

6664 7586 4114



ஆதார் - சாதாரண மனிதனின் அதிகாரம்



(முகவரி: 24 பதாசாய் வீடு, 8
காயப்பாக்கம், கங்கேப்பேட்டை, கங்கேப்பேட்டை
கங்கேப்பேட்டை, கங்கேப்பேட்டை, கங்கேப்பேட்டை
கங்கேப்பேட்டை, கங்கேப்பேட்டை, கங்கேப்பேட்டை
கங்கேப்பேட்டை, கங்கேப்பேட்டை, கங்கேப்பேட்டை

Address S/O Kannan no 8
DOCTOR AMBETHKAR
STREET, KATTUKUDALUR,
Kattugudalur, Kattugudalur,
Kancheepuram, Tamil Nadu,
603301

Signature

6664 7586 4114

இந்திய அரசாங்கம்
Government of India

புகைப்படம்
Sathish Kumar
பிறந்த நாள் DOB: 02/06/1989
ஆண் / MALE

3293 8767 0552
VID: 9156 8670 4674 5917

எனது ஆதார். எனது அடையாளம்

இந்திய அரசாங்கம்
Unique Identification Authority of India

புகைப்படம்
S/O: Anandhasaker, 24, PADASAI STREET,
KAYAPAKKAM, Kancheepuram, Kancheepuram,
Tamil Nadu - 603301

3293 8767 0552
VID: 9156 8670 4674 5917

1847 | info@uidai.gov.in | www.uidai.gov.in

1 புள்ளி 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தாக்கனைக் கொண்டது
18 வது நாள் பதிவு செய்யப்பட்டது

K. S. S.



A. Nectur Name



1. பருவம் 2025 ம. பருவம் 1160
பருவம் 23 ம. பருவம் 1160
19 ம. பருவம் 1160



GPS Map Camor

Neerpair, Tamil Nadu, India
Neerpair, Tamil Nadu 603313, India
Lat 12.421783° Long 79.923291°
18/03/25 03:02 PM GMT +05:30

Google

For NAVEEN ENTERPRISES

P. S. V.

Authorized Signatory

T. S. V.

For OM VINAYAGA SUPPLIER

M. S. V.

Proprietor



தமிழ்நாடு அரசு

வருவாய் மற்றும் பேரிடச் மேலாண்மைத் துறை

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

மாவட்டம் : செங்கல்பட்டு

வட்டம் : மதுராத்தகம்

வருவாய் விராமம் : நல்லாழார்

பட்டா எண் : 1604 ✓

உரிமையாளர்கள் பெயர்

1. - நலிள் என்டர்பிரைசஸ் நிறுவனத்தின் பங்குதாரர்களில் ஒருவரான
2. நாராயண செட்டி மகன் சோம சேகர் செட்டி ✓

1 பத்திரம் 2025 ம் ஆண்டு 1160 ம்
 ஆவணம் ... 83 ... நாட்சுலானக் கொண்டது
 ... 80 ... ஸ்ரீ நாராயண ... பதிவு செய்து கொண்டது



7. 8. 2024



வரி	க.ச.ப.பெ	பொது		பொது		பொது		குறிப்பு
		மொத்த	பெறு	மொத்த	பெறு	மொத்த	பெறு	
		பெறு - ரூ	பெ - ரூ	பெறு - ரூ	பெ - ரூ	பெறு - ரூ	பெ - ரூ	
37	1	0 - 62.50	1.16	--	--	--	--	2022/0103 /35/246614--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM
37	15	1 - 61.50	3.00	--	--	--	--	2022/0103 /35/254904--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	16	0 - 24.50	0.45	--	--	--	--	2022/0103 /35/254904--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	17	0 - 97.00	1.80	--	--	--	--	2022/0103 /35/254904--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	18	0 - 85.50	1.58	--	--	--	--	2022/0103 /35/254904--- ----- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM

1 பிப்ரவரி 2025 இல் சந்தர்ப்பம் 1160
சுருவணம் 23 தாக்கவணம் கொண்டு
21 வருது தான் பத்திர சந்தர்ப்பம் கொண்டு

K. D. 100





37	19	0 - 30.50	0.56	--	--	--	2022/0103 /35/254904--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	20	0 - 18.00	0.34	--	--	--	2022/0103 /35/254904--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	21	0 - 36.50	0.68	--	--	--	2022/0103 /35/285812--- Digitally signed: BHARATHI R Zonal Deputy Tahsildar 15/10/2022 03:51:42:PM
37	22	0 - 29.00	0.54	--	--	--	2022/0103 /35/254904--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 29/03/2022 04:08:02:PM
37	23	1 - 50.00	2.78	--	--	--	2022/0103 /35/246614--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM
37	24	0 - 81.00	1.50	--	--	--	2022/0103 /35/246614--- Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM

1 புத்தகம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தாக்கணம் கொண்டு
22 ம் ஆண்டு பத்திரம் கொண்டு



k.24 est



37	25	0 - 40.50	0.75	--	--	--	Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM 2022/0103 /35/246614-44
37	26	0 - 62.50	1.16	--	--	--	Digitally signed: NARAYANAN C Zonal Deputy Tahsildar 12/01/2022 05:34:07:PM
		6 - 79.00	16.30				

குறிப்பு :



1. மேற்கண்ட தகவல் / சான்றிதழ் தகவல் விவரங்கள் மின் பதிவேட்டிலிருந்து பெறப்பட்டன. இவற்றை தயக்கம் <https://eservices.tn.gov.in> என்ற இணைய தளத்தில் 35/07/190/01604/10011 என்ற குறிப்பு எண்ணம் உடனீடு செய்து உறுதி செய்துகொள்ளவும்.
2. இத் தகவல்கள் 19-03-2025 அன்று 12:34:06 PM நேரத்தில் அச்சிடப்பட்டது.
3. மகப்பேரி சேவையின் 2D barcode படிப்பான் மூலம் படித்து 3G/GPRS வழி இணையதளத்தில் சரிபார்க்கவும்.

1 பந்தம் 2025 ம் ஆண்டு 1160 ம்
ஆவணம் 23 தாக்களைக் கொண்டது
23 வாங்கு தான் பதிவு அட்டை வைப்புகள்



K. Hest



Government of India

Form GST REG-06

[See Rule 10(1)]

Registration Certificate

Registration Number : 33CUYPD0545H1ZK

1.	Legal Name	DHAKSHANAMURTHI			
2.	Trade Name, if any	OM VINAYAGA SUPPLIER			
3.	Additional trade names, if any				
4.	Constitution of Business	Proprietorship			
5.	Address of Principal Place of Business	Building No./Flat No.: 14 Road/Street: Vandavasi Road City/Town/Village: Sothupakkam District: Chengalpattu State: Tamil Nadu PIN Code: 603319			
6.	Date of Liability				
7.	Period of Validity	From	06/03/2025	To	Not Applicable
8.	Type of Registration	Regular			
9.	Particulars of Approving	Centre			
Signature					
Signature Not Verified Digitally signed by DS GOODS AND SERVICES TAX NETWORK 15 Date: 2025.03.06 17:45:54 IST					
Name		GOPAL SURESHKUMAR			
Designation		Superintendent			
Jurisdictional Office		CHENNAI			
Date of issue of Certificate		06/03/2025			
Note: The registration certificate is required to be prominently displayed at all places of business in the State.					

This is a system generated digitally signed Registration Certificate issued based on the approval of application granted on 06/03/2025 by the jurisdictional authority.

K. J. S.



Goods and Services Tax Identification Number: 33CUYPD0545H1ZK

Details of Additional Place of Business(s)

Legal Name DHAKSHANAMURTHI
Trade Name, if any OM VINAYAGA SUPPLIER

Total Number of Additional Places of Business in the State 0

Goods and Services Tax

K. A. S.



Goods and Services Tax Identification Number: 33CUYPD0545H1ZK

Legal Name DHAKSHANAMURTHI
Trade Name, if any OM VINAYAGA SUPPLIER

Details of Proprietor

1



Name DHAKSHANAMURTHI
Designation/Status Proprietor
Resident of State Tamil Nadu

K. S. Sathya


भारत सरकार
GOVERNMENT OF INDIA


अधिकांशिक डेटा
Druckanamurthi S.
जन्म दिनांक: 21/07/1978
लिंग: MALE



9724 6689 3739

कृपया ध्यान दें: कृपया ध्यान दें: कृपया ध्यान दें


भारत सरकार
GOVERNMENT OF INDIA

अधिकांशिक डेटा
Druckanamurthi S.
जन्म दिनांक: 21/07/1978
लिंग: MALE

Address
10/10 Rotherham Road, 15, Rotherham Road,
Theraplam Post, Rotherham, Rotherham,
Tamil Nadu - 625406



9724 6689 3739

कृपया ध्यान दें: कृपया ध्यान दें: कृपया ध्यान दें



K. S. S.

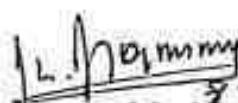
SUPER MINES & MINERALS

MINES : Deveenna Goundanoor,
S.F.No - 631/9, Sankari, Taluk,
SALEM DISTRICT. Cell : 94432 52403
Email : chandramohan5@yahoo.com

Date : 08-07-2024

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Mr. N.SURESH S/o. Mr.P.NARAYANAN, Residing at D.No.6/187-A, Amaragundhi Post, Omalur Taluk, Salem Taluk, Salem District -636 503 has worked in our mines from the date of 13.03.2018 to 08.07.2024 as a **GEOLOGIST** with **Supervisor capacity**. During the above tenure of service his execution of the assigned work in exemplary and worth mentioning. I wish him success in his future endeavors.


Signature of the Mine owner

With Date & Seal
M/s. SUPER MINES & MINERALS
DEVANNAGOUNDANUR VILLAGE,
SANKARI TALUK,
SALEM DISTRICT-637 101,
TAMILNADU STATE.

Name of Mine: M/S. SUPER MINES & MINERALS

Address: No. 23/12 Sri Krishna Kudil
Apartment, Highways Colony Road, Opp. To
Sona Engg. College,

District: Salem - 636 005.

State: Tamilnadu.

Place: Salem
Date: 08.07.2024

OFFICE : 23/12 Sri Krishna Kudil Apartments,
Highways Colony Road,
Opp.Sona Engg. College, Salem - 636 005.

K. S. S.



அறிவியல் புலம்
FACULTY OF SCIENCE

பெரியார் பல்கலைக்கழக ஆட்சிக்குழு 2012 ஆம் ஆண்டு ஏப்ரல் மாதம்
நடந்த பயன்பாட்டுப்புவியமைப்பியல் தேர்வில்
அரசு கலைக் கல்லூரி, சேலம் - 636 007 (தன்னாட்சி) பயின்ற
N சுரேஷ் என்பவர்

முதல் வகுப்பு A++ தரத்தில் தேர்ச்சி பெற்றார் என்று
தக்க தேர்வாளர்கள் சான்றளித்தபடி அறிவியல் நிறைஞர்
என்னும் பட்டத்தை அவருக்குப் பல்கலைக்கழக இலச்சினையுடன் வழங்குகிறது.

The Syndicate of the Periyar University hereby makes known
that SURESH N 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
WITH A++ GRADE *at the Examination held in APR-2012 through*
GOVERNMENT ARTS COLLEGE, SALEM - 636 007 (AUTONOMOUS).



Given under the seal of this university

திகதி
Dated 09-11-2012
சேலம் 636011, தமிழ்நாடு, இந்தியா.
Salem 636011, Tamil Nadu, India.

Keiray

பதிவாளர்
Registrar

Keiray

குணமேந்தர்
Vice-Chancellor

K. S. S.

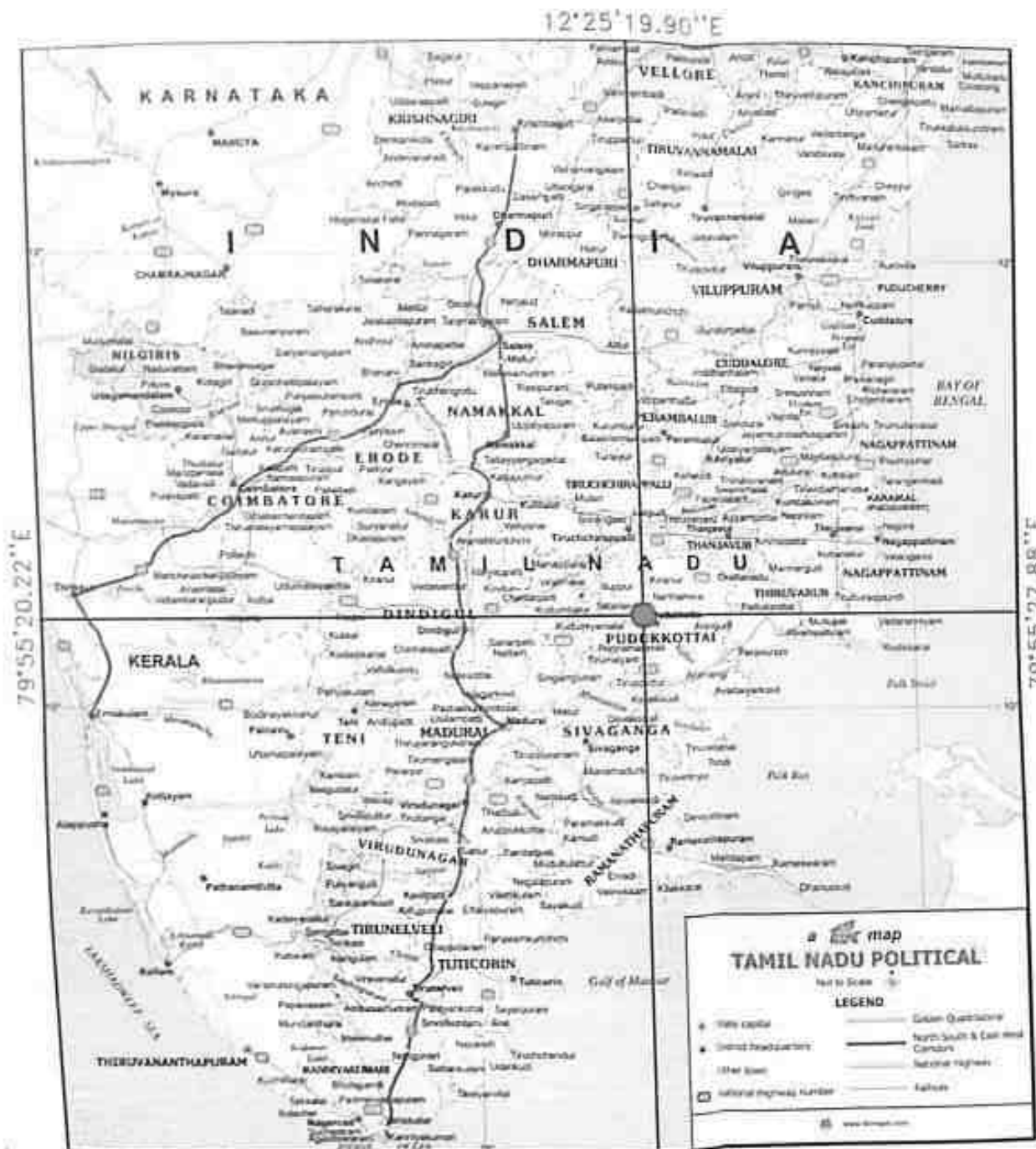


PLATE NO.1

DATE OF SURVEY: 31.10.2025

APPLICANT ADDRESS:

M. OM VRIYAGA SUPPLIER
 PROPRIETOR: CHAKSHANMURTHI
 PLOT NO: 14 GR7, S/W COMPLEX,
 VANTHAVASI ROAD, SOTHUPAKKAM,
 CHEYUR TALUK,
 CHENGALPATTU DISTRICT - 603 319

LOCATION OF QUARRY:

EXTENT : 5.3250 Hq
 S.F.NOs: 37/15, 16, 18(P), 19(P), 20,
 37/21, 22 & 37/23 (P)
 VILLAGE : MALLAMAR MADURAKKOLATHUR
 TALUK : MADURANTHAKAM
 DISTRICT : CHENGALPATTU
 STATE : TAMIL NADU

INDEX

QUARRY LEASE AREA ●
 TOPO SHEET NO: 57/P/18
 LATITUDE : 12° 25' 12.24" N to 12° 25' 19.90" N
 LONGITUDE : 79° 55' 20.22" E to 79° 55' 27.88" E

LOCATION PLAN

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. Anand
 SURESH, N.S.
 QUALIFIED PERSON

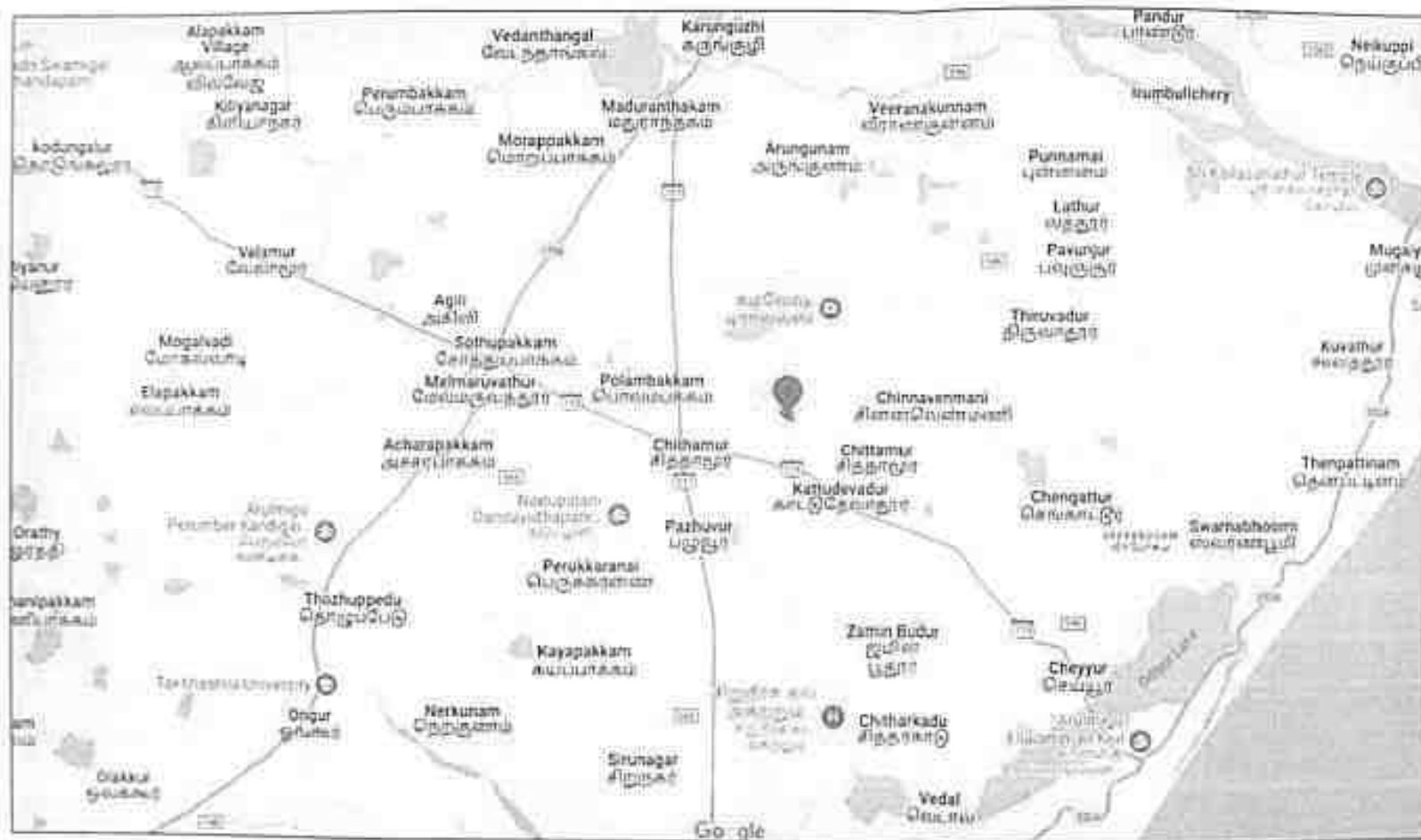
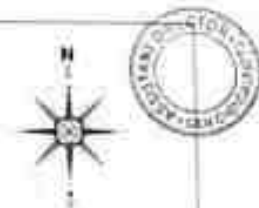


PLATE NO: 1A	
DATE OF SURVEY: 31.03.2025	
APPLICANT ADDRESS:	
M. OM VINAYAGA SUPPLIER, PROP THRU: DHARMIKAMUTHI, PLOT NO: 14 OF 7.5 V. COMPLEX, VANTHAVASI ROAD, SOTHUPAKKAM, CHEYYUR TALUK, CHENGALPATTU DISTRICT - 603 319	
LOCATION OF QUARRY:	
EXTENT	3.32.30 Hc
ST NOs	37/15, 16, 18 (P), 19 (P), 20 37/21, 22 & 37/23 (P)
VELLAGE	MAJALUR, PAKKALUR & CHATHUR
TALUK	MADURANTHAKAM
DISTRICT	CHENGALPATTU
STATE	TAMIL NADU
INDEX	
QUARRY LEASE APPLIED AREA	
APPROACH ROAD	
VELLAGE 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	
 N. SURESH, M.Sc. QUALIFIED PERSON	



PLATE NO:1C

DATE OF SURVEY: 31.10.2023

APPLICANT ADDRESS:

M. OM VINAYAGA SUPPLIER
PROF. SHILPA DHAKSHANAMURTHI
PLOT NO. 14, GE 7, EV. COMPLEX,
YANTHAVASI ROAD, SOTHUPAKKAM,
CHEYTUR TALUK,
CHENGALPATTU DISTRICT - 603 319.

LOCATION OF QUARRY:

EXTENT : 3.32.50 Hls.
S.F. NOS. : 37/15, 16, 18(P), 19(P), 20,
37/21, 22 & 37/23 (P)
VILLAGE : KALLIVAR MADURAI CLATHUR
TALUK : MADURANTHAKAM
DISTRICT : CHENGALPATTU
STATE : TAMIL NADU

INDEX:

QUARRY LEASE BOUNDARY	
VILLAGE ROAD	
APPROACH ROAD	
500m RADIUS	
500m RADIUS	
1km RADIUS	

TOPO SHEET NO. 57-R/15

LATITUDE : 12° 25' 12.24" N to 12° 25' 19.90" N

LONGITUDE : 79° 55' 20.22" E to 79° 55' 27.88" E

SATELLITE IMAGE
(1km RADIUS)

SCALE : 1:10000

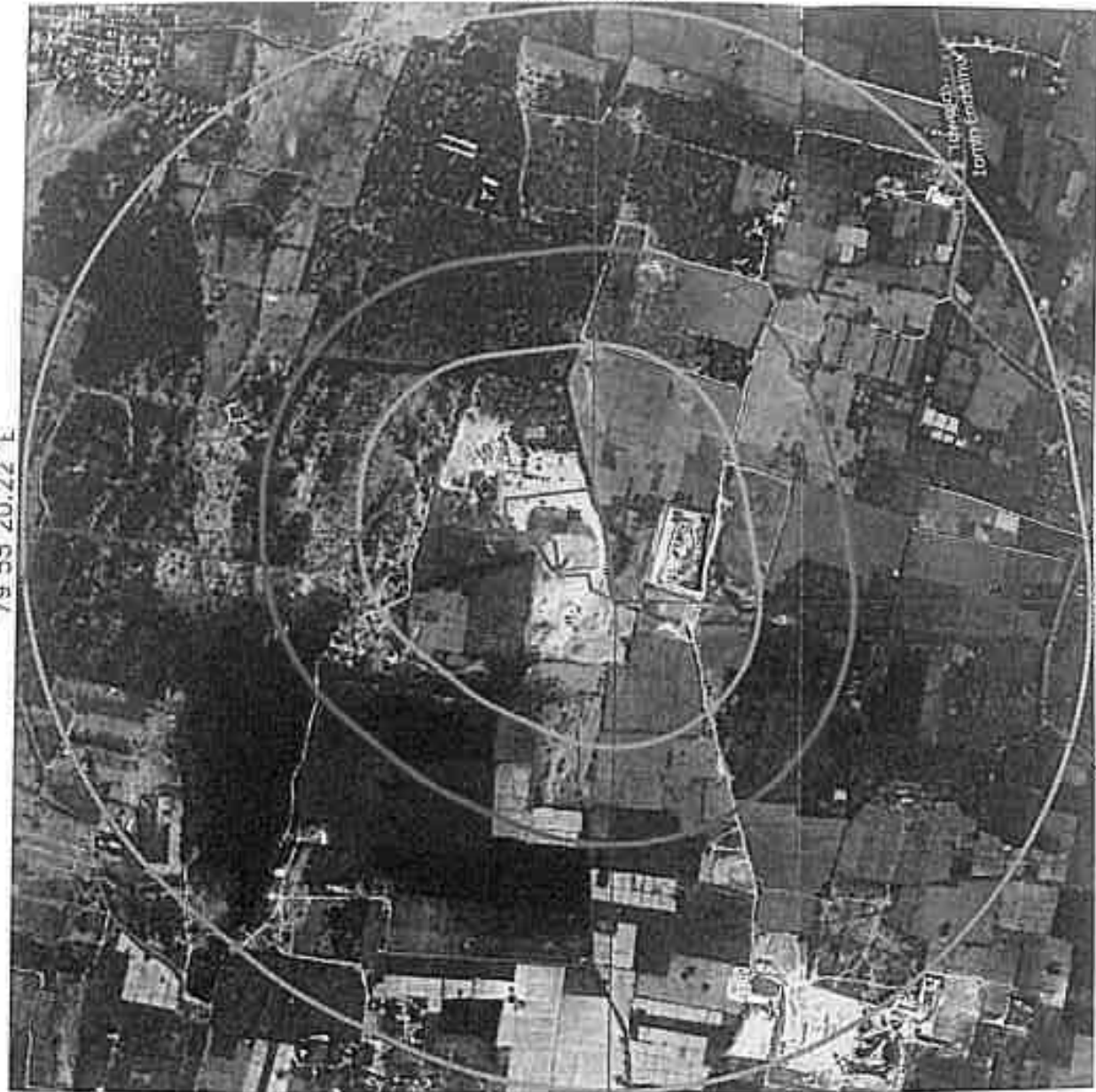
Prepared By:

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

H. SURESH, M.Sc.,
QUALIFIED PERSON

79°55'20.22"E

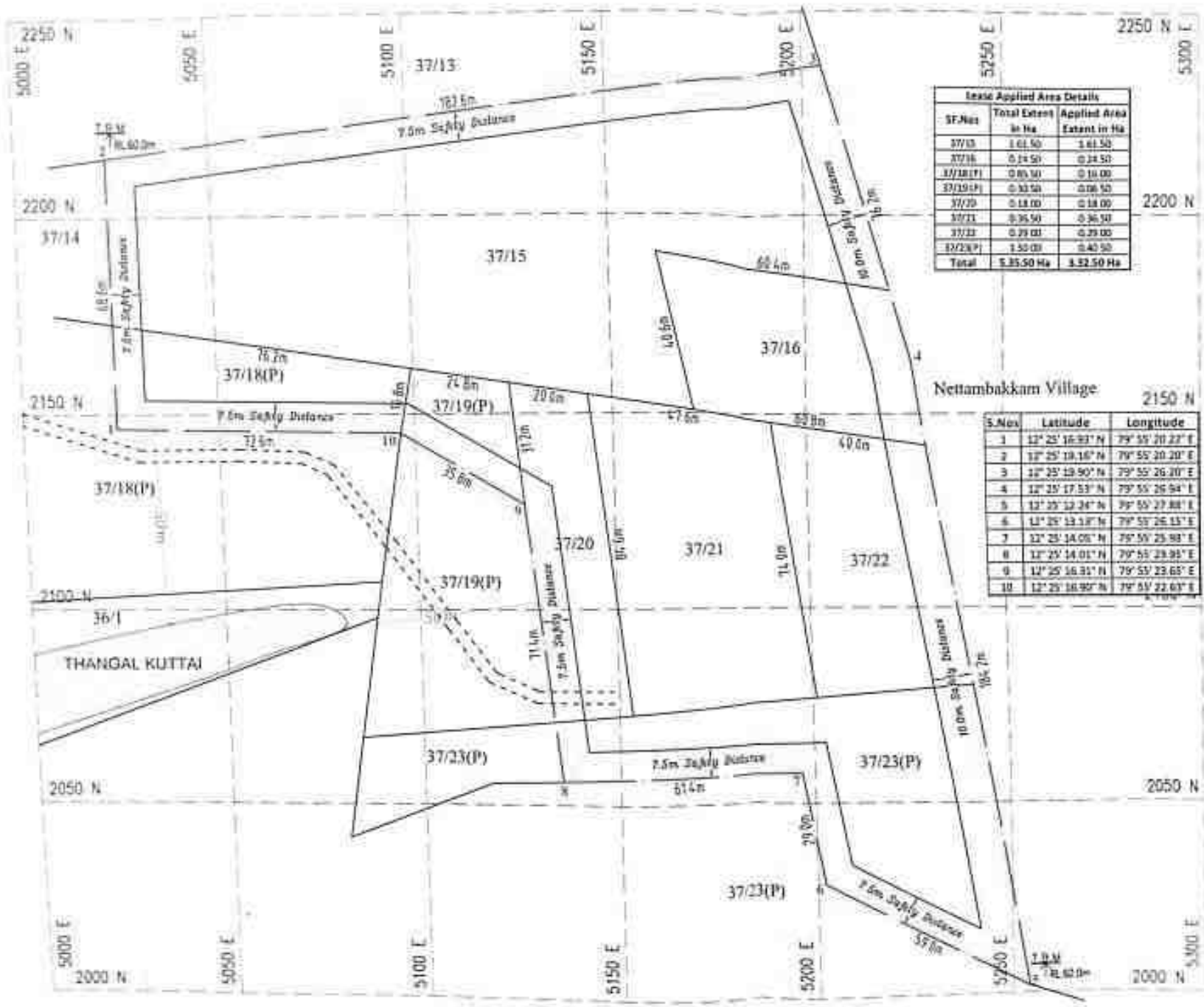
12°25'19.90"E



79°55'27.88"E

General
contour

12°25'12.24"E



Lease Applied Area Details		
SF.No.	Total Extent in Ha	Applied Area Extent in Ha
37/13	1.61.50	1.61.50
37/14	0.14.50	0.14.50
37/18(P)	0.00.00	0.00.00
37/19(P)	0.33.50	0.33.50
37/20	0.18.00	0.18.00
37/21	0.35.50	0.35.50
37/22	0.29.00	0.29.00
37/23(P)	1.50.00	0.40.50
Total	5.35.50 Ha	3.52.50 Ha

S.No.	Latitude	Longitude
1	12° 25' 16.93" N	79° 55' 20.22" E
2	12° 25' 19.16" N	79° 55' 20.20" E
3	12° 25' 19.90" N	79° 55' 26.30" E
4	12° 25' 17.53" N	79° 55' 26.94" E
5	12° 25' 12.34" N	79° 55' 27.88" E
6	12° 25' 13.18" N	79° 55' 26.13" E
7	12° 25' 14.08" N	79° 55' 25.98" E
8	12° 25' 14.01" N	79° 55' 23.95" E
9	12° 25' 16.35" N	79° 55' 23.65" E
10	12° 25' 16.95" N	79° 55' 22.63" E

PLATE NO: II

DATE OF SURVEY: 31.10.2025

APPLICANT ADDRESS

M. OM VINAYAGA SUPPLIER,
PROP: THIRU K. DHAKSHANAMURTHI
PLOT NO: 14, GF 7, S.V. COMPLEX
VANTHAVASI ROAD, SOTHUPAKKAM,
CHEYYUR TALUK,
CHENGALPATTU DISTRICT - 603 319.

LOCATION OF QUARRY

EXTENT : 3.52.50 Ha
S.F.NO. : 37/13, 14, 18(P), 19(P), 20,
37/21, 22 & 37/23 (P)
VILLAGE : GALLANGEMPOORA KOTTAIR
TALUK : MADURANTHARAM,
DISTRICT : CHENGALPATTU,
STATE : TAMIL NADU

INDEX

QUARRY LEASE BOUNDARY

7.5m, 10.0m & 50m Safety Distance

TEMPORARY BENCH MARK

APPROACH ROAD

THANGAL KUTTAI

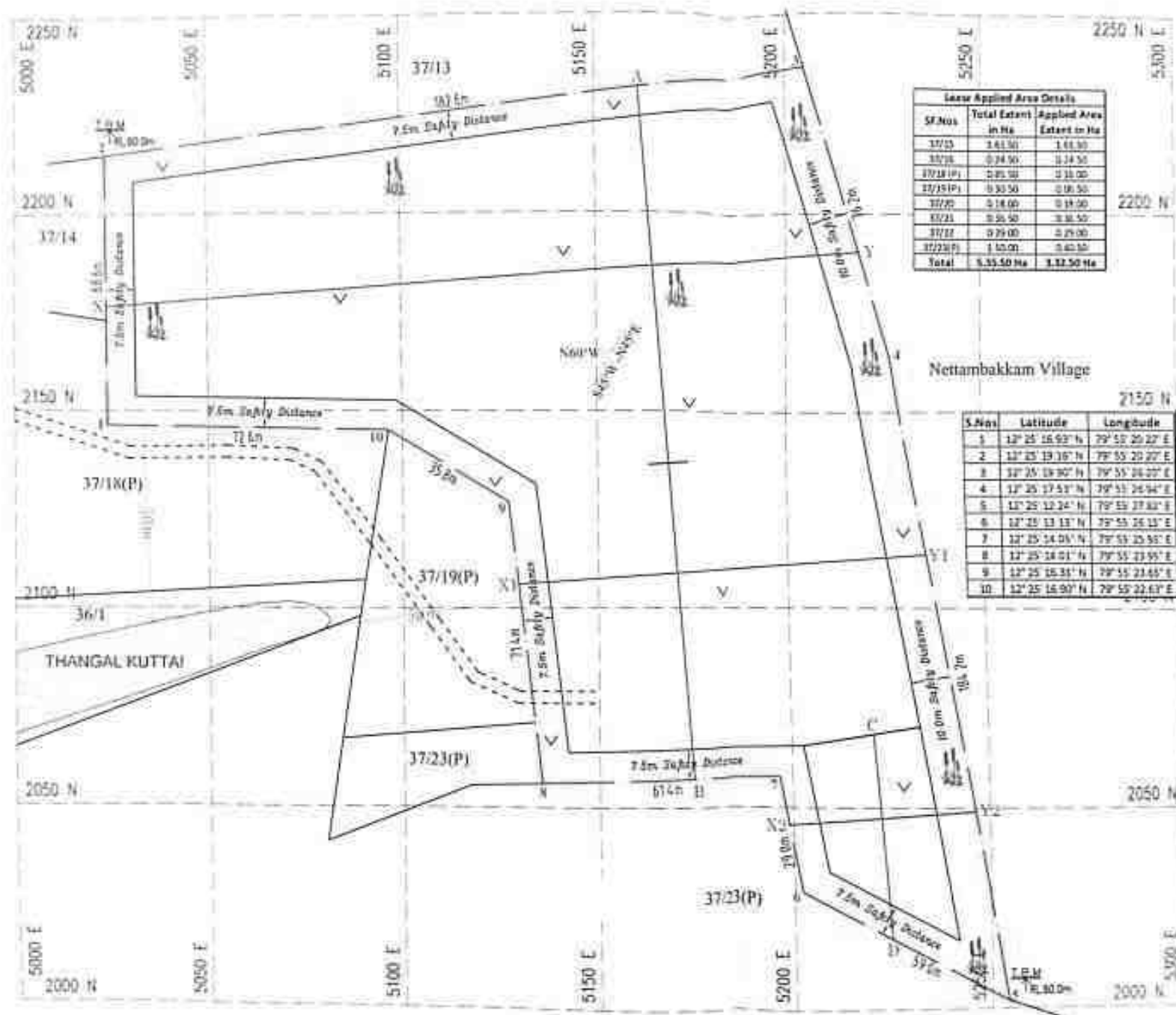
MINE LEASE PLAN

SCALE: 1:1000

Prepared By:

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

M. Suresh N. S.
QUALIFIED PERSON



Lease Applied Area Details		
SF Nos	Total Extent in Ha	Applied Area Extent in Ha
37/13	1.41.30	1.41.30
37/14	0.24.30	0.24.30
37/18(P)	0.45.00	0.45.00
37/19(P)	0.30.30	0.30.30
37/20	0.14.00	0.14.00
37/21	0.36.30	0.36.30
37/22	0.29.00	0.29.00
37/23(P)	1.10.00	0.40.30
Total	5.33.50 Ha	3.32.50 Ha

S.No	Latitude	Longitude
1	12° 25' 16.93" N	79° 55' 20.22" E
2	12° 25' 19.18" N	79° 55' 20.20" E
3	12° 25' 19.80" N	79° 55' 20.20" E
4	12° 25' 17.51" N	79° 55' 24.94" E
5	12° 25' 12.24" N	79° 55' 27.82" E
6	12° 25' 13.13" N	79° 55' 26.15" E
7	12° 25' 14.01" N	79° 55' 25.55" E
8	12° 25' 14.01" N	79° 55' 23.55" E
9	12° 25' 16.31" N	79° 55' 21.65" E
10	12° 25' 16.90" N	79° 55' 22.63" E



PLATE NO. III

DATE OF SURVEY: 31.10.2023

APPLICANT ADDRESS:

M. OM VINAYAGA SURESH
PROP: THIRU K. DHAKSHANMURTHI
PLOT NO: 14, OF 7, S.V. COMPLEX
VANTHAVAI ROAD, EOTHUPAKKAM
CHEYUR TALUK,
CHENGALPATTU DISTRICT - 603 319

LOCATION OF QUARRY:

EXTENT: 3.32.50 Ha
SF NOS: 37/13, 14, 18(P), 19(P), 20,
37/21, 22 & 37/23 (P)
VILLAGE: VALLURU KARUR VOTAKK
TALUK: MADURANTHAKAM
DISTRICT: CHENGALPATTU
STATE: TAMIL NADU

INDEX

QUARRY LEASE BOUNDARY:

7.5m, 10.0m & 30m SAFETY DISTANCE:

TEMPORARY BENCHMARK:

APPROACH ROAD:

GRAVEL:

SHRUB:

STAKE & DIP:

THANGAL KUTTAI:

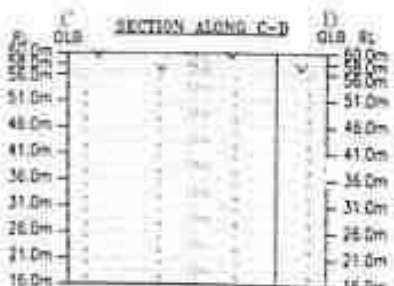
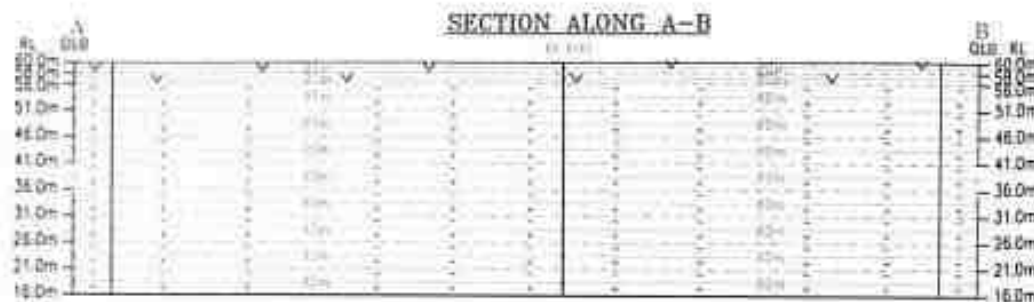
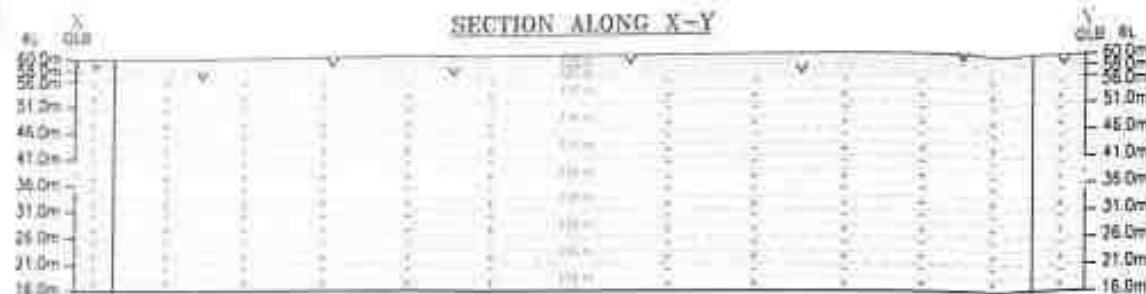
SURFACE & GEOLOGICAL PLAN

SCALE: 1:1000

Prepared By:

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

M. Suresh
M. SURESH M.S.
QUALIFIED PERSON



GEOLOGICAL RESOURCES							
Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in (m ³)	Gravel in m ³ / Mt	Geological Resources in m ³ / Mt (100%)
XY-AB	I	196	95	3		37240	
	II	196	95	2		37240	
	III-X	196	95	40	744800		744800
	Total					74480	744800
XY-CD	I	106	80	2		16960	
	II	106	80	2		16960	
	III-X	106	80	40	339200		339200
	Total					33920	339200
XY-EF	I	51	47	2		4794	
	II	51	47	2		4794	
	III-X	51	47	40	95880		95880
	Total					9588	95880
Grand Total						117988 / 235976 Mt	1179880 / 3244870 Mt

PLATE NO-III-A
 DATE OF SURVEY: 31.10.2023
APPLICANT ADDRESS:
 T.M. OM VINAYAGA SWAMY,
 PROP. THIRU K. DHAKSHANAMURTHI,
 PLOT NO. 14, GP 7, S.V. COMPLEX,
 VANTHAVASI ROAD, SORHUPAKKAM,
 CHEYYUR TALUK,
 CHENGALPATTU DISTRICT - 603 319.

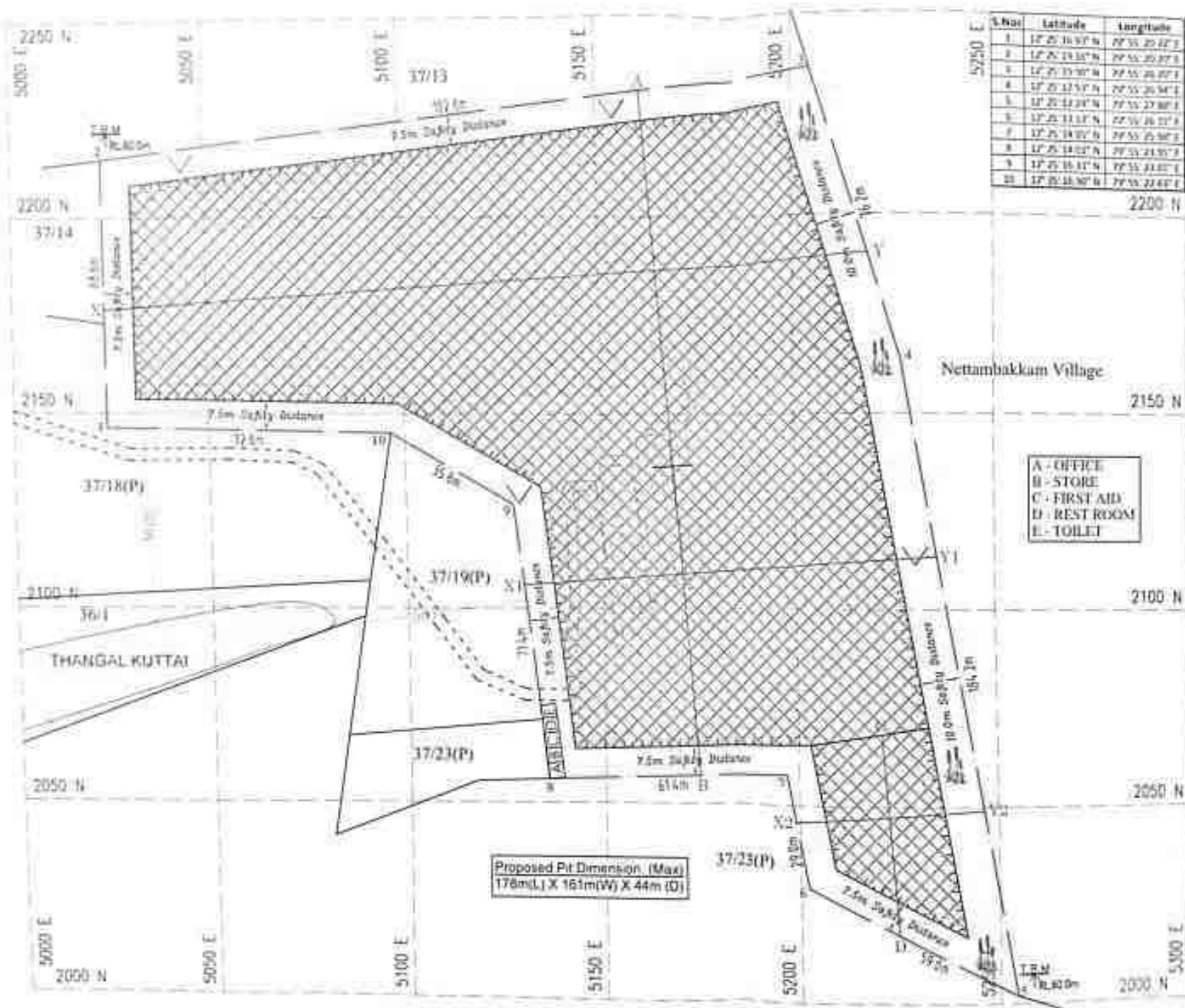
LOCATION OF QUARRY:
 EXTENT : 3.32.50 Hg
 S.F. NO. : 37/15-76, 18(P), 19(P), 20,
 37/21, 22 & 37/23 (P)
 VILLAGE : VELLARAI KUDUR KOLATHUR
 TALUK : MADURANTHAKAM
 DISTRICT : CHENGALPATTU
 STATE : TAMIL NADU

INDEX
 QUARRY LEASE BOUNDARY: ☐
 2.5m & 10m SAFETY DISTANCE: ☐
 GRAVEL: ☒
 FLOUGH STONE: ☐

GEOLOGICAL SECTIONS
 SCALE: HGR: 1:1000
 VGR: 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

(Signature)
 M. SURESH, M.Sc.,
 QUALIFIED PERSON



S.No	Latitude	Longitude
1	12° 25' 18.97" N	77° 55' 20.12" E
2	12° 25' 19.18" N	77° 55' 20.37" E
3	12° 25' 19.90" N	77° 55' 20.87" E
4	12° 25' 21.57" N	77° 55' 20.94" E
5	12° 25' 22.94" N	77° 55' 21.80" E
6	12° 25' 23.13" N	77° 55' 21.07" E
7	12° 25' 18.07" N	77° 55' 20.90" E
8	12° 25' 18.02" N	77° 55' 21.50" E
9	12° 25' 16.17" N	77° 55' 21.07" E
10	12° 25' 16.90" N	77° 55' 21.67" E



PLATE NO.IV

DATE OF SURVEY: 31.10.2025.

APPLICANT ADDRESS:

M. OM VINAYAGA SUPPLIER
 PROP: THIRU K. DHARSHANAMURTHI
 PLOT NO. 14 OF 7 S.V. COMPLEX
 VANDHAVASI ROAD, SOTHUPAKKAM
 CHEYYUR TALUK
 CHENGALPATTU DISTRICT - 603 319

LOCATION OF QUARRY:

EXTENT : 3.32-50 ha
 S.F.NO. : 37/15, 16, 18(P), 19(P), 20,
 37/21, 22 & 37/23(P)
 VILLAGE : NALLUR-MADURAKALATHUR
 TALUK : MADURANTHAKAM
 DISTRICT : CHENGALPATTU
 STATE : TAMIL NADU

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m to 10m & 50m SAFETY DISTANCE
- TEMPORARY BENCH MARK
- APPROACH ROAD
- QUARRY ROAD
- GRAVEL
- SHFLS
- THANGAL KUTTAI
- PROPOSED PIT LIMIT

YEAR WISE DEVELOPMENT AND PRODUCTION PLAN

SCALE 1:1000

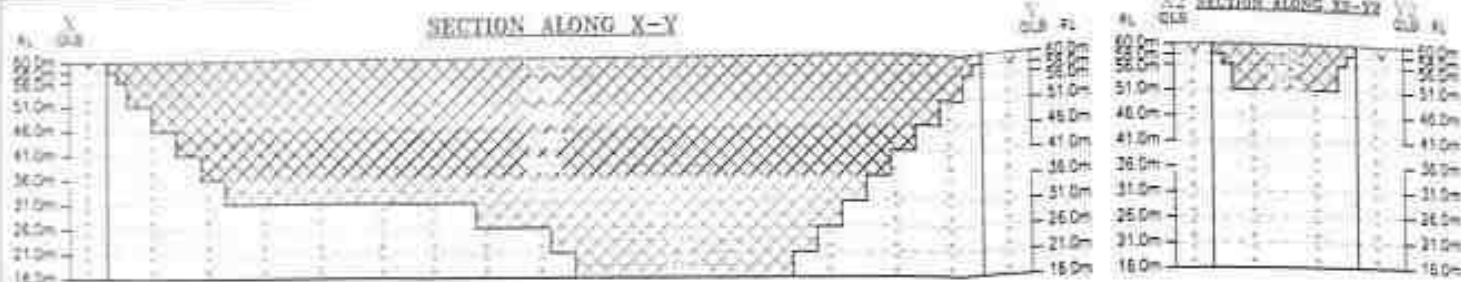
Prepared By:

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

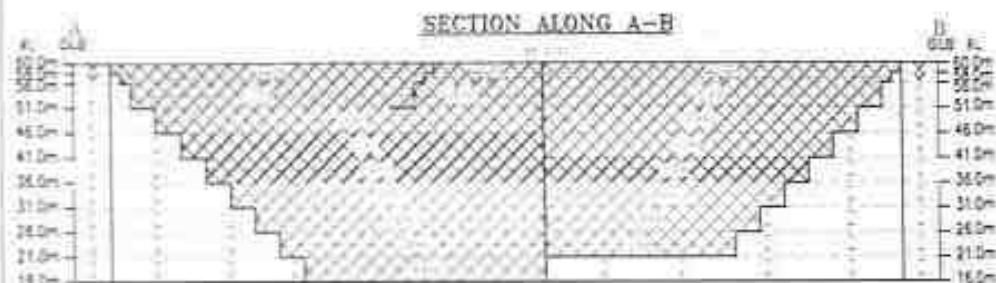
(Signature)
 M. SURESH M.S.
 QUALIFIED PERSON



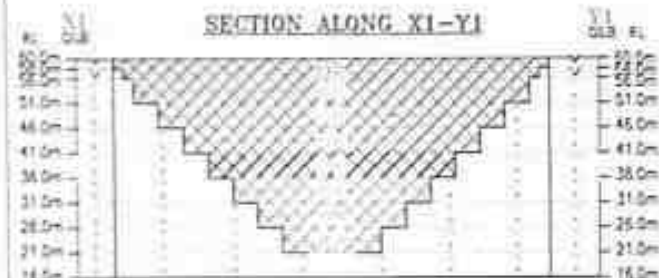
SECTION ALONG X-Y



SECTION ALONG A-B



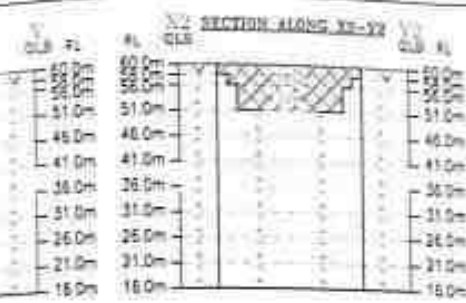
SECTION ALONG X1-Y1



SECTION ALONG C-D



SECTION ALONG X2-Y2



I	YEAR PROPOSED EXCAVATION	
II	YEAR PROPOSED EXCAVATION	
III	YEAR PROPOSED EXCAVATION	
IV	YEAR PROPOSED EXCAVATION	
V	YEAR PROPOSED EXCAVATION	

YEARWISE DEVELOPMENT AND PRODUCTION RESERVES								
Year	Section	Block	Length in feet	Width in feet	Depth in feet	Volume in cu ft	Recoverable Reserves of Rough Stone in m ³ / Mt (100%)	
1-YEAR	X1-A1	1	376	36	2	2896	4900	
		2	374	42	2	3136	4900	
		20	376	36	3	4070	4900	
		Total				4070	4900	
2-YEAR	X1-A1	1	376	36	2	2896	4900	
		2	374	42	2	3136	4900	
		10	376	36	3	4070	4900	
		1	40	73	3	1293	2100	
	X1-B1	2	36	73	3	1293	2100	
		10	36	33	3	2700	2700	
		1	41	36	3	1401		
		2	39	26	4	2028		
	X1-C1	10	37	22	3	6070	6070	
		Total				6070	6070	
		X1-A1	10	360	74	3	6120	6100
			2	78	64	3	2160	2200
4	60		39	3	1770	1770		
Total				10050	10050			
3-YEAR	X1-A1	3	430	74	3	2730	2730	
		3	140	85	3	4500	4500	
		3	30	34	3	1100	1100	
		Total				11760	11760	
4-YEAR	X1-A1	3	430	64	3	4110	4100	
		3	74	36	3	2130	2130	
		10	34	34	3	1410	1410	
		3	44	49	3	1270	1270	
	X1-B1	3	40	43	3	960	960	
		3	40	44	3	1070	1070	
		10	20	33	3	660	660	
		Total				3660	3660	
	Grand Total						40700 (approx. 40700)	40700 (approx. 40700)

PLATE NO. 33-V-A

DATE OF SURVEY: 31.10.2023

APPLICANT ADDRESS:

14.0M VINAYAGA SUPPLIER
PROP. THIRU K. DHAKSHANAMURTHI
PLOT NO. 14, GF 7, S.V. COMPLEX
VANDHAVAR ROAD, TOTHUPAKKAM,
CHEYUR TALUK,
CHENGALPATTU DISTRICT - 603 319

LOCATION OF QUARRY:

EXTENT: 3.32.50 Hq.
S.P. NO.: 37/15, 14, 15(P), 16(P), 20,
37/21, 22 & 37/23 (P)
VILLAGE: MADURANTHA KANAKA
TALUK: MADURANTHA KANAKA
DISTRICT: CHENGALPATTU
STATE: TAMIL NADU

INDEX

QUARRY LEASE BOUNDARY	
7.5M & 10M SAFETY DISTANCE	
GRAVEL	
WEATHERED ROCK	
ROUGH STONE	
PROPOSED PIT LIMIT	

YEARWISE DEVELOPMENT
AND PRODUCTION SECTION

SCALE: HOR: 1:1000
VER: 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

N. Suresh
N. SURESH, M.Sc.
QUALIFIED PERSON

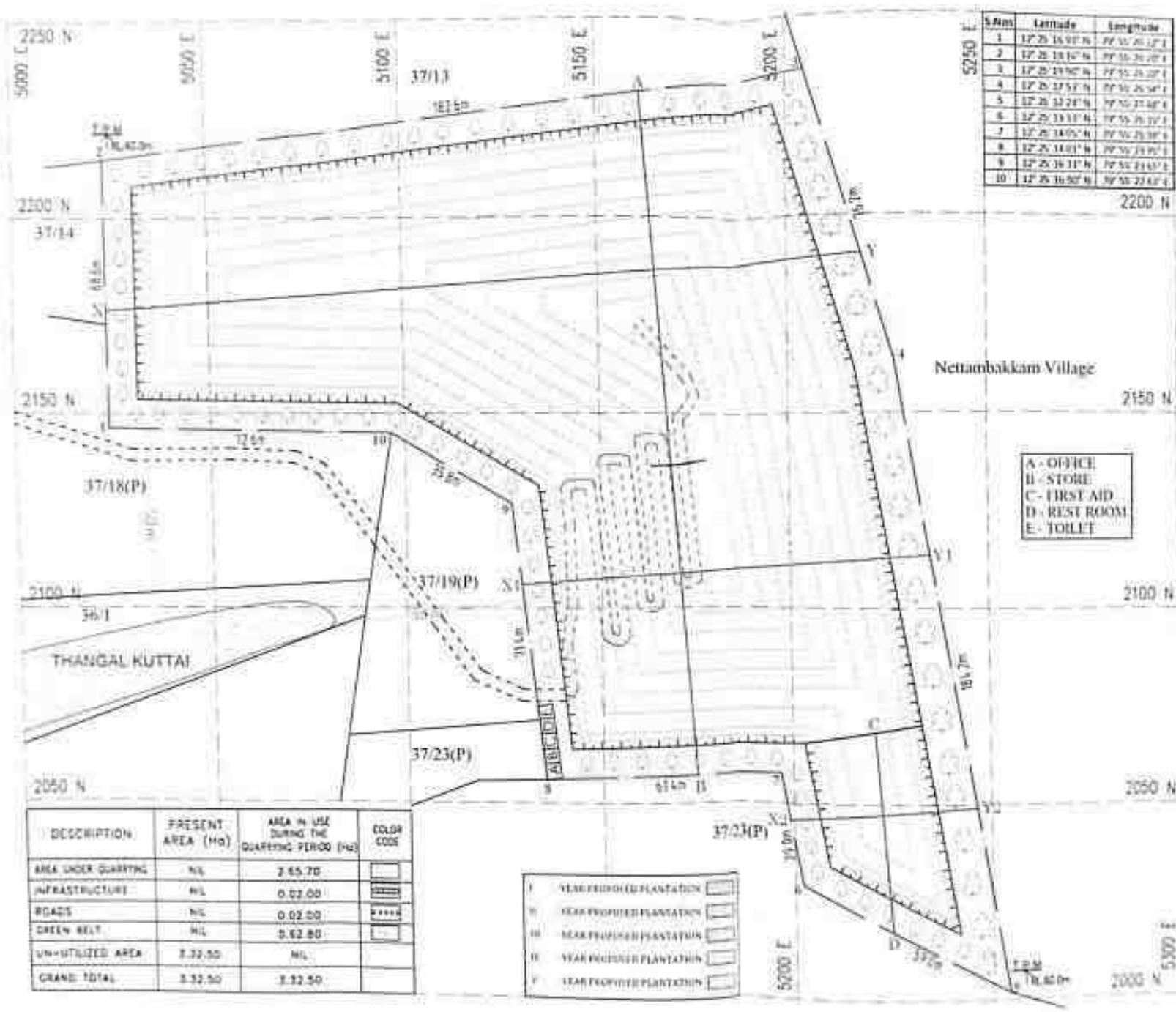
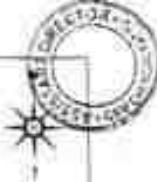


PLATE NO-V

DATE OF SURVEY: 31.10.2022

APPLICANT ADDRESS:

M. OM VINAYAGA SUPPLIER,
 PROP. SHRI K. DHAKSHANAMURTHI
 PLOT NO. 14, DF-7, S.V. COMPLEX
 VANNAVADI ROAD, SOTHUPAKKAM,
 CHEYUR TALUK,
 CHENGALPATTU DISTRICT - 603 319.

LOCATION OF QUARRY:

EXTENT : 3.32.50 Ha.
 S.E. CORN : 37/15, 16, 18(P), 19(P), 20,
 37/21, 22 & 37/23 (P).
 VILLAGE : NALLAMUR KANDUR KOLATHUR
 TALUK : MADURANTHAKAM
 DISTRICT : CHENGALPATTU
 STATE : TAMIL NADU

INDEX

- QUARRY LEASE BOUNDARY
- 7.5m, 15.0m & 50m WHITE DISTANCE
- TEMPORARY BENCH MARK
- APPROACH ROAD
- QUARRY ROAD
- GRAVEL
- SHRUB
- THANGAL KUTTAI
- APPEL LAYOUT

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

(Signature)
 SURVEYOR
 QUALIFIED PERSON

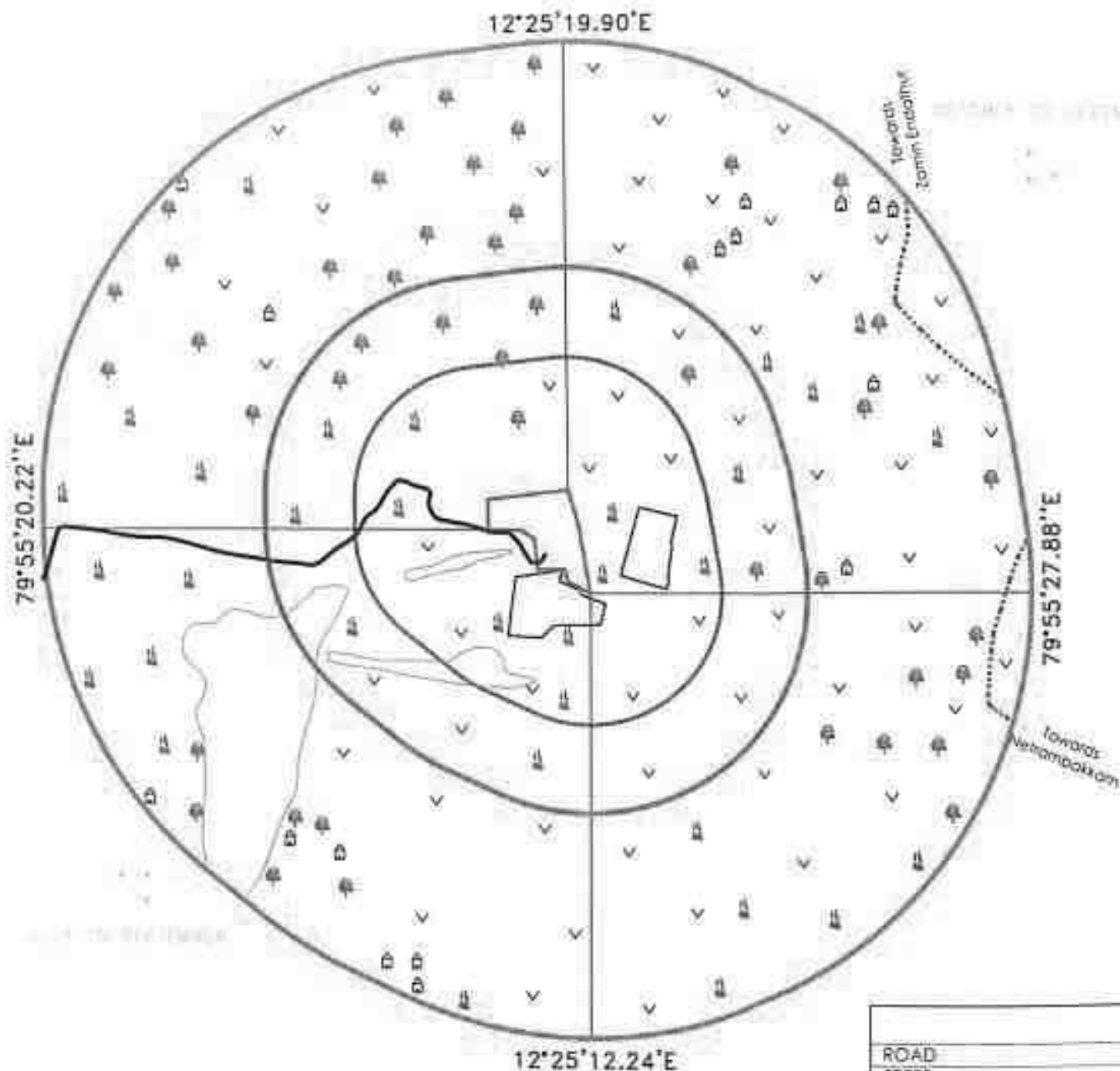


PLATE NO: VI

DATE OF SURVEY: 31.10.2014

APPLICANT ADDRESS:

M. OM VINAYAGA SUPPLIER,
PROP. THIRU. DHAKSHANAMURTHI,
PLOT NO. 14, GF-7, S.V. COMPLEX,
VANTHAVASI ROAD, SOTHUPAKKAM,
CHEYYUR TALUK,
CHENGALPATTU DISTRICT - 603 319.

LOCATION OF QUARRY:

EXTENT : 3.32.50 Hrs.
S.F. NOS : 37/15, 16, 18(P), 19(P), 20,
37/21, 22 & 37/23 (P)
VILLAGE : VALLANUR MADURAKKOTAYUR
TALUK : MADURANTHAKAM
DISTRICT : CHENGALPATTU
STATE : TAMIL NADU.

INDEX

QUARRY LEASE BOUNDARY	
VILLAGE ROAD	
APPROACH ROAD	
300M RADIUS	
500M RADIUS	
1KM RADIUS	
TREES	
SHRUB	
DRY AGRICULTURAL LAND	
INFRASTRUCTURES	
WIND DIRECTION	
TANK	
ADJOINING QUARRY PIT	

ENVIRONMENT 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

M. SURESH, M.Sc.
QUALIFIED PERSON

ROAD	(05%)
TREES	(20%)
SEASONAL AGRICULTURAL LAND	(35%)
BARREN LAND	(30%)
HABITATIONS	(05%)
TANK	(05%)



PLATE NO-VII

DATE OF SURVEY: 31.10.2023

APPLICANT ADDRESS:

M. OM VINAYAGA SUPPLIER,
PROP: THIRU K. DHAKSHANAMURTHI,
PLOT NO: 14, OF 2, S.V. COMPLEX,
VANTHAVASI ROAD, SOTHUPAKKAM,
CHEYUR TALUK,
CHENGALPATTU DISTRICT, PIN 319

LOCATION OF QUARRY:

EXTENT : 3.32.50 Ha.
S.F. NOS : 37/15, 16, 18(P), 19(P), 20,
37/21, 22 & 37/23 (P)
VILLAGE : SALLURU MADURA KOLATHUR
TALUK : MADURANTHAKAM
DISTRICT : CHENGALPATTU
STATE : TAMIL NADU

INDEX

QUARRY LEASE BOUNDARY	
7.5m/10.0m & 50m BENCH DISTANCE	
TEMPORARY BENCH MARK	
APPROACH ROAD	
QUARRY ROAD	
QUARRY PIT	
TREES	
THANGAL KUTTAI	
FENCING	
PARAPET WALL	
ULTIMATE PIT LIMIT	
PROPOSED WATER STORAGE	

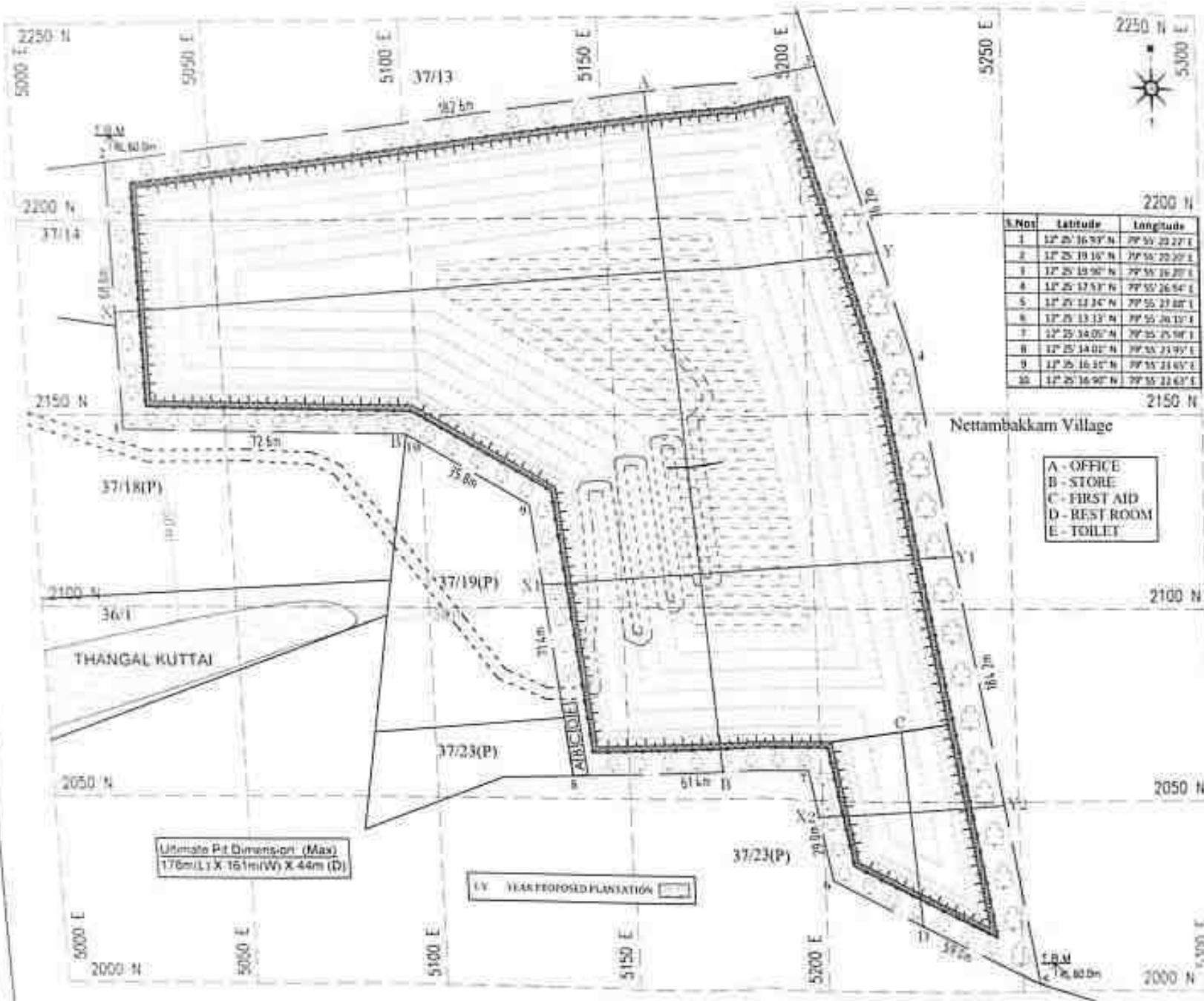
CONCEPTUAL & FINAL MINE CLOSURE PLAN

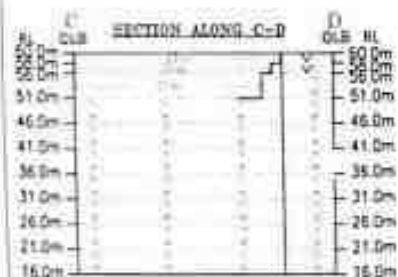
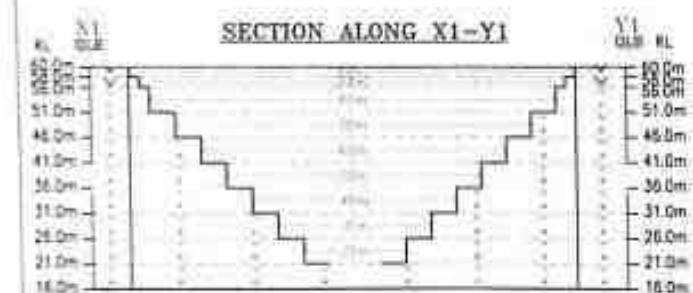
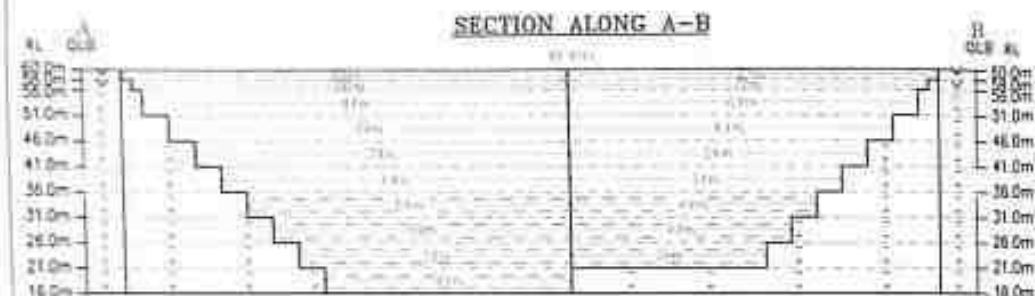
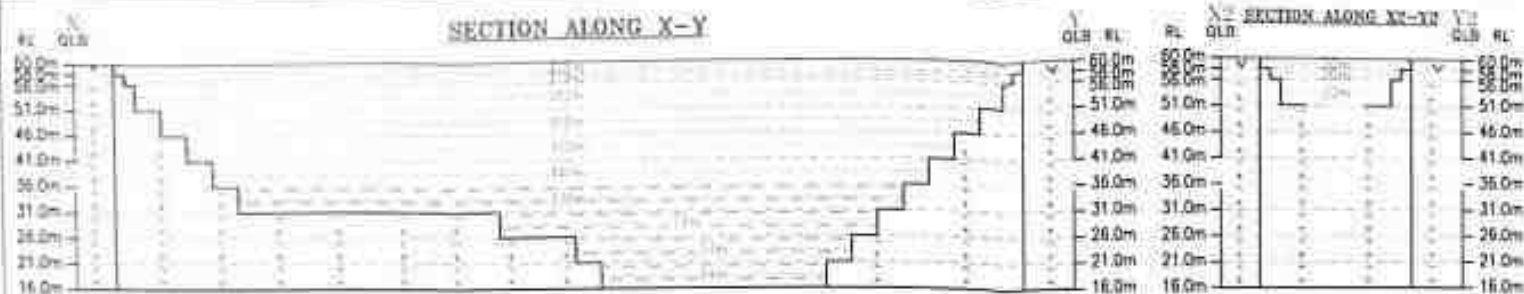
SCALE 1:1000

Prepared By:

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

S. Senthil
S. Senthil
QUALIFIED PERSON





MINEABLE RESERVES							
Section	Bench	Length in (m)	Width in (m)	Depth in (m)	Volume in (m ³)	Gravel in m ³ / Mt	Mineable Reserves in m ³ /Mt (100%)
XY-AB	I	178	88	3		31328	
	II	174	86	3		29928	
	III	170	84	3	71400		71400
	IV	160	79	3	63200		63200
	V	150	74	3	55500		55500
	VI	140	69	3	48300		48300
	VII	130	64	3	41600		41600
	VIII	74	39	3	21830		21830
	IX	54	34	3	14580		14580
	X	44	49	3	10760		10760
XY-CD						81256	327190
	I	88	73	2		12848	
	II	84	71	2		11928	
	III	80	69	3	27600		27600
	IV	70	64	3	22800		22800
	V	60	59	3	17700		17700
	VI	50	54	3	13500		13500
	VII	40	49	3	9800		9800
	VIII	30	44	3	6900		6900
	IX	20	39	3	3400		3400
XY-EF	Total					24776	101800
	I	41	30	2		2460	
	II	34	26	2		2028	
	III	37	22	3	4070		4070
Grand Total						98529 / 381040 MT	412760 / 1150000 MT

PLATE NO VII-A

DATE OF SURVEY: 31.10.2023

APPLICANT ADDRESS:

TM. OM VINAYAGA SUPPLIER,
PROP. THIRU A. DIKSHANAMURTHI
PLOT NO - 14, GP 7, S.V. COMPLEX,
VANDHAVASI ROAD, SODHUPAKKAM,
CHEYYUR TALUK,
CHENGALPATTU DISTRICT - 603 219.

LOCATION OF QUARRY:

EXTENT : 3.32.50 Hq
S.F NOS : 37/15, 16, 18 (P), 19 (P), 20,
31/21, 22 & 37/23 (P)
VILLAGE : MADURANTHAKAM
TALUK : MADURANTHAKAM
DISTRICT : CHENGALPATTU
STATE : TAMIL NADU

INDEX

QUARRY LEASE BOUNDARY ☐
7.5m & 10m SAFETY DISTANCE ☐
GRAVEL ☒
WEATHERED ROCK ☐
ROUGH STONE ☐
QUARRY PIT ☐
OLD SURFACE (LEVEL) ☐
ULTIMATE PIT SLOPE ☐
PROPOSED WATER STORAGE ☐

CONCEPTUAL & FINAL MINE CLOSURE SECTIONS

SCALE: HORIZ. 1:1000
VERT. 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

N. Suresh
N. SURESH, M.Sc.,
QUALIFIED PERSON

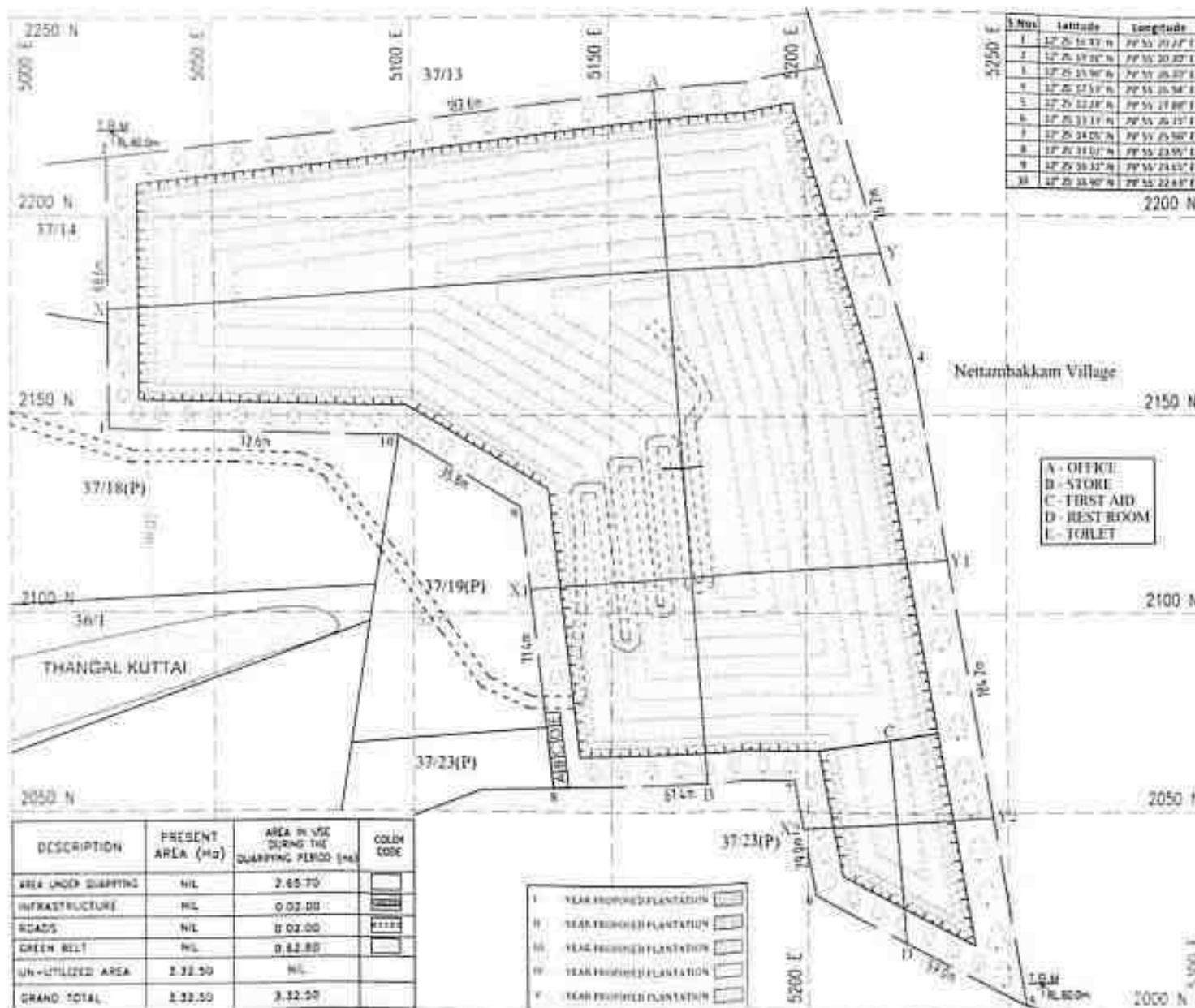


PLATE NO. VIII

DATE OF SURVEY: 31.10.2023

APPLICANT ADDRESS:

M. OM VAIYAGA SUFFLER,
PROF. THIRU K. DHAKSHANAMURTHI,
PLOT NO. 14, GF 2, S.V. COMPLEX,
VANTHAVASI ROAD, SOORUPAKKAM,
CHEYUR TALUK,
CHENGALPATTU DISTRICT - 605 319.

LOCATION OF QUARRY:

EXTENT: 3.32.50 Ha
SFNO: 37/15, 16, 18(P), 19(P), 20,
37/21, 22 & 37/23 (P)
VILLAGE: MADURAVANTHAKKAM
TALUK: MADURAVANTHAKKAM
DISTRICT: CHENGALPATTU
STATE: TAMIL NADU

INDEX

QUARRY LEASE BOUNDARY: 
7.5M, 12.0M & 30M SAFETY DISTANCE: 
TEMPORARY BENCH MARK: 
APPROACH ROAD: 
QUARRY ROAD: 
GRAVEL: 
SHIELD: 
THANGAL KUTTAI: 
MINE LAYOUT: 

PROGRESSIVE MINE CLOSURE PLAN

SCALE: 1:1000

Prepared By:

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

(Signature)
S. SURESH K. S.
QUALIFIED PERSON