

# **SCHEME OF MINING**

(Category 'B'/Semi-mechanized Granite Building  
Stone Quarry/ Open cast mining Project)

Lease No.810/2015-16/10839/M3/2015

**M/S KARIMALA GRANITES & AGGREGATES  
PVT.LTD**

IN  
**KANGAZHA VILLAGE, CHANGANASSERY TALUK,  
KOTTAYAM DISTRICT**  
(Area-5.2309Ha)

OF  
MR.K.J.THOMAS KUTTY  
(MANAGING DIRECTOR)  
M/S KARIMALA GRANITES & AGGREGATES PVT.LTD  
KANGAZHA P.O, PATHANAD  
KOTTAYAM-686541

Quarry Lease Period: 29-03-2016 to 28-03-2026  
Scheme Period: 2021 -2022 to 2025-2026  
(Up to 28-03-2026)

Submitted under Rule 12(3) of MCDR 1988  
KMMC Rule 1967 Amended 2015, Rule 67(2) and 67(5)

Prepared By  
**P.S JAYACHANDRA PANICKER**

DMG/KERALA/RQP/12/2017

*[Handwritten signature]*  
*[Handwritten signature]*  
**GEOLOGIST**  
**DISTRICT OFFICE**  
**DEPT OF MINING AND GEOLOGY**  
**COLLECTORATE P.O. KOTTAYAM-686 002**



**AUTHORIZATION LETTER BY THE MANAGING DIRECTOR**

The Scheme of Mining Plan in respect of Mr. K.J.Thomas Kutty over an area of 5.2309Ha, in Kangazha Village, Changanassery Taluk, Kottayam District, Kerala State bearing Mining Lease No. 810/2015-16/10839/M3/2015 submitted under Rule 24/ Rule 25 of MCDR 2017 has been prepared by Qualified Person Sri P.S Jayachandra Panicker. I request the District Geologist, Department of Mining & Geology, Kottayam, Kerala to make any further correspondence regarding any correction of the scheme of mining plan.

Name of RQP : Jayachandra Panicker.P.S  
Reg No : DMG/KERALA/RQP/12/2017  
Address of RQP : N<sup>2</sup>Mining & Environmental solutions LLP,  
Xaitoon Plaza, Edappal,  
Kerala-679577

Mobile No 9847001810

Email-ID psjpanicker@gmail.com

Place: Kangazha

Date 29-07-2017

  
Mr. K.J.Thomas Kutty  
Managing Director





## **CERTIFICATE**

The provisions of the Mineral Conservation and Development Rules 2017 made under Section 18 of the Mines & Minerals (Development & Regulation) Amendment Act 2015, have been observed in the preparation of the Scheme of mining for Mr. K.J.Thomas Kutty over an area of 5.2309Ha, in Kangazha Village, Changanassery Taluk, Kottayam District in Kerala State and whenever specific permissions are required, the Managing Director will approach the concerned authorities. The information furnished in the Scheme of mining is true and correct to the best of our knowledge.



Place: Edappal

P.S Jayachandra Panicker

Date: 29-07-21

DMG/KERALA/RQP/12/2017



## UNDERTAKING

I hereby undertake that all information/ modifications in Scheme of mining by recognized qualified person be deemed to have been made with his knowledge and consent and shall be acceptable on binding in all respects.

It is certified that the Scheme of mining complies with all statutory rules, Regulations, Orders Made by the Central or State Government, Statutory organization, Court etc. which have been taken into consideration and wherever any specific permission is required the Managing Director will approach the concerned authorities.

"The provisions of Mines Act, Rules and Regulations made there under have been observed in the Scheme of mining over an area of 5.2309 hectares in Kottayam district in Kerala state belonging to me where specific permissions are required, the Managing Director will approach the appropriate authorities.

The information furnished in the Scheme of mining is true and correct to the best of our knowledge and records.

It is to undertake that all the proposals made in Mining Plan approved for the area shall be executed in true spirits. The fact that the lease is going to expire with balance reserves in the lease area shall not cause any distraction in Mineral Conservation, Systematic, Scientific and Sustainable Development of the Mine.

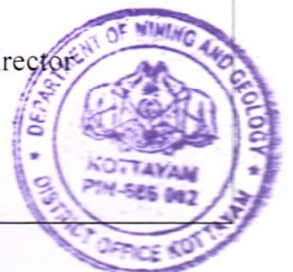
It is to undertake that all the measures proposed in this Scheme of mining will be implemented in a time bound manner as proposed.

Place: Kangazha

Mr. K.J.Thomas Kutty

Date: 29-07-21

Managing Director



## INDEX

Sl. No.	Description	Page No.
1	Introduction	1
2	Chapter 1-Review of Mining	2
3	Chapter 2- Proposal Under Scheme Of Mining For The Next Five Years	9
4	Chapter 3-Reserves	11
5	Chapter 4 –Mining	17
6	Chapter 5 – Environmental Management Plan	29
7	Progressive Mine Closure Plan	32
<b>Annx. No.</b>	<b>ANNEXURES – cover page</b>	
1	Id Proof	
2	Copy of Mining Mate's certificate	
3	Copy of Foreman's Certificate of Competency	
4	Copy of Explosive License	
5	Copy of Pollution Certificate	
6	Copy of Environmental Clearance	
7	Copy of Quarrying Lease & Proceedings order	
8	Copy of Village License	
9	Report from Village officer	
10	Copy of Court judgment	
11	Air Quality Monitoring Reports	
12	Water Quality Monitoring Reports	
13	Noise Monitoring Reports	
14	Laboratory Recognition Certificate	
15	Copy of Mining Plan Approval Letter	
16	Copy of CSR Receipt	
17	Copy of RQP Certificate	
<b>Plate No.</b>	<b>PLATES</b>	
1.	Area survey plan	
2.	Plan showing existing pit details and mined out quantity	
3.	Surface Plan	
4.	Geological Plan	





5.	Geological cross sections
6.	Development Plan
7.	Development Cross sections
8.	Production Plan
9.	Production Cross sections
10.	Drainage Plan
<b>Table No.</b>	<b>List of Tables</b>
1.	Year Wise Mineral Production Details
2.	Corporate Social Responsibility(CSR)/ Corporate Environmental Responsibility (CER)
3.	List of Persons Employed in the Mine
4.	Section wise Geological Reserve Estimation
5.	Section wise Mineable Reserve Estimation.
6.	Mineable reserve estimation along A-A'
7.	Mineable Reserve Estimation along Section B-B'
8.	Mineable Reserve Estimation along Section C-C'
9.	Mineable Reserve Estimation along Section D-D'
10.	Summary of Estimated Reserves
11.	Quantity extracted details
12.	Quarry pits
13.	Machinery Details
14.	Estimation of bench wise production of minerals during 1st Year
15.	Estimation of bench wise production of minerals during 2nd Year
16.	Estimation of bench wise production of minerals during 3rd Year
17.	Estimation of bench wise production of minerals during 4 <sup>th</sup> Year
18.	Estimation of bench wise production of minerals during 5 <sup>th</sup> Year
19.	Production Details of Quarry
20.	Proposed Production Details Of The Quarry
21.	Land use details



PART-1

## REVIEW OF MINING PLAN



## INTRODUCTION

This scheme of mining is prepared for the granite building stone quarry project situated in SurveyNo:277/1(P),277/9,278/2,2-1,3(P),4-4(P),4-1,4-2,4-3,4- 5,6,7,286/2(P),4,5(P),8(P),282/10 of Kangazha Village of Changanassery Taluk, Kottayam district, Kerala. The Project is over an area of 5.2309Ha, in favour of Mr. K.J.Thomas Kutty, Managing Director of M/s Karimala Granites & Aggregates Pvt.Ltd, Kangazha P.O,Pathanad Kottayam-686541.

The granite building stone project of M/s Karimala Granites & Aggregates Pvt.Ltd comprises of 5.2309Ha which is situated in the survey no 277/1(P),277/9,278/2,2-1,3(P),4-4(P),4-1,4-2,4-3,4- 5,6,7,286/2(P),4,5(P),8(P),282/10 of Kangazha Village of Changanassery Taluk, Kottayam district. Quarrying Lease from the department of Mining and Geology has been issued wef 29-03-2016 to 28-03-2026 for a period of 10 years for this area. Mining of granite building stone was started at the beginning from 2009 to 2016, but the method of mining was unscientific and at that time the law & its implementations were at the infantry stage. But the quantity of 167493.17m<sup>3</sup> of building stone was mined as per the Revenue office report. Method of mining from 2016- till date was scientific and quantity of mineable reserves excavated was according to the approved mining plan which valid till 2021. Quantity mined already during the tenure of the Quarrying Lease period is given in the table no 1.As per the quarrying lease, total quantity permitted to be mined in a year is 2,00,000MT and the same will be expires on 28-03-2026. So here the scheme of mining is prepared for the next 5 financial years. However the life of mine may increase in case of not achieving the targeted mineable production.

This scheme of mining is prepared by RQP as per Rule 67(2) and 67(5) of KMMC rules 2015. It is prepared to review the mining activities carried out so far including mine closure and to plan the future mining activities for next five years.

The first part comprises of the review of mining plan. Next the scheme of mining contains the quantity of mineral mined during the review period and also gives the production details and finally the progressive closure plan.





## **CHAPTER-1**

### **REVIEW OF MINING PLAN**

#### **1.1 DETAILS OF LESSEE**

This area of Granite Building Stone quarry project is working with a Quarrying Lease granted by Director of Mining & Geology, and .Mr. K.J.Thomas Kutty is the Managing Director of M/s Karimala Granites & Aggregates Pvt.Ltd The address of Managing Director is K.J.Thomas Kutty, Managing Director of M/s Karimala Granites & Aggregates Pvt.Ltd, Kangazha P.O, Pathanad Kottayam-686541.

#### **1.2 DETAILS OF MINERAL CONCESSION IN KOMPAS**

The quarrying lease number, Lease file reference number, Mineral concession number and mining entity code are available in Kerala Online Mining Permit Awarding Services portal of the Department of Mining and Geology.

#### **1.3 PARTICULARS OF QUARRYING LEASE**

The Quarrying Lease was granted in Survey No 277/1(P),277/9,278/2,2-1,3(P),4-4(P),4-1,4-2,4-3,4- 5,6,7,286/2(P),4,5(P),8(P),282/10 of Kangazha Village, Changanassery Taluk, Kottayam district for 10 years over an area of 5.2309Hectares. The Quarrying Lease was executed on 29/3/2016 and is expected to expire on 28/3/2026. Copy of quarrying lease is enclosed as annexure 7.

#### **1.4 NAME OF MINERAL FOR WHICH THE SCHEME HAS TO PREPARED**

The Quarrying lease has been granted for the extraction of the mineral “Granite Building Stone”.



### **1.5 COMMENCEMENT OF MINING OPERATION**

The mining operations in the lease hold area has been started on 05.04.2016.

### **1.6 DATE OF INTIMATION TO DGMS REGARDING OPENING OF MINE;-**

The intimation to the regional office, DGMS Bangalore has been done on 05.04.2016.

### **1.7 DETAILS OF ENVIRONMENTAL CLEARANCE ISSUED**

Environmental Clearance for the project is issued by State Environmental Impact Assessment authority No 222/SEIAA/KL/349/2014 on 29-11-2014. Its validity expired on 28/11/2019. Duration of the Environmental Clearance was 5 years. According to the verdict of Hon'ble High Court, WP © 12439/2020 & common case number WP © 17533/2020 clearly states that the validity of an Environmental Clearance will be extended up to life of mine of the project. As per the previous approved Mining Plan, the mineable quantity is 2005000MT and 774536 MT has been mined during earlier plan period. From the remaining mineable quantity of 1230464 MT, 1000000MT is planned to be mined during the scheme period (5 years) therefore the same will expires only on 28.03.2026.

### **1.8 PARTICULARS OF VALUE ADDITION UNIT IF PRESENT;-**

Value addition unit is situated in the lease area has been registered in the Department of Mining & Geology under Rule 91 of KMMCR, 2015 for the production and sale of aggregates by operating with Primary Crusher- 36" x 27 (2 Nos), Vertical shaft impactor - 250HP(2Nos), Cone Crusher-150Hp(2Nos).

### **1.9 DETAILS OF LAST APPROVED MINING PLAN/SCHEME OF MINING**

The last approved mining plan was prepared by Mr. K.Shankar, submitted on 18-11-2015 which was approved on 25.01.2016, for a period of 5 years.

### **1.10 DETAILS OF MODIFIED MINING PLAN IF SUBMITTED;-**

There is no modified mining plan submitted in this regards.





### 1.11 MINERAL PRODUCTION DETAILS

Mining of granite building stone from the project area was started at an earlier period i.e., from 2009 onwards, but the method of mining was unscientific. The quantity of 167493.17m<sup>3</sup> of building stone was mined as per the Revenue office report. The mineable quantity of 200000MT/year was proposed during the quarrying lease period i.e.2016-2026. As per the approved mining plan, 1205932MT is the proposed mineable quantity. But the quantity of 7,60,736 MT was mined from 2016- 2020. Table wise calculation of extracted quantity is given below.

Year	Mined out Quantity
2016- 2017	108355MT
2017 -2018	185655MT
2018- 2019	224558MT
2019- 2020	121818MT
2020- 2021 ( up to 02/12/2020)	120350MT
<b>TOTAL</b>	<b>7,60,736 MT</b>

Year wise mineral production details are given below:

Table No.1

### MINERAL PRODUCTION

#### MINERAL PRODUCTION (PROPOSED)

Year	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Proposed Production	200000MT	200000MT	200000MT	200000MT	200000MT





### 1.11 MINERAL PRODUCTION DETAILS

Mining of granite building stone from the project area was started at an earlier period i.e., from 2009 onwards, but the method of mining was unscientific. The quantity of 167493.17m<sup>3</sup> of building stone was mined as per the Revenue office report. The mineable quantity of 200000MT/year was proposed during the quarrying lease period i.e.2016-2026. As per the approved mining plan, 1205932MT is the proposed mineable quantity. But the quantity of 7.60,736 MT was mined from 2016- 2020. Table wise calculation of extracted quantity is given below.

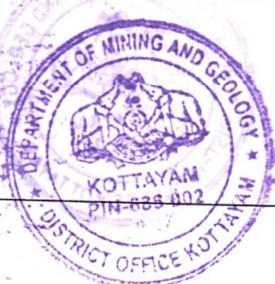
Year	Mined out Quantity
2016- 2017	108355MT
2017 -2018	185655MT
2018- 2019	224558MT
2019- 2020	121818MT
2020- 2021 ( up to 02/12/2020)	120350MT
<b>TOTAL</b>	<b>7,60,736 MT</b>

Year wise mineral production details are given below:

Table No.1

### MINERAL PRODUCTION

MINERAL PRODUCTION (PROPOSED)					
Year	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Proposed Production	200000MT	200000MT	200000MT	200000MT	200000MT



MINERAL PRODUCTION (ACTUAL)					
Year	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Actual Production	108355MT	185655MT	224558MT	121818MT	120350MT ( up to 02/12/2020)
Average Actual Production	152334.8MT				
<b>TOTAL</b>	7,60,736 MT				

**(A) DETAILS OF DEFICIENCIES EXISTING IN THE APPROVED MINING PLAN & ITS RECTIFICATION IN THE SCHEME**

Mining plan which was submitted previously comprises a total area of 5.2309Ha is valid till 2021. Deficiency that found out in the existing approved mining plan, there was no garland canal included in the drainage plan enclosed. A modified drainage plan with garland canal is enclosed in the present scheme of mining.

**(B) REVIEW OF COMPLIANCE**

During the financial year 2019-2020, C.M.S High School Kanam have received Rs,25000 from the project authority for the midday meal programme for 3 days in the school as part of CSR/CER funds. CSR receipt is enclosed as annexure no 16.

**PROPOSAL FOR CORPORATE SOCIAL RESPONSIBILITY (CSR)/ CORPORATE ENVIRONMENTAL RESPONSIBILITY (CER) FOR THE SCHEME PERIOD**

**Table No-2**

Year Period	Activity	Amount	Maintenance Amount
-------------	----------	--------	--------------------





First Year	Renovation of Elappungal Anganawadi in Kangazha Gramapanchayath ward No. XI.	2,00,000	10000 per year Up to validity period of the EC (5 Year period)
	Provide stainless drinking water dispenser for Elappungal Anganawadi in Kangazha Gramapanchayath ward No. XI.	50,000	5000 per year Up to validity period of the EC (5 Year period)
Second Year	Provide vehicle parking shed, Generator 200watts, Portable microphone system, 2 unit computer, Display board, Renovation of Covid -19 vaccine waiting room and conference hall, (Health centre Edayirikkappuzha)	7,00,000	10000 per year Up to validity period of the EC (5 Year period)
	Roofing work of Mundathanam health centre, Medical shelf and printer, 3 unit water purifier, compound lighting work . (Health centre Edayirikkappuzha)	2,00,000	5000 per year Up to validity period of the EC (5 Year period)
Sub Total		11,50,000	1,50,000





Grand Total	13,00,000
-------------	-----------

A total amount of **13,00,000₹ INR** is budgeted for CER activities. This will be completed during the first two years of validity period of the EC. Rupees 11.5 lakhs is budgeted for implementation of CER activity and 1.5lakh rupees is budgeted for maintenance of the interventions. The maintenance of the water dispenser could be entrusted to the installing agency on an Annual Maintenance Contract. The maintenance of the other activity will be done directly by the proponent. All the above CER activities will be carried out by the proponent under the supervision of the beneficiary.

#### **c) REHABILITATION DETAILS**

No rehabilitation was carried out within the proposed area, Afforestation will be done only after the completion of mining operations.

#### **(D)JUSTIFICATIONS FURNISHED ALONG WITH PROPOSAL FOR COMPLIANCE IN THE ENSURING PERIOD**

It includes systematic programme with proper environment impact assessment, planning for offsetting the ill effects of development, implementing the programme for resource management, development planning, and close control over day-to-day operations, regular monitoring and auditing of environmental performance and collection of base line information which serve as a guide to determine how the future development will affect the environment compared to the present base line status.

#### **1.10 DETAILS OF VIOLATION NOTICES FROM THE AUTHORITIES CONCERNED;-**

There is no violation notices from any agencies like SEIAA, State Pollution Control Board (SPCB) etc.

#### **1.11 DETAILS OF ACTIONS TAKEN FOR RECTIFICATION & IMPOSITION OF FINE BY DMG IF ANY;-**



No fine has been imposed over the lease area by Department of Mining and Geology during plan period

**1.12 DETAILS OF ACCIDENTS, INJURIES/ DEATH & COMPENSATION PAID;-**

There is no accident or injuries occurred in the mine during last years.

**1.13 PARTICULARS OF COURT CASE IF ANY;-**

There is no court case against the mining activities during plan period.





## CHAPTER-2

### **2. PROPOSAL UNDER SCHEME OF MINING FOR THE NEXT FIVE FINANCIAL YEARS.**

Quarrying lease has been granted for the extraction of Granite building Stone from an area of 5.2309Ha on 29-03-2016. Mining Operations in the site was started at the beginning of 2009. Method of mining at that time was unscientific till 2016. The mineable quantity of 167493.17m<sup>3</sup> was excavated during the previous permit period (14-02-2009 to 30.09.2015) as per the Revenue office report. Detailed report from the Revenue office is enclosed as annexure no 9. Rule stating scientific mining method came into existence during 2015. Scientific method was followed in the project area from 2016 to till date. Mineable quantity of granite building stone of 1230464 MT in 5.2309Ha is proposed to mine scientifically during the scheme period in the next five financial years. But as per the quarrying lease, the permitted quantity of granite building stone is 200000MT/ year. So, from the remaining mineable quantity of 1230464 MT, 1000000 MT is proposed to mine during the scheme period. According to ROM, the life of mine will be 7years. As per the approved mining plan, it has explains that the life of mine will increase in case of not achieving the targeted mineable quantity. So, Remaining quantity of 230464 MT can be mined in the upcoming 6<sup>th</sup> and 7<sup>th</sup> year.

#### **2.1 DETAILS OF RECOGNISED QUALIFIED PERSON**

Shri. Jayachandra Panicker, P.S, S/O Sukumaran Panicker K.P, Souparnika, Navajyothi Nagar 39A, Kadappakada. P.O, Kollam District – 691008, Kerala. The registration number is DMG/KERALA/RQP/12/2017. The recognition is valid for a period of 10 years ending on 1/12/2027

#### **2.2 DATE OF EXPIRY OF APPROVAL GRANTED**

Date of expiry of Quarrying Lease for 10 years is on 28.03.2026.

#### **2.3 DETAILS OF LABOURS & DESIGNATION** List of persons employed in the mine including the name and designation of person required to be posted as per Mines Act and metalliferous Mines Regulation 1961.

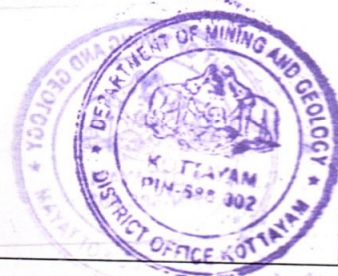




Table No-3

SL NO	NAME	DESIGNATION
1 OFFICE	DEEPAK	MANAGER
2	PRAHLADA DASARA	MINES MATE
3	KAILA SRINU	FOREMAN
4	RIJUMON	OFFICE
5 BUNKER	SARATH	OFFICE
6	BISSIN	OFFICE
7	SABU	BUNKER SUPERVISOR
8	STEPHEN	BUNKER SUPERVISOR
9	RAJU	BUNKER DRIVER
10	DILLEP	BUNKER LABOUR
11	SHAM	BUNKER LABOUR
12 PLANT	AJAY	BUNKER LABOUR
13	LENOJ	BUNKER LABOUR
14	SUMAN	PLANT SUPERVISOR
15	SAJI	ELECTRICIAN
16	RAJESH	WELDER
17	RANJITH	PLANT LABOUR
18	RATHAN	PLANT LABOUR
19	SEBASTIAN	PLANT LABOUR
20	MUNNA	PLANT LABOUR
21	RAMESH	PLANT LABOUR
22 MADA	RUPEN	PLANT LABOUR
23	NARAYANAN	PLANT LABOUR
24	RADHAKRISHNAN	MADA SUPERVISOR
25	ANUJ	OPERATOR
26	SHIJU	OPERATOR
27	JAMES	OPERATOR
28	RATHEESH	OPERATOR
29	GOJEN	OPERATOR
30	PRASANNAN	OPERATOR
31	SATHEESH	DRIVER
32	SANTHOSH	DRIVER
33	PRASAD	DRIVER
34	JIJU	DRIVER
35	ACHU	HELPER
36	BIKAS	HELPER
37	AJU	HELPER
38	SANEESH	DRILLING
39	ANUPAM	DRILLING
40	GERACHAN	DRILLING
41	SABIN	DRILLING
42	AYAPPAN	DRILLING



## **CHAPTER-3**

### **RESERVES**

#### **3.1 RESERVE ESTIMATION DETAILS AS PER EARLIER MINING PLAN WITH GRADE IF IT IS APPLICABLE**

Earlier mining plan which was submitted for an area of 5.2309Ha valid till 2021. Average production of granite building stone as per the earlier mining plan with Grade is applicable in this case.

#### **3.2 DEPLETION OF RESERVES ON ACCOUNT OF MINING**

7,74,536 MT was mined during the period of 2016-2021.

#### **3.3 REASON FOR NOT MINING PROPOSED QUANTITY (PREVIOUS PLAN PERIOD)**

The proposed quantity has been almost extracted during the plan period. From remaining mineable quantity of 1230464MT, 1000000MT is to be mined during scheme period.

#### **3.4 PLANS & SECTIONS FURNISHED IN THE SCHEME**

##### **i) Details of updated Surface & Geological Plan**

An updated surface plan, geological plan are attached in this scheme of mining.

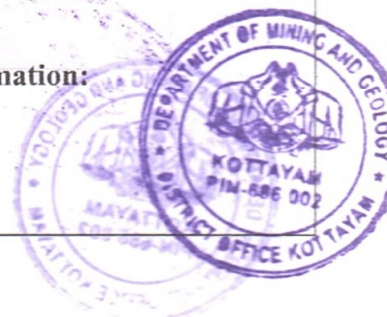
##### **ii) Details of updated transverse & longitudinal section**

An updated transverse sections are attached in this scheme of mining.

#### **METHOD OF ESTIMATION OF RESERVES**

The estimation of ore reserves is made by conventional parallel cross section method using geological cross section. The geological cross sections are prepared across the strike of the ore body. The area of individual litho units in each and every cross section is calculated separately. The volume between the cross section is arrived on the basis of the average area of parallel cross section i.e  $(S1 + S2) / 2$  and multiplying sectional interval and tonnage is arrived at by multiplying with bulk density.

**Note : Following are the parameters considered for reserve estimation:**





- In the allotted area, the mineral is exposed from the lower most level is 119 m MSL to the top most part of the hill at 145 m MSL.
- Bulk Density of Stone and associated minor minerals is taken as 2.5Ton /M3.

### 3.5 RESERVES OF MINERALS

Considering the above parameters and exposures observed in the existing pit in the allotted area, the surface, geological plan, geological cross-sections are prepared on a scale 1:1000.

#### Geological Reserves: -

**Table No 4- Section wise Geological Reserve Estimation**

GEOLOGICAL RESERVES					
Section	Section Area (Sq.m)	Influence (m)	Volume (cu.m)	Bulk Density	Quantity (Tonnes)
A-A'	3021	74.5	225064.5	2.5	562661.3
B-B'	3474	94.5	328293	2.5	820732.5
C-C'	3350	113.5	380225	2.5	950562.5
D-D'	2267	96.5	218765.5	2.5	546913.8
<b>Total</b>					<b>2880870 MT</b>

#### Mineable Reserves: -

To estimate the mineable reserves, the reserves blocked under 7.5m statutory barriers and due to formation of systematic benches up to Ultimate Pit Limit have been considered.

**Table No 5- Section wise Mineable Reserve Estimation.**

### MINEABLE RESERVES



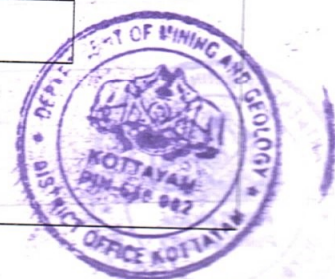
Section	Section Area (Sq.m)	Influence (m)	Volume (cu.m)	Bulk Density	Quantity (Tonnes)
A-A'	1548	67	103716	2.5	259290
B-B'	1820.558621	87	158388.6	2.5	395972
C-C'	1416	106	150096	2.5	375240
D-D'	941	85	79985	2.5	199962
Total					1230464 MT

Total Geological Reserve = 2880870MT

Total Mineable Reserve = 1230464 MT

Table No 6- Section wise mineable reserve estimation along A-A

MINEABLE RESERVES				
SECTION ALONG A-A'				
REDUCE LEVEL OF BENCH	AREA (Sq.m)	INFLUENCE (m)	DENSITY	QUANTITY (TON)
145	11	67	2.5	1842.5
140	83	67	2.5	13902.5
135	136	67	2.5	22780
130	143	67	2.5	23952.5
125	153	67	2.5	25627.5
120	256	67	2.5	42880
115	266	67	2.5	44555
110	216	67	2.5	36180
105	51.36893	67	2.5	8604





<b>TOTAL</b>	<b>220324 MT</b>
--------------	------------------

**Table No-7 Mineable Reserve Estimation along Section B-B'**

<b>MINEABLE RESERVES</b>				
<b>SECTION ALONG B-B'</b>				
<b>REDUCE LEVEL BENCH</b>	<b>OF</b>	<b>AREA (Sq.m)</b>	<b>INFLUENCE (m)</b>	<b>DENSITY QUANTITY (TON)</b>
130		181	87	2.5 39367.5
125		193	87	2.5 41977.5
120		205	87	2.5 44587.5
115		370	87	2.5 80475
110		564	87	2.5 122670
105		486.714	87	2.5 105860.3
<b>TOTAL</b>				<b>434938MT</b>

**No-8 Mineable Reserve Estimation along Section C-C'**

<b>MINEABLE RESERVES</b>				
<b>SECTION ALONG C-C'</b>				
<b>REDUCE LEVEL BENCH</b>	<b>OF</b>	<b>AREA (Sq.m)</b>	<b>INFLUENCE (m)</b>	<b>DENSITY QUANTITY (TON)</b>
145		3	106	2.5 795
140		7	106	2.5 1855
135		18	106	2.5 4770
130		20	106	2.5 5300
125		68	106	2.5 18020
120		317	106	2.5 84005
115		517	106	2.5 137005



110	466	106	2.5	123490
<b>TOTAL</b>				<b>375240MT</b>

**No-9 Mineable Reserve Estimation along Section D-D'**

MINEABLE RESERVES					
SECTION ALONG D-D'					
REDUCE LEVEL BENCH	OF	AREA (Sq.m)	INFLUENCE (m)	DENSITY	QUANTITY (TON)
135		37	85	2.5	7862.5
130		91	85	2.5	19337.5
125		107	85	2.5	22737.5
120		102	85	2.5	21675
115		325	85	2.5	69062.5
110		279	85	2.5	59287.5
TOTAL					199963MT

**SUMMARY OF GEOLOGICAL & MINEABLE RESERVES**

In this area the building stone exposures are bordering to the lease boundary. The mineable reserves are arrived after deducting the reserves locked in mines barrier along the boundary in compliance with Metalliferous Mines Regulations Act. Summary of Geological and mineable reserve is given below.





Table No. 10- Summary of Estimated Reserves

RESERVES IN MT	
Category	R O M (MT)
Mineable reserves	1230464 MT
Blocked reserves	1561937MT
Geological reserves	2792401MT

Note : **Geological Reserves** = Mineable Reserves + Blocked Reserves

In above Geological reserves of 2792401MT, only 1230464 MT can be exploited / mined, while the balance of 1561937MT is getting blocked which cannot be mined, due to the boundary and practical constraints, and safety considerations. Hence for all practical purpose (for production and future planning) only Mineable Reserves are considered.



## **CHAPTER-4**

### **MINING**

#### **4.1 MINING METHOD & MACHINERY DEPLOYED**

The said area is proposed to work with conventional open cast method with bench system and mode of operation will be mechanized. Based on the mode and method so adopted and taking geological parameters of the ore body into consideration, the quarry pit is designed in such a way that the height of the bench is kept at 5.00 m max., and the width at 5.00 m min., maintaining a slope of 45° from the horizontal. Mining will be done with the help of machineries like rock drills, jack hammer, compressors, hydraulic excavators, breakers, etc.

#### **4.2 PARTICULARS OF DEVELOPMENT PLAN & SECTIONS**

Yearly pit-wise development plan and sections will be attached in this scheme of Mining.

#### **4.2A DETAILS OF GRANITE BUILDING STONE EXTRACTION**

Mining of granite building stone was started at the beginning from 2009 to 2016. The quantity of **167493.17m<sup>3</sup>** of building stone was mined as per the Revenue office report. ie the total quantity of Granite Building Stone extracted from the inside and outside the Lease area as per the assessment of Revenue Department is **4,18,732.925 MT**. Granite building stone extracted from lease area is **7,74,536 MT**. As per the latest survey, it is assessed that a quantity of **11,93,268.925 MT Granite Building Stone** has been removed from entire lease area. The details are given in the table below.

Table No. 11

<b>DETAILS OF GRANITE BUILDING STONE EXTRACTION OF KARIMALA GRANITES AND AGGREGATES PVT.LTD</b>		
		<b>TOTAL</b>
Assessment of village authorities (revenue department). The quantity of Granite Building Stone has been removed from the area	Quantity extracted Inside lease area - <b>263129.175 MT</b>	<b>4,18,732.925 MT</b>
	Quantity extracted Outside lease area -	





	<b>155603.75 MT</b>	
Quantity of Granite Building Stone extracted from the lease area (quantity allowed as per quarrying lease is 10,00,000 MT for 5 years @ 200000/year		<b>7,74,536 MT</b>
Presently, as per the latest survey, it is assessed that a quantity of Granite Building Stone has been removed from lease area including the quantity already removed from the entire area of lease		<b>11,93,268.925 MT</b>

#### 4.3 PARTICULARS OF PRODUCTION PLAN

Year wise production plan and cross sections will be attached in this scheme of Mining.

#### 4.3 A EXISTING QUARRY PIT DIMENSION

**Table No. 12-EXISTING QUARRY PIT DIMENSION**

AVG.LENGTH(m)	AVG.WIDTH(m)	AVG.DEPTH(m)
449.75	68.47	15.5

#### 4.4 CHANGE IN MINING METHODS & DEPLOYMENT OF MACHINERY

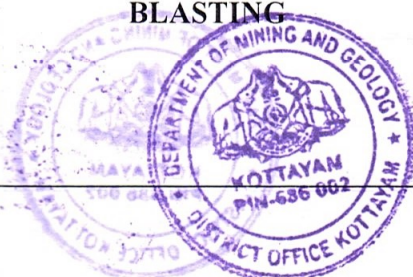
There is no change in proposed mining methods, deployment of machinery and method of blasting.

#### 4.5 MACHINERY DETAILS- Table No. 13

Sl.No	Equipment/ Machinery	No. of units
1.	Cat 320D	2
2.	Cat 320 D2	2
3.	Tata Hitachi	2
4.	Petty Compressor	2

#### b).BLASTING TECHNIQUE ADOPTED

##### BLASTING



Granite is compact rock, at places it is fractured also. Now a days, Blasting is done by Nonel technology, which provides a high level of safety against accidental initiation. Nonel is a shock tube detonator designed to initiate explosions, in the blasting of rocks in mines and quarries.

It is a thin plastic shock tube that has a light dusting of reactive powder on the inside surface (approximately one pound per 70,000 feet).

This tube will reliably transmit a low-energy signal from one point to another by means of shock wave phenomena much like a dust explosion. It will reliably detonate around sharp bends and through kinks. Because the detonation is sustained by such a small quantity of the reactive material, the outer surface of the tube remains intact during and after functioning.

Nonel can be initiated by detonating cord or by a blasting cap. It will reliably initiate instant or delay Nonel blasting caps.

The design of nonel detonators incorporates patented technology, including the Cushion Disk (CD) and Delay Ignition Buffer (DIB) to provide reliability and accuracy in all blasting applications.

## **USE OF THE NON-DETONATING ROCK BREAKING TOOL**

The application of this technology are :

1. Drill a 1 1/2" hole; fill it with water.
2. Drop one or more booster cartridges in the water, place the device in the hole, and place a mat or Some sandbags over the device.
3. Load the primer cartridge and set it off mechanically by pulling a lanyard from a distance of 21 feet from the rock when the device is used.

Depending upon the breakability of the material, a hole can be drilled in from the edge or face (burden) at any distance ranging from a 1 1/2 feet, to as much as 4 feet.

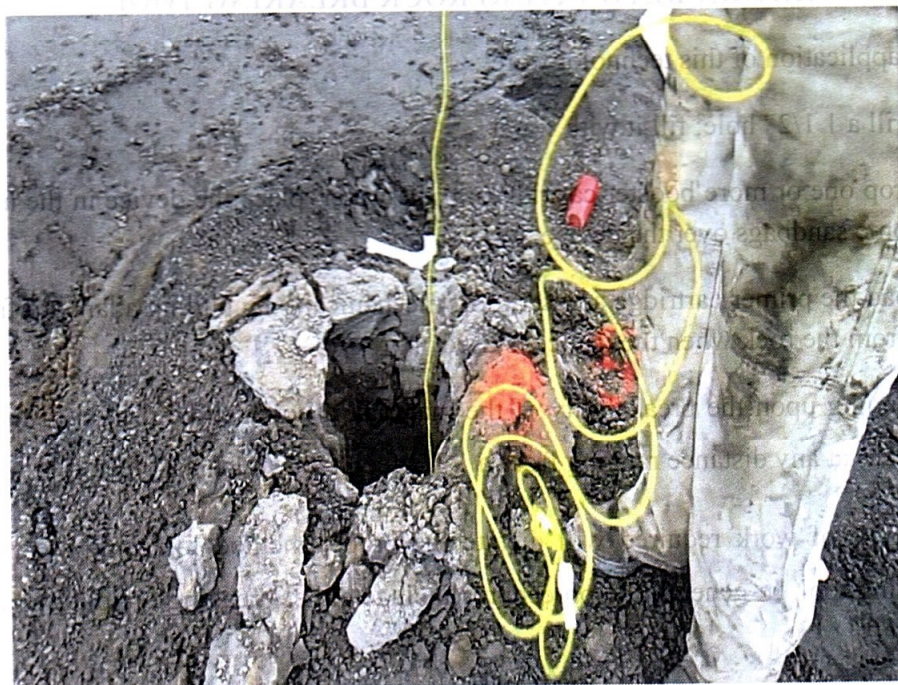
The type of work required will dictate the proper method for using the non-detonating rock-breaking tool. In general, the procedures include either breaking or splitting an entire unconfined mass.

When an unconfined rock needs to be split, a hole should be drilled to a point that is just beyond the center of the mass. The tool can then be used to reduce it to several pieces. If the size of the entire mass cannot be determined, such as when bedrock or large rocks are encountered in an





excavation, then the hole needs to be positioned and drilled deep enough so that the proper sized piece of material will be broken or split from the edge.



The non-detonating rock breaking tool can do anything a small diameter blast hole charged with conventional explosives can do, but in a safer and much more controlled manner. The greatest



difference seems to be that it splits the material rather than shatters it. It will break reinforced concrete and boulders, or the rock ledges and shiners encountered in excavation projects, with the energy that is contained in one or several shotgun shell size cartridges. Caution: Even though this product does not represent a 'detonation process' great care must be taken to protect crews and equipment from fly-rock potential.

## BENEFITS

Since this system breaks material with a negligible amount of fly rock, no noxious fumes, and almost no ground vibration, it allows rock to be broken in the most restrictive circumstances. For example, it can be used to break oversize rocks in the jaws of a crusher or on a grizzly without risk of damaging the equipment. In addition, it is used in very tight excavation situations where explosives are not allowed or are inappropriate; and where it is not possible to use hydraulic demolition hammers.

With this tool, hard excavation near sensitive objects including high pressure gas lines, telephone, power or optic cables, in or near buildings, and in crowded construction sites can be done safely and quickly. Best of all, there are not any restrictive regulations affecting the storage, transportation, or use of the tool or the cartridges.

Each blasting operation will be unique in nature, involving different surface coatings, blast material quantity and working conditions. Before beginning of drilling & blasting operations, the Managing Partner will identify the hazards from the knowledgeable person who had worked in masonry stone mining and being trained to recognize the hazards as well as to inform the authority for quickly corrective action to eliminate such hazards. The Managing Partner will use engineering and administrative control measures, personal protective equipment's (PPE) including respiratory protection and training to protect workers involved in drilling & blasting activities. Engineering control measures such as substitution, isolation, containment and ventilation which are the primary means of preventing or reducing exposures to airborne hazards during drilling & blasting operations have to be implemented by the Managing Partner. Administrative control measures including the use of good work and personal hygiene practices will also reduce exposure to health hazards.

## Engineering Controls

### 1. Substitution





- Use of proper blasting material.
- Use of water soluble (slurry) explosives to reduce dust.

## **2. Isolation and Containment**

- Use barriers and curtain walls to isolate the blasting operation from other workers.
- Use blast rooms or portable blast shelter for smaller operations.
- Use restricted areas for non-enclosed blasting operations.
- Keep co-workers away from the blaster.

### **Administrative Controls**

Perform routine cleanup using wet methods.

- Not to use compressed air to clean the working site as this will create dust in the air.
- Clean and decontaminate the equipments on the worksite.
- Schedule blasting when the least number of workers are at the site.
- Avoid blasting in windy conditions to prevent the spread of hazardous materials.

### **Medical Control**

Medical control measures will be taken for the miners with a view to protect their health. The medical officer will visit the mine site once in a month and shall undertake the following need based functions.

- Pre-employment health examination of all miners.
- Emergency medical care.
- Health Education & Training.
- Health Counseling.
- Provide necessary medical and occupational health facilities.

### **Statutory Control**

For ensuring compliance of the statutory requirements and to maintain the desirable standard for the mine, all the places will be under the control of qualified Mine Manager assisted by number of qualified Assistant Mines Managers, designated as Safety Officer and Welfare Officer and front line supervisors like Mine Foreman, Mining Mate, Blaster/ Shot-firer, Surveyors etc to look after the Safety, Health, Sanitation & Welfare of the work persons. They all will operate in the mine and ensure proper supervision and control in all the activities of mining to avoid any untoward incidents causing injury or harm or health hazards to workforce. For coordinating the activities of



mine at corporate level, an Agent will be appointed with specific responsibilities. Owner of the mine will be responsible for providing all the facilities & assistances to mine management to ensure all the standards at a desired level.

### **Personal Hygiene Practices**

- Prohibit eating, drinking or using tobacco products during drilling & blasting.
- Provide wash stations separately for the workers to wash their hands and face routinely before eating & drinking.
- Remove contaminated work clothes before eating & drinking.
- Provide separate accommodations and storage facilities for protective clothing and equipments.

### **Respiratory Protection**

The driller & blaster will have respirator with the wearer's head, neck, and shoulders to protect the wearer from dust & splinters.

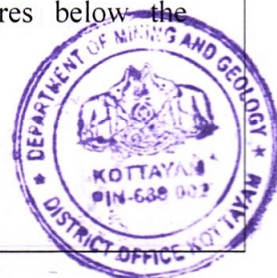
- A certified & approved blasting airline respirator with positive pressure blasting helmet will be provided if necessary.

### **Personal Protective Equipments**

- Hearing protection
- Eye and face protection
- Helmet for head protection
- Leather gloves to protect to full forearm and aprons (or coveralls)
- Safety shoes or boots to protect legs
- Provide training to drillers & blasters and support personnel on drilling & blasting health and safety hazards, how to use controls, personal hygiene practices, safe work practices and the use of respirators.

### **Preventive Measures**

1. Respirators should not be used as the only means of preventing or minimizing exposures to airborne contaminants. Dust source controls such as containment systems, local exhaust systems, and good work practices should be implemented as the primary means of protecting workers. When dust source controls cannot keep exposures below the





recommended exposure limits, controls should be supplemented with the use of respiratory protection.

2. Environmental monitoring by trained personnel will be conducted in all -blasting applications. This is necessary to ensure that workers will not be over expose than the prescribed exposure limit as fixed by the authorities.
3. Anytime environmental conditions, airborne contaminants and their concentrations should be within the permissible limit.

#### **4.6 GENERATION & DISPOSAL OF WASTE**

Mining area is not a fresh one, so the mine waste from the quarry site was dumped in a predetermined dumping yard which is situated adjacent to the project area.

#### **4.7 DETAILS OF DUMPS BUILD UP**

The quarry output is sent for the production of stone aggregates. The granite aggregate products are transported to consuming centers for various needs such as construction of roads, bridges, buildings, etc. in nearby areas and elsewhere.

#### **4.8 CHANGES IN USE OF MINERALS**

There is no change in use of mineral in the proposed site.

#### **4.9 PRODUCTION PLAN**

The System or method of working shall be performed as stipulated under Rule 69(1) by formation of benches as per the Metalliferous Mines Regulations, issued under the Mines Act. Topsoil and mine waste in the mining area is completely removed, so the recovery of saleable material is about 95% of ROM.

During the first year of mining, the work will be carried out from 150 m to 125mMSL by bench cutting method to obtain the proposed rate of rock as shown on the section A-A',B-B',C-C', D-D'. The details of bench wise production & total quantity of rock raised during this year is 200000MT, as in table no: 11.

During the second year of mining, the work will be carried from 130m MSL to 120 m MSL by bench cutting method to obtain the proposed rate of rock as shown on the section A-



A',B-B',C-C', D-D'. The details of bench wise production & total quantity of rock raised during this year is 200000MT, as in table no: 12.

During the third year of mining, the work will be carried from 125m MSL to 115 m MSL by bench cutting method to obtain the proposed rate of rock as shown on the section A-A',B-B',C-C', D-D'. The details of bench wise production & total quantity of rock raised during this year is 200000MT, as in table no: 13.

During the fourth year of mining, the work will be carried from 120m MSL to 110 m MSL by bench cutting method to obtain the proposed rate of rock as shown on the section A-A', ,C-C', D-D'. The details of bench wise production & total quantity of rock raised during this year is 200000MT, as in table no: 14

During the fifth year of mining, the work will be carried from 115m MSL to 110 m MSL by bench cutting method to obtain the proposed rate of rock as shown on the section A-A',B-B',C-C', D-D'. The details of bench wise production & total quantity of rock raised during this year is 200000MT, as in table no: 15.

**Table No. 14 -Details showing estimation of bench- wise production of minerals during 1<sup>st</sup>Year of mine planning.**

Bench m MSL	Section	Area (M <sup>2</sup> )	Influence Length(IL)	Volume in ROM (MT) M <sup>3</sup> (Area x I.L.)	
150MSL to 145MSL	AA'	11	67	737	1842.5
150MSL to 145MSL	C-C'	3	106	318	795
145MSL to 140MSL	AA'	83	67	5561	13903
145MSL to 140MSL	C-C'	7	106	742	1855
140MSL to 135MSL	AA'	136	67	9112	22780





140MSL to 135MSL	C-C'	18	106	1908	4770
140MSL to 135MSL	D-D'	37	85	3145	7863
135MSL to 130MSL	AA'	143	67	9581	23953
135MSL to 130MSL	B-B'	181	87	15747	39368
135MSL to 130MSL	C-C'	20	106	2120	5300
135MSL to 130MSL	D-D'	91	85	7735	19338
130MSL to 125MSL	AA'	153	67	10251	25628
130MSL to 125MSL	B-B'	149.92	87	13043.04	32608
<b>Total</b>					<b>200000MT</b>

**Table No. 15 -Details showing estimation of bench- wise production of minerals during 2<sup>nd</sup> Year of mine planning.**

Bench m MSL	Section	Area (M2)	Influence Length(IL)	Volume in M3 (Area x I.L.)	ROM (MT)
130MSL to 125MSL	B-B'	43.08	87	3748	9369.9
130MSL to 125MSL	C-C'	68	106	7208	18020.0
130MSL to 125MSL	D-D'	107	85	9095	22737.5
125MSL to 120MSL	AA'	256	67	17152	42880.0
125MSL to 120MSL	B-B'	205	87	17835	44587.5
125MSL to 120MSL	C-C'	235.49	106	24962	62404.9
<b>Total</b>					<b>200000MT</b>

**Table No. 16 -Details showing estimation of bench- wise production of minerals during 3rd Year of mine planning.**





Bench m MSL	Section	Area (M2)	Influence Length(IL)	Volume in M3 (Area x I.L.)	ROM (MT)
125MSL to 120MSL	C-C'	81.51	106	8640	21600.2
125MSL to 120MSL	D-D'	102	85	8670	21675.0
120MSL to 115MSL	A-A'	266	67	17822	44555.0
120MSL to 115MSL	B-B'	370	87	32190	80475.0
120MSL to 115MSL	C-C'	119.6	106	12678	31694.5
Total					200000MT

Table No. 17 -Details showing estimation of bench- wise production of minerals during 4<sup>th</sup> Year of mine planning.

Bench m MSL	Section	Area (M2)	Influence Length(IL)	Volume in M3 (Area x I.L.)	ROM (MT)
120MSL to 115MSL	C-C'	397.4	106	42124	105311.0
120MSL to 115MSL	D-D'	325	85	27625	69062.5
115MSL to 110MSL	A-A'	153	67	10251	25627.5
Total					200000MT

Table No. 18 -Details showing estimation of bench- wise production of minerals during 5<sup>th</sup> Year of mine planning.

Bench m MSL	Section	Area (M2)	Influence Length(IL)	Volume in M3 (Area x I.L.)	ROM (MT)
-------------	---------	--------------	-------------------------	----------------------------------	----------





115MSL to 110MSL	A-A'	64	67	4288	10720.0
115MSL to 110MSL	B-B'	564	87	49068	122670.0
115MSL to 110MSL	C-C'	251.36	106	26644	66610.4
<b>Total</b>					<b>200000MT</b>

**4.9.1 Table 19 -Production Details of Quarry**

Mineable quantity as per previous mining plan	2005000 MT
Quantity mined during plan period	774536 MT
Balance quantity available	1230464 MT

**4.9.2 Proposed Rate of Production and Expected Life of Mine-**

The average proposed production (ROM) will be about 100000MT/ year for the next 5 financial years.

**Table 20 Proposed Production details of the Quarry**

Sl. No.	YEAR	SCHEME PERIOD	ROM (in MT)
1	First Year	2021-2022	200000MT
2	Second Year	2022-2023	200000MT
3.	Third Year	2023-2024	200000MT
4.	Fourth Year	2024-2025	200000MT
5.	Fifth Year	2025-2026	200000MT
6.	Balance quantity		230464 MT



## **CHAPTER-5**

### **ENVIRONMENTAL MANAGEMENT PLAN**

**Table No-20**

<b>Salient Items</b>	<b>Proposed As Per Approved Mining Plan</b>	<b>Position At The End Of The 5 Years Mining Plan</b>	<b>Proposal For Future Plan Period</b>
Top Soil Storage, Preservation And Utilisations	No top soil to be removed	nil	nil
Land Reclamation And Rehabilitation	nil	nil	Proposed area will be reclaimed
Waste Dump Management	nil	nil	nil
Afforestation Programme With Precautions For Survival & Protection Of Plantation	There is no proposal for afforestation and rehabilitation.	There is no proposal for afforestation and rehabilitation.	At the end of the life of mine, the possible area will be reclaimed with suitable plants and whole area will be fenced to prevent inherent entry of public and cattle

#### **5.1 Quality of air**

- The quality of air at the allotted area is fresh & respirable.

#### **5.2 Quality of water**

The quality of water in the wells outside the allotted area is potable. The mining operations will not touch the water table in the project site, so the quality of water remains the same.





**5.3 During the proposed mining operations, noise pollution will be there due to following activities:-**

- (1) Drilling of holes and running of compressors.
- (2) Operation of excavators & dumpers.
- (3) Blasting of drill holes.

**BLASTING:-**

Granite is compact rock, at places it is fractured also. Production from the fractured zone will be obtained with the help of excavator, whereas from compact zone the production will be obtained by drilling and blasting. Drilling will be done by jack hammer with the help of air compressor.

- Whole location will be properly dressed by excavator to remove the loose boulders for efficient drilling and for avoiding jamming of drilling hammer and bits.
- Drill holes of 32mm diameter and 1.5 M in depth will be made.
- To reduce the noise level the holes will be blasted by using nitrate mixture and Millisecond delay detonators.
- To maintain the bench height of 5 M, sub bench of 2.5 m will be formed first, later on Two benches will be merged and one bench of 5m will be formed and maintained
- The spacing and burden will be kept at 0.6 M.
- About 30 to 60 holes will be blasted in one blast
- Yield per hole will be  $1.5 \times 0.6 \times 0.6 = 0.54 \text{M}^3$ .
- Number of blasts per day will be 2 to 4 blasts of 40 holes each.

**BLASTING PATTERN:**

The blasting pattern entirely depends on the situation of the joints present in the rocks. The drilling is done as per the requirement of the rock fragmentation with desired production of mineral.

The controlled blasting is proposed by adopting all the safety measures as per "MMR 1961" and with the permission of DGMS. In this area for fragmentation of granite, blasting will be conducted. Multiple blast hole of 1.0 to 1.5m depth will be drilled with the help of 32mm drill rod, jack hammer and air compressor of 110 cfm capacity.



**a) Details of noise level**

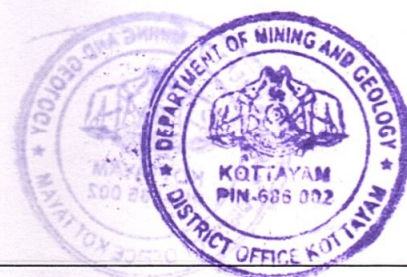
Sources of noise pollution have already been dealt. To reduce the noise caused by machineries and equipment's at the mine, mufflers of adequate size and capacity shall be provided with equipment's at the mine. Chief sources of noise pollution in the mine will be mining machineries. Based on LOI practice, in Director General of Mines Safety circular no.- 158 (Tech.) of 1975, noise standards have been recommended. According to this, there is a warning limit value of 85 db (A) by which the danger of hearing impairment and deafness may result from unprotected ear.

**b) Details of vibration level**

Blasting of drill holes has been proposed for the mineral excavation which will produce vibration for a few moments. Based on the ground vibration studies made earlier, proper care will be taken during blasting operations.

**6. ANY OTHER INFORMATION**

There is no further investigation carried out.





## PART-2

# PROGRESSIVE MINE CLOSURE PLAN



## INTRODUCTION

### (a) Name and address of Managing Director:

Mr.K.J.Thomas Kutty

(Managing Director)

M/S Karimala Granites & Aggregates Pvt.Ltd,

Kangazha P.O, Pathanad,

Kottayam-686541.

### (b) Location of the lease area:

1- State	:	Kerala
2- District	:	Kottayam
3- Taluk	:	Changanassery
4- Village	:	Kangazha
		277/1(P),277/9,278/2,2-1,3(P),4-4(P),4-1,4-2,4-3,4-
5. Survey Nos:		5,6,7,286/2(P),4,5(P),8(P),282/10

### (c) Extent of Lease Area

TYPE OF LAND	Private owned Land
LEASE AREA (IN HECT)	5.2309Ha

### (d) Methods of mining

The proposed method of mining will be Semi mechanized open cast mining. The basic mining techniques adopted will use of machines. For the systematic working of open cast mines, the main development work will be formation of systematic benching. The height of bench will not be kept more than 5.0m at a time and the width of the benches will be always kept safe according to provisions. Mining will be done with the help of tools such as drills, jack- hammers, compressors, hand shovels, picks, excavators etc. The average proposed production (ROM) will be about 200000MT/ year for the next 5 financial years.





### (e) Mineral Processing Operation

Sorting of minerals will be carried out manually. No other process of mineral processing operation has been proposed in the mining lease area.

#### (1.1) Reason for non-closure

The geological reserve estimation of the proposed area is 2792401MT. From this, 1230464 MT will be mined out and 1566937 MT will be remained as blocked reserve. Mineable quantity of granite building stone of 1230464 MT in 5.2309Ha is proposed to mine scientifically during the scheme period in the next five financial years. But as per the quarrying lease, the permitted quantity of granite building stone is 200000MT/ year. So, from the remaining mineable quantity of 1230464 MT, 1000000 MT is proposed to mine during the scheme period. Remaining quantity of 230464MT is left in the site for the future need. *The average proposed production (ROM) will be about 200000MT/ year for the next 5 financial years.*

Adjacent area includes the part of project area will be applied for renewal after obtaining NOC from the concerned authority if needed, so the final closure plan may not be implemented as per KMMC rule 2015.

#### Anticipated life of Quarry

Based on the reserves and considering the projected production target during mining period, the life of mine is anticipated for next 2 years.

#### (1.2) Statutory Obligation

This is a new mining lease area. The PMCP has been prepared in compliance of rules 37E(V1) as statutory obligation for closure of mine, though it is not applicable at present.

#### (1.3) Closure plan preparation

Name of RQP :- Jayachandra Panicker.P.S

Reg No :- DMG/KERALA/RQP/12/2017

Valid Up to :- 01/12/2027

Address :- S/o.Sukumara PanickerK.P,  
Souparnika,  
Mavajyothi Nagar,39A,Kadappakada. P.O  
Kollam-691008

Phone :- 9847001810

E-mail :- psjpanicker@gmail.com

#### Executing Agency

Mr. K.J.Thomas Kutty





## **2.0 CLOSURE PLAN**

### **2.1 Water Quality management:**

There is no natural water body in the lease area. Mining operation will terminate much before the water table and there is no intersection. No ground water management is required. There is well water available near the mine area which is suitable for drinking purposes.

### **2.2 Air Quality Management**

Mining operation is of small scale so air pollution due to dust will be negligible. Wet drilling has been proposed to minimize the dust. Water sprinklers were proposed on either side of the road once in a day especially during the dry seasons.

### **2.3 Top Soil**

The Top soil is completely removed from the proposed mining area and dumped in the predetermined dumping yard which is situated in the adjacent side of the quarry.

### **2.4 Waste**

Mining area is not a fresh area. So the mine waste from the quarry site is completely removed dumped in the predetermined dumping yard which is situated in the adjacent side of the quarry.

### **2.5 Tailing Dam Management**

There is no proposal of beneficiation for processing of mineral as it is used directly in crude form, so no effluent will be generated. Therefore no tailing dam is required.

### **2.6 Infrastructure**

Access road will be maintained.

### **2.7 Safety and Security**

This is a small-scale open cast mine. Only some part of the area will be the working zone. Safety measure will be taken for that proposed area as per Mine Safety Act .Lease area will be fenced.

### **2.8 Disaster Management and Risk Assessment**

Open cast mining method is adapted in this mine. If the benches are made with proposed height and width no risk will be there. There are provisions for First Aid at the mine site, and the Public





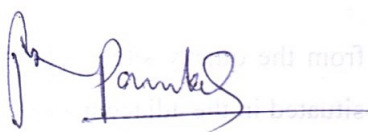
Health Centre with doctors is nearby. Mine Related disaster management training will be imparted to the personnel. Transportation facility is available at the mine site.

### 3.0 Care and Maintenance during temporary discontinuance

During the temporary discontinuance the working place will be fenced completely and board of discontinuance will be hanged on the main entrance of the working place. One choukidar will be kept on the lease area to watch the area and look after the survival of the plants.

### 4.0 CONCLUSION

Adjacent area includes the part of project area will be applied for renewal after obtaining NOC from the concerned authority if needed, so the final closure plan may not be implemented as per KMMC rule 2015. At the end of mining operations, the reclamation will be carried out. Reclamation process will help to make an ecofriendly nature which will reduce the risk of mining.


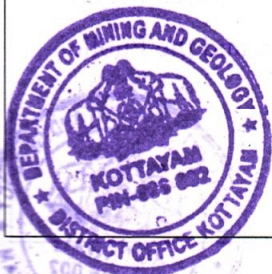


**P.S JAYACHANDRA PANICKER**

**DMG/KERALA/RQP/12/2017**



**Mr. K.J. Thomas Kutty**  
Managing Director



**GEOLOGIST**  
**DISTRICT OFFICE**  
**DEPT. OF MINING AND GEOLOGY**  
**COLLECTORATE P.O. KOTTAYAM-686 002**

# ANNEXURES





ഭാരത സർക്കാർ  
GOVERNMENT OF INDIA



കെ ജോസഫ് തോമസ് കുട്ടി  
K Joseph Thomas Kutty  
പിതാവ്: ജോസഫ് കുട്ടി  
Father: JOSEPHKUTTY

ജനന വർഷം/Year of Birth: 1950  
ലിംഗം: Male

**3317 5403 3278**





ആധാർ - സാധാരണക്കാരന്റെ അവകാശം


ഭാരത സർക്കാർ ഓൺലൈൻ അടയാളം  
UNIQUE IDENTIFICATION AUTHORITY OF INDIA


അധികാരി: S/O ജോസഫ് കുട്ടി  
കുടുംബശ്രീ, വാടാസെറിക്കര എ.എ.  
വാടാസെറിക്കര, പാലാണമുള, കേരളം  
പിൻ: 689602

Address: S/O Josephkutty,  
KANNAMTHANATHU,  
VADASSERIKKARA P.O.  
Vadasserikkara,  
Palanankhulla, Kerala,  
689602

 1800 180 1947

 help@uidai.gov.in

 www.uidai.gov.in

 P.O. Box No.1947,  
Gangakur-680 001



Cert No. MR/SZ/510

भारत सरकार/Government of India

खान अधिनियम, 1952/Mines Act, 1952

खनन परीक्षा बोर्ड/Board of Mining Examinations

खनन मेट सक्षमता प्रमाण-पत्र

MINING MATE'S CERTIFICATE OF COMPETENCY

(केवल ओपेनकास्ट खानों तक सीमित)

(Restricted to mines having opencast workings only)

(धात्विकीय खान विनियम, 1961 के अन्तर्गत)

(Under the Metalliferous Mines Regulations, 1961)

PRAHLADA

MINES MANAGER  
L/S VS LAD & SON

श्री

सुपुत्र

है, को अपनी

जिनकी जन्म तिथि

आयु, स्वस्थता, सदाचार, साक्षरता और धात्विकीय खानों में काम करने के विहित अनुभव का सन्तोषजनक प्रमाण

प्रस्तुत करने एवं दिनांक

को

केन्द्र पर आयोजित

विहित परीक्षा में उत्तीर्ण होने पर एतद्वारा केवल ओपेनकास्ट खानों तक सीमित मेट सक्षमता प्रमाण-पत्र

प्रदान किया जाता है।

Shri

PRAHLADA DASARA

son of NARASAPPA

born on 01ST MAY, 1976 (SEVENTY SIX)

having given satisfactory evidence of his age,

medical fitness, good character, literacy and prescribed experience of working in metalliferous

mines and having passed the prescribed examination held at

MVTC, SANDUR

centre on 09.09.2014

is hereby granted MINING MATE'S CERTIFICATE OF

COMPETENCY restricted to mines having opencast workings only.

बाएं हाथ

निशान

Left hand thumb impression

अंचल सचिव

खनन परीक्षा बोर्ड

Zonal Secretary

Board of Mining

Examinations

अंचल सचिव

खनन परीक्षा बोर्ड

दक्षिणी अंचल, बेंगलूर

Zonal Secretary

Board of Mining Examination

Southern Zone, Bengaluru

Signed and Sealed

Date 08/04/2015

अध्यक्ष

खनन परीक्षा बोर्ड

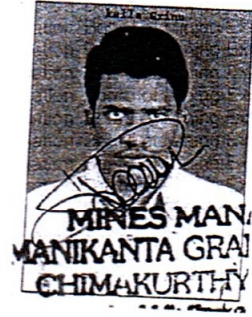
Chairman

Board of Mining

Examinations







Cert No. FRE/3760

भारत सरकार/Government of India

खान अधिनियम, 1952/Mines Act, 1952

खनन परीक्षा बोर्ड/Board of Mining Examinations

फोरमैन सक्षमता प्रमाण-पत्र

FOREMAN'S CERTIFICATE OF COMPETENCY

(केवल ओपनकास्ट खानों तक सीमित)

(Restricted to mines having opencast working only)

(धात्विकीय खान विनियम, 1961 के अन्तर्गत)

(Under the Metalliferous Mines Regulations, 1961)

श्री कल्ला श्रीनु

जिनकी जन्म तिथि

19.08.1993

सुपुत्र कल्ला अप्पलाराजु

है, को विहित अर्हताएं एवं अनुभव प्राप्त करने

का सन्तोषजनक प्रमाण प्रस्तुत करने पर एतद्वारा केवल ओपनकास्ट धात्विकीय खानों के लिए फोरमैन सक्षमता प्रमाण-पत्र प्रदान किया जाता है। यह प्रमाण-पत्र दिनांक 04.06.2015 से प्रभावी है।

Shri Kaila Srinu

born on 19th August, 1993

son of Kaila Appalaraju

having given satisfactory evidence of possessing

the prescribed qualifications and experience is hereby granted FORMAN'S CERTIFICATE OF COMPETENCY for metalliferous mine having opencast workings only. This certificate is effective from 04.06.2015

सचिव

खनन परीक्षा बोर्ड

Secretary

Board of Mining  
Examinations

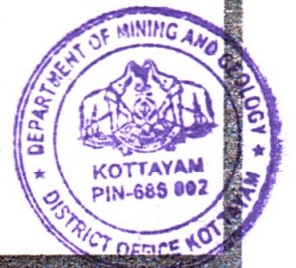
अध्यक्ष

खनन परीक्षा बोर्ड

Chairman

Board of Mining  
Examinations

Signed and Sealed  
Date 29.04.16





## अनुज्ञापि प्ररूप एल. ई.-3 | LICENCE FORM LE-3

(विस्फोटक नियम, 2008 की अनुसूची 4 के भाग 1 के अनुच्छेद 3(क) से (घ) देखिए।)

(See article 3(a) to (d) of Part 1 of Schedule IV of Explosives Rules, 2008)

(ग) उपयोग के लिए एक समय पर वर्ग 1,2,3,4,5 या वर्ग 7 के विस्फोटक या किसी मैगजीन में वर्ग 6 के विस्फोटक रखने के लिए अनुज्ञापि

Licence to possess : (c) for use, explosives of class 1, 2,3,4,5,6 or 7 in a magazine

अनुज्ञापि सं. (Licence No.) : E/SC/KL/22/823(E38836)

वार्षिक फीस रुपए (Annual Fee Rs): 2400/-



License Photo

1. Licence is hereby granted to

Shri K.J. THOMAS, Managing Director (अधिभागी / Occupier : Mr. K.J. Thomas), Karimala Granites, Kannanthanathu House, Vadasserikara P.O. Pathanamthitta, Town/Village - Vadasserikara, District-PATHANAMTHITTA, State-Kerala, Pincode - 686515

को अनुज्ञापि अनुदत्त की जाती है।

2. अनुज्ञापिधारी की प्राप्ति | Status of licensee : Company

3. अनुज्ञापि निम्नलिखित प्रयोजनों के लिए विधिमान्य है।

possess for use of Nitrate Mixture, Ordinary Detonator, Safety Fuse, - के उपयोग के लिए

Licence is valid only for the following purpose.

4. अनुज्ञापि विस्फोटकों के निम्नलिखित किस्मों, प्रकार और मात्रा के लिए विधिमान्य है।

Licence is valid for the following kinds and quantity of explosives: -- (क) (a)

Sr. No.	Name and Description	Class & Division	उप-प्रभाग Sub-division	मात्रा किसी एक समय में Quantity at any one time
1.	Nitrate Mixture	2,0	0	150 Kg.
2.	Ordinary Detonator	6,3	0	5000 Nos.
3.	Safety Fuse	6,1	0	2000 Mtrs

(ख) किसी एक कलेंडर मास में खरीदे जाने वाले विस्फोटक की मात्रा [अनुच्छेद 3(ख) और (ग) के अधीन अनुज्ञापि के लिए]

(b) Quantity of explosives to be purchased in a calendar month [applicable for licence under article 3(b) and (c)] : 20 times as above.

5. निम्नलिखित रेखाचित्र (रेखाचित्रों) से अनुज्ञापि परिसर की पुष्टि होती है।

The licensed premises shall conform to the following drawing(s):

रेखाचित्र क्र. (Drawing No.) E/SC/KL/22/823 (E38836)

दिनांक (Dated) 08/05/2020

6. अनुज्ञापि परिसर निम्नलिखित पते पर स्थित हैं। The licensed premises are situated at following address:

Survey No(s). 286/9, ग्राम (Town/Village) : Kangazha, Changanacherry taluk, पुलिस थाना (Police Station) : Karukachal  
जिला (District) KOTTAYAM राज्य (State) Kerala पिनकोड (Pincode)  
दूरभाष (Phone) ई. मेल (E-Mail) फेक्स (Fax)

7. अनुज्ञापि परिसर में निम्नलिखित सुविधाएं अंतर्विष्ट हैं।

The licensed premises consist of following facilities.

Two G Type Portable Magazines additional third magazine thekkan total three magazines

8. अनुज्ञापि समय - समय पर यथासंशोधित विस्फोटक अधिनियम, 1884 और उनके अधीन विरचित विस्फोटक नियम, 2004 के उपबंधों, शर्तों और अतिरिक्त शर्तों और निम्नलिखित उपाबद्धों के अधीन रहते हुए अनुदत्त की जाती है।

The licence is granted subject to the provision of Explosives Act 1884 as amended from time to time and the Explosives Rules, 2008 framed there under and the conditions, additional conditions and the following Annexures.

1. उपर्युक्त क्रम सं. 5 में यथा कथित रेखाचित्र (स्थान, सन्निर्माण संबंधी और अन्य विवरण दर्शित करते हुए)। Drawings (showing site, constructional and other details) as stated in serial No. 5 above.

2. अनुज्ञापि प्राधिकारी द्वारा हस्ताक्षरित इस अनुज्ञापि की शर्तों और अतिरिक्त शर्तों। Conditions and Additional Conditions of this licence signed by the licensing authority.

3. दूरी प्ररूप DE-2 | Distance Form DE-2.

9. यह अनुज्ञापि तारीख 31 मार्च 2008 तक विधिमान्य रहेगी। This licence shall remain valid till 31st day of March 2008.

यह अनुज्ञापि, अधिनियम या उसके अधीन विरचित नियमों या अनुसूची V के भाग 4 के प्रति निर्दिष्ट सेट-VII के अधीन यथा उपवर्णित इस अनुज्ञापि की शर्तों का अधिक्रमण करने या यदि अनुज्ञापि परिसर योजना या उससे संलग्न उपबंध में दर्शित





विवरण के अनुरूप नहीं पाए जाने पर निलंबित या प्रतिसंहत की जा सकती है, जहां वह लागू हो।

This licence is liable to be suspended or revoked for any violation of the Act or Rules framed there under or the conditions of this licence as set forth under Set VIII, wherever applicable, referred to in Part 4 of Schedule V or if the licensed premises are not found conforming to the description shown in the plans and Annexure attached hereto.

तारीख | The Date - 25/10/2006 .

संयुक्त मुख्य विस्फोटक नियंत्रक | Joint Chief Controller of  
Explosives  
South Circle, Chennai

**Amendments :**

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 09/08/2011
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 08/03/2014
- Amendment in Drawings/Facilities/Premises dated : 22/05/2014
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 14/12/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 08/05/2020

**Transfers :**

- Change in Licensee Name/Address/Status dated : 09/10/2012

नवीनीकरण के पृष्ठांकन के लिए स्थान  
Space for Endorsement of Renewal

मुख्य विस्फोटक नियंत्रक  
Joint Chief Controller of  
Explosives, Ernakulam

नवीकरण की तारीख Date of Renewal	समाप्ति की तारीख Date of Expiry	अनुज्ञापन प्राधिकारी के हस्ताक्षर और स्टाम्प Signature of licensing authority and stamp
12/03/2020	31/03/2025	Sd/- Dy. Chief Controller of Explosives, Ernakulam

**कानूनी चेतावनी :** विस्फोटकों को गलत ढंग से चलाने या उनका दुरुपयोग विधि के अधीन गंभीर दंडित अपराध होगा।

**Statutory Warning :** Mishandling and misuse of explosives shall constitute serious criminal offence under the law.





GOVERNMENT OF INDIA  
MINISTRY OF COMMERCE & INDUSTRY  
PETROLEUM AND EXPLOSIVES SAFETY ORGANISATION(PESO)  
(Formerly Department of Explosives)  
Kendriya Bhavan, Block C-2, 3rd Floor  
CSEZ PO Kakkanad Dist. Ernakulam Ernakulam 682037  
Tele: 2427286 Fax: 2427276  
Email: dycceernakulam@explosives.gov.in

No.: E/SC/KL/22/823(E38836)

Dated:08/05/2020

To,  
Shri K.J. THOMAS, Managing Director,  
Karimala Granites, Kannamthanathu House, Vadasserikara P.O. Pathanamthitta, Town/Village - Vadasserikara  
District-PATHANAMTHITTA, State-Kerala, Pincode - 686515

Subject: Possession for Use of Explosives from magazine situated at Survey No(s):286/9,  
Kangazha;Changanacherry taluk, Dist. KOTTAYAM, Kerala -Licence No.: E/SC/KL/22/823  
(E38836) granted in Form LE-3 of Explosives Rules, 2008 -  
Amendment of Quantity of Explosives/Monthly Purchase Limit.

Sir(s),

Please refer to your letter No. Nil dated 08/05/2020 on the subject cited above.

The Licence No.: E/SC/KL/22/823(E38836) is forwarded herewith duly amended in respect of followings ;  
INTIMATION REGARDING QUARRYING OPERATIONS AS PER THE QUARRYING LEASE IN  
FORM H(DEED NO.542/2016 REGISTERED WITH KARUKACHAL SUB REGISTER OFFICE DATED  
08/02/2016) WITH THE GEOLOGIST, DISTRICT OFFICE, DEPARTMENT OF MINING & GEOLOGY,  
KOTTAYAM VALID UP TO 28/03/2026 IN AT SY.NOS. AT SY.NOS. 278/7,278/2-1,278/2,3,278/4-4,278/4-  
1,278/4-2,278/4-3,278/4-5,278/6,9,277/1,286/5,286/2,286/8,286/4,282/10 OF KANGAZHA VILLAGE,  
CHANGANACHERRY TALUK, KOTTAYAM IS ACKNOWLEDGED HERE WITH THE FOLLOWING  
CONDITIONS 1. NO USE OF EXPLOSIVES IS PERMITTED UNLESS VALID QUARRY PERMIT IS  
OBTAINED AND COPY SUBMITTED TO THIS OFFICE. LOCAL STATE GOVERNMENT AUTHORITIES  
APPROVAL/ENVIRONMENTAL CLEARANCE AS APPLICABLE AND RENEWED FROM TIME TO  
TIME SHALL BE IN POSSESSION.2. LICENSED EXPLOSIVES VAN SHALL BE USED FOR  
TRANSPORTATION OF EXPLOSIVES FROM MAGAZINE TO BLASTING SITE.3. IF ANY CHANGE OF  
QUARRY OR ADDITIONAL QUARRY IS INVOLVED, NECESSARY PRIOR  
APPROVAL/ENDORSEMENT SHALL BE OBTAINED FROM THE LICENSING AUTHORITY.4  
OPENING OF QUARRY SHALL BE INFORMED TO THE DGMS AND BLASTING OPERATIONS SHALL  
BE CONDUCTED AS PER MINES ACT.5. APPROVED BLASTER SHALL BE APPOINTED IN THE  
QUARRY FOR BLASTING. 6. ALL RECORDS OF USE OF EXPLOSIVES IN RE-3, RE-5, RE-7 RE-13  
SHALL BE MAINTAINED.6.DAILY PASS FOR USE OF EXPLOSIVES (RE-13)SHALL BE GENERATED  
ONLINE. 7. EXPLOSIVES AND DETONATORS SHALL NOT BE TRANSPORTED IN SAME VAN AND  
TO BE TRANSPORTED SEPARATELY FROM MAGAZINE TO BLASTING SITE.8. VAN SHALL NOT BE  
USED FOR STORAGE OF EXPLOSIVES AT SITE. 9. EXPLOSIVE VAN IS PERMITTED FOR OWN USE  
ONLY.10. NECESSARY APPROVALS/LICENCES FROM OTHER DEPARTMENTS SHALL BE TAKEN  
AS PER THE RULES..

The licence capacity at any one time shall not exceed the kinds and quantities mentioned below ;

No Explosive(s)	Class	Div	Sub Div	Capacity	Unit
1 Nitrate Mixture	2	0	0	150	Kg.
2 Ordinary Detonator	6	3	0	5000	Nos.
3 Safety Fuse	6	1	0	2000	Mtrs





Quantity of explosives to be purchased in a calendar month[applicable for licence under article 3(b) and (c)] : 20 times as above.

This Licence shall remain valid till 31st day of March 2025.

For further renewal of licence, please follow the procedure under Rule 112 of Explosives Rules, 2008.  
Receipt of this letter may please be acknowledged.

Enclosures :

Yours faithfully,

(Dr. R. Venugopal  
Deputy Chief Controller of Explosives  
Ernakulam

Copy Forwarded to:

1. District Magistrate, KOTTAYAM, Kerala with reference to his Noc No: H4-55601/2011/K.Dis  
Dated: 20/01/2012.
2. Superintendent of Police, KOTTAYAM, Kerala

Deputy Chief Controller of Explosives  
Ernakulam

[For more information regarding status, fees and other details, please visit our web site <http://peso.gov.in>]



(सेट VIII) Set VIII)

मैगजीन में वर्ग 1, 2, 3, 4, 5, 6, और 7 के विस्फोटकों को विक्री या प्रयोग हेतु रखने के लिए प्ररूप एल.ई. 3 (अनुच्छेद 3 (ख) से (ग)) में मुख्य विस्फोटक नियंत्रक या विस्फोटक नियंत्रक द्वारा प्रदान किए जाने वाले अनुज्ञप्ति सं. E/SC/KL/22/823(E38836) की शर्तें निम्नलिखित हैं।

The following are the conditions of licence number E/SC/KL/22/823(E38836) to possess for sale or use, explosives of Class 1, 2, 3, 4, 5, 6 and 7 in a magazine in Form LE-3 (articles 3(b) to (c)) granted by Chief controller of Explosives or Controller of Explosives.

1. परिसर में किसी भी समय विस्फोटकों की मात्रा अनुज्ञापन योग्य सामर्थ्य से अधिक नहीं होगी।  
The quantity of explosives on the premises at any one time shall not exceed the licensable capacity.
2. विस्फोटकों के भंडारण के लिए प्रयुक्त होने वाली मैगजीन अनुसूची III और अनुज्ञप्ति के उपाबंध में विनिर्दिष्ट सुरक्षा दूरी बनाए रखना होगा।  
The magazine used for storage of explosives shall maintain safety distance specified in Schedule III and annexure to the licence.
3. मैगजीन का प्रयोग उन सभी विस्फोटकों के, जो इस अनुज्ञप्ति में विनिर्दिष्ट है, रखे जाने के लिए और ऐसे रखे जाने से संबद्ध आधान या औजार या उपकरणों के रखे जाने के लिए ही किया जाएगा; अन्यथा नहीं।  
The magazine shall be used only for keeping all explosives specified in this licence and of receptacles for, or tools or implements for work connected with the keeping of such explosives.
4. पैकजों को खोलने का कार्य और विस्फोटकों को तौलने तथा पैक करने का कार्य मैगजीन में नहीं किया जाएगा।  
The opening of packages and the weighing and packing of explosives shall not be carried on in the magazine.
5. दो या दो से अधिक वर्णन के विस्फोटकों को, जिन्हें मैगजीन में रखे जाने की अनुज्ञा दी जा सकती है, मैगजीन में तभी रखे जाएंगे जब उनमें से प्रत्येक को, ऐसे पदार्थ या स्वरूप का कोई मध्यवर्ती विभाजक लगाकर या उनके बीच ऐसा मध्यवर्ती स्थान छोड़कर, परस्पर पृथक् कर दिया जाए कि किसी वजह से विस्फोटक में लगने वाली आग या होने वाला विस्फोट किसी अन्य वर्णन के विस्फोटक तक न पहुंच सके : परंतु -  
(घ) 2 (नाइट्रेट मिश्रण), वर्ग 3 (नाइट्रो योगिक) के विभिन्न विस्फोटक, वर्ग 6 प्रथम प्रभाग के अंतर्गत आने वाले सुरक्षा पत्ती और वर्ग 6 प्रभाग 2 के अंतर्गत आने वाले विस्फोटक प्रेरक पत्ती, जिनमें कोई खुला लोहा या इस्पात नहीं है, एक दूसरे के साथ बिना किसी मध्यवर्ती विभाजक या स्थापन के रखे जा सकते हैं।  
(ङ) वर्ग 6 प्रभाग 3 के अंतर्गत आने वाले विस्फोटक प्रेरक अलग रखे जाएंगे।  
(च) वर्ग 1 के अंतर्गत आने वाले बारूद को अलग रखा जाएगा।  
Two or more description or explosives which may be permitted to be kept in the magazine shall be kept only if they are separated from each other by an intervening partition of such substance or character, or by such intervening space, as will effectually prevent explosion or fire in the one communicating with the other; Provided that—  
(d) the various explosives of Class 2 (nitrate-mixture), Class 3 (nitro-compound), safety fuses belonging to Class 6 Division 1 and detonating fuses belonging to Class 6 Division 2 as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space;  
(e) Detonators belonging to Class 6 Division 3 shall be kept separately.  
(f) Gun powder belonging to Class 1 shall be kept separately.
6. वर्ग 3 (नाइट्रो योगिक) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पश्चात सिवाय अनुज्ञापन प्राधिकारी की विशेष मंजूरी के मैगजीन में नहीं रखा जाएगा।  
Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of licensing authority.
7. वर्ग 3 (नाइट्रो योगिक) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पश्चात मैगजीन में तभी रखा जाएगा जब कि किसी विस्फोटक नियंत्रक ने इसके लिए विशेष मंजूरी दे दी हो।  
(i) जब ऐसी मंजूरी दे दी गई हो तो प्रत्येक निरीक्षण पर किसी विस्फोटक नियंत्रक से ऐसा लिखित प्रमाणपत्र अभिप्राप्त कर लिया जाए जिसमें दी गई मंजूरी के अंतर्गत आने वाली अवधि दर्शित की गई हो और ऐसे प्रमाणपत्र के अनुज्ञप्तिधारी अपने पास रखेगा और मांग की जाने पर प्रस्तुत करेगा।  
(ii) जब कोई विस्फोटक मानक शुद्धता का न रह जाने के कारण या द्रव्यीकरण या नाइट्रो ग्लाइसरीन या द्रव नाइट्रो योगिक के निकल जाने के विह्वल होने के कारण मैगजीन में भण्डारित किए जाने के उपयुक्त नहीं रह जाता है तो अनुज्ञप्तिधारी अपने ही व्यय पर ऐसे विस्फोटक के निपटारे के लिए ऐसे निदेशों का अनुपालन करेगा जो मुख्य नियंत्रक या विस्फोटक नियंत्रक जारी करें।  
Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of the Controller of Explosives.  
(i) When such sanction has been given, a written certificate showing the period covered by the sanction shall be obtained from the Controller of Explosives at each inspection, and shall be kept by the licensee and produced on demand.  
(ii) When an explosive owing to its being no longer of standard purity or owing to signs of liquefaction or of exuded nitro-glycerin or liquid nitro-glycerin or liquid nitro compound is no longer fit for storage in the magazine or store house the licensee shall comply, at his own expense, with such directions as to its disposal as the Chief Controller or Controller of Explosives may issue.
8. मैगजीन के भीतरी भाग या उसमें लगी बेंचों, शैल्फों और उसकी फिटिंग का इस प्रकार सन्निर्माण किया जाएगा या उन्हें इस प्रकार अंतरित या अवतरित किया जाएगा कि विस्फोटक का किसी लोहे या इस्पात के साथ संपर्क रोका जा सके। भीतरी भाग में लगी बेंचें, शैल्फें और फिटिंग यथासाध्य ग्रिट से मुक्त एवं साफ रखे जाएंगे तथा ऐसे विस्फोटक, जो जल से खतरनाक रूप में प्रभावित हो सकते हैं, इस बाबत सम्यक सावधानी बरती जाएगी कि वहां कोई जल मौजूद न रहे : परंतु किसी लोहे या इस्पात के खुले होने के विरुद्ध सावधानी से संबंधित इस शर्त का वह भाग ऐसे किसी भवन में बाधकर नहीं होगा जिसमें वर्ग 6 (गोला बारूद) के प्रथम के विस्फोटक से भिन्न कोई विस्फोटक रखा गया है।





The interior of the magazine and the benches, shelves and fittings therein shall be so constructed or so lined or covered as to prevent the exposure of any iron or steel contact with the explosives. Such interior, benches, shelves and fittings shall so far as is reasonably practicable, be kept free from grit and shall otherwise be clean; and in the case of any explosives liable to be dangerously affected by water, due precautions shall be taken to exclude water there from. Provided that so much of this condition as relates to precautions against the exposure of any iron or steel shall not be obligatory in a building in which no explosive other than explosive of the 1st Division 6th (Ammunition) Class is kept.

9. यदि तडित चालक का परीक्षण विस्फोटक नियंत्रक करता है तो अनुज्ञापिधारी ऐसे परीक्षण के लिए विहित फीस का संदाय करेगा यदि परीक्षण असमाधानकारी साबित होता है तो उतनी ही फीस अनुज्ञापिधारी द्वारा पश्चात्कर्त प्रत्येक परीक्षण के लिए तब तक दी जाती रहेगी जब तक कि परीक्षण अधिकारी तडित चालक को समाधानप्रद घोषित नहीं कर देता :  
परंतु किसी एक परीक्षण के लिए देय फीस किसी एक दिन के दौरान किसी चालक के किए गए सभी परीक्षणों के लिए प्रभावी होगी :  
परंतु यह और कि यदि दो या अधिक तडित चालक एक ही मैगजीन से संबद्ध हैं तो ऐसे सभी चालकों के परीक्षण के लिए फीस ऐसी किसी फीस से अधिक नहीं होगी जो किसी एक तडित चालक के परीक्षण के लिए हर स्थिति में विहित की गई है।  
If the lighting conductor is tested by the Controller of Explosives, the licensee shall pay the fees prescribed for test. In the even of the test proving unsatisfactory, the same fees shall be payable by the licensee for each subsequent test until the lighting conductor is passed by the testing officer as satisfactory:  
Provided that the fees payable for a single test shall be charged for all tests made on a conductor during any one day :  
Provided further that where two or more lighting conductors are attached to one and the same magazine, the fee for the testing of all such conductors shall not exceed the fee prescribed in this condition for testing a single lighting conductor.
10. उपयुक्त तथा जेब रहित कार्यकरण वस्तुओं, उपयुक्त जूतों के प्रयोग द्वारा तथा तलाशी लेकर या अन्यथा अथवा ऐसे किन्हीं साधनों द्वारा इस बाबत सम्यक उपबंध किया जाएगा कि फैक्ट्री परिसर में अग्नि, दियासलाई अथवा ऐसी कोई वस्तुएं या पदार्थ, जिससे विस्फोट हो सकता है या आग लग सकती हो, किन्तु इस शर्त के कारण ऐसी संरचना, स्थिति या स्वरूप में किसी कृत्रिम वस्ती का प्रवेश वर्जित नहीं है जिससे आग लगने या विस्फोट होने का खतरा न हो :  
परंतु इस शर्त का वह भाग, जो लोहे या इस्पात के अपवर्जन को लागू होता है, ऐसे किसी भवन के संबंध में बाध्य कर नहीं होगा जिससे भिन्न कोई विस्फोटक नहीं रखा गया है।  
Due provisions shall be made, by the use of suitable working clothes without pockets, suitable shoes and by searching or otherwise or by such means, for preventing the introduction into danger area of the factory premises of fire, Lucifer matches or any substance or article likely to cause explosion or fire, but this condition shall not prevent the introduction of an artificial light of such construction, position or character as not to cause any danger of fire or explosion:  
Provided that so much of this condition as applies to the exclusion of iron or steel, shall not be obligatory in a building in which no explosive other than an explosive of the 1st Division of the 6th (Ammunition) Class is kept.
11. अनुज्ञापिधारी प्रारूप आर.ई.-3 और आर.ई.-4 या आर.ई.-5, जैसी स्थिति हो, में सभी विस्फोटकों का अभिलेख और लेखा रखेगा और विस्फोटक नियम, 2008 के अधीन प्राधिकृत किसी भी अधिकारी के समक्ष उसके द्वारा ऐसा करने की मांग की जाने पर स्टॉक पुस्तक और अभिलेख प्रस्तुत करेगा। स्टॉक पुस्तक विहित प्रोफार्मा में पृष्ठ संख्यांकित होगी।  
The licensee shall keep records and accounts of all explosives in Forms RE-3 and RE-4 or RE-5, as the case may be, and exhibit the stock books and records to any of the officers authorised under the Explosives Rules, 2008 whenever such officer may call upon him to do so. The stock books in the prescribed proforma shall be page numbered.
12. परिसरों में कोई परिवर्तन या तबदीली अनुज्ञापन प्राधिकारी के पूर्वानुमोदन बिना नहीं की जाएगी और अनुज्ञापिधारी ऐसी किसी शर्त का अनुपालन करेगा जो इस निमित्त अनुज्ञापन प्राधिकारी विनिर्दिष्ट करें।  
No changes or alterations shall be carried out to the premises without prior approval of the licensing authority and the licensee shall comply with any condition that may be specified by the licensing authority in this behalf.
13. मैगजीन सभी समयों पर अच्छी मरम्मत की स्थिति में बनाई रखी जाएगी (या अच्छी हालत में बनाई रखी जाएगी) यदि किसी कारणवश किसी विस्फोटक के भण्डारण के लिए मैगजीन अनुपयुक्त हो जाती है तो अनुज्ञापिधारी इस बात की सूचना अनुज्ञापन प्राधिकारी को तुरंत देगा।  
Magazine shall at all times be kept in state of good repair (or maintained in good condition). The licensee shall report to licensing authority forthwith, if the magazine becomes unfit for storage of any explosives for any reason whatsoever.  
मैगजीन का अनुज्ञापिधारी इन नियमों के नियम 24 के उप-नियम 3 के अनुसार त्रैमासिक विवरणी प्रस्तुत करेगा।  
The licensee of the magazine shall submit quarterly return as per sub-rules (3) and (4) of rule 24 of these rules.
14. यदि सुरक्षा दूरी का कोई अधिक्रमण होता है तो उसकी सूचना अनुज्ञापन प्राधिकारी को आवश्यक सलाह और कार्यवाही के लिए तुरंत दी जाएगी।  
Any encroachment of the safety distance shall be immediately communicated to the licensing authority for necessary advice and action.
15. यदि कोई विस्फोटक विनष्ट हुआ अथवा अनुपयोगी जाया जाता है तो उसकी सूचना अनुज्ञापन प्राधिकारी को, सलाह प्राप्त करने के लिए, तुरंत दी जाएगी।  
The licensing authority shall be immediately informed for advice if any explosive is found deteriorated or unserviceable.
16. विस्फोटकों के पैकेटों के चट्टे इस प्रकार लगाए जाएंगे कि कम से कम एक व्यक्ति भण्डार किए गए सभी पैकेजों की हालत की जांच करने और प्रत्येक पैकेज की विनिर्माण विशिष्टियों को पढ़ने के लिए उनके बीच से होकर आ जा सके।  
The explosive packages shall be stocked in such a way so as to allow movement of at least one person to check the condition of all packages stored and to read the manufacture particulars of each package.  
तडित चालकों की भूमि के लिए प्रतिरोध यथासंभव न्यूनतम होगा और किसी भी दशा में 10 ओह्म से अधिक नहीं होगा।  
The resistance of the lightning conductor to earth shall be as low as possible and in no case be more than 10 ohms.
17. मैगजीन के चारों ओर 15 मीटर की दूरी के अंतर्गत कोई शुल्क घास या झाड़ी या ज्वलनशील सामग्री नहीं रहने दी जाएगी।





सेट VIII Set VIII

मैगजीन में वर्ग 1, 2, 3, 4, 5, 6, और 7 के विस्फोटकों को बिक्री या प्रयोग हेतु रखने के लिए प्रारूप एल.ई. 3 [अनुच्छेद 3 (ख) से (ग)] में मुख्य विस्फोटक नियंत्रक या विस्फोटक नियंत्रक द्वारा प्रदान किए जाने वाले अनुज्ञप्ति सं. E/SC/KL/22/823(E38836) की शर्तें निम्नलिखित हैं।

The following are the conditions of licence number E/SC/KL/22/823(E38836) to possess for sale or use, explosives of Class 1, 2, 3, 4, 5, 6 and 7 in a magazine in Form LE-3 (articles 3(b) to (c)) granted by Chief controller of Explosives or Controller of Explosives.

1. परिसर में किसी भी समय विस्फोटकों की मात्रा अनुज्ञापन योग्य सामर्थ्य से अधिक नहीं होगी।  
The quantity of explosives on the premises at any one time shall not exceed the licensable capacity.
2. विस्फोटकों के भंडारण के लिए प्रयुक्त होने वाली मैगजीन अनुसूची III और अनुज्ञप्ति के उपाबंध में विनिर्दिष्ट सुरक्षा दूरी बनाए रखना होगा।  
The magazine used for storage of explosives shall maintain safety distance specified in Schedule III and annexure to the licence.
3. मैगजीन का प्रयोग उन सभी विस्फोटकों के, जो इस अनुज्ञप्ति में विनिर्दिष्ट है, रखे जाने के लिए और ऐसे रखे जाने से संबंध आधान या औजार या उपकरणों के रखे जाने के लिए ही किया जाएगा; अन्यथा नहीं।  
The magazine shall be used only for keeping all explosives specified in this licence and of receptacles for, or tools or implements for work connected with the keeping of such explosives.
4. पैकजों को खोलने का कार्य और विस्फोटकों को तोलने तथा पैक करने का कार्य मैगजीन में नहीं किया जाएगा।  
The opening of packages and the weighing and packing of explosives shall not be carried on in the magazine.
5. दो या दो से अधिक वर्णन के विस्फोटकों को, जिन्हें मैगजीन में रखे जाने की अनुज्ञा दी जा सकती है, मैगजीन में तभी रखे जाएंगे जब उनमें से प्रत्येक को, ऐसे पदार्थ या स्वरूप का कोई मध्यवर्ती विभाजक लगाकर या उनके बीच ऐसा मध्यवर्ती स्थान छोड़कर, परस्पर पृथक कर दिया जाए कि किसी वजह से विस्फोटक में लगने वाली आग या होने वाला विस्फोट किसी अन्य वर्णन के विस्फोटक तक न पहुंच सके; परंतु -  
(घ) 2 (नाइट्रेट मिश्रण), वर्ग 3 (नाइट्रो योगिक) के विभिन्न विस्फोटक, वर्ग 6 प्रथम प्रभाग के अंतर्गत आने वाले सुरक्षा पत्तीते और वर्ग 6 प्रभाग 2 के अंतर्गत आने वाले विस्फोटक प्रेरक पत्तीते, जिनमें कोई खुला लोहा या इस्पात नहीं है, एक दूसरे के साथ बिना किसी मध्यवर्ती विभाजक या स्थापन के रखे जा सकते हैं।  
(ङ) वर्ग 6 प्रभाग 3 के अंतर्गत आने वाले विस्फोटक प्रेरक अलग रखे जाएंगे।  
(च) वर्ग 1 के अंतर्गत आने वाले बारूद को अलग रखा जाएगा।  
Two or more description or explosives which may be permitted to be kept in the magazine shall be kept only if they are separated from each other by an intervening partition of such substance or character, or by such intervening space, as will effectually prevent explosion or fire in the one communicating with the other, Provided that—  
(d) the various explosives of Class 2 (nitrate-mixture), Class 3 (nitro-compound), safety fuses belonging to Class 6 Division 1 and detonating fuses belonging to Class 6 Division 2 as do not contain any exposed iron or steel, may be kept with each other without any intervening partition or space;  
(e) Detonators belonging to Class 6 Division 3 shall be kept separately.  
(f) Gun powder belonging to Class 1 shall be kept separately.
6. वर्ग 3 (नाइट्रो योगिक) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पश्चात सिवाय अनुज्ञापन प्राधिकारी की विशेष मंजूरी के मैगजीन में नहीं रखा जाएगा।  
Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of licensing authority.
7. वर्ग 3 (नाइट्रो योगिक) के विस्फोटकों को, उनके विनिर्माण की तारीख से एक वर्ष बीत जाने के पश्चात मैगजीन में तभी रखा जाएगा जब कि किसी विस्फोटक नियंत्रक ने इसके लिए विशेष मंजूरी दे दी हो।  
(i) जब ऐसा मंजूरी दे दी गई हो तो प्रत्येक निरीक्षण पर किसी विस्फोटक नियंत्रक से ऐसा लिखित प्रमाणपत्र अभिप्राप्त कर लिया जाए जिसमें दी गई मंजूरी के अंतर्गत आने वाली अवधि दर्शित की गई हो और ऐसे प्रमाणपत्र के अनुज्ञप्तिधारी अपने पास रखेगा और मांग की जाने पर प्रस्तुत करेगा।  
(ii) जब कोई विस्फोटक मानक शुद्धता का न रह जाने के कारण या द्रव्यीकरण या नाइट्रो ग्लिसरीन या द्रव नाइट्रो योगिक के निकल जाने के चिह्न प्रकट होने के कारण मैगजीन में भण्डारित किए जाने के उपयुक्त नहीं रह जाता है तो अनुज्ञप्तिधारी अपने ही व्यय पर ऐसे विस्फोटक के निपटारे के लिए ऐसे निदेशों का अनुपालन करेगा जो मुख्य नियंत्रक या विस्फोटक नियंत्रक जारी करें।  
Explosives of Class 3 (nitro compound) shall not be kept in the magazine after the expiration of one year from the date of their manufacture except with the special sanction of the Controller of Explosives.  
(i) When such sanction has been given, a written certificate showing the period covered by the sanction shall be obtained from the Controller of Explosives at each inspection, and shall be kept by the licensee and produced on demand.  
(ii) When an explosive owing to its being no longer of standard purity or owing to signs of liquefaction or of exuded nitro-glycerin or liquid nitro-glycerin or liquid nitrocompound is no longer fit for storage in the magazine or store house the licensee shall comply, at his own expense, with such directions as to its disposal as the Chief Controller or Controller of Explosives may issue.
8. मैगजीन के भीतरी भाग या उसमें लगी बैचो, शेल्फों और उसकी फिटिंग का इस प्रकार सन्निर्माण किया जाएगा या उन्हें इस प्रकार अंतरित या अवतरित किया जाएगा कि विस्फोटक का किसी लोहे या इस्पात के साथ संपर्क रोका जा सके। भीतरी भाग में लगी बैचे, शेल्फें और फिटिंग यथासाध्य ग्रिट से मुक्त एवं साफ रखे जाएंगे तथा ऐसे विस्फोटक, जो जल से खतरनाक रूप में प्रभावित हो सकते हैं, इस बाबत सम्यक सावधानी बरती जाएगी कि वहां कोई जल मौजूद न रहे; परंतु किसी लोहे या इस्पात के खुले होने के विरुद्ध सावधानी से संबंधित इस शर्त का वह भाग ऐसे किसी भवन में बांधकर नहीं होगा जिसमें वर्ग 6 (गोला बारूद) प्रथम के विस्फोटक से भिन्न कोई विस्फोटक रखा गया है।





- A distance of 15 meters surrounding the magazine or store house shall be kept clear of dried grass or bush or flammable materials.
18. विस्फोटकों के प्रत्येक पैकेट की, जब उसे मैगजीन के भीतर लिया जा रहा हो, ठीक दशा जानने के लिए परीक्षा की जाएगी।  
Every package of explosive at the time of bringing inside the magazine shall be examined for its sound condition.
  19. किसी मैगजीन / भंडारगृह में किसी एक समय में चार व्यक्तियों से अधिक को नहीं रहने दिया जाएगा।  
Not more than 4 persons shall be allowed inside the magazine or store house at any one time.
  20. विस्फोटकों के खाली पैकेजों को शीघ्रतः वहां से हटा दिया जाएगा और नष्ट कर दिया जाएगा।  
Empty packages of the explosives shall be removed at the earliest and destroyed.
  21. अनुज्ञप्तिधारी और कर्मचारी को परिसर के भीतर अस्वाभाविकता के दौरान की जाने वाली प्रक्रियाओं से अवगत होना चाहिए।  
The licensee and the employee shall be conversant with procedure to be taken during the emergency within the premises.
  22. निरीक्षण या नमूना अधिकारी को सभी युक्तियुक्त समयों पर अनुज्ञत परिसर में अबाध रूप से पहुंचने दिया जाएगा और वह सुनिश्चित करने के लिए कि अधिनियम और इन नियमों के उपबंधों और सुरक्षा स्थितियों को सम्पन्न: अनुपालन किया जा रहा है, अधिकारी को प्रत्येक सुविधा प्रदान की जाएगी।  
Free access to the licensed premises shall be given at all reasonable times to any inspecting or sampling officer and every facility shall be afforded to the officer for ascertaining that the provisions of the Act and these rules and the safety conditions are duly observed.
  23. यदि अनुज्ञापन प्राधिकारी या विस्फोटक नियंत्रक अनुज्ञप्तिधारक को अनुज्ञत परिसरों या मशीनरी, टूल या उपकरण में ऐसी कोई मरम्मत या परिवर्धन या परिवर्तन करने या सिफारिशों को लागू करने को लिखित रूप में सूचित करता है जो परिसर के अंदर या बाहर या व्यक्तियों की सुरक्षा के लिए आवश्यक है, अनुज्ञप्तिधारक सिफारिशों को निम्नलिखित अवधि के भीतर अनुपालन रिपोर्ट ऐसे प्राधिकारी को देगा।  
If the licensing authority or a Controller of Explosives informs in writing, the holder of the licence to execute any repairs or to make any additions or alterations to the licensed premises or machinery, tools or apparatus or carry out recommendations, which are in the opinion of such authority may pose unacceptable risk and so necessary for the safety of either on-site or off-site of the premises or persons, the holder of the licence shall execute the recommendations and report compliance within the period specified by such authority.
  24. अनुज्ञप्तिधारी मैगजीन में रखने और बिक्री के लिए प्राधिकृत विस्फोटक सूची में उल्लिखित अनुज्ञत फैक्टरी या कंपनी से प्राधिकृत विस्फोटक / आतिशबाजी या सुरक्षा पदार्थ खरीदेगा।  
The licensee shall purchase authorised explosives/ fireworks or safety fuse as mentioned in the list authorised explosives from a licensed factory or company for possession and sale from the magazine.
  25. निम्न से अधिक ध्वनि स्तर उत्पादित करने वाले आतिशबाजियों पटाखों की बिक्री और रखने के लिए -  
(क) जो फटने की जगह से चार मीटर की दूरी पर है, 125 डी.बी. (ए1) या 145 डी.बी. (सी) पी. के प्रतिबंधित होंगे;  
(ख) थूला (बुड़े हुए पटाख) को गठन करने वाले व्यक्तिगत पटाखों के लिए उपर्युक्त उल्लिखित सीमा 5 लॉग.10 (एन) डी.बी. (सी) पी. के प्रतिबंधित होंगे;  
The possession and sale of fire-crackers generating noise level exceeding:  
a) 125 dB(A) or 145 dB(C)pk at 4 meters distance from the point of bursting shall be prohibited;  
b) For individual fire-cracker constituting the series (joined fire-crackers), the above mentioned limit be reduced by 5 log10 (N) dB, where N = number of crackers joined together.
  26. आग या विस्फोट द्वारा दुर्घटना या नुकसान पटाखों की कमी या चोरी, तुरंत पास के पुलिस थाने और अनुज्ञापन प्राधिकारी और अनुज्ञापन प्राधिकारी के स्थानीय कार्यालय को रिपोर्ट की जाएगी।  
Accidents by fire or explosion and losses, shortage or theft of explosives shall be immediately reported to the nearest police station and the licensing authority and local office of the licensing authority.

**अतिरिक्त शर्तें / Additional Conditions :**

1. अनुज्ञप्तिधारी विदेशी मूल के आतिशबाजी को ना प्रदर्शित करेगा, ना रखेगा और ना ही उसकी बिक्री करेगा  
The licensee shall not exhibit, possess and sell fireworks of foreign origin.

कृते संयुक्त मुख्य विस्फोटक नियंत्रक  
For Joint Chief Controller of Explosives  
दक्षिणांचल, चेन्नै / South Circle, Chennai



**Form DE-2**  
(See rule 113 of the Explosives Rules, 2008)  
(Distance Form to be attached to the licence)

Safety distances required to be kept clear around magazine for high explosives or fire works or factory licence number E/SC/KL/22/S23(E38836) in form LE-3 granted to Shri K.J.THOMAS, Managing Director, Karimala Granites, Kannaithanathu House, Vadasserikara P.O. Pathanamthitta., Kerala- .

Type of Structure(s)	Safety distances meters	
<b>Inside Safety Distances(ISD)</b>		
	M	UM
1 Room or Workshop used in Connection with the Magazine	13	19
2 Any other Explosives Magazine or store House or Factory of the Applicant		
3 Magazine Office		
<b>Middle Safety Distances(MSD)</b>		
4 Magazine Keeper's or Chowkidar's Dwelling house		
5 Railway including Minerals and Private Railways		
6 Canal (in active use) or other navigable water		
7 Dock or Pier or Jetty		
8 Public Highway or Public Road		40
9 Private Road which is PRINCIPAL means of access to a Temple, Mosque, Church, Gurudwara or other places of worships, Hospital, College, School or Factory		
10 River Embankment or Sea Embankment or Public Well		
11 Reservoir or Bounded tank/rope way		
12 Windmillor or Solar panel for Power Generation		
<b>Outside Safety Distances(OSD)</b>		
13 Dwelling House		
14 Govt. and Public Building		
15 Temple, Mosque, Church or Gurudwara or other Places of Worships		
16 Shops, Market place, Public recreation and Sports Ground, College, School, Hospital, Theater, Cinema or other Building where the public are accustomed to assemble		
17 Factory		
18 Buildings or Works used for the Storage in Bulk of Petroleum, Sprit, gas, or other inflammable or hazardous substances		45
19 Building or Works used for Storage and Manufacture of Explosives or of articles which contain Explosives		
20 Aerodrome		
21 Furnace, Kiln or Chimney		
22 Quarry or mine pit head		
23 Power House or Electric Substation		
24 Wireless Station		
25 Warehouse or other Storage Building		
26 Any other Protected works		
<b>Overhead Electric lines</b>		
27 Electric Power over head Transmission Lines above 440V		45
28 Electric Power over head Transmission Lines upto 440V		15

The Date : 25/10/2006

For Joint Chief Controller of Explosives  
South Circle, Chennai

**Amendments :**

- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 09/08/2011
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 08/03/2014
- Amendment in Drawings/Facilities/Premises dated : 22/05/2014
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 14/12/2017
- Amendment of Quantity of Explosives/Monthly Purchase Limit dated : 08/05/2020







## KERALA STATE POLLUTION CONTROL BOARD

FILE NO. : 7806634

Date of issue : 2018-06-28

## CONSENT VARIATION ORDER

Consent No : O16KOT4201053

Ref : R14KOT284125R32018 dated 02.06.2018 with a validity up to 30.06.2023

The 'Integrated Consent to Operate' issued as per reference above to M/s karimala Granites & Aggregates Pvt. Ltd. ( Quarry Unit ), Pathanadu, Kangazha P.O. , Kottayam is hereby modified & issued to M/s karimala Granites & Aggregates Pvt. Ltd. ( Quarry Unit ), Pathanadu, Kangazha P.O. , Kottayam. The consent(s)/ variation order(s) cited under reference are integral part of this consent variation order and this order is subject to the conditions stipulated therein and the following modifications/ additions.

## I. GENERAL

S.No.	Items	Description
1	VALIDITY	30.06.2023
2	Survey No.	278/2,2-1,3,7,4-2,4-1,4-3,4-4,4-5,6,277/1,9,286/2,3,4,5,8,282/10

## II. CONDITIONS

All other conditions of the Integrated Consent to Operate issued as per reference above remain unchanged.

DATE : 29/06/2018

JOSEMON J

Digitally signed by JOSEMON J  
Date: 2018.06.29 00:09:21 +07'00SIGNATURE & SEAL OF ISSUING AUTHORITY  
ENVIRONMENTAL ENGINEER



To  
K. J. Thomaskutty  
(Mg. Director)  
Kannanthanathu (H)  
Vadasserykkara P.O.  
Pathanamthitta

1. This digitally signed document is legally valid as per the Information Technology Act 2000
2. For verifying this document please go to [krocmms.nic.in](http://krocmms.nic.in) and search using date of issue/name of the unit/Application Number in "Consent Granted Applications" link in the home page of the Board's Online Consent Management and Monitoring System.





## Proceedings of the State Environmental Impact Assessment Authority Kerala-

(Present Prof. (Dr.) K.P. Joy, Chairman, Dr. J. Subhashini, Member, Dr. Nivedita P. Haran IAS, Member  
Secretary & Additional Chief Secretary to Government (Environment Department))

Sub: SEIAA Kerala - Proposed Quarry project by M/s Karimala Granites & Aggregates Pvt. Ltd.  
Kangazha Village & Panchayath, Chenganassery Taluk, Kottayam District, Kerala -  
Environmental Clearance - Accorded

### Environmental Clearance

No. 222/SEIAA/KL/349/2014

dated, Thiruvananthapuram 29.11.2014

- Ref:- 1. Application dated 09.12.2013 submitted by the Managing Director of Karimala Granites & Aggregates Pvt. Ltd., Kangazha P.O., Pathanand, Chenganassery, Kottayam District - 686541 Village & Panchayath, Chenganassery Taluk, Kottayam District, Kerala
2. Minutes of 25<sup>th</sup> meeting of SEAC held on 14<sup>th</sup> & 15<sup>th</sup> February 2014
3. Minutes of 32<sup>nd</sup> meeting of SEAC held on 12<sup>th</sup> & 13<sup>th</sup> August 2014
4. Minutes of the 34<sup>th</sup> meeting of SEIAA held on 24<sup>th</sup> October 2014

### ORDER

1. Sri. K.J. Thomas Kutty Managing Director, M/s Karimala Granites & Aggregates Pvt. Ltd., Pathanad, Kangazha P.O., Chenganassery, Kottayam District -686541, vide his application dated 22.01.2014, has sought Environmental Clearance under EIA Notification, 2006 for the building stone quarry project in Sy. Nos. 286/10 (P), 286/1(P), 286/3(P), 286/4, 282/10, 278/4-1, 278/4-2, 278/4-3, 278/4-5, 278/4-4, 286/7(P), 286/2(P), 286/8(P), 286/6(P), 286/9(P), 278/6, 278/3(P), 278/2-1, 278/2, 278/7, 277/1(P), 277/9 and 286/5(P) at Kangazha Village & Panchayath, Chenganassery Taluk, Kottayam District, Kerala for an area 9.61.18 hectares. The project comes under Category B, Activity 1(a), (i) as per the Schedule of EIA Notification 2006 (since it is below 50 hectares) and as per O.M. No. L-11011/47/2011-IA.II(M) dated 18<sup>th</sup> May 2012 of Ministry of Environment and Forests. It is further categorized as Category B2 as per the O.M. No. J-13012/12/2013-IA-II (I) dt. 24.12.2013 of Ministry of Environment and Forests, since the area of the project is below 25 hectares.

Name of project		Building Stone Quarry of Karimala Granites & Aggregates Pvt. Ltd
Brief description of the project		Open cast mining
Category/Subcategory & Schedule		Category B/B2 & Schedule 1 (a)
Location Sy no/ district, Taluk/ village etc.		Sy. Nos. 286/10 (P), 286/1(P), 286/3(P), 286/4, 282/10, 278/4-1, 278/4-2, 278/4-3, 278/4-5, 278/4-4, 286/7(P), 286/2(P), 286/8(P), 286/6(P), 286/9(P), 278/6, 278/3(P), 278/2-1, 278/2, 278/7, 277/1(P), 277/9 and 286/5(P) at Kangazha Village & Panchayath, Chenganassery Taluk, Kottayam District, Kerala
GPS co-ordinates		Longitude: 76° 41' 16.51" E to 76° 41' 22.44" E. Latitude: 9° 30' 30.57" N to 9° 30' 37.59" N
for Mining projects	Extent of area (in hectares)	9.61.18 hectares
	Minimum and maximum height of excavation (MSL)	Highest 160m MSL and Lowest 95m MSL
	Life of mine proposed	12 years



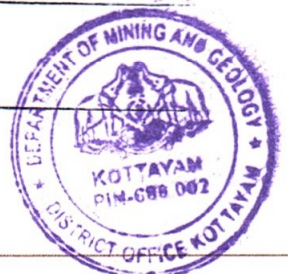


Ultimate depth of mining (in MSL)	80m MSL
Distance from the adjacent quarry	OP Baburaj Quarry - 150 mts- N MM Granites Pandiyankuzhi - 1 km - N
Capacity of production	1500 TPD
Details of Project Cost	Rs. 7.96 Crores
CRZ recommendations	Not Applicable
Forest clearances	Not Applicable

#### ABOUT THE PROJECT

Environmental parameters	Mitigation Measures
<b>WATER</b>	
Water requirement & sources	The total water requirement for the project is about 16.5 KLD with the following break up: 1. Domestic & Sanitary needs - 1.5 KLD 2. Dust suppression, Plantation, etc. - 15.0 KLD The entire water requirement is met from well & located inside lease area.
RWH units proposed	Yes, Rain water collection pond
Facilities for liquid waste treatment	Liquid domestic effluents are minimal and let out into septic tank and soak pits.
Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?	Not applicable
Does it have provisions for use of recycled water	Not applicable
<b>LAND</b>	
Proximity to forest lands	No
Access road to the site - Width & Condition	4 m. wide road to Changanassery - Vazhoor road (SH - 10)
Storage of explosives /hazardous substances	Yes, Explosives will be stored as per Explosives Act/Rules.
Facility for solid waste mgmt	The municipal solid waste will be suitably disposed.
Topographic features/ slope	The topography of the lease area is rock area. The Influence of the lease area in m are :- Section 'A - A' = 65 Section 'B - B' = 75 Section 'C - C' = 75 Section 'D - D' = 75 Section 'E - E' = 75 Section 'F - F' = 75 Section 'G - G' = 70 Highest level = 160 m MSL, middle of the area Lowest level = 95 m MSL, S side

Top soil, overburden etc.	Top soil - 0.46 lakh tonnes Overburden - 4.19 lakh tones
---------------------------	---





# AIR

Air quality meeting requirements	Yes
Noise level meeting requirements	Yes
Likely emissions affecting environment	Only minor quantities of gaseous pollutants due to operation of diesel operated machineries like hydraulic excavators, hydraulic rock breakers, compressors, transport vehicles, etc.0
<b>ENERGY</b>	
Energy requirement	No electricity is needed for Quarry operations as only diesel operated mining machinery including jack hammer are used for quarrying.
Energy Sources	From diesel engine.
<b>BIODIVERSITY</b>	
Presence of any endangered species or red listed category	No
Loss of native species and genetic diversity	No
<b>SOCIAL ASPECTS</b>	
Proximity to nearest habitation	106 m.
CSR components suggested	Bio-diversity fund - As part of Access and Benefit Share (ABS), 1 percent of annual profit of the firm would be given to Biodiversity Management Committee of the Panchayath through the concerned Grama Panchayath towards the restoration of biodiversity loss due to quarrying activities.
<b>GENERAL</b>	
Does it propose environment management plan	Yes
Does it have eco restoration programmes	Yes, Development of Greenbelt. Area all around the lease is owned by the proponent and in this area excellent rubber plantation is already developed. This acts as a good barrier preventing propagation of dust and noise outside the lease area.
Litigation/court cases, if any, against the project (provide details)	No
Details of Authorised Signatory	Sri. K.J. Thomas Kutty, Managing Director Karimala Granites Pvt.Ltd., Pathanad, Kangazha P.O., Kottayam District -686541.  (Signature)
Details of NABET approved EIA consultant organisation	M/s Creative Engineers & Consultants Pvt. Ltd., 9 B/4, Bharatwajar Street, East Tambaram, Chennai -600 059. NABET/EIA/SA052/0413

2. The proposal was placed as agenda item No. 25.20 before the 25<sup>th</sup> SEAC meeting held on 14<sup>th</sup> and 15<sup>th</sup> February 2014. The project proponent made a brief presentation of the project. In the application and as stated by the consultant, the nearest house to the project site is located at a distance of 106 m but the proponent stated that the same is at a distance of 200 m from the project site. The Committee decided to ascertain the same during site visit. The Committee found from the google image that the project site is having dense vegetation predominated by rubber plantation indicating thick overburden and very fertile top soil.

Directorate of Environment  
Kottayam District





Considering the details provided in the application, the information provided by the proponent, the documents submitted by the proponent, the item was deferred for site visit to assess the proximity of human settlements to the project site & overburden thickness in the site and directing the proponent to submit the following for further consideration of the proposal:

1. Map clearly demarcating the total area owned by the proponent and the proposed mining area with area numbers.
2. Details on green belt development.
3. Perspective plan of 500 m radius clearly marking human settlements with density of population and other land uses.
4. Cadastral map duly certified by Village Officer.
5. Land use map/conceptual plan including all facilities marking distances from each facility.
6. Photographs of the existing quarry.
7. Revised mine closure plan after removing the pond proposed in the present plan.
8. Revised site specific biodiversity listing of flora and fauna duly authenticated by concerned experts.
9. Environmental quality analysis reports of four different locations of the project site.
10. Detailed split up of the proposed CSR activities specifically mentioning the areas/institutions to which CSR same shall be extended, with documentary evidence of the already done CSR activities.

3. As per the decision taken by the committee, a site visit was conducted by the expert member Member of SEAC on 3<sup>rd</sup> March 2014 and made the following observations:

This working quarry is about 300 m North east of Pathanad centre. Undulating terrain with a central ridge with few old quarries in the vicinity of the present area. The slope is to North and South. Rock is generally foliated Charnockite. Top soil and overburden is seen in patches. Rubber is the dominant land use. The area has relatively dense settlement though not within 100 m of the quarry. The present method of quarrying in bits and pieces is to be discouraged. Steep cuttings are seen in old working faces a part of which is again planned to be quarried.

The following recommendations are made:

1. Steep cutting (>10 m on the S side) is seen on either side of the main haulage road posing hazardous condition. It needs to be filled and vegetated. Fencing is also necessary.
  2. The pond presently used as RWH structure need to be repaired for holding water.
  3. Top soil and overburden need to be stacked in designated places. Presently no such plan is apparent.
  4. Formation of benches are not in practice.
  5. Storm water management on either side of the sloping quarry faces is required. Storm water channels, desilting and clarification structures etc are necessary.
  6. Superimpose the cadastral map of the quarry area on the google image so that the boundaries of the quarry are clearly visible and assessment of the area can be done with greater precision.
  7. Care must be taken to mitigate the dangers on account of fly rocks in the settlement area and towards the main road and side road with dense traffic.
  8. A temple is seen within 250 m of the quarry. Quarry operations should not affect the normal functioning of centres of worship.
4. On submission of the additional clarifications called for the proponent, the application was placed for reconsideration in the 32<sup>nd</sup> SEAC meeting as agenda item no. 32.17. SEAC recommended the proposal subject to the following specific conditions in addition to the general conditions stipulated for mining projects:





Steep cutting (>10 m on the south side) on either side of the main haulage road posing hazardous conditions should be filled and vegetated.

2. The pond presently used as RWH structure should be repaired for holding water.

The application, feasibility report and minutes of SEIAA were placed for consideration in the 34<sup>th</sup> SEIAA meeting as agenda item no. KLA/34.41. The Authority approved the proposal for issue of environmental clearance subject to the general and eight special conditions as per the recommendations of SEAC. EC will be for a period of five years only.

5. Environmental Clearance under EIA notification 2006 is accorded for the proposed quarry project of Sri. K.J. Thomas Kutty, Managing Director, M/s Karimala Granites & Aggregates Pvt. Ltd., subject to all the mining features, Environmental Management Plans as undertaken in the EMP (Pages 106 to 129 of Report) submitted to SEIAA which will form part of this proceedings as if incorporated herein, and the following additional specific conditions, and the general conditions on mining of miner mineral appended hereto:

a) The following specific conditions in addition to the general conditions stipulated for mining projects; would also apply:


1. Steep cutting (>10 m on the south side) on either side of the main haulage road posing hazardous conditions should be filled and vegetated.

2. The pond presently used as RWH structure should be repaired for holding water.

6. Validity of this Environmental clearance will be 5 years and it will be subject to review at any stage earlier, if any of the conditions is the E.C. is violated, or not duly complied with.

I. Compliance of the conditions herein will be monitored by the Directorate of Environment and Climate Change or its agencies and also by the Regional office of the Ministry of Environment and Forests, Govt. of India, Bangalore.

II. Necessary assistance for entry and inspection should be provided by the project proponent and those who are engaged or entrusted by him to the staff for inspection or monitoring.

  
For Member Secretary (SEIAA)

To,

Sri. K.J. Thomas Kutty,  
M/s Karimala Granites & Aggregates Pvt. Ltd.,  
Kangazha P.O., Pathanad,  
Changanassery Taluk  
Kottayam - 686541.

Copy to:

1. MoEF Regional Office, Southern Zone, Kendriya Sadan, 4<sup>th</sup> Floor, E&F Wing, II Block Koramangala, Bangalore-560034
2. The Addl. Chief Secretary to Government, Environment Dept., Government of Kerala
3. The District Collector, Kottayam
4. The Director, Dept. of Environment and Climate Change, Govt. of Kerala, Trivandrum - 24
5. The Director, Mining and Geology Department, Government of Kerala
6. The Secretary, Kangazha Grama Panchayath, Changanassery Taluk, Kottayam District
7. Website
8. Stock file
9. O/c





# STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY KERALA

## GENERAL CONDITIONS (for mining projects)

- (i) Rain Water Harvesting facility should be installed as per the prevailing provisions of KMBR / KSPCB unless otherwise specified.
- (ii) Environment Monitoring Cell as agreed under the affidavit filed by the proponent should be formed and made functional.
- (iii) Suitable avenue trees should be planted along either side of the tarred road and open parking areas, if any, including of approach road and internal roads.
- (iv) Maximum possible solar energy generation and utilization shall be ensured as an essential part of the project.
- (v) Sprinklers shall be installed and used in the project site to contain dust emissions.
- (vi) Eco-restoration including the mine closure plan shall be done at the own cost of the project proponent.
- (vii) At least 10 percent out of the total excavated pit area should be retained as water storage areas and the remaining area should be reclaimed with stacked dumpings and overburden and planted with indigenous plant species that are eco-friendly.
- (viii) Corporate Social Responsibility (CSR) agreed upon by the proponent should be implemented
- (ix) *The lease area shall be fenced off with barbed wires to a minimum height of 4ft around, before starting of mine.*
- (x) Warning alarms indicating the time of blasting (to be done at specific timings) has to be arranged as per stipulations of Explosive Department.
- (xi) Control measures on noise and vibration prescribed by KSPCB should be implemented.
- (xii) Quarrying activities should be limited to day time as per KSPCB guidelines.
- (xiii) Blasting should be done in a controlled manner as specified by the regulations of Explosives Department or any other concerned agency.
- (xiv) A licensed person should supervise/ control the blasting operations.
- (xv) Access roads to the quarry shall be tarred to contain dust emissions that may arise during transportation of materials.
- (xvi) Overburden materials should be managed within the site and the old quarries, if any, should be reclaimed and restored.
- (xvii) Height of benches should not exceed 5 m and width should not be less than 5 m.
- (xviii) Mats to reduce fly rock blast to a maximum of 10 PPV should be provided.
- (xix) *Maximum depth of mining from general ground level at site shall not exceed 10m*
- (xx) No mining operations should be carried out at places having a slope greater than 45°.
- (xxi) Acoustic enclosures should have been provided to reduce sound amplifications in addition to the provisions of green belt and hollow brick envelop for crushers so that the noise level is kept within prescribed standards given by CPCB/KSPCB.
- (xxii) The workers on the site should be provided with the required protective equipment such as ear muffs, helmet, etc.
- (xxiii) Garland drains with clarifiers to be provided in the lower slopes around the core area to channelize storm water.
- (xxiv) The transportation of minerals should be done in covered trucks to contain dust emissions.
- (xxv) The proponent should plant trees at least 5 times of the loss that has been occurred while clearing the land for the project.
- (xxvi) Disposal of spent oil from diesel engines should be as specified under relevant Rules/ Regulations.
- (xxvii) Explosives should be stored in magazines in isolated place specified and approved by the Explosives Department.
- (xxviii) *A minimum buffer distance of 100m from the boundary of the quarry to the nearest dwelling unit or other structures, not being any facility for mining shall be provided*
- (xxix) 200 m buffer distance should be maintained from forest boundaries.
- (xxx) Consent from Kerala State Pollution Control Board under Water and Air Act(s) should be obtained before initiating activity.






initiating activity

All other statutory clearances should be obtained, as applicable, by project proponents from the respective competent authorities including that for blasting and storage of explosives.

- xxxii) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Authority.
- xxxiii) The Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- xxxiv) The stipulations by Statutory Authorities under different Acts and Notifications should be complied with, including the provisions of Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and control of Pollution) act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- (xxxv) The project proponent should advertise in at least two local newspapers widely circulated in the region, one of which (both the advertisement and the newspaper) shall be in the vernacular language informing that the project has been accorded Environmental Clearance and copies of clearance letters are available with the Department of Environment and Climate Change, Govt. of Kerala and may also be seen on the website of the Authority at [www.seiaakerala.org](http://www.seiaakerala.org). The advertisement should be made within 10 days from the date of receipt of the Clearance letter and a copy of the same signed in all pages should be forwarded to the office of this Authority as confirmation.
- (xxxvi) A copy of the clearance letter shall be sent by the proponent to concerned Grama Panchayat/ District Panchayat/ Municipality/Corporation/Urban Local Body and also to the Local NGO, if any, from whom suggestions / representations, if any, were received while processing the proposal. The Environmental Clearance shall also be put on the website of the company by the proponent.
- xxxvii) The proponent shall submit half yearly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) and upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the respective Regional Office of MoEF, Govt. of India and also to the Directorate of Environment and Climate Change, Govt. of Kerala.
- xxxviii) The details of Environmental Clearance should be prominently displayed in a metallic board of 3 ft x 3 ft with green background and yellow letters of Times New Roman font of size of not less than 40. Sign board with extent of lease area and boundaries shall be depicted at the entrance of the quarry, visible to the public.
- (xxxix) The proponent should provide notarized affidavit (indicating the number and date of Environmental Clearance proceedings) that all the conditions stipulated in the EC shall be scrupulously followed.
- xl) The above conditions shall prevail notwithstanding anything to the contrary, in consistent, or simplified, contained in any other permit, license or consent given by any other authority for the same project



  
Member Secretary, SEIAA Kerala





542/16.

I have satisfied myself that on production of the original of lease & Pan No. Sub of Rupas Tassohala Shetty on Thosand Pore Bunder and 644 Serial.

on the end day of April 2016

चौ सौ रुपये

सचिव जयंत

RS. 500

INDIA NON JUDICIAL

കേരളം केरल KERALA

FORM H

(See rule 43)

QUARRYING LEASE

Executant

K.J. Thomaskutty



This deed of lease made on this the 29th day of March 2016 between the Governor of Kerala (hereinafter referred to as the "State Government" which expression shall, where the context so admits be deemed to include his successors and assigns) of the one part and M/s. Karimala Granites & Aggregates (P) Ltd, Pathanad, Kanjasha P O, Changanassery, Kottayam, -686541 (Represented by Sri K. J. Thomaskutty, Managing Director) aged 65 son of Sri. K. J. Joseph resident of Kannamthanathu House in the Vadaserikkara Village of Ranni Taluk of Pathanamthitta District having Pan No. AEZPK3762J (hereinafter called the "lessee/lessees" which expression shall where the context so admits, include his/their heirs, executors, administrators, representatives and permitted assigns) of the other part,

Sri. K.J. Thomaskutty

*[Signature]*

29/3/2016

101.13125

28.3.2016

M/s Karimala Granites and Aggregates Pvs Ltd Pathanad

*[Signature]*  
MANAGING DIRECTOR  
KARIMALA GRANITES & AGGREGATES (P) LTD  
PATHANAD, KOTTAYAM

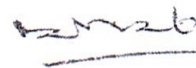




Witnesseth that in consideration of the rents and royalties and lessee's/Lessee's covenants, hereinafter reserved and contained the State Government hereby give on lease to the lessee/lessees the land measuring 5.2309 hectares described in the schedule hereunder and delineated on the plan hereto annexed and therein coloured red (hereinafter called the "said lands") to hold the same for a period of Ten (10) years commencing from the 29<sup>th</sup> March 2016 and ending on the 28<sup>th</sup> March 2026 for the purposes of extracting minor mineral/minerals and subject to the terms and conditions contained in the Kerala Minor Mineral Concession Rules, 2015 (hereinafter referred to as "the Rules") and to the terms and conditions hereinafter appearing.

1. The lessee/lessees shall have the right in and upon the said lands to extract Granite Building Stone (here in after called the said mineral/minerals) and to do all acts necessary for the extraction of the said mineral/minerals including the erection on the said lands, buildings and plant required for the purposes and also to take lead and carry away over the said lands and to dispose of the said minerals extracted as aforesaid.
2. The lessee/lessees shall during the subsistence of this lease have the liberty to Work the said mineral minerals and remove the same from the leasehold on permits issued by the State Government competent authority or any other officer authorised by him in this regard. The permits shall be issued only on the basis of pre-paid royalty at the rates specified in schedule I to these Rules. The royalty rates shall be subject to revision from time to time as the State Government may order.
3. The lessee/lessees shall pay to the State Government a yearly surface rent equal to the land revenue if any, assessable under the rules for the time being in force, or if the land be the property of Government or in reserve forest then equal to the land revenue plus cess, if any, per hectare of the land the surface whereof shall be occupied or used by the lessee/lessees for any of the purposes of this deed and so in proportion for any area less than one hectare. The said surface rent shall be paid by yearly payments; the first of such payments to be made on or before the last day of the first year of occupation provided always that no such rent shall be paid or demanded in respect of any roads or ways now in existence.
4. The lessee/lessees shall at all times during the currency of this lease keep correct and intelligible books of account showing accurately the quantity of the said minerals extracted and the weight and value of the said mineral sold or exported together with the names of the purchasers or consignees. The lessee shall also maintain a register of employees showing therein separately men, women employed daily and shall at reasonable times allow the competent authority appointed under the rules (hereinafter referred to as "competent authority") or the officer authorised by him to examine the said books of account and the register of employees and to take copies and extracts

Sri. K.J. Thomaskutty




therefrom. The lessee/lessees shall submit reports in Forms F and G on the specified dates.

5. All sums found due under or by virtue of this deed from the lessee/lessees may be recovered from him jointly and severally from them and his / their properties movable and immovable under the provisions of the Revenue Recovery Act for the time being in force as though such sums are arrears of land revenue or in any other manner as the State Government may deem fit.

6. The lessee/lessees shall at the lessee's/lessees' own expense erect and at all times maintain and keep in repair boundary marks and pillars along the boundaries of the said lands according to the demarcation shown in the plan hereto annexed

7. In cases where explosives are not used for quarrying the lessee shall not carry on or allowed to be carried on any quarrying operations at or to any points within a distance of 75 metres from any railway line except with the previous written permission of the Railway Administration concerned; and any bridge on National High way or 50 metres from any reservoir, tanks, canals, rivers, bridges, public roads, other public works, residential buildings, the boundary walls of places of worship, burial grounds, burning ghats or any Government protected monuments or forest lands which do not conform to the category of wild life forests except with the previous permission of the authorities concerned or State Government or competent authority or any other officer authorised by the State Government in this behalf.

In cases where explosives are used for quarrying, the lessee shall not carry on or allowed to be carried on any quarrying operations at or to any points within a distance of 100 metres from any railway line, bridge, reservoir, tanks, residential buildings, Government protected monuments, canals, rivers, public roads having vehicular traffic, other public works or the boundary walls of places of worship or 50 metres from any burial grounds or burning ghats or village roads or forest lands which do not conform to the category of wild life forests.

The above said distances shall be measured in the case of a railway, reservoir or canal horizontally from outer edge of the cutting or outer edge of the bank, as the case may be and in the case of a building horizontally from the plinth thereof.

For the purposes of this clause the expression 'railway' and 'railway administration' shall have the same meaning as defined in sub sections (4) and (6) of section 3 of Indian Railway Act, 1890 (IX of 1890).

8. The sides of open workings shall be sloped, stepped or secured by the lessee in such a manner as to prevent slope failure, when an open working is worked in steps, steps shall be of sufficient breadth in relation to their height to secure safety. In open workings trees liable to fall and

Sri. K.J. Thomaskutty

*[Signature]*

*[Signature]*

GEOLOGIST  
DISTRICT OFFICE  
DEPT. OF MINING AND GEOLOGY  
KOTTAYAM  
PIN-686 002

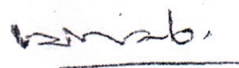




all loose ground and material shall be removed by the lessee sufficiently far from the edge or otherwise made source in order to prevent danger to persons employed in the quarry.

9. If a working place is found to be unsafe all persons shall be withdrawn by the lessee/lessees immediately from the dangerous area and all access to such working place except for the purpose of removing the danger of saving life shall be prevented by securely fencing the full width of all entrances to the place.
10. The lessee/lessees shall at all reasonable times allow any officer authorised by the Central Government or by the State Government in that behalf to inspect the said lands and the buildings and plants erected thereon and the lessee/lessees shall assist such persons in conducting the inspection and afford them all information they may reasonably require, and shall conform to and observe all orders which the Central and State Governments as the result of such inspection or otherwise, may from time to time pass.
11. The lessee shall be responsible for implementing the provisions of the various labour laws applicable, from time to time, to the quarry.
12. The lessee/lessees shall not assign or underlet the said lands or any part thereof or the rights or privileges, therein hereby granted or any of them without the previous permission in writing of the State Government/competent authority:
13. Where the lease or any right, title or interest therein has been assigned, sublet or transferred as provided in rule 45 read with condition 12, then the person in whose favour such assignment, sublease or transfer has been made shall be responsible for implementing the provisions of the various labour laws applicable, from time to time, to the quarry.
14. The lease may be surrendered by the lessee/lessees at any time after 3 months notice in writing to the State Government/competent authority: Provided that the lessee/lessees has have paid all sums due on account of the lease. Provided that if the lessee/lessees elects/elect to determine this lease before the expiry of the term of the lease, shall pay in addition to other dues a sum equal to the dead rent payable for the remaining part of the term of the lease deed.
15. If the lessee/lessees shall be desirous of taking a further lease of the said lands for a further term of 10 years he/they shall give three months' previous notice in writing of such desire to the State Government/Competent authority and if the lessee/lessees has have duly observed all the conditions of this lease, the State Government/competent authority may agree to renew the lease for such further term and on such terms and conditions as the State Government/Competent authority may determine which shall be in accordance with the provisions of these rules. with a new deed

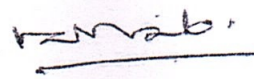
Sri. K.J. Thomaskutty




16. If the lessee/lessees shall at any time during the said term use the said lands or any part thereof in any manner other than as authorised by this lease or fail to carry on quarrying operations continuously without sufficient cause of which the State Government/Competent authority shall be the judge or shall commit a breach of any of the conditions of this lease it shall be lawful for the State Government/Competent authority to cancel this lease and take possession of the said lands or the alternative to receive from the lessee/lessees such penalty not exceeding Rs. 25000/- for the breach as the State Government/Competent authority may fix.
17. If at the expiration of three calendar months after the expiry of the lease or its sooner determination, there shall remain in or the said lands, any engines, machinery, plant buildings, structures and other works erections and conveniences the said minerals or other property which the lessee is/lessees are entitled to remove from the said lands, the same shall, if not removed by the lessee/lessees within one calendar month after notice in writing requiring their removal be given to the lessee/lessees by the State Government/Competent authority be deemed to become the property of the State Government in such manner as they may deem fit without liability to pay any compensation or to account to the lessee/lessees in respect thereof.
18. This lease subject to all rules and regulations which may from time to time be issued by the State Government regulating the working of the quarries and other matters affecting safety, health and convenience of the lessee's/lessees' employees or of the public, whether under the Indian Mines Act or otherwise.
19. The lessee/lessees shall without delay send to the District Collector and the competent authority or the officer authorized by him in this regard report of any accident causing loss of life or serious bodily injuries or seriously affecting or endangering life or property which may at any time occur at or in the said lands in the course of operations under this lease.
20. The lessee/lessees shall furnish such reports and returns relating to output, labourers employed and other matters as the State Government may prescribe.
21. The lessee/lessees shall make and pay such reasonable compensation as may be assessed by lawful authority in accordance with the law in force on the subject for all damage, injury or disturbance which may be done by him/them in exercise of the powers granted by this lease and shall indemnify

Sri. K.J. Thomaskutty

GEOLOGIST  
DEPT. OF MINING AND GEOLOGY  
COLLECTORATE





and shall keep indemnified fully and completely the State Government against all claims which may be made by any person or persons in respect of any such damage, injury or disturbance and all costs and expenses in connection therewith.

22. Any condition prescribed in the Kerala Minor Mineral Concession Rules, 2015 but left out in this lease which may be found applicable to the lessee/lessees shall be treated as binding on the lessee/lessees.
23. In this case anticipated royalty for the mineral at rate of Rs 24/- (Rupees Twenty Four only) per tone for a period of one year is Rs.4800000/- (Rupees Forty Eight Lakhs only)
24. Dead rent realized at the rate of 1<sup>st</sup> year NIL 2<sup>nd</sup> year Rs.300/- (Rupees Three Hundred only) and 3<sup>rd</sup> year onwards Rs.1200/- (Rupees One Thousand and Two Hundred Only) per hectare subject to revision from time to time. Surface rent at the rate of Rs.200/- (Rupees two hundred only) per hectare for one year is Rs.1046/- (Rupees one thousand and forty six only) security deposit is Rs.52309/- (rupees fifty two thousand three hundred and nine only)
25. The Quarry Lease will become invalid if the lease to renew the EC after 28/11/19
26. This Lease agreement is prepared and registered in original with Two duplicates thereof.

### The Schedule of description of land

District	: Kottayam
Sub District	: Karukachal
Thaluk	: Changanacherry
Village	: Kangazha
Kara	: Kangazha
Panchayath	: Kangazha
Block No.	: 20
Old Sy. No.	: 463/1, 447/1A/1/57/98, 447/1A, 447/1A/1, 447/1A/1/21
Resurvey/Survey No of the Area	: Sy. No. 278/7, 278/2-1, 278/2, 278/3, 278/4-4, 278/4-1, 278/4-2, 278/4-3, 278/4-5, 278/6, 277/9, 277/1, 286/5, 286/2, 286/8, 286/4, 282/10

Area in Hectares : 5.2309 Hectares

### Bounded by Survey Numbers

On the North by	: Re. Sy. No. 278/1-2, 275
On the East by	: Re. Sy. No. 286/2, 286/7, 286/9, 286/3
On the South by	: Re. Sy. No. 282/3, 282/4, 282/5, 286/1
On the West by	: Re. Sy. No. 278/1-1, 280/2, 280/7, 281/5, 281/7, 282/1, 282/2, 282/3

K.J. Thomaskutty

*[Signature]*

GEOLOGIST  
DISTRICT OFFICE  
DEPT. OF MINING AND GEOLOGY  
KOTTAYAM



In witness whereof the parties hereto have set their hands here unto on the day and year first above written.



Signed by  
GOVT. OF  
KERALA

*mmb.*  
Sri. M. M. Vahab

Geologist

Department of Mining & Geology  
District Office, Kottayam

GEOLOGIST

DISTRICT OFFICE

DEPT. OF MINING AND GEOLOGY

COLLECTORATE P.O. KOTTAYAM-686 097

for and on behalf of the Governor of Kerala. In the presence of:

(1) SHEENAMOL V.T  
Asst. Geologist  
Department of Mining and Geology  
District office, Kottayam.

(2) SHAMFER-S  
Clerk.  
Dept. of Mining and Geology  
Dist. office, Kottayam

Signed by

Sri. K.J. Thomaskutty

Kannamthanathu (H), Vadasserikkara P.O., Pathanamthitta Dt.

for and on behalf of the lessee/lessees In the presence of:

(1) Thomas Varghese  
Attapakkal  
madam, P.O.  
Perumal

(2) Jobin. P. Sam  
Panangalla Thundiyil (H)  
Kari Madhavan. C.P.O.  
Mannimala





Directorate of Mining & Geology  
Kesavadasapuram, Pattom P.O.  
Thiruvananthapuram-4  
Tel/FAX: 0471-2447429  
E.mail: director.dir.dmg @ kerala.gov.in  
Web: www.dmg.kerala.gov.in

Dated : 16-03-2016

No. 10839/M3/2015

From  
The Director of Mining & Geology.

To  
M/s. Karimala Granites & Aggregates Pvt. Ltd.,  
Pathanad, Kangazha P.O., Changanassery,  
Kottayam-686541 (Represented by  
Sri. K.J. Thomaskutty, Managing Director).

Sir,

Sub : Mines and Minerals - Minor Minerals- Granite (Building Stone) -  
Preparation and execution of quarrying lease deed - reg.

Ref : 1. Pro.Order No. 810/2016-17/10839/M3/2015 Dated: 16.03.2016.  
2. KMMC Rules 2015.  
3. Pro.No. 222/SEIAA/KL/349/2014 dtd. 29-11-2014 of the Member  
Secretary, SEIAA, Kerala.

Please refer to the Proceedings Order cited above wherein a quarrying lease for Granite (Building Stone) was granted to M/s. Karimala Granites & Aggregates Pvt. Ltd., Pathanad, Kangazha P.O., Changanassery, Kottayam-686541 (Represented by Sri. K.J. Thomaskutty, Managing Director). I request you to prepare three copies of the quarrying lease deed original on plain paper and two copies of the same in stamped paper worth Rs. 200/- and produce the same before the Geologist, District Office, Kottayam for scrutiny and execution. The date of execution will be entered up by the Geologist at the time of execution. After scrutiny of the quarrying lease deed, the Geologist will inform you the date of execution convenient to him. After execution as per the request of the Geologist stamp duty will be fixed by the District Registrar, Kottayam and he will receive the stamp duty and a certificate of remittance of stamp duty will be entered in the lease deed. A chalan for ₹52,309/- (Rupees fifty two thousand three hundred and nine only) being the security deposit is enclosed herewith duly countersigned. Please affix your signature at the appropriate places before remittance of money in the treasury. The original treasury receipted chalan may also be produced along with the typed copies of the lease deed and the draft form 'H' which is enclosed herewith, before the Geologist, District Office, Kottayam at the time of execution.



Please note that the quarrying lease deed has to be executed within a period of six months from the date on which quarrying lease has been granted and got registered in accordance with the Registration Act, 1908 vide Rules 44 of the Kerala Minor Mineral Concession Rules, 2015. Form 'D' is also enclosed herewith for strict compliance and to report thereof.



Yours faithfully

*[Signature]*  
16/03/2016

DIRECTOR OF MINING & GEOLOGY

Encl: as above.

Copy to: The Geologist, District Office, Kottayam

(vide Letter No. 1956/DOY/ML/2015 dtd. 16-10-2015) - He is instructed to execute the lease deed as and when it is received. The Original survey map is enclosed herewith. Please acknowledge. A copy of the lease deed may be forwarded to this office soon after registration. The area under this grant should be demarcated and boundary stones fixed before execution of the lease deed.

You are also instructed to obtain and forward the Form D to this office. No movement permits should be issued before the service of Form 'D' notice, which is a statutory requirement.

You are further instructed to forward photocopies of the registered lease deed to the Director of Mines Safety, Bangalore Region & District Collector. Also ensure that the lessee has erected notice board and made proper fencing before the execution of lease deed as stipulated in the rules.

ab/1603





**PROCEEDINGS OF THE DIRECTOR OF MINING & GEOLOGY**

Sub : Mines & Minerals - Minor Minerals - Granite( Building Stone) - Quarrying lease to M/s. Karimala Granites & Aggregates Pvt. Ltd., Pathanad, Kangazha P.O., Changanassery, Kottayam-686541 (Represented by Sri. K.J. Thomaskutty, Managing Director) - sanction - orders issued.

Ref : 1. Application dated 27-06-2015 from M/s. Karimala Granites & Aggregates Pvt. Ltd., Pathanad, Kangazha P.O., Changanassery, Kottayam-686541 (Represented by Sri. K.J. Thomaskutty, Managing Director)

2. Letter No. 1956/DOY/ML/2015 dtd. 16-10-2015 from the Geologist, District Office, Kottayam

3. Kerala Minor Mineral Concession Rules, 2015.

4. Pro.Order No. 222/SEIAA/KL/349/2014 dtd. 29-11-2014 of the Member Secretary, SEIAA, Kerala.

No. 810/2015-16/10839/M3/2015

Dated, Thiruvananthapuram, 16-03-2016

**ORDER**

A quarrying lease is granted to M/s. Karimala Granites & Aggregates Pvt. Ltd., Pathanad, Kangazha P.O., Changanassery, Kottayam-686541 (Represented by Sri. K.J. Thomaskutty, Managing Director) to quarry Granite (Building Stone) over an area of 5.2309 hectares of private land comprised in Survey Nos. 278/7, 278/2-1, 278/2, 278/3, 278/4-4, 278/4-1, 278/4-2, 278/4-3, 278/4-5, 278/6, 277/9, 277/1, 286/5, 286/2, 286/3, 286/4, 282/10 of Kangazha Village, Changanassery Taluk, Kottayam District for 10(ten) years from the date of execution of the quarrying lease deed under the Kerala Minor Mineral Concession Rules, 2015 and as per the survey map issued by the Tahsildar, Changanassery and the approved Mining Plan and environmental clearance submitted by the applicant and the conditions stipulated in the EIA and subject to the under mentioned conditions.

1. Royalty is payable to Government as per Rule 32 of the Kerala Mineral Concession Rules, 2015 in respect of minor mineral quarried and moved out of the quarry subject to revision from time to time on the basis of amendments to the schedule I of the said Rules.
2. Dead rent is realizable under 40(d) of the said rules subject to revision from time to time on the basis of amendments to the schedule II of the said rules.
3. Surface rent realizable under of the said rules will be equal to the land revenue assessed by the Revenue Department subject to revision from time to time on the basis of the land revenue.
4. The lessee shall execute a quarrying lease deed *within a period of three months* from the date of this order in form 'H' as per Rule 43 of the Kerala Minor Mineral Concession Rules, 2015.
5. The lessee shall also deposit an amount of Rs. 52,309/- (Rupees fifty two thousand three hundred and nine only) as security deposit for the observance of the terms and conditions of the lease before the deed is executed as per rule 42 of the said rules. The lessee shall commence quarrying operation only after the deed is executed and registered.
6. The quarrying area shall be demarcated and boundary stones fixed at the lessee's expenses before execution of the quarrying lease deed.
7. The lessee shall not win and dispose of any type of dimension and decorative stones from the area over which the quarrying lease has been sanctioned on the strength of this order.
8. The production of Granite Building Stone from the area covered under this grant shall be restricted to 2,00,000 MT (Two lakh Metric Tonne only) per year during the tenure of this quarrying lease.





9. (i) The lessee shall erect a notice board in Malayalam at a prominent place with a minimum size of 1 metre X 1.5 metres in a metallic board near to the entrance of the quarry to the effect that it shall contain the name and address of the permit holder, mineral concession number and date, the mineral to be extracted, permit number and date and its date of expiry, quantity of extraction permitted (if applicable), area of extraction permitted, explosives used (if any), etc.
- (ii) The lessee shall erect a warning board with danger sign regarding operation of the quarry, 100 metres away by the side of the road leading to it.
10. The lessee should provide retention wall/barricade/fencing compound wall surrounding the quarry before the commencement of the quarrying operation for preventing accidents by falling of human beings, animals, vehicles and material into the quarry. The lessee should take effective preventive measures for the safety of labourers as well as the general public.
11. The lessee should leave a distance of 7.5m from the adjacent boundary lands including government puramboke land while carrying out quarrying operations.
12. The lessee should not assign, sublet or transfer ~~their~~ lease or any right or interest therein to any person without previous permission of the Director of Mining & Geology.
13. The lessee shall pay tax related to Revenue Department, if any, as directed by them and the details should be furnished to the Geologist periodically.
14. The lessee shall operate the quarry in accordance with the condition stipulated in the environmental clearance and mining plan submitted by them.
15. The lessee shall obtain all other statutory licenses/clearances/No Objection Certificates from other authorities concerned including Explosive licence, consent from Pollution Control Board and D & O licence from the Local Self Government Department concerned.
16. The quarrying lease will become invalid if the lessee fails to renew the Environmental clearance after 28-11-2019.
17. The lessee shall produce a financial guarantee of Rs. 1,30,773/- (One lakh thirty thousand seven hundred and seventy three only) as stipulated in rule 62 of the KMMC Rules, 2015 before execution of lease deed.
18. The lessee shall pay 10% of the amount of royalty/consolidated royalty, as the case may be paid by them, being the quarry safety fund in addition to the royalty/consolidated royalty, as per rule 63 of the KMMC Rules, 2015.
19. The lessee shall carry out mining operations as per the approved mining plan.

The terms and conditions stated in this order will be subjected to such further modifications as may be made by the State Government from time to time.

Sd/-  
D.P.SREEKUMAR  
DIRECTOR OF MINING & GEOLOGY

To : M/s. Karimala Granites & Aggregates Pvt. Ltd., Pathanad,  
Kangazha P.O., Changanassery, Kottayam-686541  
(Represented by Sri. K.J. Thomaskutty, Managing Director).

Copy to : The Deputy Director General, Directorate General of  
Mines Safety, Southern Zone, Bangalore- 560029  
The District Collector, Kottayam  
The Geologist, District Office, Kottayam.  
The Tahsildar, Changanassery.  
Stock File (2), File Copy.

(By Order)

Senior Superintendent

Do/1603







നമ്പർ: 2/2020-2021/A-4/1104/2020

തീയതി: 27/04/2020

കണ്ടഴ ഗ്രാമപഞ്ചായത്ത്

കണ്ടഴ പി.ഒ., കോട്ടയം (ജില്ല)

പിൻ: 686541, ഫോൺ: 4812494321, ഇ-മെയിൽ: kangazhagpkm@gmail.com

വ്യവസായം, വാണിജ്യം, സംരഭകത്വം, മറ്റ് സേവനങ്ങൾക്കുള്ള ലൈസൻസ്

(കെ.പി.ആർ ആക്ട് സെക്ഷൻ 232, FTE &amp; OS ലൈസൻസ് ചട്ടങ്ങൾ 1996)

ലൈസൻസിനുടേപേര്	കെ ജെ തോമസ് കുട്ടി
ലൈസൻസിനുടേ മേൽവിലാസം	കരിമല ഗ്രാനൈറ്റ്സ് & അഗ്രിഗേറ്റ്സ് പ്രൈവറ്റ് ലിമിറ്റഡ്, കണ്ടഴ പി ഒ
സ്ഥാപനത്തിന്റെ പേരും, സ്ഥലത്താലും	കരിമല ഗ്രാനൈറ്റ്സ് & അഗ്രിഗേറ്റ്സ് പ്രൈവറ്റ് ലിമിറ്റഡ്, കണ്ടഴ പി ഒ
ലൈസൻസ് നൽകിയിട്ടുള്ള പ്രവർത്തനങ്ങൾ	പറമ്പട
വാർഡ് നമ്പർ/കെട്ടിട നമ്പർ	XV/92,278/2,2-1,278/3,4-1,4-2,4-3,4-44-5,278/6,7,277/1,9,286/2,286/4,5,8,282/10
ലൈസൻസ് കാലാവധി	27/04/2020 മുതൽ 31/03/2021 വരെ
ലൈസൻസ് ഫീസ്	തുക രസീത് നമ്പർ തീയതി
മോട്ടോർ ഫീസ്	15000/- രൂപ 120010100026 27/04/2020
തൊഴിൽ തികുതി	1000/- രൂപ 120010100026 27/04/2020
	2500/- രൂപ 120010100026 27/04/2020

ലൈസൻസ് അനുവദിക്കുന്നതിന് ഹാജരാക്കിയ നിരാക്ഷേപ പത്രങ്ങളുടെ വിലാസങ്ങൾ (നമ്പർ, തീയതി, കാലയളവ്, നൽകിയ അധികാര സ്ഥാപനം)

1. പൊലുഷൻ കൺട്രോൾ ബോർഡിന്റെ 30/06/2023 വരെയുള്ള അനുമതി
2. ചീഫ് കൺട്രോളർ ഓഫ് എക്സ്പ്ലോസിവിന്റെ 31/03/2025 വരെയുള്ള അനുമതി
3. മൈനിംഗ് & ജിയോളജിയുടെ അനുമതി





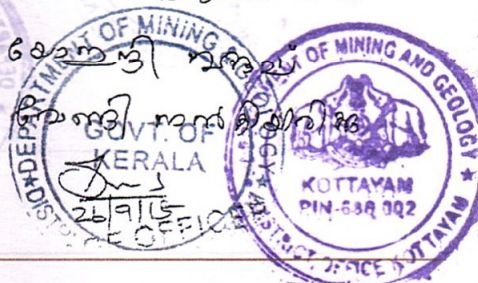
21.08.2015  
26.09.2015

26.09.2015

നവംബറിയിൽ ചില വിമാനങ്ങൾ ചുവടെ പറയുന്ന പ്രകാരം.

278/4-4, 278/4-5  
 20-9-2015  
 മൂലത്തിൽ പ്രസ്താവിച്ച സർവ്വേ നമ്പറുകളിൽ നിന്നും വർദ്ധിപ്പിച്ച്  
 278/4-4, 278/4-5  
 20-9-2015  
 മൂലത്തിൽ പ്രസ്താവിച്ച സർവ്വേ നമ്പറുകളിൽ നിന്നും വർദ്ധിപ്പിച്ച്  
 278/4-4, 278/4-5  
 20-9-2015

A-213





IN THE HIGH COURT OF KERALA AT ERNAKULAM

PRESENT

THE HONOURABLE MR. JUSTICE P.B.SURESH KUMAR

MONDAY, THE 02ND DAY OF NOVEMBER 2020 / 11TH KARTHIKA,  
1942

WP(C).No.17533 OF 2020(N)

PETITIONER:

T.MATHEW ABRAHAM, AGED 74 YEARS  
PROPRIETOR, M/S.SOUTHERN ROCK AND AGGREGATE  
MINING COMPANY, VALLAMKULAM P.O., THIRUVALLA -  
689541.

BY ADV. SRI.PHILIP J.VETTICKATTU

RESPONDENTS:

- 1 STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT  
AUTHORITY  
(SEIAA KERALA), REPRESENTED BY ITS MEMBER  
SECRETARY, 4TH FLOOR, KSRTC BUS TERMINAL  
COMPLEX, THIRUVANANTHAPURAM - 695001.
- 2 STATE LEVEL EXPERT APPRAISAL COMMITTEE  
REPRESENTED BY ITS CHAIRMAN, PALLIMUKKU,  
KANNAMMOOLA ROAD, OVERBRIDGE, VELAKUDI,  
TRIVANDRUM - 695024.
- 3 STATE OF KERALA  
REPRESENTED BY THE CHIEF SECRETARY TO  
GOVERNMENT, SECRETARIAT, TRIVANDRUM - 695001.
- 4 STATE OF KERALA  
REPRESENTED BY THE PRINCIPAL SECRETARY,  
INDUSTRIES (A) DEPARTMENT, SECRETARIAT,  
TRIVANDRUM - 695001.
- 5 THE MINISTRY OF ENVIRONMENT  
CLIMATE AND FOREST CHANGE, JORBAGH ROAD, NEW  
DELHI - 110 003, REPRESENTED BY ITS DIRECTOR.

SRI. RENJITH THAMPAN, ADDL.AG



IN THE HIGH COURT OF KERALA AT ERNAKULAM

PRESENT

THE HONOURABLE MR. JUSTICE P.B.SURESH KUMAR

MONDAY, THE 02ND DAY OF NOVEMBER 2020 / 11TH KARTHIKA,  
1942

WP(C).No.12439 OF 2020(D)

PETITIONER:

KARIMALA GRANITES AND AGGREGATES PVT.LTD.  
PATHANAD, KANGAZHA.P.O, KOTTAYAM-686541,  
REPRESENTED BY ITS MANAGING DIRECTOR,  
SRI.K.J.THOMASKUTTY

BY ADVS.  
SRI.PAUL JACOB (P)  
SRI.ENOCH DAVID SIMON JOEL  
SRI.RONY JOSE  
SRI.GEORGE A.CHERIAN  
SRI.LEO LUKOSE

RESPONDENTS:

- 1 THE STATE ENVIRONMENT IMPACT ASSESSMENT  
AUTHORITY  
PALLIMUKKU-KANNAMMOOLA RD, OVERBRIDGE,  
VELAKUDI, THIRUVANANTHAPURAM-695024,  
REPRESENTED BY ITS MEMBER SECRETARY
- 2 THE MEMEBER SECRETARY  
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,  
PALLIMUKKU-KANNAMMOOLA RD, OVERBRIDGE,  
VELAKUDI, THIRUVANANTHAPURAM-695024
- 3 THE DISTRICT GEOLOGIST  
DEPARTMENT OF MINING AND GEOLOGY, DISTRICT  
OFFICE, CHEMBUKKAVU, THRISSUR-680020
- 4 UNION OF INDIA,  
REPRESENTED BY THE SECRETARY, MINING ON





APPENDIX OF WP(C) 12439/2020

PETITIONER'S/S EXHIBITS:

- EXHIBIT P1                      TRUE COPY OF THE ENVIRONMENTAL  
CLEARANCE CERTIFICATE NO.DTD  
29.11.2014 WITH FILE  
NO.222/SEIAA/KL/349/2014 ISSUED BY THE  
1ST RESPONDENT
- EXHIBIT P2                      TRUE ABSTRACT COPY OF THE APPROVED  
MINING PLAN OF THE PETITIONER DATED  
25.01.2016 ISSUED BY THE 3RD  
RESPONDENT
- EXHIBIT P3                      TRUE COPY OF THE JUDGMENT DATED  
24.12.2014 IN WP(C) NO.25211/2013 ON  
THE FILES OF THE HON'BLE HIGH COURT OF  
ORISSA AS REPORTED IN  
MANU/OR/0646/2014
- EXHIBIT P4                      TRUE COPY OF AN ENVIRONMENTAL  
CLEARANCE CERTIFICATE DATED 10.12.2014  
ISSUED BY THE 4TH RESPONDENT
- EXHIBIT P4 A                    TRUE COPY OF AN ENVIRONMENTAL  
CLEARANCE CERTIFICATE DATED 19.3.2015  
ISSUED BY THE 4TH RESPONDENT
- EXHIBIT P5                      TRUE COPY OF THE ABSTRACT OF THE DRAFT  
OF THE ENVIRONMENTAL IMPACT ASSESSMENT  
NOTIFICATION, 2020



the courts in environmental law such as polluter pays, sustainable development, precautionary principle etc. cannot be put forward in a case where the decision taken by the statutory authority is impugned for of want of jurisdiction. The aforesaid are only principles evolved to be followed as guiding principles while dealing with matters relating to environment.

22. As noted, the appraisal committees concerned have not estimated the life of the projects of the petitioners in any of the cases while making recommendations to the regulatory bodies for grant of ECs. As such, the declaration sought by the petitioners that they are entitled to ECs for the life of their respective projects as estimated by them cannot be granted. In other words, the life of the projects of the petitioners needs to be estimated by the appraisal committees concerned.

In the circumstances, the writ petitions are disposed of directing the regulatory bodies concerned to call for additional recommendations from the appraisal committees after estimating the life of the projects of the petitioners in respect of which ECs have been issued to them, and





thereupon, re-validate the ECs granted to the petitioners, wherever necessary. It is made clear that in the matter of making estimation of the life of the projects in terms of this judgment, it will be open to the appraisal committees to call for additional information required and in that event, it will be obligatory for the petitioners to furnish the additional information called for. It is also made clear that the recommendations of the appraisal committees in this regard would not be binding on the regulatory bodies, and in the event the regulatory bodies disagree with the recommendations made by the appraisal committees as regards the project life of the petitioners, the regulatory bodies would be free to follow the procedure mentioned in clause 8 of 2006 notification in the matter of arriving at the conclusion as to the life of the projects of the petitioners, for the purpose of complying with the directions contained in this judgment. The directions aforesaid shall be complied with, within four months from today.

**P.B.SURESH KUMAR  
JUDGE**

ds 21.10.2020





**TEST REPORT**

ULR No:TC540220000003610F	Date: 07.12.2020	Page 1 of 1
---------------------------	------------------	-------------

**CUSTOMER DETAILS**

Customer Name & Address	M/s Karimala Granites & Aggregates Pvt Ltd Kangazha, Changanassery Kottayam District.
Customer Reference	Test Request dt 28.11.2020

**SAMPLE DETAILS**

Product Category	Atmospheric Pollution	Sample Code	EN20110334
Sample Name	Ambient Air	Sample Received on	30.11.2020
Sample Conditions at Receipt	Fit for Analysis	Test Commenced on	01.12.2020
Sampled by	Lab Authorized Sampler	Test Completed on	04.12.2020

**DETAILS OF SAMPLING**

Sampling Location	Project Site	Date of Sampling	28.11.2020
Sampling Procedure	SEAAL/ENL/GEN/SOP/02	Humidity	62%

**SAMPLING SITE DETAILS**


Survey No.	277/1(P), 277/9, 278/2.2-1, 3(P), 4-4(P), 4-1, 4-2, 4-3, 4-5, 6, 7, 286/2(P), 4,5(P), 8(P), 282/10		
Village	Kangazha	Taluk	Changanassery
District	Kottayam	State	Kerala

**TEST RESULTS - CHEMICAL PARAMETERS**


Sl. No.	PARAMETERS	TEST METHOD	UNIT	RESULT	NAAQ Standards
1	Particulate Matter, PM <sub>10</sub>	IS 5182 (Part 23):2006	µg/m <sup>3</sup>	49.8	Max 100
2	Particulate Matter, PM <sub>2.5</sub>	EPA 40 CFR (Part 50) Appendix - L	µg/m <sup>3</sup>	23.7	Max 60
3	Sulphur Dioxide as SO <sub>2</sub>	IS 5182 (Part 2): 2001 RA 2017	µg/m <sup>3</sup>	< 2.00	Max 80
4	Oxides of Nitrogen as NO <sub>2</sub>	IS 5182 (Part 6): 2006 RA 2017	µg/m <sup>3</sup>	< 2.00	Max 80

Remarks:

\*\*\*End of Report\*\*\*

  
**Shency Joy**  
 Dy. TM Chemical

Checked by:

  
**Laiju P. N.**  
 Laboratory Head

Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43  
 Web: www.sealabs.in, E-mail: sealab@gmail.com





**TEST REPORT**

ULR No: TC540220000003613F

Date: 07.12.2020

Page 1 of 2

**CUSTOMER DETAILS**

Customer Name & Address	M/s Karimala Granites & Aggregates Pvt Ltd Kangazha, Changanassery Kottayam District.
Customer Reference	Test Request dt 28.11.2020

**SAMPLE DETAILS**

Product Category	Water	Sample Code	WT20110141
Sample Name	Ground Water	Sample Received on	30.11.2020
Sample Conditions at Receipt	Fit for Analysis	Temperature @ Receipt	30 °C
Sample Quantity & Packing	2L & 100ml Plastic Bottles	Test Commenced on	30.11.2020
Sampled by	Lab Authorized Sampler	Test Completed on	03.12.2020
Information Provided by Customer	---		

**DETAILS OF SAMPLING**

Sample Source	Open Well - Project Site	Date of Sampling	28.11.2020
Sampling Procedure	SEAAL/ENL/GEN/SOP/01 & SEAAL/MBL/SOP/06	Sample Temperature	31 °C

**SAMPLING SITE DETAILS**

Survey No.	277/1(P), 277/9, 278/2, 2-1, 3(P), 4-4(P), 4-1, 4-2, 4-3, 4-5, 6, 7, 286/2(P), 4, 5(P), 8(P), 282/10		
Village	Kangazha	Taluk	Changanassery
District	Kottayam	State	Kerala

**TEST RESULTS - CHEMICAL PARAMETERS**

Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 : 2012
1	Colour	IS 3025 (Part 4):1983 RA 2017	Hazen	1.00	Max 5
2	Odour	IS 3025 (Part 5):2018	---	Agreeable	Agreeable
3	Turbidity	IS 3025 (Part 10):1984 RA 2017	NTU	0.30	Max 1
4	pH	IS 3025 (Part 11):1983 RA 2017	---	5.27	6.50 - 8.50
5	Conductivity	IS 3025 (Part 14):1984 RA 2019	μS/cm	172	---
6	Total Dissolved Solids	IS 3025 (Part 16):1984 RA 2017	mg/L	110	Max 500
7	Total Hardness as CaCO <sub>3</sub>	IS 3025 (Part 21):2009 RA 2019	mg/L	34.0	Max 200
8	Calcium as Ca	IS 3025 (Part 40):1991 RA 2019	mg/L	10.4	Max 75
9	Magnesium as Mg	IS 3025 (Part 46):1994 RA 2019	mg/L	1.94	Max 30
10	Chloride as Cl	IS 3025 (Part 32):1988 RA 2019	mg/L	22.5	Max 250

*Shency Joy*  
Shency Joy  
Dy. TM Chemical

Checked by:

*Salini T. S.*  
Salini T. S.  
Microbiologist

Authorized Signatory

*Laiju P. N.*  
Laiju P. N.  
Laboratory Head

Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the Laboratory

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 43  
Web: www.sealabs.in, E-mail: seaalab@gmail.com





## TEST REPORT

ULR No:TC540220000003613F	Date: 07.12.2020	Page 2 of 2
---------------------------	------------------	-------------


11	Total Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23):1986 RA 2019	mg/L	16.3	Max 200
12	Iron as Fe	IS 3025 (Part 53):2003 RA 2019	mg/L	0.19	Max 1
13	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24):1986 RA 2019	mg/L	9.06	Max 200

### TEST RESULTS - BIOLOGICAL PARAMETERS

Sl.No.	PARAMETERS	TEST METHOD	UNIT	RESULT	Requirement as per Acceptable Limit of IS 10500 : 2012
1	Total Coliform Bacteria	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml
2	E coli	IS 15185 : 2016	----	Absent/100 ml	Absent/100 ml

Remarks:


\*\*\*End of Report\*\*\*

  
**Shency Joy**  
 Dy. TM Chemical

Checked by:

  
**Salini T. S.**  
 Microbiologist

Authorized Signatory

  
**Lalju P. N.**  
 Laboratory Head

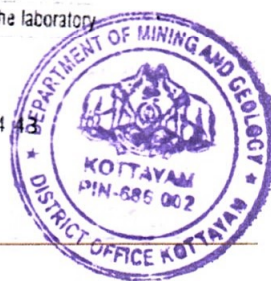
Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB

K.J Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14  
 Web: www.sealabs.in, E-mail: seaalab@gmail.com





**TEST REPORT**

ULR No:TC540220000003611F	Date: 07.12.2020	Page 1 of 1
---------------------------	------------------	-------------

CUSTOMER DETAILS	
Customer Name & Address	M/s Karimala Granites & Aggregates Pvt Ltd Kangazha, Changanassery Kottayam District.
Customer Reference	Test Request dt 28.11.2020

DETAILS OF MONITORING			
Product Category	Atmospheric Pollution	Sample Code	EN20110335
Sample Name	Ambient Noise	Monitoring Commenced on	28.11.2020 / 06:00
Monitoring Location	Project Site	Monitoring Completed on	29.11.2020 / 06:00
Test Method	IS 9989:1981 RA:2008	Monitored by	Lab Authorized Sampler

SAMPLING SITE DETAILS			
Survey No.	277/1(P), 277/9, 278/2,2-1, 3(P), 4-4(P),4-1,4-2,4-3,4-5,6,7, 286/2(P),4,5(P), 8(P), 282/10		
Village	Kangazha	Taluk	Changanassery
District	Kottayam	State	Kerala

MONITORING RESULTS - Leq					
TIME	RESULTS dB(A)	TIME	RESULTS dB(A)	TIME	RESULTS dB(A)
06:00	36.5	14:00	48.9	22:00	35.3
07:00	39.1	15:00	49.3	23:00	33.1
08:00	43.2	16:00	50.4	24:00	35.5
09:00	46.6	17:00	50.8	01:00	36.1
10:00	48.9	18:00	45.5	02:00	35.8
11:00	51.9	19:00	42.1	03:00	36.5
12:00	49.3	20:00	38.4	04:00	35.5
13:00	48.5	21:00	37.9	05:00	37.2

TEST RESULTS - CHEMICAL			
Sl. No.	PARAMETERS	UNIT	RESULT
1	Ambient Sound Level (Leq) Day Time (06:00 to 22:00)	dB(A)	47.4
2	Ambient Sound Level (Leq) Night Time (23:00 to 05:00)	dB(A)	35.8

Remarks:

\*\*\*End of Report\*\*\*

  
Shency Joy  
Dy. TM Chemical

Checked by:

  
Laiju P. N.  
Laboratory Head

Authorized Signatory

The results are related only to the samples submitted for analysis and this test report shall not be reproduced except in full, without the written approval of the laboratory.

**Standard<sup>S</sup> Environmental & Analytical Laboratories**

Accreditation and Approval: NABL as per ISO 17025: 2017 & "A" Grade Laboratory of KSPCB

K.J. Tower, Pathalam, Udyogamandal P.O., Ernakulam-683 501, Tel. 0484-2546660, 93 87 27 24 02, 90 74 34 14 43

Web: www.sealabs.in, E-mail: seaalab@gmail.com





National Accreditation Board for Testing and Calibration Laboratories

(A Constituent Board of Quality Council of India)



NABL / T-2749

21.11.2019

LAIJU P N  
STANDARDS ENVIRONMENTAL & ANALYTICAL LABORATORIES  
K. J. TOWER, PATHALAM,  
UDYOGAMANDAL P.O.  
ERNAKULAM, KERALA-683501  
Mobile: 9387272402  
E-mail: seaalab@gmail.com

Subject: **Renewal of accreditation**

Dear Sir/Ma'am,

NABL is pleased to inform you the renewal of accreditation in the disciplines of Chemical and Biological Testing in accordance with ISO/IEC 17025:2017 as per the scope (except as mentioned below) recommended by the assessment team.

Following test parameters are not recommended in view of non submission of satisfactory corrective actions and subsequently withdrawn by laboratory:

1. Total fluoride as per IS 11255 under Atmospheric Pollution in Chemical scope (Ref. NAF 3A and NC No. 7)
2. Arsenic as As per APHA (23rd Edition) 3120-B: 2017 under Residue in Water and Pollution & Environment in Chemical scope (Ref. NC No. 2 & 6).

Lab is also required to submit the results of already initiated ILC/PT program.

The accreditation certificate no. TC-5402 for Chemical and Biological Testing, dated 21.11.2019 valid till 20.11.2021 is in progress of preparation and will be sent to you shortly through NABL Portal (Note: No hard copies will be issued).

Being an accredited laboratory of NABL you must fulfil all the Terms and Conditions laid down in our document NABL-131. You are requested to follow NABL-133 for using NABL symbol.

The accreditation is subject to continued compliance of NABL norms during the accreditation period. You are required to contact us after 10 months for desktop audit.

Yours faithfully,

Pankaj Goyal

jitendra@nabl.qcin.org

NABL House, Plot 45, Sector 44, Gurgaon 122 002, Haryana, India  
Tel. No.: +91-124-4679700 (30 lines) \* Fax: +91-124-4679799 \* Website: www.nabl-india.org





No. 2996/DOY/ML/2015

Department of Mining and Geology,  
District Office, Kottayam-686 002Email [kot.geologist@gmail.com](mailto:kot.geologist@gmail.com)

Phone: 04812301405

Date 25.01.2016

From

The Geologist.

To

Shri. K.J. Thomaskutty  
Managing Director,  
M/s. Karimala Granites and Aggregates (P) Ltd.,  
Kangazha.P.O., Changanacherry,  
Kottayam

Sir,

Sub:- Mines and Minerals-Minor Minerals- -Approval of Mining Plan -  
Granite Building stone quarry at Survey No. 278/7, 278/2-1, 278/2,3, 4-4,  
4-1, 4-2, 4-3, 4-5, 277/9, 277/1, 286/5, 2, 8,4 and 282/10 of Kangazha  
Village, Changanacherry Taluk, Kottayam District-reg.

- Ref:- 1. The Mines and Minerals (Development and Regulation Act 1957.  
2. The Kerala Minor Mineral Concession Rules 2015  
3. Your Application dtd. 19.11.2015.  
4. This office letter of even No. dtd. 19.12.2015  
5. Your request dtd. 25.01.2016 along with the modified mining plan.

\*\*\*\*\*

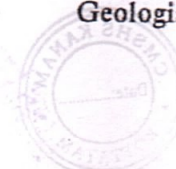
The mining plan of building stone quarry project at Survey No. 278/7, 278/2-1,  
278/2, 3, 4-4, 4-1, 4-2, 4-3, 4-5, 277/9, 277/1, 286/5, 2, 8,4 and 282/10 of Kangazha  
Village of Changanacherry Taluk for an area of 5.2309 Hectares is hereby approved  
with the following conditions.

1. That you will follow the prescribed Rules and Regulations of Central Government and State Government issued from time to time in respect to mining operation.
2. That you will follow the Mine Safety Rules and Regulations.
3. That you will store the mining waste in the earmarked location/dumping yard only as specified in the plan.
4. That you will carry out the environmental management procedures as committed in this plan without fail.
5. That your yearly production shall be restricted to as envisaged in the plan.
6. That any modification in the scheme shall only be carried out with prior approval from the authority concerned.

Yours faithfully,



Geologist.





# C.M.S HIGH SCHOOL KANAM

Kanjirappally Educational District, Kanam P.O, Kottayam. 689515

Phone- 0481 2456083 Email- Cmshtkanam50@gmail.com

പ്രേക്ഷകൻ  
ഹെഡ്മിസ്ട്രസ്സ്

സീക്രട്ടറി  
കരിമല ഗ്രാനൈറ്റ്സ്  
പത്തനാട്, കണ്ണൂർ

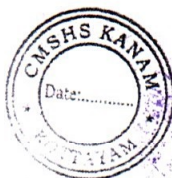
വിഷയം : കരിമല ഗ്രാനൈറ്റിൽ നിന്നും സ്പെഷൽ മെനു അനുസരിച്ച് ഉച്ച ഭക്ഷണം ക്രമീകരിക്കുന്നതിനായി സംഭാവന സ്വീകരിക്കുന്നത് സംബന്ധിച്ച്.

ഈ സ്കൂളിലെ മുഴുവൻ വിദ്യാർത്ഥികൾക്കും മൂന്നുദിവസത്തെ ഉച്ച ഭക്ഷണം ക്രമീകരിക്കുന്നതിനായി (സ്പെഷൽ മെനു അനുസരിച്ച്) കരിമല ഗ്രാനൈറ്റിൽ നിന്നും 25000 രൂപ കൈപ്പറ്റിയിരിക്കുന്നു.

തീയതി : 29/10/2019

സ്ഥലം : കാനം

വിശ്വസ്തതയോടെ



MARYKUTTY JOSEPH  
HEADMISTRESS  
CMSHS, KANAM

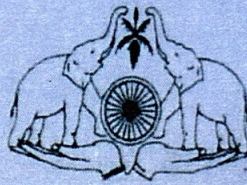


എ.എം മാത്യു

വൈസ് പ്രസിഡന്റ്  
കണ്ടഴ ഗ്രാമപഞ്ചായത്ത്

Mob: 8281041024, Ph: 04812494321

Email: kangazhagpkm@gmail.com



ആനിത്തോട്ടത്തിൽ

കണ്ടഴ പി.ഒ.  
പത്തനാട്

Mob: 9447602216

Email: ammanithottam@gmail.com

10. ഗ്രേമിംഗ് റോഡ്.

കവിളപ്രൊമോട്ട്സ് അഫ്ഫേയ്സ്,  
കണ്ടഴ. പി.ഒ, പത്തനാട്

Sir,

കണ്ടഴ പ്രൊമോട്ട്സ് ചുറ്റും റോഡിൽ പ്രവർത്തിച്ചു  
കൊണ്ടിരിക്കുന്ന 51-ാം നമ്പർ അറബ് പാടി (ഇപ്പോൾ)  
പുറംകൽക്കൽ വി. പാലത്തിന് മുമ്പെ പിന്നെ അറബ് പാടി  
കണ്ടഴയിലെ കടിയുണ്ടായ വളരെ അപകടങ്ങൾ.

ഈ അറബ് പാടി കടിയുണ്ടായ വളരെ അപകടങ്ങൾ  
എന്നി ചിട്ടയുണ്ട്. ടി കടിയുണ്ടായ ചിട്ടയുണ്ട് അപകട  
കാലം അതിനായി ഇപ്പോൾ.

51-ാം നമ്പർ കണ്ടഴ പ്രൊമോട്ട്സ് ചുറ്റും  
അറബ് പാടി കടിയുണ്ടായ അട കടിയുണ്ടായ അട  
അറബ് കടിയുണ്ടായ അട കടിയുണ്ടായ അട കടിയുണ്ടായ അട  
ചെയ്ത് പനാലിന അട കടിയുണ്ടായ അട കടിയുണ്ടായ അട

19/1/21



VICE PRESIDENT &  
FINANCE STANDING COMMITTEE CHAIRMAN  
KANGAZHA GRAMA PANCHAYAT  
KANGAZHA P.O., PATHANAMTHI  
MOB: 8281041024

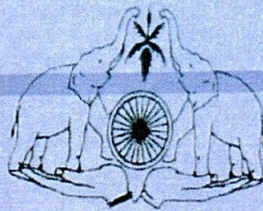


എ.എം മാത്യു

വൈസ് പ്രസിഡന്റ്  
കുണ്ടഴ ഗ്രാമപഞ്ചായത്ത്

Mob: 8281041024, Ph: 04812494321

Email: kangazhagpkm@gmail.com



ആനിത്തോട്ടത്ത്

കുണ്ടഴ പി.  
പത്തനം

Mob: 9447602216

Email: ammanithottam@gmail.com

To Managing Director,  
Karimala Grants & Assignates,  
Kangalha P.O., Pathanamthitta

Sir

കുണ്ടഴ ഗ്രാമപഞ്ചായത്ത് XIാം വാർഡിൽ 1977ൽ  
ജൂൺ 30-ൽ ലഭിച്ച കോട്ടന പദ്ധതി ക്ലൈം പദ്ധതിക്ക്  
അനുബന്ധമായി ഉൾക്കൊള്ളിക്കപ്പെട്ട്.

കോട്ടന പദ്ധതിക്ക് കുണ്ടഴ ഗ്രാമപഞ്ചായത്ത്  
ഉടമസ്ഥതയിലുള്ള പദ്ധതിക്ക് അനുബന്ധമായി  
കോട്ടനയിൽ 60 ഏക്കർ പാർക്ക്  
കോട്ടനയിൽ ധാരാളം കുടിയേറ്റം.

കോട്ടനയിലുള്ള കുടിയേറ്റ പദ്ധതിയെക്കുറിച്ച് അഭ്യർത്ഥന  
കുടിയേറ്റം പിന്നീട് നടപ്പാക്കാൻ ഉദ്ദേശിക്കുന്നു  
അതിൽ അപ്രദേശം കുടിയേറ്റം നടപ്പാക്കാൻ  
കുണ്ടഴ ഗ്രാമപഞ്ചായത്ത് അനുബന്ധമായി



VICE PRESIDENT &  
FINANCE STANDING COMMITTEE CHAIRMAN  
KANGAZHA GRAMA PANCHAYAT  
KANGALHA P.O., PATHANAMTHITTA  
MOB: 8281041024



മുഖേന ,

മേലിൽ അധികാരി

നാമധേയം ഉണ്ടായിരിക്കുന്നു

സംവിധാനം ,

മേലിൽ അധികാരി ,

കുറിയായാണു & മേലിൽ അധികാരി കിട്ടിയിട്ടുണ്ട്

സംവിധാനം ,

ഇതിൽ ഉണ്ടായിരിക്കുന്ന നാമധേയം ഉണ്ടായിരിക്കുന്ന അതിർത്തി  
സംവിധാനം മേലിൽ അധികാരിയുടെ അതിർത്തി സംവിധാനം  
മേലിൽ അധികാരിയുടെ അതിർത്തി സംവിധാനം

1) നാമധേയം അതിർത്തി സംവിധാനം

2) അതിർത്തി സംവിധാനം

3) അതിർത്തി സംവിധാനം (അതിർത്തി സംവിധാനം)

4) അതിർത്തി സംവിധാനം

5) അതിർത്തി സംവിധാനം

6) അതിർത്തി സംവിധാനം

7) അതിർത്തി സംവിധാനം

8) അതിർത്തി സംവിധാനം

9) അതിർത്തി സംവിധാനം

10) അതിർത്തി സംവിധാനം

11) അതിർത്തി സംവിധാനം

അതിർത്തി സംവിധാനം

കിട്ടിയിട്ടുണ്ട്



അതിർത്തി സംവിധാനം  
അതിർത്തി സംവിധാനം  
അതിർത്തി സംവിധാനം





GOVERNMENT OF KERALA

**DEPARTMENT OF MINING AND GEOLOGY**

Directorate of Mining and Geology, Pattom Palace PO,  
Kesavadasapuram, Thiruvananthapuram-695004, Kerala  
www.dmg.kerala.gov.in

**FORM Q**


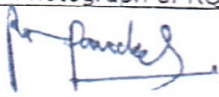
**CERTIFICATE OF RECOGNITION AS QUALIFIED PERSON TO PREPARE  
MINING PLANS FOR QUARRYING MINOR MINERALS IN KERALA**

(Issued under Rule 54 of the Kerala Minor Mineral Concession Rules, 2015)

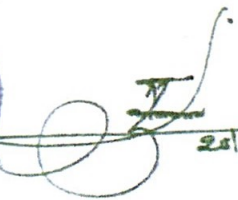
Shri. Jayachandra Panicker. P. S, S/o Sukumara Panicker. K. P, Souparnika, Navajyothi Nagar 39A, Kadappakada. P. O, Kollam District - 691 008, Kerala, having given satisfactory evidence of his qualification and experience is hereby granted **RECOGNITION** under Rule 54 of the Kerala Minor Mineral Concession Rules, 2015 as qualified person to prepare Mining Plans for quarrying minor minerals in Kerala.

The registration number is **DMG/KERALA/RQP/12/2017**

This recognition is valid for a period of 10 years ending 01/12/2027


Photograph of RQP

Signature of RQP



  
20/12/17

C. K. BAIJU  
DIRECTOR OF MINING AND GEOLOGY [I/C]

**C.K. BAIJU**  
M.Sc, MPhil, Dip.Cri, MMGI  
Director of Mining & Geology (I/c)  
Kesavadasapuram, Pattom Palace PO  
Thiruvananthapuram-695 004

Place: Thiruvananthapuram  
Date: 20-12-2017





# PLATES







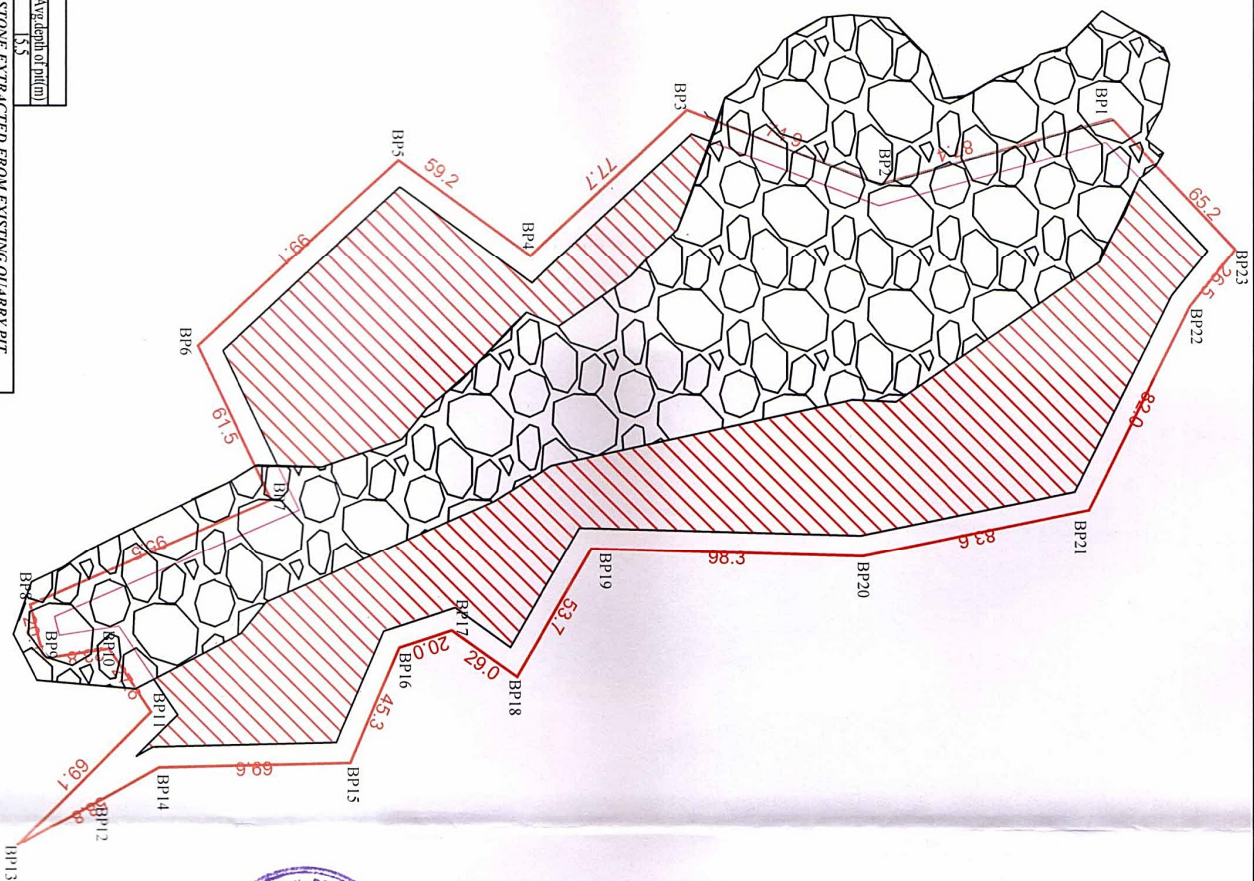
## GPS READING

JAYACHANDRA PANICKER, P.S. N-SQUARE MINING & ENVIRONMENTAL SOLUTIONS, LLP RQP No: DMSKRALRQP1121201	
--	--

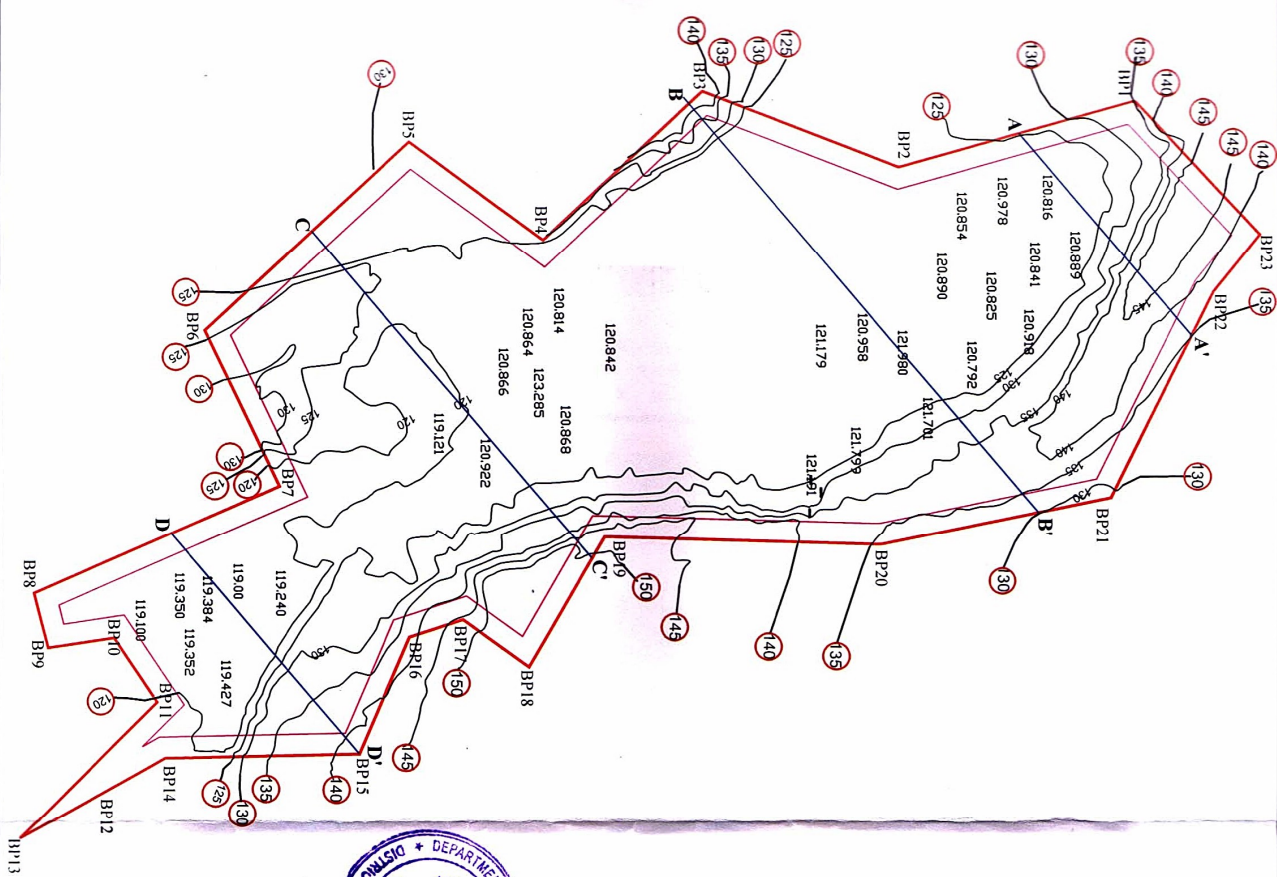
LEAVING GOLIARR PIT DIMENSION			
Average length of pit(m)	Average width of pit(m)	Average depth of pit(m)	
449.75	68.47	15.5	

QUANTITY OF GRANITE BUILDING STONE EXTRACTED FROM EXISTING GOLIARR PIT			
Area in m <sup>2</sup>	Average depth(m)	Volume(m <sup>3</sup> )	Dens Ton
30794.034	15.5	47307.6	2.5
			119326.925







# INDEX

	LEASE BOUNDARY
	SAFETY LINE
	CONTOUR LINE
	SECTION LINE

# GPS READING

BOUNDARY PILLAR	LATITUDE	LONGITUDE	BOUNDARY PILLAR	LATITUDE	LONGITUDE
BP (1)	09°30'44.4"N	76°41'08.8"E	BP (16)	09°30'36.27"N	76°41'15.45"E
BP (2)	09°30'41.7"N	76°41'09.7"E	BP (17)	09°30'36.88"N	76°41'15.22"E
BP (3)	09°30'39.39"N	76°41'08.92"E	BP (18)	09°30'37.67"N	76°41'15.74"E
BP (4)	09°30'37.62"N	76°41'10.74"E	BP (19)	09°30'38.48"N	76°41'14.18"E
BP (5)	09°30'36.02"N	76°41'09.66"E	BP (20)	09°30'41.68"N	76°41'14.13"E
BP (6)	09°30'33.75"N	76°41'11.97"E	BP (21)	09°30'44.32"N	76°41'13.46"E
BP (7)	09°30'34.69"N	76°41'13.75"E	BP (22)	09°30'45.40"N	76°41'11.00"E
BP (8)	09°30'31.90"N	76°41'15.13"E	BP (23)	09°30'45.91"N	76°41'10.30"E
BP (9)	09°30'32.9"N	76°41'15.76"E			
BP (10)	09°30'32.85"N	76°41'15.61"E			
BP (11)	09°30'33.38"N	76°41'16.34"E			
BP (12)	09°30'31.86"N	76°41'18.01"E			
BP (13)	09°30'31.50"N	76°41'18.20"E			
BP (14)	09°30'33.50"N	76°41'16.99"E			
BP (15)	09°30'35.75"N	76°41'16.84"E			

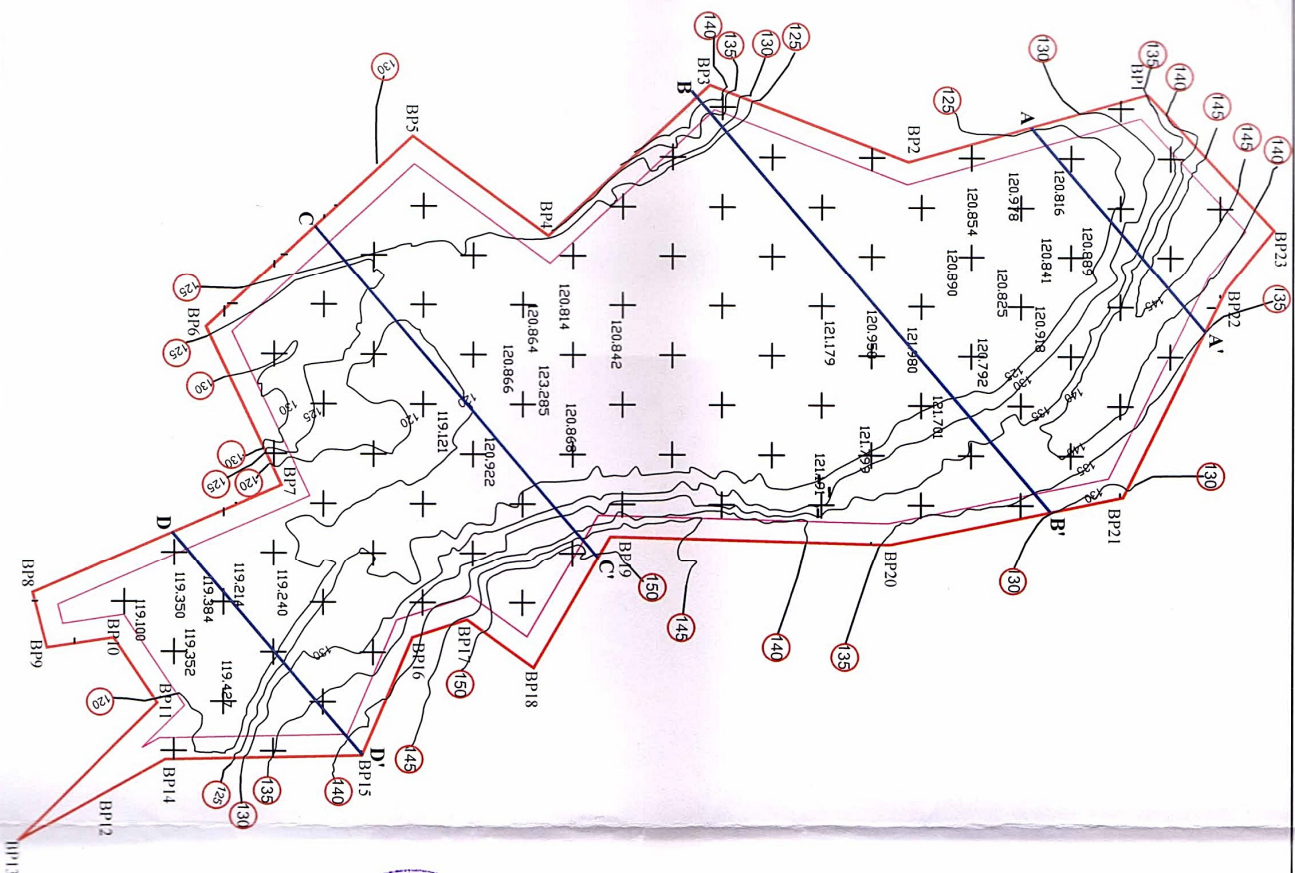
# SURFACE PLAN

BUILDING STONE QUARRY OF M/S KARIMALA GRANITES & AGGREGATES PVT.LTD	
AREA : 5.2109Ha	
DISTRICT : KOTTAYAM	
TALUK : CHANGANASSERY	
VILLAGE : KANGAZHA	
STATE : KERALA	
DATE OF SY: 7-8-2020	

Signature of ROP

SY.N: 277/1(P), 277/2, 278/2-1, 3(P), 4(P)  
 41,42,43,44,45,46, 2862(P), 45(P), 8(P), 282/10  
 JAYACHANDRA PANICKER, P.S.  
 SOLUTIONS, L.P.  
 N.SQUARE MINING & ENVIRONMENTAL  
 SOLUTIONS, L.P.  
 282/10, 282/11, 282/12, 282/13, 282/14, 282/15, 282/16, 282/17, 282/18, 282/19, 282/20, 282/21, 282/22, 282/23, 282/24, 282/25, 282/26, 282/27, 282/28, 282/29, 282/30, 282/31, 282/32, 282/33, 282/34, 282/35, 282/36, 282/37, 282/38, 282/39, 282/40, 282/41, 282/42, 282/43, 282/44, 282/45, 282/46, 282/47, 282/48, 282/49, 282/50, 282/51, 282/52, 282/53, 282/54, 282/55, 282/56, 282/57, 282/58, 282/59, 282/60, 282/61, 282/62, 282/63, 282/64, 282/65, 282/66, 282/67, 282/68, 282/69, 282/70, 282/71, 282/72, 282/73, 282/74, 282/75, 282/76, 282/77, 282/78, 282/79, 282/80, 282/81, 282/82, 282/83, 282/84, 282/85, 282/86, 282/87, 282/88, 282/89, 282/90, 282/91, 282/92, 282/93, 282/94, 282/95, 282/96, 282/97, 282/98, 282/99, 282/100, 282/101, 282/102, 282/103, 282/104, 282/105, 282/106, 282/107, 282/108, 282/109, 282/110, 282/111, 282/112, 282/113, 282/114, 282/115, 282/116, 282/117, 282/118, 282/119, 282/120, 282/121, 282/122, 282/123, 282/124, 282/125, 282/126, 282/127, 282/128, 282/129, 282/130, 282/131, 282/132, 282/133, 282/134, 282/135, 282/136, 282/137, 282/138, 282/139, 282/140, 282/141, 282/142, 282/143, 282/144, 282/145, 282/146, 282/147, 282/148, 282/149, 282/150, 282/151, 282/152, 282/153, 282/154, 282/155, 282/156, 282/157, 282/158, 282/159, 282/160, 282/161, 282/162, 282/163, 282/164, 282/165, 282/166, 282/167, 282/168, 282/169, 282/170, 282/171, 282/172, 282/173, 282/174, 282/175, 282/176, 282/177, 282/178, 282/179, 282/180, 282/181, 282/182, 282/183, 282/184, 282/185, 282/186, 282/187, 282/188, 282/189, 282/190, 282/191, 282/192, 282/193, 282/194, 282/195, 282/196, 282/197, 282/198, 282/199, 282/200, 282/201, 282/202, 282/203, 282/204, 282/205, 282/206, 282/207, 282/208, 282/209, 282/210, 282/211, 282/212, 282/213, 282/214, 282/215, 282/216, 282/217, 282/218, 282/219, 282/220, 282/221, 282/222, 282/223, 282/224, 282/225, 282/226, 282/227, 282/228, 282/229, 282/230, 282/231, 282/232, 282/233, 282/234, 282/235, 282/236, 282/237, 282/238, 282/239, 282/240, 282/241, 282/242, 282/243, 282/244, 282/245, 282/246, 282/247, 282/248, 282/249, 282/250, 282/251, 282/252, 282/253, 282/254, 282/255, 282/256, 282/257, 282/258, 282/259, 282/260, 282/261, 282/262, 282/263, 282/264, 282/265, 282/266, 282/267, 282/268, 282/269, 282/270, 282/271, 282/272, 282/273, 282/274, 282/275, 282/276, 282/277, 282/278, 282/279, 282/280, 282/281, 282/282, 282/283, 282/284, 282/285, 282/286, 282/287, 282/288, 282/289, 282/290, 282/291, 282/292, 282/293, 282/294, 282/295, 282/296, 282/297, 282/298, 282/299, 282/300, 282/301, 282/302, 282/303, 282/304, 282/305, 282/306, 282/307, 282/308, 282/309, 282/310, 282/311, 282/312, 282/313, 282/314, 282/315, 282/316, 282/317, 282/318, 282/319, 282/320, 282/321, 282/322, 282/323, 282/324, 282/325, 282/326, 282/327, 282/328, 282/329, 282/330, 282/331, 282/332, 282/333, 282/334, 282/335, 282/336, 282/337, 282/338, 282/339, 282/340, 282/341, 282/342, 282/343, 282/344, 282/345, 282/346, 282/347, 282/348, 282/349, 282/350, 282/351, 282/352, 282/353, 282/354, 282/355, 282/356, 282/357, 282/358, 282/359, 282/360, 282/361, 282/362, 282/363, 282/364, 282/365, 282/366, 282/367, 282/368, 282/369, 282/370, 282/371, 282/372, 282/373, 282/374, 282/375, 282/376, 282/377, 282/378, 282/379, 282/380, 282/381, 282/382, 282/383, 282/384, 282/385, 282/386, 282/387, 282/388, 282/389, 282/390, 282/391, 282/392, 282/393, 282/394, 282/395, 282/396, 282/397, 282/398, 282/399, 282/400, 282/401, 282/402, 282/403, 282/404, 282/405, 282/406, 282/407, 282/408, 282/409, 282/410, 282/411, 282/412, 282/413, 282/414, 282/415, 282/416, 282/417, 282/418, 282/419, 282/420, 282/421, 282/422, 282/423, 282/424, 282/425, 282/426, 282/427, 282/428, 282/429, 282/430, 282/431, 282/432, 282/433, 282/434, 282/435, 282/436, 282/437, 282/438, 282/439, 282/440, 282/441, 282/442, 282/443, 282/444, 282/445, 282/446, 282/447, 282/448, 282/449, 282/450, 282/451, 282/452, 282/453, 282/454, 282/455, 282/456, 282/457, 282/458, 282/459, 282/460, 282/461, 282/462, 282/463, 282/464, 282/465, 282/466, 282/467, 282/468, 282/469, 282/470, 282/471, 282/472, 282/473, 282/474, 282/475, 282/476, 282/477, 282/478, 282/479, 282/480, 282/481, 282/482, 282/483, 282/484, 282/485, 282/486, 282/487, 282/488, 282/489, 282/490, 282/491, 282/492, 282/493, 282/494, 282/495, 282/496, 282/497, 282/498, 282/499, 282/500, 282/501, 282/502, 282/503, 282/504, 282/505, 282/506, 282/507, 282/508, 282/509, 282/510, 282/511, 282/512, 282/513, 282/514, 282/515, 282/516, 282/517, 282/518, 282/519, 282/520, 282/521, 282/522, 282/523, 282/524, 282/525, 282/526, 282/527, 282/528, 282/529, 282/530, 282/531, 282/532, 282/533, 282/534, 282/535, 282/536, 282/537, 282/538, 282/539, 282/540, 282/541, 282/542, 282/543, 282/544, 282/545, 282/546, 282/547, 282/548, 282/549, 282/550, 282/551, 282/552, 282/553, 282/554, 282/555, 282/556, 282/557, 282/558, 282/559, 282/560, 282/561, 282/562, 282/563, 282/564, 282/565, 282/566, 282/567, 282/568, 282/569, 282/570, 282/571, 282/572, 282/573, 282/574, 282/575, 282/576, 282/577, 282/578, 282/579, 282/580, 282/581, 282/582, 282/583, 282/584, 282/585, 282/586, 282/587, 282/588, 282/589, 282/590, 282/591, 282/592, 282/593, 282/594, 282/595, 282/596, 282/597, 282/598, 282/599, 282/600, 282/601, 282/602, 282/603, 282/604, 282/605, 282/606, 282/607, 282/608, 282/609, 282/610, 282/611, 282/612, 282/613, 282/614, 282/615, 282/616, 282/617, 282/618, 282/619, 282/620, 282/621, 282/622, 282/623, 282/624, 282/625, 282/626, 282/627, 282/628, 282/629, 282/630, 282/631, 282/632, 282/633, 282/634, 282/635, 282/636, 282/637, 282/638, 282/639, 282/640, 282/641, 282/642, 282/643, 282/644, 282/645, 282/646, 282/647, 282/648, 282/649, 282/650, 282/651, 282/652, 282/653, 282/654, 282/655, 282/656, 282/657, 282/658, 282/659, 282/660, 282/661, 282/662, 282/663, 282/664, 282/665, 282/666, 282/667, 282/668, 282/669, 282/670, 282/671, 282/672, 282/673, 282/674, 282/675, 282/676, 282/677, 282/678, 282/679, 282/680, 282/681, 282/682, 282/683, 282/684, 282/685, 282/686, 282/687, 282/688, 282/689, 282/690, 282/691, 282/692, 282/693, 282/694, 282/695, 282/696, 282/697, 282/698, 282/699, 282/700, 282/701, 282/702, 282/703, 282/704, 282/705, 282/706, 282/707, 282/708, 282/709, 282/710, 282/711, 282/712, 282/713, 282/714, 282/715, 282/716, 282/717, 282/718, 282/719, 282/720, 282/721, 282/722, 282/723, 282/724, 282/725, 282/726, 282/727, 282/728, 282/729, 282/730, 282/731, 282/732, 282/733, 282/734, 282/735, 282/736, 282/737, 282/738, 282/739, 282/740, 282/741, 282/742, 282/743, 282/744, 282/745, 282/746, 282/747, 282/748, 282/749, 282/750, 282/751, 282/752, 282/753, 282/754, 282/755, 282/756, 282/757, 282/758, 282/759, 282/760, 282/761, 282/762, 282/763, 282/764, 282/765, 282/766, 282/767, 282/768, 282/769, 282/770, 282/771, 282/772, 282/773, 282/774, 282/775, 282/776, 282/777, 282/778, 282/779, 282/780, 282/781, 282/782, 282/783, 282/784, 282/785, 282/786, 282/787, 282/788, 282/789, 282/790, 282/791, 282/792, 282/793, 282/794, 282/795, 282/796, 282/797, 282/798, 282/799, 282/800, 282/801, 282/802, 282/803, 282/804, 282/805, 282/806, 282/807, 282/808, 282/809, 282/810, 282/811, 282/812, 282/813, 282/814, 282/815, 282/816, 282/817, 282/818, 282/819, 282/820, 282/821, 282/822, 282/823, 282/824, 282/825, 282/826, 282/827, 282/828, 282/829, 282/830, 282/831, 282/832, 282/833, 282/834, 282/835, 282/836, 282/837, 282/838, 282/839, 282/840, 282/841, 282/842, 282/843, 282/844, 282/845, 282/846, 282/847, 282/848, 282/849, 282/850, 282/851, 282/852, 282/853, 282/854, 282/855, 282/856, 282/857, 282/858, 282/859, 282/860, 282/861, 282/862, 282/863, 282/864, 282/865, 282/866, 282/867, 282/868, 282/869, 282/870, 282/871, 282/872, 282/873, 282/874, 282/875, 282/876, 282/877, 282/878, 282/879, 282/880, 282/881, 282/882, 282/883, 282/884, 282/885, 282/886, 282/887, 282/888, 282/889, 282/890, 282/891, 282/892, 282/893, 282/894, 282/895, 282/896, 282/897, 282/898, 282/899, 282/900, 282/901, 282/902, 282/903, 282/904, 282/905, 282/906, 282/907, 282/908, 282/909, 282/910, 282/911, 282/912, 282/913, 282/914, 282/915, 282/916, 282/917, 282/918, 282/919, 282/920, 282/921, 282/922, 282/923, 282/924, 282/925, 282/926, 282/927, 282/928, 282/929, 282/930, 282/931, 282/932, 282/933, 282/934, 282/935, 282/936, 282/937, 282/938, 282/939, 282/940, 282/941, 282/942, 282/943, 282/944, 282/945, 282/946, 282/947, 282/948, 282/949, 282/950, 282/951, 282/952, 282/953, 282/954, 282/955, 282/956, 282/957, 282/958, 282/959, 282/960, 282/961, 282/962, 282/963, 282/964, 282/965, 282/966, 282/967, 282/968, 282/969, 282/970, 282/971, 282/972, 282/973, 282/974, 282/975, 282/976, 282/977, 282/978, 282/979, 282/980, 282/981, 282/982, 282/983, 282/984, 282/985, 282/986, 282/987, 282/988, 282/989, 282/990, 282/991, 282/992, 282/993, 282/994, 282/995, 282/996, 282/997, 282/998, 282/999, 282/1000, 282/1001, 282/1002, 282/1003, 282/1004, 282/1005, 282/1006, 282/1007, 282/1008, 282/1009, 282/1010, 282/1011, 282/1012, 282/1013, 282/1014, 282/1015, 282/1016, 282/1017, 282/1018, 282/1019, 282/1020, 282/1021, 282/1022, 282/1023, 282/1024, 282/1025, 282/1026, 282/1027, 282/1028, 282/1029, 282/1030, 282/1031, 282/1032, 282/1033, 282/1034, 282/1035, 282/1036, 282/1037, 282/1038, 282/1039, 282/1040, 282/1041, 282/1042, 282/1043, 282/1044, 282/1045, 282/1046, 282/1047, 282/1048, 282/1049, 282/1050, 282/1051, 282/1052, 282/1053, 282/1054, 282/1055, 282/1056, 282/1057, 282/1058, 282/1059, 282/1060, 282/1061, 282/1062, 282/1063, 282/1064, 282/1065, 282/1066, 282/1067, 282/1068, 282/1069, 282/1070, 282/1071, 282/1072, 282/1073, 282/1074, 282/1075, 282/1076, 282/1077, 282/1078, 282/1079, 282/1080, 282/1081, 282/1082, 282/1083, 282/1084, 282/1085, 282/1086, 282/1087, 282/1088, 282/1089, 282/1090, 282/1091, 282/1092, 282/1093, 282/1094, 282/1095, 282/1096, 282/1097, 282/1098, 282/1099, 282/1100, 282/1101, 282/1102, 282/1103, 282/1104, 282/1105, 282/1106, 282/1107, 282/1108, 282/1109, 282/1110, 282/1111, 282/1112, 282/1113, 282/1114, 282/1115, 282/1116, 282/1117, 282/1118, 282/1119, 282/1120, 282/1121, 282/1122, 282/1123, 282/1124, 282/1125, 282/1126, 282/1127, 282/1128, 282/1129, 2





## INDEX

	LEASE BOUNDARY
	SAFETY LINE
	CONTOUR LINE
	SECTION LINE
	ROCK

## GPS READING

BOUNDARY PILLAR	LATITUDE	LONGITUDE	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (1)	09°30'44.4"N	76°41'08.8"E								
BP (2)	09°30'41.7"N	76°41'09.7"E								
BP (3)	09°30'39.39"N	76°41'08.92"E								
BP (4)	09°30'37.62"N	76°41'10.74"E								
BP (5)	09°30'36.02"N	76°41'09.66"E								
BP (6)	09°30'33.75"N	76°41'11.97"E								
BP (7)	09°30'34.69"N	76°41'13.75"E								
BP (8)	09°30'31.90"N	76°41'15.13"E								
BP (9)	09°30'32.9"N	76°41'15.76"E								
BP (10)	09°30'32.85"N	76°41'15.61"E								
BP (11)	09°30'33.38"N	76°41'16.34"E								
BP (12)	09°30'31.86"N	76°41'18.01"E								
BP (13)	09°30'31.50"N	76°41'18.20"E								
BP (14)	09°30'33.50"N	76°41'16.99"E								
BP (15)	09°30'35.75"N	76°41'16.84"E								

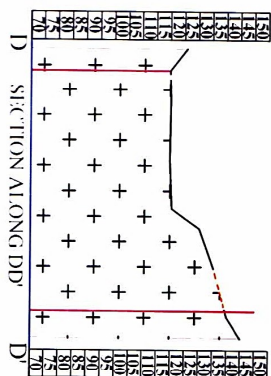
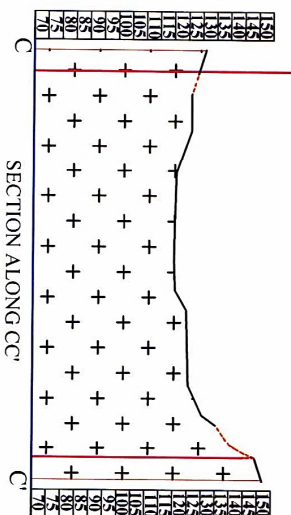
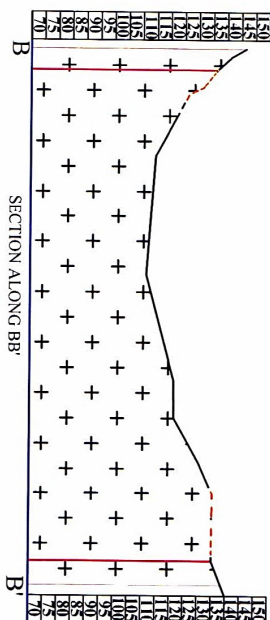
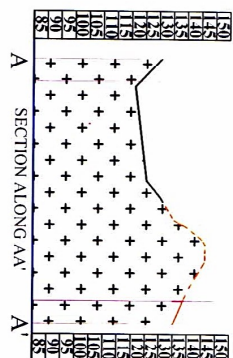
## GEOLOGICAL PLAN

BUILDING STONE QUARRY OF M/S KARIMALA GRANITES & AGGREGATES PVT.LTD	
AREA : 5.2309Ha	
DISTRICT : KOTTAYAM	
TALUK : CHANGANASSERY	
VILLAGE : KANGAZHA	
STATE : KERALA	
DATE OF SV: 7.8.2020	

Signature of ROP

*[Signature]*

JAYACHANDRA PANICKER, P.S.  
4-1-4-43-4-5-67,  
2862 (P), 4-5 (P), 8 (P) 28210  
N-SQUARE MINING & ENVIRONMENTAL  
SOLUTIONS, LLP  
REGD. NO. 17



# INDEX

<input type="checkbox"/>	LEASE BOUNDARY
<input type="checkbox"/>	SAFETY LINE
<input checked="" type="checkbox"/>	ALREADY EXCAVATED BENCH/IN

## GPS READING

BOUNDARY PILAR	LATITUDE	LONGITUDE	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (1)	09°30'44.4"N	76°41'08.8"E	09°30'36.7"N	09°30'36.00"N	09°30'37.67"N	09°30'38.00"N	09°30'41.60"N	09°30'44.17"N	09°30'45.40"N	09°30'45.91"N
BP (2)	09°30'41.7"N	76°41'09.7"E								
BP (3)	09°30'39.39"N	76°41'08.92"E								
BP (4)	09°30'37.62"N	76°41'10.74"E								
BP (5)	09°30'36.02"N	76°41'09.66"E								
BP (6)	09°30'33.75"N	76°41'11.97"E								
BP (7)	09°30'34.69"N	76°41'13.75"E								
BP (8)	09°30'31.90"N	76°41'15.13"E								
BP (9)	09°30'32.9"N	76°41'15.76"E								
BP (10)	09°30'32.85"N	76°41'15.61"E								
BP (11)	09°30'33.38"N	76°41'16.34"E								
BP (12)	09°30'31.86"N	76°41'18.01"E								
BP (13)	09°30'31.50"N	76°41'18.20"E								
BP (14)	09°30'33.50"N	76°41'16.99"E								
BP (15)	09°30'35.75"N	76°41'16.84"E								

## GEOLOGICAL CROSS SECTION

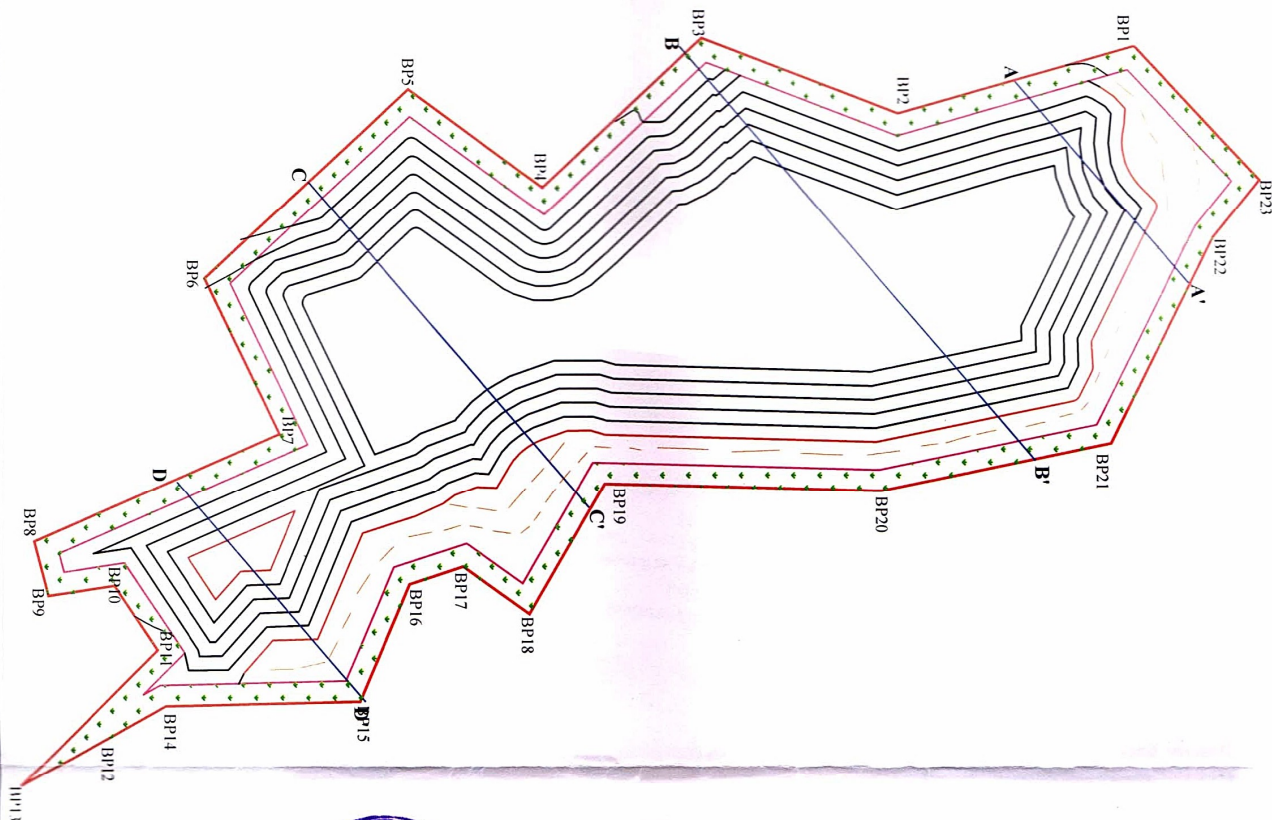
BUILDING STONE QUARRY OF M/S KARNATA GRANITES & CONCRETE WTL LTD

AREA : 5.2309Ha	SY No: 277 (10P), 2779, 2782, 21.
DISTRICT: KOTTAYAM	3(P), 4(P)
TALUK: CHANGANASSERY	41, 42, 43, 45, 6, 7.
VILLAGE: KANGAZHA	2862 (P), 45(P), 8(P), 282/10
STATE: KERALA	
DATE OF SY: 7-8-2020	SCALE: 2000

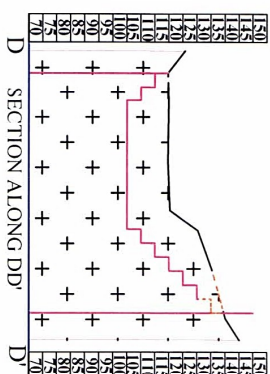
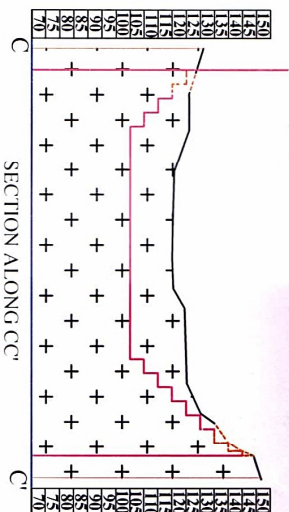
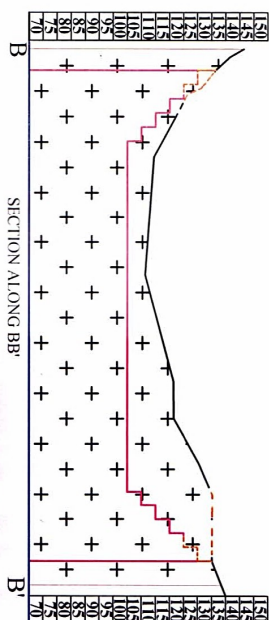
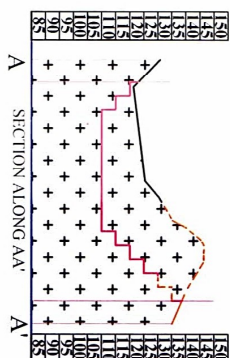
Signature of KGP

JAYACHANDRA PANICKER, P.S.  
41, 42, 43, 45, 6, 7.  
2862 (P), 45(P), 8(P), 282/10  
N-SQUARE MINING & ENVIRONMENTAL  
SOLUTIONS, L.P  
PLOT No. PMA/KE/AL/RO/PT/20217





INDEX					
	LEASE BOUNDARY				
	SAFETY LINE				
	ALREADY EXCAVATED BENCHES				
	CURRENT BENCH				
	PROPOSED BENCHES (2021-2026)				
	GREEN BELT				
GPS READING					
BOUNDARY PILLAR	LATITUDE	LONGITUDE			
BP (1)	09°30'44.4"N	76°41'08.8"E	BP (16)	09°30'36.27"N	76°41'15.45"E
BP (2)	09°30'41.7"N	76°41'09.7"E	BP (17)	09°30'36.88"N	76°41'15.22"E
BP (3)	09°30'39.39"N	76°41'08.92"E	BP (18)	09°30'37.67"N	76°41'15.74"E
BP (4)	09°30'37.62"N	76°41'10.74"E	BP (19)	09°30'38.48"N	76°41'14.18"E
BP (5)	09°30'36.02"N	76°41'09.66"E	BP (20)	09°30'41.68"N	76°41'14.13"E
BP (6)	09°30'33.75"N	76°41'11.97"E	BP (21)	09°30'44.32"N	76°41'13.46"E
BP (7)	09°30'34.69"N	76°41'13.75"E	BP (22)	09°30'45.40"N	76°41'11.00"E
BP (8)	09°30'31.90"N	76°41'15.13"E	BP (23)	09°30'45.91"N	76°41'10.30"E
BP (9)	09°30'32.9"N	76°41'15.76"E			
BP (10)	09°30'32.85"N	76°41'15.61"E			
BP (11)	09°30'33.38"N	76°41'16.34"E			
BP (12)	09°30'31.86"N	76°41'18.01"E			
BP (13)	09°30'31.50"N	76°41'18.20"E			
BP (14)	09°30'33.50"N	76°41'16.99"E			
BP (15)	09°30'35.75"N	76°41'16.84"E			
DEVELOPMENT PLAN					
BUILDING STONE QUARRY OF M/s KARIMALA GRANITES & AGGREGATES PVT.LTD					
AREA : 5.2309Ha			Signature of RQP  JAYACHANDRA PANICKER, P.S. N-SQUARE MINING & ENVIRONMENTAL SOLUTIONS, LLP DATE: 15/08/2020		
DISTRICT: KOTTAYAM					
TALUK : CHANGANASSERY					
VILLAGE :KANGAZHA					
STATE: KERALA					
DATE OF SY:7.8.2020			SCALE:2000		



## INDEX

	LEASE BOUNDARY
	SAFETY LINE
	ALREADY EXCAVATED BENCHES
	PROPOSED BENCHES
	ROCK

## GPS READING

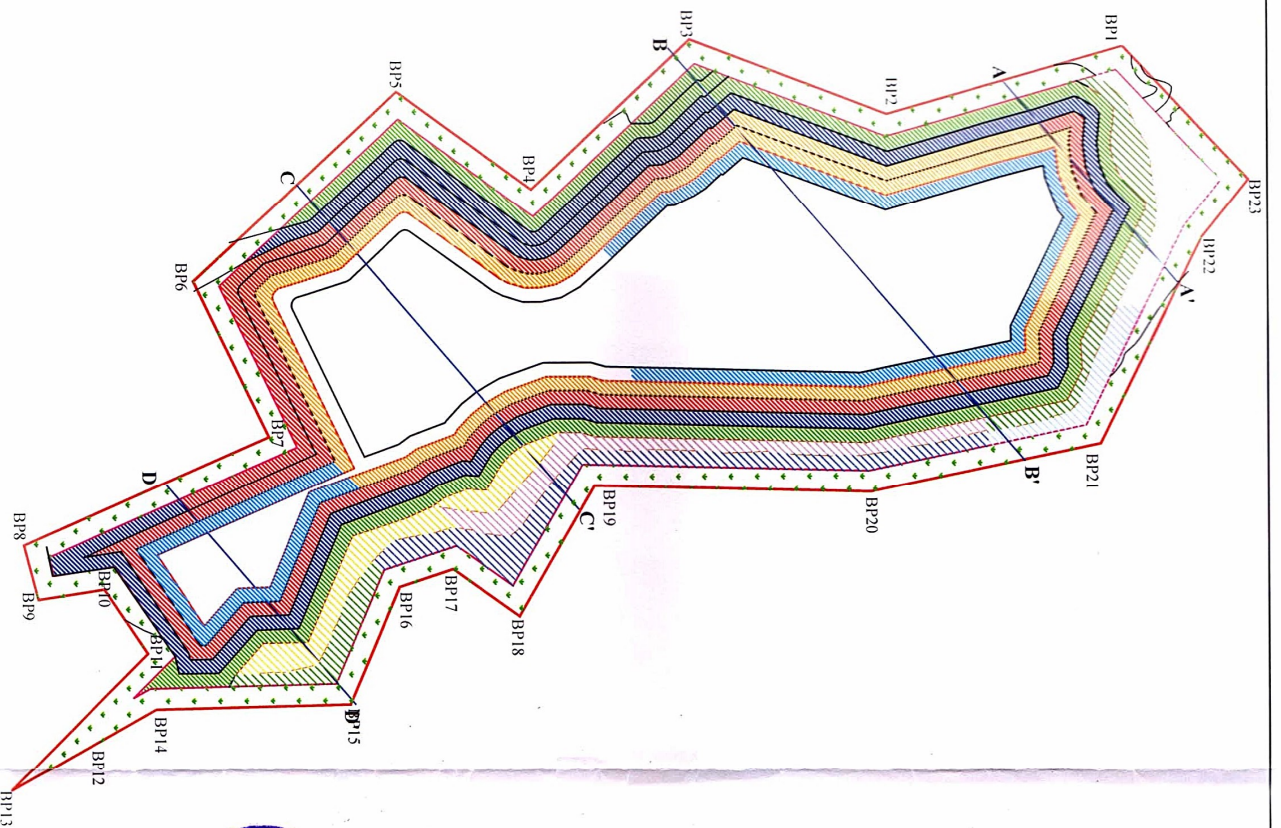
BOUNDARY PILLAR	LATITUDE	LONGITUDE		
BP (1)	09°30'44.4"N	76°41'08.8"E	BP (16)	09°30'36.27"N
BP (2)	09°30'41.7"N	76°41'09.7"E	BP (17)	09°30'36.88"N
BP (3)	09°30'39.39"N	76°41'08.92"E	BP (18)	09°30'37.67"N
BP (4)	09°30'37.62"N	76°41'10.74"E	BP (19)	09°30'38.48"N
BP (5)	09°30'36.02"N	76°41'09.66"E	BP (20)	09°30'41.68"N
BP (6)	09°30'33.75"N	76°41'11.97"E	BP (21)	09°30'44.32"N
BP (7)	09°30'34.69"N	76°41'13.75"E	BP (22)	09°30'45.40"N
BP (8)	09°30'31.90"N	76°41'15.13"E	BP (23)	09°30'45.91"N
BP (9)	09°30'32.9"N	76°41'15.76"E		
BP (10)	09°30'32.85"N	76°41'15.61"E		
BP (11)	09°30'33.38"N	76°41'16.34"E		
BP (12)	09°30'31.86"N	76°41'18.01"E		
BP (13)	09°30'31.50"N	76°41'18.20"E		
BP (14)	09°30'33.50"N	76°41'16.99"E		
BP (15)	09°30'35.75"N	76°41'16.84"E		

## DEVELOPMENT CROSS SECTION

Signature of ROP

BUILDING STONE QUARRY OF M/s KARIMALA GRANITES & AGGREGATES PVT LTD	
AREA : 5.2309Ha	
DISTRICT : KOTTAYAM	
TALUK : CHANGANASSERY	
VILLAGE : KANGAZHA	
STATE : KERALA	
DATE OF SY: 7-8-2020	
SY.No: 277/1(P), 277/9, 278/2-1, 3(P), 4(P)	
41+2-34-56.7, 2862 (P), 45(P), 8(P), 282/10	
JAYACHANDRAN PANICKER, P.S.	
SOLUTIONS, LLP	
28/07/2017	





INDEX		GPS READING	
LEASE BOUNDARY	2006-2017 - 108355N11	BP (16)	09°30'36.27"N / 76°41'15.45"E
SAFETY LINE	2017-2018 - 196655N11	BP (17)	09°30'36.88"N / 76°41'15.22"E
ALREADY EXCAVATED BENCHES	2018-2019 - 228158N11	BP (18)	09°30'37.67"N / 76°41'15.74"E
CURRENT BENCH	2019-2020 - 121818N11	BP (19)	09°30'38.48"N / 76°41'14.18"E
GREEN BELT	2020-2021 (02.12.2020) - 120150	BP (20)	09°30'41.68"N / 76°41'14.13"E
TOTAL - 774366N11		BP (21)	09°30'44.32"N / 76°41'13.46"E
PROPOSED BENCHES		BP (22)	09°30'45.40"N / 76°41'11.00"E
I - 1st Yr. AR (2021-2022) - 200000N11		BP (23)	09°30'45.91"N / 76°41'10.30"E
II - 2nd Yr. AR (2022-2023) - 200000N11			
III - 3rd Yr. AR (2023-2024) - 200000N11			
IV - 4th Yr. AR (2024-2025) - 200000N11			
V - 5th Yr. AR (2025-2026) - 200000N11			

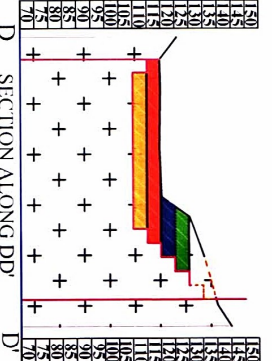
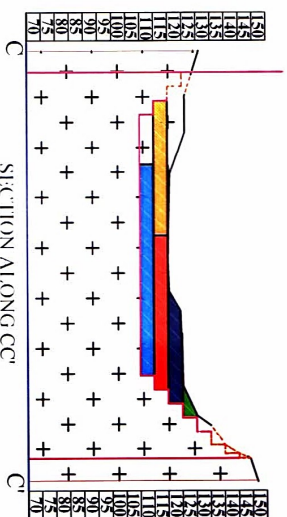
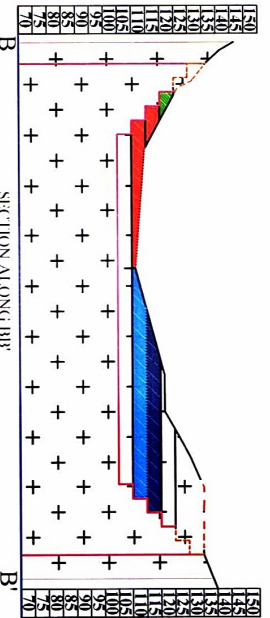
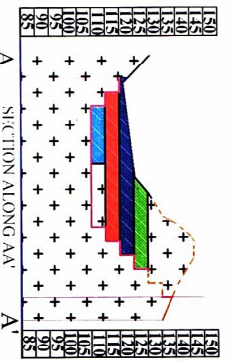
GPS READING		GPS READING	
BOUNDARY PILLAR	LATITUDE	LONGITUDE	
BP (1)	09°30'44.4"N	76°41'08.8"E	
BP (2)	09°30'41.7"N	76°41'09.7"E	
BP (3)	09°30'39.39"N	76°41'08.92"E	
BP (4)	09°30'37.62"N	76°41'10.74"E	
BP (5)	09°30'36.02"N	76°41'09.66"E	
BP (6)	09°30'33.75"N	76°41'11.97"E	
BP (7)	09°30'34.69"N	76°41'13.75"E	
BP (8)	09°30'31.90"N	76°41'15.13"E	
BP (9)	09°30'32.9"N	76°41'15.76"E	
BP (10)	09°30'32.85"N	76°41'15.61"E	
BP (11)	09°30'33.38"N	76°41'16.34"E	
BP (12)	09°30'31.86"N	76°41'18.01"E	
BP (13)	09°30'31.50"N	76°41'18.20"E	
BP (14)	09°30'33.50"N	76°41'16.99"E	
BP (15)	09°30'35.75"N	76°41'16.84"E	

PRODUCTION PLAN		Signature of ROP	
BUILDING STONE QUARRY OF M/S KARNATA GRANITES KANGIRIGATTI PVT LTD			
AREA - 5.2309Ha			
DISTRICT - KOTTAYAM			
TALUK - CHANGANASSERY			
VILLAGE - KANGAZHA			
STATE - KERALA			
DATE OF SY-7-8-2020			

SY.No: 277/10P, 2779, 2782, 2-1, 3(P, 4-4P)			
4-1, 4-2, 4-3, 4-5, 6, 7, 2862 (P, 4-5P), 80P, 282/10			
JAYACHANDRA PANICKER, P.S. N.SQUARE MINING & ENVIRONMENTAL SOLUTIONS - LLP			
REGD. No. DM/GK/ER/LR/20P/12/2017			



# INDEX

	LEASE BOUNDARY	I ST YEAR (2021-2022)-200000MT
	SAFETY LINE	II ND YEAR (2022-2023)-200000MT
	ALREADY EXCAVATED BENCHES	III RD YEAR (2023-2024)-200000MT
	PROPOSED BENCHES	IV TH YEAR (2024-2025)-200000MT
		V TH YEAR (2025-2026)-200000MT

## GPS READING

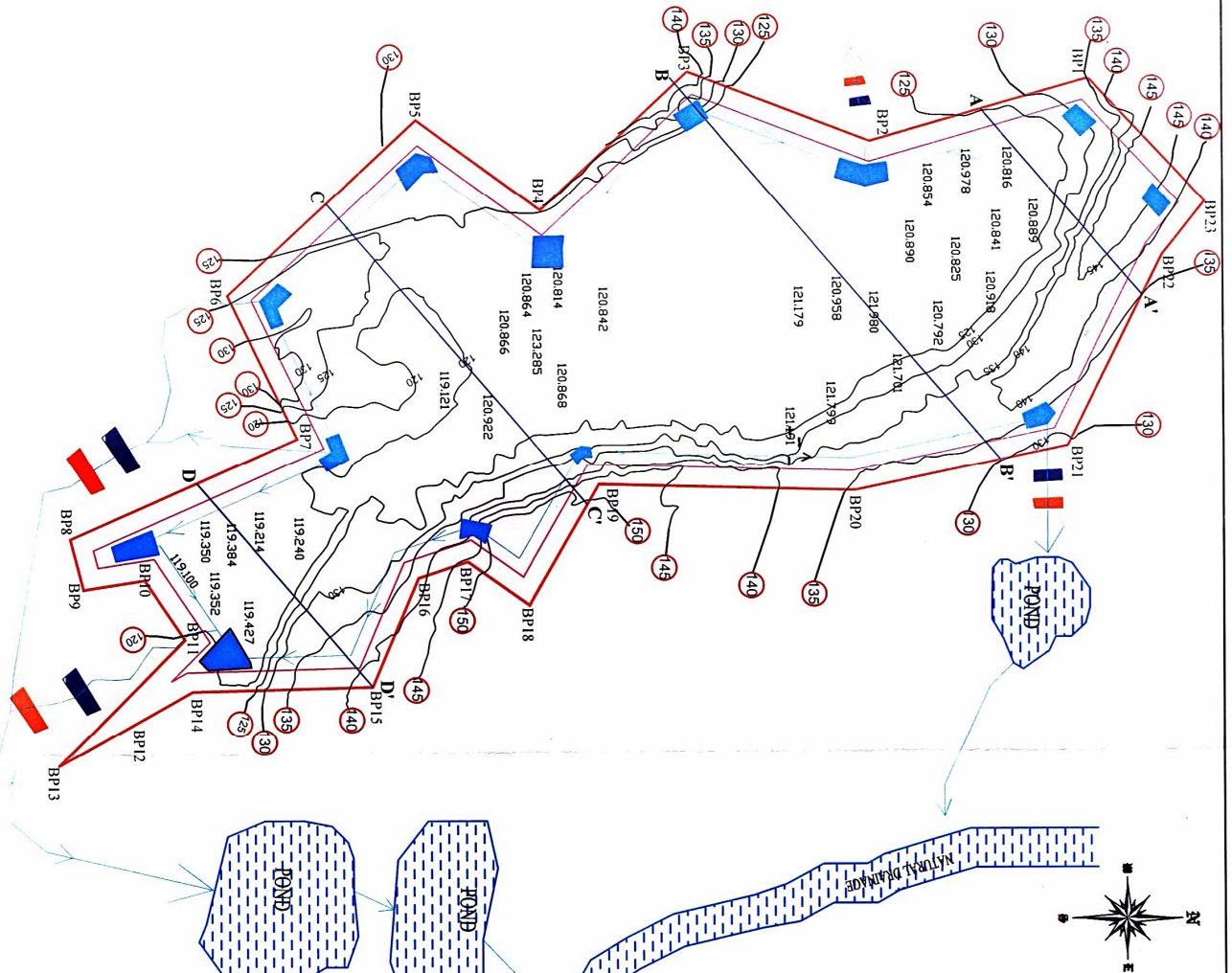
BOUNDARY PILLAR	LATITUDE	LONGITUDE	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (1)	09°30'44.4"N	76°41'08.8"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (2)	09°30'41.7"N	76°41'09.7"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (3)	09°30'39.39"N	76°41'08.92"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (4)	09°30'37.62"N	76°41'10.74"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (5)	09°30'36.02"N	76°41'09.66"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (6)	09°30'33.75"N	76°41'11.97"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (7)	09°30'34.69"N	76°41'13.75"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (8)	09°30'31.90"N	76°41'15.13"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (9)	09°30'32.9"N	76°41'15.76"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (10)	09°30'32.85"N	76°41'15.61"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (11)	09°30'33.38"N	76°41'16.34"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (12)	09°30'31.86"N	76°41'18.01"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (13)	09°30'31.50"N	76°41'18.20"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (14)	09°30'33.50"N	76°41'16.99"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)
BP (15)	09°30'35.75"N	76°41'16.84"E	BP (16)	BP (17)	BP (18)	BP (19)	BP (20)	BP (21)	BP (22)	BP (23)

## PRODUCTION CROSS SECTION

BUILDING STONE QUARRY OF M/S KARIMALA GRANITES & AGGREGATES PVT.LTD	Signature of ROP
AREA : 5.2309Ha	
DISTRICT : KOTTAYAM	
TALUK : CHANGANASSERY	
VILLAGE : KANAKAZHA	
STATE : KERALA	
DATE OF SY: 7.8.2020	

JAYACHANDRA PANICKER, P.S.  
N-SQUARE MINING & ENVIRONMENTAL  
SOLUTIONS- LLP  
RQP No: DMGKERALA/RQP/12/2017





# INDEX

	LEASE BOUNDARY		SILT TRAP
	SAFETY LINE		SITUATION TANK
	CONTOUR LINE		CUT & DRAIN
	SECTION LINE		POND
			WATER FLOW DIRECTION

## GPS READING

BOUNDARY PILLAR	LATITUDE	LONGITUDE	BP (8)	BP (9)
BP (1)	09°30'44.4"N	76°41'08.8"E	BP (9)	09°30'32.9"N
BP (2)	09°30'41.7"N	76°41'09.7"E	BP (10)	09°30'32.85"N
BP (3)	09°30'39.39"N	76°41'08.92"E	BP (11)	09°30'33.38"N
BP (4)	09°30'37.62"N	76°41'10.74"E	BP (12)	09°30'31.86"N
BP (5)	09°30'36.02"N	76°41'09.66"E	BP (13)	09°30'31.50"N
BP (6)	09°30'33.75"N	76°41'11.97"E	BP (14)	09°30'33.50"N
BP (7)	09°30'34.69"N	76°41'13.75"E	BP (15)	09°30'35.75"N
			BP (16)	09°30'36.27"N
			BP (17)	09°30'36.88"N
			BP (18)	09°30'37.67"N
			BP (19)	09°30'38.48"N
			BP (20)	09°30'41.68"N
			BP (21)	09°30'44.32"N
			BP (22)	09°30'45.40"N
			BP (23)	09°30'45.91"N

## DRAINAGE PLAN

BUILDING STONE QUARRY OF M/s KARIMALA GRANITES & AGRICULTURES PVT.LTD

AREA : 5.2309Ha	SY.No: 277/10P, 277/9, 278/2-1, 3P, 44P
DISTRICT : KOTTAYAM	TALUK : CHANGANASSERY
VILLAGE : KANGAZHA	2862/P, 45P, 8P, 282/10
STATE : KERALA	
DATE OF SY: 7-8-2020	SCALE: 2000

Signature of ROP

JAYACHANDRA PANICKER, P.S.  
N-SQUARE MINING & ENVIRONMENTAL SOLUTIONS - LLP  
RQP NO. DMGKERALARP012/2017



DISTRICT OFFICE  
DEPT. OF MINING AND GEOLOGY  
KOTTAYAM  
LECTURATE P.O. KOTTAYAM-686 006