

**BEFORE THE HON'BLE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE, CHENNAI**

**APPEAL NO. 43 OF 2022 (SZ)**

**IN THE MATTER OF:**

1. Ratheesh Karattu,  
S/O R.K. Vasu, Rayaroth House,  
Tholambra P.O, Peravoor, Kannur District – 670 673
2. Nidhin C.M.,  
Chandroth House, Tholambra P.O, Peravoor,  
Kannur District – 670 673

... Appellants

Versus

1. Ministry of Environment, Forests and Climate Change  
And Ors  
Indira Parayavaran Bhawn, Jor Bagh, Ali Ganj,  
New Delhi – 110 003,  
Represented by its Secretary
2. State Environmental Impact Assessment Authority,  
KSRTC Bus Terminal Complex, 4<sup>th</sup> floor,  
Thampanoor, Thiruvananthapuram, Kerala – 695 001  
Represented by its Chairman
3. State Expert Appraisal Committee,  
KSRTC Bus Terminal Complex, 4<sup>th</sup> Floor,  
Thampanoor Thiruvananthapuram, Kerala – 695 001  
Represented by its Member Secretary
4. The Administrator,  
State Environmental Impact Assessment Authority,  
KSRTC Bus Terminal Complex, 4<sup>th</sup> Floor,  
Thampanoor Thiruvananthapuram, Kerala – 695 001
5. K.K. Premkumar, Kolanthara (H), Melmuringodi P.O.,  
Manathana, Kannur District, Kerala – 670 673
6. State Disaster Management Authority,  
Vikas Bhavan P.O, Observatory Hills,  
Opposite Kananakknu Palace,  
Nanthacodu,  
Thiruvananthapuram, Kerala 695 003

... Respondents

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Certified that all the above are true copies of the original.

Dated at Chennai on this the 11<sup>th</sup> day of September, 2023.

**COUNSEL FOR 5<sup>TH</sup> RESPONDENT**

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 186/2016  
(M.A. No. 350/2016)  
And  
Original Application No. 200/2016  
And  
Original Application No. 580/2016  
(M.A. No. 1182/2016)  
And  
Original Application No. 102/2017  
And  
Original Application No. 404/2016  
(M.A. No. 758/2016, M.A. No. 920/2016,  
M.A. No. 1122/2016, M.A. No. 12/2017 & M.A. No. 843/2017)  
And  
Original Application No. 405/2016  
And  
Original Application No. 520 of 2016  
(M.A. No. 981/2016, M.A. No. 982/2016 & M.A. No. 384/2017)

**IN THE MATTERS OF:**

**Satendra Pandey  
Vs.  
Ministry of Environment, Forest & Climate Change & Anr.  
And  
Rajeev Suri Vs. Union of India  
And  
Badal Singh Vs. Union of India & Ors.  
And  
Nature Club of Rajasthan (NGO) Vs. Union of India & Ors.  
And  
Naresh Zargar Vs. Ministry of Environment & Forest and Anr.  
And  
Rajeev Suri Vs. Union of India & Anr.  
And  
Vikrant Tongad Vs. Union of India**

**CORAM : HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE DR. JUSTICE JAWAD RAHIM, JUDICIAL MEMBER  
HON'BLE MR. JUSTICE S.P. WANGDI, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

<b>Present: Applicant:</b>	<b>Mr. Rahul Choudhary and Ms. Meera Gopal, Advs. in Original Application No. 388/2018</b>
<b>Respondents</b>	<b>Mr. Divya Prakash Pande, Adv. for Ministry of Environment, Forest and Climate Change Dr. Abhishek Atrey, Adv. for Ministry of Environment, Forest and Climate Change Mr. Amit Tiwari, Adv. for State of Uttar Pradesh Mr. Ashok Kumar Sharma and Mr. Kshitij Mudgal, Advs. Mr. V.K. Shukla, and Ms. Vijay Lakshmi, Advs. for State of MP, State Environment Impact Assessment Authority &amp; Mining Corporation Mr. Rahul Pratap, Adv. for Ministry of Environment, Forest and Climate Change Mr. Shiv Mangal Sharma, AAG with Mr. Saurabh Rajpal and Mr. Vikramjeet Singh, Advs. for State of Rajasthan</b>

Date and Remarks	Orders of the Tribunal
<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b> DV &amp; AT</p>	<p>1. By this application, the applicant has sought to assail Notifications dated 15.01.2016, 20.01.2016 and 01.07.2016 amending the EIA Notification dated 14.09.2006 on the ground that the procedure for obtaining Environmental Clearance in respect of mining of minor minerals for areas from 0 to 25 ha has been diluted by bringing it within B-2 category projects and exempting such category from Public Consultation, Environment Impact Assessment (EIA) and Environment Management Plan (EMP) which was in contravention of the judgment of the Hon'ble Supreme Court in <i>Deepak Kumar Vs. State of Haryana &amp; Ors.: (2012) 4SCC 629</i> and also of this Tribunal in <i>Original Application No. 123 of 2014</i> dated 13.01.2015.</p> <p>2. The crux of the case of the applicant is that while in <i>Deepak Kumar</i> case (supra) it had been held that all mining leases in respect of its size would require to obtain Environmental Clearance and be subjected to strict regulatory framework as that of all major minerals, the impugned Notifications, more particularly 15.01.2016, exempts the necessity of having EIA and Public Consultation for areas upto 25 ha.</p> <p>3. According to the applicant the impugned Notification dated 15.01.2016 provided exemption of the rigors of the necessity of EIA and EMP even for areas ranging from 5 to 25 ha when in the earlier Notifications it was necessary from 5 to 50 ha. It was contended that the Hon'ble Supreme Court had expressed its concern on</p>

	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>dispensing with the necessity of obtaining Environmental Clearance and the other requirements cognate thereto for areas less than 5 ha in the case of <i>Deepak Kumar</i> (supra).</p> <p>4. Further contention was that B-category as it stood originally, was broken to B-1 and B-2 categories by bringing areas of mining of minerals from 25 ha to 50 ha within B-1 category and 0 to 25 ha as B-2 category. For B-2 category, the authority prescribed for grant of Environmental Clearance is now the District Environment Impact Assessment Authority (DEIAA) which would base its decision on the recommendations of District Expert Appraisal Committee (DEAC).</p> <p>5. Further contentions of the applicant in assailing the Notification dated 15.01.2016 are as follows:</p> <p>a) Form-1M prescribed in the impugned Notification dated 15.01.2016, required to be submitted for mining of minor minerals upto 5 ha under Category B-2 projects provided in Appendix-VII, is generic seeking only basic details pertaining to the lease holder and the mine with perfunctory information on the environmental effect of the project which was in contrast to Form-1 which is required to be filled up for all other categories which is comprehensive seeking detailed information on environmental implications of the project.</p> <p>b) B-2 projects of 0 – 5 ha under individual and cluster category are exempted from requirements of preparing an Environment Impact Assessment</p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>Report (EIA) and Environment Management Plan (EMP) and those greater than 5 ha and less than or equal to 25 ha are exempted from preparing Environment Impact Assessment Report (EIA) both with respect to individual Mine Lease and cluster situation. No such exemption has been provided in para 7 (i) of the EIA Notification, 2006 under Stage (2) - Scoping which stipulates such requirement, but it has been done away with now at Appendix-XI of Notification dated 15.01.2016.</p> <p>c) EIA/EMP is an integral and most critical component of Environmental Clearance as it is only through the EIA that the potential impacts and risks of a project can be assessed and mitigation measures formulated and adopted in the EMP. By exempting EIA/EMP, critical environmental aspects like anticipated environmental impacts, mitigation measures and additional studies involving public consultation, risk assessment, social impact assessment and rehabilitation and resettlement action plans, stand exempted. These requirements provided under Appendix-III, defeats the very purpose of the Notification and the Environment (Protection) Act, 1986.</p> <p>d) The District Level Environment Impact Assessment Authority (DEIAA) and District Level Expert Appraisal Committee (DEAC) comprises mostly of officers/bureaucrats who have no</p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>expertise and scientific knowledge to assess environmental implications, and have been conferred with excessive and uncanalized power devoid of any guidelines. Even the power to appoint the Expert Members vested upon the authorities in the DEIAA and DEAC are unguided whereas there is an extensive elaborations with regard to qualifications, skill sets and competencies for the members of SEAC and SEIAA.</p> <p>6. Based, <i>inter-alia</i>, upon the aforesaid grounds, the applicant seeks a direction for quashing the impugned Notifications.</p> <p>7. Mr. Divya Prakash Pande, Ld. Counsel for MoEF&amp;CC in his arguments, at the outset, raised objection as to the maintainability of the application on the ground of jurisdiction of the Tribunal to grant relief for quashing the impugned notifications. It is contended that the decision of this Court in the case of <i>S.P. Muthuraman v. Union of India</i>, in O.A. No. 676 of 2017 (Earlier O.A. No. 37/2015) whereby the Tribunal has held that it had the jurisdiction to pass such orders has since been challenged before the Hon'ble Supreme Court in Civil Appeal No. 7191-7192 of 2015 and is yet to be decided and, by implication of the orders passed by the Hon'ble Supreme Court, operation of the impugned judgement stands stayed.</p> <p>8. On the merits of the application, it is submitted that Notification dated 15<sup>th</sup> January, 2016 which is sought to</p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>be assailed, had been passed by the MoEF&amp;CC in exercise of its powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of Rule 5 of the Environment (Protection) Rules, 1986. The notification was issued after due deliberations with various stakeholders and the State Governments over the draft notification in respect thereof issued on 22<sup>nd</sup> September, 2015 and, after a committee constituted <i>vide</i> letter dated 3<sup>rd</sup> December, 2015 to examine the comments/suggestions submitted by them, had submitted its report. The impugned Notification provides for DIEAA/DEAC in the districts which also includes appointment of Officers/bureaucrats as experts in the two bodies. The impugned Notification is further justified by the Learned Counsel contending that as the Executive Engineer, Irrigation Department has been made part of the DEAC as he deals with the rivers and canals in the district and, therefore, has the best information and knowledge about sand and gravel deposits in the districts. The Forest Department officials are also part of these committees who have the ability to do value addition in forest areas or areas adjoining the forest having deposits of minor minerals.</p> <p>9. Upon consideration of the fact and circumstances set out in the original application and upon hearing the Ld. Counsel for parties, we find that the impugned Notification dated 15<sup>th</sup> January, 2016 is not consistent with the decision of the Hon'ble Supreme Court in the case of <i>Deepak Kumar (supra)</i>. We find substance in the</p>
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<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>submissions of the Ld. Counsel for the applicant that while breaking category B of the mines to B-1 &amp; B-2 may not <i>per se</i> be bad, it certainly dilutes the stringent requirement of lease areas upto 25 ha being exempted from the necessity of submitting EIA and EMP for grant of Environmental Clearance. It is undisputed that the impugned Notification is issued with the object to comply with the directions passed in the case of <i>Deepak Kumar (supra)</i>. This case had arisen as the EIA Notification dated 14<sup>th</sup> September, 2006 was being flouted by breaking homogenous areas into pieces of less than 5 ha in the States of Uttar Pradesh, Rajasthan and Haryana, as the notification then did not require Environmental Clearance for areas less than 5 ha. The Hon'ble Supreme Court after noting the serious deleterious effect of quarrying, mining and removal of sand in-stream and up-stream of rivers to the environment, in paragraphs 9 and 10 (of SCC), held as follows:</p> <p><i>“9. Extraction of alluvial material from within or near a streambed has a direct impact on the stream's physical habitat characteristics. These characteristics include bed elevation, substrate composition and stability, in-stream roughness elements, depth, velocity, turbidity, sediment transport, stream discharge and temperature. Altering these habitat characteristics can have deleterious impacts on both in-stream biota and the associated riparian habitat. The demand for sand continues to increase day by day as building and construction of new infrastructures and expansion of existing ones is continuous thereby placing immense pressure on the supply of the sand resource and hence mining activities are going on legally and illegally without any restrictions. Lack of proper planning and sand management cause disturbance of marine ecosystem and also upset the ability of natural marine processes to replenish the sand.</i></p> <p><i>10. We are expressing our deep concern since we are faced with a situation where the</i></p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p><i>auction notices dated 3-6-2011 and 8-8-2011 have permitted quarrying mining and removal of sand from in-stream and upstream of several rivers, which may have serious environmental impact on ephemeral, seasonal and perennial rivers and river beds and sand extraction may have an adverse effect on bio-diversity as well. Further it may also lead to bed degradation and sedimentation having a negative effect on the aquatic life. The rivers mentioned in the auction notices are on the foothills of the fragile Shivalik hills. Shivalik hills are the source of rivers like Ghaggar, Tangri, Markanda etc. River Ghaggar is a seasonal river which rises up in the outer Himalayas between Yamuna and Satluj and enters Haryana near Pinjore, District Panchkula, which passes through Ambala and Hissar and reaches Bikaner in Rajasthan. River Markanda is also a seasonal river like Ghaggar, which also originates from the lower Shivalik hills and enters Haryana near Ambala. During monsoon, this stream swells up into a raging torrent, notorious for its devastating power, as also, river Yamuna.</i></p> <p><i>11. We find that it is without conducting any study on the possible environmental impact on/in the river beds and elsewhere the auction notices have been issued. We are of the considered view that when we are faced with a situation where extraction of alluvial material within or near a riverbed has an impact on the rivers physical habitat characteristics, like river stability, flood risk, environmental degradation, loss of habitat, decline in biodiversity, it is not an answer to say that the extraction is in blocks of less than 5 hectares, separated by 1 km, because their collective impact may be significant, hence the necessity of a proper environmental assessment plan.”</i></p> <p>10. The Hon’ble Supreme Court also took note of the fact that the MoEF&amp;CC had constituted a Core Group under the Chairmanship of the Secretary (Environment &amp; Forest) to look into the environment aspects associated with mining of the minor minerals <i>vide</i> order dated 24<sup>th</sup> March, 2009 with specific terms and conditions. The Core Group after consideration of various issues including cluster of mine approach for addressing and implementing EMP in case of small mines, submitted a report on 29<sup>th</sup></p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>January, 2010 with the recommendation to permit mining of minor minerals under strict regulatory regime and carried out only under an approved framework of mining plan which should provide for reclamation and rehabilitation of mine areas. For smaller mine lease areas a cluster approach was recommended. It was directed that the States should adopt the recommendations and the model guidelines framed by the Ministry of Mines, namely the Model Rules, 2010.</p> <p>11. In pursuance of the directions, the impugned Notification dated 15<sup>th</sup> January, 2016 was ultimately issued. The MoEF&amp;CC Notification dated 14<sup>th</sup> December, 2006 as it stood earlier prescribed for two categories of projects and activities as Category A and Category B based on the spatial extent of potential impacts, potential impacts on human health and natural and man-made resources. Stage (1)-Screening that provides for Category 'B' projects or activities, entail scrutiny of an application seeking prior Environment Clearance made in Form 1 by the concerned State Level Expert Appraisal Committee (SEAC) for determining whether or not the project or activity requires further environmental studies for preparation of EIA for appraisal prior to grant of Environment Clearance depending upon the nature and location specificity of the project. It further provides that the project requiring EIA report would be termed as Category 'B-1' and remaining projects as Category 'B-2' that would not require EIA report. Discretion to make such categorization was left upon the MoEF&amp;CC and to issue appropriate guidelines from time to time. This</p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>provision was a subject matter of challenge in the case of <i>Himmat Singh Shekhawat v. State of Rajasthan</i>, 2015 ALL (I) NGT Reporter (1) DEL 44 by which it was upheld as having been issued by the Ministry as a Subordinate Legislation. However, the office memorandums dated 24<sup>th</sup> June, 2013 and 24<sup>th</sup> December, 2013 prohibiting grant of Environment Clearance to the mine areas of less than 5 ha was quashed as being in conflict with the aforesaid provision.</p> <p>12. The only contention that require for us to consider in this case is as to whether the Notification dated 15<sup>th</sup> January, 2016 would satisfy the spirit of the directions issued in the case of <i>Deepak Kumar (supra)</i>. As already noted, EIA Notification dated 14<sup>th</sup> September, 2006 under the Schedule provided thereto require all mining lease area of equal to and up to 50 ha to seek Environment Clearance requiring to submit EIA for appraisal from the SEIAA.</p> <p>13. The impugned Notification dated 15<sup>th</sup> January, 2016, however, would clearly indicate that Category B has been split into category B1 and B2 and again, category B2 has been further split into areas of 0-5 ha and 5-25 ha. While 0-5 ha has been exempted from the requirement of EIA/Public Consultation, such exemption has also been provided even for mining areas of 5 ha to 25 ha with the DEAC and the DEIAA as the prescribed authority for evaluation and grant of Environmental Clearance. Category B-1 being mining areas of 25 ha to 50 ha, the authorities prescribed are the SEAC and SEIAA. For falling in excess of 50 ha being Category-A, it is the EAC and the</p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>MoEF&amp;CC.</p> <p>14. The procedure for grant of the Environment Clearance by the DEIAA for areas between 0 to 5 ha falling under Category 'B-2' is found prescribed in paragraphs 6, 7(iii) (a) and 7(iii) (b) of the impugned Notification read with appendices VIII, X and XI. The Schematic Presentation of Requirement of Environment Clearance of Minor Minerals including cluster situation provided in a table to Appendix XI would substantiate indubitably that even for areas between 5 to 25 ha, no EIA and Public Hearing is required and in cluster situation also, the requirement of EIA and Public Hearing have been exempted.</p> <p>15. Introduction of such procedure, in our view, is clearly not consistent with the directions contained in the case of <i>Deepak Kumar (supra)</i> and the spirit behind such direction. By the provision, mining area upto from 5 ha to 25 ha has been completely exempted from the EIA and Public Consultation. For areas of 5 ha and below, apart from the exemption, it has been made only subject to a separate procedure of preparing a District Survey Report (DSR). These provisions quite apparently are more mine-centric rather than striving a balance between mining and environment especially with regard to Form-1M which needs to be made more elaborate incorporating environment related aspects.</p> <p>16. The Sustainable Sand Mining Management Guidelines, 2016 prepared by the MoEF&amp;CC has also deprecated the procedure as will appear from below which</p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>is contained in the chapter on “The Issues and Management of Mining in Cluster”:-</p> <p>“It is seen that the categorization of mines into 'B1' and 'B2' category in which Category 'B2' leases are being exempted from the requirement of Environment Impact Assessment, Environment Management Plan, and Public Consultation for grant of EC, in many cases now the mining leases are being given for 25 hectares or less. This defeats the purpose and intent of Hon'ble Supreme Court Judgment which orders environment clearance for all mining leases irrespective of size. The environment clearance without Environment Impact Assessment, Environment Management Plan, and Public Consultation does not serve the purpose of environment clearance which is to ensure environmentally sustainable and socially responsible mining. So if a cluster or individual lease size exceeds 5 hectare, the EIA/ EMP should be completed in the process of grant of prior environment clearance.”</p> <p>17. Thus, even according to the Sustainable Sand Mining Management Policy issued by the MoEF&amp;CC by dispensing with Public Hearing, the judgment of the Hon'ble Supreme Court in the case of <i>Deepak Kumar (supra)</i> will stand defeated.</p> <p>18. We also find that parameters for consideration while preparing District Mining Plan (DMP) and District Survey Report (DSR) are only for the purpose of ascertaining whether an area is fit for mining which are quite different from the parameters laid down for EIA. The consideration of the view point of the public by keeping DSR in public domain is not a substitute of Public Hearing for consideration of the view point of the public for EIA.</p> <p>19. With specific reference to mining in cluster, the Report of the Committee of Secretaries, Ministry of Environment, Forest and Climate Change, 2010 recommended as follows:</p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p><i>“Considering the nature of occurrence of minor mineral, economic condition of the lessee and the likely difficulties to be faced by Regulatory Authorities in monitoring the environmental impacts and implementation of necessary mitigation measures, it may be desirable to adopt cluster approach in case of smaller mine leases being operated presently.”</i></p> <p>20. This report which is a part of the Sustainable Sand Mining Management Guidelines, 2016 finds reinforcement in the Chapter “The Issues and Management of Mining in Cluster” referred to earlier where it has inter-alia been recommended as under:</p> <p><i>“The Hon’ble Supreme Court, NGT, SEAC/EAC and the Project Proponents have raised issue of cluster in mine lease allotment and environment clearance for the same, so following conditions need to be ensured for cluster of mines:</i></p> <ol style="list-style-type: none"> <li><i>1. To address the concern of adverse impact of minor mineral mining on environment it is proposed that all mining activity including river sand mining (above 5 hectare individual or cluster) will need to prepare Environment Impact Assessment Report and Environment Management Plan before grant of environment clearance. These reports (EIA /EMP) can be prepared by the State or State nominated Agency / the Project Proponent (s).</i></li> <li><i>2. As can be seen from the data provided by the States most of the mining leases for minor minerals are of lease area less than 5 hectare. It is also reported that in hill states getting a stretch in river with area more than 5 hectare is very uncommon. So the size of lease for minor minerals including river sand mining will be determined by the States as per their circumstances.</i></li> <li><i>3. The EIA Notification, 2006 does not provide for cluster EC, it provides for issuance of EC to individual project proponents and the same has also been upheld in the judgment of Hon’ble Supreme Court in Vijay Bansal vs. State of Haryana case. So EC will have to be applied for and issued to the individual project proponent.</i></li> <li><i>4. A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area.</i></li> <li><i>5. The mining of minor minerals is mostly in clusters. The Environment Impact Assessment or Environment Management</i></li> </ol>
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**Item Nos.  
07 to 14**

**September  
13, 2018**

**DV & AT**

*Plan are required to be prepared for the entire cluster in order to capture all the possible externalities. These reports shall capture carrying capacity of the cluster, transportation and related issues, replenishment and recharge issues, geo-hydrological study of the cluster area. The Environment Impact Assessment or Environment Management Plan shall be prepared by the State or State nominated Agency or group of project proponents in the Cluster or the project proponent in the cluster.*

6. *The individual lease holders in cluster can use the same Environment Impact Assessment or Environment Management Plan for application for environmental clearance. The cluster Environment Impact Assessment or Environment Management Plan shall be updated as per need keeping in view any significant change.*
7. *There shall be one public consultation for entire cluster after which the final Environment Impact Assessment or Environment Management Plan report for the cluster shall be prepared.*
8. *The details of cluster Environment Impact Assessment or Environment Management Plan shall be reflected in each environmental clearance in that cluster and District Expert Appraisal Committee (DEAC), SEAC, and EAC shall ensure that the mitigative measures emanating from the Environment Impact Assessment or Environment Management Plan study are fully reflected as environmental clearance conditions in the environmental clearance's of individual project proponents in that cluster.*
9. ....
10. ....
11. ....”

21. Dispensing with the requirement of Public Hearing which forms a part of the Public Consultation under Stage-III of the Environmental Clearance process under EIA Notification, 2006 for areas measuring 0 to 25 ha for individual mine areas and in cluster situation where public hearing has been provided, has resulted in gross dilution of EIA Notification dated 14<sup>th</sup> September, 2006. Such dilution would, in our view, result in its misuse by unscrupulous elements and the situation would revert

	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>back to the lawless state prevailing prior to the decision in the case of <i>Deepak Kumar (supra)</i>. Stringent measures are, therefore, necessary if the rampant exploitation of the minor minerals is to be curbed. This apparently was also the view of the Hon'ble Supreme Court in the case of <i>Deepak Kumar (supra)</i>.</p> <p>22. For all these reasons, we direct that the procedure laid down in the impugned Notification be brought in consonance and in accord with the directions passed in the case of <i>Deepak Kumar (supra)</i> by (i) providing for EIA, EMP and therefore, Public Consultation for all areas from 5 to 25 ha falling under Category B-2 at par with Category B-1 by SEAC/ SIEAA as well as for cluster situation wherever it is not provided; (ii) Form-1M be made more comprehensive for areas of 0 to 5 ha by dispensing with the requirement for Public Consultation to be evaluated by SEAC for recommendation of grant EC by SEIAA instead of DEAC/DEIAA; (iii) if a cluster or an individual lease size exceeds 5 ha the EIA/EMP be made applicable in the process of grant of prior environmental clearance; (iv) EIA and/or EMP be prepared for the entire cluster in terms of recommendation 5 (supra) of the Guidelines for the purpose of recommendations 6, 7 and 8 thereof; (v) revise the procedure to also incorporate procedure with respect to annual rate of replenishment and timeframe for replenishment after mining closure in an area; (vi) the MoEF&amp;CC to prepare guidelines for calculation of the cost of restitution of damage caused to mined-out areas along with the Net Present Value of Ecological Services forgone because of illegal or unscientific mining.</p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>23. We have permitted retention of 0-5 ha as a category keeping in view that some States grant isolated single lease of 5 ha and less not falling in cluster situation for which stringent requirements in Form-1M will serve the purpose of providing safeguards for protection of the environment and sustainable mining of minor minerals. This is particularly true in smaller and mountainous States as will also appear from condition no. 2 under “The Issues and Management of Mining in Cluster” referred to earlier in para 20 of this order.</p> <p>24. It is reiterated that any attempt to split the lease area for the purpose of avoiding the applicable regulatory regime shall be viewed seriously. This in our view will be in the interest of the environment as deliberated in detail in the case of <i>Deepak Kumar (supra)</i> and would also satisfy the Precautionary Principle and the Principle of Sustainable Development contemplated under Section 20 of the National Green Tribunal Act, 2010.</p> <p>25. The MoEF&amp;CC shall, therefore, take appropriate steps to revise the procedure laid down in the impugned Notification dated 15<sup>th</sup> January, 2016 in terms of the above directions and observations so that it is conformity with the letter and spirit of the directions passed by the Hon’ble Supreme Court in <i>Deepak Kumar (supra)</i>.</p> <p>The applications stand disposed of.</p> <p>....., CP (Adarsh Kumar Goel)</p> <p>....., JM (Dr. Jawad Rahim)</p>
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	<p><b>Item Nos. 07 to 14</b></p> <p><b>September 13, 2018</b></p> <p><b>DV &amp; AT</b></p>	<p>.....,JM (S.P. Wangdi)</p> <p>.....,EM (Dr. Nagin Nanda)</p> <p>13.09.2018</p>
--	---	---



From

The Geologist,  
District office,  
Kannur.

To

Sri.K.K.Prem Kumar  
S/o K.K.Kunhiraman,  
Kolanthra House,  
Melmuringodi, Manathana,  
Kannur District - 670673

Sir,

Sub:- Approval of Eco-friendly mining plan - Granite  
Building Stone Quarry at Survey Nos. 1/100,1,9  
Tholambra Village, Maloor Panchayath,  
Thalassery Taluk, Kannur District, Kerala

Ref:- Your Letter dtd.06.07.2019

The Mining Plan for the Granite building stone quarry project in Survey Nos. 1/100,1,9, of Tholambra Village, Maloor Panchayath, Thalassery Taluk, Kannur District, Kerala is hereby approved vide the powers delegated to the district Geologist for the approval of mining plan for the minor minerals vide order of Industries Department, Government of Kerala No. G.O.(P) No.05/2015/ID dt. 12.01.2015 issued under Rule 62 of Kerala Minor Mineral Concession Rules, 1967, with the following conditions:

6. That you will follow the prescribed Rules & Regulations of Central Government and State Government issued from time to time in regard to mining
7. That you will follow the Mine Safety Rules & Regulations.
8. That you will store the mining waste in the earmarked location/dumping yard only as specified in the plan.
9. That you will carry out the plantation as committed in the plan.
10. That provision shall be made for the housing facility for the labour with all basic infrastructure facilities including safe drinking water, toilets etc, within the site.



Yours Faithfully  
*[Signature]*  
17.7.2019  
GEOLOGIST  
GEOLOGIST  
Department of Mining & Geology,  
District Office  
KANNUR - 670 002

District Office,  
Mining and Geology,  
Civil Station, Kannur 670 002  
Web: [www.dmg.kerala.gov.in](http://www.dmg.kerala.gov.in)  
E-mail: [geo.kan.dmg@kerala.gov.in](mailto:geo.kan.dmg@kerala.gov.in)  
Phone: 0497 2700106  
Date: 17.07.2019

CERTIFICATE

This is to certify that the following two quarries are seen within 500 Meters from the quarry of Sri.K.K.Prem Kumar, S/o K.K.Kunhiraman, Kolanthra House Melmuringodi, Manathana, Kannur District - 670673 in Survey Nos. 1/100, 1, 9 of Tholambra Village, Maloor Panchayath, Thalassery Taluk, Kannur District, Kerala.

1. Quarry owned by Sri.K.K.Surendran, S/o Govindan, Aswathi, Valavayal, Keezhallur.P.O., Kannur- 670 612, In an area of 0.9978 Hectare, in Re. Survey No. 10/114, 10/115, Tholambra Village Maloor Grama Panchayath, Thalassery Taluk, Kannur District (Applied for short term Permit. Letter of Intent granted. Presently not working)
2. Quarry owned by Sri. Prajil.K.K, S/o Prabhakaran, Prajosh Nivas, P.O.Ayitharambaram, Kannur- 670 643, In an area of 0.4422 Hectare in Re.sy.no. 10 of Tholambra village, Thalassery Taluk Maloor Panchayath, Kannur District. (Presently working with short Term permit)

This Certificate is issued to produce before DEIAA / SEIAA / Ministry of Environment & Forests, Government of India, New Delhi.

*[Signature]*  
17.7.2019

GEOLOGIST

**GEOLOGIST**  
Department of Mining & Geology  
District Office  
KANNUR - 670 002

To

Sri.K.K.Prem Kumar  
S/o K.K.Kunhiraman,  
Kolanthra House,  
Melmuringodi, Manathana,  
Kannur District - 670673



# MINING PLAN

(Including Progressive Mine Closure Plan)  
(Under Rule 55 of the Kerala Minor Mineral Concession Rule 2015)

for

## GRANITE BUILDING STONE QUARRY (Minor Mineral)

at

**Extent: 1.4621 Ha. (3.6128 Acres)**

Survey Nos. : 1/100, 1 & 9.  
Village : Tholambra  
Taluk : Thalassery  
District : Kannur  
State : Kerala

### Shri. K. K. PREMKUMAR

Kolanthra House, Melmuringodi P.O., Manathana Taluk, Kannur District – 670673

Production Capacity: - 50,130.00 TPA (Max)

Open Cast, semi Mechanized Mining Method  
Private Land

Prepared by

Cyriac Joseph  
DMG/KERALA/RQP/15/2015

Mining Plan Approved  
*[Signature]*  
17.7.19



### GLOBAL Environment & Mining Services

(Consulting Engineers, Mine Designers, Geologists & Surveyors)

#212, Celestic Towers, Palm Avenue, Green Glen Layout, Bellandur,  
BANGALORE- 560 103, Karnataka, India.

Ph : +91 6361550211

e-mail : [gems.blr@globalmining.in](mailto:gems.blr@globalmining.in)

webste : [www.globalmining.in](http://www.globalmining.in)

H.O.

3<sup>rd</sup> Main Road, Basaveshwara Badawane  
HOSPET – 583201, Bellary Dist. (Karnataka)

**Shri. K. K. PREMKUMAR**  
 Kolanthra House, Melmuringodi P.O., Manathana Taluk,  
 Kannur District, Kerala – 670 673  
 Ph No. : +91 9447013110



**UNDERTAKING**

The Mining Plan including Progressive Mine Closure Plan for 'Granite Building Stone Quarry of Shri. K. K. Premkumar' over an extent of 1.4621 Ha. (3.6128 Acres) at Survey Nos. 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur Dist. Kerala State, has been prepared by Cyriac Joseph, M/s. GLOBAL Environment & Mining Services, Bangalore.

We request the District Geologist, Department of Mining & Geology, Kannur District, Kerala State to make further correspondence regarding the Mining Plan including Progressive Mine Closure Plan with the Recognized Qualified Person at the following address:

**M/s GLOBAL Environment & Mining Services,**  
 #212, Celestic Towers, Palm Avenue, Green Glen Layout, Bellandur,  
 Bangalore – 560 103,  
 Karnataka State, India.  
 Ph: +91 8025432447

**H. O.**

3rd Main Road, Basaveshwara Badawane  
 HOSPET – 583201, Bellary Dist. (Karnataka)

We hereby undertake that all the proposals made in the Mining plan including Progressive Mine Closure Plan by the Recognized Qualified Person are deemed to have been made with the knowledge and consent of me in all respects.

**Place:** Melmuringodi

**Date:** 28.06.2019

Shri. K. K. Premkumar  
 Authorized Signatory

# Shri. K. K. PREMKUMAR

Kolanthra House, Melmuringodi P.O., Manathana Taluk,

Kannur District, Kerala – 670 673

Ph No. : +91 9447013110



## CERTIFICATE

This is to certify that the Mining Plan including Progressive Mine Closure Plan for 'Granite Building Stone Quarry of Shri. K. K. Premkumar' over an extent of 1.4621 Ha.(3.6128 Acres) at Survey Nos. 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur Dist. Kerala State, has been prepared in full consultation with me and I have understood its contents and agree to implement the same in accordance with the law.

**Place:** Melmuringodi

**Date:** 28.06.2019

Shri. K. K. Premkumar  
Authorized Signatory

# Shri. K. K. PREMKUMAR

Kolanthra House, Melmuringodi P.O., Manathana Taluk,  
Kannur District, Kerala – 670673  
Ph No. : +91 9447013110



23

## CERTIFICATE

“The provisions of Mines Act 1952 and the Kerala Minor Mineral Concession Rule (Kmmcr-2015) have been observed in Mining Plan including Progressive Mine Closure Plan for ‘Granite Building Stone Quarry of Shri. K. K. Premkumar’ over an extent of 1.4621 Ha. (3.6128 Acres) at Survey Nos. 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur Dist. Kerala State, and where specific permissions are required, the Director General of Mines Safety will be approached. Further, standards prescribed by DGMS in respect of all provisions of the mines act 1952 will be strictly implemented”.

**Place:** Melmuringodi

**Date:** 28.06.2019

Shri. K. K. Premkumar  
Authorized Signatory

# Shri. K. K. PREMKUMAR

24

Kolanthra House, Melmuringodi P.O., Manathana Taluk,

Kannur District, Kerala – 670673

Ph No. : +91 9447013110



## CERTIFICATE

This is to certify that the “Progressive Mine Closure Plan” in respect of Mining Plan for ‘Granite Building Stone Quarry of Shri. K. K. Premkumar’ over an extent of 1.4621 Ha. (3.6128 Acres) at Survey Nos. 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur Dist. Kerala State, prepared and has taken in to consideration all statutory rules, regulations, orders made by the Central or State Government, Statutory Organizations, Court etc, and wherever any specific permission is required I will approach the concerned authorities.

I also give an undertaking to the effect that all the measures proposed in the closure plan will be implemented in a time bound manner as proposed.

**Place:** Melmuringodi

**Date:** 28.06.2019

**Shri. K. K. Premkumar**  
Authorized Signatory



#212, Celestic Tower, Palm Avenue, Green Glen Layout,  
Bellandur, **BANGALORE – 560103**, Karnataka, India  
Ph : +91 6361550211  
e-mail : gems.blr@globalmining.in  
Website : globalmining.in



**H. O.**  
3<sup>rd</sup> Main Road, Basaveswara Badavane,  
**HOSPET – 583201**, Bellary Dist., (Karnataka)

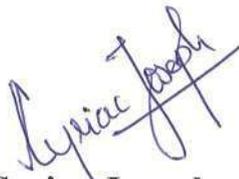
**CERTIFICATE**

1. Certified that provisions of Mines Act 1952, the Kerala Minor Mineral Concession Rules (KMMCR-2015) have been observed in the Mining Plan including Progressive Mine Closure Plan for 'Granite Building Stone Quarry of Shri. K. K. Premkumar' over an extent of 1.4621 Ha. (3.6128 Acres) at Survey Nos. 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur Dist. Kerala State, and wherever specific permissions are required the applicant will approach Director General of Mines safety.
2. It is also certified that information furnished in the above mining plan including Progressive Mine Closure Plan are true and correct to the best of our knowledge.

Place: Bangalore

Date: 28.06.2019

**GLOBAL Environment & Mining Services**

  
**Cyriac Joseph**

DMG/KERALA/RQP/15/2018



# **GLOBAL Environment & Mining Services** **26**

(Consulting Engineers, Mine designers, Geologist & Surveyors)

#212, Celestic Tower, Palm Avenue, Green Glen Layout,  
Bellandur, **BANGALORE – 560103**, Karnataka, India  
Ph : +91 6361550211  
e-mail : gems.blr@globalmining.in  
Website : globalmining.in



**H. O.**  
3<sup>rd</sup> Main Road, Basaveswara Badavane,  
**HOSPET – 583201**, Bellary Dist., (Karnataka)

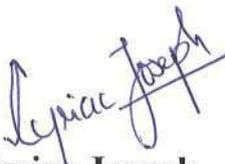
## **CERTIFICATE**

This is to certify that the provisions of the Kerala Minor Mineral Conservation Rule (KMMCR-2015) have been observed in the Mining Plan including Progressive Mine Closure Plan for 'Granite Building Stone Quarry of Shri. K. K. Premkumar' over an extent of 1.4621 Ha.(3.6128 Acres) at Survey Nos. 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur Dist. Kerala State, and wherever specific permissions are required, the applicant will approach the concerned authorities of the Department of Mining & Geology, Kerala.

Place: Bangalore

Date: 28.06.2019

**GLOBAL Environment & Mining Services**

  
**Cyriae Joseph**

DMG/KERALA/RQP/15/2018



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## **LIST OF ANNEXURES**

<b>Sl. No</b>	<b>DESCRIPTION</b>	<b>Annexure No.</b>
1	Letter of Intent	1
2	RQP Certificate	2
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5	Text Recipe	5
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7	Non assignment Certificate	7
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## LIST OF PLATES

Sl. No	DESCRIPTION	Plate No.	Scale
1	Administrative Plan	1	NTS
2	Key Plan	1A	1:50,000
3	Survey Map	2	1:2000
4	Surface Plan	3	1:1000
5	Geological Plan & Sections	4	1:1000
6	Production & Development Plan (I-Year)	5A	1:1000
7	Production & Development Plan (II-Year)	5B	1:1000
8	Production & Development Plan (III-Year)	5C	1:1000
9	Production & Development Plan (IV-Year)	5D	1:1000
10	Production & Development Plan (V-Year)	5E	1:1000
11	Production & Development Sections	6	1:1000
12	Conceptual Plan & Sections	7	1:1000
13	Environment Plan (Map showing all features & Surroundings within 500m Radius)	8	1:5000
14	Environment Management Plan	9	1:1000
15	Progressive Mine Closure Plan	10	1:1000
16	Infrastructure Plan	11	1:5000
17	Buffer Map (5Km) Showing Site Location & Transportation Route Map	12	1:50,000



◆-----◆  
**MINING PLAN**  
◆-----◆  
**For "GRANITE BUILDING STONE QUARRY"**  
◆-----◆  
**Shri. K. K. PREMKUMAR**  
◆-----◆

**INTRODUCTION:**

Granite Building Stone is one of the most common rock types in the Geology of Kerala. It is a coarse grained plutonic rock containing over 80-90% quartz, feldspar and a small percentage of biotite, hornblende and other ferromagnesian minerals. Due to its hard nature and easy availability it is commonly used as a construction material and road material all over the state. The abundance of granite building stone and its growing demand has prompted the entrepreneur to apply for the mining in this area.

Shri. K. K. Premkumar, S/o. K. K. Kunhiraman, Kolanthra House, Melmuringodi Post, Manathana Taluk, Kannur District 670673, has proposed for their mining operations (Granite Building Stone Quarry) in the area over an extent of 1.4621 Ha (3.6128 Acres) for the production of granite building stone at Survey Nos. 1/100, 1&9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala State. The location of the proposed mine is shown on the Administrative Plan and Key plan enclosed vide Plate No 1 & 1A. The Survey Map showing the applied mining area is enclosed vide Plate No - 2.

This granite building stone quarry is located at 2.6 Kms from Tholambra Village in Thalassery Taluk. The quarry is at a distance of 38 Kms from Kannur town. It can be reached via Malur - Koovakkara Road.

Now as a statutory requirement a Mining Plan (including Progressive Mine Closure Plan) showing systematic development of the mine and mining related proposals for next five years required to be prepared and submitted to the Geologist, Dept. of Mining and Geology Kannur, Govt of Kerala for approval. Hence a Mining plan is prepared for the period of 5 years for the maximum production of 50,130.00 Tonnes Per Annam and submitted to Department of Mining & Geology, Kerala for approval.



The Mining is proposed to be operated by developing benches of 5m height and 5m ultimate width by Opencast Semi-Mechanised Mining Method. The mechanised operation of mining includes excavators, tippers, rock breakers, Jack hammer drilling and blasting.

The boulders and broken material from the mine would be transported to the local consumers, construction sites and / or to the crusher situated outside the mining Lease area for further sizing.

The Mining plan is prepared as per the requirements of the Kerala Minor Mineral Concession Rule (KMMCR) 2015, and is submitted to the District Geologist, Kannur Kerala for approval.



## 1.0 GENERAL

a) **Name & address of lessee:** Shri. K. K. Premkumar  
S/o. K. K. Kunhiraman,  
Kolanthra house, Melmuringodi P.O.,  
Manathana, Kannur District, Kerala- 670673  
Ph No. : +91 9447013110

b) **Registered Office:** Shri. K. K. Premkumar  
S/o. K. K. Kunhiraman,  
Kolanthra house, Melmuringodi P.O.,  
Manathana, Kannur District, Kerala- 670673  
Ph No. : +91 9447013110

**Status of lessee**

Private Individual	:	Yes
Cooperative Association	:	No
Private Company	:	No
Public Company	:	No
Public Sector Undertaking	:	No
Joint Sector Undertaking	:	No
Other (Pl. specify)	:	No

The Id proof of Shri. K. K. Premkumar is enclosed as **Annexure – 3**.

c) **Mineral/s which are occurring:  
in the area and which the  
Lessee intends to mine** Granite building stone.

d) **Period for which the mining lease is granted/renewed/proposed to be  
applied:**

Fresh Lease



**e) Name & address of RQP Preparing Mining Plan**

<b>Cyriac Joseph</b> DMG/KERALA/RQP/15/2018
<b>GLOBAL Environment &amp; Mining Services</b> #212, Celestic Towers, Palm Avenue, Green Glen Layout, Bellandur, <b>Bengaluru-560 103</b> , Karnataka e-mail : <a href="mailto:gems.blr@globalmining.in">gems.blr@globalmining.in</a> Mobile : +91-8025432447
<b>H.O.</b> 3 <sup>rd</sup> Main Road, Basaveshwara Badawane <b>HOSPET – 583201</b> , Bellary Dist. (Karnataka)

The RQP certificate of Cyriac Joseph from Department of Mining & Geology, Kerala is enclosed as **Annexure - 2**.

**f) Name of Prospecting Agency: GSI/DMG Kerala**

**g) Reference no. and date of consent letter from the State Government G.O. No.**

For mining of the said area, Directorate of Mining and Geology, Thiruvananthapuram, has issued a Letter of Intent (LOI) vide No. 8816/M3/2018 dated 25.06.2019. The copy of the LOI is enclosed as **Annexure -1**.

## 2.0 LOCATION & ACCESSIBILITY:

### LOCATION:

The Granite Building Stone Quarry of Shri. K. K. Premkumar over an area of 1.4621 Ha. (3.6128Acres) is located in Survey No. 1/100,1&9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala State.

### ACCESSIBILITY:

This granite building stone quarry is located at 2.6 Kms from Tholambra Village in Thalassery Taluk. The quarry is at a distance of 38 Kms from Kannur town. It can be reached via Malur - Koovakkara Road. The location of this mining area is shown on the Administrative and Key Plan enclosed Vide **Plate No-1 and 1A**.

a)	Details of area (with location map)	:	The lease is marked on Key plan / enclosed vide Plate No.1A.
i)	District and state	:	Kannur, Kerala
ii)	Taluk / Mandal	:	Thalassery
iii)	Village	:	Tholambra
iv)	Khasara No. / Plot No. / Block / Gat Noetc	:	1/100,1&9
v)	Lease Area (Hectares)	:	1.4621 Ha
vi)	Whether the area is recorded to be in forest (please specify whether protected, reserved etc.,)	:	No
vii)	Ownership / Occupancy	:	Private
viii)	Existence of public road/railway line, if any, nearby and approximate distance Nearest Port / Airport	:	The nearest railhead is at Kannur is at 38 km from the mine. Nearest airport – Calicut (120km)
ix)	Topo sheet No.	:	49 M/9 (work sheet No C43D9)
x)	Latitude & Longitude (between)	:	N11°53'47.971" to N11°53'53.423" E75°38'54.735" to E75°39'00.711"

The detail of lands is enclosed as **Annexure – 4 & 5**. The copy of consent of the landowner is enclosed as **Annexure – 6**.

The details of land in each Survey Number along with its extent and land proposed for mining are given in the Table 2.1

**Table No. 2.1: Details of Survey Number and the area acquired for lease**

SL No	Sy.No	Doc No.	Village Name	Name of the Owner	Area of Possession in Ha.	Area for mining in Ha.	Area for Buffer zone in Ha.	Total applied Lease Area in Ha.
1	1/100	2366/2017	Tholambra	K K Mohandas Managing Partner K K Builders	0.4047	0.2767	0.0919	0.3686
2	1	340/2006, 350/2016		K K Mohandas Managing Partner K K Builders	0.8094	0.5843	0.1630	0.7473
		1427/1997		K K Premkumar				
3	9	2433/2007, 1174/1997		K K Mohandas Managing Partner K K Builders	4.0467	0.2118	0.1344	0.3462
		1175/1997		K K Premkumar				
<b>Total Lease area</b>					<b>5.2608</b>	<b>1.0728</b>	<b>0.3898</b>	<b>1.4621</b>

**x) Land Use Pattern (Forest, Agricultural, Grazing, Barren etc.):**

The entire proposed Mining area is a private land. The details of the land is given in the Table No 2.2.

**Table No. 2.2: The details of the land applied for mining**

Particulars	Extent in Ha.	Ownership
Lands	1.4621	Private

Attach general location and vicinity map showing area boundaries and existing and proposed access roads. It is preferred that the area be marked on a Survey of India Topographical map or as the case may be. However if none of these are available the area should be shown on accurate sketch map on a scale of 1: 50,000.

A general location plan is prepared in scale 1: 50,000 and enclosed vide Plate No. 1A.

**Details of the Ground Control Points:**

Ground Control Point	Location	Distance from Corner Pillar -24 Km	GPS Reading	
			Latitude	Longitude
Known Point-1	Sastri Nagar Bus Stop	2.67	N11°53'39.207"	E-75°40'28.928"
Known Point-2	Malur City Bus St	1.81	N11°53'27.340"	E-75°39'56.047"



### **3.0 GEOLOGY & RESERVES :**

- a) Briefly describe the topography and general geology and local/mine geology of the mineral deposit include drainage pattern.

#### **1. Topography of the area:**

The lease is located on the slope of the hillock gently dipping towards SE. The highest elevation in this area is 165.0m above MSL and the lowest elevation is 120.0m above MSL. The general slope of the lease hold area is between 17° to 19° degree. The area has moderate climate with maximum temperature of 28.4° to 36.9°C in the month of April and minimum temperature of 19.7° to 23.9°C in the month of December. The area receives a total annual rain fall of around 3438mm. The area receives highest rainfall in the month of July.

#### **Geology**

##### **Regional Geology:**

The district can be broadly divided into seven geological belts trending NW-SE viz., (i) northern belt of Charnockite group extending further north and east to the adjacent districts, (ii) north central belt of Wayanad schist complex, (iii) Central belt of eninsular Gneissic Complex extending to the southeast, (iv) south central belt of Vengad Group, equivalent to Dharwars, (v) southernmost belt of Migmatite Complex which extends further south to the adjacent district, (vi) Sedimentary (Warkalli Beds) in the western part near the coast and (vii) Quaternary sediments along the coast. The lithology of Kannur district is grouped under Precambrian, late Tertiary and Quaternary periods and the Precambrian rocks dominate over the other two. Charnockite Group, includes pyroxene granulite, charnockite (hypersthene granulite) and hornblende-diopside granulite. While hornblende granite and charnockite occupy large areas, pyroxene granulite occurs as linear bodies in the southeast. Hornblendebiotite gneiss constitutes the litho unit of Migmatite Complex. It has a large areal extent along the coast, south of Kannur. Towards east and southeast, discrete metasedimentary and ultramafic sequences which have been designaed as Wayanad Schist Complex and are considered equivalent of Sargur Group of Karnataka. They occur as isolated bands within charnockite and gneiss. Their contacts are generally discordant due to later folding, metamorphism and migmatisation. The group comprises quartzite, magnetite quartzite, garnet-kyanite-sillimanite gneiss, quart-mica-kyanite schist, quartz-sericite schist,

amphibolite, kyanite-sillimanite-sericite quartzite, metaultramafites. Garnetkyanite-sillimanite gneiss/schist is widespread in the east, whereas the other members of Wayanad Complex occur as linear bands, lensoidal bodies and vestiges to the West Peninsular Gneissic Complex, represented by hornblende-biotite gneiss comprise of a complex suite of gneisses and granites, representing the anatectic phase of migmatization of schist complex. East of Kannur extending upto Tellichery in the south, a large body of quartz-mica schist is separated from the other schistose rocks by a conglomerate horizon extending over 8km. This lithounit known as Vengad Formation, characterised by lack of migmatization, presence of primary structures and absence of high grade minerals, is correlatable with rocks of Dharwar Super Group. Large bodies of anorthosite, gabbro, granite and granophyre from the post Vengad basic and acid intrusives. Dolerite dykes trending NW-SE represent the younger basic intrusives. Late Tertiary sedimentary rocks (Warkalli beds) occur as isolated patches along the coast near Kannur, Pazhayangadi and east of Payyannur. They comprise variegated clays and friable sandstone. At Kannur and Pazhayangadi, carbonaceous clay with thin seams of lignite is reported towards bottom of the sedimentary sequence. The Tertiaries as well as the basement rocks are extensively lateritised. The pebble bed, reported near Valapatnam along the bank of Valapatanam river, is considered to be of Quaternary age. Quaternary alluvial deposit occur along the coast and in the valleys

#### **Local Geology:**

The granite building stones are very well exposed as outcrop, whereas part of area with lower elevation is covered by top soil of about 0 to 1.4m thickness,

A geological plan showing the granites and soil cover and the geological sections showing subsurface geology is prepared on 1:1000 scale and enclosed vide **Plate No 4.**

**Table 3.1: Local Geology**

Soil Cover	0 to 1.4m
Granite	80m (min. estimate)

The geology of the lease area is shown the Geological Plan and Sections enclosed vide **Plate No-4.**

- b) The topographic plan of the lease area prepared on a scale of 1:1000 or 1:2000 with contour interval of 3 to 10 m. depending upon the topography of the area should be taken as the base plan for preparation of geological plan. The details of exploration already carried out including evidences of mineral existence should be shown on the geological plan.**



The topographic plan on 1:1000 scale is prepared with contour interval of 5m by incorporating all the existing details like topography, surface exposures, structures etc. and enclosed vide **Plate No 3**.

**c) Exploration Already carried out:**

The granite building stone in the lease area are of intrusive nature with good outcrops and very good exposures in the open pits. Hence no exploration proposal is made.

**d) Geological sections should be prepared at suitable intervals on a scale of 1:1000 / 1:2000.**

The geological cross sections are prepared for every 35 m interval based on the updated geological plan on 1:1000 scales and The geological plan and sections are enclosed vides **Plate No – 4**.

**e) Broadly indicate the year wise future program of exploration, taking into consideration the future production program planned in next five years as in table below:**

The granite building stone are intrusive in nature and well exposed in the mine. As the granite building stone in this mining area is of proved nature, no exploration is proposed.

**f) Indicate geological and recoverable reserves and grade, duly supported by standard method of estimation and calculations along with required sections (giving split up of various categories i.e., proved, probable, possible) indicate cut-off grade. Availability of resources should also be indicated for the entire leasehold.**

The geological resources of granite building stones are estimated by cross sectional method and given in the **Table No 3.2**.

**Table No:3.2: The Geological Resources.**

Section No	Area (m <sup>2</sup> )	Influence (m)	Volume (m <sup>3</sup> )	Tonnage (T) BD 2.5T/m <sup>3</sup>	UNFC
A-A'	5506	57.5	316,595.00	791,487.50	332
B-B'	4167	40.5	168,763.50	421,908.75	332
<b>Total</b>			<b>485,358.50</b>	<b>1,213,396.25</b>	332

These resources of granite building stones are estimated in the 332 category of UNFC classification. For the estimation of geological resources the area is marked with sections

A-A' & B-B' with the interval of 35 m. The section wise sectional area is measured and multiplied by the influence to obtain the volume in  $m^3$ . The volume is multiplied by  $2.5T/m^3$  (BD) to calculate the resources of granite building stone in tonnes.

**g) Indicate mineral reserves by slice plan/level plan method, as applicable as per the proposed mining parameters.**

The reserves of granite building stone in tonnes are estimated out of indicated resources after deleting the granite building stone blocked in the 7.5m buffer area and ultimate benches. The granite building stone reserves are given in the Table No – 3.3

**Table No 3.3: Granite Building Stone Reserves**

Section No	Bench Level	Area (m <sup>2</sup> )	Influence (m)	Volume (m <sup>3</sup> )	Tonnage (T) BD 2.5T/m <sup>3</sup>	UNFC
A-A'	160	12	50	600.00	1,500.00	122
	155	47	50	2,350.00	5,875.00	122
	150	99	50	4,950.00	12,375.00	122
	145	167	50	8,350.00	20,875.00	122
	140	222	50	11,100.00	27,750.00	122
	135	273	50	13,650.00	34,125.00	122
	130	326	50	16,300.00	40,750.00	122
	125	167	50	8,350.00	20,875.00	122
	120	198	50	9,900.00	24,750.00	122
	115	183	50	9,150.00	22,875.00	122
	110	133	50	6,650.00	16,625.00	122
	105	85	50	4,250.00	10,625.00	122
<b>SUB TOTAL</b>				<b>95,600.00</b>	<b>239,000.00</b>	122
B-B'	160	12	33	396.00	990.00	122
	155	41	33	1,353.00	3,382.50	122
	150	77	33	2,541.00	6,352.50	122
	145	110	33	3,630.00	9,075.00	122
	140	103	33	3,399.00	8,497.50	122
	135	149	33	4,917.00	12,292.50	122
	130	199	33	6,567.00	16,417.50	122
	125	256	33	8,448.00	21,120.00	122
	120	333	33	10,989.00	27,472.50	122
	115	225	33	7,425.00	18,562.50	122
110	88	33	2,904.00	7,260.00	122	
<b>SUB TOTAL</b>				<b>52,569.00</b>	<b>131,422.50</b>	122
<b>GRAND TOTAL</b>				<b>148,169.00</b>	<b>370,422.50</b>	122

**h) Grades of granite building stone.**

The general analysis of granite building stone is given in the Table 3.4

**Table No 3.4: Analysis of granite building stone**

Minerals*	Percentage %
SiO <sub>2</sub>	72.0
Al <sub>2</sub> O <sub>3</sub>	13.1
Fe <sub>2</sub> O <sub>3</sub>	01.5
FeO	01.8
MgO	00.6
CaO	01.5
Na <sub>2</sub> O	03.5
K <sub>2</sub> O	04.8
H <sub>2</sub> O	00.7
TiO <sub>2</sub>	00.3
P <sub>2</sub> O <sub>5</sub>	00.1

\*Source: The Principles of Petrology by G W Tyrrell



## 4.0 MINING

- a) Briefly describe the existing/proposed method for developing/working the deposit with all design parameters.

It is a Virgin area. It is located in the Survey Nos. 1/100, 1 & 9, Tholambra Village. In these five years of the mining plan period it is proposed to work on all the sections from A-A' to B-B'. A crushing and screening plant is located outside the lease area.

It is proposed to produce maximum 50,130.00 tonnes granite building stone from this mine in III-Year by opencast semi-mechanised mining method. Jack hammer drilling blasting shall be adopted for mining along with rock breaker. Excavators shall be used for excavating and loading the material to the tippers. A team of 10 labours shall be deployed for the miscellaneous and environmental work.

The excavated material shall be transported to the crushing and screening plant located outside the lease area for crushing and sizing. The sized product shall be supplied to the consumer mainly for building construction and infrastructure development.

- b) Indicate quantum of development and tonnage and grade of production expected pit wise as in table below.

The year wise calculation of production for these five years of mining plan period is given in the Table No – 4.1. During mining the top soil shall be handled as waste. The same shall be used for the afforestation in the buffer zone. The quantity of generated top soil is given in Table No 4.2

**Table No. 4.1 Year-wise calculations of granite building stone production**

Year	Section No	Bench Level	Area (m <sup>2</sup> )	Influence (m)	Volume (m <sup>3</sup> )	Tonnage (T) BD 2.5T/m <sup>3</sup>
I-Year	A-A'	160	12	50	600.00	1,500.00
		155	47	50	2,350.00	5,875.00
		150	99	50	4,950.00	12,375.00
		145	84	50	4,200.00	10,500.00
	B-B'	160	12	33	396.00	990.00
		155	41	33	1,353.00	3,382.50
		150	77	33	2,541.00	6,352.50
		145	110	33	3,630.00	9,075.00
TOTAL					20,020.00	50,050.00
II-Year	A-A'	145	83	50	4,150.00	10,375.00



		140	222	50	11,100.00	27,750.00
	B-B'	140	103	33	3,399.00	8,497.50
		135	42	33	1,386.00	3,465.00
TOTAL					20,035.00	50,087.50
III-Year	A-A'	135	273	50	13,650.00	34,125.00
	B-B'	135	107	33	3,531.00	8,827.50
		130	87	33	2,871.00	7,177.50
TOTAL					20,052.00	50,130.00
IV-Year	A-A'	130	326	50	16,300.00	40,750.00
	B-B'	130	112	33	3,696.00	9,240.00
TOTAL					19,996.00	49,990.00
V-Year	A-A'	125	167	50	8,350.00	20,875.00
		120	64	50	3,200.00	8,000.00
	B-B'	125	256	33	8,448.00	21,120.00
TOTAL					19,998.00	49,995.00
<b>GRAND TOTAL</b>					<b>100,101.00</b>	<b>250,252.50</b>

**Table No. 4.2 Year-wise generation of top soil/waste**

Year	Section No	Area (m <sup>2</sup> )	Influence (m)	Volume (m <sup>3</sup> )	Tonnage (T) BD 1.6T/m <sup>3</sup>
I YEAR	A-A'	30	50	1,500.00	2,400.00
	B-B'	24	33	792.00	1,267.20
Total				2,292.00	3,667.20
II YEAR	A-A'	8	50	400.00	640.00
	B-B'	15	33	495.00	792.00
Total				895.00	1,432.00
III YEAR	A-A'	8	50	400.00	640.00
	B-B'	8	33	264.00	422.40
Total				664.00	1,062.40
IV-Year	A-A'	9	50	450.00	720.00
Total				450.00	720.00
V-Year	A-A'	17	50	850.00	1,360.00
	B-B'	9	33	297.00	475.20
Total				1,147.00	1,835.20
<b>GRAND TOTAL</b>				<b>5,448.00</b>	<b>8,716.80</b>

The summary of the production and development of waste is given in the Table No 4.3

**Table No 4.3: Summary of the production and development**

Year	Production (T)	Top Soil (T)	Total Handling (T)	Ratio
I-Year	50,050.00	3,667.20	53,717.20	1:0.07
II-Year	50,088.50	1,432.00	51,520.50	1:0.03
III-Year	50,130.00	1,062.40	51,192.40	1:0.02
IV-Year	49,990.00	720.00	50,710.00	1:0.01
V-Year	49,995.00	1,835.20	51,830.20	1:0.04
<b>Total</b>	<b>2,50,252.50</b>	<b>8,716.80</b>	<b>2,58,969.30</b>	<b>1:0.03</b>

The Year wise movement of the benches in pit during the five years mining is shown on the production and development plan enclosed vide **Plate No – 5A to 5E** respectively.

**c) Attach- Individual year wise plans & sections (in case of ‘A’ class mines):**

The year wise Production & Development at the end of every year (of all the five year) is given on the production & development Plan enclosed vide **Plate No 5A to 5E** and the production and development sections are enclosed vide **Plate No 6**.

**d) Attach supporting composite plan and section showing pit layouts, dumps, stacks of sub-grade mineral, if any, the year from which effected.**

The year wise Production & Development at the end of every year (of all the five year) is given on the production & development Plan enclosed vide **Plate No 5A to 5E** and the production and development sections are enclosed vide **Plate No 6**.

**e) Indicate proposed rate of production when the mine is fully developed, and the expected life of the mine and the year from which effected.**

The Geological resources of granite building stone in this area are 12,13,396.25 Tonnes and mineral reserves are 3,70,422.50 Tonnes. In the first five years of plan period totally 2,50,252.50 Tonnes granite building stone / aggregate shall be quarried. The balance mineral reserves shall be quarried in the subsequent mining plan period.

Considering the above the anticipated life of the mine is about 9 years.

The production plan for 1st five years is given bellow,

Year	Production
I-Year	50,050.00
II-Year	50,087.50
III-Year	50,130.00
IV-Year	49,990.00
V-Year	49,995.00
<b>Total</b>	<b>2,50,252.50</b>



The production plan for the remaining plan period is given bellow,

Year	Production
VI-Year	40,000.00
VII-Year	40,000.00
VIII-Year	35,000.00
IX-Year	5,170.00
<b>Total</b>	<b>1,20,170.00</b>

- f) **Attach a note furnishing a conceptual mining plan for the entire lease period (for 'B' category mines) and up to the life of mine (for 'A' category mines) based on the geological, mining and environmental considerations.**

**Conceptual mining plan:**

For any mine, preparation of conceptual mining plan amounts to, fore-seeing in totality and planning for mining and related activities through-out its life span, till such time all the usable ore / minerals are exhausted to the economical limits and lease area is reclaimed to the extent possible. Apart from physico-chemical and mineralogical parameters which form primary basis for compilation of conceptual mine plan, several other factors such as economic viability, safety, environment, sustainable development, marketability and the norms laid down by the Government agencies from time to time do play important roles, with ever increasing and changing needs of humanity, coupled with technological advancements.

A Conceptual Plan of the Lease area and conceptual sections are enclosed vide **Plate No. 7.**

- (i) **Mineral reserves and anticipated life of the mine:**

The Geological resources of granite building stone in this area are 12, 13,396.25 Tonnes and mineral reserves are 3,70,422.50 Tonnes. In the first five years of plan period totally 2,50,252.50 Tonnes granite building stone / aggregate shall be quarried. The balance mineral reserves shall be quarried in the subsequent mining plan period.

Considering the above the anticipated life of the mine is about 9 years.

The production plan for 1st five years is given bellow,

Year	Production
I-Year	50,050.00
II-Year	50,087.50
III-Year	50,130.00
IV-Year	49,990.00
V-Year	49,995.00
<b>Total</b>	<b>2,50,252.50</b>



The production plan for the remaining plan period is given bellow,

Year	Production
VI-Year	40,000.00
VII-Year	40,000.00
VIII-Year	35,000.00
IX-Year	5,170.00
<b>Total</b>	<b>1,20,170.00</b>

**(ii) Exploration:**

The granite building stone in the lease area are of intrusive nature with good exposures in outcrops. Hence no exploration proposal is made.

**(iii) Mine Development:**

At conceptual stage there shall be single pit in this area with 12 benches of 5m height and 5m width. The pit at conceptual stage shall have 132 m length and 97 m width and it shall be developed upto 105m above MSL level. The overall pit slope shall be maintained at less than 45°.

The top benches at the conceptual stage shall be spread with topsoil and pisciculture with good local bio-diversified vegetation will be made. The bottom most benches at the conceptual stage shall be converted into rain water pond. The pit shall be properly fenced with single opening for drawing the water.

Totally 8,716.80 Tonnes top soil shall be recovered and 2,50,252.50 Tonnes granite building stone shall be generated in the first five years of the plan period. Any excess waste will be transported to the pre-determined dump location as shown in the Production & Development plan.

**(iv) Environmental Aspects:**

A safety barrier area of 7.5m from the boundary shall be developed as green belt area by planting the local species. At conceptual/Mine Closure stage the working pit shall be developed for pisciculture with good local bio-diversified vegetation. Totally 0.3893 Ha safety barrier area shall be used for green belt. Apart from this the plantation shall be carried out outside the lease area along haulage road.

A garland drain is proposed all along periphery of mining area to prevent the entry of rain water in the pit. The water from garland drain shall be diverted to silt settling tank & rain water harvesting pond before releasing to natural water course.



During mining the main source of air pollution is expected to be drilling, blasting and transportation. The regular sprinkling of water on haulage road and stopping drilling and blasting during high wind shall drastically reduce impact on air.

The present land use, proposed land use for the plan period and at conceptual stage is given in the Table No 4.2.

**Table No. 4.4: Ultimate land use at the end of mine**

Particulars	Land use pattern at present stage (Ha)	Land use pattern (end of progressive stage) (Ha)	Land use pattern at Conceptual stage (Ha)
Area for mining / mining activities	-	0.9977	1.0728
Area for Roads	-	-	-
Area for Safety Barrier / Green belt	-	0.3893	0.3893
Overburden / dump/ tailing dump	-	0.0751	-
<b>Total</b>	<b>0.0000</b>	<b>1.4621</b>	<b>1.4621</b>
Unused area	1.4621	-	-
<b>Total Lease area</b>	<b>1.4621</b>	<b>1.4621</b>	<b>1.4621</b>

\* Road area inside the mine Lease is not shown separately. Since the material is transported on the benches the road area is therefore included in the mining area.

**g) Opencast Mines:**

**i. Describe briefly giving salient features of the mode of working (mechanized, semi-mechanized, and manual):**

In this five years plan period the mining is proposed by opencast semi-mechanized mining method and the sequence of mining shall be as given under,

- The top soil shall be recovered and transported to the safety barrier area for utilizing the same for afforestation / green belt development.
- After exposing the granite building stone, drilling shall be done by jack hammer.
- The blasting shall be carried out by Cartridge Slurry explosives.
- The rock breakers shall be used to break the oversize boulders left after blasting.
- The blasted material and the broken material by rock breakers of size 150mm to 250mm shall be loaded to the tippers by excavator and transported to the crushing and screening plant located outside the lease area.

The year wise planning, production & development of the mine is as given under,

**I-Year : -**

The mining in the I-year shall be done on the section A-A' to B-B'. It is proposed to develop four benches of 5m height & 5m width to produce 50,050.00T granite building stones. The simultaneous recovery of topsoil is expected to be 3,667.20T. At the end of I-Year the size of the pit shall be 52m in length & 97m in width. The mining operation shall be reach to the level of 145m above MSL.

**II-Year : -**

The mining in the II-year shall be done on the section A-A' to B-B'. It is proposed to develop six benches of 5m height & 5m width to produce 50,087.50T granite building stones. The simultaneous recovery of topsoil is expected to be 1,432.00T. At the end of II-Year the size of the pit shall be 78m in length & 97m in width. The mining operation shall be reach to the level of 135m above MSL.

**III-Year : -**

The mining in the III-year shall be done on the section A-A' to B-B'. It is proposed to develop seven benches of 5m height & 5m width to produce 50,130.00T granite building stones. The simultaneous recovery of topsoil is expected to be 1,062.40T. At the end of III-Year the size of the pit shall be 95m in length & 97m in width. The mining operation shall be reach to the level of 130m above MSL.

**IV-Year : -**

The mining in the IV-year shall be done on the section A-A' to B-B'. It is proposed to develop seven benches of 5m height & 5m width to produce 49,990.00T granite building stones. The simultaneous recovery of topsoil is expected to be 720.00T. At the end of IV-Year the size of the pit shall be 96m in length & 97m in width. The mining operation shall be reach to the level of 130m above MSL.

**V-Year : -**

The mining in the V-year shall be done on the section A-A' to B-B'. It is proposed to develop nine benches of 5m height & 5m width to produce 49,995.00T granite building stones. The simultaneous recovery of topsoil is expected to be 1,835.20T. At the end of V-Year the size of the pit shall be 132m in length & 97m in width. The mining operation shall be reach to the level of 120m above MSL.

The mining shall be done by developing the benches of 5m height with 5m ultimate width. At the end of fifth year of mining totally there shall be 9 benches developed in this mine. The level of the bottom most bench shall be 120m above MSL. The pit slope shall be 45°. In these five years of the plan period a pit of 132m in length & 97m width shall be formed.

The year wise (of all the five years) pit design is shown on the Production & Development Plan enclosed vide **Plate 5A to 5E** and the year wise movement of the benches is shown on the Production & Development Sections enclosed vide **Plate No 6**.

**ii. Describe briefly the layout of mine workings, the layout of faces and sites for disposal of over burden/waste.**

The year wise layout of the mine is shown on the year wise production and development plan enclosed **Plate No 5A to 5E** and production and development sections enclosed vide **Plate No 6**. As there is no over burden or side burden, there is no requirement for any area for disposal of waste.

**h) Underground Mines:**

Not Applicable

**i) Extent of Mechanization**

The mining shall be carried out by deploying one excavator and three tippers for the maximum total handling of 53,717.20 Tonnes material in I-year. And three units of jackhammer drilling are required. One water tanker shall be deployed for the sprinkling of water, and jeep for travelling of the staff to mine site.

**1. Drilling Machines**

During this mining plan period, the maximum production estimated is about 50,130.00 Tonnes in III-year. The drilling and blasting in granite building stone is 100%. It is proposed to drill with jackhammer with 33/48mm dia bit. The calculations for required no of drilling units are given below.

Total material handled (max.) per annum shall be 50,130.00 T

Hole depth	--	1.5 m
Burden	--	1.m
Spacing	--	1.5m

Therefore the drilling machine required per year is calculated as under:



Rock broken / hole of 1.5 m depth

Spacing x Burden X Depth x efficiency x B.D. (2.5T/m<sup>3</sup>)

1m x 1.5m x 1.5m x 80% X 2.5 BD=4.5 Tonnes

Therefore, rock broken/m = 4.5 Tonnes/1.5 m = 3 Tonnes /m

Drilling meterage required/yr =  $\frac{50,130}{3} = 16,710\text{m}$

Therefore drilling required per day = 16,710/300 days = 55.7 m/day

The jack hammer can drill about 50m per shift.

Hence the number of jack hammer drill units required = (55.7/day) / 50m each  
= 1.39 units

Considering 80% availability number of units required = (1.39\*20%) + 1.39 = 1.66

Additionally, 1 jack hammer required.

Hence 3 units of jack hammer are required for drilling and blasting in this area for single shift. Considering the working single shift from 6am to 1pm totally 3 jack hammer drill units are required.

**Table No. 4.3: Requirement of Jack Hammer Drilling Machines**

Type	No's	Dia. of hole (mm)	Make	Motive Power	H.P
Pneumatic Jack Hammer Drill	3	33/48	Atlas Capco	Diesel	40

## 2. Loading Equipment

During this mining plan period, the maximum handling estimated is about 53,717.20 Tonnes in I-year. Out of which 50,050.00 Tonnes granite building stone and 3,667.20 tonnes of top soil.

So, total handling per day = 53,717.20/300days = 179.05 tonnes

Total handling of 179.05 tonnes per day (for 300 working days) shall be loaded in the tippers by excavator. The loading capacity of excavator PC 220 in such terrain is 125Tonnes /hour.

The calculations of the excavators require are given below.

Tonnage proposed to be handled per hour

= 179.05 Tonnes / 7hours = 25.57 tonnes



### No. of Excavator

One excavator can handle 125 tonnes/hour in such terrain. And hence considering 80% availability, 1 excavator can handle 100 tonnes/hour.

Thus one 1 excavator can make (100 X 7 hours) seven hundred tonnes per day

So to handle 25.57 tonnes, we require 0.26 No. of excavators.

Hence Number of excavators required is 1.

**Table No 4.5: Requirement of Loading Equipment.**

Type	No's	Capacity	Make	Motive Power	H.P
Excavator	1	1.2m <sup>3</sup> bucket capacity	Tata Hitachi 220	Diesel	140

### 3. Haulage and Transport Equipment

#### a. Material Handling

Totally 53,717.20T material shall be handled in the 1-year. Out of that 50,050.00 tonnes granite building stone shall be transported to the crushing and screening plant outside the lease area and 3,667.20 tonnes of top soil to be transported to buffer zone where plantation to be carried out.

The requirements of the tippers to handle this material is calculated below,

Total Handling / day = 53,717.20/300 days = 179.05 tonnes/day

No of tippers = (179.05 / 10tonnes per trip / 2trips per hour / 7-hour effective shift) =1.27 units.

Considering 80% efficiency No. tippers required will be = 1.52

Additionally, 1 tipper shall be used as spare

Hence 3 tippers are required for mining

The requirement of the transport equipment is given in the Table No 4.6

**Table No 4.6: Requirement of transporting equipments**

Type	No's	Size/ Capacity	Make	Motive Power	H.P
Tipper	3	10 tonnes	Tata	Diesel	97

#### b. Transport from mine head to the destination

The broken material would be directly transported to the crusher outside the quarry by the same tipper. No additional tippers are required for the transportation.



**4. Miscellaneous:**

**Describe briefly any allied operations and machineries related to the mining of the deposit not covered earlier operations**

For afforestation one water tankers with spraying arrangement shall be deployed.

The details of the equipment required for miscellaneous is given in the Table No 4.8

**Table No. 4.8: Requirement of the equipments for miscellaneous**

Type	Nos.	Size/Capacity	Make	Motive Power	H.P
water tanker	1	8000	Tata	Diesel	97
Jeep	2	1+4	Mahindra	Diesel	40



## 5.0 BLASTING

- a) Broad blasting parameters like charge per hole, blasting pattern, charge per delay, maximum number of holes blasted in a round, manner and sequence of firing etc.

BLASTING			
1.	Burden x Spacing x Depth	:	1m X 1.5m X 1.5m depth
2.	Number of holes	:	10
3.	Dia of holes	:	33 mm/48mm
4.	Depth of each hole	:	1.5m
5.	Explosives to be used	:	Cartridged Slurry explosives
6.	Powder factor	:	3 Tonnes/kg
7.	Consumption of explosives per year	:	50,130.00 Tonnes / 3 tonnes/kg powder factor =16,710kg

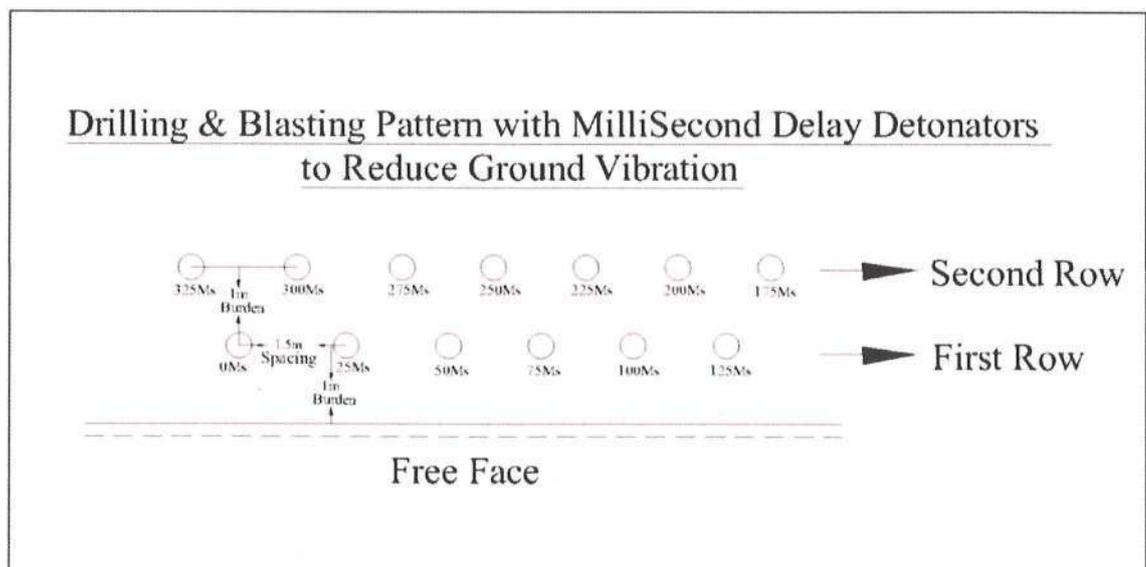
**i. Blasting Pattern :**

In case of jack hammer the blasting pattern shall be staggered, however, it would vary depending on the rock condition.

**ii. Manner and sequence of firing:**

In case of jack hammer the blasting pattern shall be staggered, however, it would vary depending on the rock condition. The rock shall be blasted and sequenced using delay detonators for least vibrations & fly rock.

Controlled Blasting techniques with Electric and Non-electric (Nonel) delay detonators will be carried out to reduce ground vibration.





- b) Type of explosives used/to be used**  
Cartridged Slurry explosives shall be used for the blasting.
- c) Powder factor in ore and overburden/ waste / development heading / stope.**  
3 Tonnes / kg
- d) Whether secondary blasting is needed, if so, describe in brief :**  
No secondary blasting shall be undertaken. Rock broken shall be used to Break down the bigger boulders.
- e) Storage of explosives (like capacity & type of explosive magazine):**  
There is no explosive magazine within the mining area.



## **6.0 MINE DRAINAGE**

- a) **Likely depth of water table based on observations from nearby wells and water bodies :**

The mine is located at higher elevation on hill and the water table in the mine is much more below the general surface, however a few perched aquifers has been observed at a distance of about 132m from the boundary of the mine. Here we have observed water level to be about 12m from the surface.

- b) **The deepest workings expected to reach.**

The expected deepest mining operation shall be about 105m above MSL, which will be much above the ground water table.

- c) **Quantity and quality of water likely to be encountered, the pumping arrangements and places where the mine water is finally proposed to be discharged.**

No ground water would be encountered during mining.

**7.0 STACKING OF MINERAL REJECTS & DISPOSAL OF WASTE**

- a) Indicate briefly the nature and quantity of top soil, overburden/waste and mineral rejects likely to be generated during the next five years :

As there is no overburden / waste other than top soil, the year wise and section wise generation of topsoil is given in the Table No 7.1.

**Table 7.1 details of the waste generation**

Year	Section No	Area (m <sup>2</sup> )	Influence (m)	Volume (m <sup>3</sup> )	Tonnage (T) BD 1.6T/m <sup>3</sup>
I YEAR	A-A'	30	50	1,500.00	2,400.00
	B-B'	24	33	792.00	1,267.20
Total				2,292.00	3,667.20
II YEAR	A-A'	8	50	400.00	640.00
	B-B'	15	33	495.00	792.00
Total				895.00	1,432.00
III YEAR	A-A'	8	50	400.00	640.00
	B-B'	8	33	264.00	422.40
Total				664.00	1,062.40
IV-Year	A-A'	9	50	450.00	720.00
Total				450.00	720.00
V-Year	A-A'	17	50	850.00	1,360.00
	B-B'	9	33	297.00	475.20
Total				1,147.00	1,835.20
<b>GRAND TOTAL</b>				<b>5,448.00</b>	<b>8,716.80</b>

Threshold values in respect of apatite and rock phosphate, bauxite, barytes, chromite, chinaclay/kaolin, fluorite, graphite, gypsum, iron ore, kyanite and sillimanite, copper ore, manganese, magnesite, talc/steatite/soapstone, and wollastonite minerals as evolved by IBM may be adopted as applicable.

Not applicable

- b) **Land chosen for disposal of waste with proposed justification.**

The topsoil recovered during mining shall be used for afforestation / green belt development in the earmarked 0.3893Ha safety barrier area.

- c) **Attach a note indicating the manner of disposal, and configuration, sequence of buildup of dumps along with the proposals for the stacking of sub-grade ore to be indicated item wise.**

No overburden / waste or sub grade is going to generate during the mining plan period.



## **8.0 USE OF MINERAL**

- a) Describe briefly the end-use of the mineral (sale to intermediary a parties, captive consumption, export and internal use).**

The granite building stones are used mainly as a basic filling material in construction, infrastructure development and road making.

- b) Indicate the physical and chemical specifications stipulated by some of the buyers.**

The tumbler index of granite building stone should be +85; the size should be 150mm to 250mm, suitable for feed do the crushers.

- c) Give details in case of blending of different grades of ores is being practiced or is being practiced at the mine to meet specifications stipulated by buyers.**

Not applicable



## 9.0 OTHERS

### a) Site Services :

The site services at mine shall take care of the workers requirements of food, shelter, water, emergency first aid services as well as equipment maintenance services in addition to recreational facilities for the employees, workmen and their families.

The following statutory and administrative facilities shall be made available near the mine site.

- Rest Shelter
- First Aid Station
- Latrines/Urinals
- Canteen
- Water supply for drinking purposes

The above site services shall be provided outside the lease area.

### b) Employment potential :

The list of the staff and workmen employed in the mine is given Table No 9.1

**Table No 9.1: Requirement of workmen & staff**

Sl. No	Particulars	No's
1	Highly Skilled	1
2	Skilled	5
3	Semi-skilled	8
4	Un-skilled	10
	<b>Total</b>	<b>24</b>

One Mines Manager cum Engineer shall be in-charge of the site operations. Apart from the above said direct employment twice the number of employments would happen as indirect employment during the mine operations.



## **10.0 MINERAL PROCESSING**

- a) **If processing/beneficiation of the ore or minerals mined is planned to be conducted on site or adjacent to the extraction area, briefly describe the nature of the processing/beneficiation. This should indicate size and grade of feed material and concentrate (finished marketable product), recovery rate.**

No processing / beneficiation would be under taken in the lease area. The entire product of rock of size 150mm to 250mm shall be transports to the crusher outside the lease area.

- b) **Explain the disposal method for tailings or waste from the processing plant (quantity and quality of tailing proposed to be discharged, size and capacity of tailing pond, toxic effect of such tailings, if any, with process adopted to neutralize any such effect before their disposal and dealing of excess water from the tailing dam).**

There is no crushing and screening within the lease. The entire rock produced would be transported for the crusher outside the lease area. As all the products are saleable, there would be no generation of waste.

- c) **A flow sheet or schematic diagram of the processing procedure should be attached.**

There is no crushing & screening plant within the lease area.

- d) **Specify quantity and type of chemicals to be used in the processing plant.**

Not Applicable

- e) **Specify quantity and type of chemical to be stored on site/plant.**

Not Applicable

- f) **Indicate quantity (cu.m per day) of water required for mining and processing and sources of supply of water. Disposal of waste water and extent of recycling.**

The requirement of water for the purpose of drinking, dust suppression by water tanker and afforestation as given in Table No 10.1

**Table.No.10.1 Requirement of water**

Purpose	Qty Required m <sup>3</sup> /day
Drinking water & Domestic	3
Afforestation	7
Dust suppression by water tanker	8
<b>Total</b>	<b>18*</b>

\*Water for dust suppression and afforestation may not be required for four to five months during the monsoon

- The required water for domestic, dust suppression and afforestation shall be brought from the Rain Water Harvesting Pond, nearby old abandoned quarries.
- Water required for drinking purpose shall be provided from RO filters/mineral water cans.

**PART - II****11.0 ENVIRONMENTAL MANAGEMENT PLAN****a) Attach a note on the status of baseline information with regard to the following :**

This Granite Building Stone Quarry, over an extent of 1.4621 Ha. (3.6128 Acres) is located on the SE slopes of hillock. It is a working area. The highest elevation in this area is 160.0m above MSL and the lowest elevation is 105.0m above MSL.

The area has moderate climate with maximum temperature of 28.4<sup>0</sup> to 36.9<sup>0</sup>C in the month of April and minimum temperature of 19.7<sup>0</sup> to 23.9<sup>0</sup>C in the month of December. The area receives a total annual rain fall of around 3438mm. The highest rainfall is received in the month of July.

The area is surrounded by the lands with commercial crop like rubber plantation, teak, rose wood, pepper, cashew, coconut, aeracanut, coffee, coco, mango, jackfruit etc. Snakes, Squirrel, Rats, Crow, Sparrow, Pigeon Butterfly & Insects are seen periodically. The nearest habitant Panambatta is located at 1.0 Kms away from this mine. No public buildings, monuments exist inside the mining area.

**Existing land use pattern indicating the area already degraded due to mining/pitting, dumping, roads, processing plant, workshop, township etc., in a tabular form.**

The existing land use pattern is given in the Table No 11.1

**Table No. 11.1 Existing land use Pattern.**

Particulars	Land use pattern at present stage (Ha)
Area for mining / mining activities	0.00
Area for Safety Barrier/Greenbelt	-
Roads	-
Total	0.00
Unused area	1.4621
<b>Total Lease area</b>	<b>1.4621</b>

➤ **Water regime**

The area receives a total annual rain fall of around 3438mm. The rains start in the month of April and continue up to November. It is maximum in the month of July. A water course at the northeast side and outside the lease drains the rain water.



## Flora and Fauna

The common flora in this area are given in the Table No 11.2

**Table No 11.2: Common Flora in study area**

SI No	Botanical Name	Common Name
1	Coffee Arabica	Coffee
2	Tectonagrandis	Teak wood
3	Areca catechu	Aeracanut
4	Artocarpusheterophyllus	Jackfruit
5	BorassusFlabellifer	Pana
6	Ensetesuperbum	Rock Banana
7	Schleicheraoleosa	Poovam
8	Cocosnucifera	Coconut
9	Anacardiumoccidentale	Cashew
10	Grevillearohusta	Silver oak
11	Boutelovadactyloides	Buffalo grass
12	Oroxylumindicum	Palakapayyani
13	LepidiumMeyenii	Maka
14	MacarangaPeltata	Vatta
15	Abrusprecatorius	Kunni
16	Piper nigrum	Pepper
17	Heveabrasiliensis	Rubber tree
18	Artocarpusaltilis	Kadaplavu
19	Mangiferaindica	Mango
20	Grewiatilifoliavahl	Chadachi
21	Dalbergialatifolia	Rosewood
22	Chromolaenaodorata	Communist Pacha
23	Bambuseae	Bamboo
24	Theobroma Cacao	Cocoa

The common fauna in this area is given in the Table No 11.3

**Table No 11.3: Common Fauna in study area**

SI No	Scientific Name	Common Name
1	Funambulus palmarum	Annan, Palm squirrel
2	Herpestes edwardsi	Common Grey Mongoose
3	Bandicota bengalensis	Bandicoot, Peruchazhi
4	Ranahexadactyla	Frog

## Quality of Air, Ambient Noise Level and Water

### 1. Ambient air quality

The air quality in the area mainly depends on the nature & concentration of emissions and meteorological conditions. The major air pollutants include:

- Particulate Matter (Dust) of various sizes
- Gases, such as, Sulphur Dioxide, Oxides of Nitrogen, Carbon Monoxide etc. from vehicular exhaust.



Dusts are the single largest air pollutant observed in this area. Diesel operating vehicles produces NO<sub>x</sub>, SO<sub>2</sub> and CO emissions, usually at low levels. Dust can be a significant nuisance to surrounding land users and potential health risk in some circumstances. Dust is produced from a number of sources and through number of mechanisms such as

- Land clearing,
- Overburden removal,
- Crushing & screening,
- Loading & unloading of material on site &
- Subsequent transport off the site etc.

The detected ambient air quality is given in the Table 11.4

**Table No 11.4: Detected AAQ in core & buffer zone.**

Area	Sample Code	PM 10 µg/m <sup>3</sup>	PM 2.5 µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>x</sub> µg/m <sup>3</sup>
Core Zone	A1	32.4	14.8	12.6	12.4
Panambatta	A2	28.4	12.6	10.8	8.2

The Environment monitoring data is enclosed as **Annexure – 10**.

**Noise levels:**

The noise level with in the core zone is found to be 55.34 dB(A) Leq\* during day time and 45.68 dB(A) Leq\* during night, whereas in the buffer zone it is 51.61 dB(A) Leq\* during day time and 47.93 dB(A) Leq\* during night time. The impact of mining on the ambient noise level would be hardly noticeable in nearby villages, as the nearest habitant Panambatta is 1.0 Kms away from the mine.

The detected noise level is given in the Table 11.5

**Table No 11.5: Detected noise level in core & buffer zone.**

Area	Sample Code	Max dB(A)	Min dB(A)
Core Zone	N1	55.34	45.68
Panambatta	N2	51.61	47.93

The Environment monitoring data is enclosed as **Annexure – 10**.



### **Water Quality:**

There is no water regime of any importance in the mining area. Drinking water is made available through bore wells. This water is being used for drinking purpose from many years. In buffer zone the minimum pH value of water is detected as 7.10 in Panambatta, total dissolved solids detected minimum 92mg/l in Panambatta. The total hardness of water is detected minimum 68.0mg/l in Panambatta. The Environment monitoring data is enclosed as-**Annexure – 10**.

### ➤ **Climatic conditions:**

The area has moderate climate with maximum temperature of 28.4<sup>0</sup> to 36.9<sup>0</sup>C in the month of April and minimum temperature of 19.7<sup>0</sup> to 23.9<sup>0</sup>C in the month of December. The area receives average rain fall of more than 3438mm. The highest rainfall receives in the month of July. The rains start in the month of June and continue upto November. It is maximum in the month of July.

### ➤ **Human settlement:**

There is no human settlement in core zone. The nearest habitants are more than 100m away from the boundary of the mining lease area. The nearest human settlements are in Panambatta, which is about 1.0 Kms from the mining lease area.

### ➤ **Public buildings, places of worship and monuments historical or archaeological importance:**

There are no monuments of either historical or archaeological importance in the core or buffer zone.

### ➤ **Attach plans showing the locations of sampling stations:**

The environment monitoring is carried out for 15days and the location of sampling station is given in the key plan.

### **b) Attach an Environmental Impact Assessment Statement describing the impact of mining and beneficiation of environment on the following over the next five years and up to conceptual plan period 'A' category mines.**

- i. Land area indicating the area likely to be degraded due to mining, pitting, dumping, road, workshop, processing plant, township etc.**



Due to this mining operation there shall be an impact on the environment. The area broken for mining at the end of five years of the mining plan period and at the conceptual stage is given in the Table No 11.6.

**Table no.11.6 Land use at the end mining plan period and life of the mine**

Particulars	Land use pattern at present stage (Ha)	Land use pattern (end of progressive stage) (Ha)	Land use pattern at Conceptual stage (Ha)
Area for mining / mining activities	-	0.9977	1.0728
Area for Roads	-	-	-
Area for Safety Barrier / Green belt	-	0.3893	0.3893
Overburden / dump/ tailing dump	-	0.0751	-
<b>Total</b>	<b>0.00</b>	<b>1.4621</b>	<b>1.4621</b>
Unused area	1.4621	-	-
<b>Total Lease area</b>	<b>1.4621</b>	<b>1.4621</b>	<b>1.4621</b>

\* Road area inside the mine Lease is not shown separately. Since the material is transported on the benches the road area is therefore included in the mining area.

The land use pattern at the end of first five years of plan period is given in PMCP enclosed vide **Plate No-10** and the ultimate land use pattern at conceptual stage is enclosed vide **Plate No-7**.

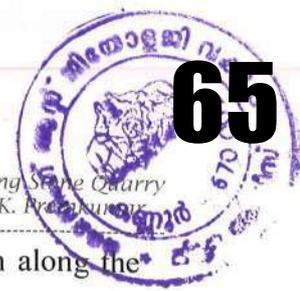
## ii. Air Quality

The quality of air in lease area would be deteriorated to certain extent due to drilling, blasting and transportation of the rock produced. However, the following environment control measures and the mitigating measures to control air pollution due to mining operations shall be undertaken, so that the pollution levels are maintained well within the permissible limits.

### **CONTROL MEASURES:**

#### **A. QUARRYING**

- Dust suppression systems (water spraying) would be adopted at mine working & loading points.
- Wet Drilling shall be Practiced to reduce dust generation.
- Speed control on vehicle movement, to limit speed.
- The blasting shall be carried out during day hours, it shall be avoided during strong wind and temperature inversion condition.
- Excavation operations shall be suspended during very strong wind condition.



- Wind reduction control by plantation. Trees and shrubs will be grown along the Green belt area/safety barrier area along the periphery of the quarry and along the haul roads.
- Plantation of wide leaf trees, creepers and tall grass along approach roads, and around hillock will help in to suppress the dust.
- Proper tuning of excavators and compressors will be ensured to keep the gas emissions from the vehicles within the prescribed norms of the CPCB and MoEF guidelines.
- All workers shall be provided with personal protective devices eg. Dust Mask, Goggles, Helmet, etc.

### iii. Water Quality

There is no water source of perennial type passing through the area. The lease area is located at higher elevation on the area and here the ground water level is much more below the general surface on the lowest portion. Hence no ground water would be encounter during mining as the mining is proposed to extend up to 15m depth from the lowest level of the lease area. Hence there shall not be any impact on water quality. Also granite building stone being a very stable material and is not hazardous material does affect the water quality. The following mitigating measures for the surface run offs has been incorporated.

#### MITIGATING MEASURES:

The following mitigation measures are suggested for water management and water pollution control.

- Garland drains shall be constructed all along the periphery of the quarry. The garland drain shall be routed through Silt Settling Tank (SST) to remove suspended soils and the overflow water shall be discharged to natural water course. A Rain Water Harvesting Pond (RWHP) is also envisaged for the use of the surface water. The SST & RWHP is proposed in the SE of the Mining Lease area.
- Settling tanks and drains shall be periodically de-silted.
- Providing sufficient gully checks to check any silt flowing along with the surface run-off during monsoon. The environment management measures for the surface water



run offs are shown in the Environment Management Plan enclosed vide **-Plate No 8 & 9.**

- No toilet is planned within the mine area. However, the toilets built at the site office, shall be provided with septic tanks to handle the sewage from the same.
- The quality of the water in the surrounding area and the Pre & Post monsoon water quality shall be monitored to track any changes or contamination in the water quality.
- The working of quarry at present shall be restricted at 105m above MSL at conceptual stage of quarrying, which is much above the ground water level.

**iv. Noise Levels**

The noise level with in the core zone is found to be 55.34 dB(A) Leq\* during day time and 45.68 dB(A) Leq\* during night, whereas in the buffer zone it is 51.61 dB(A) Leq\* during day time and 47.93 dB(A) Leq\* during night time. The impact of mining on the ambient noise level would be quite insignificant, in the nearby villages as the nearest habitants are beyond 101m from the boundary of the mining lease area and human settlements are in Panambatta which is about 1. 0 Kms away from the mine.

➤ **Control Measures:**

- Identification of mitigation measures for noise abatement for both point sources and line sources are undertaken and measures to minimize the impact is proposed.
- The equipments and machines shall be maintained properly. Particular attention shall be given to the silencers and mufflers.
- Use of sharp drilling bits, delivery of compressed air at optimal pressure and proper maintenance of compressor, drilling machine, jackhammers and tipper trucks.
- Limiting the speed of empty haulage vehicles/tippers to a moderate level to prevent undue noise.
- In addition to it, Green belt development shall be undertaken around the quarry lease area to minimize propagation of noise.
- Provision of rotation of workers to minimize exposure time as well as provision of earmuffs to workers exposed to high noise areas is also envisaged.
- Regular monitoring of noise level shall be done within the core zone and the buffer zone of the mining lease area.



### **Vibration levels (due to blasting)**

The drilling is proposed by jack hammer with 33mm/48mm dia. The blasting shall be done sequentially. Due to very small diameter hole blasting, the vibration in this area shall well within the permissible limits. Delay shall be used for blasting keeping the vibration to minimum with least fly rock.

Thus the vibration would not be of significance as the nearest habitants are beyond 101m from the boundary of the mining lease area and human settlements are in Panambatta, which is about 1.0 Kms away from the mine.

### **Control Measures:**

#### **VIBRATION & NOISE MITIGATION MEASURES (BLASTING PRECAUTIONS):**

- Only small diameter drill holes of 33/48mm diameter with 25mm diameter cartridge slurry/ emulsion explosives shall be used for blasting, no large diameter holes are proposed for the blasting. With optimum blast design, effective blasting techniques with delay detonators and low charge per delay, care shall be taken to limit the blast vibrations and the PPV below 10mm per second, i.e. within the permissible limits, vide DGMS circular 7 of 1997.
- Each blast would be is carefully planned, supervised, executed and observed by qualified Blasters.
- Design of optimum blast hole geometry i.e. burden, spacing, Blast hole layout pattern, inclination and depth considering, burden, nature of the rock, safe working space, fragmentation size, etc., to keep the flyrock, noise and ground vibrations at the minimum.
- Blasting shall be done using appropriate delay detonators to keep the noise and vibration at the minimum levels.
- Proper sequencing of the blast so as to keep the vibration, noise and flyrock to the minimum levels.
- The appropriate Charge per delay shall be regulated to keep the PPV below 10mm/ sec as per DGMS Circular 7 of 1997.
- The holes shall be proper stemmed and the stemming of each hole shall be checked by the qualified blaster to avoid 'blown thorough' holes, that is one of the major source of noise and Airblast during primary blasting.



- No secondary blasting like Pop Shooting or Plaster Shooting shall be undertaken for breaking down large boulders so as to avoid Airblasts and Fly rocks. Only rock breakers will be used for breaking down the bigger boulders
- Where ever house or public buildings at a distance of 50 to 100m the controlled blasting techniques like cushion blasting Muffle Blasting will be adopted

**v. Socio-economics**

**Social and demographic profile:** The mine is situated in the remote area, where the socio- economic status of the people is not satisfactory. The main occupation of the people is working in plantation and there are no major industries in this area. The mining operation in such remote places would provide 24 direct and twice the number of indirect employments to local people. Hence mining operation will help in improving socio-economic status of the area.

**vi. Occupational health and safety hazards:**

The statutory norms shall be followed during the course of mining to ensure the proper health and safety of workers. All the health and safety aspects as per the requirement and standards of the DGMS shall be followed to ensure the health and safety of all persons employed at the mine. Apart from this there is no other factor envisaged during the mining operations.

**vii. Human settlement:**

The local population is well settled in the nearby villages. There is possibility of the migrating the laborers from surround area to the nearby villages due to increase in revenue earning in this area. There shall be better development of infrastructure due to mining activities.

**viii. Recreation facilities:**

As of now there are not much recreational facilities available. Recreation facilities would be improved once the mining start and financial position of workers develop. The company also plans to provide good facilities as part of the CSR works.

**viii. Historical monuments etc.**

There are no historical monuments in the core or buffer zone.



- c) **Attach an Environmental Management Plan (supported by appropriate plans and sections and time-bound action proposed to be taken with sequence & timing in the following diagrams should be used).**

**Temporary storage and utilization of top soil.**

Totally 8,716.80 tonnes soil is expected to be generated. This topsoil shall be transported to the safety barrier area and used for afforestation / green belt development all along periphery of the mine.

- **Year wise proposal for reclamation of land affected by abandoned mines and their mining activity during first five years (and up to conceptual plan period for ‘A’ category mines, clarifying to extent back filling and re-contouring and/or alternative use of unfilled/partially filled excavations to sides/slopes and mine.**

The mining operations during these five years of the plan period are planned upto 120m above MSL. At conceptual stage the pit shall be developed for pisciculture with good local bio-diversified vegetation. The reclamation measures are shown on the environment management plan enclosed vide **Plate No - 9.**

- **Programme for afforestation, year wise for the initial five years (and up to conceptual plan of ‘A’ category mines) indicating number of plants with name of species to be demarcated in areas in hectares.**

0.3893 Ha area earmarked for safety barrier shall be developed as green belt by planting minimum but not limiting to 700 local species. wherever if it is not possible to undertake plantation for greenbelt in the safety zone area, the same plantation will be done in the nearest possible area to Develop a good green belt for environmental protection. Till conceptual stage totally 0.3893Ha area shall be covered under green belt. Apart from this Afforestation shall be done on the haulage road by planting 1300 saplings.

The afforestation program is given in the Table No 11.7

Table No 11.7: Afforestation program

Year	No of Plants	Green Belt area covered	Location
I-Year	400 saplings	0.07786 Ha	Green belt area & Haulage Road
II-Year	400 saplings	0.07786 Ha	
III-Year	400 saplings	0.07786 Ha	
IV-Year	400 saplings	0.07786 Ha	
V-Year	400 saplings	0.07786 Ha	
	<b>2000 saplings</b>	<b>0.3893 Ha</b>	



- **Stabilization and vegetation dumps along with waste dump management for next five years (and up to conceptual plan period for 'A' category mines).**

Only 8,716.80 tonnes topsoil is expected to generate in this area. The topsoil/waste recovered during mining shall be used for afforestation / green belt development in the earmarked 0.5542 Ha safety barrier area. Any excess waste will be transported to the pre-determined dump location as shown in the Production & Development plan. Totally minimum but not limiting to 700 saplings shall be planted in this area. Till conceptual stage totally 0.3893Ha area shall be covered under green belt. Apart from this Afforestation shall be done on the haulage road by planting another 1300 saplings.

- **Treatment and disposal of water from mine:**

Excepting during monsoon months, no water shall be discharged from mine. A garland drain shall be made all around the mine to divert the water away from the pit through silt settling tank. The clarified water from Silt Settling Tank (SST) shall be directed to Rain Water Harvesting Pond (RWHP). The over flow water from Rain Water Harvesting Pond shall be released to natural water course.

- **Measures for minimizing adverse effects on water regime:**

Excepting during monsoon months, no water shall be discharged from mine. A garland drain shall be made all around the mine to divert the water away from the pit to Silt Settling Tank (SST). The water from Silt Settling Tank (SST) shall be directed to a rain harvesting pond before being released to natural water course. However granite building stone is a Non toxic and hence there shall not be any chemical hazardous effect on the water regime.

- **Protective measures for ground vibrations/air blast caused by blasting:**

The drilling is proposed by jack hammer with 33mm/48mm dia. The blasting shall be done with 25mm slurry cartridges. Due to very small diameter hole blasting the vibration in this zone shall very low and the vibrations shall be maintained below 10mm/s as per the DGMS circular No. 7 of 1997. The nearest habitant in Panambatta, which is about 1.0 Kms away from the mine. Secondary blasting shall not be undertaken to avoid air blast. Only rock breaker shall be used to break the bigger boulders.



- **Measures for protecting historical monuments and for rehabilitation of habitats settlements, disturbed due to mining activity:**

There are no historical monuments in the core or buffer zone.

- **Socio-economic benefits arising out of mining:**

**Social and demographic profile:** The mine is situated in the remote area, where the socio- economic status of the people is not satisfactory.

The main occupation of the people is working in plantation. There are no major industries in the area. The mining operations in such remote places would provide 24 direct and twice the number of indirect employment to local people. Hence mining operation will help in improving socio-economic status of the area.

d) **Monitoring schedules for different environmental components after the commencement of mining operations and related activities (for 'A' category mines only):**

For this mining project a quarterly monitoring mechanism for various environmental parameters shall be evolved as per the guidelines issued by State Environment Committee / MOEF.

**PART III****12.0 PROGRESSIVE MINE CLOSURE PLAN****12.01 Introduction**

- a) **Name & address of lessee:** Shri. K. K. Premkumar  
S/o. K. K. Kunhiraman,  
Kolanthra house, Melmuringodi P.O.,  
Manathana, Kannur- 670673  
Ph No. : +91 9447013110
- b) **Registered Office:** Shri. K. K. Premkumar  
S/o. K. K. Kunhiraman,  
Kolanthra house, Melmuringodi P.O.,  
Manathana, Kannur- 670673  
Ph No. : +91 9447013110

A location plan is enclosed vide **Plate No. 1.**

- c) **Extent of the area** : 1.4621 Ha  
**Type of the lease area** : Private.

**Present Land Use Pattern :**

The present land use in mine area is given in the Table No 12.1:

**Table No. 12.1: Present Land Use Pattern.**

Particulars	Land use pattern at present stage (Ha)
Area for Mining/Mining activities	-
Area for Safety Barrier / Green belt	-
Unused area	1.4621
<b>Total lease area</b>	<b>1.4621</b>

**Method of Mining**

Please refer Chapter – 4 mining

**12.02 Reasons for closure**

There is no proposal given for mine closure in these five years of the mining plan as the life of the mine is around 9 Years, however progressive mine closure plan is submitted along with this mine plan and the details are given in the **Plate No:10** (Progressive Mine Closure Plan).



### Statutory Obligations

The mining plan is to be approved by District Geologist, Department of Mining & Geology, Kannur District, Kerala State where as the Environment Clearance is under process.

### 12.03 Closure Plan Preparation:

- a) Lessee : Shri. K. K. Premkumar  
S/o. K. K. Kunhiraman,  
Kolanthra house, Melmuringodi P.O.,  
Manathana, Kannur- 670673  
Ph No. : +91 9447013110

### Name and Address of the RQP:

<b>Cyriac Joseph</b> DMG/KERALA/RQP/15/2018
<b>Global Environment &amp; Mining Services</b> #212, Celestic Towers, Palm Avenue, Green Glen Layout, Bellandur, BANGALORE – 560103, Karnataka Email : gems.blr@globalminig.in Mob. No.: +91-8025432447  <b>H.O.</b> 3 <sup>rd</sup> Main Road, Basaveshwara Badawane <b>HOSPET – 583201, Bellary Dist. (Karnataka)</b>

- a) Executing Agency : Shri. K. K. Premkumar

### MINE DESCRIPTION:

#### 12.20 Geology:

##### Regional geology

Please Refer Chapter 3 Geology & Reserves

##### Local Geology:

Please refer Chapter No 3 Geology & Reserves.

#### 12.21 Reserves

Please refer Chapter 3 Geology & Reserves

#### 12.22 Mining Method:

Please Refer Chapter 4 Mining.

#### 12.23 Mineral Beneficiation:

There is no mineral beneficiation involved in the quarry operations.



### **12.30 REVIEW OF IMPLEMENTATION OF MINING PLAN**

**12.31 Name of Mine:** 'Granite Building Stone Quarry' of Shri. K. K. Premkumar

#### **12.32 Particulars of the Approved Mining Plan/ Scheme**

It is under process. Mining plan is prepared for five years and submitted for approval.

#### **12.33 Date of commencement of Mining Operations.**

This mine is working on lease granted by Government of Kerala.

#### **12.34 Review of Compliance Position of Mining Plan**

**Review of Compliance position of Salient features of Mining Plan on chapter wise basis bringing out marked deviation, if any, and justification / reasons thereof.**

##### **1. Exploration:**

This is the first Mining plan. Hence it is not applicable

##### **2. Mine Development:**

This is the first Mining plan. Hence it is not applicable

##### **3. Mine Production:**

This is the first Mining plan. Hence it is not applicable

##### **4. Reclamation & Rehabilitation:**

This is the first Mining plan. Hence it is not applicable

#### **Waste Management**

This is the first Mining plan. Hence it is not applicable

#### **Quality of Air**

This is the first Mining plan. Hence it is not applicable

#### **Noise Level**

This is the first Mining plan. Hence it is not applicable

#### **Ground Vibrations**

This is the first Mining plan. Hence it is not applicable



**Quality of water:**

This is the first Mining plan. Hence it is not applicable

**3.4C Review of compliance of conditions and stipulations imposed, if any, while approving Mining Plan / Scheme. In case non-compliance, partial compliance justification reasons thereof may be furnished along with proposal for compliance in ensuring period.**

This is the first Mining plan. Hence it is not applicable

**3.4D Review of compliance of violations pointed out after inspections made under MCDR, 1988 during the last five years.**

This is the first Mining plan. Hence it is not applicable

**3.4E Any other points requiring attention in the interest of proper mine design Development, conservation and Ecology of the area.**

Nil

**12.4.0 Progressive mine closure Plan**

**12.4.1 Mined out land.**

It was part of working mine under approved lease by Government of Kerala. The present land use, the land use at the end of 5 years of the mining plan and at the conceptual stage is given in the Table Number 12.2.

**Table No.12.2: Present land use, land use at the end of progressive stage and the ultimate land use pattern.**

Particulars	Land use pattern at present stage (Ha)	Land use pattern (end of progressive stage) (Ha)	Land use pattern at Conceptual stage (Ha)
Area for mining / mining activities	-	0.9977	1.0728
Area for Roads	-	-	-
Area for Safety Barrier / Green belt	-	0.3893	0.3893
Overburden / dump/ tailing dump	-	0.0751	-
<b>Total</b>	-	<b>1.3870</b>	<b>1.4621</b>
Unused area	1.4621	-	-
<b>Total Lease area</b>	<b>1.4621</b>	<b>1.4621</b>	<b>1.4621</b>

\* Road area inside the mine Lease is not shown separately. Since the material is transported on the benches the road area is therefore included in the mining area.

**12.4.2 Water quality management:**

There is no water course in the lease. To divert the rain water away from the mine to the natural course, a garland drain shall be made all around the lease as shown in the Environment Management Plan enclosed vide **Plate No: 9**. The water from garland drain shall be collected in the silt settling pond before releasing that to natural water course.

**12.4.3 Air quality management:**

The air around the mine is clean and moderately dry. To maintain the same during mining the sprinkling of water shall be done on haulage road. The drilling and blasting, excavation and loading shall not be done during high wind.

**12.4.4 Waste Management:**

Totally 8,716.80 tonnes topsoil/waste is expected to generate from this mine. The waste material shall be stacked separately in the pre-determined location as shown in the Production and Development Plan.

**12.4.5 Topsoil Management**

The entire topsoil shall be utilized for Afforestation/Green belt development and for plantation proposal on the ultimate benches as shown in the Production and Development Plan.

**12.4.6 Tailing Dam Management**

Not Applicable

**12.4.7 Infrastructure.**

No infrastructure is proposed to develop inside the lease area. The office and structures required for other service including statutory requirement shall be constructed outside the lease area, which shall be dismantled at conceptual stage of mining.

**12.4.8 Disposal of Machinery**

The question of disposal of mining machinery does not arise as the closure plan is a progressive in nature, and the life of the mine extends beyond the plan period.

**12.5 Safety & Security:**



For safety the lease hold areas shall be guarded by security personals.

### 12.6 Disaster Management & Risk Assessment:

No disaster is expected in this small scale of mining; however, as an emergency the location of the hospital, police station and fire brigade is given in the Table No 12.3

**Table No. 12.3: Location of Stations during Emergency**

Stations	Location of the station	Distance of station from Quarry
Govt. Hospital	Govt Hospital, Peravoor	12.0 Km
Police station	Maloor	02.0 Km
Fire Brigade	Peravoor	12.5 Km

In case of any eventuality the following person will be available for contact.

Shri. K. K. Premkumar  
S/o. K. K. Kunhiraman,  
Kolanthra house, Melmuringodi P.O.,  
Manathana, Kannur- 670673  
Ph No. : +91 9447013110

### 12.7 Care and maintenance during temporary discontinuance:

The following specific measures shall be taken during temporary discontinuance,

- The pit shall be fenced
- Proper and adequate security at the entrance to the mine to prevent entry of unauthorized person with proper gates under lock.
- All the above will be examined by manager once in a week to ensure that they are in order.

#### 12.7.1 Economic repercussions of closure of mine & manpower retrenchments:

In case of the closure of the mine the company shall plan for the voluntary retirement scheme.

#### 12.7.2 Time Scheduling of Abandonment:

The life of the mine is around 9 years and as on now there is no schedule for abandonment of mine. However the time scheduling for environment management measures are given in Table 12.4



**Table No. 12.4 Environment Management Schedule**

YEAR	I-Year	II-Year	III-Year	IV-Year	V-Year
Greenbelt					
Garland drain					
Afforestation					
Environmental Monitoring					
Water spraying on haul roads					

**Abandonment Cost**

As on now the environment management cost includes the initial and capital cost and annual recurring cost.

The capital cost is given in the table No 12.5 and annual recurring cost is given in Table No 12.6

**Table No. 12.5 Initial/ Capital Investment for Environmental Protection**

Sl. No.	Particulars	No.	Cost (LakhRs.)
<b>I</b>	<b>Pollution Control</b>		
1.1	Water sprayer (Mobile)	1	4.00
	<b>Total</b>		<b>4.00</b>

**Table No. 12.6: Recurring Annual Cost for Environmental Protection**

Sl. No.	Particulars	No.	Cost (Lakh Rs.)
<b>I</b>	<b>Pollution Control</b>		
1.1	Water spraying		4.00
1.2	Green belt development	Avg. 400 plants	1.80
1.3	Personal protective equipment	30	0.60
1.4	Quarterly monitoring		1.00
	<b>Total</b>		<b>7.40</b>
2	Corporate Social Responsibility		<b>1.00</b>
	<b>Total</b>		<b>8.40</b>

The annual cost for environment protection / environmental improvement and CSR activities are envisaged as Rs. 8.40 lakhs and the specific environmental protection cost per tonne is nearly Rs 16.78 /- per tonne of granite building stone.

**12.8 Financial Assurance:**

At the end of these five years of the mining plan period totally 1.4621 Ha. (3.6128 Acres) area shall be used for mining and green belt development activities. The financial



assurance of Rs 1,00,000/- shall be given as a bank guarantee to Directorate of Mining & Geology after confirmation. The detail breakup of the land is given in Table No 12.8.1 and the broken up area is shown in **Plate No. 10**, Progressive Mine Closure Plan.

**Table No. 12.8.1: Details of Broken up area at the end of progressive stage**

Sl. No.	Head	Area Put On Use at start of plan (in H a)	Additional requirement during plan period (in Ha)	Total (in Ha)	The area considered as fully reclaimed & rehabilitated (in Ha)	Net area considered for calculation (in Ha)
1	Area under mining / mining activities	-	0.9977	0.9977	-	0.9977
2	Safety Barrier/Green belt	-	0.3893	0.3893	-	0.3893
3	Overburden / dump/ tailing dump	-	-	0.0751	-	0.0751
4	Infrastructure (work shop, office, etc)	-	-	-	-	-
5	Roads	-	-	-	-	-
6	Storage of top soil	-	-	-	-	-
7	Mineral separation plant	-	-	-	-	-
8	Afforestation on dump	-	-	-	-	-
9	Others to specify	-	-	-	-	-
	<b>Total</b>	<b>0.000</b>	<b>1.3870</b>	<b>1.4621</b>	<b>-</b>	<b>1.4621</b>
	<b>Virgin area</b>	<b>1.4621</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Total Lease area</b>	<b>1.4621</b>	<b>1.4621</b>	<b>1.4621</b>	<b>1.4621</b>	<b>1.4621</b>

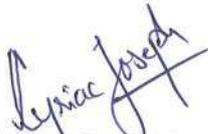
### 12.9 Certificate:

Enclosed

### 12.10 Plans and Sections:

Plans and sections are enclosed.

### GLOBAL Environment & Mining Services

  
Cyriac Joseph

DMG/KERALA/RQP/15/2018



# ANNEXURES



No. 8816/M3/2018

Directorate of Mining & Geology  
Kesavadasapuram, Pattam Palace .P.O.  
Thiruvananthapuram - 4  
Tel Fax : 0471 2447429  
e-mail: [director\\_dir.dmg@kerala.gov.in](mailto:director_dir.dmg@kerala.gov.in)  
[www.dmg.kerala.gov.in](http://www.dmg.kerala.gov.in)  
Date : 25-06-2019

From  
The Director of Mining & Geology

To  
✓ Shri. K. K. Premkumar,  
S/o. K. K. Kunhiraman,  
Kolanthra House, Melmuringodi,  
Manathana, Kannur District – 670 673

Sir,

Sub:- Mines and Minerals – Minor Mineral – Granite (Building Stone) – Application for quarrying lease under KMMC Rules 2015 – Letter of Intent - forwarding of– reg.

- Ref:-
1. Your application for quarrying lease dated. 13.04.2018.
  2. Letter No. DOC/M – 2043/2018 dtd. 26/07/2018, 22/06/2019 of the Geologist, District Office, Kannur.
  3. Kerala Minor Mineral Concession Rules 2015.

Please refer to the references cited above . As per the reference 1<sup>st</sup> cited, you have applied for a quarrying lease for a period of 10 years from this office for the extraction of granite building stone from an area of 1.4621 Hectares in Survey Nos. 1/100, 1, 9 of Tholambra Village of Thalassery Taluk of Kannur District [as shown in the Survey Map No. E3 – 2157/18 issued by Tahsildar, Thalassery enclosed]. Vide reference cited 2 above, District Geologist, Kannur forwarded your application to this office with recommendations to issue Letter of Intent. On scrutiny of application and other documents received from the Geologist, Kannur, it is seen that a quarrying lease can be granted to the precise area shown in the map under the provisions contained in the KMMC Rules 2015. However, for granting quarrying lease you have to produce following documents through District Geologist to the satisfaction of this office in accordance with the relevant statutes.

#### DOCUMENTS TO BE PRODUCED

1. Mining plan approved by the District Geologist as stipulated in the KMMC Rules 2015, for the precise area as per the survey map.
2. Environmental Clearance as stipulated in EIA Notification 2006 for the precise area.
3. Consent to operate quarry from the Kerala State Pollution Control Board for the precise area.
4. Explosive licence from the authorities concerned for appropriate quantity of explosives required for extraction of mineral from the precise area as mentioned in the approved mining plan.

✓



5. Licence from the Local Self Government authorities concerned for operating quarry in the precise area.

In addition, you shall make arrangements for the survey and demarcation by erection of boundary pillars of the said area by the revenue authority not below the rank of a Tahsildar or Asst. Director of the Department of Survey and Land Records and shall produce a certificate in this regard issued by authorities concerned.

It is further informed that the duration of lease as well as annual production of mineral will be decided based on the approved mining plan and documents submitted.

It is also informed that as per the provisions contained in the KMMC Rules 2015 this letter of intent shall be sufficient for the purpose of issuing necessary licenses/consents/Clearances/NOCs etc. by the other statutory authorities concerned. In the event of granting of quarrying lease you may also need to produce new Possession & Enjoyment Certificate at the time of grant of quarrying lease.

It is further informed that this letter of intent is valid for a period of one year from the date of issue. In case you have any valid reason for seeking extension of period of this LOI, the same may be obtained before the expiry of this LOI. Your application for Quarrying Lease shall deemed to have been rejected, if you fail to produce above mentioned documents before the expiry of LOI.

Yours faithfully,

ADDITIONAL DIRECTOR OF MINING & GEOLOGY  
For DIRECTOR OF MINING & GEOLOGY

Encl: Photocopy of Survey Map showing precise area

Copy to:-

1. The Member Secretary, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram.
2. The Chairman, SEIAA, Thampanoor Bus Terminal, Thiruvananthapuram.
3. The Deputy Chief Controller of Explosives, CSEZ, CGO Complex, Kakkanad, Ernakulam
4. Kerala State Pollution Control Board, District Office, Kannur District.
5. The Secretary, Maloor Grama Panchayath, Kannur District
6. The Tahsildar, Thalassery Taluk Office, Kannur District.

For kind attention of statutory authorities

[The statutory authorities while issuing licence/consents/NOCs based on this letter of intent may refer this letter of intent in the respective licence/consent clearance NOC while issuing the same. The statutory authorities may refer the survey map and consider the extent of applied area, quantity of mineral proposed to extract and the period of lease applied for while issuing such documents. The authorities may note that the operation as per their licence shall start only after execution and registration of quarrying lease granted by this office. All the Survey Nos. Re-Survey numbers with Block No. included in the survey map submitted in this connection shall be included in all the aforesaid documents.]

7. The Geologist, District Office, Kannur (The Geologist shall forward all the above said documents to this office for grant of quarrying lease with recommendations).



9



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

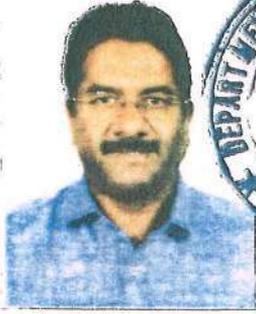
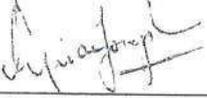
**CERTIFICATE OF RECOGNITION AS QUALIFIED PERSON TO PREPARE  
MINING PLANS FOR QUARRYING MINOR MINERALS IN KERALA**

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

**Shri. Cyriac Joseph, S/o Joseph. O.T, #2074 Sobha Dhia, Outer ring road, Bellandur, Bangalore—560 103, Karnataka State, 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/15/2018**

This recognition is valid for a period of 10 years ending 22/02/2028

	
	
Photograph of RQP	
Signature of RQP	

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 P.O  
Thiruvananthapuram-695 004

Place: Thiruvananthapuram  
Date: 23-02-2018



Address : 143  
 Kolondra  
 Peruvayur  
 Taluk : 133  
 District : 2  
 State : 910003

**Election Registration Officer**  
 തിരഞ്ഞെടുപ്പ് കമ്മീഷൻ ഓഫീസർ  
 Periyar LA Constituency  
 പരിയാർ ല.എ. കോൺസ്റ്റൻസി

Place : Thiruvayur  
 District : 133  
 Date issued : 31-03-2001

This card may be used as Identity Card under different Constituents Sections for other voters unless otherwise mentioned in this card.

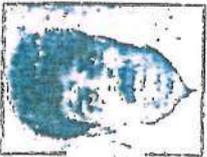


*Pran Kumar E*

*Pran Kumar E*

**ELECTION COMMISSION OF INDIA**  
 ഇന്ത്യൻ തിരഞ്ഞെടുപ്പ് കമ്മീഷൻ

IDENTITY CARD  
 തിരഞ്ഞെടുപ്പ് കമ്മീഷൻ



CPH1562006

Electors Name : Prankumar  
 തിരഞ്ഞെടുപ്പുകാരുടെ പേര് : പ്രാങ്കുമാർ  
 Father's Name : K. Subraman  
 അച്ഛൻ്റെ പേര് : കെ.സുബ്രമാൻ  
 Sex : Male  
 തിരഞ്ഞെടുപ്പുകാരുടെ ലിംഗം : പുരുഷൻ  
 Age : 36  
 ജനന തീയതി : 01.01.2001  
 വയസ്സ് : 01.01.2001



**ഭാരത സർക്കാർ**  
**Government of India**

കെ കെ പ്രഭാകുമാർ  
 K K Praekumar



ജനന വർഷം/Year of Birth: 1962  
 പുരുഷൻ / Male

6409 8719 3919

**ആധാർ - സാധാരണക്കാരന്റെ അവകാശം**

**ആധാർ**  
**Government of India**

അപേക്ഷകൻ: S/O: കെ കെ കുങ്കുരമൻ  
 കെ.കെ. കുങ്കുരമൻ, മേമുറിങ്ങോടി, മന്നൂർ  
 മേമുറിങ്ങോടി, മണ്ണാഴി, മക്കരൂർ, 670873

Address: S/O: K K  
 Kunhraman, Kolanthra  
 House, Meimuringodi,  
 Manathana, Mannur,  
 Meimuringodi, Kerala,  
 670873

6409 8719 3919

1989 389 1347    help@uidai.gov.in    www.uidai.gov.in

*Sony*  
*K.K. Prekumar*

FORM 12 C  
(See Rule 3)



GOVERNMENT OF KERALA  
THOLAMBRA VILLAGE OFFICE  
POSSESSION CERTIFICATE



No 30085048

Date: 30/01/2018

Name of Person to whom certificate is issued	K K MOHANDAS MANAGING PARTNER K K BUILDERS
Name of Father	K K KUNHIRAMAN
Address	KOLANTHRA HOUSE, 1/163, MELMURINGODI
Post Office with PIN Code	MELMURINGODI, 670673
District	Kannur

Certified that land shown in the schedule below are in possession and enjoyment of the person

Taluk / Village	Old Survey No	Re-Survey Block	ReSurvey No	Extend in Ha	Thandapper	Class of Land
Thalassery Tholambra		69	1100	0.4047	-	Asthirapun-cha
Thalassery Tholambra		69	9	0.3034	-	Asthirapun-cha
Thalassery Tholambra		69	9	0.5058	-	Asthirapun-cha
Thalassery Tholambra		69	9	1.6187	-	Asthirapun-cha
Thalassery Tholambra		69	1	0.3480	-	Asthirapun-cha
Thalassery Tholambra		69	1	0.4047	-	Asthirapun-cha

Certificate issued Date	30/01/2018
Designation of the Issuing officer	Special Village Officer
Purpose for which the certificate is issued for	DEPARTMENT OF MINING AND GEOLOGY

Security Code 87R11

Signature valid

Digitally signed by RAJEEVAN M  
Date: 2018.01.30 16:39:44 IST

NOTE

1. This digitally signed document is legally valid as per the Information Technology (IT) Act, 2000
2. Authenticity of this document can be verified from <http://edistrict.kerala.gov.in/> and submitting the Certificate Number and Security code. Alternatively please call the numbers 155300 (from BSNL landline), 0471155300 (from BSNL mobile), 04712315523/0471215094/04712115098 (from other networks) and quote the Certificate Number to the operator.





L. R. 316. 19/439/2016. 12000 x 100 x 2. G. P. S.

ഒറിജിനൽ രസീത്

ബുക്ക് നമ്പർ ഒ

25215

ഒ No. 2521494

-ാം നമ്പർ തണ്ടപ്പേര് അനുസരിച്ച് കിരം ഒടുക്കിയതിന് രസീത് ഉത്തരവ് തുക 26-4-16 വില്ലേജ്

തലശ്ശേരി താലൂക്ക് തോലമ്പ്ര

സർവ്വേയും സബ് ഡിവിഷനും നമ്പരും ചെറുപ്പം	വിസ്തീർണ്ണം		പട്ടാടമുറയോ പട്ടാടമുറയോ ഉടയോ പേര്	ഒടുക്കിയ സ്വഭാവം	പണം ഒടുക്കിയ ആളിന്റെ പേര്	തുക		റിമാർക്സ്
	ഹെ. ആർ	ആർ				രൂപ	സ.	
697/2/1								
	ശ. ര. ഭാഗ്യനന്ദന							
9/	1.6187		6	BT	2017 2018	324	-	

മേൽ വിവരിച്ച പ്രകാരം 324 രൂപ പൈസ  
 2017-മാണ്ട് 6-3 മാസം 1-2 (അക്ഷരത്തിൽ)  
 ഇന്നേദിവസം സ്വീകരിച്ച് വില്ലേജ് കണക്കിൽ മുതൽ വച്ചിരിക്കുന്നു.

സ്ഥലം: തോലമ്പ്ര  
 തീയതി: 1-6-17

വില്ലേജ് ഓഫീസറുടെയും  
 വില്ലേജ് അസിസ്റ്റന്റിന്റെയും പേരും ഒപ്പും



L. R. 316. 19/439/2016. 12000 x 100 x 2. G. P. S.

ഒരിജിനൽ രസീത്

ബുക്ക് നമ്പർ ഒ 25215 ഒ No. 2521495

-ാം നമ്പർ തണ്ടപ്പേര് അനുസരിച്ച് കരം ഒടുക്കിയതിന് രസീത് ഉത്തരവ് തുക 2614.16 വില്ലേജ് താലൂക്ക് താലൂക്ക്

സർവ്വേയും സബ് ഡിവിഷനും നമ്പരും വെല്ലറും	വിസ്തീർണ്ണം		പട്ടാണുഴയോ പട്ടാണുതർമാരുടെയോ പേര്	ഒടുക്കിന്റെ സ്വഭാവം	പണം ഒടുക്കിയ ആളിന്റെ പേര്	ഏതു കാലത്തേക്കെന്നോ ഏതു തവണയ്ക്കെന്നോ	തുക		റിമാർക്സ്
	ഹെ. ആർ	ആർ					രൂപ	സ.	
697417			മെ	മെ	ജി.എൻ. ദിവാൻ				
1/ 0.4047			8	RS		2017 2018	82		

മേൽ വിവരിച്ച പ്രകാരം 82 രൂപ പൈസ

2017 -ാമാണ്ട് 6-6 മാസം 1-17 തീയതിയായ

ഇന്നേദിവസം സ്വീകരിച്ചു വില്ലേജ് കണക്കിൽ മുതൽ വച്ചിരിക്കുന്നു.

സ്ഥലം: താലൂക്ക്  
തീയതി: 1-6-17

വില്ലേജ് ഓഫീസറുടെയോ വില്ലേജ് അസിസ്റ്റന്റിന്റെയോ പേര്: *[Signature]*



L. R. 316. 19/439/2016. 12000 x 100 x 2. G. P. S.

ഒറിജിനൽ രസീത്

ബുക്ക് നമ്പർ ഒ

25215

ഒ No. 2521496

-ാം നമ്പർ തണ്ടപ്പേര് അനുസരിച്ച് കരം ഒടുക്കിയതിന് രസീത് ഉത്തരവി തുക വില്ലേജ് താലൂക്ക് തോലൂ 26.4.16 വില്ലേജ്

സർവ്വേയും സബ് ഡിവിഷനും നമ്പരും ലെറ്ററും	വിസ്തീർണ്ണം		പട്ടാടാക്കളിയോ പട്ടാടാക്കൾമാരുടെയോ പേര്	ഒടുക്കിയ സമയം	പണം ഒടുക്കിയ ആളിന്റെ പേര്	ഏതു കാലത്തേക്കെന്നോ ഏതു തവണയ്ക്കെന്നോ		തുക	റിമാർക്സ്
	ഹെ.	ആർ				രൂപ	സ.		
69751			മ.മ. മ.മ. മ.മ.						
9/ 0-8094			6	൪		2017 2018	162 -		

മേൽ വിവരിച്ച പ്രകാരം 162 L രൂപ പൈസ (അക്ഷരത്തിൽ) 2017-മാണ്ട് 6-ന് മാസം 1-ന് തീയതിയായ ഇന്നേദിവസം സ്വീകരിച്ച് വില്ലേജ് കണക്കിൽ മുതൽ വച്ചിരിക്കുന്നു

സ്ഥലം: തോലൂ തീയതി: 1.6.17 വില്ലേജ് ഓഫീസറുടെയോ വില്ലേജ് അസിസ്റ്റന്റിന്റെയോ പേരും ഒപ്പും



L. R. 316 19-439 2016. 12000 x 100 x 2 G. P. S.

ഒറിജിനൽ രസീത്

ബുക്ക് നമ്പർ ഒ

25215

ഒ No. 2521497

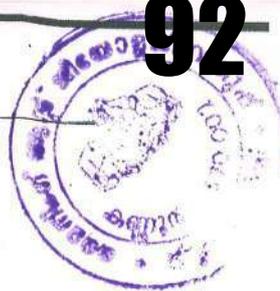
-ാം നമ്പർ തണ്ടപ്പേര് ഉത്തരവ് അനുസരിച്ച് കരം കുടിയിടം രസീത് തുക 26.4.16 വില്ലേജ്

താലൂക്ക് താലൂക്ക് താലൂക്ക്

സർവ്വേയും സബ് ഡിവിഷനും നമ്പരും ചെറുപ്പം	വിസ്തീർണ്ണം		പട്ടാണിപ്പാലം പട്ടാണിപ്പാലം പേര്	ഒട്ടിക്കിന്റെ സ്വഭാവം	പണം കുടിയേറ്റത്തിന്റെ പേര്	ഏതു കാലത്തേക്കെന്നോ ഏതു തവണയ്ക്കെന്നോ	തുക		റിമാർക്സ്
	ഹെ.	ആർ					രൂപ	സ.	
697516			താ. താ.		പ്രൊ. 2017				
1/	0.0567		8	ന	2017		12	-	

മേൽ വിവരിച്ച പകാരം 126 രൂപ. പൈസ (അക്ഷരാർത്ഥത്തിൽ) 2017-മാണ്ട് 6-3 മാസം 1-3 തീയതിനായ ഇന്നേദിവസം സീകരിച്ച് വില്ലേജ് കണക്കിൽ മുതൽ വച്ചിരിക്കുന്നു;

നമ്പരം താലൂക്ക് വില്ലേജ് ഓഫീസിലേയ്ക്കോ തീയതി 1.6.17 വില്ലേജ് അസിസ്റ്റന്റിന്റെയോ



L. R. 316, 19-439 2016 12900 x 100 x 2 G. P. S.

ഒറിജിനൽ  
രസീത്

ബുക്ക് നമ്പർ 25215      No. 2521498

-ാം നമ്പർ തണ്ടപ്പേര് അനുസരിച്ച് കരം അടക്കിയതിന് രസീത് ഉത്തരവ് തുക വില്ലേജ് ഓഫീസിലെ താലൂക്ക് ഓഫീസ് വില്ലേജ്

നാൾപ്പോലും സമീപ സമീപം നമ്പരും ലെറ്ററും	വിസ്തീർണ്ണം		പട്ടണമുണ്ടോ പട്ടണമില്ലാതെ ഉണ്ടോ പേര്	ഒടുക്കിന്റെ സ്വഭാവം	പണം ഒടുക്കിയ ആളിന്റെ പേര്	തുക		റിമാർക്സ്
	ച.മ.	ആർ				തുക	റൂ.	
69/24/1	2.6187 ഏ		മാ.കെ.പ്ര.കുമാർ			2017	324 -	
9/	1.6187	6 മാ			2018			

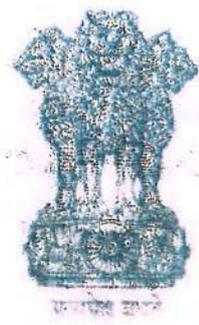
മേൽ വിവരിച്ച പകാരം 324/- രൂപ പൈസ അടയ്ക്കുന്നതിൽ തക്കതരത്തിൽ തിരിച്ചടയ്ക്കുന്നതിനായി വില്ലേജ് ഓഫീസിലെ താലൂക്ക് ഓഫീസ് വില്ലേജ് കണക്കിൽ മുതൽ വച്ചിരിക്കുന്നു.

നമ്പർ: 25215      വില്ലേജ് ഓഫീസിലേക്കോ      പേര്:      വില്ലേജ് അസിസ്റ്റന്റ് കമ്മീഷണർ





₹ 100



Rs: 100  
ONE  
HUNDRED RUPEES

INDIA  
INDIA NON JUDICIAL



10 കേരള KERALA

BV 386412

സമ്മതപത്രം

കണ്ണൂർ ജില്ല ഇരിട്ടി താലൂക്ക് മണത്തണ അംശം ചേരവട്ടൂർ ഭാഗത്ത് സ്താപിതമായ കെ.കെ.ബിൾഡേർസ് എന്ന സ്ഥാപനത്തിന്റെ മാനേജിംഗ് പാർട്ണർ മണത്തണ അംശം മുളിങ്ങോടി ഭാഗത്ത് കോലുന്ത വീട്ടിൽ താമസിക്കും കുഞ്ഞിരാമൻ എന്നവരുടെ മകൻ ബിസിനസ്സ് 53 വയസ്സ് കെ.കെ.മോഹൻറാസ്, കെ.കെ.ബിൾഡേർസിന്റെ പാർട്ണറായ മേൽ ഭാഗത്ത് കുഞ്ഞിരാമൻ എന്നവരുടെ മകൻ കോലുന്ത വീട്ടിൽ താമസിക്കും ബിസിനസ്സ് 57 വയസ്സ് കെ.കെ.പ്രൊകുമാറിന് എഴുതിക്കൊടുക്കുന്ന സമ്മതപത്രം

കെ.കെ.ബിൾഡേർസിനു വേണ്ടി.

*[Handwritten signature]*

കെ.കെ.മോഹൻറാസ്

(മാനേജിംഗ് പാർട്ണർ)

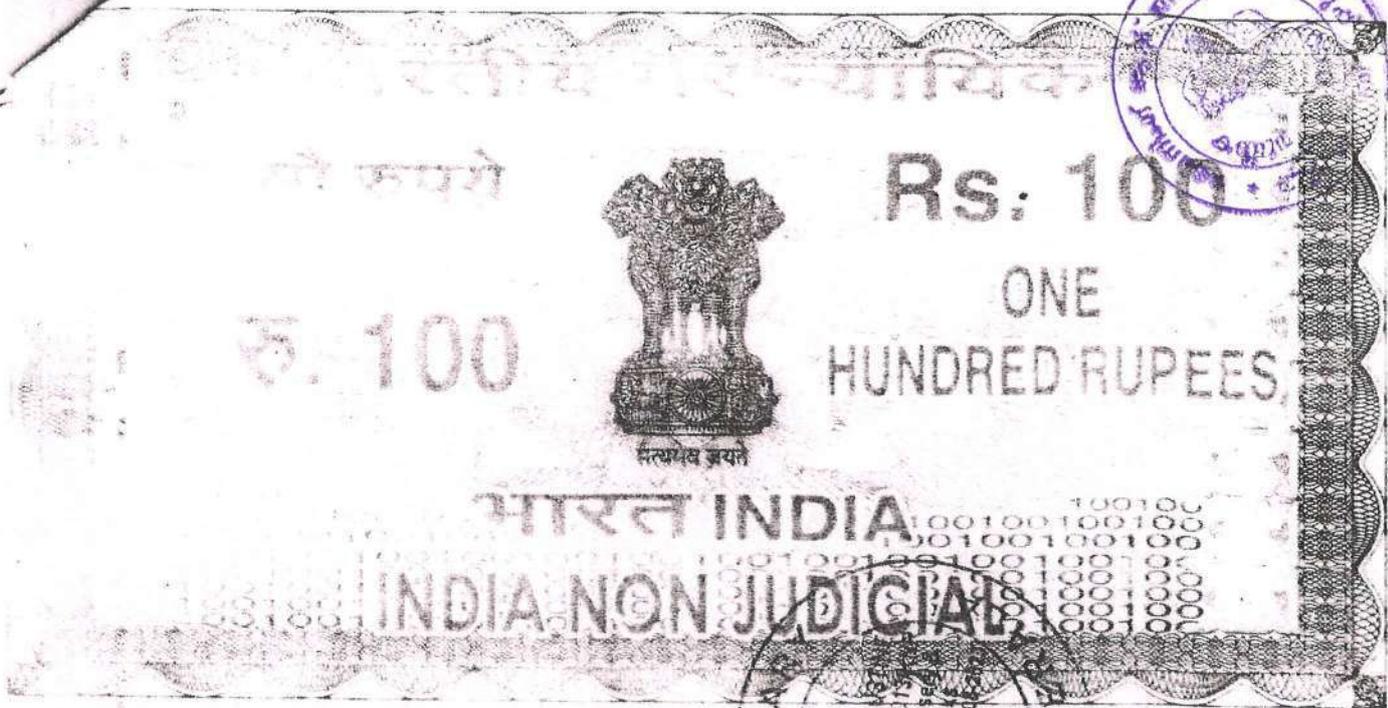
*[Handwritten signature]*

*[Handwritten signature]*

കെ.കെ.മോഹൻറാസ്  
കെ.കെ.പ്രൊകുമാർ

24/53 17-9-08  
മണത്തണ പാർട്ണർ കെ.കെ.ബിൾഡേർസ് ചേരവട്ടൂർ  
നാസ്





കേരളം കേരल KERALA

BV 386413

2

കെ.കെ.ബിൻഡേർസിന്റെ ഉടമസ്ഥതയിൽ മട്ടന്നൂർ സബ് രജിസ്ട്രാർ ഓഫീസിലെ 1174/1997,340/2006, 2433/2007, 350/2010, 2366/2017 എന്നീ ആധാരങ്ങൾ പ്രകാരം തലശ്ശേരി താലൂക്ക് തോലന്ത്രം അംശം പുറിഴാരി ഭേദത്തം റി.സ 9,1,1/100 എന്നീ സർവ്വെ നമ്പറുകളിൽ പെട്ട 0.3034, 0.5058, 0.3480, 1.6187, 0.4047, 0.4047 ഹെക്ടർ സ്ഥലങ്ങളിൽ നിന്ന് കരകല്ല് ഖനനം ചെയ്യുന്നതിന് മൈനിങ് ആന്റ് ജിയോളജി വകുപ്പിൽ നിന്നും ക്വാറിയിങ് ലീസ് അനുവദിച്ച് എക്സിക്യൂട്ടീവ് ചെയ്യുന്ന തീയതി മുതൽ 14 (പതിനാല്) വർഷത്തേക്ക് സ്വന്തമായി പൂർണ്ണമായും സമ്മതിച്ചിരിക്കുന്നു.

കെ.കെ.ബിൻഡേർസിനു വേണ്ടി,

*[Handwritten signature]*

കെ.കെ.മോഹൻദാസ്  
(മാനേജിംഗ് പാർട്ണർ)

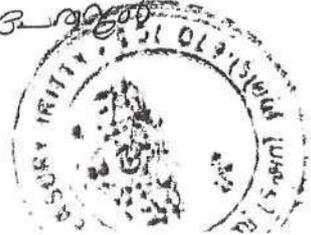
*The literature executed hereby of and of 20.6.19 at Kalyan...*

*[Handwritten signature]*  
20.6.19

24154  
മാനേജിംഗ് പാർട്ണർ  
നമ്പർ

17-9-08

മാനേജിംഗ് പാർട്ണർ കെ.കെ.ബിൻഡേർസിനു വേണ്ടി



നം: 72/98

വില്ലേജ് ഓഫീസ്: തോലൂമ്പ്ര.  
 തീയതി: 19/06/19

**നോൺഅസൈന്മെന്റ് സർട്ടിഫിക്കറ്റ്**

ശ്രീ കെ.കെ.പ്രേംകുമാർ കോലൂമ്പ്ര ഹൗസ്, മേൽമുരിങ്ങോടി.പി.ഒ, 670673 എന്നയാളുടേയും കെ.കെ.മോഹൻറാസ്, മാന്തേങ്ങിംഗ് പാർട്ണർ, കെ.കെ.ബിൾഡേർസ്, പേരോമ്പുര, എന്നവരുടേയും പേരിൽ മട്ടന്നൂർ സബ് രജിസ്ട്രാർ ഓഫീസിൽ താഴെ പറയുന്ന നമ്പരുകളിൽ രജിസ്റ്റർ ചെയ്ത ആധാരങ്ങൾ പ്രകാരം തലശ്ശേരി താലൂക്ക് തോലൂമ്പ്ര വില്ലേജിൽ പുഴാരി ഭാഗത്ത് താഴെ പറയുന്ന സർവ്വെ നമ്പരുകളിലും വിസ്തീർണ്ണത്തിലുമുള്ള ഭൂമി റവന്യൂ വകുപ്പ് മറ്റു പ്രത്യേക ആവശ്യങ്ങൾക്ക് പതിച്ചുകൊടുത്തതല്ലെന്നും റിസർവ് വനത്തിൽ ഉൾപ്പെട്ടതല്ലെന്നും ടി വകകളിന്മേൽ കോടതി / ബേങ്ക് അറ്റാച്ച്മെന്റ് ഇല്ലായെന്നും ടി ഭൂമി ആനിവംസി വിഭാഗങ്ങൾക്ക് അനുകൂലപ്പെടുത്തണമെന്നും സമീപ ആനിവംസി സെറ്റിൽമെന്റിൽ നിന്ന് മൂന്ന് കിലോമീറ്റർ ദൂരമുണ്ടെന്നും സാക്ഷ്യപ്പെടുത്തുന്നു. റി.സ. 1 ൽ പെട്ട സ്ഥലം ഭൂദഹിത കർഷക തൊഴിലാളികൾക്ക് കൃഷി ആവശ്യത്തിന് മിച്ചഭൂമിയായി പതിച്ചുനൽകിയതും കൈമറ്റം ചെയ്യുവാനുള്ള സമയപരിധി കഴിഞ്ഞതിനാലു ശേഷം കൈമറിയതാണെന്നും സാക്ഷ്യപ്പെടുത്തുന്നു.

	സർവ്വെ നമ്പർ	ആധാര നമ്പർ	വിസ്തീർണ്ണം
1	9	1174/1997	0.3034 0.5058
2	9	1175/1997	1.8188
3	1	1427/1997	0.0567
4	1	340/2006	0.3480
5	9	2433/2007	1.6187
6	1	350/2010	0.4047
7	1/100	2366/2017	0.4047

(ഈ സാക്ഷ്യപത്രം മൈനിംഗ് ആന്റ് ജിയോളജി വകുപ്പിൽ ഹാജരാക്കുന്ന തിന് അന്യവദിച്ചിരിക്കുന്നു.)



  
 FIELD OFFICER  
 POLA/BBR



നം: 7/19

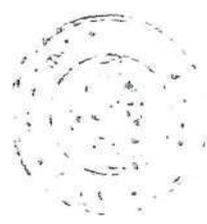
വില്ലേജ് ഓഫീസ്: തോലമ്പ്ര  
തീയതി: 19/06/19

ഡിമാൻഡ് ക്ലൈംബർ സർട്ടിഫിക്കറ്റ്

ശ്രീ കെ.കെ.പ്രേംകുമാർ കോലമ്പ്ര ഹൗസ്, മേൽമുരിങ്ങോടി.പി.ഒ. 670673 എന്നയാളുടേയും കെ.കെ.മോഹൻറാസ്, മന്ദനജിംഗ് പാർട്ണർ, കെ.കെ. ബിൽഡേർസ്, പേരാമ്പൂർ, എന്നവരുടേയും പേരിൽ മട്ടന്നൂർ സബ്ബ് റജിസ്ട്രാർ ഓഫീസിൽ താഴെ പറയുന്ന നമ്പറുകളിൽ റജിസ്റ്റർ ചെയ്ത ആധാരങ്ങൾ പ്രകാരം തലശ്ശേരി താലൂക്ക് തോലമ്പ്ര വില്ലേജിൽ പുഴാരി റേഞ്ചത്ത് താഴെ പറയുന്ന സർവ്വേ നമ്പറുകളിലും വിസ്തീർണ്ണത്തിലുമുള്ള ഭൂമിയിൽ ക്യാനിയീഷൻ ജിസിനറായി അപേക്ഷിക്കാൻ ഉദ്ദേശിക്കുന്ന 1.4621 ഹെക്ടർ ഭൂമി പ്രത്യേകം അളന്ന് വേർതിരിച്ച് ആയതിന്റെ അതിർത്തികളിൽ കോൺക്രീറ്റ് പില്ലറുകൾ സ്ഥാപിച്ച് പ്രത്യേകം വേർതിരിച്ചിട്ടുണ്ടെന്ന് സാക്ഷ്യപ്പെടുത്തുന്നു.

	സർവ്വേ നമ്പർ	ആധാര നമ്പർ	വിസ്തീർണ്ണം
1	9	1174/1997	0.3034 0.5058
2	9	1175/1997	1.6188
3	1	1427/1997	0.0567
4	1	340/2006	0.3490
5	9	2433/2007	1.6197
6	1	350/2010	0.4047
7	1/100	3368/2017	0.4047

(ഈ സാക്ഷ്യപത്രം മെനിങ് ആന്റ് ജിയോളജി വകുപ്പിൽ ഹാജരാക്കുന്ന തിന് അന്യവരിച്ചിരിക്കുന്നു.)



*[Handwritten Signature]*  
VILLAGE OFFICER  
MULBAIPRA



കേരളം KERALA

30AA 640203

**Affidavit**

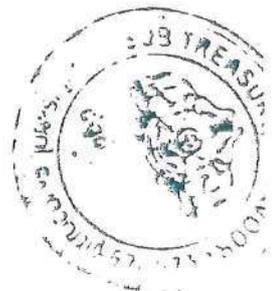
I have filed the upto date Income Tax returns, paid the Income Tax assessed thereon, paid the Income Tax on the basis of self assessment as per the provisions contained in the Income Tax Act 1961.

K.K.Premkumar

നമ്പർ 10244. തീയതി 19-6-81

മെട്രിക് വികാ...  
...  
...

...





കേരളം കേരള KERALA

30AA 640204

2

What is stated above are true to the best of my knowledge and belief.  
Date of this the 20<sup>th</sup> day of June 2018.

K.K.Premkumar *[Signature]*

*[Faint handwritten text]*



*[Handwritten signature]*  
K. RAMADASA

നമ്പർ 12245- തീയതി 19.6.2018

ക. ക. പ്രകാശ്...  
ക. ക. പ്രകാശ്...  
ക. ക. പ്രകാശ്...  
ക. ക. പ്രകാശ്...



100



കേരളം കേരള KERALA

30AA 640201

അഭിപ്രായം

2018 ജൂൺ മാസം 19ാം തീയതി മൈസൂർ ഓഫീസ് ജില്ലാ ജൂറി നോട്ടാരിയൽ ഓഫീസിൽ  
കണ്ണൂർ ജില്ലയിൽ ഇരിട്ടി താലൂക്കിൽ മണലത്തല വില്ലേജിൽ മുരിങ്ങോടി എന്ന സ്ഥലത്ത് താമസം  
കോലാൽ വിട്ടിൽ കുഞ്ഞിരാമൻ എന്നവരുടെ മകൻ കെ.കെ.പ്രേംകുമാർ ബോധിപ്പിക്കുന്ന  
സത്യവാങ്മൂലം.

കണ്ണൂർ ജില്ലയിൽ തലശ്ശേരി താലൂക്കിൽ തോലൂമ്പാല വില്ലേജിൽ പുഴാരി റോഡത്ത് 1, 1/100, 9 എൻ  
സർവ്വെ ഡയറികളിൽ പെട്ട 1.4621 ഹെക്ടർ സ്ഥലത്തു തിന്നും കരകുട്ട് വനം ചെയ്യുന്നതിന് അനുബന്ധ  
നൽകുന്ന പക്ഷം താഴെ പറയുന്ന കാര്യങ്ങൾ നിർവഹിക്കുമെന്ന് ഞാൻ സമ്മതിക്കുകയും ഉറപ്പു  
നൽകുകയും ചെയ്യുന്നു.

കെ.കെ.പ്രേംകുമാർ

RAMADASAN  
Notary Public

നമ്പർ 12244. തീയതി 19-6-2018.  
കേൾ...  
അംഗീകരിക്കുന്നു...  
ഒപ്പ്...  
കേൾ...  
കേൾ...

RAMADASAN  
Notary Public





കേരളം കേരള KERALA

2

30AA 640202

1. അനീകരിച്ച മൈയിങ് പ്ലാൻ പ്രകാരം ഖനനം നടത്തുന്നതാണ്.
2. ഖനന പ്രവർത്തനം മൂലം പരിസര മലിനീകരണവും പാരിസ്ഥിതിക പ്രശ്നങ്ങളും ഉണ്ടാകാതിരിക്കാൻ വേണ്ട ക്രമീകരണങ്ങൾ നടത്തുന്നതാണ്. ഇക്കാര്യത്തിൽ ബന്ധപ്പെട്ട അനികാരികളുടെ നിർദ്ദേശങ്ങൾ പാലിക്കുന്നതാണ്.
3. സ്പോടക വസ്തുക്കളുടെ അമിതമായ ഉപയോഗം മൂലം പരിസരവാസികൾക്ക് എന്റെ സ്ഥാപനത്തിന്റെ പേരിലുള്ള എക്സ്പോസിംഗ് ലൈസൻസ് പ്രകാരം വാങ്ങിക്കുന്ന സ്പോടക വസ്തുക്കൾ ഉപയോഗിച്ച് മാത്രമേ ഞാൻ ഖനനം നടത്തുകയുള്ളൂ.
4. സമീപവാസികളിൽ നിന്നും പരാതിക്ക് ഇടവരാത്ത വിധത്തിൽ മാത്രമേ ഖനന പ്രവർത്തനം നടത്തുകയുള്ളൂ.

K. RAMADASAN  
ADVOCATE & NOTARY PUBLIC

കെ.കെ.പ്രൊ.കുമാർ

നമ്പർ 12243. തീയതി 19-6-018

പേര്...  
കാ...  
വില...

.....

പേരവുമുൾപ്പടെ മ.പ.പ. വി.സി. പ്രശ്നം

K. RAMADASAN  
ADVOCATE & NOTARY PUBLIC  
NO. 12243 KNR  
19/6/2018  
KERALA





- 5. ക്വാറിയിൽ ജോലിചെയ്യുന്ന തൊഴിലാളികൾക്കും ക്വാറിയുമായി ബന്ധപ്പെട്ട് പ്രവർത്തിക്കുന്ന വർക്കും മറ്റ് പൊതുജനങ്ങൾക്കും ക്വാറി പ്രവർത്തനം മൂലം അപകടങ്ങൾ സംഭവിക്കാതിരിക്കുന്നതിനു വേണ്ടിയുള്ള സുരക്ഷാ ക്രമീകരണങ്ങൾ ക്വാറിയിലും പരിസരത്തും നടത്തുന്നതാണ്. ക്വാറിക്ക് ചുറ്റും ഷെൽസിങ് ആവശ്യമുള്ള പക്ഷം ഷെൽസിങ് നടത്തുന്നതാണ്.
- 6. അപേക്ഷയോടൊപ്പം ഹാജരാക്കിയിട്ടുള്ള രേഖകളിൽ തിന്നും ഒന്നും തന്നെ തെറ്റായ വിവരങ്ങളോ വ്യാജരേഖകളോ ഇല്ലാത്തതാണ്. അപേക്ഷയോടൊപ്പം ഹാജരാക്കിയ സമ്മതപത്രങ്ങൾ ഇപ്പോഴും നിയമസാധുത ഉള്ളതാണെന്ന് ഞാൻ ഉറപ്പു നൽകുന്നു. ഈ രേഖകളിൽ ഒപ്പിട്ടിരിക്കുന്നത് ഇതുമായി ബന്ധപ്പെട്ട വ്യക്തികൾ മാത്രമാണ്. സമ്മതപത്രം നൽകിയ വ്യക്തി ഇപ്പോഴും ഇന്ത്യൻ പൗരത്വമുള്ളതാണ്. കന്യാ / പാർട്ണർഷിപ്പ് ഷേം എസിവി സംബന്ധിച്ച് ഞാൻ ഹാജരാക്കിയ എല്ലാ രേഖകളും നിയമാനുസൃതമായതും നിലവിൽ സാധുതയുള്ളതുമാണ്. ക്വാറിയോട് ചേർന്ന് കിടക്കുന്ന റവന്യൂ പുറമ്പോക്കിൽ തിന്നും ഞാൻ അനുകൂല ഖനനം നടത്തുന്നതല്ല. അപ്രകാരം ഖനനം നടത്തുന്ന പക്ഷം ആയതിന് ഉത്തരവാദി ഞാൻ തന്നെയാണെന്ന് എനിക്ക് ബോധ്യപ്പെട്ടിട്ടുണ്ട്. അപ്രകാരം ഖനനം നടത്തുന്ന പക്ഷം എവിടെക്കൊണ്ടും ഉണ്ടായേക്കാവുന്ന ഏതൊരു തടപടിയും ഞാൻ തടസ്സം വീൽക്കുന്നതല്ല. അപേക്ഷയോടൊപ്പം ഹാജരാക്കിയിരിക്കുന്ന രേഖകളിൽ തെറ്റായ വിവരങ്ങൾ ഉണ്ടെന്നോ ഏതെങ്കിലും രേഖകൾ വ്യാജമാണെന്നോ തെളിയുന്ന പക്ഷം ആയതിന്റെ പൂർണ്ണ ഉത്തരവാദിത്വം എനിക്ക് തന്നെയാണെന്ന് എനിക്ക് ബോധ്യപ്പെട്ടിട്ടുണ്ട്. അപ്രകാരമുള്ള എന്തൊരു പ്രവൃത്തിക്കൊണ്ടും ഏതു നിയമ തടപടിയും സ്വീകരിക്കുന്നതിന് തടസ്സമില്ലാത്തതും തെറ്റായ വിവരങ്ങൾ നൽകിയോ വ്യാജരേഖകൾ നൽകിയോ ആണ് ഞാൻ അനുമതി സമ്പാദിച്ചതെന്ന് തെളിയുന്ന പക്ഷം എനിക്ക് അനുവദിച്ചു തന്ന അനുമതികൾ റദ്ദ് ചെയ്യുന്നതിനും എനിക്ക് പൂർണ്ണ സമ്മതവുമാണ്. അപേക്ഷയിലും അപേക്ഷയോടൊപ്പം ഹാജരാക്കിയ രേഖകളിലും ബന്ധപ്പെട്ട ഉദ്യോഗസ്ഥരോ ബന്ധപ്പെട്ട വ്യക്തികളോ മാത്രമാണ് ഒപ്പിട്ടിരിക്കുന്നത്. മേൽ വിവരങ്ങൾ സത്യമാണ്.

കെ.കെ.പ്രേംകുമാർ

*[Handwritten signature]*

സാക്ഷികൾ

1. കെ. രാമദാസൻ *[Signature]* Solemnly affirmed and signed before me  
 2. കെ. രാമദാസൻ *[Signature]* on this day 20<sup>th</sup> June 2018  
 3. കെ. രാമദാസൻ *[Signature]*



22/6/18  
 K. RAMADASAN  
 NOTARY PUBLIC  
 KANNUR  
 Kerala State, India - 670 003  
 Ph: 9447161522



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## GLOBAL Environment & Mining Services

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Certificate No: TC-5323

GEMS-LD/TF/11/01

Date: 27.05.2019

### Analysis Report of Ambient Air Quality Monitoring

- 1 Name of the Customer/Address : Granite Building Stone Quarry of  
Shri. K. K. Premkumar,  
Extent: 1.4621 Ha. (3.6128 Acres)  
Sy. Nos. 1/100, 1 & 9,  
Tholambra Village, Thalassery Taluk,  
Kannur District, Kerala State
- 2 Sample Description : Ambient Air Quality Monitoring
- 3 Sample Collected By : GLOBAL Environment & Mining Services
- 4 Particulars of Sample Collected : Combined Sampler (GTI-241)
- 5 Duration of the Monitoring : 24 Hour of Sampling
- 6 Name of the Station : Core zone area (A1)
- 7 Sample Received : 22.05.2019
- 8 Date of Analysis : 24.05.2019
- 9 Date of Analysis Completion : 27.05.2019
- 10 Sample Code : GEMS/GBSQPSS/AAQM/2019-20/1524
- 11 Report Number : ULR-TC532319000000442F

### Results

Date of Monitoring	PM10 [ $\mu\text{g}/\text{m}^3$ ]	PM2.5 [ $\mu\text{g}/\text{m}^3$ ]	SO <sub>2</sub> [ $\mu\text{g}/\text{m}^3$ ]	NO <sub>2</sub> [ $\mu\text{g}/\text{m}^3$ ]
	IS: 5182: (Part 23) 2006 (RA 2012)	USEPA 2001	IS: 5182: (Part 2) 2001 (RF 2014)	IS: 5182: (Part 6) 2006 (RF 2014)
24.05.2019	32.4	14.8	12.6	12.4
Standard	100	60	80	80

INFERENCE	As per CPCB Standards, Report Status: - Measured Values for the above parameters are within the limit.
-----------	---

\*\*End of Report\*\*

Analysed By  
J.M. Thippeswamy  
Chemist

Checked By  
S.S. Afreen  
Environmental Engineer

Authorised Signatory  
K. Ramakrishna Reddy  
Technical Manager

### Note:

- The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied
- Water Samples will be destroyed after 15Days, Minerals 3 Months, Filter papers & Thimbles 7 Days and ILC samples from the date of issue of Month test certificate unless otherwise specified.
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- Total liability of our laboratory is limited to the Invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only



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Certificate No: TC-5323

GEMS-LD/TF/11/01  
 Date: 27.05.2019

**Analysis Report of Ambient Air Quality Monitoring**

- 1 Name of the Customer/Address : Granite Building Stone Quarry of Shri. K. K. Premkumar, Extent: 1.4621 Ha. (3.6128 Acres) Sy. Nos. 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala State
- 2 Sample Description : Ambient Air Quality Monitoring
- 3 Sample Collected By : GLOBAL Environment & Mining Services
- 4 Particulars of Sample Collected : Combined Sampler (GTI-241)
- 5 Duration of the Monitoring : 24 Hour of Sampling
- 6 Name of the Station : Panambatta (A2)
- 7 Sample Received : 22.05.2019
- 8 Date of Analysis : 24.05.2019
- 9 Date of Analysis Completion : 27.05.2019
- 10 Sample Code : GEMS/GBSQPSS/AAQM/2019-20/1525
- 11 Report Number : ULR-TC532319000000443F

**Results**

Date of Monitoring	PM10 [µg/m <sup>3</sup> ]	PM2.5 [µg/m <sup>3</sup> ]	SO <sub>2</sub> [µg/m <sup>3</sup> ]	NO <sub>2</sub> [µg/m <sup>3</sup> ]
	IS : 5182: (Part 23) 2006 (RA 2012)	USEPA 2001	IS: 5182: (Part 2) 2001 (RF 2014)	IS: 5182: (Part 6) 2006 (RF 2014)
24.05.2019	28.4	12.6	10.8	8.2
Standard	100	60	80	80

INFERENCE	As per CPCB Standards, Report Status: - Measured Values for the above parameters are within the limit. <b>**End of Report**</b>
-----------	---

*J.M. Thippeswamy*  
 Analysed By  
 J.M. Thippeswamy  
 Chemist

*S.S. Afreen*  
 Checked By  
 S.S. Afreen  
 Environmental Engineer

*K. Ramakrishna Reddy*  
 Authorised Signatory  
 K. Ramakrishna Reddy  
 Technical Manager

**Note:**

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Certificate No: TC-5323

GEMS-LD/TF/08/01  
Date: 27.05.2019

### TEST REPORT OF AMBIENT NOISE LEVEL MONITORING

1	Name of the Customer/Address	:	Granite Building Stone Quarry of <b>Shri. K. K. Premkumar,</b> Extent: 1.4621 Ha. (3.6128 Acres) Sy. Nos. 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala State
2	Sample Description	:	Ambient Noise Level Monitoring
3	Sample Collected By	:	GLOBAL Environment & Mining Services
4	Particulars of Sample Collected	:	Digital LCD Sound Level Meter (E0-6080W8NI)
5	Duration of the Monitoring	:	24 Hour of Sampling
6	Date of Sample Receipt	:	22.05.2019
7	Date of Analysis Completion	:	27.05.2019
8	Sample Code	:	GEMS/GBSQPSS/ANLM/2019-20/1526 & 1527
9	Report Number	:	ULR-TC532319000000444F

Date	22.05.2019	23.05.2019
Name of the Location	Core Zone	Panambatta
Time (hrs)	N1	N2
6.00	50.4	50.5
7.00	51.4	51.1
8.00	52.6	50.3
9.00	54.0	51.1
10.00	52.8	51.4
11.00	56.4	52.2
12.00	56.2	54.4
13.00	56.4	54.6
14.00	56.8	50.2
15.00	56.8	48.8
16.00	56.6	50.4
17.00	56.8	52.4
18.00	56.8	52.8
19.00	56.4	50.2
20.00	52.2	48.6
21.00	51.4	48.4
22.00	48.8	48.6
23.00	46.6	46.2
00.00	40.4	46.4
01.00	40.2	46.2
02.00	38.2	46.4
03.00	38.0	48.2
04.00	40.2	48.8
05.00	44.6	50.2
<b>Lmax</b>	<b>56.8</b>	<b>54.6</b>
<b>Lmin</b>	<b>38.0</b>	<b>46.2</b>
<b>Ld</b>	<b>55.34</b>	<b>51.61</b>
<b>Ln</b>	<b>45.68</b>	<b>47.93</b>
<b>Leq</b>	<b>55.5</b>	<b>55.1</b>

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

#### Note:

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**NOISE: (AMBIENT STANDARDS)**

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



Note	Day time shall mean from 6:00 am and 10.00 pm
	Night time shall mean from in between 10.00 pm and 5.00 am
	Silence zone is an area comprising not less than 100 meters around hospitals, educational institutions, courts, religious places or any other area which is declared as such by the competent authority
	Mixed categories of areas may be declared as one of the four above mentioned categories by the competent authority
	*dB(A) Leq denotes the time weighted average of the level of sound in decibels on scale A which relatable to human being
	A "decibel" is a unit in which noise is measured
	"A", in dB(A) Leq, denotes the frequency weighting in the measurement of noise and corresponds to frequency response characteristics of the human ear.
Leq: It is energy mean of the noise level over a specified period.	

*S.S. Afreen*

Checked By  
S.S. Afreen  
Environmental Engineer



Authorised Signatory  
K. Ramakrishna Reddy  
Technical Manager

**Note:**

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Certificate No: TC-5323

GEMS-LD/TF/23/01  
Date: 27.05.2019

### Analysis Report of Drinking Water

- 1 Name of the Customer/Address : Granite Building Stone Quarry of  
Shri. K. K. Premkumar,  
Extent: 1.4621 Ha. (3.6128 Acres)  
Sy. Nos. 1/100, 1 & 9,  
Tholambra Village, Thalassery Taluk,  
Kannur District, Kerala State
- 2 Sample Collected By : GLOBAL Environment & Mining Services
- 3 Sample type : Well Water
- 4 Name of the location : Buffer area (A1)
- 5 Date of Sample Collection : 22.05.2019
- 6 Date of Sample Received : 14.05.2019
- 7 Date of Sample Analyzed : 27.05.2019
- 10 Sample Code : GEMS/GBSQPSS/WW/2018-19/1528
- 11 ULR Number : ULR-TC532319000000446F

Sl. No.	Parameters	Protocol	Unit	Results	Standards as per IS : 10500 : 2012	
					Desirable Limits	Permissible Limits
1.	pH	APHA 22 <sup>nd</sup> Edition 2012 4500 B (Pg No. 4-92 to 4-96)	-	7.10	6.5 to 8.5	No Relaxation
2.	Conductivity	APHA 22 <sup>nd</sup> Edition 2012 2510 B (Pg No. 2-54)	µS/cm	72	-	-
3.	Turbidity (NTU)	APHA 22 <sup>nd</sup> Edition 2012 2130 B (Pg No. 2-14)	NTU	BDL	1	5
4.	Total Dissolved Solids	APHA 22 <sup>nd</sup> Edition 2012 2540 B (Pg No. 2-65)	mg/L	92	500	2000
5.	Calcium as Ca	APHA 22 <sup>nd</sup> Edition 2012 3500 Ca B (Pg No. 3-84)	mg/L	6.13	75	200
6.	Magnesium as Mg	APHA 22 <sup>nd</sup> Edition 2012 3500 B-Mg By Calculation	mg/L	<1.0	30	100
7.	Total Suspended Solids	APHA 22 <sup>nd</sup> Edition 2012 2540 B (Pg No. 2-66 to 2-67)	mg/L	1.54	-	-
8.	Dissolved Oxygen	IS:3025 (part 38)- 1989, RA – 2014 Winkler titrimetric azide modification	mg/L	6.50	-	-
9.	BOD 3 days at 27° C	IS:3025 (part 44) – 1993, RA-2014,	mg/L	NIL	-	-
10.	COD as O <sub>2</sub>	APHA 22 <sup>nd</sup> Edition 2012 2540 B (Pg No. 5-19 to 5-20)	mg/L	NIL	-	-
11.	Dissolved Phosphate as P	IS:3025 (part 38)- 1988, RA – 2014, Stannous chloride method	mg/L	<0.01	-	-
12.	Sodium as Na	APHA 22 <sup>nd</sup> Edition 2012 Na 3500 B (Pg No. 3-97 to 3-98)	mg/L	8.60	-	-
13.	Potassium as K	APHA 22 <sup>nd</sup> Edition 2012 3500 B (Pg No. 3-87 to 3-88)	mg/L	0.54	-	-
14.	Total Hardness as CaCO <sub>3</sub>	APHA 22 <sup>nd</sup> Edition 2012 2340 C (Pg No. 2-46)	mg/L	68.0	200	600
15.	Chloride as Cl	APHA 22 <sup>nd</sup> Edition 2012 4500 Cl (Pg No. 4-72)	mg/L	7.12	250	1000
16.	Total Iron as Fe	APHA 3500 B (Pg No. 3-77)	mg/L	0.62	0.30	No Relaxation
17.	Sulphate as SO <sub>4</sub>	APHA 22 <sup>nd</sup> Edition 2012 4500 SO <sub>4</sub> – E (Pg No. 4-190)	mg/L	7.02	200	400
18.	Fluoride as F	APHA 22 <sup>nd</sup> Edition 2012 4500 F-D (Pg No. 4-87 to 4-88)	mg/L	0.40	1	1.50
19.	Nitrate Nitrogen as NO <sub>3</sub>	APHA 22 <sup>nd</sup> Edition 2012 4500 NO <sub>3</sub> E (Pg No. 4-125 to 4-127)	mg/L	0.86	45	No relaxation
20.	Total Alkalinity as CaCO <sub>3</sub>	APHA 22 <sup>nd</sup> Edition 2320 B (Pg No. 2-35)	mg/L	9.03	200	600
21.	Oil & Grease	APHA 22 <sup>nd</sup> Edition 2012 5520 B	mg/L	NIL	-	-

#### Note:

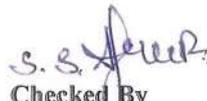
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(Pg No.5-40 to 5-41)					
22.	Total Coliform count*	APHA 22 <sup>nd</sup> Edition 2012 9222 B (Pg No.9-66) Membrane filter technique	MPN/ 100ml	Absent	Shall not be detectable in any 100 ml sample
23.	Escherichia coli count*	APHA 22 <sup>nd</sup> Edition 2012 9222 B (Pg No.9-66) Membrane filter technique	E.Coli/ 100ml	Absent	Shall not be detectable in any 100 ml sample

**\*\*End of report\*\***



  
**Analysed By**  
**Keerthana Yadav B.R**  
**Chemist**

  
**Checked By**  
**S.S. Afreen**  
**Environmental Engineer**

  
**Authorised Signatory**  
**K. Ramakrishna Reddy**  
**Technical Manager**

**Note:**

- 1 The result listed refers only to the tested samples & applicable parameters. Endorsement of products is neither inferred nor implied.
- 2 Water Samples will be destroyed after 15Days, Minerals 3 Months, Filter papers & Thimbles 7 Days and ILC samples from the date of issue of Month test certificate unless otherwise specified
- 3 This report is not to be reproduced wholly or in part & cannot be used as evidence in the Court of law & should not use any advertising media without special permission in writing.
- 4 Total liability of our laboratory is limited to the Invoice amount. Any dispute arising out of this report is subject to Hosapete jurisdiction only.



National Accreditation Board for Testing and Calibration Laboratories  
(A Constituent Board of Quality Council of India)



**CERTIFICATE OF ACCREDITATION**

**GLOBAL ENVIRONMENT & MINING SERVICES**

has been assessed and accredited in accordance with the standard

**ISO/IEC 17025:2005**

**"General Requirements for the Competence of Testing & Calibration Laboratories"**

for its facilities at

3rd Cross, 60 feet Main Road, 16th Ward, Basaveshwara Badavane,  
Hospet, Karnataka

in the field of

**TESTING**

Certificate Number	7C-5323		
Issue Date	12/10/2017	Valid Until	11/10/2019

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.  
(To see the scope of accreditation of this laboratory, you may also visit NABL website [www.nabl-india.org](http://www.nabl-india.org))

Signed for and on behalf of NABL

N. Venkateswaran  
Program Director



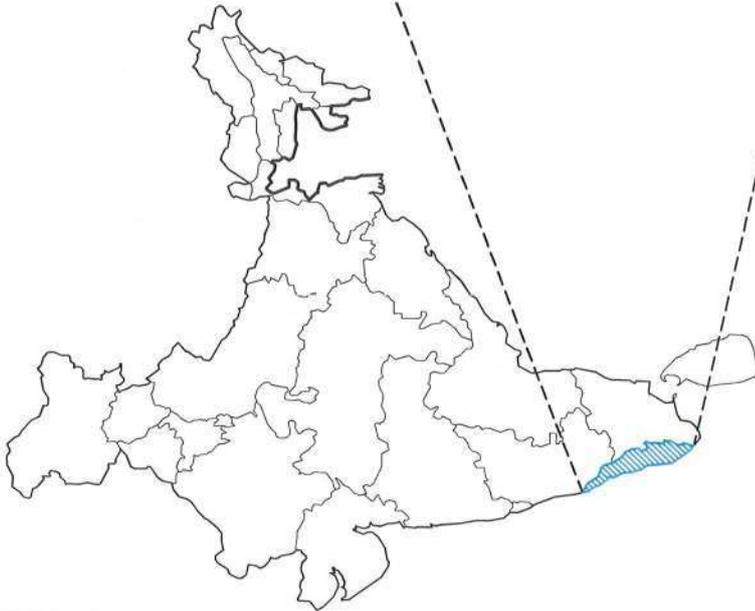
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Anil Relia  
Chief Executive Officer

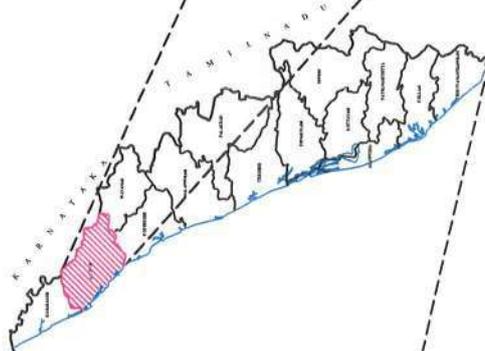


# PLATES

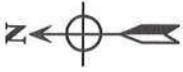
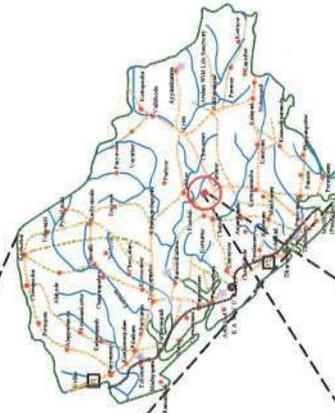
INDIA



KERALA STATE



KANNUR DISTRICT



I N D E X

-  QUARRY BOUNDARY
-  DISTRICT BOUNDARY
-  NATIONAL HIGHWAYS
-  OTHER ROAD
-  DISTANCE IN KILOMETER
-  DISTRICT HEADQUARTER
-  WATER BODY
-  TOURIST CENTER
-  RAILWAY TRACK



PLATY NO

GRANITE BUILDING STONE QUARRY OF

Shri. K. K. PREMKUMAR

Sy. Nos. 1/100.1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala

Title ADMINISTRATIVE PLAN

Scale NTS      Extent : 1.4621 Ha. (3.6128 Acres)

Certified that the above plan is correct.

*Cyriac Joseph*  
Cyriac Joseph  
DMG, KERALA RGP/15/2018





Village : Tholambra  
 Taluk : Thalassery  
 District : Kannur  
 State : Kerala

### SURVEY MAP

Sy.No.s : 1/100, 1 & 9

#### INDEX

- Village Road
- 7mts Private Road to Proposed Quarry
- Houses
- Known point (Landmark)
- Survey Stone
- Goat Farm
- Magazine
- Crusher
- Shed

GPS READINGS OF GROUND CONTROL POINTS  
 MAP DATUM - WGS84

Ground Control Points	Name	Latitude	Longitude
Known Point - 1	Saari Nagar Bus Stop	N-11°53'39.207"	E-75°38'28.928"
Known Point - 2	Malur City Bus Stop	N-11°53'27.340"	E-75°39'56.047"

Land Index of Mining Lease Area

Sl.No	Sy.No.	Doe No.	Village Name	Name of the owner	Area of possession in Ha	Area for mining in Ha	Area for Buffer zone in Ha	Total Applied Area in Ha
1	1/100	2366/2017	Tholambra	K.K Mohandas Managing Partner K.K Builders	0.4047	0.2767	0.0919	0.3686
2	1	340/2006 350/2010 1427/1997	Tholambra	K.K Mohandas Managing Partner K.K Builders K.K Premikumar	0.8094	0.5843	0.1630	0.7473
3	9	2433/2007 1174/1997 1175/1997	Tholambra	K.K Mohandas Managing Partner K.K Builders K.K Premikumar	4.0467	0.2118	0.1344	0.3462
<b>Total</b>					<b>5.2608</b>	<b>1.0728</b>	<b>0.3893</b>	<b>1.4621</b>

Submitted before Mining & Geology Department

Scale 1:2000  
 1cm = 20m  
 All dimensions are in metres

APPLICANT:-  
**Mr. K.K. PREMICKUMAR**  
 Authorized Signatory

- MINING LEASE AREA : 1.0728 Ha.
- BUFFER ZONE AREA (7.5m) : 0.3893 Ha
- TOTAL MINING LEASE APPLICATION AREA : 1.4621 Ha

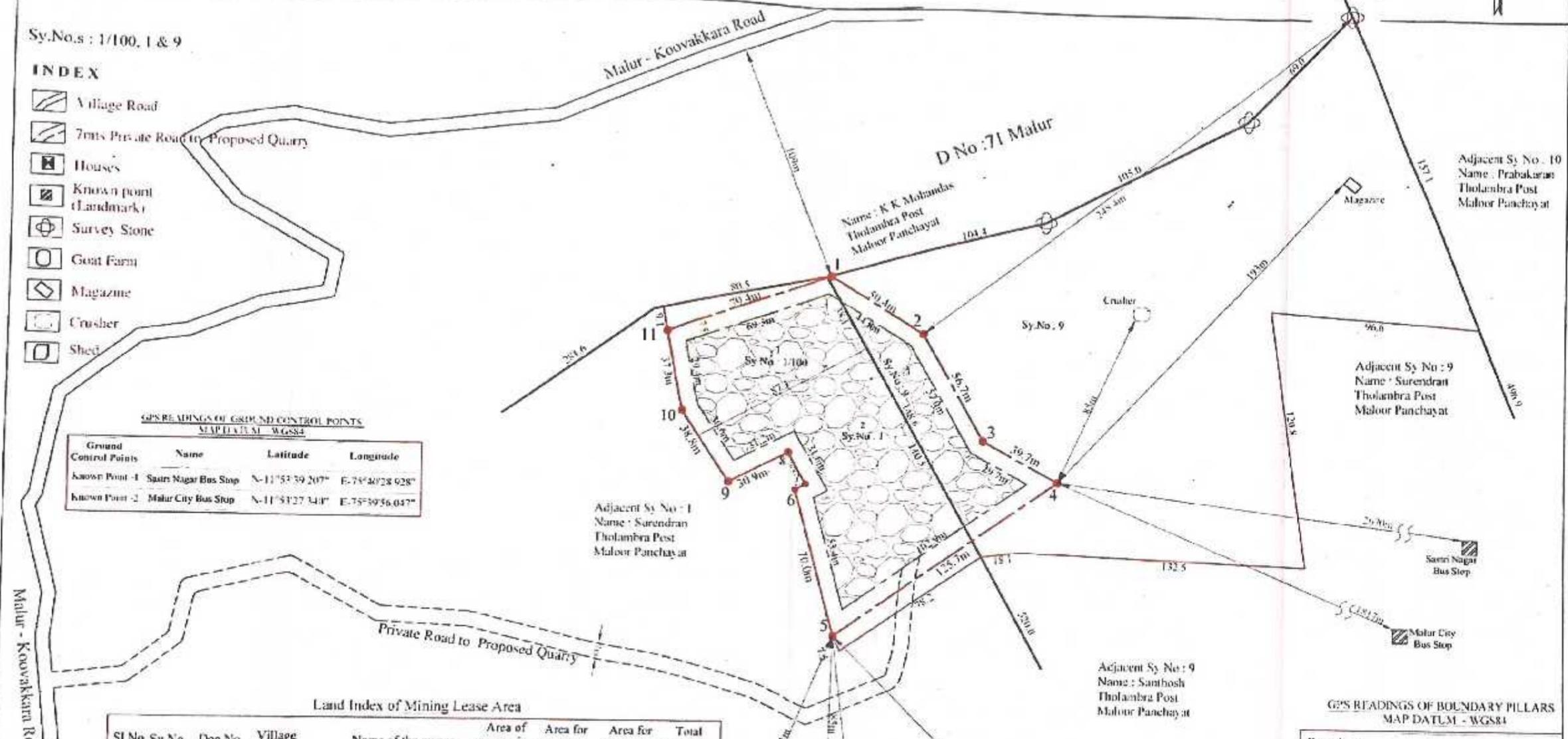
VILLAGE OFFICER  
 THOLAMBRA

Countersigned

TALSILDAR  
 THALASSERY

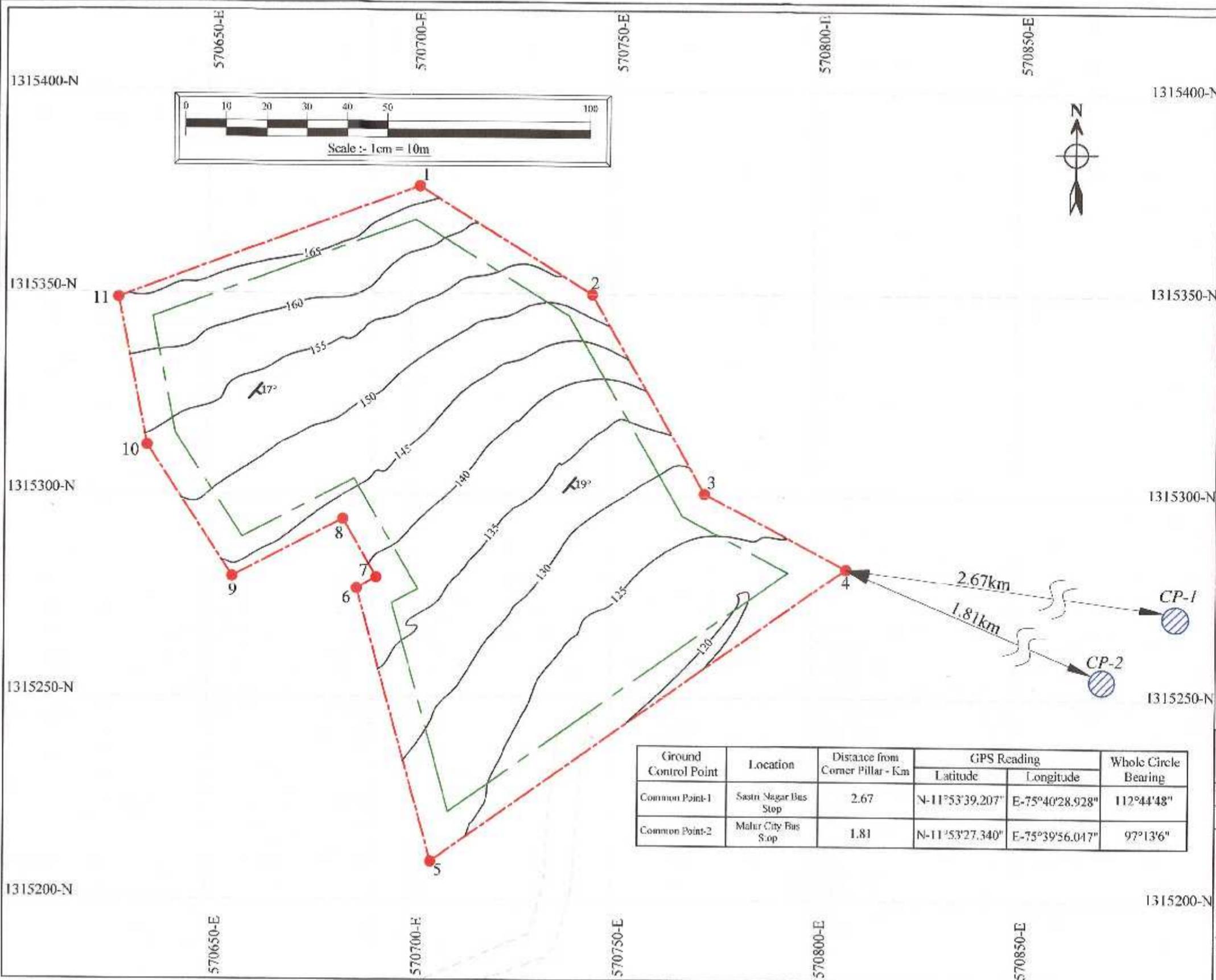


TALUK SURVEYOR  
 THALASSERY



GPS READINGS OF BOUNDARY PILLARS  
 MAP DATUM - WGS84

Boundary Pillars	Latitude	Longitude
1	N-11°53'53.423"	E-75°38'57.218"
2	N-11°53'52.530"	E-75°38'58.600"
3	N-11°53'50.930"	E-75°38'59.520"
4	N-11°53'50.340"	E-75°39'00.711"
5	N-11°53'47.971"	E-75°38'57.305"
6	N-11°53'50.151"	E-75°38'56.680"
7	N-11°53'50.260"	E-75°38'56.840"
8	N-11°53'50.741"	E-75°38'56.580"
9	N-11°53'50.250"	E-75°38'55.689"
10	N-11°53'51.339"	E-75°38'54.962"
11	N-11°53'52.500"	E-75°38'54.733"



GPS READINGS OF BOUNDARY PILLARS  
MAP DATUM - WGS84

Boundary Pillars	Latitude	Longitude
1	N-11°53'53.423"	E-75°38'57.218"
2	N-11°53'52.530"	E-75°38'58.600"
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7	N-11°53'50.260"	E-75°38'56.840"
8	N-11°53'50.741"	E-75°38'56.580"
9	N-11°53'50.250"	E-75°38'55.689"
10	N-11°53'51.339"	E-75°38'54.962"
11	N-11°53'52.500"	E-75°38'54.735"

**INDEX**

- QUARRY BOUNDARY
- 7.5M SAFETY BARRIER
- CONTOURS
- ROAD
- COMMON POINTS
- NATURAL HILL SLOPE

Ground Control Point	Location	Distance from Corner Pillar - Km	GPS Reading		Whole Circle Bearing
			Latitude	Longitude	
Common Point-1	Sastri Nagar Bus Stop	2.67	N-11°53'39.207"	E-75°40'28.928"	112°44'48"
Common Point-2	Malur City Bus S.op	1.81	N-11°53'27.340"	E-75°39'56.017"	97°13'6"

PLATE NO.3

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

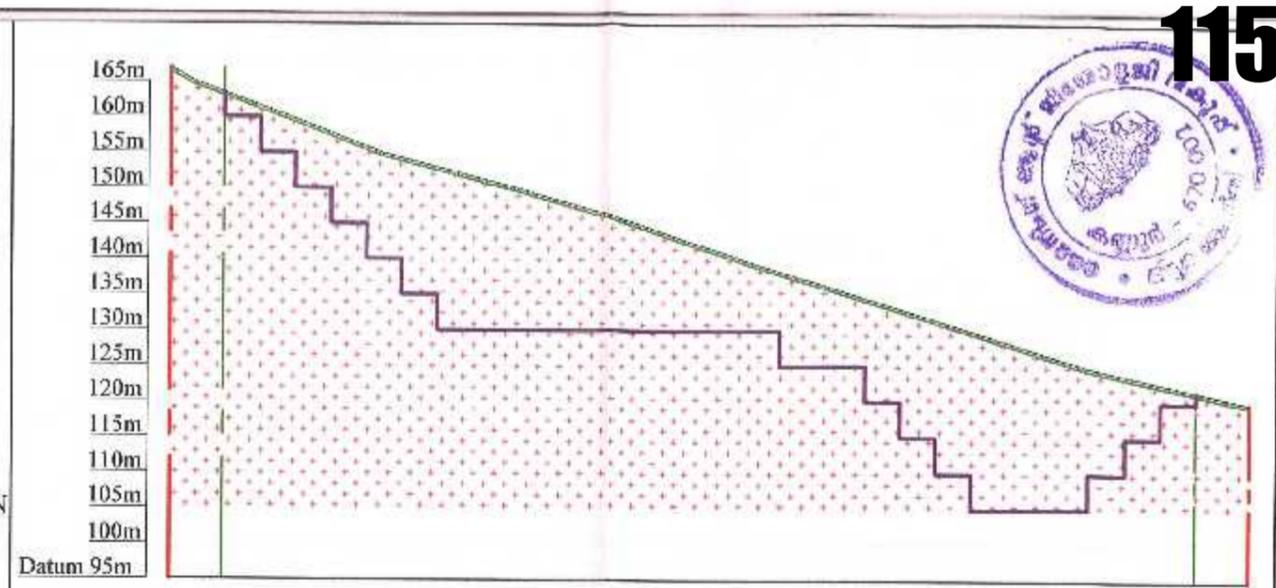
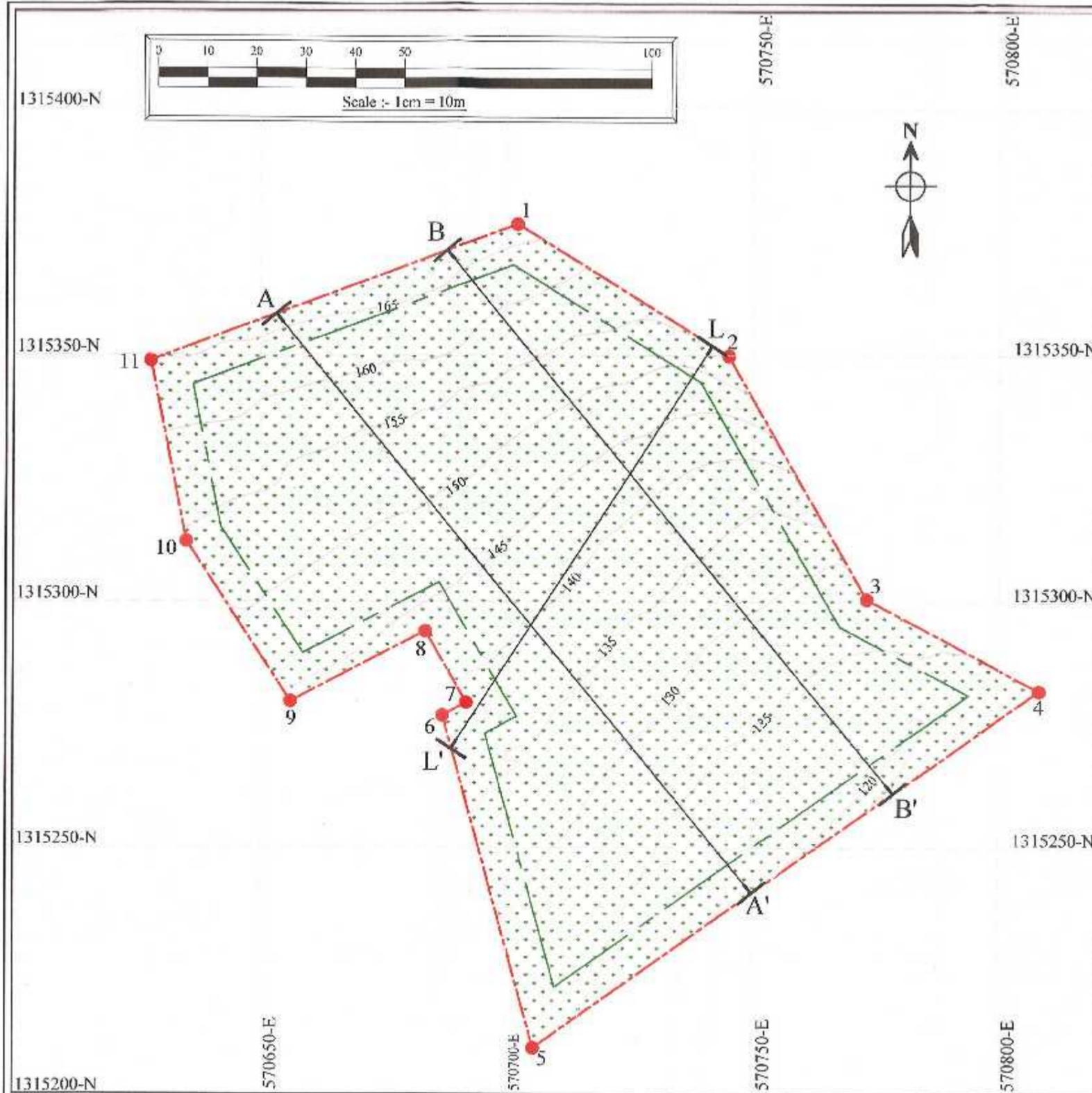
Sy. Nos.1/100,1 & 9, Tholambra Village, Thelassery Taluk, Kannur District, Kerala

<b>Title</b>	<b>SURFACE PLAN</b>	Date of Survey: 12.12.2018
<b>Scale</b>	1:1000 RF	Extent: 1.4621 Ha. (2.6128Acres)

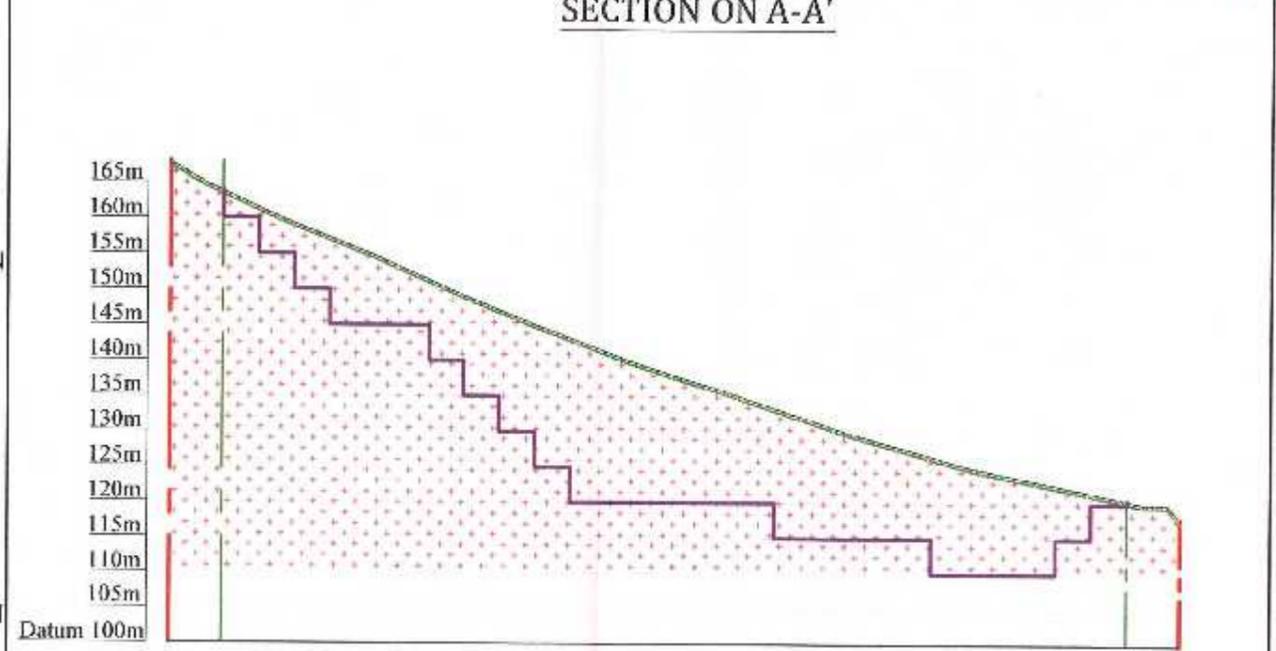
Certified that the above plan is correct.

*Cyriac Joseph*  
**Cyriac Joseph**  
DMC/ER/AL/RO/PLS/2018

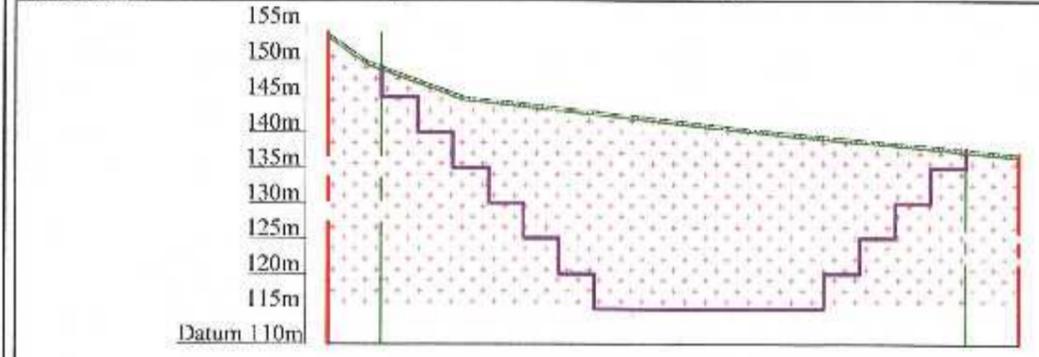
PREPARED BY: **GLOBAL ENVIRONMENT & MINING SERVICES**  
(Consulting Engineers, M. & S. Designers, Geologists & Surveyors)



SECTION ON A-A'



SECTION ON B-B'



LONGITUDINAL SECTION ON L-L'

**INDEX**

- QUARRY BOUNDARY
- SECTION LINE
- 7.5m SAFETY BARRIER
- CONTOURS
- ROAD
- SOIL COVER
- GRANITE
- ULTIMATE PIT LIMIT

PLATE NO.4

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

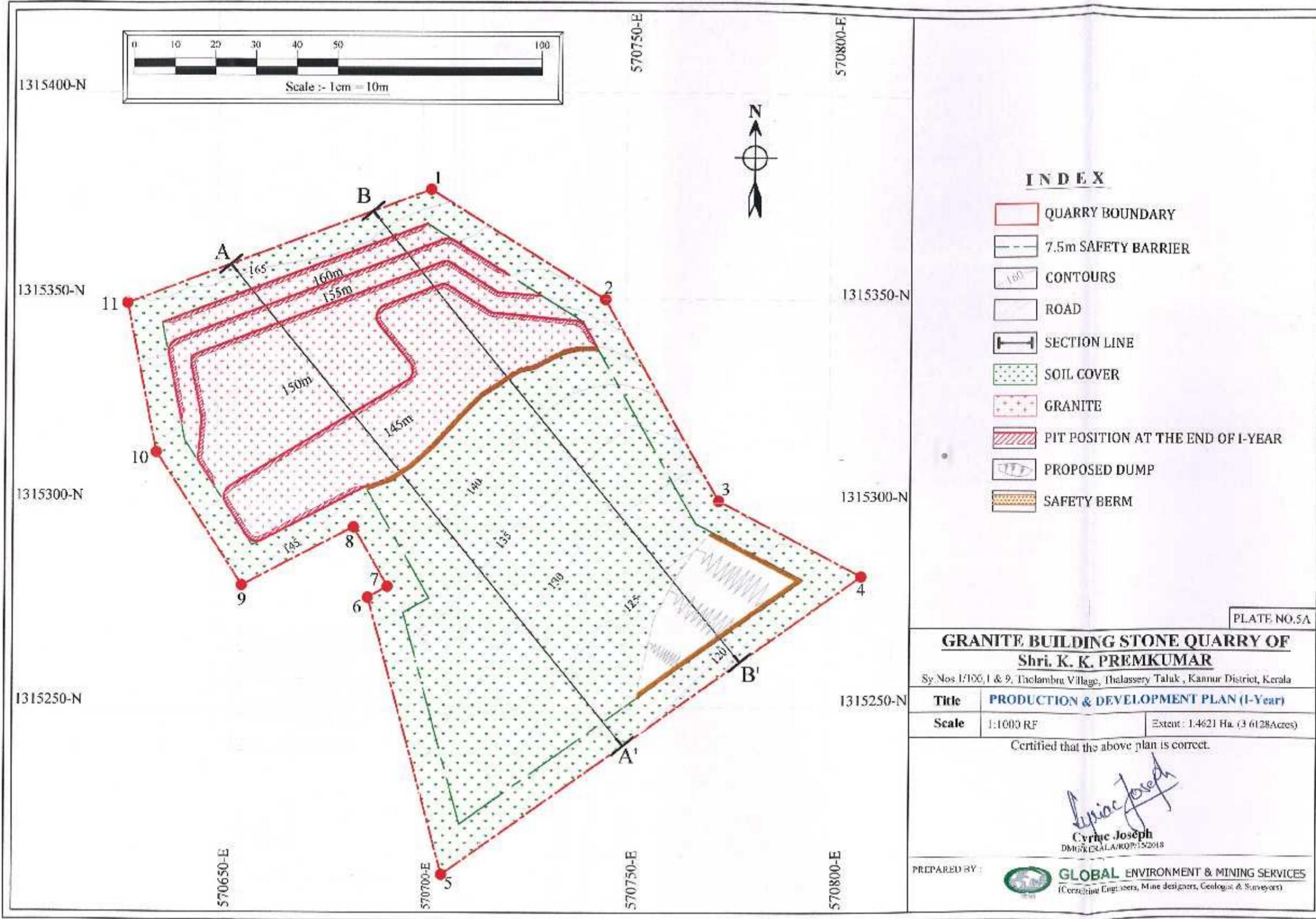
Sy Nos 1/100, 1 & 2, Thelambra Village, Thalassery Taluk, Kannur District, Kerala

<b>Title</b>	<b>GEOLOGICAL PLAN &amp; CROSS SECTIONS</b>	
<b>Scale</b>	1:1000 RF	Extent: 1.4621 Ha (3.6128 Acres)

Certified that the above plan & section is correct.

*Cyriac Joseph*  
**Cyriac Joseph**  
 DMG/SERAL/001/2018

PREPARED BY: **GLOBAL ENVIRONMENT & MINING SERVICES**  
 (Consulting Engineers, Mine designs, Geologist & Surveyors)



- INDEX**
- QUARRY BOUNDARY
  - 7.5m SAFETY BARRIER
  - CONTOURS
  - ROAD
  - SECTION LINE
  - SOIL COVER
  - GRANITE
  - PIT POSITION AT THE END OF 1-YEAR
  - PROPOSED DUMP
  - SAFETY BERM

PLATE NO.5A

**GRANITE BUILDING STONE QUARRY OF**  
**Shri. K. K. PREMKUMAR**

Sy. Nos 1/100, 1 & 9, Thelambri Village, Thalassery Taluk, Kannur District, Kerala

<b>Title</b>	<b>PRODUCTION &amp; DEVELOPMENT PLAN (1-Year)</b>	
<b>Scale</b>	1:1000 RF	Extent : 1.4621 Ha. (3.6128Acres)

Certified that the above plan is correct.

**Cyril Joseph**  
 DMG/KERALA/KOP/152018

PREPARED BY: **GLOBAL ENVIRONMENT & MINING SERVICES**  
(Consulting Engineers, Mine designers, Geologists & Surveyors)

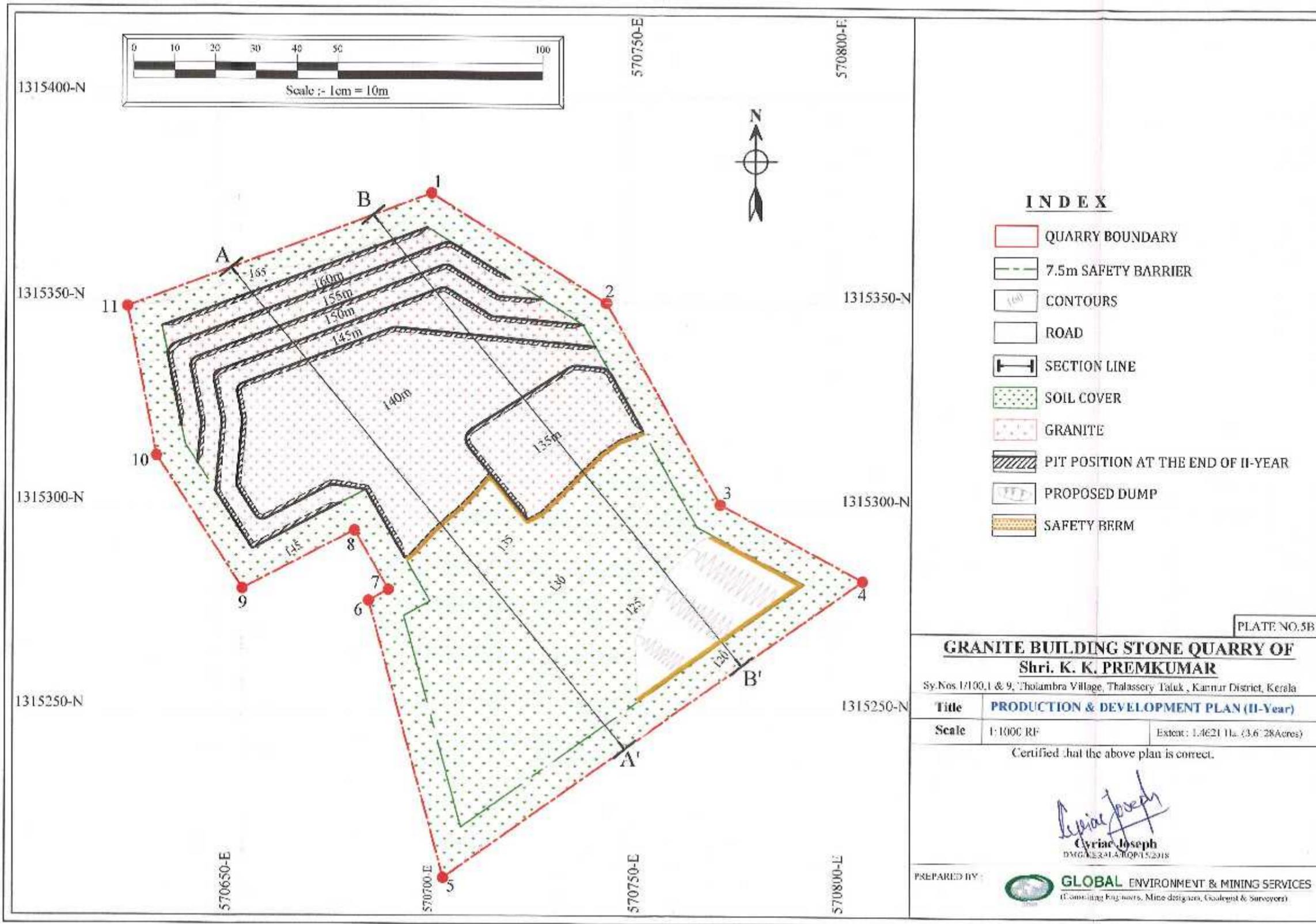
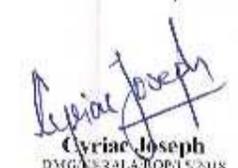
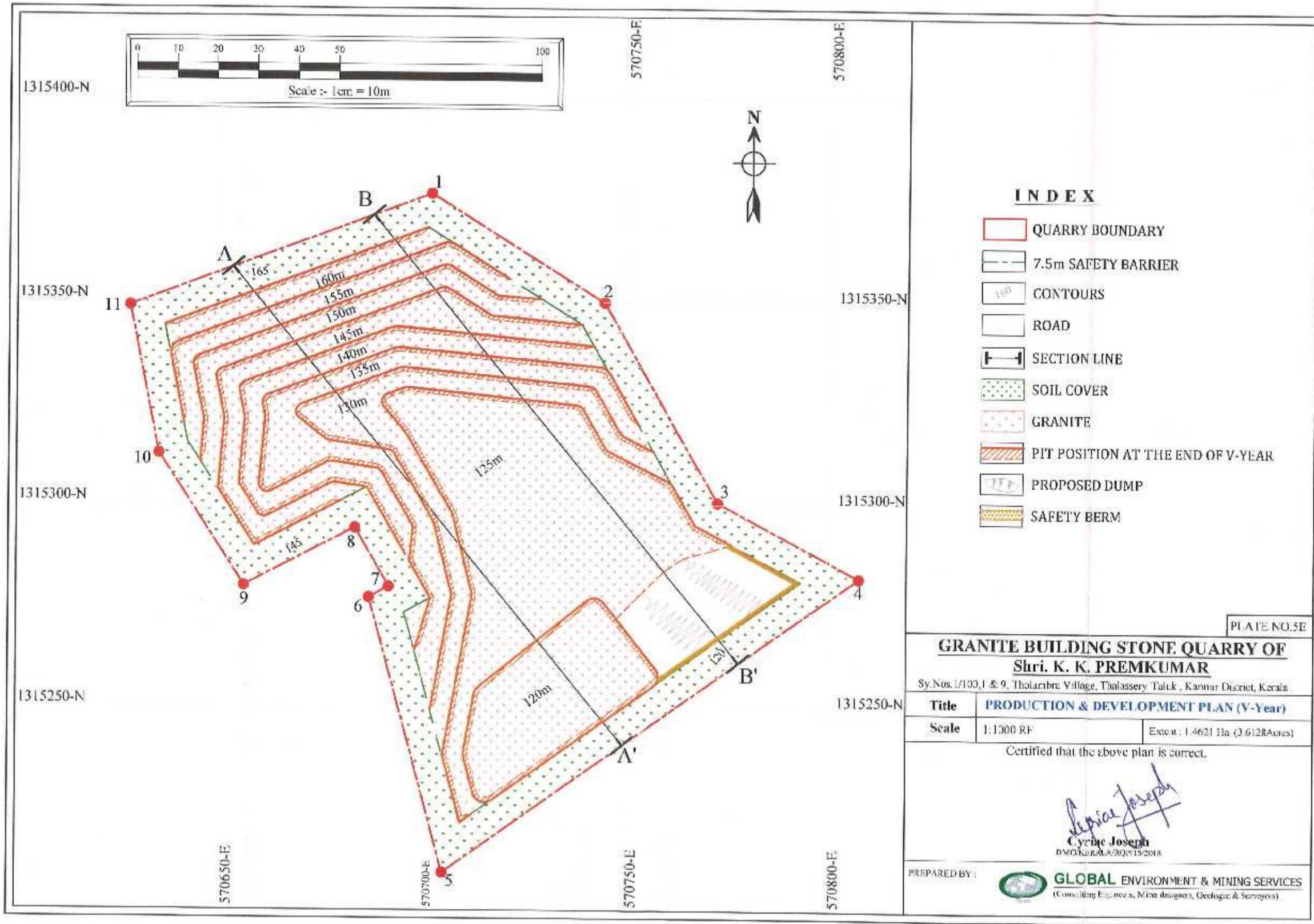


PLATE NO.5B	
<b>GRANITE BUILDING STONE QUARRY OF</b>	
<b>Shri. K. K. PREMKUMAR</b>	
Sy. Nos. 1/100,1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala	
<b>Title</b>	<b>PRODUCTION &amp; DEVELOPMENT PLAN (II-Year)</b>
<b>Scale</b>	1:1000 RF <span style="float: right;">Extent: 1.4621 Ha. (3.6*28Acres)</span>
Certified that the above plan is correct.	
 <b>Cyriac Joseph</b> DMG/23/1A/TQM/15/2018	
PREPARED BY:	 <b>GLOBAL ENVIRONMENT &amp; MINING SERVICES</b> (Consulting Engineers, Mine Designers, Geologists & Surveyors)





**INDEX**

- QUARRY BOUNDARY
- 7.5m SAFETY BARRIER
- CONTOURS
- ROAD
- SECTION LINE
- SOIL COVER
- GRANITE
- PIT POSITION AT THE END OF V-YEAR
- PROPOSED DUMP
- SAFETY BERM

PLATE NO.5E

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

Sy.Nos.1/100,1 & 9, Tholarim Village, Thalassery Taluk, Kannur District, Kerala

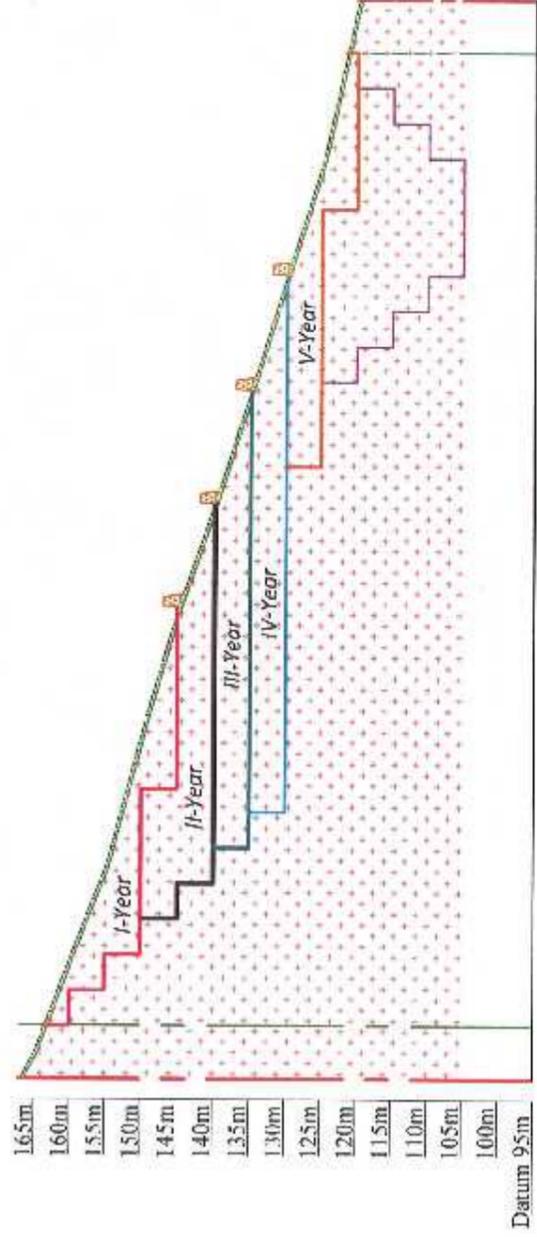
**Title** PRODUCTION & DEVELOPMENT PLAN (V-Year)

**Scale** 1:1000 RF      Extent: 1.4621 Ha (3.6128Acres)

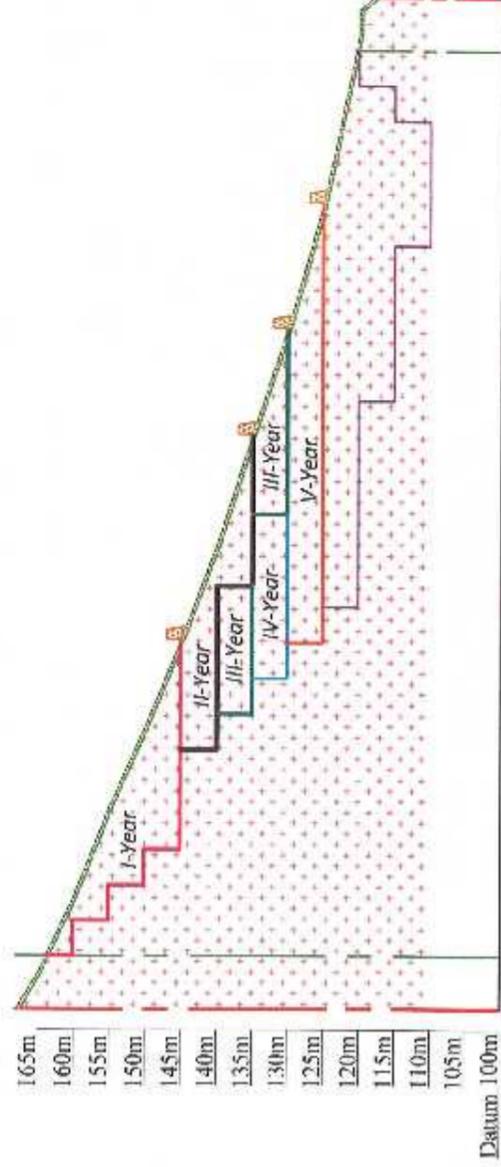
Certified that the above plan is correct.

*Cyril Joseph*  
Cyril Joseph  
DMD/KERALA/RQP/15/2018

PREPARED BY: **GLOBAL ENVIRONMENT & MINING SERVICES**  
(Consulting Engineers, Mine designers, Geologists & Surveyors)



SECTION ON A-A'



SECTION ON B-B'

**I N D E X**

-  QUARRY BOUNDARY
-  7.5m SAFETY BARRIER
-  SOIL COVER
-  GRANITE
-  ULTIMATE PIT LIMIT
-  PIT POSITION AT THE END OF I-YEAR
-  PIT POSITION AT THE END OF II-YEAR
-  PIT POSITION AT THE END OF III-YEAR
-  PIT POSITION AT THE END OF IV-YEAR
-  PIT POSITION AT THE END OF V-YEAR
-  SAFETY BERM

PLATE NO.6

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

Sy Nos. 1/100.1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala

<b>Title</b>	<b>PRODUCTION &amp; DEVELOPMENT SECTIONS</b>
<b>Scale</b>	1:1000 RF

Extent - 1.4621 Ha. (3.0128 Acres)

Certified that the above plan is correct.

*Cyriac Joseph*

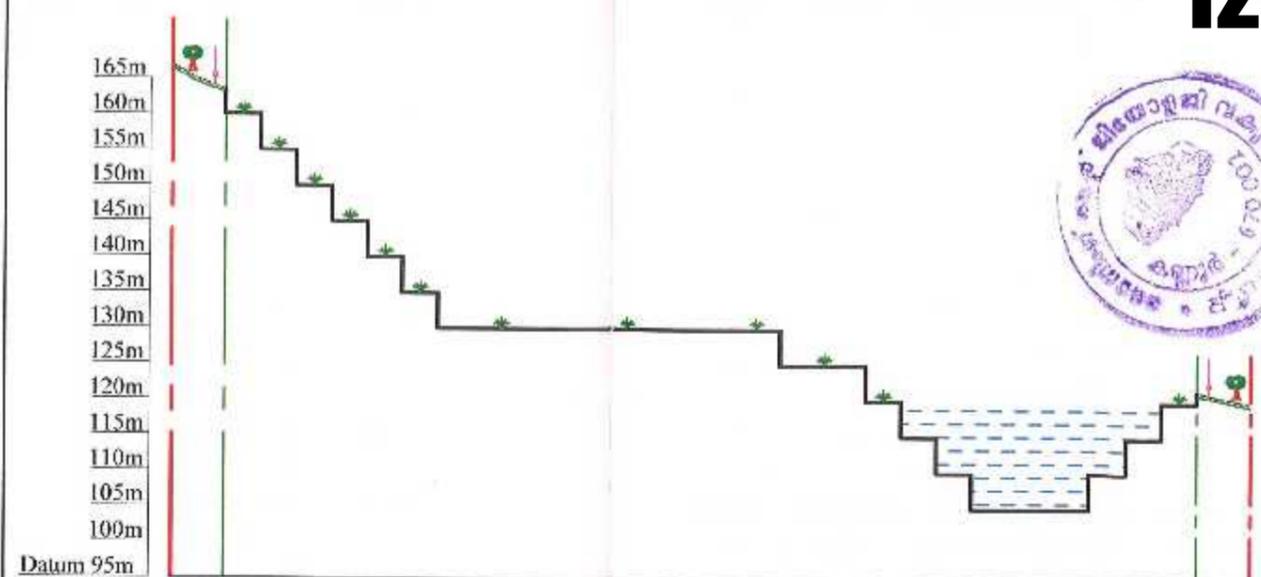
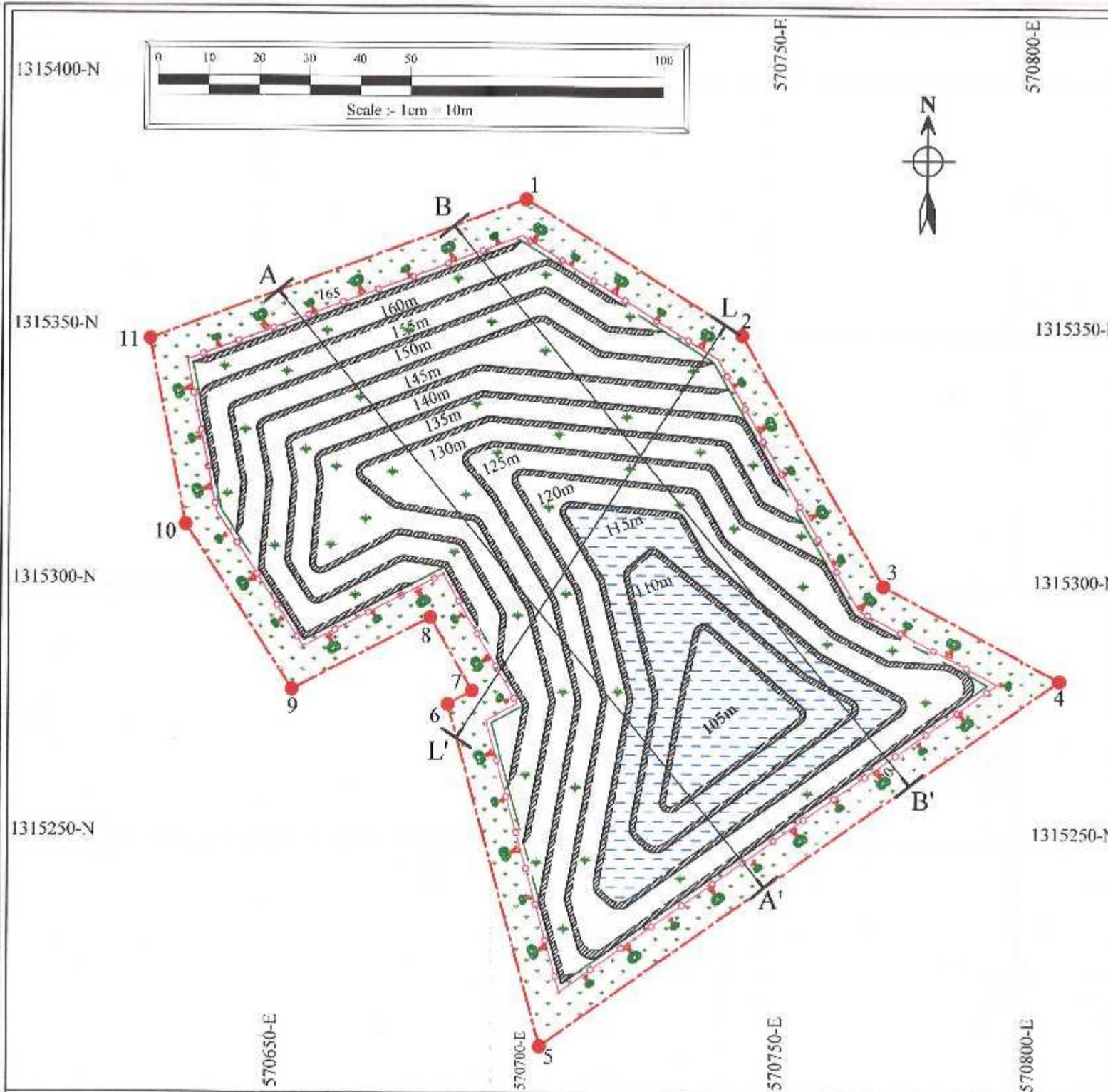
**Cyriac Joseph**  
LAWYER, GENERAL SURVEYOR

PREPARED BY:

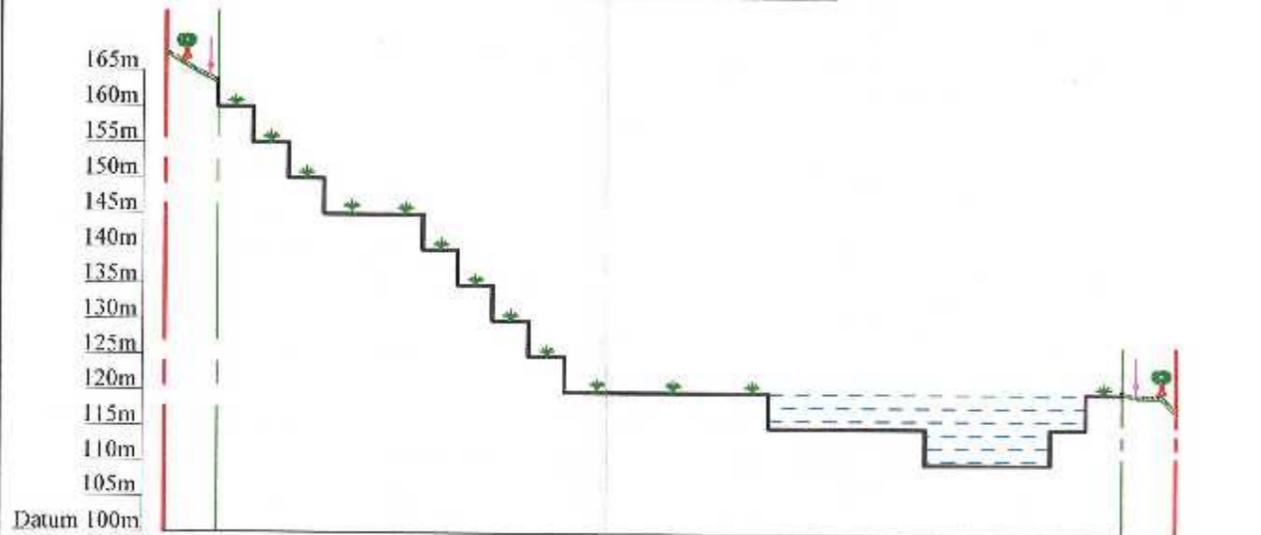


**GLOBAL ENVIRONMENT & MINING SERVICES**  
(Consulting Engineers, Mine & Green, Geotechnical, Safety & Health)





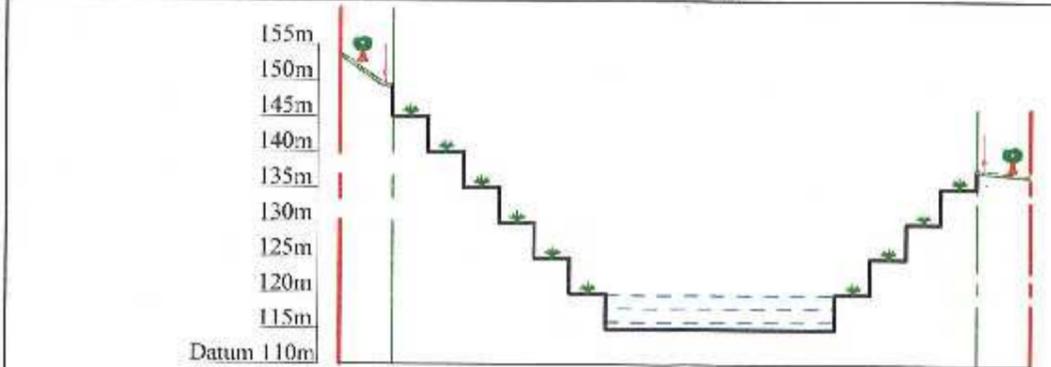
SECTION ON A-A'



SECTION ON B-B'

LAND USE AT CONCEPTUAL STAGE (Ha.)

PARTICULARS	AREA IN Ha.
AREA FOR QUARRYING	1.0728
AREA FOR SAFETY BARRIER	0.3893
<b>TOTAL LEASE AREA</b>	<b>1.4621</b>



LONGITUDINAL SECTION ON L-L'

- INDEX**
- QUARRY BOUNDARY
  - 7.5m BUFFER ZONE PLANTATIONS
  - CONTOURS
  - ROAD
  - SECTION LINE
  - ULTIMATE BENCHES
  - WATER POND
  - FENCING
  - PLANTATION IN BENCHES



PLATE NO 7

**GRANITE BUILDING STONE QUARRY OF**  
**Shri. K. K. PREMKUMAR**  
 Sy. Nos. 1/100, 1 & 9, Potharim Village, Thiruvazhi Taluk, Kannur District, Kerala

<b>Title</b>	CONCEPTUAL PLAN & SECTIONS	
<b>Scale</b>	1:100 RF	Extent: 1.4621 Ha (3.8125 Acres)

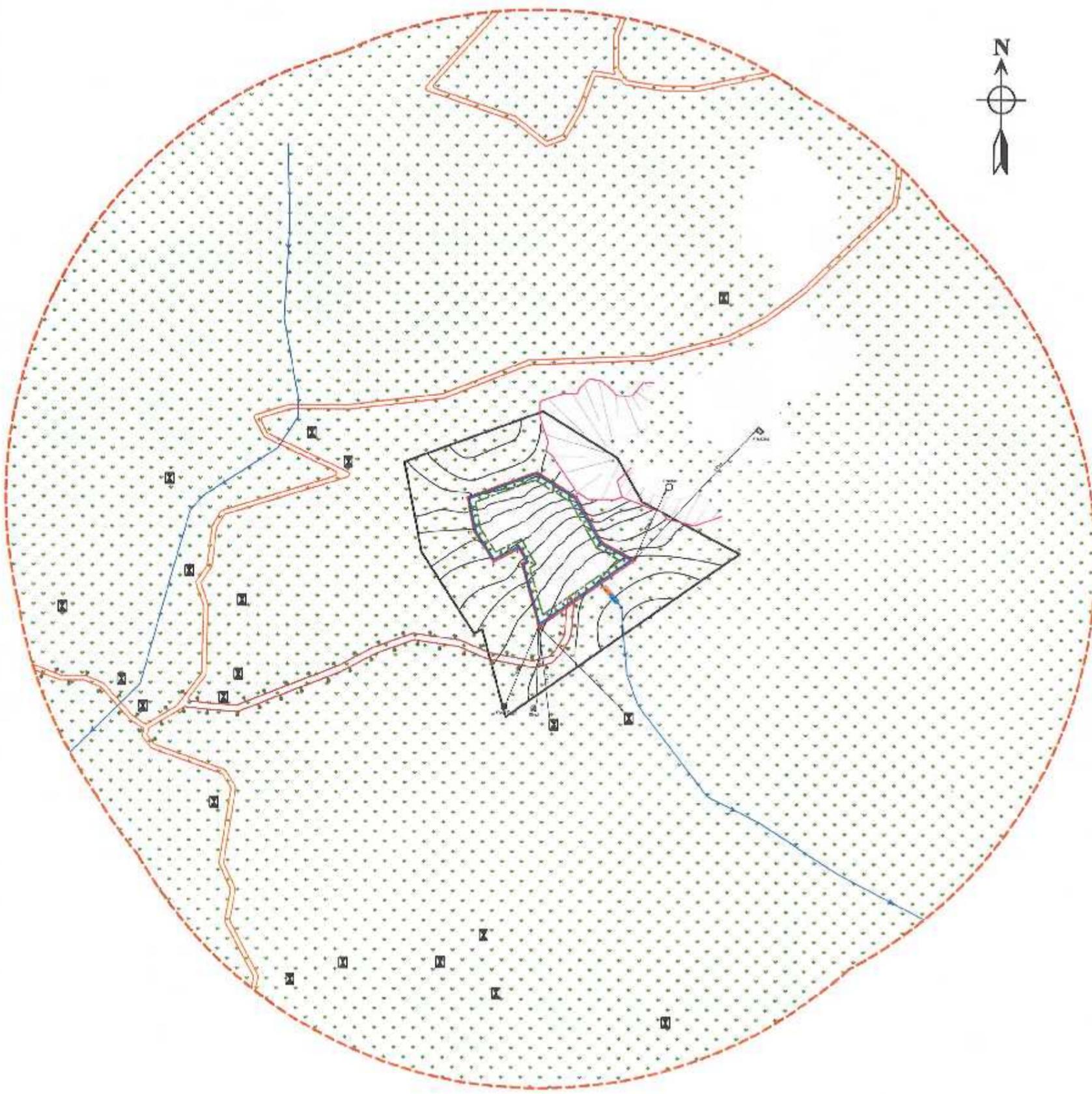
Certified that the above plan & section is correct.

*Cyril Joseph*  
 Cyril Joseph  
 (Sd/-) PROJECT ENGINEER

PREPARED BY: **GLOBAL ENVIRONMENT & MINING SERVICES**  
 (Consulting Engineers, Mine Design, Ventilation & Surveying)



MAP SHOWING ALL FEATURES (SITE & SURROUNDINGS WITHIN 500m. RADIUS) - Shri. K. K. PREMKUMAR



**INDEX**

- QUARRY BOUNDARY
- 7.5m SAFETY BARRIER
- CONTOURS
- OLD WORKING
- PRIVATE ROAD
- VILLAGE ROAD
- 60m LIMIT LINE
- 500m LIMIT LINE
- PRIVATE LAND
- PROPOSED PLANTATIONS
- GARLAND DRAIN
- SST SILT SETTLING TANK
- RWHP RAIN WATER HARVESTING POND
- WATER COURSE
- HOUSES / SHEDS
- MAGAZINE
- CRUSHER

PLATE NO. 8

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

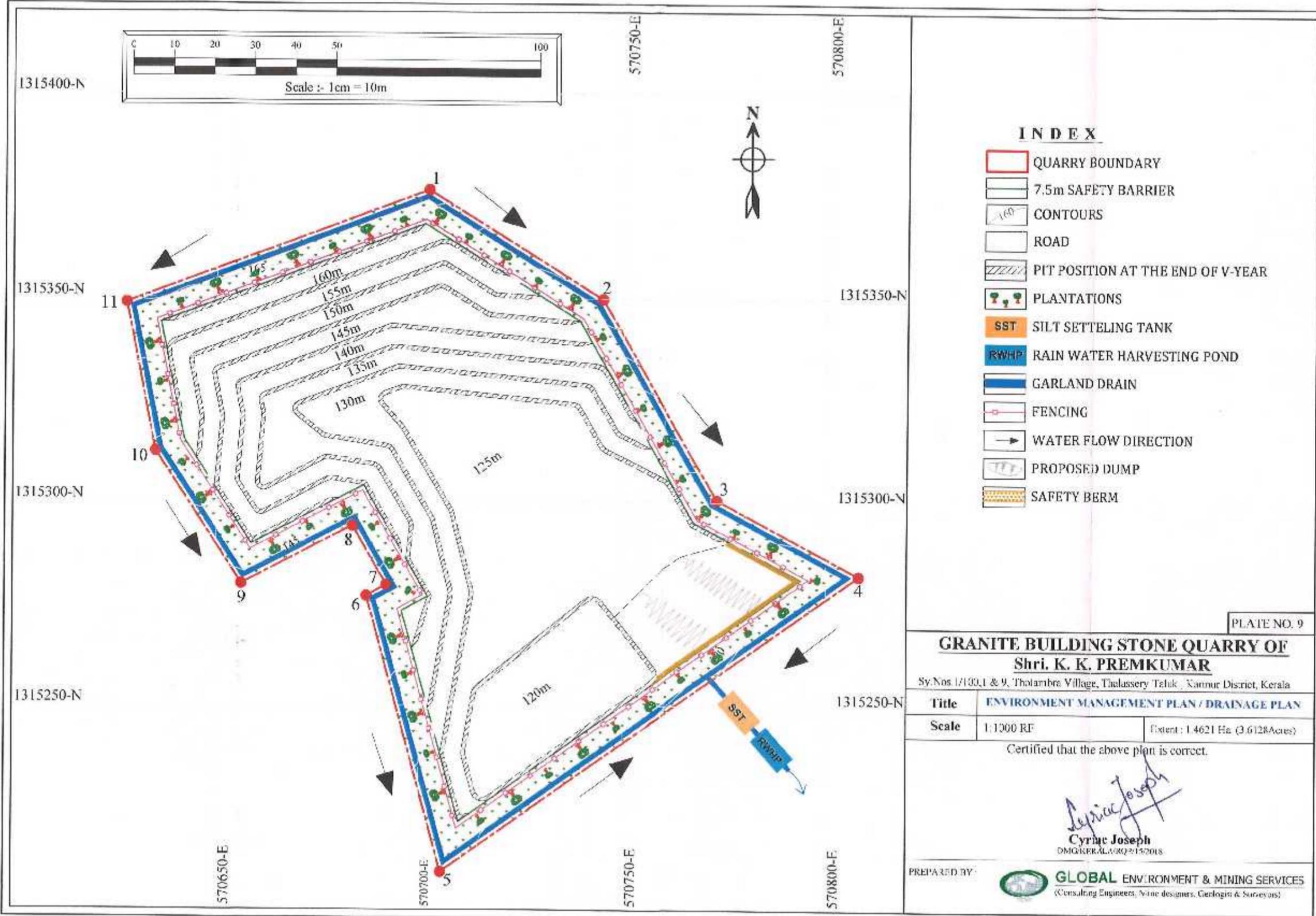
Sy.Nos.1/100,1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala

<b>Title</b>	<b>ENVIRONMENT PLAN</b> <small>(MAP SHOWING ALL FEATURES SITE &amp; SURROUNDINGS WITHIN 500m. RADIUS)</small>	
<b>Scale</b>	1:5000 RF	Extent : 1.4621 Ha. (3.6128Acres)

Certified that the above plan is correct.

*Cyriac Joseph*  
**Cyriac Joseph**  
DMG/KERALA/RQP/15/2018

PREPARED BY: **GLOBAL ENVIRONMENT & MINING SERVICES**  
(Consulting Engineers, Mine Designers, Geologist & Surveyors)



- INDEX**
- QUARRY BOUNDARY
  - 7.5m SAFETY BARRIER
  - CONTOURS
  - ROAD
  - PIT POSITION AT THE END OF V-YEAR
  - PLANTATIONS
  - SST SILT SETTLING TANK
  - RWHP RAIN WATER HARVESTING POND
  - GARLAND DRAIN
  - FENCING
  - WATER FLOW DIRECTION
  - PROPOSED DUMP
  - SAFETY BERM

PLATE NO. 9

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

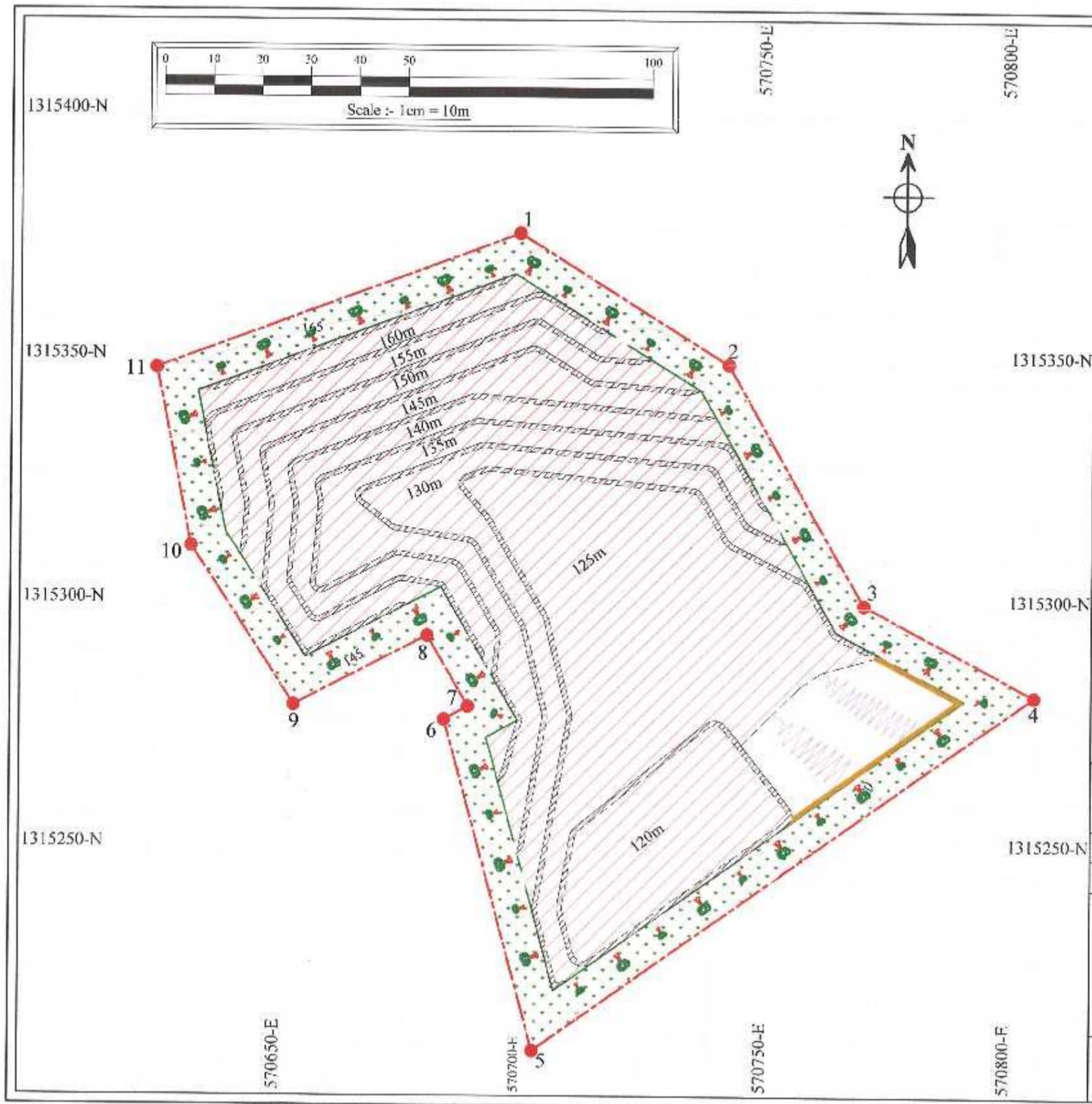
Sy. Nos 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala

<b>Title</b>	ENVIRONMENT MANAGEMENT PLAN / DRAINAGE PLAN	
<b>Scale</b>	1:1000 RF	Extent: 1.4621 Ha (3.6128 Acres)

Certified that the above plan is correct.

**Cyril Joseph**  
 DMG/KERALA/MQ/2/15/2018

PREPARED BY: **GLOBAL ENVIRONMENT & MINING SERVICES**  
 (Consulting Engineers, Mine designers, Geologists & Surveyors)



**LAND USE AT PROGRESSIVE STAGE (Ha.)**

PARTICULARS	AREA IN Ha.
AREA FOR QUARRYING	0.9977
AREA FOR SAFETY BARRIER	0.3893
<b>TOTAL</b>	<b>1.3870</b>
AREA FOR WASTE DUMP	0.0751
<b>TOTAL LEASE AREA</b>	<b>1.4621</b>

**INDEX**

- QUARRY BOUNDARY
- 7.5m SAFETY BARRIER
- CONTOURS
- ROAD
- SECTION LINE
- PIT POSITION AT THE END OF V-YEAR
- PROPOSED DUMP
- SAFETY BERM

PLATE NO.10

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

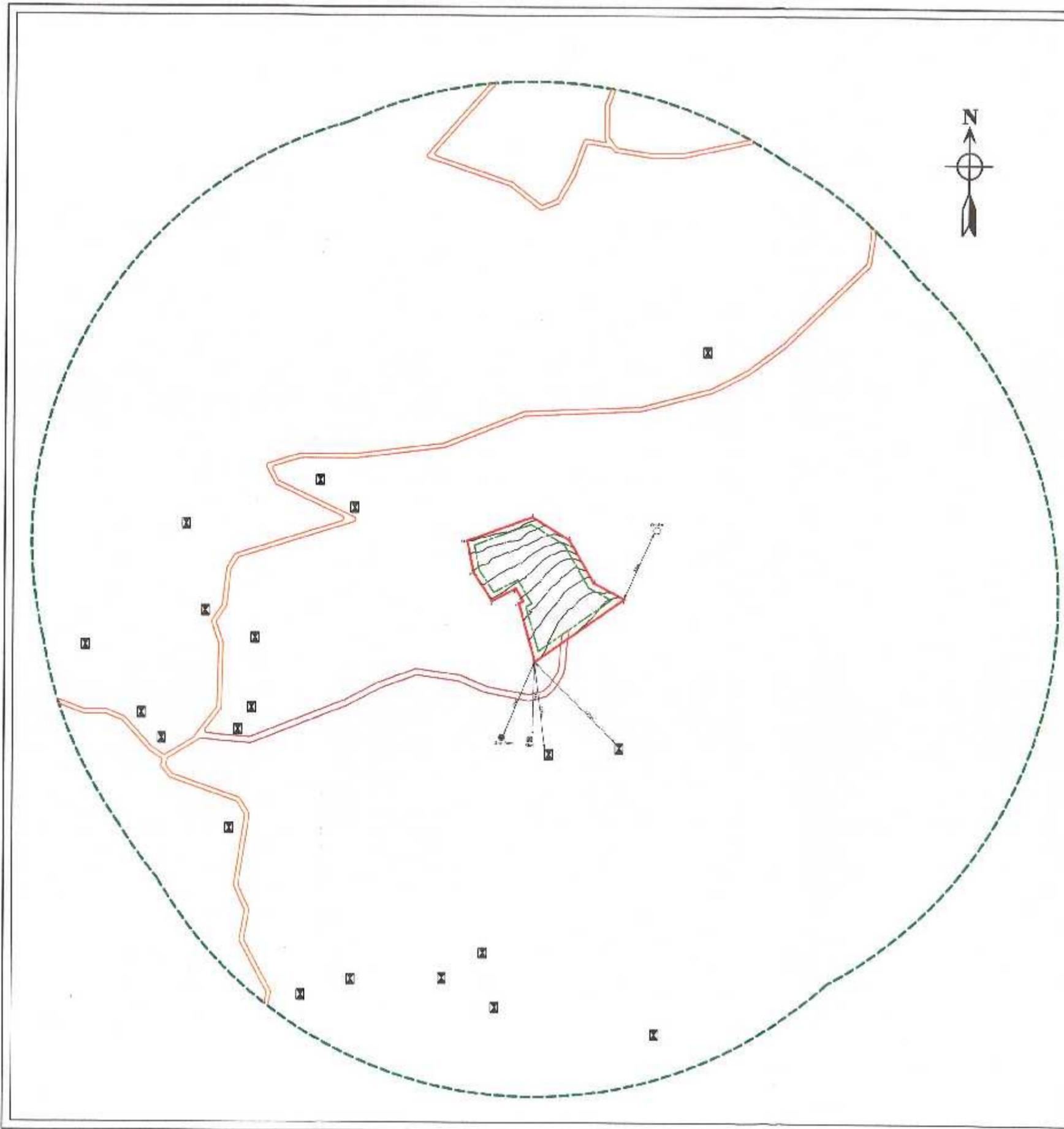
Sy.Nos. 1/100,1 & 9, Tholarabra Village, Thalassery Taluk, Kannur District, Kerala

<b>Title</b>	<b>PROGRESSIVE MINE CLOSURE PLAN</b>	
<b>Scale</b>	1:1000 RF	Extent: 1.4621 Ha (3.6128Acres)

Certified that the above plan is correct.

*Cyriac Joseph*  
**Cyriac Joseph**  
 DMG/KERALA/RQ/2/15/2018

PREPARED BY: **GLOBAL ENVIRONMENT & MINING SERVICES**  
 (Consulting Engineers, Mine designers, Geologists & Surveyors)



**INDEX**

-  QUARRY BOUNDARY
-  7.5m SAFETY BARRIER
-  CONTOURS
-  OLD WORKING
-  PRIVATE ROAD
-  VILLAGE ROAD
-  500m LIMIT LINE
-  HOUSES / SHEDS
-  CRUSHER

PLATE NO. 11

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

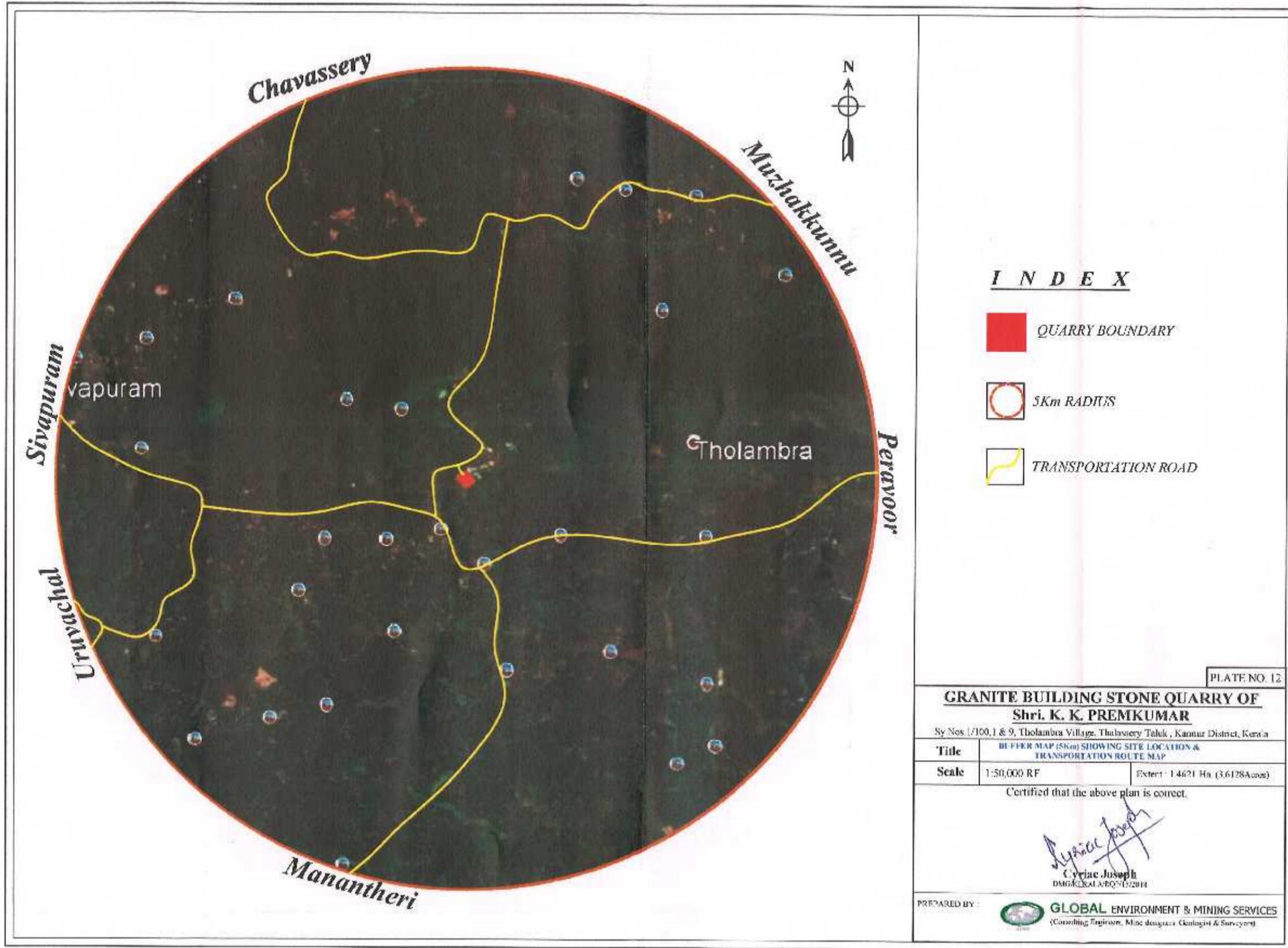
Sy.Nos.1/100,1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala

<b>Title</b>	INFRASTRUCTURE PLAN	
<b>Scale</b>	1:5000 RF	Extent : 1.4621 Ha. (3.6128Acres)

Certified that the above plan is correct.

*Cyriac Joseph*  
**Cyriac Joseph**  
 DMG/REGAL/ARQ/15/2018

PREPARED BY  **GLOBAL ENVIRONMENT & MINING SERVICES**  
 (Consulting Engineers, Mine Designers, Geologists & Surveyors)



**I N D E X**

- QUARRY BOUNDARY
- 5Km RADIUS
- TRANSPORTATION ROAD

PLATE NO. 12

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

Sy Nos 1/100.1 & 9, Tholambra Village, Thulassery Taluk, Kannur District, Kerala

<b>Title</b>	BUFFER MAP (5Km) SHOWING SITE LOCATION & TRANSPORTATION ROUTE MAP	
<b>Scale</b>	1:50,000 RF	Extent: 1.4621 Ha (3.6128Acres)

Certified that the above plan is correct.

*Cyriac Joseph*  
**Cyriac Joseph**  
 DMG/KERALA/NO/15/2014

PREPARED BY: **GLOBAL ENVIRONMENT & MINING SERVICES**  
 (Consulting Engineers, Mine Designers, Geologists & Surveyors)

Kolanthra house, Melmuringodi P.O.,Manathana, Kannur District, Kerala- 670673

Ph No. : +91 9447013110

To,

Date:14.09.2019

**The Member Secretary**

**State Environment Impact Assessment Authority (SEIAA)**

**Directorate of Environment & Climate Change**

**4<sup>th</sup> Floor, KSTRC Bus Terminal,**

**Thampanoor, Kerala-01**

**Sub:** Online submission of EC application along with EIA/ EMP Report, Pre-feasibility Report, Approved Mining Plan for mining Lease in respect of “Granite Building Stone Quarry of Shri. K.K. Premkumar, over an extent 1.4621 Ha. (3.6128 Acres) Sy Nos. 1/100,1 & 9 Tholambra Village, Thalassery Taluk, Kannur District, Kerala State, India

Dear Sir,

Please find the following documents for obtaining the Environment Clearance for mining lease of “Granite Building Stone Quarry of Shri. K.K. Premkumar, over an extent 1.4621 Ha. (3.6128 Acres) Sy Nos. 1/100,1 & 9 Tholambra Village, Thalassery Taluk, Kannur District, Kerala State, India for a production capacity 50,130 tonnes per annum.

- 1) EIA/ EMP Report
- 2) Pre-feasibility Report
- 3) Approved Mining Plan
- 4) Additional Documents (LOI, Approved Mining Plan Letter, Cluster Certificate, NABET Validity Extension Letter, Hazard Zonation Map, EIA Coordinator Details, Other Documents)

I request your good office to kindly accept the document for further processing and issue of Environmental Clearance.

Thanking You Sir,

Yours faithfully,



**Shri. K.K. Premkumar**

**Authorized Signatory.**

To,

Date: 19.03.2020

The Administrator,

State Level Expert Appraisal Committee (SEAC),

K.S.R.T.C Bus Terminal Complex,

4th Floor, Thampanoor,

Thiruvananthapuram - 695 001

Dear Sir,

**Sub:** Reply to ADS query from SEAC for Environmental Clearance proposal of 'Granite Building Stone Quarry of Shri. K. K. Premkumar'.

Please find the following additional documents as mentioned in the ADS query raised by SEAC for Environmental Clearance proposal of 'Granite Building Stone Quarry of Shri. K. K. Premkumar' over an extent of 1.4621 Ha. in Sy Nos. 1/100,1 & 9 of Tholambra Village, Thalassery Taluk, Kannur District, Kerala State, India for a maximum production of 50,130.00 tonnes Per annum.

- Form-1M is attached as **Annexure -1,**
- Detailed CER Plan is attached as **Annexure - 2**
- Land use/ Landform map (within 500m radius from the proposed mining area) which is certified by Village Officer (Tholambra Village) is attached as **Annexure -3**

I request your good office to kindly accept the additional documents for further processing and issue of Environmental Clearance.

Thanking you Sir,

Yours faithfully,



**Shri. K. K. Premkumar,**

Authorized Signatory.

## APPENDIX VIII

(See paragraph 6)

**FORM 1 M**

APPLICATION FOR MINING OF MINERALS UNDER CATEGORY 'B2' FOR LESS THAN AND EQUAL TO FIVE HECTARE.

**(II) Basic Information**

Sl.No	Areas	Distance in Kilometer/Details																																				
(i)	Name of the Mining Lease Site	Granite Building Stone Quarry of ' <b>Shri. K. K. Premkumar</b> '																																				
(ii)	Location/Site (GPS Co-Ordinate)	<p>Survey Nos. 1/100,1&amp;9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala State.</p> <table border="1"> <thead> <tr> <th>B. P. No.</th> <th>Latitude</th> <th>Longitude</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>N-11°53'53.423"</td> <td>E-75°38'57.218"</td> </tr> <tr> <td>2</td> <td>N-11°53'52.530"</td> <td>E-75°38'58.600"</td> </tr> <tr> <td>3</td> <td>N-11°53'50.930"</td> <td>E-75°38'59.520"</td> </tr> <tr> <td>4</td> <td>N-11°53'50.340"</td> <td>E-75°39'00.711"</td> </tr> <tr> <td>5</td> <td>N-11°53'47.971"</td> <td>E-75°38'57.305"</td> </tr> <tr> <td>6</td> <td>N-11°53'50.151"</td> <td>E-75°38'56.680"</td> </tr> <tr> <td>7</td> <td>N-11°53'50.260"</td> <td>E-75°38'56.840"</td> </tr> <tr> <td>8</td> <td>N-11°53'50.741"</td> <td>E-75°38'56.580"</td> </tr> <tr> <td>9</td> <td>N-11°53'50.250"</td> <td>E-75°38'55.689"</td> </tr> <tr> <td>10</td> <td>N-11°53'51.339"</td> <td>E-75°38'54.962"</td> </tr> <tr> <td>11</td> <td>N-11°53'52.500"</td> <td>E-75°38'54.735"</td> </tr> </tbody> </table>	B. P. No.	Latitude	Longitude	1	N-11°53'53.423"	E-75°38'57.218"	2	N-11°53'52.530"	E-75°38'58.600"	3	N-11°53'50.930"	E-75°38'59.520"	4	N-11°53'50.340"	E-75°39'00.711"	5	N-11°53'47.971"	E-75°38'57.305"	6	N-11°53'50.151"	E-75°38'56.680"	7	N-11°53'50.260"	E-75°38'56.840"	8	N-11°53'50.741"	E-75°38'56.580"	9	N-11°53'50.250"	E-75°38'55.689"	10	N-11°53'51.339"	E-75°38'54.962"	11	N-11°53'52.500"	E-75°38'54.735"
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11	N-11°53'52.500"	E-75°38'54.735"																																				
(iii)	Size of the Mining Lease (Ha.)	1.4621 Ha																																				
(iv)	Capacity of Mining Lease (TPA)	It is proposed to produce maximum of 50,130.00 tonnes per annum of granite building stone.																																				
(v)	Period of Mining Lease	9 Years (Life of Mine)																																				
(vi)	Expected cost of the project	222.20 Lakhs																																				
(vii)	Contact Information	<b>Shri. K. K. Premkumar,</b> Kolanthra house, Melmuringodi P.O., Manathana, Kannur District, Kerala- 670673 Ph No.: +91 9447013110																																				
(vii)	RQP Address	<b>Cyriac Joseph,</b> <b>DMG/KERALA/RQP/15/2018,</b> GLOBAL Environment & Mining Services, #212, Celestic Tower, Palm Avenue, Green Glen Layout, Bellandur, BANGALORE-560 103, Karnataka e-mail: gems.blr@globalmining.in Mobile: +91 6361550211, +080 25746999.																																				

## Environment Sensitivity

Sl. No	Areas	Distance in Kilometer/Details
1	Distance of Project site from rail or road bridge over the concerned River, Rivulet, Nallah etc.	Aryangad road bridge (1.70 Kms)
2	Distance from infrastructural facilities	
	Railway line	Thalassery (23.28 Kms)
	National Highway	Kochi-Kanyakumari Road, (NH-66, 24.52 Kms)
	State Highway	Thalassery - Coorg Road (SH-30, 6.10 Kms).
	Major District Road	Thalassery - Coorg Road (SH-30, 6.10 Kms).
	Any Other Road	Maloor – Koovakara road (0.11 Kms)
	Electrical transmission line pole or tower	<b>Electric Post:</b> Maloor – Koovakara road (0.11 Kms) <b>Main power line:</b> Edayar (5.8 kms)
	Canal or check dam or reservoirs or lake or ponds	<b>Dam:</b> Pazhassi Dam (10.00 Kms) <b>Pond:</b> Thodikulam Temple pond (4.87 Kms)
	In-take for drinking water/pump house	<b>Pump house:</b> KSIDC Pump house, Mudapathur (4.39 Kms) <b>Water tank:</b> Elayavoor Overhead water tank (26.00 Kms)
	Intake for Irrigation canal pumps	<b>Canal:</b> Pazhassi (Mattanur) canal (8.12 kms)
3	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value.	None within 2 Kms of the project site
4	Areas which are important or sensitive for ecological reasons – Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests	<b>Nearest Forest:</b> Kannoth reserve forest (6.02 Kms) <b>Nearest Wildlife Sanctuary:</b> Aralam Wildlife Sanctuary (15.5 Kms) <b>Nearest River:</b> Anjarakandy river (3.90 Kms) <b>Nearest Rivulet:</b> Idumba thodu (1.92 Kms)
5	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration	None within 2 Kms of the project site
6	Inland, coastal, marine or underground waters	<b>Coast:</b> Palissery, Kannur District (23.66 Kms)
7	State, National boundaries	Karnataka state boundary is at a distance of 20.10 Kms from the proposed mining lease area.
8	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	<b>National Highway:</b> Kochi-Kanyakumari Road, (NH-66, 24.52 Kms) <b>State Highway:</b> Thalassery - Coorg Road (SH-30, 6.10 Kms).

9	Defense installations	None within 2 Kms of the project site
10	Densely populated or built-up area, distance from nearest human habitation.	The nearest human settlements are in Panambatta at a distance of 1.0 Kms from the proposed mining lease area.
11	Areas occupied by sensitive man-made land uses (Hospitals, schools, places of worship, community facilities)	<p><b>Nearest Hospital:</b> Primary health Center, Tholambra (2.98 Kms)</p> <p><b>Nearest School:</b> Government Higher Secondary School, Maloor (0.58 Kms)</p> <p><b>Nearest Church:</b> Assumption Church, Kolayad, (3.63 Kms)</p> <p><b>Nearest Temple:</b> Sree Muthappan Temple Chitrapeddam, Maloor (1.03 Kms)</p> <p><b>Nearest Mosque:</b> Juma Masjid, Maloor (1.02 Kms)</p> <p><b>Nearest Anganwadi:</b> Edakanam (8.98 Kms)</p>
12	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	None within 2 Kms of the project site
13	Areas already subjected to pollution or environmental damage, (those where existing legal environmental standards are exceeded)	None within 2 Kms of the project site
14	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	No, the lease area is not susceptible to any natural hazard.
15	Is proposed mining site located over or near fissure/fracture for ground water recharge	No
16	<p>Whether the proposal involves approval or clearance under the following Regulations or Acts, namely:-</p> <p>(a) The Forest (Conservation) Act, 1980.</p> <p>(b) The Wildlife (Protection) Act, 1972.</p> <p>(c) The Coastal Regulation Zone Notification, 2011.</p> <p>If yes, details of the same and their status to be given.</p>	<p>No</p> <p>No</p> <p>No</p>
17	Forest land involved (hectares)	No forest land is involved.
18	<p>Whether there is any litigation pending against the project and/or land in which the project is proposed to be set up?</p> <p>(a) Name of the Court</p> <p>(b) Case No.</p>	No litigation is pending against the project and /or land in which the project is proposed.

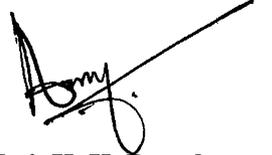
	(c) Orders or directions of the court, if any and its relevance with the proposed project.	
--	--	--

"I hereby given undertaking that the data and information given in the application & enclosures are true to the best of my knowledge & belief & I am aware that if any part of the data & information submitted is found to be false or misleading at any stage, the project will be rejected & clearance given, if any to the project will be revoked at our risk & cost".

**Date:** 11.03.2020

**Place:** Kannur

**(Signature of the Project Proponent  
along with name and address)**



**Shri. K. K. Premkumar**  
Kolanthra house, Melmuringodi P.O.,  
Manathana, Kannur District, Kerala- 670673  
Ph No.: +91 9447013110

## Capital Cost of Project

SI No	Description	Capital Investment Cost in Lakh Rs
1	Excavator, Rock Breaker (Estimated equipment cost)	60.0
	Water Tanker, Jeep, Truck etc.,	18.0
	Trippers, Jack hammers	31.20
2	Strengthening of Roads	6.00
3	Cost of Infrastructure like Site Office, Temporary Sheds, Rest shelters etc.,	4.00
4	Cost for Environment Protection	37.00
5	Cost for Construction of Garland drains, SST, RWHP, Gully checks, etc.,	6.00
6	Air Compressor	10.0
7	Land Expenses (208.32 Ares X 14,520 Rupees/Are) + Misc.	28.0
8	Pre-Operational Cost	10.0
9	Miscellaneous	12.0
<b>TOTAL</b>		<b>222.20</b>

As per MoEF & CC, GoI. The project proponent must allocate 2% of its project cost for Corporate Environment Responsibility (CER).

However, the project proponent has set apart an amount of Rs. 12.0 Lakhs to carry out CER activities in first five years of mining plan period which is much above mandatory requirement.

Project Cost	222.20 Lakhs
2% of Project cost	4.44 Lakhs
Total amount allotted to carryout the CER activities in the first five years of mining plan period.	12.0 Lakhs

## CORPORATE ENVIRONMENT RESPONSIBILITY (CER)

- The project proponent has committed a minimum but not limiting an amount of **2.00 lakhs/annum** towards the contribution to the CER activities for the benefits of the local area in consultation with the local governing bodies.( **Rs 10.0 Lakhs in the first 5 Years**)
- The project proponent also commits an amount of **Rs. 2.00 Lakhs as initial contribution (non-recurring) towards CER** at beginning of the project.
- Thus the project proponent Contributes a minimum CER amount of **Rs 12.0 Lakhs** in the first 5 years.

To make an effective contribution a study was conducted in the local area along with the project proponent, with a focus on the following sectors:

1. Support facility for Education.
2. Promotion on Health.
3. Support for Solar Power.

**CER- Proposals of the project as per the MoEF & CC guidelines as mentioned in OM No. 22-65/2017-ALIII, Dated: 01/05/2018**

**A. CER- Recurring – Rs2.00 Lakhs/Annum (Total amount of Rs 10.0 Lakhs in first five year)**

**1. Projects – Support facility for Education**

**Project Cost: Rs.1.00 Lakh/year:**

- Providing computer facilities at government public utilities like schools, Public libraries on need base in consultation with Local Self-governing Bodies.
- Timeline implementation of program details are given below.

Support facilities for Education					
Location Name	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Govt. HS School, Sivapuram	1,00,000				
Tholambra UP School, Sivapuram		1,00,000		1,00,000	
Govt LP School, Peringanam, Tholambra			1,00,000		1,00,000

## 2. Project – Medical Infrastructure facility and Health care.

**Project Cost : Rs.0.50 Lakh/year:**

- Provision of equipment support facilities and Infrastructure facilities at nearest Primary Health Centre.
- The details of villages and Funds allotted are given below.

### Medical Infrastructure Facility and Health Care

Location Name	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
PHC, Maloor, Tholambra	50,000				25,000
Govt. Homeo Dispensary Malur, sivapuram		50,000		50,000	
Govt. Ayurveda Dispensary Malur, Sivapuram			50,000		25,000

### 3. Project – Support for Solar Power.

#### Project Cost : Rs.0.50 Lakh/year:

- Solar rechargeable streetlights will be installed at appropriate location in surrounding villages in consultation with local Self-Governing Bodies, Timeline implementation of program details are given below.

Installation of Solar Street light.					
Location Name	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> Year	4 <sup>th</sup> Year	5 <sup>th</sup> Year
Tholambra	50,000			50,000	
Sivapuram		50,000			50,000
Thilankery			50,000		

## SUMMARY OF CER ANNUAL COMMITMENT

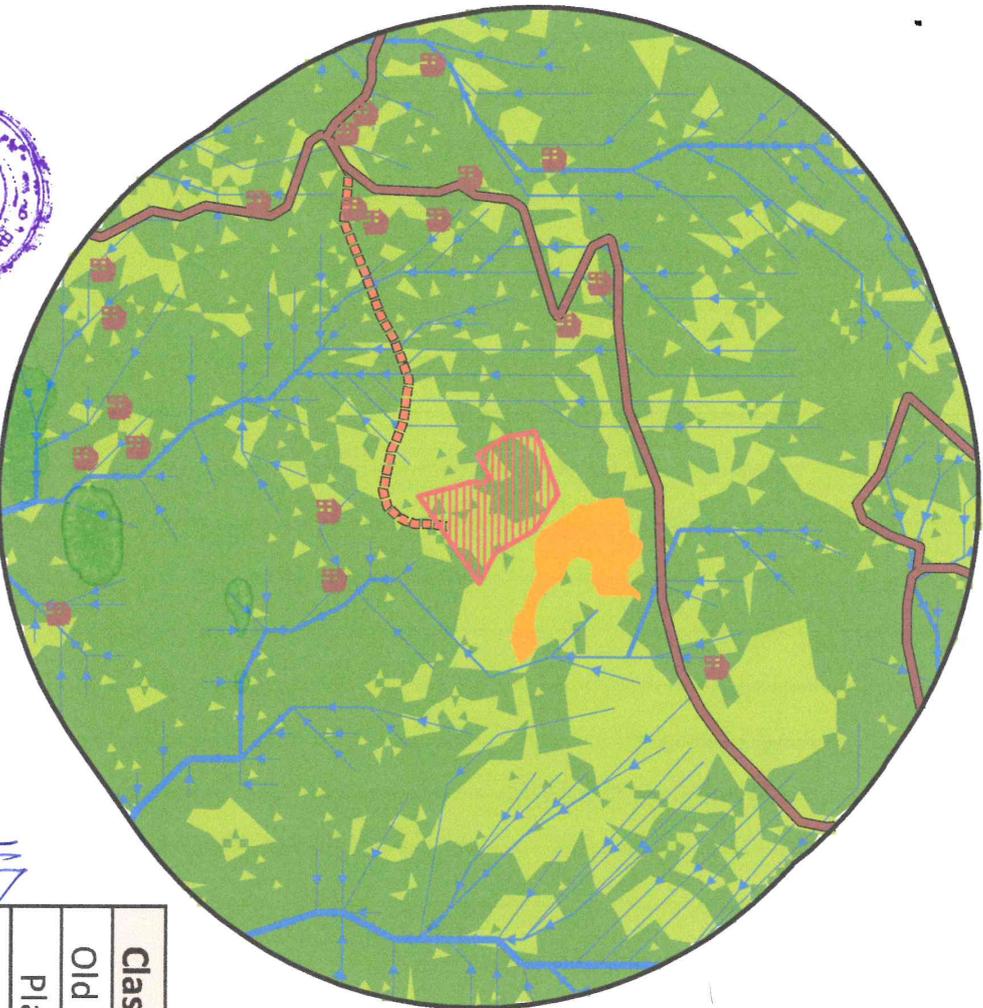
CER/ Recurring							
	Location Name	1 <sup>st</sup> Year	2 <sup>nd</sup> Year	3 <sup>rd</sup> year	4 <sup>th</sup> Year	5 <sup>th</sup> Year	Total
1	Tholambra	1,00,000		1,00,000	50,000	1,25,000	3,75,000
2	Sivapuram	1,00,000	2,00,000	50,000	1,50,000	75,000	5,75,000
3	Thilankery			50,000			50,000
<b>Total</b>		2,00,000	2,00,000	2,00,000	2,00,000	2,00,000	10,00,000

**CER /NON-RECURRING COMMITEMENTS**

<b>CER/ Non- Recurring</b>			
<b>Sl. No</b>	<b>Activity</b>	<b>Period</b>	<b>Amount (Rs. in Lakhs)</b>
<b>1</b>	<b>Infrastructure development, Education and Health facilities, Solar energy, skill development, Electrification, Avenue Plantation etc., in consultation with LSG's</b>	<b>---</b>	<b>2.00</b>
<b>TOTAL</b>			<b>2.00</b>

- All the CER works shall be undertaken based on the recommendation of the Local Self Government (LSG's).

**Land Use/ Land Cover Within 500m Radius - Shri. K. K. Premkumar**  
 Sy. Nos. 1/100, 1, 9 of Tholambra Village, Thalassery Taluk, Kannur District

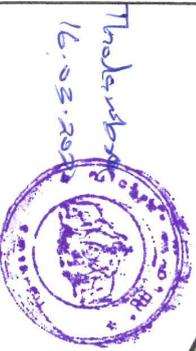


**Legend**

- Houses/Buildings/Sheds
- Public Road
- Private Road
- Drainage Pattern
- Quarry Boundary
- 500m Buffer
- Old Mining Pit
- Plantation
- Mixed Vegetation

Area: 1.4621 Ha.

Classification	Area(Ha)	Area(%)
Old Mining Pit	1.229	1.15
Plantation	76.633	71.78
Mixed Vegetation	28.895	27.07



**VILLAGE OFFICER**  
**THOLAMBRA**

# Shri. K.K.Premkumar,

Kolanthra house, Melmuringodi P.O., Manathana, Kannur District, Kerala- 670 673

Ph No.: +91 9447013110.

# 141

**To,**

**Date: 26.06.2020**

The Administrator,  
State Level Expert Appraisal Committee (SEAC),  
K.S.R.T.C Bus Terminal Complex,  
4th Floor, Thampanoor,  
Thiruvananthapuram - 695 001

**Dear Sir,**

**Sub:** Reply to ADS query from SEAC for Environmental Clearance proposal of 'Granite Building Stone Quarry of Shri. K. K. Premkumar'.

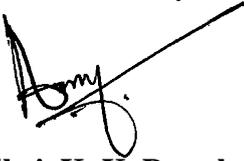
Please find the following additional document as mentioned in the ADS query raised by SEAC for Environmental Clearance proposal of 'Granite Building Stone Quarry of Shri. K. K. Premkumar' over an extent of 1.4621 Ha. in Sy Nos. 1/100,1 & 9 of Tholambra Village, Thalassery Taluk, Kannur District, Kerala State, India for a maximum production of 50,130.00 tonnes Per annum.

- Revised Corporate Environment Responsibility (CER) Plan is attached as **Annexure -1**

I request your good office to kindly accept the additional document for further processing and issue of Environmental Clearance.

Thanking you Sir,

Yours faithfully,



**Shri. K. K. Premkumar,**

Authorized Signatory.

**Annexure-1**  
**Revised CER Plan**

**CORPORATE ENVIRONMENT RESPONSIBILITY (CER)**

**for**

**Shri. K K Premkumar**

## CORPORATE ENVIRONMENT RESPONSIBILITY (CER)

- The project proponent has committed a minimum but not limiting an amount of **2.50 lakhs/annum** towards the contribution to the CER activities for the benefits of the local area in consultation with the local governing bodies.( **Rs 12.5 Lakhs in the first 5 Years**)
- The project proponent also commits an amount of **Rs. 2.00 Lakhs as initial contribution (non-recurring) towards CER** at beginning of the project.
- Thus the project proponent Contributes a minimum CER amount of **Rs 14.5 Lakhs** in the first 5 years.

To make an effective contribution a study was conducted in the local area along with the project proponent, with a focus on the following sectors:

1. Support facility for Education.
2. Promotion on Health.
3. Support for Solar Power.

**CER- Proposals of the project as per the MoEF & CC guidelines as mentioned in OM No. 22-65/2017-ALIII, Dated: 01/05/2018**

**A. CER- Recurring – Rs2.50 Lakhs/Annum (Total amount of Rs 12.5 Lakhs in first five year)**

**1. Projects – Support facility for Education**

**Project Cost: Rs.1.00 Lakh/year:**

- Providing computer facilities at government public utilities like Schools, Public libraries on need base in consultation with Local Self-governing Bodies.
- Timeline implementation of program details are given below.

<b>Support facilities for Education</b>					
<b>Location Name</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
Govt High Secondary School, Maloor	1,00,000			1,00,000	
Government Upper Primary School, Tholambra		1,00,000			50,000
New Upper Primary School, Panambatta			1,00,000		50,000

**CER- Proposals of the project as per the MoEF & CC guidelines as mentioned in OM No. 22-65/2017-ALIII, Dated: 01/05/2018**

**2.Project – Medical Infrastructure facility and Health care.**

**Project Cost : Rs.1.00 Lakh/year:**

- Provision of equipment support facilities and Infrastructure facilities at nearest Primary Health Centre.
- The details of villages and Funds allotted are given below.

<b>Medical Infrastructure Facility and Health Care</b>					
<b>Location Name</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
Primary Health Centre, Tholambra	1,00,000	1,00,000	1,00,000	1,00,000	1,00,000

**CER- Proposals of the project as per the MoEF & CC guidelines as mentioned in OM No. 22-65/2017-ALIII, Dated: 01/05/2018**

**3. Project – Support facility for Harvesting Solar Energy.**

**Project Cost : Rs.0.50 Lakh/year:**

- Solar rechargeable streetlights will be installed at appropriate location in surrounding villages in consultation with local Self-Governing Bodies, Timeline implementation of program details are given below.

<b>Installation of Solar Street light.</b>					
<b>Location Name</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
Tholambra	50,000			50,000	
Maloor		50,000			50,000
Panambatta			50,000		

## SUMMARY OF CER ANNUAL COMMITMENT

<b>CER/ Recurring</b>							
<b>Sl No</b>	<b>Location Name</b>	<b>1st Year</b>	<b>2nd Year</b>	<b>3rd Year</b>	<b>4th Year</b>	<b>5th Year</b>	<b>Total</b>
<b>1</b>	Maloor	1,00,000	50,000		1,00,000	50,000	3,00,000
<b>2</b>	Tholambra	1,50,000	2,00,000	1,00,000	1,50,000	1,50,000	7,50,000
<b>3</b>	Panambatta			1,50,000		50,000	2,00,000
<b>Total</b>		<b>2,50,000</b>	<b>2,50,000</b>	<b>2,50,000</b>	<b>2,50,000</b>	<b>2,50,000</b>	<b>12,50,000</b>

## CER /NON-RECURRING COMMITEMENTS

<b>CER/ Non- Recurring</b>			
<b>Sl. No</b>	<b>Activity</b>	<b>Period</b>	<b>Amount (Rs. in Lakhs)</b>
<b>1</b>	<b>Infrastructure development, Education and Health facilities, Solar energy, skill development, Electrification, Avenue Plantation etc., in consultation with LSG's</b>	---	<b>2.00</b>
<b>TOTAL</b>			<b>2.00</b>

- **All the CER works shall be undertaken in Co-ordination with the Local Self Government (LSG's).**

**MINUTES OF THE 113<sup>th</sup> MEETING OF SEAC KERALA HELD ON  
15<sup>th</sup> – 17<sup>th</sup> SEPTEMBER 2020 AT THE CONFERENCE HALL,  
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,  
THIRUVANANTHAPURAM**

**AGENDA - 2**

**1. SIA/KL/MIN/129719/2019 , 1315/EC2/2019/SEIAA**

Environmental Clearance for the proposed Granite Building Stone Quarry with permit at Block No.62, Re-Survey No.25/1-2 in Thrikkalangode Village, Ernad Taluk, Malappuram District, Kerala State for an extent of 0.7747 Ha Under B2 Category

**Decision:** The proponent was present. The RQP made the presentation. The Committee decided to direct the proponent to submit the following documents/details;

- 1) *Correct the total area according to the approved mining plan in Form 1 M.*
- 2) *Check and resubmit the stripping ratio.*
- 3) *Correction in drainage map and provide necessary silt traps and settling tank.*
- 4) *Hydrological details of waterlevel in open well with geo co-ordinates.*
- 5) *Latitude & Longitude of monitored open well*
- 6) *Revised CER with location specific and monitorable targets*
- 7) *Rework biodiversity management plan*
- 8) *Corrected Form IM*
- 9) *Submit new cluster certificate.*

The Committee also entrusted Shri.K.Krishna Panicker & Dr.A.V.Raghu for field inspection.

**2. SIA/KL/MIN/32452/2019 , 1481/EC3/2019/SEIAA**

Building Stone Quarry (Minor Mineral) mining project of M/s Nattanpara Metals LLP is situated at Survey No. 1998 (Not final), Kanthalad Village, Thamarassery Taluk, Kozhikode District, Kerala in an area of 3.3910 ha.

**Decision:** The proponent was present. The RQP made the presentation. The Committee decided to direct the proponent to submit the following documents/details;

- 1) *Revised Project cost and CER cost*
- 2) *Detailed survey map*
- 3) *Revised EMP cost*
- 4) *Print out of the application submitted for wild-life clearance*
- 5) *Prepare buffer & core zones in biodiversity plan*
- 6) *Details of ground water levels with geo co-ordinates of the well.*
- 7) *Clarification on noise level data*
- 8) *Distance from the proposed quarry to the nearest house/building as certified by the Village Officer.*
- 9) *Landslide mitigation study with emphasis on whether this project will destabilise nearby High Hazard area.*

The Committee also entrusted Dr. R.AjayakumarVarma& Dr N.Anilkumar for field inspection.

### **3 SIA/KL/MIN/42946/2013 , 1473/EC3/2019/SEIAA**

Expansion of existing building stone quarry (Minor Mineral) mining project of M/s Payyoli Granites Pvt. Ltd. is situated at Re-Survey Nos. 80/1A1, 81/2 of Keezhariyur Village, Re-Survey No. 72 of Thurayur Village, Koyilandy Taluk, Kozhikode District, Kerala for an area of 4.9237 ha.

**Decision:** The proponent was present. The RQP made the presentation. The Committee decided to direct the proponent to submit the following documents/details;

- 1) *Certificate from regional office of MoEF*
- 2) *GPS Map to be uploaded*
- 3) *Revise the EMP and cost required for its implementation*
- 4) *Rework the biodiversity details*
- 5) *Letters from the CER beneficiaries*
- 6) *Stripping ratio to be checked and corrected*

7) *Impact of mine on the nearby water tank.*

The Committee also entrusted Dr.R.AjayakumarVarma & Dr.N.Anil Kumar for field inspection.

#### **4 SIA/KL/MIN/43053/2019 , 1498/EC3/2019/SEIAA**

Granite Building Stone Quarry of Shri. K.K. Premkumar, over an extent 1.4621 ha. (3.6128 Acres) Sy Nos. 1/100,1 & 9 Tholambra Village, ThalasseryTaluk, Kannur District, Kerala State.

**Decision:** The proponent was present. The RQP made the presentation. The Committee decided to direct the proponent to submit the following documents/details;

- 1) *Environmental sensitivity analysis of the area considering the nearness of the site to high hazard zone*
- 2) *Mitigation measures, if any to be suggested for nullifying the adverse impacts, if any, due to environmentally sensitive aspects.*
- 3) *Write up on the afforestation plan*
- 4) *Revised CER with location specific and monitorable targets*

The Committee also entrusted Dr.R.AjayakumarVarma&Dr.N.Anil Kumar for field inspection.

#### **5 SIA/KL/MIN/43996/2019 , 1487/EC3/2019/SEIAA**

Granite Building stone Quarry of Sri K Gangadharan, over an extent of 1.5110 ha. (3.7337 Acres) Sy. No. 57/2B2, Kolavallor Village, Thalassery Taluk, Kannur District, Kerala State

**Decision:** The RQP made the presentation. The Committee decided to direct the proponent to submit the following documents/details;

- 1) *Revised site-specific CER proposals with monitorable indicators*
- 2) *A plan for green belt development.*

- 3) *Recent cluster certificate*
- 4) *O.B. dumping site should be included in the plan and submitted.*

The Committee also entrusted Dr.R.AjayakumarVarma & Dr.N.Anil Kumar for field inspection.

### **CONSIDERATION OF TOR PROPOSALS**

#### **1. SIA/KL/MIN/43351/2019 , 1506/EC2/2019/SEIAA**

Granite Building stone Quarry of Mr. Shibu. S S/OSasidharan, shibunivas, Nettayam P.O,37/5-2,37/5-3,37/4-2,37/4-1,37/3-2-2, 37/3-1,37/3-2,37/13-1- 2,35/2-2,35/14, 35/15,35/15-2,36/3,36/2-2(Private Land) 35/13,36/4 Government Land with NOC Vellinalloor Village,KottarakkaraTaluk,Kollam District, Kerala for an area of 02.1252 ha

**Decision:** The proponent was present. The RQP made the presentation. The Committee decided to approve standard TOR along with additional terms given below for the EIA study. Committee also directed the proponent to submit the following documents/details also;

- 1) *Revalidated NOC*
- 2) *Revised cluster certificate*
- 3) *Land details*
- 4) *Hazard zonation map*
- 5) *Revised CER with location specific and monitorable targets*
- 6) *Detailed Land use plan within 500m radius of the project site*
- 7) *Traffic density and traffic management plan*

*Additional terms for conducting EIA*

1. *Impact of impounded quarry ponds and their breach potential*
2. *Impact on the slope stability of the region in and around the project site*
3. *Impact of additional traffic due to transportation of mine products*
4. *Impact of rehabilitation required, if any.*

**2. SIA/KL/MIN/48074/2019 , 1543/EC3/2019/SEIAA**

Granite building Stone quarry of Mr.Abdu Rahiman,A.C,in Re-Survey No.269/1,269/2 in Nediyririppu Village,KondottyTaluk,Malappuram District, Kerala State for an extent of 2.2259 ha

**Decision:** The proponent was present. The RQP made the presentation. The Committee decided to accept the TOR proposed for the EIA study along with the special terms given below and directed the proponent to submit the following documents/details also;

- 1) *Revised CER based on the need assessment of the impact zone with specific focus on gender aspects*
- 2) *Hazard zonation map.*
- 3) *500m land use and land cover map*

*Additional terms for conducting EIA*

1. *Impact of impounded quarry ponds and their breach potential*
2. *Impact on the slope stability of the region in and around the project site*
3. *Impact of additional traffic due to transportation of mine products*
4. *Impact on the existing drainage adjacent to the project site including its supportive capacity for the possible augmented load*
5. *Impact on the nearby hazard zones*

**3. SIA/KL/MIN/49680/2020 , 1590/EC1/2019/SEIAA**

Granite Building Stone Quarry of Mr. EldhoIssac at -Sy. No208/1 of Alanallur Village, MannarkkadTaluk, Palakkad District of Kerala for an extent of 4.7023 ha under B2 category

**Decision:** The proponent was present. The RQP made the presentation. The Committee decided to accept the TOR proposed for the EIA study along with the following additional terms and directed the proponent to submit the following documents/details also;

- 1) *Landuse/Land cover map of the area covering 500m radius of the project site*
- 2) *Survey map indicating distance from the proposed quarry to the nearby houses/buildings*
- 3) *Detailed drainage map*
- 4) *Revised project cost*

5) *Revised CER with location specific and monitorable targets*

*Additional terms for conducting EIA*

1. *Impact on the slope stability of the region in and around the project site*
2. *Impact of additional traffic due to transportation of mine products*
3. *Impact of the overburden and mine waste dumping locations*
4. *Impact on the existing drainage*
5. *Impact on the nearby environmentally sensitive zones, if any.*

**4. SIA/KL/MIN/49707/2020, 1667/EC3/2020/SEIAA**

Environmental Clearance for Building Stone Project of Mr. P K Prasad, in re survey no. 281/10, 281/11, 281/11-2 of Mazhuvannur Village of Kunnathunadu Taluk, Ernakulam, Kerala for an area of 2.1235 Ha

**Decision:** The proponent was present. The RQP made the presentation. The Committee decided to accept the TOR proposed for the EIA study along with additional terms and directed the proponent to submit the following documents/details also;

- 1) *Biodiversity status to be assessed with quantitative details in the buffer and mining areas*
- 2) *Upload GPS map with boundary pillar locations*
- 3) *Upload valid accreditation status of the consultant*

*Additional terms for conducting EIA*

1. *Cumulative impact of the existing and proposed quarry as well as the old working ones in the impact zone*
2. *Impact on the nearby buildings as well as those located in the break-in-slope region of the impact zone, particularly in the WSW and Eastern side*
3. *Impact on the slope stability of the region in and around the project site*
4. *Impact of additional traffic due to transportation of mine products*
5. *Impact on the impoundments in the vicinity with focus on breach potential*

**5. SIA/KL/MIN/47565/2019 , 1515/EC3/2019/SEIAA**

Building Stone Quarry (Minor Mineral) project of Mr. KADER BABU situated at Re Survey No. 111/4, 111/7, 111/8, 111/2, 111/10, 111/5, 111/6 in Kannamangalam Village, Thirurangadi Taluk, Malappuram District, Kerala in an area of 3.4739 ha.

**Decision:** The RQP made the presentation. The Committee decided to direct the proponent to submit the following documents/details; The Committee also decided to accept the TOR proposed for the EIA study along with additional terms

- 1) *Revised project cost*
- 2) *Revised CER based on need assessment of the locality as well as the SC/ST farmers in the vicinity*

*Additional terms for conducting EIA*

1. *Cumulative impact of the existing quarries and proposed quarry as well as the old workings in the impact zone*
2. *Impact on the slope stability of the region in and around the project site*
3. *Impact of additional traffic due to transportation of mine products*
4. *Impact on the impoundments in the vicinity with focus on breach potential considering the rainfall intensity and magnitude for the last 5 years*

**6. SIA/KL/MIN/40579/2019 , 1442/EC2/2019/SEIAA**

Granite Building Stone Quarry of Mr. P.R Vijayakumar over an extent of 0.9907 Ha. Re survey No 53/2 in Venganellur village, Thalappilly taluk, Thrissur. Kerala

**Decision:** The RQP made the presentation. The Committee decided to direct the proponent to submit the following documents/details;

- 1) *Revised contour map*
- 2) *Revised CER plan with location specific and monitorable targets*
- 3) *Plan for protection of location for dumping overburden and mine waste*
- 4) *Plan for safe handling of rock boulders*

The Committee also entrusted Dr.S.Sreekumar & Dr. P.S.Easa for the field inspection

**Sd/-**  
**Mir Mohammed Ali,IAS**  
**Secretary**

**Sd/-**  
**Dr.C.Bhaskaran**  
**Chairman**

**MINUTES OF THE 115<sup>th</sup> MEETING OF SEAC KERALA HELD  
DURING 3 – 5, NOVEMBER 2020 AT THE CONFERENCE HALL,  
STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY,  
THIRUVANANTHAPURAM**

**AGENDA -5**

**CONSIDERATION/RECONSIDERATION OF ENVIRONMENTAL CLEARANCE**

**1. SIA/KL/MIN/125574/2019 , 1584/EC4/2019/SEIAA**

**Environment Clearance for mining lease of “Ordinary Earth Quarry of Shri.K. H. Shajahan Rawather’ over an extent of 2.4517 Ha. (6.0581 Acres) Block No. 2, Sy. Nos. 394/1, 1-2, 1-3, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 15-2, 397/1, 3, 4, 14, , 15, 16, 19, 20, 398/5 & 398/9 in Kidangannur Village, Kozhenchery Taluk, Pathanamthitta District, Kerala**

**Decision:** The Committee discussed and accepted the field inspection report and decided to direct the proponent to submit the following documents/detail:

- i) Revised plan of excavation so as to ensure that the general slope is not affected and surface run off is not affected seriously*
- ii) Revised drainage plan to avoid possibility of land slides*
- iii) Detailed compensatory green plantation program suitable for proposed educational complex*
- iv) Latest demand /order from railways/other government institutions/end users.*

**2. SIA/KL/MIN/125587/2019, 1492/EC1/2019/SEIAA**

**Environmental Clearance for Granite building stone quarry of Mr. K.V Mohammedali, for an extent of 1.3640 Ha ,Re Survey No-1/4 in Vallapuzha village, Pattambi Taluk, Palakkad District, Kerala.**

**Decision:**The Committee decided to direct the proponent to submit the following documents/details:

- i) Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III*

*dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

- ii) *Details of road access to the project site.*
- iii) Details of compensatory green belt development program.

### **3. SIA/KL/MIN/127053/2019, 1517/EC1/2019/SEIAA**

**Environmental Clearance for Building Stone Quarry of M/s Popular Granites over an extent of 0.7184 Ha.Survey No-114/pt, in Thirumittacode-II Village, Pattambi Taluk, Palakkad District, Kerala.**

**Decision:** The Committee discussed and accepted the field inspection report and decided to direct the proponent to submit the following documents/details:

- i) *Details of top soil dump yard showing protective measures.*
- ii) *An affidavit for the safety of latex processing shed within 50 m.*
- iii) *Mining must be limited to 5m below ground level to ensure the phreatic aquifer of the area is not affected.*
- iv) Formulate suitable compensatory green belt development program.
- i) Revise project cost considering fair value of land and revised EMP.
- ii) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

### **4. SIA/KL/MIN/129061/2019, 1531/EC3/2019/SEIAA**

**Granite Building stone quarry of Shri. Sabu Varghese, Managing Partner, M/s. St. Kuriakose Granites, At Re- Survey No: 298/4,298/18, Block No.41 in Thiruvaniyoor Village, Kunnathunadu Taluk, Ernakulam District, Kerala State**

**Decision:** The Committee decided to invite the proponent for presentation along with the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**5. SIA/KL/MIN/129623/2019, 1537/EC3/2019/SEIAA**

**Environmental clearance for Granite (Building Stone) Quarry with Lease at Re Survey No. 397, Block No: 64 in Elankur Village, Ernad Taluk, Malappuram District, Kerala State for an extent of 3.2636 Ha under B2 category**

**Decision:**The Committee decided to invite the proponent for presentation along with the following documents/details:

- i) *Revised project cost*
- ii) *Hazard zonation map indicating the distance from the proposed site*
- iii) *District Survey Report*
- iv) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**6. SIA/KL/MIN/129749/2019, 1553/EC2/2019/SEIAA**

**Granite Building Stone Quarry of Vallom Infrastructure and Developers Pvt.Ltd, at Survey Nos. 47/1 in Venganellur Village, Thalappilly Taluk, Thrissur District, Kerala for an extent of 0.9990 Ha under B2 category**

**Decision:** The Committee scrutinised the ADS by the proponent and decided to direct to submit the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**7. SIA/KL/MIN/129777/2019, 1561/EC1/2019/SEIAA**

**Environmental Clearance for Granite building stone quarry of Mr. Haridasan T, for an extent of 0.9896 Ha. Survey no 315 in Nagalassery Village, Pattambi Taluk, Palakkad-District,Kerala**

**Decision:** The Committee discussed and accepted the field inspection report. The Committee decided to direct the proponent to submit the following documents/details:

- i) *Revised drainage map to channel overflow water properly to the nearest natural drain.*
- ii) *Details of top soil dump with proper gabion wall to avoid soil erosion.*
- iii) *Details of compensatory green belt development plan.*
- iv) *Mining must be limited to 5 m below ground level to ensure uninterrupted seasonal drainage.*
- v) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the*

*first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

#### **8. SIA/KL/MIN/134156/2019, 1698/EC4/2019/SEIAA**

**Environment Clearance for Building stone quarry project over an extent of 0,6663Ha, at Survey No. No172, 188/2 in Kodyathur Village; Kozhikode Taluk, Kozhikode District, Kerala State**

**Decision:** The Committee scrutinised the ADS by the proponent and decided to invite the proponent for presentation along with additional documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

#### **9.SIA/KL/MIN/152995/2020, 1681/EC1/2020/SEIAA**

**Environmental Clearance for the Proposed Granite (Building Stone) Quarry in Block No-5, Re-Survey No. 540/5 in Pallassena Village, Chittur Taluk, Palakkad District, Kerala for an extent of 0.9992 Ha under B2 category.**

**Decision:** The Committee decided to invite the proponent for presentation along with the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under*

*CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**10.SIA/KL/MIN/155712/2020 , 1688/EC1/2020/SEIAA**

**The building stone quarry (Minor Mineral) mining project of Mr. V. Sudhakaran situated at Block No. 4, Re Survey Nos. 270/1, 2, 3, 4, 4-1, 5, 5-1, 5-2, 5-3, 5- 4, 5-18, 5-19, 12,12-1, 12-2, 14, 15, 15-1, 16, 17 of Pallichal Village, Neyyattinkara Taluk, Thiruvananthapuram District, Kerala for an area of 1.7230 hectares.**

**Decision:** The Committee scrutinised the ADS by the proponent and decided to direct to submit the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**11. SIA/KL/MIN/39461/2019, Building Stone Mine (Quarry, Minor Mineral Mining) project of M/s Vengunadu Granite and Sands Pvt. Ltd. at Survey Nos. 238/1, 238/2, 239/1, 239/2, 239/5, 239/6, 239/7, Block No. 22, Muthalamada 1 V.**

**Decision:** The Committee scrutinised the ADS by the proponent and decided to direct to submit the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining*

*validity period of the EC.*

**12. SIA/KL/MIN/43053/2019, 1498/EC3/2019/SEIAA**

**Environment Clearance for mining lease of “Granite Building Stone Quarry of Shri.K.K. Premkumar, over an extent 1.4621 Ha. (3.6128 Acres) Sy Nos. 1/100,1 & 9 Tholambra Village, Thalassery Taluk, Kannur District, Kerala State**

**Decision:**The Committee accepted the FIR and decided to direct the proponent to submit the following documents:

- i) *Detailed plan for stabilization of the adjacent High Hazard Zone in which the abandoned quarry of the same proponent is located*
- ii) *Affidavit regarding the implementation of safeguards against the accident potential of the adjacent quarries of the proponent*
- iii) *Affidavit regarding the closure of the adjacent abandoned quarry taking all the environmental safeguards*
- iv) *Detailed drainage plan including that in the quarry and outflow*
- v) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**13. SIA/KL/MIN/43404/2019, 1459/EC1/2019/SEIAA**

**Granite Building Stone quarry of Mr. Najeeb Hassan N at Re Sy No-27/3 in Koppam Village, Pattambi Taluk, Palakkad District, and Kerala for total mine Permit area of 0.8749Ha.**

**Decision:** The Committee discussed and accepted the field inspection report and decided to direct the proponent to submit the following documents/details:

- i) *Certified copy from the concerned Village Officer stating the distance from the proposed quarry to the nearby houses/buildings.( within 200 m radius)*

- ii) *Details of road development plan*
- iii) *Revise project cost considering revision of EMP and road development cost.*
- iv) *Mining must be limited to 5 m below ground level.*
- v) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

#### **14. SIA/KL/MIN/43996/2019, 1487/EC3/2019/SEIAA**

**Environment Clearance for mining lease of Shri. K. Gangadharan over an extent 1.5110 Ha. (3.7337 Acres) Sy. No. 57/2B2, Kolavallor Village, Thalassery Taluk, Kannur District, Kerala State.**

**Decision:** The Committee accepted the FIR and decided to direct the proponent to submit the following documents/details:

- i) *Recent cluster certificate*
- ii) *Clarification with respect to the total cluster area warranting cumulative EIA study*
- iii) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

#### **15. SIA/KL/MIN/44590/2019, 1501/EC3/2019/SEIAA**

**Environment Clearance for mining permit of Granite Building Stone Quarry of Sri.Suneesh.M.P over an extent of 0.9915 Ha.(2.4499 Acres) at Re-Survey No. 57/2B2, Kolavallur Village, Thalassery Taluk, Kannur District, Kerala State.**

**Decision:**The Committee decided to direct the proponent to submit the following documents/details:

- i) *Recent cluster certificate*
- ii) *Clarification with respect to the total cluster area warranting cumulative EIA study*
- iii) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**16. SIA/KL/MIN/45120/2019, 1526/EC2/2019/SEIAA**

**Shri.VJ Chacko, Re-survey No. 153/7 over an extent of 0.9996 hectares, Paralikad Granites situated in Wadakkanchery Village, Thalappilly Taluk Thrissur District**

**Decision:** The Committee scrutinised the ADS by the proponent and decided to direct to submit the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**17. SIA/KL/MIN/45585/2019, 1494/EC1/2019/SEIAA**

**Environmental Clearance for the Proposed Granite (Building Stone) Quarry in Re - Sy. No. 345/1, 340/2, 339/11, 340/4, 340/5, 339/2, 345/7, 345/9 of Pallikkal Village,**

**Varkala Taluk of Thiruvananthapuram District., Kerala for an extent of 2.4925 Ha under B2 category.**

**Decision:** The Committee scrutinised the ADS by the proponent and decided to direct to submit the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**18. SIA/KL/MIN/45874/2019, 1541/EC3/2019/SEIAA**

**Building stone quarry project is situated at Re. Sy No.322/109, 110, 111, 112, 118 (322/3, 322/5 old of Village– Chavasseri, Taluk-Irityy, District-Kannur, Kerala over an area of 0.2513 Ha.)**

**Decision:** The Committee discussed and accepted the field inspection report, and decided to direct the proponent to submit the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**19. SIA/KL/MIN/92227/2019, 1215/EC2/2019/SEIAA**

**MOHAMMED.K.K QUARRY**

**Decision:** The Committee scrutinised the ADS by the proponent and decided to direct to submit the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

## **20. SIA/KL/MIS/137528/2020, 1623/EC4/2019/SEIAA**

### **Proposed Expansion of 'Government General Hospital' at Kasaba Village, Kozhikode Taluk, Kozhikode, Kerala.**

**Decision:** The Committee discussed and accepted the field inspection report, and decided to direct the proponent to submit the following documents/details:

1. *The Environmental Management Plan and cost required for its implementation during the operation phase may be revised by re-addressing the following aspects:*

- Adequacy of space allocated for storage of biodegradable and non-biodegradable waste and the number of composting bins during the operation phase
- Adequacy of space allocated for the safeguarded storage of biomedical waste
- Sequential plan for managing demolition waste and excavated soil and its utilization as well as temporary storage of the excess quantity.
- Substantiated plan for the use of the excess excavated soil of about 6430 m<sup>3</sup> for internal road laying, backfilling and landscaping and handing over of the excess quantity for the nearest public works.
- Possibility for tree fencing all around the compound in addition to avenue trees with appropriate species that has lesser canopy cover as there is limiting land availability.
- Substantiated plan for the parking arrangement without compromising the required open spaces near the hospital buildings.
- Ensure that the depth of the percolation pit (proposed as 3.6 m) is such that it allows adequate filtration before reaching the water table.
- Design the storm water drain considering the carrying capacity as the quantity of flow increases gradually
- Climate responsive design as per Green Building Guidelines in practice should be adopted.

- Exposed roof area and covered parking should be covered with material having high solar reflective index
- 2. *Building design should cater to the differently-abled citizens*
- 3. *Provide safe and healthy basic facilities for construction workers as per the Building & Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996*
- 4. *Water efficient plumbing should be adopted*
- 5. *Design of the building should be in compliance to Energy Building Code as applicable*

**CONSIDERATION OF TOR PROPOSALS**

**1. SIA/KL/MIN/36523/2019 , 1389/EC2/2019/SEIAA**

**Granite Building Stone Quarry of Mr. Sibish Augustine, at Survey Nos. 264/1, 295/6, 296/3, 296/4, 296/5, 297/1 in Vayakkara Village, Payyannur Taluk, Kannur District, Kerala for an extent of 1.0854 Ha**

**Decision:** The Committee accepted the FIR and scrutinised the ADS submitted by the proponent and decided to direct the proponent to submit the following documents/details:

- i) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**2. SIA/KL/MIN/40632/2019, 1419/EC1/2019/SEIAA**

**Building Stone Quarry of Mr. Suresh Babu over an extent of 2.9408 Ha. Re Survey No1/9,2/4A,2/4B in Ottapalam-1 Village, Ottapalam Taluk, Palakkad District, Kerala**

**Decision:** The Committee accepted the FIR and decided to direct the proponent to submit the following documents/details:

- i) *Revised drainage map protecting the seasonal drain within the project area and connecting overflow water to the nearest natural drain. Top soil dump also to be included in the map*
- ii) *Details of compensatory afforestation program.*
- iii) *Details of proposed road widening.*
- iv) *Protective measures for avoiding soil erosion from top soil dump.*
- v) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the*

*first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

### **3. SIA/KL/MIN/41701/2019, 1497/EC1/2019/SEIAA**

**Environmental Clearance for Building Stone Quarry Project of Mr. Ajikumar.N in Re-Survey Number: 270/3 Malayalappuzha Village, Konni Taluk, Pathanamthitta District**

**Decision:**The Committee discussed and accepted the field inspection report, and decided to direct the proponent

- i) *Revise project cost by including EMP cost also*
- ii) *Details of afforestation programs in nearby places. Also explore the possibility of planting Miyawaki forest.*
- iii) *Water requirement including drinking water and its source*
- iv) *Certified location map*
- v) *Upload the approved mining plan*
- vi) *Detailed afforestation program.*
- vii) *Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

### **4. SIA/KL/MIN/41954/2019, 1433/EC1/2019/SEIAA**

**Environmental Clearance of Building Stone Quarry of Mr. Muhammed Saleem.V over an extent of 0.9891 Ha. Re-Sy.Block No. 36, Re-Sy:-321/1-1 in Kulukkallur Village, Pattambi Taluk, Palakkad District, Kerala**

**Decision:** The Committee discussed and accepted the field inspection report and decided to direct the proponent to submit the following documents/details:

- i) *An agreement with neighboring quarry owner on scheduling blasting time to minimize seismic vibrations.*
- ii) *Details of compensatory green belt development and revised site-specific EMP.*

- iii) *Revised land use map showing boundaries of old quarry, working quarry and other land features.*
  - iv) *Revised drainage map with soil dump site and its protective measures.*
  - v) *Undertaking to limit the maximum depth of mining to 40 m above MSL to avoid to breach of quarry pit and to protect nearby wells.*
  - vi) *Ensure proper overflow channel from the old quarry pit to nearest natural drain.*
- Revised EMP incorporating the specific CER activities in physical terms to be undertaken by the proponent in consultation with the stakeholders as stipulated in the OM No.22-65/2017-IA.III dated 30/09/2020 and OM No. 22-65/2017-IA.III dated 20/10/2020 of the MoEF &CC, GOI instead of allocation of funds under CER. The CER activities incorporated in the EMP should be undertaken during the first two years of validity period of the EC so as to ensure that the maintenance of the interventions undertaken can be done by the proponent during the remaining validity period of the EC.*

**Sd/-**  
**MirMohammedAli,IAS**  
**Secretary**

**Sd/-**  
**Dr.C.Bhaskaran**  
**Chairman**



**From,**

K. K. PREMKUMAR  
Kolanthra House, Melmuringodi P.O.,  
Manathana Taluk, Kannur District,  
Kerala – 670 673, Ph No. : +91 9447013110

**To,**

The Member Secretary  
State Environment Impact Assessment Authority (SEIAA)  
Directorate of Environment & Climate Change  
4<sup>th</sup> Floor, KSRTC Bus Terminal, Thampanoor, Kerala – 01

**Ref:** 1) Minutes of the 113<sup>th</sup> meeting of SEAC, Kerala held on 15<sup>th</sup> to 17<sup>th</sup> September 2020.  
2) **E C File No:** 1498/EC3/2019/SEIAA  
3) **E C Proposal No:** SIA/KL/MIN/43053/2019

**Respected Sir/Madam,**

**Subject :** Submission of all necessary documents as mentioned in the of Minutes of the 113<sup>th</sup> Meeting of SEAC, Kerala held on 15<sup>th</sup> to 17<sup>th</sup> September 2020 for Granite Building Stone Quarry of “K. K. Prem Kumar” over an extent of 1.4621 Ha, situated at Survey Nos. 1/100,1&9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala State.

Please find enclosed herewith the following documents as mentioned in the above said reference for further processing of Environmental Clearance application for Granite Building Stone Quarry of “K.K. Prem Kumar.”

List of Enclosures as per Minutes of the 113<sup>th</sup> Meeting of SEAC, Kerala.

1. Report on Environmental Sensitivity analysis of the area is attached as **Annexure-1.**
2. Report on Mitigation Measures to Nullify the adverse impacts due to Environmental Sensitive Aspects is attached as **Annexure-2.**
3. Write up on the afforestation plan is attached as **Annexure-3.**
4. Revised CER with location specific and monitorable targets is attached as **Annexure-4.**

I request your good office to kindly accept the documents for further processing of Environment Clearance application.

Thanking You



K.K. Prem Kumar  
Authorized Signatory

**ENVIRONMENTAL SENSITIVITY ANALYSIS OF  
PROJECT AREA CONSIDERING THE NEARNESS  
OF SITE TO HIGH HAZARD ZONE**

*for*  
**Granite Building Stone Quarry**  
*of*  
**K. K. PREMKUMAR**

*Extent : 1.4621 Ha.*

*Sy. Nos : 1/100,1&9*

*Village : Tholambra*

*Taluk : Thalassery*

*District : Kannur*

*State : Kerala*

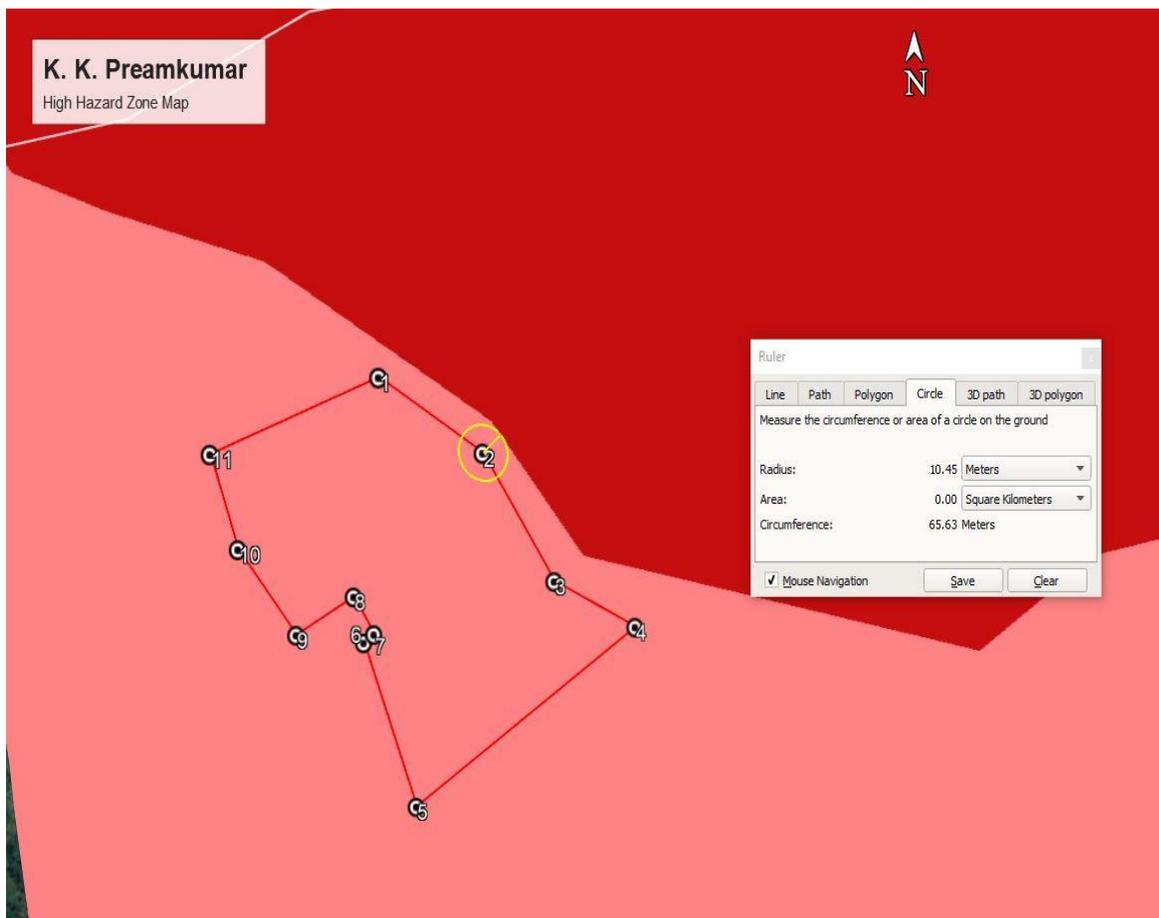
## ENVIRONMENTAL SENSITIVITY ANALYSIS

### BASELINE INFORMATION:

This Granite Building Stone Quarry of K.K. Premkumar, over an extent of 1.4621 Ha, is situated at Survey Nos. 1/100,1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala State. The lease is located on the slope of the hillock gently dipping towards SE. The highest elevation in this area is 165.0m above MSL and the lowest elevation is 120.0m above MSL. The general slope of the lease hold area is between 17° to 19° degree.

As per the Kerala State Disaster Management Authority classification the proposed project site is located at a distance of 10.45 m from the High Hazard Zone and the also proposed project site falls completely within the medium hazard zone.

Hazard zonation map is shown in the fig.01.



**Fig: 01. Hazard zonation map**

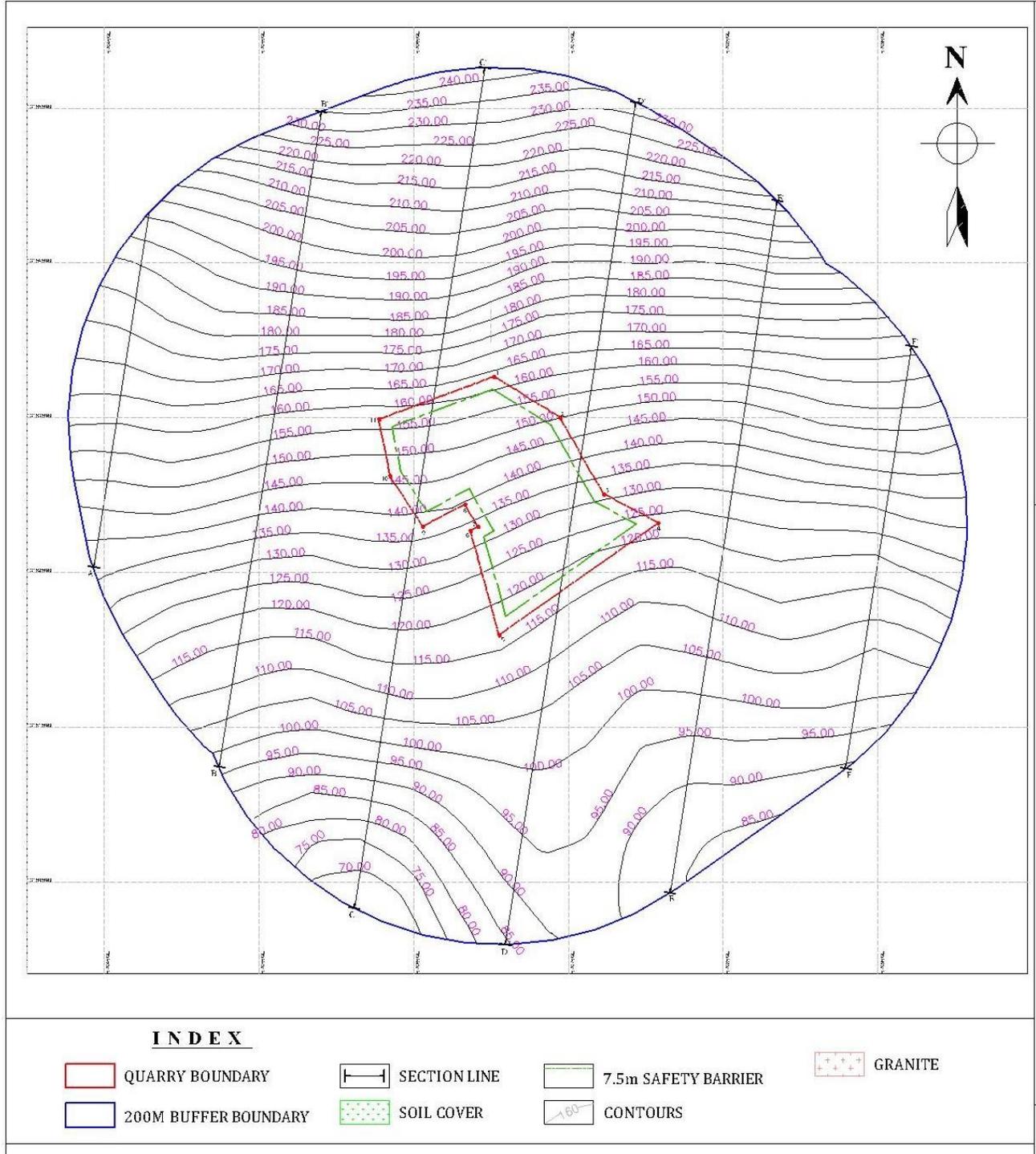
**MAJOR FACTORS WHICH ARE CONSIDERED FOR ENVIRONMENTAL SENSITIVITY ANALYSIS.**

1. Average slope of the project site and surrounding area.
2. Topsoil type and thickness around the site of analysis.
3. Average Rain Fall in the area.
4. Natural Drainage pattern.
5. Geological disturbances like major faults, folds and dykes etc
6. Ground Vibration due to Mining activities.

**1. Average slope of the project site and surrounding area.**

Slope analysis of the projects site and vicinity area : To carryout slope analysis study for the proposed project and area covered within 200m radius around the project site is also been considered for better understanding of environmental sensitivity of surrounding area. Contour data with 5m interval has been collected for the whole 200m circle area. Six cross sections has been made with interval of 100m i.e from A-A' to F-F'.

A plan showing the contour lines and cross sections is shown in the fig:-02

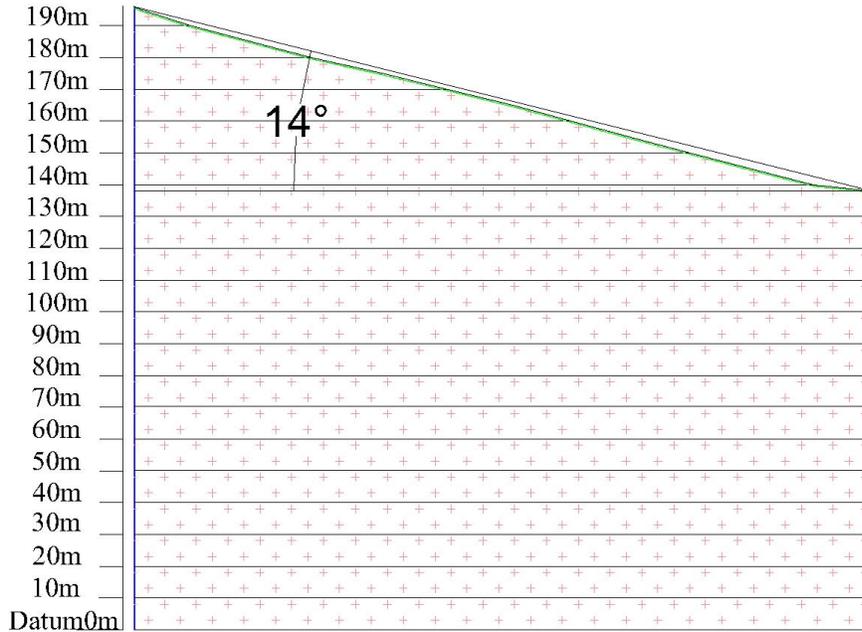


**Fig: 02: Contour plan for 200m Circle**

The average slope analysis of all the sections has been calculated by sectional method.

**A. Slope analysis of Section A-A'**

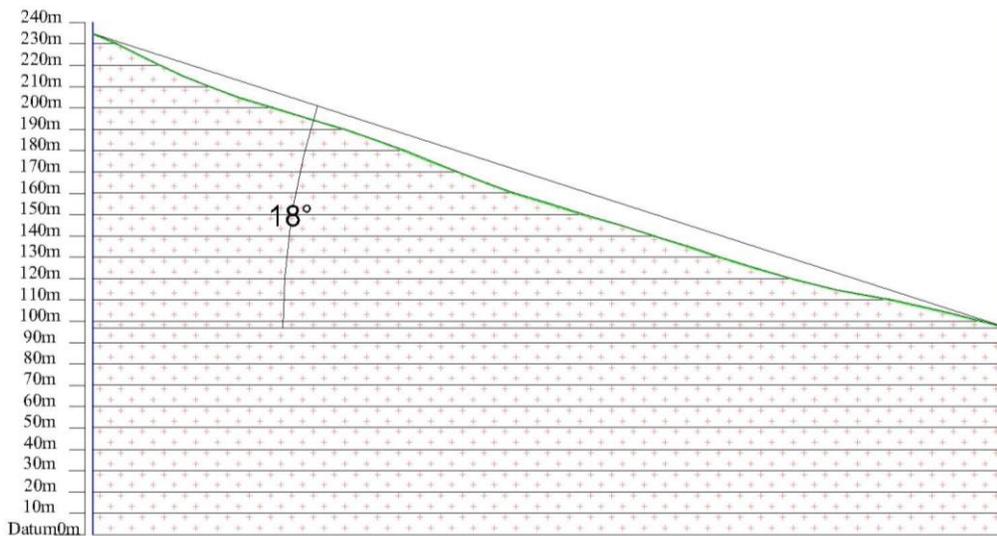
The slope angle along the section A-A' is  $14^{\circ}$



SECTION ON A-A'

**B. Slope analysis of Section B-B'**

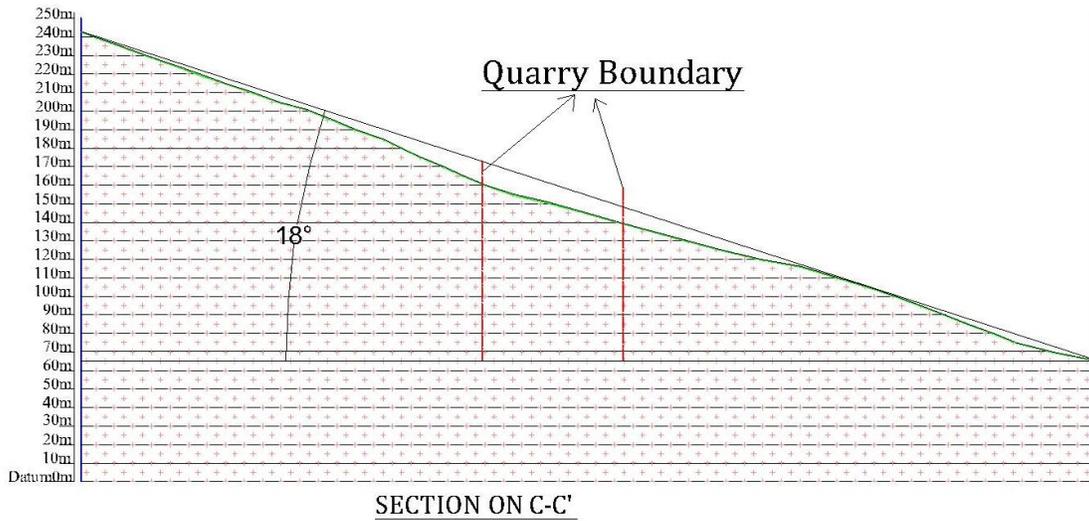
The slope angle along the section B-B' is  $18^{\circ}$



SECTION ON B-B'

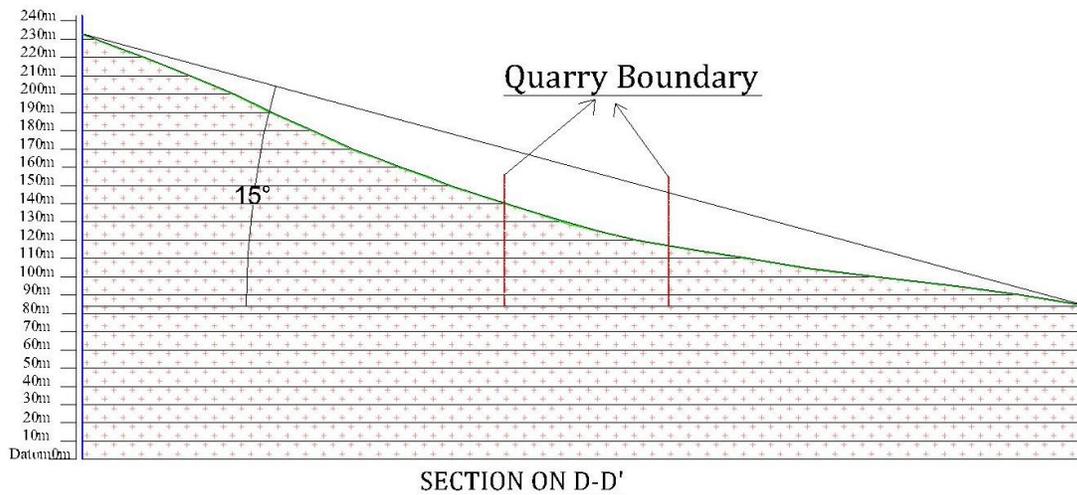
**C. Slope analysis of Section C-C'**

The slope angle along the section C-C' is  $18^{\circ}$



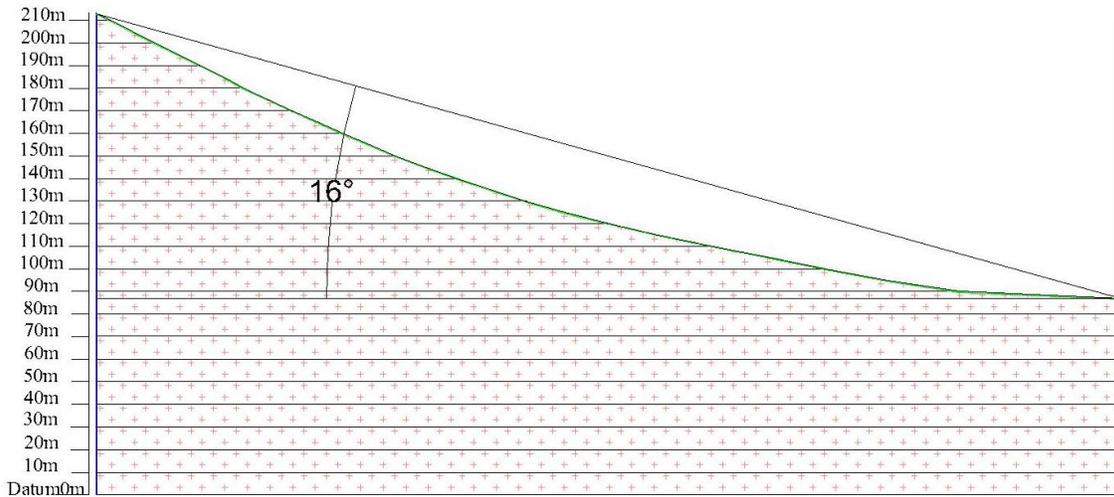
**D. Slope analysis of Section D-D'**

The slope angle along the section D-D' is  $15^{\circ}$



**E. Slope analysis of Section E-E'**

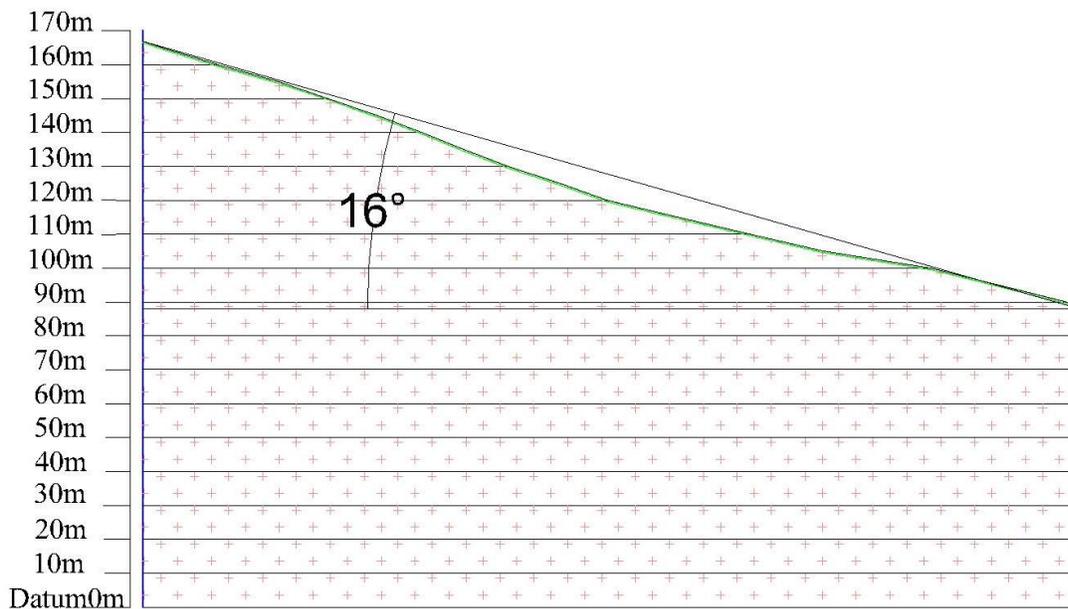
The slope angle along the section E-E' is  $16^{\circ}$



SECTION ON E-E'

**F. Slope analysis of Section F-F'**

The slope angle along the section F-F' is  $16^{\circ}$



SECTION ON F-F'

**Summary of Slope angles of each sections:**

Sl. No	Name of the Section	Slope Angle
01	A-A'	14 <sup>0</sup>
02	B-B'	18 <sup>0</sup>
03	C-C'	18 <sup>0</sup>
04	D-D'	15 <sup>0</sup>
05	E-E'	16 <sup>0</sup>
06	F-F'	16 <sup>0</sup>

From the above slope analysis it is understood that the general slope in the proposed project site and the vicinity area is in the range of 14<sup>0</sup> to 18<sup>0</sup> which can be considered as very moderate slope and in no place steep slopes has not been observed.

**2. Type and Thickness of the Topsoil cap around the site of analysis**

The topsoil type, thickness and characteristics has been considered to understand the stability in and around the project site. The thickness of the topsoil is moderate, ranging from 0.6 to 1.4 m with good vegetation. The topsoil is very well compacted with good stability. The texture of these soils generally ranges from loam to clay loam with average gravel content of 10 to 50%. In addition, stones and boulders are noticed in the subsoil. These soils have reddish brown to yellowish red/strong brown colour.

The granite building stones are very well exposed as outcrop in many places, whereas part of area with lower elevation is covered by topsoil of about 0 to 1.4m thickness within the project area.

**3. Average Rain Fall in the area.**

Kannur district receives a total annual rainfall of around 3438 mm. District experiences heavy rainfall during the South West monsoon season followed by North East monsoon. South West monsoon during June to September contributes 70 % of the total rainfall of the year. The northeast monsoon contributes only about 30%. The year to year variability of annual rainfall is around 28.2%. In general, the rainfall increases from the coast to the eastern hilly regions. Kannur district falls under wet type of climate based on Thornthwaite’s climatic classification. Study of historical rainfall data plays very important role in analyzing the slope stability and landslides. The rainfall data collected during the last 3 years period is very useful in interpretation of soil erosion and change in the natural water drainage which as direct impact on the land slide and slope stability.

**Rainfall Data for three Years in the district:**

<b>Rainfall (mm) in Kannur district, Kerala</b>				
<b>Year</b>	<b>Summer Season March and May</b>	<b>S.W. Monsoon Season June to August</b>	<b>N.E. Monsoon Season September to November</b>	<b>Winter season December to February</b>
<b>2016-2017</b>	358.2	1127.1	236.9	51.8
<b>2017-2018</b>	403.3	1524.1	936.9	160.4
<b>2018-2019</b>	543.4	3581.3**	538	233

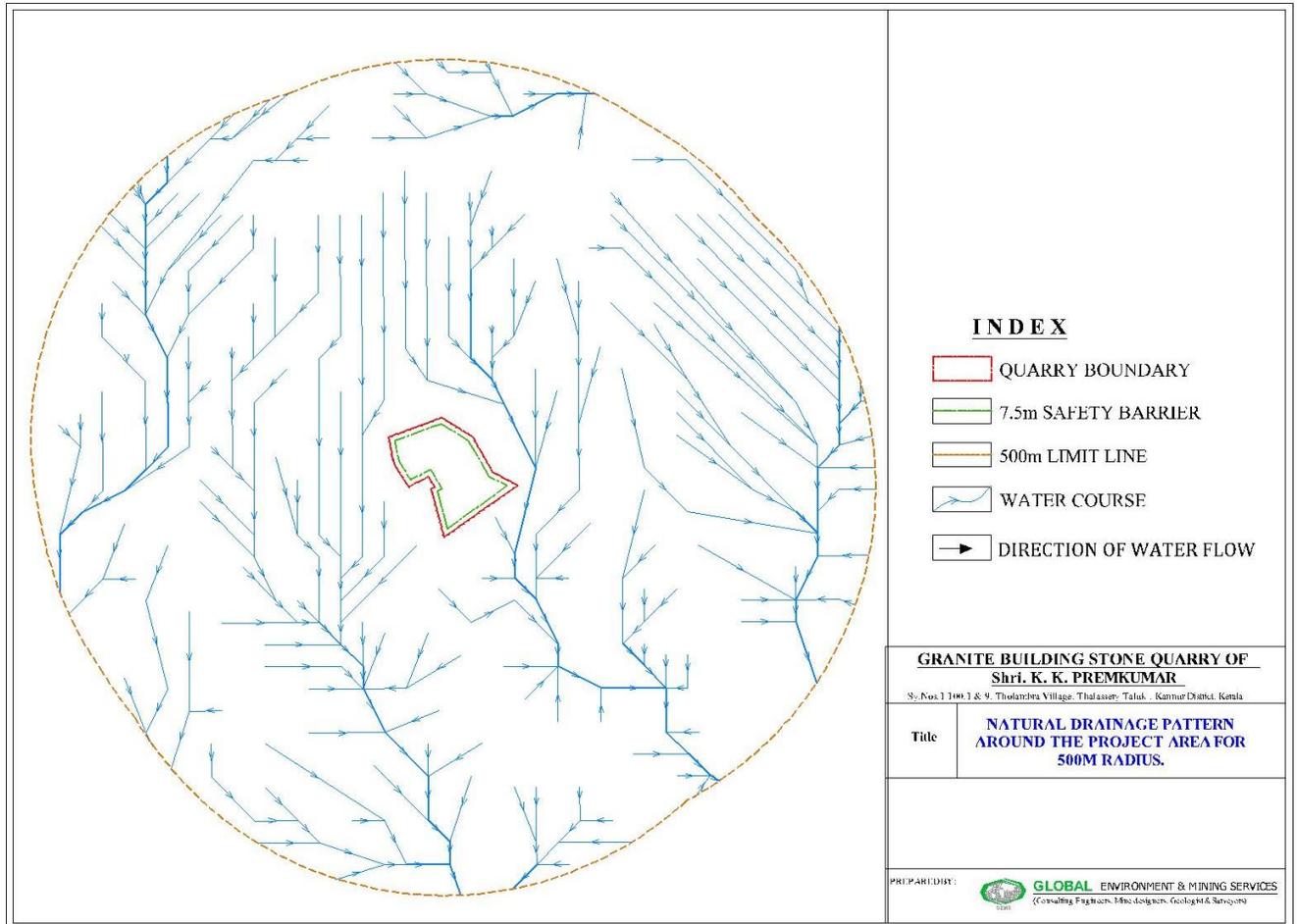
*Source : IMD, Kannur Station*

\*\* Though heavy rainfall has been observed in 2018-2019, no occurrence of landslide has been observed during the period as the slopes are stable.

**4. Natural Drainage pattern:**

A drainage plan has been prepared for 500m radius from the proposed project site to understand the natural water flow and to analysis the direction of water flow in the area.

A Map showing the drainage pattern for 500m radius is shown as **fig:4**



**Fig : 4. Natural Drainage pattern**

**5. Geological disturbances like major faults, folds and dykes etc:**

The proposed project site and surrounding area falls in seismic zone -III as per ISI classification.

There are no major faults or folds, or dykes observed in projects site. The Granite Building Stone deposit is homogenous in nature and stable.

**6. Ground Vibration due to Mining activities.**

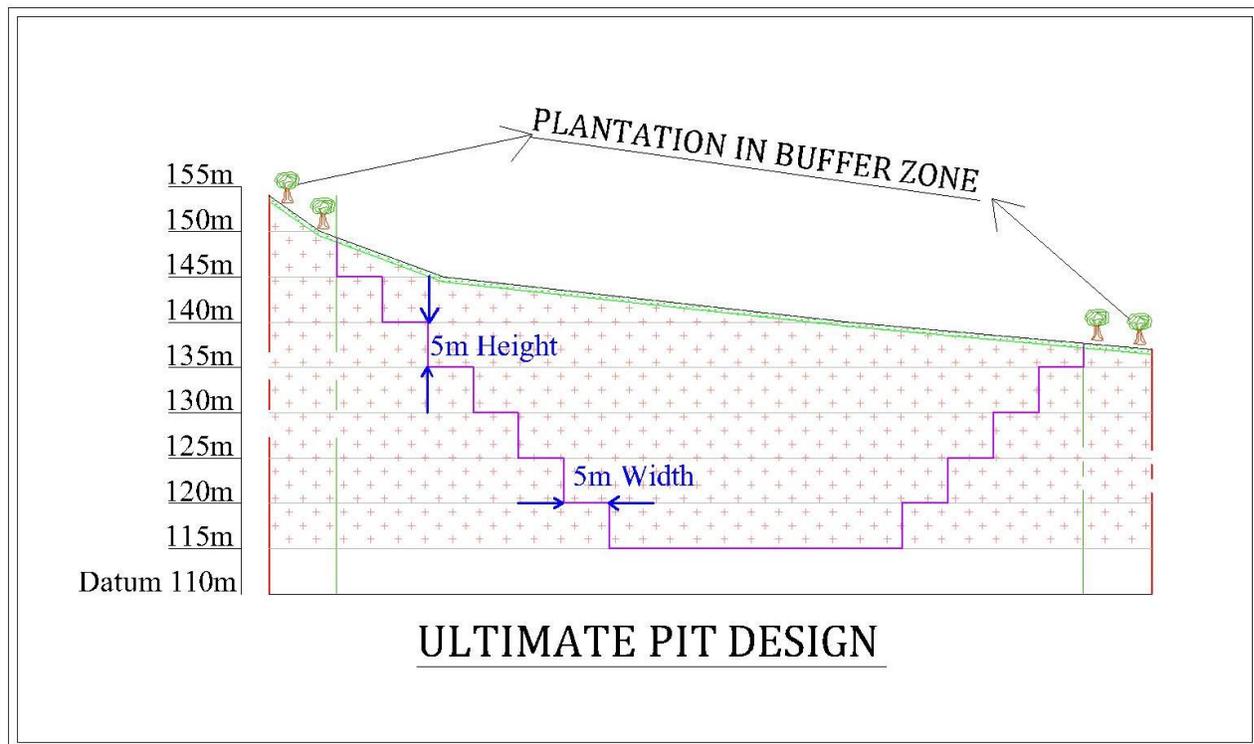
The main sources of ground vibration are drilling, blasting, heavy earth moving machinery( HEMM) and vehicular movement.

The drilling is proposed by jack hammer with 33mm dia. The blasting shall be done sequentially. Due to very small diameter hole blasting, the vibration in this area shall be well within the permissible limits. NONEL blasting with Non-Electrical delay detonators will be used for blasting to keep the Ground vibration to minimum levels.

## MITIGATION MEASURES FOR NULLIFYING THE ADVERSE IMPACTS DUE TO ENVIRONMENTAL SENSITIVE ASPECTS.

### 1. Mitigation Measures to prevent Slope Failure

- Even though the slopes are very moderate within the proposed project site the ultimate slope within the quarry will be maintained by formation of benches with dimensions of 5m width and 5m length. A section showing the ultimate pit angle is given as fig: 3



**Fig: 3. Ultimate Pit Design.**

- Deep root bearing plant species will be planted in 7.5m safety barrier to stabilize the topsoil.
- Geotextile will be carried out on the waste dump and slopy areas to prevent the landslides.

## **2. Mitigation Measures to prevent the erosion of Topsoil**

- Plantation of deep-rooted plants in safety barrier which will prevent the soil erosion by increasing the binding capacity of the soil.
- Maintenance of natural drains by periodical de-siltation around the project site.
- Geotextile will be carried out on the waste dump and slopy areas to prevent the landslides.

### **➤ AFFORESTATION TO PREVENT THE SOIL EROSION**

0.3893 Ha area earmarked for safety barrier shall be developed as green belt by planting minimum but not limiting to 700 local saplings. Apart from these 1300 local saplings shall be planted along the haulage road. Till conceptual stage totally 0.3893 Ha area shall be covered under green belt. The year wise afforestation plan is given below.

#### **Afforestation program**

<b>Year</b>	<b>No of Plants</b>	<b>Green belt area covered</b>	<b>Location</b>
I-Year	700 saplings	0.3893 Ha	Greenbelt area
II-Year	400 saplings	-	Haulage Roads
III-Year	300 saplings	-	Haulage Roads
IV-Year	300 saplings	-	Haulage Roads
V-Year	300 saplings	-	Haulage Roads
<b>Total</b>	<b>2000 saplings</b>	<b>0.3893 Ha</b>	

## **3. Mitigation Measures to be followed during the heavy rainfall**

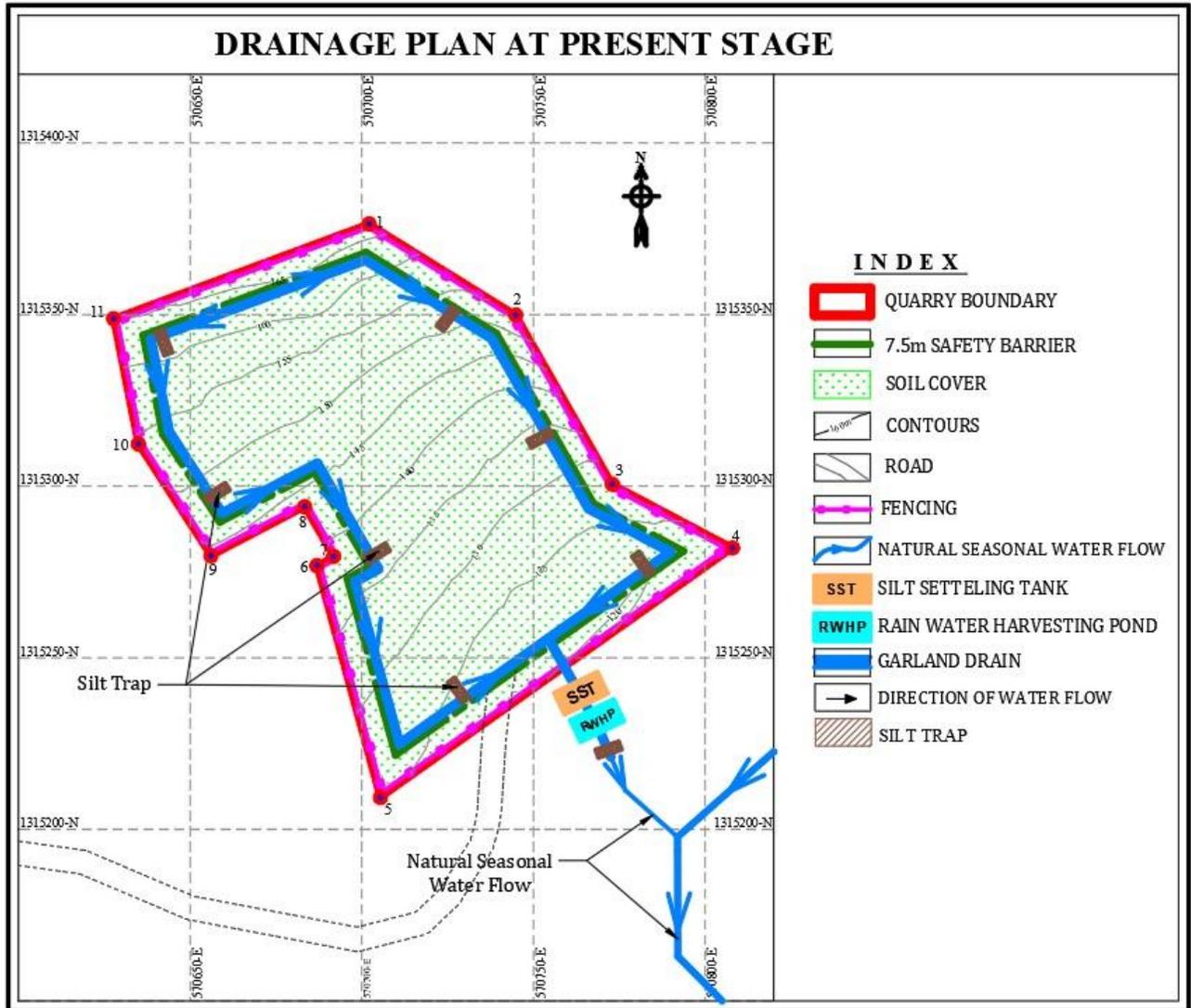
- Blasting activities should be completely stopped when there is continuous rainfall of more than 8cms for two consecutive days as per the guidelines of Kerala State Disaster Management Plan by KSDMA,
- As per the guidelines given in the Kerala State Disaster Management Plan, if more than 8cm rainfall in 2 consecutive days a good system of communication shall be established with the village officer to strictly follow any warning or alerts.
- Mining activities including drilling and blasting shall not be undertaken when there is a heavy rainfall.
- Garland drains and Silt Settling ponds will be de-silted before onset of monsoon rains.

- Two workers shall be allotted for the regular & continues inspection, Maintenance of the garland drains & silt traps.

**4. Mitigation Measures to protect the natural water drainage pattern in area.**

The following mitigation measures will be adopted to Protect the Natural Water Drainage Pattern in Area

- Garland drains shall be constructed all along the periphery of the quarry. The garland drain shall be routed through Silt Settling Tank (SST) to settle the suspended solids and the overflow water shall be routed to a Rainwater Harvesting Pond (RWHP) before being discharged to natural water course. The water from the Rainwater Harvesting ponds shall be used for Plantation work and for dust suppression.
- Settling tanks and drains shall be periodically de-silted.
- Two workers shall be allotted for the regular & continues inspection, Maintenance of the garland drains & silt traps.
- Providing sufficient silt traps to check any silt flowing along with the surface run-off during monsoon.
- Based on the natural drainage system all mitigation activities shall be planned and implemented accordingly.
- Map showing the proposed drainage plan with Garland drain, Rainwater Harvesting Ponds and Silt settling tanks for the proposed Project site is shown in fig: 5



***Fig:5: Proposed drainage Plan with SST, RWHP and Silt traps***

### **5. Mitigation Measures for Ground Vibration (Blasting Precautions):**

- Only small diameter drill holes of 33mm diameter with 25mm diameter cartridge slurry/ emulsion explosives shall be used for blasting, no large diameter holes are proposed for the blasting. With optimum blast design, effective blasting techniques with delay detonators and low charge per delay, care shall be taken to limit the blast vibrations and the PPV below 10mm per second, i.e. within the permissible limits, vide DGMS circular 7 of 1997.
- Each blast would be is carefully planned, supervised, executed, and observed by qualified Blasters.
- Design of optimum blast hole geometry i.e. burden, spacing, Blast hole layout pattern, inclination and depth considering, burden, nature of the rock, safe working space, fragmentation size, etc., to keep the ground vibrations at the minimum level.
- Proper sequencing of the blast so as to keep the vibration, noise and fly rock to the minimum levels.
- The appropriate Charge per delay shall be regulated to keep the PPV below 10mm/ sec as per DGMS Circular 7 of 1997.
- The holes shall be proper stemmed, and the stemming of each hole shall be checked by the qualified blaster to avoid 'blown thorough' holes, that is one of the major sources of noise and Air blast during primary blasting.
- No secondary blasting like Pop Shooting or Plaster Shooting shall be undertaken for breaking down large boulders to avoid Air blasts and Fly rocks. Only rock breakers will be used for breaking down the bigger boulders.
- If there continues rain for two consecutive days mining activities will be stopped completely until the condition returns to normal.
- The blasting shall be carried out by Cartridge Slurry explosives with non-electric (Nonel) double deck charging blasting technique. A sectional view of double deck charging is given in the Fig:6

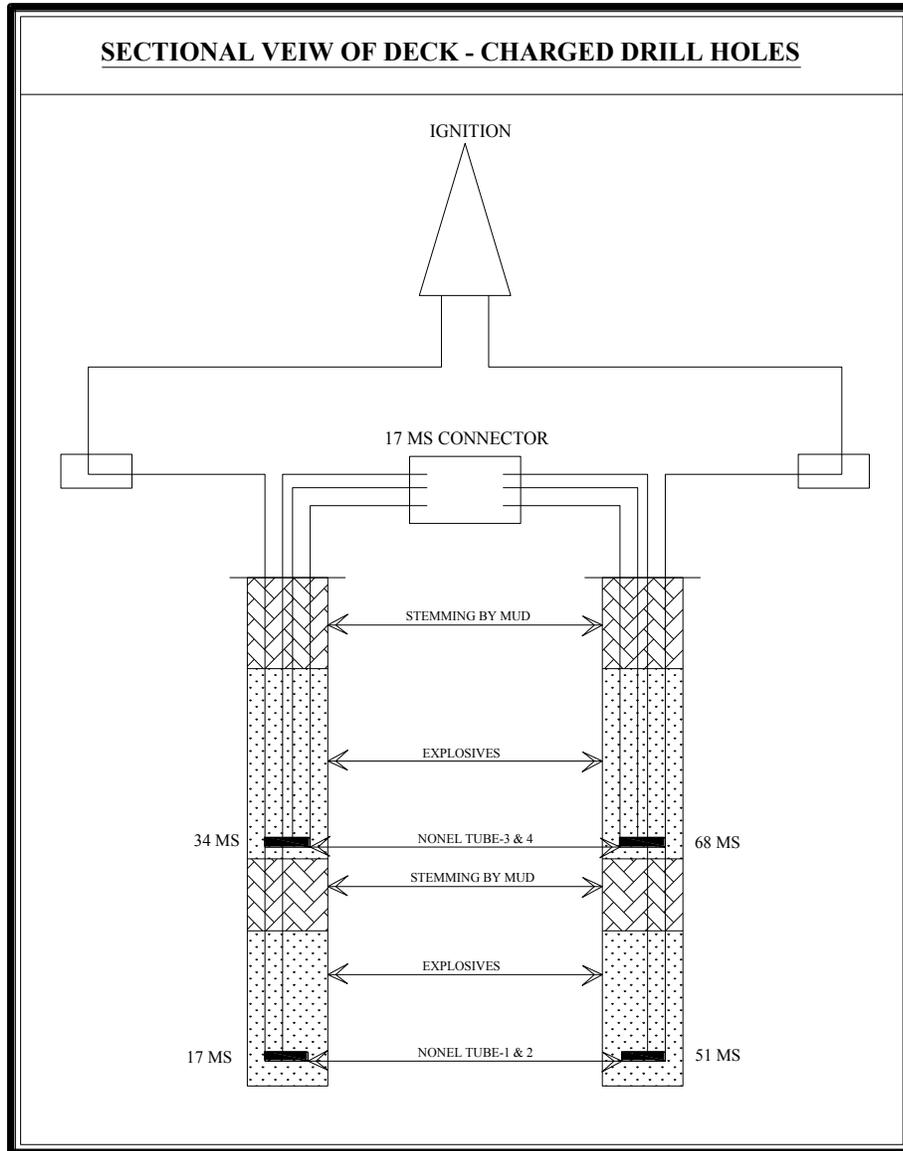


Fig: 6. A sectional view of double deck charging

**6. Additional precautions:**

**01. piezometric well proposal**

One piezometric well of diameter 115mm shall be monitored for ground water. Casing pipe shall be provided up to weathered portion. The top borehole casing has to be fitted with a nipple and nut bolt system for easy opening for monitoring of water levels. The Piezometer may be provided with Statometer (Digital Water Level Recorder-telemetry system).

**02. Blast induced Vibration Monitoring**

Every six months vibration study shall be carried out to analyze the impact of blast induced vibration(Peak Particle Velocity) on the stability of slopes and necessary technical developments shall be implement.

**Tree cutting and Afforestation plan for Granite Building Stone  
Quarry of K.K. Premkumar**

1. List of trees observed in the Study Area

Sl. No	Scientific name	Common name	No of Trees to be Cut in Mining Area	No of Trees to be Retained in 7.5m Safety Zone	Total No of Trees
1.	Albizia odoratissima	Karinthakara	1	0	1
2.	Artocarpus heterophyllus	Plavu	5	6	11
3.	Artocarpus hirsutus	Anjili	80	42	122
4.	Bombax ceiba	Elavu	2	0	2
5.	Erythrina variegata	Mullumurukku	2	1	3
6.	Ficus hispida	Thondi	4	2	6
7.	Ficus religiosa	Arayal	1	0	1
8.	Macaranga peltata	Vatta	8	6	14
9.	Moringa pterygosperma	Muringa	0	1	1
10.	Racosperma mangium	Mangium	0	1	1
11.	Swietenia mahagoni	Mahogany	2	2	4
12.	Tectona grandis	Thekk	18	4	22
13.	Trema orientalis	Amapotti	2	4	6
14.	Xylia xylocarpa	Irul	2	1	3
Total			<b>127</b>	<b>70</b>	<b>197</b>

## 2. Summary of Tree cutting details

01.	Location	Number of Trees
02.	7.5m Safety Barrier	70
03.	Mining Core Zone	127
04.	Totally in proposed Area	197

Totally around 127 trees which are present in Mining core zone will be uprooted before the commencement of mining operations and there are about 70 trees present in the 7.5m safety barrier which will not be disturbed and it will be left as barrier for pollution sink.

### 3. The afforestation program: -

- Development of greenbelt will be carried out by plantation of native species and However much importance will be given to the species which are present in the Core zone of the Project site to maintain ecological balance of the region.
- Totally around the 127 trees will be uprooted from the core zone for mining activities, however under the afforestation program totally 2000 saplings will be planted in both greenbelt area and haulage roads which is 15 times more than the number of trees uprooted from core zone.

The Timeline implementation of afforestation program is given in the table below

Year	No of Plants	Green belt area covered	Location
I-Year	700 saplings	0.3893 Ha	Greenbelt area
II-Year	400 saplings	-	Haulage Roads
III-Year	300 saplings	-	Haulage Roads
IV-Year	300 saplings	-	Haulage Roads
V-Year	300 saplings	-	Haulage Roads
<b>Total</b>	<b>2000 saplings</b>	<b>0.3893 Ha</b>	

- Afforestation shall be done alongside the haulage road by planting 1300 saplings and 700 saplings will be planted in buffer zone.
- Development of greenbelt will be carried out in first year of the mining plan period as suggested by SEAC, Kerala.
- Developed green belt all along the periphery of the lease area will act as a barrier to control the pollution.
- The implementation of the development of green belt will be of paramount importance as it will not only add up as an aesthetic feature, but also act as a pollution sink.

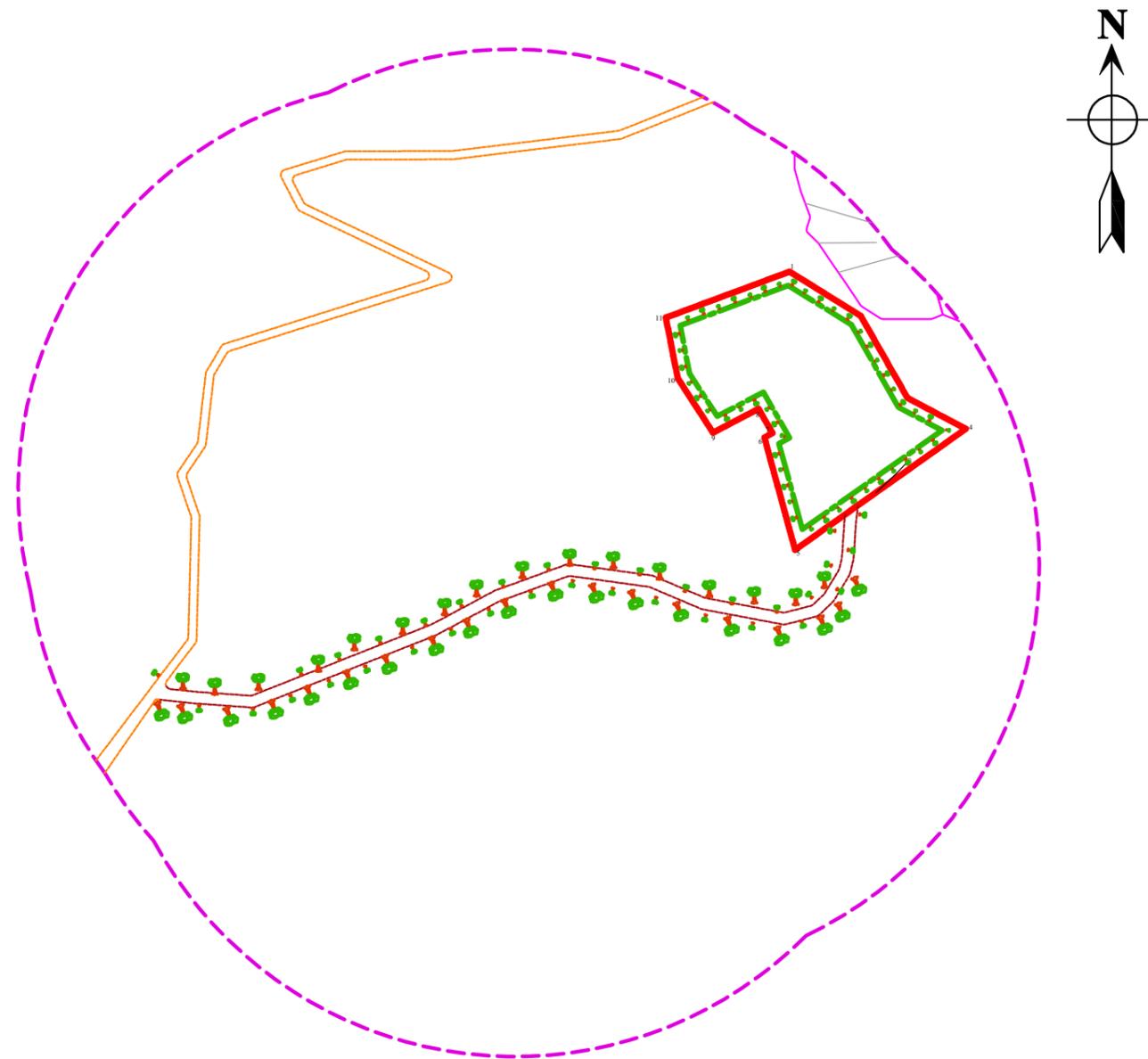
#### 4. Proposed species for plantation program

Sl. No	Scientific Name	Vernacular/English Name	Family
1	Bambusa bambos	Bamboo	Poaceae
2	Vetiveria zizanioides	Vettivar	Poaceae
3	Artocarpus hirsutus	Anjili	Moraceae
4	Artocarpus heterophyllus	Jack fruit tree	Moraceae
5	Mangifera indica	Mango	Anacardiaceae
6	Swietenia mahagoni	Mahagony	Meliaceae
7	Azadirachta indica	Neem	Meliaceae
8	Artocarpus heterophyllus	Plavu	Moraceae
9	Tectona grandis	Teak	Verbenaceae

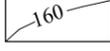
10	<i>Garcinia gummi gutta</i>	Kudambuli	Clusiaceae
11	<i>Phyllanthus emblica</i>	Nellikka	Euphorbiaceae
12	<i>Macaranga peltata</i>	Vatta	Euphorbiaceae
13	<i>Tamarindus indica</i>	Puli	Fabaceae
14	<i>Cassia fistula</i>	Konna	Fabaceae
15	<i>Peltophorum pterocarpum</i>	Copperpod	Fabaceae
16	<i>Ailanthus excelsa</i>	Perumaram	Simaroubaceae
17	<i>Psidium guajava</i>	Perakka	Myrtaceae
18	<i>Syzygium cumini</i>	Njaval	Myrtaceae
19	<i>Annona squamosa</i>	Seethaappazham	Annonaceae
20	<i>Annona reticulata</i>	Aatha	Annonaceae
21	<i>Mimusops elengi</i>	Elanchi	Sapotaceae
22	<i>Muntingia calabura</i>	Pancharappazham	Elaeocarpaceae
23	<i>Ficus hispida</i>	Thondi	Moraceae
24	<i>Simarouba glauca</i>	Lakshmitharu	Simaroubaceae
25	<i>Aegle marmelos</i>	Koovalam	Rutaceae
26	<i>Alstonia scholaris</i>	Pala	Apocynaceae
27	<i>Bombax ceiba</i>	elavu	Bombacaceae
28	<i>Calophyllum inophyllum</i>	Punna	Clusiaceae
29	<i>Careya arborea</i>	Pezhu	Lecythidaceae
30	<i>Ceiba pentandra</i>	Panjimaram	Bombacaceae

A Plan showing the afforestation program is attached as **Annexure-A**.

AFFORESTATION PLAN FOR  
GRANITE BUILDING STONE QUARRY OF K.K .PREMKUMAR



**INDEX**

-  QUARRY BOUNDARY
-  7.5m SAFETY BARRIER
-  160 CONTOURS
-  OLD WORKING
-  PRIVATE ROAD
-  VILLAGE ROAD
-  PROPOSED PLANTATIONS

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

Sy.Nos.1/100,1 & 9, Tholambra Village, Thalassery Taluk , Kannur District, Kerala

**Title**      **AFFORESTATION PLAN**

Extent : 1.4621 Ha.

PREPARED BY :



**GLOBAL ENVIRONMENT & MINING SERVICES**  
(Consulting Engineers, Mine designers, Geologist & Surveyors)

**CORPORATE ENVIRONMENT  
RESPONSIBILITY (CER) PLAN**

*for*

**GRANITE BUILDING STONE QUARRY**

*of*

**‘Shri K.K. Premkumar’**

*Extent : 1.4621 Ha.*

*Sy. Nos. : 1/100,1, 9,*

*Village : Tholambra*

*Taluk : Thalassery*

*District : Kannur*

*State : Kerala*

## CORPORATE ENVIRONMENT RESPONSIBILITY (CER)

The project proponent has committed an amount of **Rs. 9.40 Lakhs** towards the contribution to the CER activity for the benefit of the local area as consulted with the local governing bodies. **(Rs. 9.40 Lakhs in the first five years).**

To make an effective contribution a study was conducted in the local area along with the project proponent, with a focus on the following sectors:

1. Development of infrastructure and amenities at Government L. P. School, Kanhileri.
  2. Support for improving facilities at Government L. P. School, Poovampoil.
- ✓ **Project : Development of infrastructure and amenities at Government L. P. School, Kanhileri.**
- ✓ **CER Project Cost : Rs. 5.60 Lakhs in the first five years.**
- After consulting with the Headmaster in charge of the Government L. P. School, Kanhileri, it is noted that there are requirements for infrastructure developments like Solar inverter, bookshelves for classrooms, Scanner & Printer for IT Lab, Kids chairs at the school.
  - A letter from the Headmaster in charge showing the needs for the above-mentioned infrastructure developmental activities is enclosed as **Annexure-A**.
  - Timeline implementation of program details are given below,

### **Development of infrastructure and amenities at Government L. P. School, Kanhileri.**

<b>Location Name</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
<b>Government L. P. School, Kanhileri</b>	Installation of Solar power Harvesting system with Inverter with an estimated cost of Rs. 2,50,000	2 sets of computers along with computer tables, chairs and one set of printer and scanner with an estimated cost of Rs. 2,00,000	Annual Maintenance cost of Rs. 20,000	Annual Maintenance cost of Rs. 20,000	Annual Maintenance cost of Rs. 20,000
	2 Bookshelves for classrooms with an estimated cost of Rs. 50,000				
<b>Total</b>	<b>Rs. 3,00,000</b>	<b>Rs. 2,00,000</b>	<b>Rs. 20,000</b>	<b>Rs. 20,000</b>	<b>Rs. 20,000</b>

✓ **Project : Support for improving facilities at Government L. P. School, Poovampoil.**

✓ **CER Project Cost : Rs. 3.80 Lakhs in the first five years.**

- After consulting with the Headmistress, Government L. P. School, Poovampoil, there are requirements for renovation of kitchen building at school premises, Construction of well, Electronic equipment like printer, Bookshelves for classrooms and books.
- A letter from the Headmistress in charge showing the needs for the above-mentioned activities is attached as **Annexure B**.
- Timeline implementation of program details are given below,

**Support for improving facilities at Government L. P. School, Poovampoil**

<b>Location Name</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
<b>Government L. P. School, Poovampoil</b>	Renovation of Kitchen building at School premises with an estimated cost of Rs. 1,50,000	2 sets of computers along with computer tables, chairs and one set of printer and scanner with an estimated cost of Rs. 2,00,000	Annual Maintenance cost of Rs. 10,000	Annual Maintenance cost of Rs. 10,000	Annual Maintenance cost of Rs. 10,000
<b>Total</b>	<b>Rs. 1,50,000</b>	<b>Rs. 2,00,000</b>	<b>Rs. 10,000</b>	<b>Rs. 10,000</b>	<b>Rs. 10,000</b>

**SUMMARY OF CER ANNUAL COMMITMENT****CER (Recurring)**

<b>Sl. No</b>	<b>Location name</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>	<b>Total</b>
1	Government L. P. School, Kanhileri.	Rs. 3,00,000	Rs. 2,00,000	Rs. 20,000	Rs. 20,000	Rs. 20,000	<b>Rs. 5,60,000</b>
2	Government L. P. School, Poovampoil.	Rs. 1,50,000	Rs. 2,00,000	Rs. 10,000	Rs. 10,000	Rs. 10,000	<b>Rs. 3,80,000</b>
<b>Total</b>		<b>Rs. 4,50,000</b>	<b>Rs. 4,00,000</b>	<b>Rs. 30,000</b>	<b>Rs. 30,000</b>	<b>Rs. 30,000</b>	<b>Rs. 9,40,000</b>

**GOVT.L. P. SCHOOL, KANHILERI**  
P.O. KANHILERI - 670702  
MATTANUR SUB. DISTRICT , KANNUR.  
Email. [glpskanhileri@gmail.com](mailto:glpskanhileri@gmail.com)

പ്രേഷിതൻ

ഹെഡ്മാസ്റ്റർ  
കാഞ്ഞിലേരി ഗവ.എൽ.പി. സ്കൂൾ  
കാഞ്ഞിലേരി

സ്വീകർത്താവ്

കെ.കെ.പ്രേം കുമാർ  
കൊളത്തു ഹൗസ്  
മേൽ മുരിങ്ങോടി  
പേരാവൂർ

സർ,

1905 ൽ കാഞ്ഞിലേരിയിൽ മംഗലാട്ട് കൊക്കോടൻ കുഞ്ഞിരാമകുറുപ്പ് വൈദ്യർ ആരംഭിച്ച വിദ്യാലയമാണ് ഇന്നത്തെ കാഞ്ഞിലേരി ഗവ.എൽ.പി. സ്കൂൾ. മാലൂർ പഞ്ചായത്തിൽ പ്രവർത്തിച്ചു വരുന്ന ഈ സർക്കാർ വിദ്യാലയത്തിൽ പ്രീ പ്രമറി മുതൽ നാലാം ക്ലാസ്സു വരെ 126 കുട്ടികൾ 2020-21 വർഷം പഠിക്കുന്നുണ്ട്. സർക്കാരിന്റേയും ,നാട്ടുകാരുടെയും രക്ഷിതാക്കളുടേയും സഹായത്താൽ വിദ്യാലയം നല്ല നിലയിലാണ് ഇന്ന് പ്രവർത്തിച്ച് വരുന്നത്. ധാരാളം പരിമിതികൾ ഇനിയും മറികടക്കാനുണ്ട്.

സാമൂഹ്യ സേവനത്തിന്റെ ഭാഗമായി താങ്കളുടെ സ്ഥാപനം കാഞ്ഞിലേരി ഗവ.എൽ.പി. സ്കൂളിന് ഭൗതിക കാര്യങ്ങൾ മെച്ചപ്പെടുത്തുന്നതിന് സഹായം നൽകാമെന്നറിയിച്ചതിന്റെ അടിസ്ഥാനത്തിൽ താഴെ പറയുന്ന കാര്യങ്ങൾ ഞങ്ങൾക്ക് ആവശ്യമാണെന്നറിയിക്കുന്നു.

1. സോളാർ വാട്ടർ ഹീറ്റർ
2. സോളാർ വൈദ്യുതി, ഇൻവർട്ടർ
3. നാല് ക്ലാസ്സുകളിൽ ബുക്ക് ഷെൽഫ്
4. സ്കാനർ കം പ്രിന്റർ
5. മൂന്ന് ക്ലാസ്സുകളിൽ ശിശു സൗഹൃദ ഇരിപ്പിടങ്ങൾ .....

മേൽ പറഞ്ഞ ഇനങ്ങൾ ഈ വിദ്യാലയത്തിന് അനുവദിച്ചു തരാൻ താങ്കളുടെ ഇടപെടൽ ഉണ്ടാകുമെന്ന് പ്രതീക്ഷിക്കുന്നു.



*(Signature)*  
18/12/20  
**RAVEENDRAN. P**  
HEAD MASTER  
Govt. L.P. School  
KANHILERI

ഗവ. എൽ. പി. സ്കൂൾ , പൂവംപൊയിൽ.

പ്രേഷകൻ

ഹെഡ്മിസ്ട്രസ്സ്,  
ഗവ. എൽ. പി. സ്കൂൾ, പൂവംപൊയിൽ,  
താമ്ബാട്,  
വെള്ളൂർവള്ളി. (പി.ഒ)  
കുഞ്ഞൂർ.

പിൻകോഡ് : 670673

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സ്വീകർത്താവ്,

കെ.കെ. പ്രൊജക്ടർ,  
കോലന്ത്ര ഹൗസ്, (Kolanthra House)  
മേൽമുരിങ്ങോടി (പി.ഒ)  
പേരാമ്പൂർ - 670673  
കുഞ്ഞൂർ.

സർ,

ഗവ. എൽ. പി. സ്കൂൾ, പൂവംപൊയിലിന്റെ അക്കാദമികവും ഭൗതികവും  
പുനഃവികസനത്തിനുവേണ്ടി അങ്ങയുടെ സഹായം ധനസഹായം വാങ്ങാനും  
ചെയ്തിരുന്നല്ലോ. ഇതനുസരിച്ച് അങ്ങയുടെ വിദ്യാലയത്തിൽ അത്യാവശ്യ  
വികസനത്തിനുവേണ്ടി തയ്യാറാക്കിയ പദ്ധതികളുടെ വിവരങ്ങൾ അങ്ങയെ  
ടെയും സഹായത്തിന്റെ മറ്റ് അധികാരികളുടെയും പരിഗണനയ്ക്കായി  
ഇതോടൊപ്പം സമർപ്പിക്കുന്നു.



  
**PREMAJA KARIYIL**  
**HEADMISTRESS**  
Govt. L. P. SCHOOL POOVAMPOIL  
P.O. VELLARVALLI - 670673

ഗവ. എൽ. പി. സ്കൂൾ, പൂവംപൊയിൽ.

കണ്ണൂർ - മടന്നൂർ - മാപ്പുർ - താഴ്വാട് പ്രദേശത്തെ പ്രാഥമിക വിദ്യാഭ്യാസത്തിനുള്ള ഏക ആശ്രയമാണ് ഈ വിദ്യാലയം. 1981ൽ ആരംഭിച്ച് പ്രവർത്തനം തുടരുന്ന പിന്നോക്ക പ്രദേശത്തുള്ള ഈ സ്കൂൾ ധാരാളം പരിമിതികൾക്കിടയിലാണ് പ്രവർത്തിക്കുന്നത്. പാഠ്യപാഠ്യേതര പ്രവർത്തനങ്ങളിൽ മുൻനിട്ടിരിക്കുന്ന ഈ വിദ്യാലയത്തിൽ ഭൗതിക സൗകര്യങ്ങൾ ഇനിയും മെച്ചപ്പെടുത്തേണ്ടതുണ്ട്. അതിനായി പ്രഥമ പരിഗണന നൽകേണ്ടവ ഇനി സൂചിപ്പിക്കുന്നു.

1. സ്കൂൾ കെട്ടിടത്തിന് ഭിത്തി നിർമ്മിക്കൽ.

സ്കൂൾ കെട്ടിടം കാൽഭാഗം ചുമക്കും മുകാൽഭാഗം ഗ്രിൽഡും പിടിച്ച് ചുറ്റാണ്. അതിനാൽ മഴക്കാലത്ത് ഗ്രിൽഡ് വഴി ക്ലാസ് മുറികളിൽ ബജറ്റ് വീഴുകയും ഭവനൽക്കാലത്ത് അസഹ്യമായ ചൂടനുഭവപ്പെടുകയും ചെയ്യുന്നു. ഈ പ്രശ്നങ്ങൾ പരിഹരിക്കാനും കുടികളുടെ സുഗമമായ പഠനത്തിനും ഭിത്തി നിർമ്മിക്കൽ അത്യാവശ്യമാണ്. അതോടൊപ്പം വിദ്യാലയം പെയിന്റിംഗിച്ച് മനോഹരമാക്കുകയും ചെയ്യേണ്ടതുണ്ട്.

2. പാലകപ്പുര നവീകരണം.

നിലവിലുള്ള പാലകപ്പുര പക്കുതിഭാഗം ഗ്രിൽഡ് പിടിച്ച് ചുറ്റാണ്. ആധുനിക രീതിയിലുള്ള സൗകര്യങ്ങളും ഇല്ല. അതിനാൽ എല്ലാ സൗകര്യങ്ങളോടും കൂടിയ അച്ചുതട്ടുള്ള പുതിയ പാലകപ്പുര നിർമ്മിക്കുകയോ ഉള്ളവ നവീകരിക്കുകയോ ചെയ്യേണ്ടത് അത്യാവശ്യമാണ്.

3. സ്കൂളിൽ കിണർ നിർമ്മിക്കൽ.

200 മീറ്റർ അകലെ ഞാപിച്ച് നിൽക്കുന്ന കുഴൽ കിണറില്പെ വെള്ളമാണ് കുടിവെള്ളത്തിനായി സ്കൂൾ ടാങ്കിൽ എടുക്കുന്നത്. മോട്ടോർ, സ്വിച്ച് എന്നിവ സ്കൂളിൽ നിന്നും വളരെ ദൂരെയാലതിനാൽ വെള്ളം ലഭിക്കാൻ പ്രയാസമുണ്ടാകുന്നു. അതിനാൽ കുടിവെള്ളം ലഭ്യമാക്കുന്നതിനുവേണ്ടി സ്കൂൾ പരിസരത്തുണ്ടെന്ന കിണർ കുഴിക്കേണ്ടത് അനിവാര്യമാണ്.

4. Printer - Scanner - copier , Laptop .

ഓട്ടികളുടെ പഠനവശ്യങ്ങൾ നിറവേറ്റുന്നതിലേക്കും ഓഫീസ് സംബന്ധമായ പ്രവർത്തനങ്ങൾക്കും ഉപകാരപ്പെടുന്നതിനായി ഈ ഒരു ഉപകരണവും രണ്ട് ലാപ്ടോപ്പും ലഭിക്കേണ്ടതുണ്ട്.

5. പഠനമുറികൾ അങ്കുരപ്പകമാക്കൽ.

ഓരോ ക്ലാസിനും ഓരോ ഓട്ടിക്കും ഉപയോഗയോഗ്യമാംവിധം ഇരിപ്പിട സൗകര്യം , Big picture board , അലമാര ഇവ സംഘടിപ്പിക്കേണ്ടതുണ്ട്.

6. ക്ലാസ് ലൈബ്രറി .

ഓട്ടികളുടെ വായനശീലം വളർത്തുന്നതിലേക്കായി ഓരോ ക്ലാസ് ലൈബ്രറി ഓട്ടികൾക്ക് അനുയോജ്യമായ ലൈബ്രറി പുസ്തകങ്ങളും അവ സൂക്ഷിക്കുന്നതിനുള്ള ഷെൽവും സജ്ജമാക്കേണ്ടതുണ്ട്.

7. ഔഷധസസ്യത്തോടം .

പഠന പ്രക്രിയയുടെ ഭാഗമായി വിവിധതരം ഔഷധസസ്യങ്ങളെ ചരിച്ചെടുക്കുന്നതിനായി ഔഷധസസ്യത്തോടം ഒരുക്കേണ്ടതുണ്ട്.

8. KIDS PARK .

സാമ്പത്തികമായും സാമൂഹികമായും വികസനം നൽകുന്ന ഈ വിദ്യാലയത്തിലെ കുരുന്നുകൾക്ക് മനസിഭോജ്യാസത്തിനായി ഒരു kids park ലഭ്യമാക്കേണ്ടതുണ്ട്.

അക്കാദമിക് - ഭൗതിക - സാമൂഹിക മേഖലകളിൽ ഉന്നമനം ഉണ്ടാവാൻ സാധ്യമായ എല്ലാ പ്രവർത്തനങ്ങളും അവിഷ്കരിച്ച് നടപ്പിലാക്കാൻ വിവിധ സഹായ സഹകരണങ്ങളും ഉണ്ടാകണമെന്ന് അഭ്യർഥിക്കുന്നു.



പി.ടി.എ. പ്രസിഡണ്ട് -  
സമീപമന്ത്രി - VJ

Premaja Kariyil  
Headmistress  
Govt. L. P. School Poovampoil  
P.O. Vellarvalli - 670673

**From,**

Shri. K. K. Premkumar  
S/o. K. K. Kunhiraman,  
Kolanthra house, Melmuringodi P.O.,  
Manathana, Kannur District, Kerala- 670673  
Ph No. : +91 9447013110

**To,**

The Member Secretary,  
State Level Expert Appraisal Committee (SEAC),  
Directorate of Environment & Climate Change,  
4<sup>th</sup> Floor, KSRTC Bus Terminal, Thampanoor, Kerala – 01.

**Ref:** 1) Minutes of the **115<sup>th</sup>** meeting of SEAC, Kerala held on 3<sup>rd</sup> to 5<sup>th</sup> November 2020.  
2) **E C File No:** 1498/EC3/2019/SEIAA  
3) **E C Proposal No:** SIA/KL/MIN/43053/2019

**Respected Sir/Madam,**

**Subject:** Submission of all necessary documents as mentioned in the of Minutes of the **115<sup>th</sup>** Meeting of SEAC, Kerala held on 3<sup>rd</sup> to 5<sup>th</sup> November 2020 for ‘Granite Building Stone Quarry of Shri. K. K. Premkumar’ over an area of 1.4621 Ha. in Survey No. 1/100,1&9 of Tholambra Village, Thalassery Taluk, Kannur District, Kerala State.

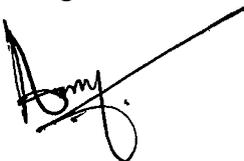
Please find enclosed herewith the following documents as mentioned in the above said reference for further processing of Environmental Clearance application for ‘Granite Building Stone Quarry of Shri. K. K. Premkumar’

List of Enclosures as per Minutes of the **115<sup>th</sup>** Meeting of SEAC, Kerala.

1. Detailed plan for stabilization of adjacent (abandoned) quarry is attached as **Annexure – 1,**
2. Affidavit regarding the implementation of safeguards against the accident potential is attached as **Annexure-2,**
3. Affidavit regarding the closure of the adjacent abandoned quarry taking all the environment safeguards is attached as **Annexure-2.**
4. Detailed drainage plan including that in the quarry and outflow is attached as **Annexure-3.**
5. Revised Environment Management Plan incorporating the specific CER activities is attached as **Annexure-4.**

I request your good office to kindly accept the documents for further processing of Environment Clearance application.

Thanking You



Shri. K.K. Premkumar,  
(Authorized Signatory)

**STABILIZATION OF ADJACENT QUARRY(ABANDONED) SITUATED CLOSE TO THE PROPOSED GRANITE BUILDING STONE QUARRY of Shri.K. K. PREMKUMAR**

**INTRODUCTION:**

This Granite Building Stone Quarry of Shri. K.K. Premkumar, over an extent of 1.4621 Ha, is situated at Survey Nos. 1/100,1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala State. The lease is located on the slope of the hillock gently dipping towards SE. The highest elevation in this area is 165.0m above MSL and the lowest elevation is 120.0m above MSL. The general slope of the lease hold area is between 17° to 19° degree.

As per the Kerala State Disaster Management Authority classification the proposed project site is located at a distance of 10.45 m from the High Hazard Zone and there is one abandoned quarry(belonging to same owner) located adjacent to the proposed quarry which is located in the High hazard zone.

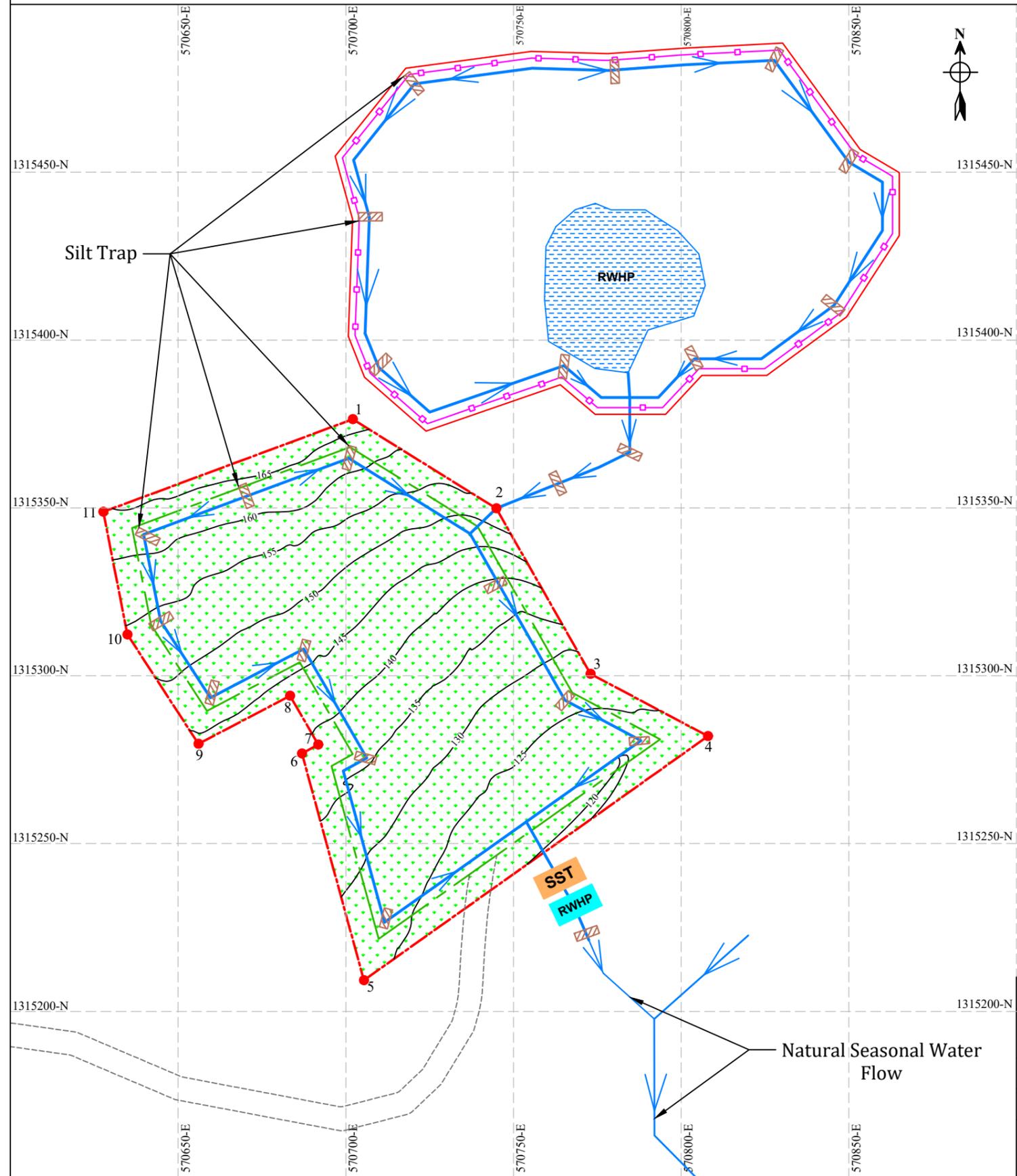
The abandoned quarry which is in the high hazard zone will not be operated in future. And stabilization of abandoned quarry will be done to prevent the accidental potential.

### Stabilization plan for adjacent quarry

- Garland drain shall be constructed all along the periphery of the abandoned quarry to divert the rainwater away from the pit and the water shall be diverted to a silt settling pond the overflow shall be diverted to rainwater harvesting pond which is a part of the abandoned quarry. A plan showing the proposed drainage plan for abandoned quarry is given in **Annexure-A**.
- Additional drains shall be provided ensure that no water flows over the slopes.
- The garland drains shall be periodically inspected, and any maintenance shall be attended immediately. Two workers shall be allotted for the regular & continues inspection and Maintenance of the garland drains & silt traps.
- Pre monsoon inspection shall be carried out to ensure that the garland drains are intact.
- Fencing with concrete pillars and barbed wires will be done all along the periphery of the abandoned quarry, to prevent the entry of man and machinery.  
A plan showing the fencing along the periphery of the abandoned quarry is attached **Annexure-A**.
- Waste/topsoil produced from the proposed quarry shall be utilized for reclamation of the abandoned quarry by spreading the topsoil on the worked-out benches and plantation will be carried out on reclaimed area.

- The topsoil from the new proposed quarry will be utilized for revegetation in abandoned quarry which will contribute to minimize soil erosion, runoff & to promote microclimatic conditions favorable to colonization of native species.
- Removal of overhang rock through scaling by excavator or by manual scaling.
- Re-sloping of unstable weathered material in upper part of the slope.
- Site shall not be left unattended after re-vegetation, it shall be monitored to determine, whether the development is proceeding well and necessary care will be taken.
- Controlled blasting techniques will be adopted in the new proposed quarry to minimize the ground vibration which has direct impact on the stability of the abandoned quarry.
- One ground vibration monitoring location shall be established in the abandoned quarry to monitor the impact of the vibration due to the mining activities on the stability of abandoned quarry and necessary precautions shall be taken to keep the ground vibration within the permissible limit.
- An Affidavit will be provided to ensure the implementation of safeguards against the accidental potential.

# DRAINAGE PLAN



## INDEX

-  QUARRY BOUNDARY
-  7.5m SAFETY BARRIER
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-  SST SILT SETTLING TANK
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-  SILT TRAP

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

Sy Nos : 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala

**Title** DRAINAGE PLAN

**Extent** 1.4621 Ha (3.6128Acres)

PREPARED BY :  **GLOBAL ENVIRONMENT & MINING SERVICES**  
(Consulting Engineers, Mine designers, Geologist & Surveyors)



केरल KERALA

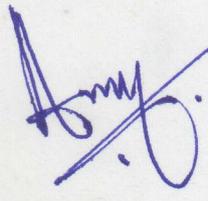
CU 490720

AFFIDAVIT

I, K.K. Prem Kumar Authorized Signatory of Granite Building Stone Quarry of "K.K. Prem Kumar." having its office at Kolanthra house, Melmuringodi P.O., Manathana, Kannur District, Kerala- 670673 do hereby affirm and confirm as follows:-

1. That the Stabilization and implementation of safeguards against the accidental potential of adjacent quarry(abandoned) situated close to the proposed "granite building stone quarry of Shri. K. K. PremKumar" shall be implemented the following all safeguard measures.
2. Garland drain shall be constructed all along the periphery of the abandoned quarry to divert the rainwater away from the pit and the water shall be diverted to a silt settling pond, the over flow shall be diverted to rain water harvesting pond which is a part of the abandoned quarry.

**Notarial Register Particulars**  
 Sl.No. .... 294/20 Vol. .... III  
 Page No. .... 17 Date: .... 10.12.20

*K.K. Prem Kumar* 

24163 8.12.20

*executed before me*

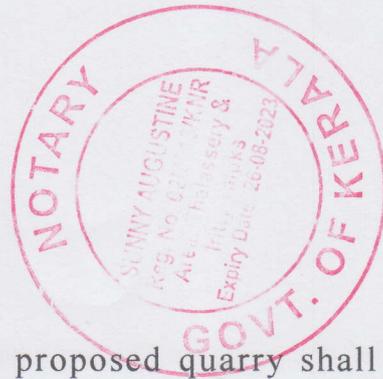
കെ. കെ. പ്രേമകുമാർ.  
 ഗ്രാനൈറ്റ് കെട്ടിട നിർമ്മാണ കമ്പനി,  
 കോലന്ത്രാ ഹൗസ്, മേൽമുറിംഗുടി പി.ഒ.,  
 മണത്തന, കണ്ണൂർ ജില്ല, കേരളം.

SUNNY AUGUSTINE  
 ADVOCATE & NOTARY  
 KUTHUPARAMBA-670 643  
 KANNUR DT.,KERALA, INDIA





3

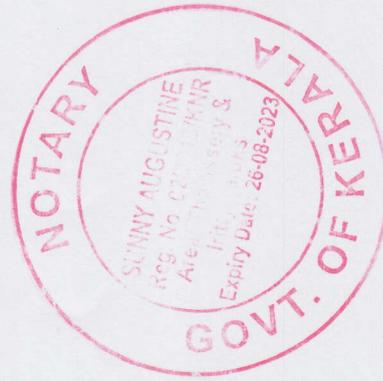


7. Waste/topsoil produced from the proposed quarry shall be utilized for reclamation of the abandoned quarry by spreading the topsoil on the worked-out benches and plantation will be carried out on reclaimed area.
8. The topsoil from the new proposed quarry will be utilized for revegetation in abandoned quarry which will contribute to minimize soil erosion, runoff & to promote microclimatic conditions favorable to colonization of native species.
9. Removal of overhang rock through scaling by excavator or by manual scaling.
10. Re-sloping of unstable weathered material in upper part of the slope.
11. Site shall not be left unattended after re-vegetation, it shall be monitored to determine whether the development is proceeding well and necessary care will be taken.
12. Controlled blasting techniques will be adopted in the new proposed quarry to minimize the ground vibration which has direct impact on the stability of the abandoned quarry.

12.6. Prem Kumar Arny.

*[Signature]*  
10.12.20

SUNNY AUGUSTINE  
ADVOCATE & NOTARY  
KUTHUPARAMBA-670 643  
KANNUR DT., KERALA, INDIA



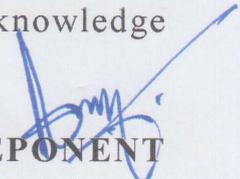
13. One ground vibration monitoring location shall be established in the abandoned quarry to monitor the impact of vibration due to the mining activities in new proposed quarry on the stability abandoned quarry and necessary precautions shall be taken to keep the ground vibration within the permissible limit.

*C. K. Prem Kumar* 

DEPONENT

**Verification :**

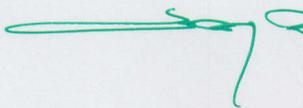
Verified that my above statements are true to the best of my knowledge and belief.

*C. K. Prem Kumar* 

DEPONENT

Place : *Peravoor*  
Date : *10.12.2020*

*Executed before me on the 10th day of December 2020 at Peravoor*

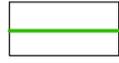
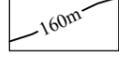
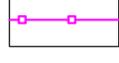
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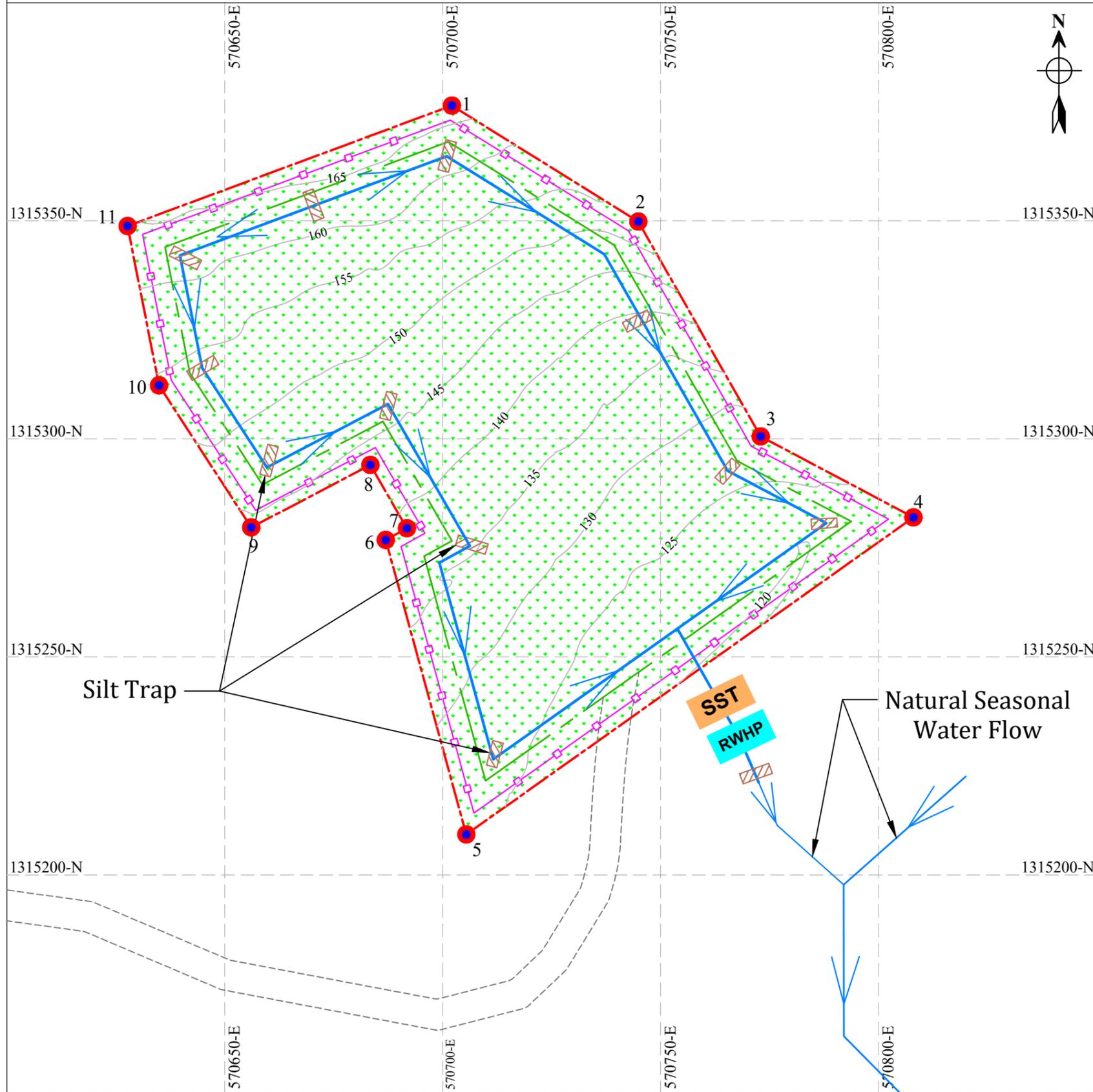
SUNNY AUGUSTINE  
ADVOCATE & NOTARY  
KUTHUPARAMBA-670 643  
KANNUR DT.,KERALA, INDIA

# DRAINAGE PLAN AT PRESENT STAGE



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-  SILT SETTELING TANK
-  RAIN WATER HARVESTING POND
-  GARLAND DRAIN
-  DIRECTION OF WATER FLOW
-  SILT TRAP



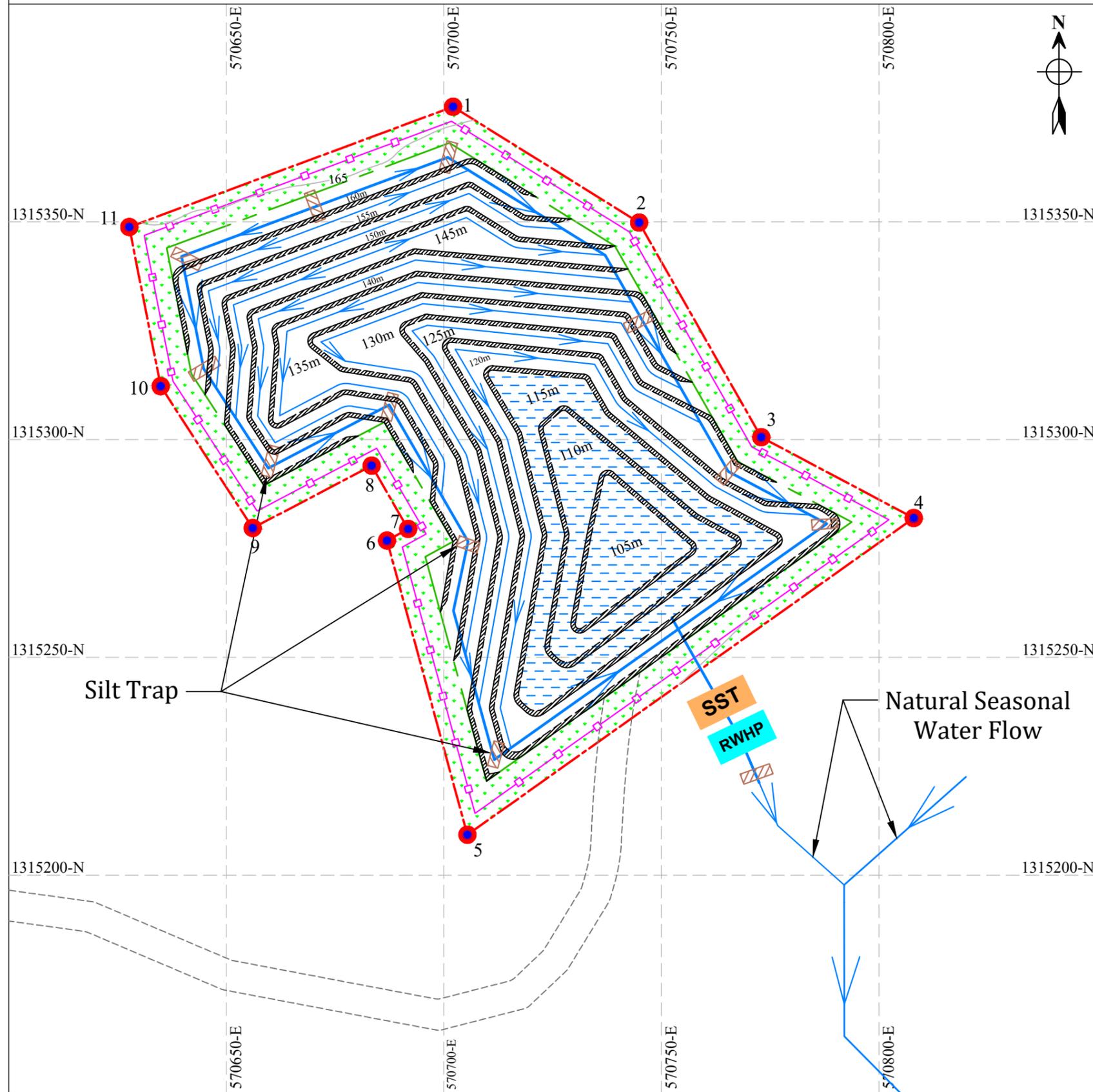
**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

Sy Nos : 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala

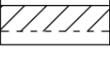
<b>Title</b>	<b>DRAINAGE PLAN AT PRESENT STAGE</b>
<b>Extent</b>	1.4621 Ha (3.6128Acres)

PREPARED BY :  **GLOBAL ENVIRONMENT & MINING SERVICES**  
(Consulting Engineers, Mine designers, Geologist & Surveyors)

# DRAINAGE PLAN AT CONCEPTUAL STAGE



## INDEX

-  QUARRY BOUNDARY
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-  SST SILT SETTELING TANK
-  RWHP RAIN WATER HARVESTING POND
-  GARLAND DRAIN
-  DIRECTION OF WATER FLOW
-  SILT TRAP
-  WATER POND

**GRANITE BUILDING STONE QUARRY OF  
Shri. K. K. PREMKUMAR**

Sy Nos : 1/100, 1 & 9, Tholambra Village, Thalassery Taluk, Kannur District, Kerala

**Title** DRAINAGE PLAN AT CONCEPTUAL STAGE

**Extent** 1.4621 Ha (3.6128Acres)

PREPARED BY :  **GLOBAL ENVIRONMENT & MINING SERVICES**  
(Consulting Engineers, Mine designers, Geologist & Surveyors)

**REVISED ENVIRONMENTAL MANAGEMENT PLAN**  
**INCORPORATING SPECIFIC CORPORATE**  
**ENVIRONMENTAL RESPONSIBILITY**  
*for*  
**GRANITE BUILDING STONE QUARRY**  
*of*  
**‘Shri K.K. Premkumar’**

*Extent : 1.4621 Ha.*

*Sy. Nos. : 1/100,1, 9,*

*Village : Tholambra*

*Taluk : Thalassery*

*District : Kannur*

*State : Kerala*

## ENVIRONMENTAL MANAGEMENT PLAN

### BASELINE INFORMATION:

The 'Granite Building Stone Quarry of Shri. K. K. Premkumar, over an area of 1.4621 Ha. for the production of granite building stone in Sy. No. 1/100, 1, 9 of Tholambra Village, Thalassery Taluk, Kannur District, Kerala State. The lease is located on the slope of the area gently dipping towards SE. The highest elevation in this area is 165.0m above MSL and the lowest elevation is 120.0m above MSL.

### Location of the project:

The proposed project area of 'Granite Building Stone Quarry of Shri. K. K. Premkumar' is located in Sy. No. 1/100, 1, 9 of Tholambra Village, Thalassery Taluk, Kannur District, Kerala State. The Latitudes and Longitudes of the proposed mining lease area are given below,

B. P. No.	Latitude	Longitude
1	N-11°53'53.423"	E-75°38'57.218"
2	N-11°53'52.530"	E-75°38'58.600"
3	N-11°53'50.930"	E-75°38'59.520"
4	N-11°53'50.340"	E-75°39'00.711"
5	N-11°53'47.971"	E-75°38'57.305"
6	N-11°53'50.151"	E-75°38'56.680"
7	N-11°53'50.260"	E-75°38'56.840"
8	N-11°53'50.741"	E-75°38'56.580"
9	N-11°53'50.250"	E-75°38'55.689"
10	N-11°53'51.339"	E-75°38'54.962"
11	N-11°53'52.500"	E-75°38'54.735"

**CLIMATIC CONDITIONS:**

The area has moderate climate with maximum temperature of 28.40 to 36.90C in the month of April and minimum temperature of 19.70 to 23.90C in the month of December. The area receives a total annual rainfall of around 3438 mm. District experiences heavy rainfall during the South West monsoon season followed by North East monsoon. South West monsoon during June to September contributes 70 % of the total rainfall of the year. The northeast monsoon contributes only about 30%. The year-to-year variability of annual rainfall is around 28.2%. In general, the rainfall increases from the coast to the eastern hilly regions. Kannur district falls under wet type of climate based on Thornthwaite's climatic classification.

**HUMAN SETTLEMENT:**

There is no human settlement in core zone. The nearest habitations are more than 101m away from the boundary of the mining lease area. The nearest human settlements are in Panambatta, which is about 1.0 Km away from the mining lease area.

**PUBLIC BUILDINGS, PLACES OF WORSHIP AND MONUMENTS:**

There are no monuments of either historical or archaeological importance in the core or buffer zone.

**REGIONAL GEOLOGY:**

The district can be broadly divided into seven geological belts trending NW-SE viz., (i) northern belt of Charnockite group extending further north and east to the adjacent districts, (ii) north central belt of Wayanad schist complex, (iii) Central belt of eninsular Gneissic Complex extending to the southeast, (iv) south central belt of Vengad Group, equivalent to Dharwar, (v) southernmost belt of Migmatite Complex which extends further south to the adjacent district, (vi) Sedimentary (Warkalli Beds) in the western part near the coast and (vii) Quaternary sediments along the coast. The lithology of Kannur district is grouped under Precambrian, late Tertiary and Quaternary periods and the Precambrian rocks dominate over the other two. Charnockite Group, includes pyroxene granulite, charnockite (hypersthene granulite) and hornblende-diopside granulite. While hornblende granite and charnockite occupy large areas, pyroxene granulite occurs as linear bodies in the southeast. Hornblende-biotite gneiss constitutes the litho unit of Migmatite Complex. It has a large areal extent along the coast, south of Kannur. Towards east and southeast, discrete metasedimentary

and ultramafic sequences which have been designaed as Wayanad Schist Complex and are considered equivalent of Sargur Group of Karnataka. They occur as isolated bands within charnockite and gneiss. Their contacts are generally discordant due to later folding, metamorphism and migmatiation. The group comprises quartzite, magnetite quartzite, garnet-kyanite-sillimanite gneiss, quart-mica-kyanite schist, quartz-sericite schist, amphibolite, kyanite-sillimanite-sericite quartzite, metaultramafites. Garnetkyanite- sillimanite gneiss/schist is widespread in the east, whereas the other members of Wayanad Complex occur as linear bands, lensoidal bodies and vestiges to the West Peninsular Gneissic Complex, represented by hornblende-biotite gneiss comprise of a complex suite of gneisses and granites, representing the anatectic phase of migmatiation of schist complex. East of Kannur extending upto Tellichery in the south, a large body of quartz-mica schist is separated from the other schistose rocks by a conglomerate horizon extending over 8km. This lithounit known as Vengad Formation, characterised by lack of migmatiation, presence of primary structres and absence of high grade minerals, is correlatable with rocks of Dharwar Super Group. Large bodies of anortjosite, gabbro, granite and granophyre from the post Vengad basic and acid intrusives. Dolerite dykes trending NW-SE represent the younger basic intrusives. Late Tertiary sedimentary rocks (Warkalli beds) occur as isolated patches along the coast near Kannur, Pazhayangadi and east of Payyannur. They comprise variegated clays and friable sandstone. At Kannur and Pazhayangadi, carbonaceous clay with thin seams of lignite is reported towards bottom of the sedimentary sequence. The Tertiaries as well as the basement rocks are extensively lateritised. The pebble bed, reported near Valapatnam along the bank of Valapatanam river, is considered to be of Quaternary age. Quaternary alluvial deposit occur along the coast and in the valleys

### **LOCAL GEOLOGY:**

The granite building stones are very well exposed as outcrop, whereas part of area with lower elevation is covered by top soil of about 0 to 1.4m thickness.

### **ENVIRONMENTAL MANAGEMENT PLAN:**

#### **1. Ambient air quality:**

The air quality in the area mainly depends on the nature & concentration of emissions and meteorological conditions. The major air pollutants include:

- Particulate Matter (Dust) of various sizes

- Gases, such as, Sulphur Dioxide, Oxides of Nitrogen, Carbon Monoxide etc. from vehicular exhaust.

Dusts are the single largest air pollutant observed in this area. Diesel operating vehicles produces NO<sub>x</sub>, SO<sub>2</sub> and CO emissions, usually at low levels. Dust can be a significant nuisance to surrounding land users and potential health risk in some circumstances. Dust is produced from a number of sources and through number of mechanisms such as

- Land clearing,
- Overburden removal,
- Crushing & screening,
- Loading & unloading of material on site &
- Subsequent transport off the site etc.

**Detected AAQ in core & buffer zone**

Area	Sample Code	PM 10 µg/m <sup>3</sup>	PM 2.5 µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>x</sub> µg/m <sup>3</sup>
Core Zone	A1	40.6	28.4	13.8	12.6
Panambatta	A2	36.7	25.9	13.2	10.4

**Mitigation Measures:**

**QUARRYING**

- Dust suppression systems (water spraying) would be adopted at mine working & loading points.
- Wet Drilling shall be practiced, to reduce the generation of dust.
- Speed control on vehicle movement, to limit speed.
- The blasting shall be carried out during day hours, it shall be avoided during strong wind and temperature inversion condition.
- Excavation operations shall be suspended during very strong wind condition.
- Wind reduction control by plantation. Trees and shrubs will be grown all along the Green belt area/safety barrier area along the periphery of the quarry and along the haul roads.
- Plantation of wide leaf trees, creepers and tall grass along approach roads, and around hillock will help in to suppress the dust.
- Proper tuning of excavators and compressors will be ensured to keep the gas emissions from the vehicles within the prescribed norms of the CPCB and MoEF guidelines.

- All workers shall be provided with personal protective devices eg. Dust Mask, Goggles, Helmet, etc.

**2. Noise and Ground Vibration:**

The noise level within the core zone is found to be 48.3 dB(A) Leq during daytime and 39.0 dB(A) Leq during nighttime, whereas in the buffer zone it is 51.5 dB(A) Leq during daytime and 40.1 dB(A) Leq during nighttime. The impact of mining on the ambient noise level would be hardly noticeable in nearby villages, as the nearest habitant Panambatta is 1.0 Kms away from the mine.

**Detected noise level in core & buffer zone.**

Area	Sample Code	Day Leq dB (A)	Night Leq dB (A)
<b>Core Zone</b>	N1	48.3	39.0
<b>Panambatta</b>	N2	51.5	40.1

**Mitigating Measures:**

- Noise will be best abated at source by choosing Machinery and equipment suitably, by proper mounting of equipment and ventilation Systems and by providing noise insulating enclosures or padding where practicable. The equipment and machines shall be maintained properly. Particular attention shall be given to the silencers and mufflers.
- Rock breakers shall be used for breaking down large boulders. No secondary blasting will be carried out to reduce noise and air blast.
- Use of sharp drilling bits, delivery of compressed air at optimal pressure and proper maintenance of compressor, drilling machine, jackhammers and tipper trucks.
- Limiting the speed of empty haulage vehicles/tippers to a moderate level to prevent undue noise.
- In addition to it, Green belt development shall be undertaken around the quarry lease area to minimize propagation of noise.
- Provision of rotation of workers to minimize exposure time as well as provision of earmuffs to workers exposed to high noise areas is also envisaged.
- Regular monitoring of noise level shall be done within the core zone and the buffer zone of the mining lease area.

**Vibration & Noise Mitigation Measures (Blasting Precautions):**

- The drilling is proposed by jack hammer with 33mm dia. The blasting shall be done sequentially. Due to very small diameter hole blasting, the vibration in this area shall be very minor. Delays and NONEL shall be used for blasting for keeping the vibration to minimum with least fly rock. Thus, the vibration would not be of significance as the nearest habitants are beyond 101 m from the boundary of the mining lease area and human settlements are in Panambatta is located at 1.0 km. from the proposed mining lease area.
- Each blast would be is carefully planned, supervised, executed, and observed by qualified Blasters.
- Design of optimum blast hole geometry i.e. burden, spacing, Blast hole layout pattern, inclination and depth considering, burden, nature of the rock, safe working space, fragmentation size, etc., to keep the ground vibrations at the minimum level.
- Proper sequencing of the blast to keep the vibration, noise and fly rock to the minimum levels.
- The appropriate Charge per delay shall be regulated to keep the PPV below 10mm/sec as per DGMS Circular 7 of 1997.
- The holes shall be proper stemmed, and the stemming of each hole shall be checked by the qualified blaster to avoid 'blown thorough' holes, that is one of the major sources of noise and Air blast during primary blasting.
- No secondary blasting like Pop Shooting or Plaster Shooting shall be undertaken for breaking down large boulders to avoid Air blasts and Fly rocks. Only rock breakers will be used for breaking down the bigger boulders.
- If there continues rain for two consecutive days mining activities will be stopped completely until the condition returns to normal.
- The blasting shall be carried out by Cartridge Slurry explosives with non-electric (Nonel) double deck charging blasting technique.

**3. Water Quality:**

There is no water regime of any importance in the mining area. Drinking water is made available through bore wells. This water is being used for drinking purpose from many years. In buffer zone the minimum pH value of water is detected as 7.10 in Panambatta, total

dissolved solids detected minimum 92mg/l in Panambatta. The total hardness of water is detected minimum 68.0mg/l in Panambatta.

**Ground Water Study:**

There is no water source of perennial type passing through the area. A detailed field study has been carried out to analyze the ground water scenario in project area and surrounding area. The detail of water level in nearby borewell is given below.

**Details of bore well observed for Groundwater study**

S. No	Name	Collar Level (MSL)	Depth of Water level in meters (BGL)	Water Level (MSL)
1	Bore Well	99m	88m	11m

As per the observation of the water level in nearby bore well, the Ground water level around the mining lease area falls in the range of 11m above MSL. However, the mining activities till the conceptual stage will be restricted to 105m above MSL. Hence, it can be assumed that mining activities up to 105m above MSL will not be intersecting the water levels as per bore well in the project surrounding area.

**Mitigating Measures:**

The following mitigation measures are suggested for water management and water pollution control,

- Garland drains shall be constructed all along the periphery of the quarry. The garland drain shall be routed through Silt Settling Tank (SST) to settle the suspended solids and the overflow water shall be routed to a Rainwater Harvesting Pond (RWHP) before being discharged to natural water course. The water from the Rainwater Harvesting ponds shall be used for Plantation work and for dust suppression. One SST & RWH tank is proposed in southeast direction of the mining lease area.
- Two workers shall be allotted for the regular & continues inspection, Maintenance of the garland drains & silt traps.
- Settling tanks and drains shall be periodically de-silted.
- Providing sufficient silt traps to check any silt flowing along with the surface run-off during monsoon. The environment management measures for the surface water run offs are shown in the Environment Management Plan & Environment/ Drainage Plan.

- No toilet is planned within the mine area. However, the toilets built at the site office, shall be provided with septic tanks to handle the sewage from the same.
- The quality of the water in the surrounding area and the Pre & Post monsoon water quality shall be monitored to track any changes or contamination in the water quality.
- The working of quarry at present shall be restricted at 105m above MSL at Conceptual stage of quarrying, which is above the ground water level.

**4. SOLID WASTE MANAGEMENT:**

It is expected to recover 8,716.80 tonnes of waste/topsoil during quarrying this area. The Topsoil shall be utilized for development Afforestation/Green belt area as and when required. The waste material shall be used for road leveling work and also shall be utilized for back filling the pit at the conceptual stage.

**PROGRAMME FOR AFFORESTATION:**

0.3893 Ha area earmarked for safety barrier shall be developed as green belt by planting 700 native species. Wherever if it is not possible to do plantation in the safety zone area, the same plantation will be done in the nearest possible area to safeguard the environmental protection. Till conceptual stage totally 0.3893 Ha area shall be covered under green belt. Apart from this, Afforestation shall be done on the haulage road by planting 1300 saplings of native species. The afforestation program is given below,

**Afforestation program**

<b>Year</b>	<b>No of Plants</b>	<b>Green belt area covered</b>	<b>Location</b>
I-Year	700 saplings	0.3893 Ha.	Greenbelt Area
II-Year	400 saplings	-	Haulage Road
III-Year	300 saplings	-	
IV-Year	300 saplings	-	
V-Year	300 saplings	-	
<b>Total</b>	<b>2000 saplings</b>	<b>0.3893 Ha</b>	

**STABILIZATION AND VEGETATION DUMPS ALONG WITH WASTE DUMP MANAGEMENT FOR NEXT FIVE YEARS:**

Only 8,716.80 tonnes topsoil/Waste is expected to generate in this area. The Topsoil shall be utilized for development of Re-grassing area/Afforestation/Green belt area as and when required. Topsoil shall be utilized for the afforestation program in safety barrier if necessary. The Topsoil/ waste shall be systematically dumped by formation of benches not exceeding height of 5m and deep-rooted plant will be planted on dump to enhance the stability of the dumps. Geotextile will be carried out on the dumps. A garland drain shall be constructed all around the periphery of the dump to prevent the percolation of rainwater into dump, which is the major factor for dump soil erosion. Construction of gabion wall is proposed at the toe of the dump to maintain a good stability of the dump.

**LAND ENVIRONMENT**

The total mine lease area of 1.4621 Ha. is private land. The present land use, land use at the end of progressive stage and the ultimate land use pattern is given below,

<b>Particulars</b>	<b>Land use pattern at present stage (Ha)</b>	<b>Land use pattern (end of progressive stage) (Ha)</b>	<b>Land use pattern at Conceptual stage (Ha)</b>
Area for mining / mining activities	-	0.9977	1.0728
Area for Roads	-	-	-
Area for Safety Barrier / Green belt	-	0.3893	0.3893
Overburden / dump/ tailing dump	-	0.0751	-
Total	-	<b>1.4621</b>	<b>1.4621</b>
Unused area	1.4621	-	-
<b>Total Lease area</b>	<b>1.4621</b>	<b>1.4621</b>	<b>1.4621</b>

**REVISED PROJECT COST ESTIMATES**

Estimated project cost along with analysis in terms of Economic viability of the project.

Considering the present domestic market conditions of the products, the appx. Cost of the project estimated is around Rs. 222.20 lakhs. The summary of the assets is given below.

Sl. No	Description	Cost in Lakh Rs
1	Excavator, Rock Breaker (Estimated equipment cost)	60.0
	Water Tanker, Jeep, Truck etc.,	18.0
	Trippers, Jack hammers	31.2
2	Strengthening of Roads	6.00
3	Cost of Infrastructure like Site Office, Temporary Sheds, Rest shelters etc.,	4.00
4	Cost for Environment Protection	37.0
5	Cost for Construction of Garland drains, SST, RWHP, Gully checks, etc.,	6.00
6	Air Compressor	10.0
7	Land Expenses (146.21 Ares X 18,150 Rupees/Are) + Misc.	28.0
8	Pre-Operational Cost	10.0
9	Miscellaneous	12.0
<b>TOTAL</b>		<b>222.20</b>

**Recurring Annual Cost for Environmental Protection**

Sl. No.	Particulars	No.	Cost (Lakh Rs.)
<b>I</b>	<b>Pollution Control</b>		
1.1	Water Sprinkling for dust suppression		1.00
1.2	Green belt development	Avg. 400 plants	1.80
1.3	Personal protective equipment	30	0.60
1.4	Environmental monitoring		2.00
1.5	Desilting and Maintenance of Garland Drain, SST and RWHP		1.00
1.6	Maintenance of haulage roads for removal of dust accumulation		0.50
1.7	Coir matting on the dump, dump maintenance etc.,		0.50
	<b>Total</b>		<b>7.40</b>
2	Corporate Environment Responsibility (Average)		1.88
<b>Total</b>			<b>9.28</b>

## CORPORATE ENVIRONMENT RESPONSIBILITY (CER)

The project proponent has committed an amount of **Rs. 9.40 Lakhs** towards the contribution to the CER activity for the benefit of the local area as consulted with the local governing bodies. **(Rs. 9.40 Lakhs in the first five years).**

To make an effective contribution a study was conducted in the local area along with the project proponent, with a focus on the following sectors:

1. Development of infrastructure and amenities at Government L. P. School, Kanhileri.
2. Support for improving facilities at Government L. P. School, Poovampoil.

✓ **Project : Development of infrastructure and amenities at Government L. P. School, Kanhileri.**

✓ **CER Project Cost : Rs. 5.60 Lakhs in the first five years.**

- After consulting with the Headmaster in charge of the Government L. P. School, Kanhileri, it is noted that there are requirements for infrastructure developments like Solar inverter, bookshelves for classrooms, Scanner & Printer for IT Lab, Kids chairs at the school.
- A letter from the Headmaster in charge showing the needs for the above-mentioned infrastructure developmental activities is enclosed as **Annexure-A**.
- Timeline implementation of program details are given below,

### **Development of infrastructure and amenities at Government L. P. School, Kanhileri.**

<b>Location Name</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
<b>Government L. P. School, Kanhileri</b>	Installation of Solar power Harvesting system with Inverter with an estimated cost of Rs. 2,50,000	2 sets of computers along with computer tables, chairs and one set of printer and scanner with an estimated cost of Rs. 2,00,000	Annual Maintenance cost of Rs. 20,000	Annual Maintenance cost of Rs. 20,000	Annual Maintenance cost of Rs. 20,000
	2 Bookshelves for classrooms with an estimated cost of Rs. 50,000				
<b>Total</b>	<b>Rs. 3,00,000</b>	<b>Rs. 2,00,000</b>	<b>Rs. 20,000</b>	<b>Rs. 20,000</b>	<b>Rs. 20,000</b>

✓ **Project : Support for improving facilities at Government L. P. School, Poovampoil.**

✓ **CER Project Cost : Rs. 3.80 Lakhs in the first five years.**

- After consulting with the Headmistress, Government L. P. School, Poovampoil, there are requirements for renovation of kitchen building at school premises, Construction of well, Electronic equipment like printer, Bookshelves for classrooms and books.
- A letter from the Headmistress in charge showing the needs for the above-mentioned activities is attached as **Annexure B**.
- Timeline implementation of program details are given below,

**Support for improving facilities at Government L. P. School, Poovampoil**

<b>Location Name</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>
<b>Government L. P. School, Poovampoil</b>	Renovation of Kitchen building at School premises with an estimated cost of Rs. 1,50,000	2 sets of computers along with computer tables, chairs and one set of printer and scanner with an estimated cost of Rs. 2,00,000	Annual Maintenance cost of Rs. 10,000	Annual Maintenance cost of Rs. 10,000	Annual Maintenance cost of Rs. 10,000
<b>Total</b>	<b>Rs. 1,50,000</b>	<b>Rs. 2,00,000</b>	<b>Rs. 10,000</b>	<b>Rs. 10,000</b>	<b>Rs. 10,000</b>

**SUMMARY OF CER ANNUAL COMMITMENT****CER (Recurring)**

<b>Sl. No</b>	<b>Location name</b>	<b>1<sup>st</sup> Year</b>	<b>2<sup>nd</sup> Year</b>	<b>3<sup>rd</sup> Year</b>	<b>4<sup>th</sup> Year</b>	<b>5<sup>th</sup> Year</b>	<b>Total</b>
1	Government L. P. School, Kanhileri.	Rs. 3,00,000	Rs. 2,00,000	Rs. 20,000	Rs. 20,000	Rs. 20,000	<b>Rs. 5,60,000</b>
2	Government L. P. School, Poovampoil.	Rs. 1,50,000	Rs. 2,00,000	Rs. 10,000	Rs. 10,000	Rs. 10,000	<b>Rs. 3,80,000</b>
<b>Total</b>		<b>Rs. 4,50,000</b>	<b>Rs. 4,00,000</b>	<b>Rs. 30,000</b>	<b>Rs. 30,000</b>	<b>Rs. 30,000</b>	<b>Rs. 9,40,000</b>

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പ്രേഷിതൻ

ഹെഡ്മാസ്റ്റർ  
കാഞ്ഞിലേരി ഗവ.എൽ.പി. സ്കൂൾ  
കാഞ്ഞിലേരി

സ്വീകർത്താവ്

കെ.കെ.പ്രേം കുമാർ  
കൊളത്തു ഹൗസ്  
മേൽ മുരിങ്ങോടി  
പേരാവൂർ

സർ,

1905 ൽ കാഞ്ഞിലേരിയിൽ മംഗലാട്ട് കൊക്കോടൻ കുഞ്ഞിരാമകുറുപ്പ് വൈദ്യർ ആരംഭിച്ച വിദ്യാലയമാണ് ഇന്നത്തെ കാഞ്ഞിലേരി ഗവ.എൽ.പി. സ്കൂൾ. മാലൂർ പഞ്ചായത്തിൽ പ്രവർത്തിച്ചു വരുന്ന ഈ സർക്കാർ വിദ്യാലയത്തിൽ പ്രീ പ്രമറി മുതൽ നാലാം ക്ലാസ്സു വരെ 126 കുട്ടികൾ 2020-21 വർഷം പഠിക്കുന്നുണ്ട്. സർക്കാരിന്റേയും ,നാട്ടുകാരുടെയും രക്ഷിതാക്കളുടേയും സഹായത്താൽ വിദ്യാലയം നല്ല നിലയിലാണ് ഇന്ന് പ്രവർത്തിച്ച് വരുന്നത്. ധാരാളം പരിമിതികൾ ഇനിയും മറികടക്കാനുണ്ട്.

സാമൂഹ്യ സേവനത്തിന്റെ ഭാഗമായി താങ്കളുടെ സ്ഥാപനം കാഞ്ഞിലേരി ഗവ.എൽ.പി. സ്കൂളിന് ഭൗതിക കാര്യങ്ങൾ മെച്ചപ്പെടുത്തുന്നതിന് സഹായം നൽകാമെന്നറിയിച്ചതിന്റെ അടിസ്ഥാനത്തിൽ താഴെ പറയുന്ന കാര്യങ്ങൾ ഞങ്ങൾക്ക് ആവശ്യമാണെന്നറിയിക്കുന്നു.

1. സോളാർ വാട്ടർ ഹീറ്റർ
2. സോളാർ വൈദ്യുതി, ഇൻവർട്ടർ
3. നാല് ക്ലാസ്സുകളിൽ ബുക്ക് ഷെൽഫ്
4. സ്കാനർ കം പ്രിന്റർ
5. മൂന്ന് ക്ലാസ്സുകളിൽ ശിശു സൗഹൃദ ഇരിപ്പിടങ്ങൾ .....

മേൽ പറഞ്ഞ ഇനങ്ങൾ ഈ വിദ്യാലയത്തിന് അനുവദിച്ചു തരാൻ താങ്കളുടെ ഇടപെടൽ ഉണ്ടാകുമെന്ന് പ്രതീക്ഷിക്കുന്നു.



*(Signature)*  
18/12/20  
**RAVEENDRAN. P**  
HEAD MASTER  
Govt. L.P. School  
KANHILERI

ഗവ. എൽ. പി. സ്കൂൾ , പൂവംപൊയിൽ.

പ്രേഷകൻ

ഹെഡ്മിസ്ട്രസ്സ്,  
ഗവ. എൽ. പി. സ്കൂൾ, പൂവംപൊയിൽ,  
താമ്ബാട്,  
വെള്ളൂർവള്ളി. (പി.ഒ)  
കിണ്ണൂർ.

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സ്വീകർത്താവ്,

കെ.കെ. പ്രൊജക്ടർ,  
കോലന്ത്ര ഹൗസ്, (Kolanthra House)  
മേൽമുരിങ്ങോടി (പി.ഒ)  
പേരാമ്പൂർ - 670673  
കിണ്ണൂർ.

സർ,

ഗവ. എൽ. പി. സ്കൂൾ, പൂവംപൊയിലിന്റെ അക്കാദമികവും ഭൗതികവും  
പുനഃവികസനത്തിനുവേണ്ടി അങ്ങയുടെ സഹായം ധനസഹായം വാദാനം  
ചെയ്തിരുന്നല്ലോ. ഇതനുസരിച്ച് അങ്ങയുടെ വിദ്യാലയത്തിൽ അത്യാവശ്യ  
വികസനത്തിനുവേണ്ടി തയ്യാറാക്കിയ പദ്ധതികളുടെ വിവരങ്ങൾ അങ്ങയെ  
ടെയും സഹായത്തിന്റെ മറ്റ് അധികാരികളുടെയും പരിഗണനയ്ക്കായി  
ഇതോടൊപ്പം സമർപ്പിക്കുന്നു.



  
**PREMAJA KARIYIL**  
**HEADMISTRESS**  
Govt. L. P. SCHOOL POOVAMPOIL  
P.O. VELLARVALLI - 670673

ഗവ. എൽ. പി. സ്കൂൾ, പൂവംപൊയിൽ.

കണ്ണൂർ - മടന്നൂർ - മാപ്പൂർ - താഴ്വാട് പ്രദേശത്തെ പ്രാഥമിക വിദ്യാഭ്യാസത്തിനുള്ള ഏക ആശ്രയമാണ് ഈ വിദ്യാലയം. 1981ൽ ആരംഭിച്ച പ്രവർത്തനം ഉടൻതന്നെ പിന്നോക്ക പ്രദേശത്തുള്ള ഈ സ്ഥലം ധാരാളം പരിമിതികൾക്കിടയിലാണ് പ്രവർത്തിക്കുന്നത്. പാഠ്യപാഠ്യേതര പ്രവർത്തനങ്ങളിൽ മുൻനിട്ടിരിക്കുന്ന ഈ വിദ്യാലയത്തിൽ ഭൗതിക സൗകര്യങ്ങൾ ഇനിയും മെച്ചപ്പെടുത്തേണ്ടതുണ്ട്. അതിനായി പ്രഥമ പരിഗണന നൽകേണ്ടവ ഇനി സൂചിപ്പിക്കുന്നു.

1. സ്കൂൾ കെട്ടിടത്തിന് ഭിത്തി നിർമ്മിക്കൽ.

സ്കൂൾ കെട്ടിടം കാൽഭാഗം ചുമക്കും മൂക്കാൽഭാഗം ഗ്രിൽഡും വാടിപ്പിച്ചു തുറന്നിട്ടുണ്ട്. അതിനാൽ മഴക്കാലത്ത് ഗ്രിൽഡ് വഴി ക്ലാസ് മുറികളിൽ വെള്ളം വീഴുകയും ഭവനൽക്കാലത്ത് അസഹ്യമായ ചൂടേറിയവെള്ളം വെച്ചു നന്നും. ഈ പ്രശ്നങ്ങൾ പരിഹരിക്കാനും കുട്ടികളുടെ സുഗമമായ പഠനത്തിനും ഭിത്തി നിർമ്മിക്കൽ അത്യാവശ്യമാണ്. അതോടൊപ്പം വിദ്യാലയം പെയിന്റിംഗ് ചെയ്യാനും മനോഹരമാക്കുകയും ചെയ്യേണ്ടതുണ്ട്.

2. പാലകപ്പുര നവീകരണം.

നിലവിലുള്ള പാലകപ്പുര പഴുതിഭാഗം ഗ്രിൽഡ് വാടിപ്പിച്ചു തുറന്നിട്ടുണ്ട്. ആധുനിക രീതിയിലുള്ള സൗകര്യങ്ങളും ഇല്ല. അതിനാൽ എല്ലാ സൗകര്യങ്ങളോടും കൂടിയ അച്ചുതട്ടുള്ള പുതിയ പാലകപ്പുര നിർമ്മിക്കുകയോ ഉള്ളവ നവീകരിക്കുകയോ ചെയ്യേണ്ടത് അത്യാവശ്യമാണ്.

3. സ്കൂളിൽ കിണർ നിർമ്മിക്കൽ.

200 മീറ്റർ അകലെ തുറന്നിട്ടിരിക്കുന്ന കുഴൽ കിണറില്പെ വെള്ളമാണ് കുടിവെള്ളത്തിനായി സ്കൂൾ ടാങ്കിൽ എടുക്കുന്നത്. മോട്ടോർ, സ്വിച്ച് എന്നിവ സ്കൂളിൽ നിന്നും വളരെ ദൂരെയാൽ നാൽ വെള്ളം ലഭിക്കാൻ പ്രയാസമുണ്ടാകുന്നു. അതിനാൽ കുടിവെള്ളം ലഭ്യമാക്കുന്നതിനുവേണ്ടി സ്കൂൾ പരിസരത്തുണ്ടെന്ന കിണർ കുഴിക്കേണ്ടത് അനിവാര്യമാണ്.

4. Printer - Scanner - copier , Laptop .

ഒട്ടികളുടെ പഠനവശ്യങ്ങൾ നിറവേറ്റുന്നതിലേക്കും ഓഫീസ് സംബന്ധമായ പ്രവർത്തനങ്ങൾക്കും ഉപകാരപ്പെടുന്നതിനായി ഈ ഒരു ഉപകരണവും രണ്ട് ലാപ്ടോപ്പും ലഭിക്കേണ്ടതുണ്ട്.

5. പഠനമുറികൾ അക്കർഷകമാക്കൽ.

ഓരോ ക്ലാസിനും ഓരോ കുട്ടിക്കും ഉപയോഗയോഗ്യമാംവിധം ഇരിപ്പിട സൗകര്യം , Big picture board , അലമാര ഇവ സംഘടിപ്പിക്കേണ്ടതുണ്ട്.

6. ക്ലാസ് ലൈബ്രറി .

ഒട്ടികളുടെ വായനശീലം വളർത്തുന്നതിലേക്കായി ഓരോ ക്ലാസ് ലൈബ്രറി കുട്ടികൾക്ക് അനുയോജ്യമായ ലൈബ്രറി പുസ്തകങ്ങളും അവ സൂക്ഷിക്കുന്നതിനുള്ള ഷെൽവും സജ്ജമാക്കേണ്ടതുണ്ട്.

7. ഔഷധസസ്യത്തോടം.

പഠന പ്രക്രിയയുടെ ഭാഗമായി വിവിധതരം ഔഷധസസ്യങ്ങളെ പരിചയപ്പെടുത്തുന്നതിനായി ഔഷധസസ്യത്തോടം ഒരുക്കേണ്ടതുണ്ട്.

8. KIDS PARK.

സാമ്പത്തികമായും സാമൂഹികമായും പിന്നോക്കം നിൽക്കുന്ന ഈ വിദ്യാലയത്തിലെ കുരുന്നുകൾക്ക് മനസിഭോക്താസത്തിനായി ഒരു kids park ലഭ്യമാക്കേണ്ടതുണ്ട്.

അക്കാദമിക് - ഭൗതിക - സാമൂഹിക മേഖലകളിൽ ഉന്നമനം ഉണ്ടാവാൻ സാധ്യമായ എല്ലാ പ്രവർത്തനങ്ങളും അവിഷ്കരിച്ച് നടപ്പിലാക്കാൻ വിവിധ സഹായ സഹകരണങ്ങളും ഉണ്ടാകണമെന്ന് അഭ്യർഥിക്കുന്നു.



പി.ടി.എ. പ്രസിഡണ്ട് -  
സമീപമന്ത്രി - VJ

പ്രേമാജ കരിയീൽ

PREMAJA KARIYIL  
HEADMISTRESS  
Govt. L. P. SCHOOL POOVAMPOIL  
P.O. VELLARVALLI - 670673

Item No. 01

(Court No. 1)

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

M.A. Nos. 80 to 83, 85 to 88, 95 and 96/2021

IN

Original Application No. 304/2019

M. Haridasan

Applicant

Versus

State of Kerala &amp; Ors.

Respondent(s)

Poabs Granites (Pvt.) Ltd. & Anr.  
Kuthirakulam P.O., Vellanand,  
Thiruvanthapuram District,  
Kerala State

Applicants in M.A.  
Nos. 80 & 81/2021

M/s. Panachayil Industries  
West Othara P.O.,  
Thiruvalla Taluk,  
Pathanamthitta District  
Kerala State

Applicant in M.A.  
Nos. 82 & 83/2021

Crystal Granites Ltd. & Anr.  
Chulli P.O., Thathupara,  
Ernakulam,  
Kerala State-683581

Applicants in M.A.  
Nos. 95 & 96/2021

Raju K. Thomas & Ors.  
Vadasserikkara Post,  
Pathanamthitta District,  
Kerala-689662

Applicants in M.A.  
No. 85/2021

Reji Joseph & Anr.  
Narikkattu House,  
Chamampathal Post,  
Vazhoor, Kottayam District  
Kerala-686517

Applicants in M.A.  
No. 86/2021

Thomsun Aggregates  
Kuttipparambil (H),  
Vadaathoor P.O., Kottayam District  
Kerala State-686010

Applicants in M.A.  
No. 87/2021

Michael Granites & Ors.  
Kanjirathumkunnu House,  
Ramapuram Bazar Post,  
Kottayam District,  
Kerala State-686576

Applicants in M.A.  
No. 88/2021

Date of hearing: 09.12.2021

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Applicant: Ms. Nishtha Kumar Advocate for original applicant

Respondent(s): Mr. Krishnan Venugopal, Senior Advocate with  
Mr. E.M.S. Anam, Advocate for Applicant in M.A 80-81/2021  
Mr. E.M.S. Anam, Advocate for Applicant in  
M.A. 82,83,95&96/2021  
Mr. Abhilash M.R., Advocate for Applicant in M.A 85 to 88/2021  
Mr. Jogy Scaria, Advocate for KSPCB

## ORDER

1. These applications have been filed by mining lessees (project proponents) undertaking quarry mining at various locations in Kerala, which also involves blasting. Mining is beyond 50 meters while according to the original applicant longer distance has to be maintained, following precautionary principle having regard to the right of inhabitants, who are affected by air and noise pollution generated in the course of mining operations. This Tribunal earlier passed order dated 21.7.2020 laying down longer distance in the light of report of the CPCB by which the present PPs are aggrieved.

2. The PPs have drawn attention to the order of the Hon'ble Supreme Court dated 25.10.2021 in a batch of matters permitting filing of

applications before this Tribunal by the parties affected by the order of this Tribunal. The said batch of matters involved *inter-alia* the issue whether this Tribunal has jurisdiction to initiate *suo motu* action against violation of environmental norms which stands concluded by the judgment reported in *Municipal Corporation of Gr. Mumbai Vs. Ankita Sinha & Ors.*, 2021 (12) SCALE 184. Therein, it was held that the affected parties are entitled to be heard and they had not been heard in the present matter. The operative part of the order is reproduced below:

*“In light of the issue answered by this Court in Civil Appeal Nos. 12122-12123 of 2018 and connected cases titled as "Municipal Corporation of Gr. Mumbai Vs. Ankita Sinha & Ors." reported in 2021(12) SCALE 184, it would be appropriate to permit the appellant(s) to raise all contentions/objections as may be available and permissible in law before the National Green Tribunal (In short "the Tribunal") in the first place. The Tribunal may consider those contentions/objections and record reasons for accepting or rejecting the same, so that the appellant(s) if dis-satisfied may have further remedy of appeal(s) before this Court.*

***In other words, all contentions raised in the present appeal(s) on these aspects, including on merits are left open, to be considered by the Tribunal afresh.***

*We say so because the judgment rendered by this Court predicates that even if the Tribunal intends to initiate suo motu action, must give opportunity to the parties likely to be affected before passing any adverse order against them. Viewed thus, the ex-parte preemptory order(s) passed by the Tribunal without giving opportunity to the person(s) likely to be affected by such order(s), be treated as effaced from the record.*

*Keeping that principle in mind, we deem it appropriate to relegate the appellant(s) before the Tribunal with liberty to raise all contentions as may be permissible in law, to be decided by the Tribunal afresh on its own merits.*

*Notably, the decision of the High Court assailed in these appeal(s) also gives that liberty to the appellant(s). However, we expressly grant such liberty to the appellant(s), as aforesaid, in terms of this order.*

*The appellant(s) may, therefore, file a formal application to take up all contentions before the Tribunal which may be considered by the Tribunal afresh on its own merits and in accordance with law, including raised in this appeal(s) and in respect of matters, referred to by the Tribunal in the earlier order. The Tribunal to decide the proposed application expeditiously.*

*Learned counsel for the appellant(s) submits that before the Tribunal finally answers the issues raised by the appellant(s), the Tribunal may consider of issuing appropriate interim order to enable the appellant(s) to give effect to the contract/lease agreement in respect of the project in question. We accede to this prayer.”*

3. All the Applications are identical and relief sought is impleadment and directions not to interfere with the distance presently being followed as per rules laid down by the mining department and Kerala PCB.

4. We have heard learned Counsel for the parties.

5. As far as impleadment is concerned, the said prayer is granted, as the applicant has no objection to such a course being adopted in the light of order of the Hon’ble Supreme Court.

6. On merits also, stand in all the applications is almost same. The PPs claim to be carrying on quarry mining, using blasting at various locations under leases granted by the Mines Department of Kerala under the Kerala Minor Mineral Concession Rules, 1967. Minimum safety distance of 50m is maintained from nearest dwelling units. Grievance of the original applicant that 50m distance is not enough and reliance on observations of the Hon’ble Supreme Court in *M.C. Mehta v. Union of India*, (1996) 8 SCC 462 and *Mohammaed Haroon Ansari v. District Collector, Ranga Reddy District*, (2004) 1 SCC 491 is uncalled for.

7. To complete the narration, we may record that the Tribunal sought a report from CPCB and as per report dated 09.07.2020, it was suggested

that minimum distance should be 100m where blasting is not involved and 200m where blasting is involved. The Tribunal accepted the said view and, vide order dated 21.07.2020, issued directions in terms thereof which are reproduced for ready reference, as follows:

*“3. Accordingly, the CPCB has filed its report on 09.07.2020 concluding as follows:*

**“6.0 Conclusion:**

*In view of available information, following minimum distance criteria may be considered for permitting stone quarrying by SPCBs:*

<b>Mining Type</b>		<b>Minimum Distance</b>	<b>Locations</b>
<b>A.</b>	<b>When Blasting is not involved</b>	<b>100 m</b>	<i>Residential/ Public buildings, Inhabited sites, Protected monuments, Heritage sites, National / State Highway, District roads, Public roads, Railway line/area, Ropeway or Ropeway trestle or station, Bridges, Dams, Reservoirs, River, Canals, Lakes or Tanks, or any other locations to be considered by States.</i>
<b>B.</b>	<b>When Blasting is involved</b>	<b>200 m **</b>	

**\*\*Note: The regulations for danger zone (500 m) prescribed by Directorate General of Mines Safety also have to be complied compulsorily and necessary measures should be taken to minimise the impact on environment.**

*However, if any states is already having stringent criteria than the above for minor mineral mining (i.e. more prescribed distances than the above), the same shall be applicable.”*

*4. In view of the above, the said criteria be followed throughout India. The CPCB may monitor compliance.”*

8. In view of rival submissions, question is whether there is any scope for interference by this Tribunal.

9. Original applicant has opposed the applications of the PPs and submitted that minimum distance of 200m must be maintained in the interest of safety of the inhabitants as well as flora and fauna in the area. The Tribunal must follow the ‘Precautionary’ principle and, if any, further

study is undertaken, mining may not be allowed within 200m pending such study. It was also submitted that mining is continuing illegally in violation of orders of Hon'ble Supreme Court and on that aspect the matter is being further raised before the Hon'ble Supreme Court by the applicant.

10. Stand of learned Counsel for the PPs is that distance of 50m is laid down under the Mines and Mineral Rules as well as under the orders of the State PCB. Any longer distance is beyond the jurisdiction of this Tribunal. CPCB also has no jurisdiction as powers under the EP Act are only with MoEF&CC.

11. Further submission is that due to topography of the State of Kerala, longer distance will obstruct the legitimate mining activities in violation of sustainable development principle. With the use of Nonel Detonation technology, 50m distance is adequate and does not cause any adverse impact.

12. Reliance has also been placed on a CSIR-Central Institute of Mining & Fuel Research study conducted in June 2021 on "SCIENTIFIC STUDIES FOR DESIGN OF SAFE BLAST PARAMETERS AT PEROORKADA STONE MINE, KUTHIRAKALAM P.O. VELLANADU, THIRUVANANTHAPURAM, KERALA" concluding and recommending as follows:

## **"8. CONCLUSIONS AND RECOMMENDATIONS**

### **8.1 Conclusions:**

*The following conclusions can be drawn from the results of the study on blast vibration analysis:*

- i) From the blasting trials, with the designed blast patterns, it was observed that blast induced ground vibrations; air overpressure and fly rock were within safe limits*
- ii) The use of bottom hole-initiation systems like shock tubes in conjunction with noiseless trunk line delays (NTLD) during trial blasts kept the vibration and air over-pressure to the allowable limits.*

- iii) *Proper stemming with coarse grained sand reduced the chances of flyrock and limited to bare minimum within the quarry area.*
- iv) *The throw of the muck was found to be favourable for easy removal and handling by machines*
- v) *The maximum value of blast induced ground vibration (PPV) level recorded at the south eastern boundary from where the closest civil structure (water tank), is 1.024 mm/s with dominant excitation frequency as 82.25 Hz at a distance of 125 m.*
- vi) *The maximum projectiles range of flyrock was observed as 10-15 m from the blast site and the air overpressure levels recorded were within the safe limits (<128 dB).*
- vii) *This clearly indicates that the blast design parameters followed during the studies at the mine are quite safe to the nearby habitats and structures.*

## **8.2 Recommendations:**

*On the basis of data analysis and results of the study the following points are recommended for consideration and strict adherence for controlled blasting and safety of structures:*

1. *It is recommended to practice the blast design parameters as burden = 1 m spacing = 1.2m, hole depth = 1.8 m to 3m and specific charge = 0.35 kg/m<sup>3</sup>.*
2. *Maximum hole depth can be upto 3m. Holes of lesser depth may have a tendency of generating more flyrock.*
3. *In case of varying hole depth, charge per holes should be calculated on the basis of specific charge (0.35 kg/m<sup>3</sup>)*
4. *The hole diameter should be kept at 32mm and there should be no variation in diameter of the drilled holes.*
5. *Typical blast designs shown in the figure 6 and 7 should be followed for safe blasting practice*
6. *The safe maximum charge per delay for the distances of 45m and above, from the dwellings/structures is mentioned in Table-5, and Figure 16, which should be followed to contain the ground vibrations and flyrock within the limits.*
7. *Although, the nearest house not belonging to quarry owner, is towards South-east direction of the mine at a distance of 250 m and the safe maximum charge per blast for that distance, as per the Table-4, is 8.29 kg*
8. *Prilled Ammonium Nitrate Fuel Oil (ANFO) and Cartridge emulsion explosive of 25mm diameter to be used for all production blast rounds. Care should be taken to ensure utilization of explosive within the prescribed shelf-life period.*
9. *Blast rounds should be planned in such a manner that at least one free face is available*
10. *Maximum four rows are to be fired in each blast round to avoid cumulative confinement and flyrock problem.*
11. *Top of the face should be cleaned for any debris. The face should be cleared of muck of the previous blast as it creates flyrock.*
12. *The free face direction should be, as far as possible, opposite from the hutments/ structures (temporary or*

*permanent). The propagation of the initiation should be opposite to the structures/ habitats.”*

13. We have duly considered the above submissions. We do not find any merit in the objection of the PPs that this Tribunal has no jurisdiction in view of distance laid down under the Mines and Mineral Rules. in view of law laid down *inter-alia* in *Mantri Techzone Pvt. Ltd. v. Forward Foundation and Ors.*,<sup>1</sup> and *the Director General (Road Development) NHAI v. Aam Aadmi Lok Manch.*<sup>2</sup> There is also no merit in the contention that CPCB has no jurisdiction under the EP Act. CPCB has jurisdiction under EP Act, as per delegation under section 23 of the said Act as well statutory powers under the Air and Water Acts and also under directions of this Tribunal. Plea of the PPs that the study relied upon clinches the matter in their favour is also not born out from the said study. There is also no merit in the contention that even at the cost of environment mining must be allowed having regard to peculiar topography of Kerala.

14. Thus, while the stand of the PPs cannot be accepted, out of abundant caution, we are inclined to consider further expert study on the subject of safe distance for mining from habitations.

15. Accordingly, we constitute a seven-member joint Committee comprising CPCB, Indian Institute of Mines/ IIT, Dhanbad, CSIR - Central Institute of Mining & Fuel Research (CIMFR), Dhanbad, CSIR-Central Building Research Institute (CBRI), Roorkee, IIT Roorkee, Wadia Institute of Himalayan Geology, Dehradun and Directorate General of Mines Safety, GoI. The nodal agency will be CPCB for coordination and compliance. The cost of the study will be initially borne by CPCB and thereafter as may be decided by this Tribunal. The Committee may undertake visit to the

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<sup>1</sup> 2019 SCC online SC 322, Para 43-47

<sup>2</sup> AIR 2020 (SC) 3471, Para 75

relevant sites and except for such visits, conduct proceedings online, if necessary. The Committee will be at liberty to take assistance from any other expert/institution. The Committee may inter-alia study the impact of blasting with Nonel Detonation technology at distances of 50m, 75m, 100m, 125m, 150m, 200m and 250m. The study will include the impact caused by vibrations on different soil strata /earth profile in the area and on noise and air levels, on building and human and wildlife. The study may be completed within three months and report furnished within four months. Any stakeholder will be at liberty to give their respective view point to the Committee. State of Kerala and Kerala State PCB will facilitate undertaking of above study. The report may be furnished to this Tribunal within four months by e-mail at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in) preferably in the form of searchable PDF/ OCR Support PDF and not in the form of Image PDF and also upload the same on website of CPCB simultaneously so that the concerned parties/Departments can access the same for further course of action.

M.A. Nos. 80/2021, 82/2021, 95/2021 stand disposed of.

List OA 304/2019 for further consideration on 11.05.2022.

A copy of this order be forwarded to CPCB, Indian Institute of Mines/ IIT, Dhanbad, CSIR - Central Institute of Mining & Fuel Research (CIMFR), Dhanbad, CSIR-Central Building Research Institute (CBRI), Roorkee, IIT Roorkee, Wadia Institute of Himalayan Geology, Dehradun, Directorate General of Mines Safety, GoI, State of Kerala and Kerala State PCB by e-mail for compliance.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Dr. Nagin Nanda, EM

December 09, 2021  
M.A. No. 80/2021 to M.A. No. 83/2021,  
M.A. No. 95/2021, M.A. No. 96/2021,  
M.A. No. 85/2021 to M.A. No. 88/2021  
DV

Item No. 06

Court No. 1

**BEFORE THE NATIONAL GREEN TRIBUNAL  
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 304/2019  
(M.A. No. 81/2021, M.A. No. 83/2021, M.A. No. 96/2021 & M.A. No.  
85/2021 to M.A. No. 88/2021 & I. A. No. 184/2022)

M. Haridasan

Applicant

Versus

State of Kerala &amp; Ors.

Respondent(s)

Date of hearing: 18.01.2023

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE MR. JUSTICE SUDHIR AGARWAL, JUDICIAL MEMBER  
HON'BLE PROF. A. SENTHIL VEL, EXPERT MEMBER**

Applicant: Ms. Nishtha Kumar, Adv. for Applicant

Respondent: Mr. Jogy Scaria, Advocate for Kerala SPCB  
Mr. Nishe Rajen Shonker, Advocate for the State of Kerala

**ORDER**

1. The Issue for consideration is the safeguards in operation of stone quarries close to residences and public roads in Kerala. Distance prescribed by the Kerala State PCB being inadequate against safety of buildings and environment, the Tribunal vide order dated 21.7.2020 directed longer distance, based on expert committee report, after study on direction of this Tribunal.

2. In the light of order of the Hon'ble Supreme Court dated 25.10.2021 in a batch of matters against order of the Tribunal, giving liberty to the aggrieved parties to move this Tribunal for reconsideration, the matter was further considered vide order dated 09.12.2021. On such further

consideration, the Tribunal did not find any substance in the stand of the project proponents (PPs) for reduction in distance as earlier directed. It was observed:

“

6. *On merits also, stand in all the applications is almost same. **The PPs claim to be carrying on quarry mining, using blasting at various locations under leases granted by the Mines Department of Kerala under the Kerala Minor Mineral Concession Rules, 1967. Minimum safety distance of 50m is maintained from nearest dwelling units.** Grievance of the original applicant that 50m distance is not enough and reliance on observations of the Hon'ble Supreme Court in *M.C. Mehta v. Union of India*, (1996) 8 SCC 462 and *Mohammaed Haroon Ansari v. District Collector, Ranga Reddy District*, (2004) 1 SCC 491 is uncalled for.*

7. *To complete the narration, we may record that **the Tribunal sought a report from CPCB and as per report dated 09.07.2020, it was suggested that minimum distance should be 100m where blasting is not involved and 200m where blasting is involved.** The Tribunal accepted the said view and, vide order dated 21.07.2020, issued directions in terms thereof which are reproduced for ready reference, as follows:*

*“3. Accordingly, the CPCB has filed its report on 09.07.2020 concluding as follows:*

**“6.0 Conclusion:**

*In view of available information, following minimum distance criteria may be considered for permitting stone quarrying by SPCBs:*

<b>Mining Type</b>		<b>Minimum Distance</b>	<b>Locations</b>
<b>A.</b>	<b>When Blasting is not involved</b>	<b>100 m</b>	<i>Residential/Public buildings, Inhabited sites, Protected monuments, Heritage sites, National / State Highway, District roads, Public roads, Railway line/area, Ropeway or Ropeway trestle or station, Bridges, Dams, Reservoirs, River, Canals, Lakes or Tanks, or any other locations to be considered by States.</i>
<b>B.</b>	<b>When Blasting is involved</b>	<b>200 m **</b>	

**\*\*Note: The regulations for danger zone (500 m) prescribed by Directorate General of Mines Safety also have to be complied compulsorily and necessary measures should be taken to minimise the impact on environment. However, if any states is already having stringent criteria than the above for minor mineral mining (i.e. more prescribed distances than the above), the same shall be applicable.”**

4. *In view of the above, the said criteria be followed throughout India. The CPCB may monitor compliance.”*

8. *In view of rival submissions, question is whether there is any scope for interference by this Tribunal.*

9. ***Original applicant has opposed the applications of the PPs and submitted that minimum distance of 200m must be maintained in the interest of safety of the inhabitants as well as flora and fauna in the area. The Tribunal must follow the ‘Precautionary’ principle and, if any, further study is undertaken, mining may not be allowed within 200m pending such study. It was also submitted that mining is continuing illegally in violation of orders of Hon’ble Supreme Court and on that aspect the matter is being further raised before the Hon’ble Supreme Court by the applicant.***

10. *Stand of learned Counsel for the PPs is that distance of 50m is laid down under the Mines and Mineral Rules as well as under the orders of the State PCB. Any longer distance is beyond the jurisdiction of this Tribunal. CPCB also has no jurisdiction as powers under the EP Act are only with MoEF&CC.*

11. *Further submission is that due to topography of the State of Kerala, longer distance will obstruct the legitimate mining activities in violation of sustainable development principle. With the use of Nonel Detonation technology, 50m distance is adequate and does not cause any adverse impact.*

12. *Reliance has also been placed on a CSIR-Central Institute of Mining & Fuel Research study conducted in June 2021 on “SCIENTIFIC STUDIES FOR DESIGN OF SAFE BLAST PARAMETERS AT PEROORKADA STONE MINE, KUTHIRAKALAM P.O. VELLANADU, THIRUVANANTHAPURAM, KERALA” concluding and recommending as follows:*

## **“8. CONCLUSIONS AND RECOMMENDATIONS**

### **8.1 Conclusions:**

*The following conclusions can be drawn from the results of the study on blast vibration analysis:*

- i) From the blasting trials, with the designed blast patterns, it was observed that blast induced ground vibrations; air overpressure and fly rock were within safe limits*
- ii) The use of bottom hole-initiation systems like shock tubes in conjunction with noiseless trunk line delays (NTLD) during trial blasts kept the vibration and air over-pressure to the allowable limits.*
- iii) Proper stemming with coarse grained sand reduced the chances of flyrock and limited to bare minimum within the quarry area.*
- iv) The throw of the muck was found to be favourable for easy removal and handling by machines*
- v) The maximum value of blast induced ground vibration (PPV) level recorded at the south eastern boundary from where the closest civil structure (water tank), is 1.024 mm/s with*

- dominant excitation frequency as 82.25 Hz at a distance of 125 m.
- vi) The maximum projectiles range of flyrock was observed as 10-15 m from the blast site and the air overpressure levels recorded were within the safe limits (<128 dB).
  - vii) This clearly indicates that the blast design parameters followed during the studies at the mine are quite safe to the nearby habitats and structures.

## 8.2 Recommendations:

On the basis of data analysis and results of the study the following points are recommended for consideration and strict adherence for controlled blasting and safety of structures:

1. It is recommended to practice the blast design parameters as burden = 1 m spacing = 1.2m, hole depth = 1.8 m to 3m and specific charge = 0.35 kg/m<sup>3</sup>.
2. Maximum hole depth can be upto 3m. Holes of lesser depth may have a tendency of generating more flyrock.
3. In case of varying hole depth, charge per holes should be calculated on the basis of specific charge (0.35 kg/m<sup>3</sup>)
4. The hole diameter should be kept at 32mm and there should be no variation in diameter of the drilled holes.
5. Typical blast designs shown in the figure 6 and 7 should be followed for safe blasting practice
6. The safe maximum charge per delay for the distances of 45m and above, from the dwellings/structures is mentioned in Table-5, and Figure 16, which should be followed to contain the ground vibrations and flyrock within the limits.
7. Although, the nearest house not belonging to quarry owner, is towards South-east direction of the mine at a distance of 250 m and the safe maximum charge per blast for that distance, as per the Table-4, is 8.29 kg
8. Prilled Ammonium Nitrate Fuel Oil (ANFO) and Cartridge emulsion explosive of 25mm diameter to be used for all production blast rounds. Care should be taken to ensure utilization of explosive within the prescribed shelf-life period.
9. Blast rounds should be planned in such a manner that at least one free face is available
10. Maximum four rows are to be fired in each blast round to avoid cumulative confinement and flyrock problem.
11. Top of the face should be cleaned for any debris. The face should be cleared of muck of the previous blast as it creates flyrock.
12. The free face direction should be, as far as possible, opposite from the hutments/ structures (temporary or permanent). The propagation of the initiation should be opposite to the structures/ habitats.”
13. We have duly considered the above submissions. **We do not find any merit in the objection of the PPs that this Tribunal has no jurisdiction in view of distance laid down under the Mines and Mineral Rules. in view of law laid down inter-alia in Mantri**

***Techzone Pvt. Ltd. v. Forward Foundation and Ors.,<sup>1</sup> and the Director General (Road Development) NHAI v. Aam Aadmi Lok Manch.<sup>2</sup> There is also no merit in the contention that CPCB has no jurisdiction under the EP Act. CPCB has jurisdiction under EP Act, as per delegation under section 23 of the said Act as well statutory powers under the Air and Water Acts and also under directions of this Tribunal. Plea of the PPs that the study relied upon clinches the matter in their favour is also not born out from the said study. There is also no merit in the contention that even at the cost of environment mining must be allowed having regard to peculiar topography of Kerala.”***

3. In spite of above, the Tribunal thought it proper to direct further study on the subject and constituted a seven member joint Committee for the purpose to furnish report to this Tribunal within four months. It is sad to note that inspite of expiry of one year, the Committee has failed to give its report and has been seeking further time vide letters dated 20.07.2022, 28.10.2022 and 13.01.2023.

4. Even though we are disappointed at long delay caused in the process when there should not have not been any difficulty in completing the work in one year period, as last opportunity, we grant further extension up to 28.02.2023 for submission of the report which may now be positively filed by that date.

List for further consideration on 06.03.2023.

Adarsh Kumar Goel, CP

Sudhir Agarwal, JM

Prof. A. Senthil Vel, EM

January 18, 2023

Original Application No. 304/2019

(M.A. No. 81/2021, M.A. No. 83/2021, M.A. No. 96/2021 & M.A. No. 85/2021 to M.A. No. 88/2021 & I. A. No. 184/2022)

AB

<sup>1</sup> 2019 SCC online SC 322, Para 43-47

<sup>2</sup> AIR 2020 (SC) 3471, Para 75



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Signed for and on behalf of NABL



N. Venkateswaran  
Chief Executive Officer



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**Certificate of Accreditation**

**Global Environment Mining Services, Bellary**

**3rd Main Road, Basaveswara Badavane, Hospet, Bellary- 583201**

The organization is accredited as **Category-A** under the QCI-NABET Scheme for Accreditation of EIA Consultant Organization, Version 3: for preparing EIA-EMP reports in the following Sectors –

S. No	Sector Description	Sector (as per)		Cat.
		NABET	MoEFCC	
1	Mining of minerals including opencast / underground mining	1	1 (a) (i)	A
2	Mineral beneficiation	7	2 (b)	A

**Note: Names of approved EIA Coordinators and Functional Area Experts are mentioned in RAAC minutes dated Oct 22, 2021 posted on QCI-NABET website.**

The Accreditation shall remain in force subject to continued compliance to the terms and conditions mentioned in QCI-NABET's letter of accreditation bearing no. QCI/NABET/ENV/ACO/22/2207 dated Jan 11, 2022. The accreditation needs to be renewed before the expiry date by Global Environment Mining Services, Bellary following due process of assessment.

**Sr. Director, NABET**  
Dated: Jan 11, 2022

**Certificate No.**  
**NABET/EIA/2124/RA 0231**

**Valid up to**  
**March 24, 2024**

**NABET**

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IN THE HIGH COURT OF KERALA AT ERNAKULAM

PRESENT

THE HONOURABLE MR. JUSTICE N. NAGARESH

MONDAY, THE 10<sup>TH</sup> DAY OF JULY 2023 / 19TH ASHADHA, 1945

WP (C) NO. 39182 OF 2022

**PETITIONER:**

K.K.PREMKUMAR  
AGED 60 YEARS, S/O. KUNHIRAMAN,  
KOLANTHARA HOUSE, MELMURINGODI P.O.,  
MANATHANA, KANNUR-670 673.

BY ADVS.

ELVIN PETER P.J.

K.R.GANESH

GOURI BALAGOPAL

ABHIJITH.K.ANIRUDHAN

SREELEKSHMI A.S.

ANU JOSEPH

**RESPONDENTS:**

- 1 THE MALOOR GRAMA PANCHAYATH  
MALOOR.P.O., KANNUR DISTRICT, REPRESENTED BY ITS  
SECRETARY.
- 2 THE SECRETARY,  
MALOOR GRAMA PANCHAYAT, MALOOR.P.O., KANNUR  
DISTRICT.  
BY ADVS.  
K.P.HARISH  
V.HARISH  
RAJAN VISHNURAJ

THIS WRIT PETITION (CIVIL) HAVING COME UP FOR  
ADMISSION ON 10.07.2023, THE COURT ON THE SAME DAY  
DELIVERED THE FOLLOWING:

W.P(C) No.39182 of 2022

..2..

**J U D G M E N T**  
**Dated this the 10<sup>th</sup> day of July, 2023**

The petitioner's application for licence under Sections 232 and 233 of the Kerala Panchayat Raj Act, 1994, (hereinafter referred to as 'the Act, 1994') for establishing a quarrying unit in Maloor Grama Panchayat is not being positively considered by the Panchayat authorities, contends the petitioner.

2. The petitioner has obtained Environmental Clearance from the State Environmental Impact Assessment Authority, a Letter of Indent (LoI) from the Mining and Geology Department and Consent to Operate from the Pollution Control Board (PCB). The petitioner has also obtained Explosives Licence from the competent authority. In spite of obtaining all these licences/permits/consents, the petitioner's application for licence under Sections 232 and 233 of the Act, 1994 has been rejected by the Grama

W.P(C) No.39182 of 2022

..3..

Panchayat as per Ext.12 order. The petitioner submits that Ext.P12 order cannot stand the scrutiny of law, especially in view of the law laid down by this Court in Sinoj Thomas v. Balal Grama Panchayat and another (W.P.(C) No.11840/2023).

3. Standing Counsel entered appearance and resisted the writ petition. The Standing Counsel pointed out that the documents produced by the petitioner are anomalous inasmuch as the survey numbers and extent of property are described variedly in different documents. The petitioner was informed of this anomaly. Unless the petitioner gets licences showing the very same survey numbers and extent, it will not be proper for the Grama Panchayat authorities to issue a licence under Sections 232 and 233 of the Act, 1994.

4. The Standing Counsel further submitted that there is a petition/appeal pending in the National Green Tribunal (NGT) in respect of the quarry proposed by the petitioner. Therefore, when the matter is under consideration of the

W.P(C) No.39182 of 2022

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NGT, it will not be proper for the Panchayat authorities to grant D&O licence. It is further submitted that the area where the petitioner proposes to establish quarry is an area prone to land slide and environmental disasters. For that reason also, the Panchayat Committee has decided not to issue licence to the petitioner.

5. I have heard the learned counsel for the petitioner and the learned Standing Counsel for the respondents.

6. The first objection pointed out by the Panchayat authorities is that the extent and survey numbers of land are differently mentioned in distinct documents. I find that the land extent is stated as 1.4621 hectares in Re-survey No.1/100, 1 and 9 in the Environmental Clearance issued by the State Level Environmental Impact Assessment Authority. The very same survey numbers are given in Ext.P8 Consent of the Pollution Control Board also. But, the PCB Consent does not give the extent of property. In the Lol, the extent is shown as 1.1129 hectares and survey numbers are recorded

W.P(C) No.39182 of 2022

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as 1 and 9 only. The counsel for the petitioner would submit that the omission of survey numbers was a mistake and the petitioner has obtained Lol with the correct survey numbers.

7. Be that as it may, since the State Environmental Impact Assessment Authority has granted Environmental Clearance for 1.4621 hectares of land specifying the re-survey numbers, the petitioner cannot carry out quarrying activities anywhere else than the land and area mentioned in the Environmental Clearance. Therefore, the issue of discrepancy can be solved, if the petitioner submits an undertaking before the Panchayat authorities that he will carry out quarrying operations only in the 1.4621 hectares of land in Re-survey No. 1/100, 1 and 9 as described in the Environmental Clearance.

8. As regards the objection of the Panchayat relating to pendency of a case before the NGT, I am of the view that as long as the NGT has not passed any adverse order against the petitioner or directing the Panchayat authorities to

W.P(C) No.39182 of 2022

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desist from processing licences of the petitioner, the pendency of an appeal before the NGT by itself cannot stall the statutory process of licensing.

9. As regards the concern expressed by the Panchayat authorities with regard to the possible landslide and environmental disaster, the issue has been considered by this Court in the judgment in Sinoj Thomas (Supra) and in the said case, this Court held that when the competent and specialized statutory authorities have considered the aspects of environmental pollution, disaster, etc., the Panchayat authorities are bound to follow their decision unless there are contrary opinions supported by expert opinion. The threat of landslide and environmental issues are not issues which can be decided by majority opinion in Panchayat Committees.

10. In view of the above, I find that Ext.P12 cannot stand the scrutiny of law. Ext.P12 is therefore set aside. There will be a direction to respondents 1 and 2 to process the application of the petitioner for licence under Sections

W.P(C) No.39182 of 2022

..7..

232 and 233 of the Act, 1994, on the petitioner executing an undertaking before the Panchayat authorities relating to the survey numbers and quarrying area, as indicated hereinabove. On the petitioner submitting such an undertaking, the Panchayat authorities shall consider and grant permission or licence to the petitioner under Sections 232 and 233 of the Act, 1994, if the petitioner is otherwise eligible. The respondents shall take a decision in the matter within a period of two months from the date of receipt of the undertaking given by the petitioner.

The writ petition is disposed of as above.

**Sd/-  
N. NAGARESH  
JUDGE**

TR

W.P(C) No.39182 of 2022

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**APPENDIX OF WP (C) 39182/2022**

PETITIONER EXHIBITS

- Exhibit P1 TRUE PHOTOCOPY OF THE QUARRYING LEASE DATED 26.2.1998 ENTERED INTO BETWEEN THE PETITIONER AND THE STATE.
- Exhibit P2 TRUE PHOTOCOPY OF THE QUARRYING LEASE DEED ENTERED INTO BETWEEN THE PETITIONER AND THE STATE FOR A PERIOD OF 10 YEARS COMMENCING FROM 1.3.2010 TO 29.2.2020
- Exhibit P3 TRUE PHOTOCOPY OF THE D & O LICENSE DATED 23.6.2012 ISSUED BY THE 1ST RESPONDENT PANCHAYATH FOR CONDUCTING MINING OPERATIONS IN EXT.P2 LEASED LAND FOR THE YEAR 2012-2013.
- Exhibit P4 TRUE PHOTOCOPY OF THE D & O LICENSE DATED 22.4.2013 ISSUED BY THE 1ST RESPONDENT PANCHAYATH FOR THE PERIOD 2013 TILL 31.3.2014.
- Exhibit P5 TRUE PHOTOCOPY OF THE D & O LICENSE DATED 8.10.2018 ISSUED BY THE 1ST RESPONDENT PANCHAYAT FOR THE YEAR 2018-2019
- Exhibit P6 TRUE PHOTOCOPY OF LETTER OF INTENT DATED 25.5.2007 ISSUED BY THE DIRECTOR OF MINING AND GEOLOGY TO THE PETITIONER
- Exhibit P7 TRUE PHOTOCOPY OF THE PROCEEDINGS OF THE STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY WITH ENVIRONMENTAL CLEARANCE NO 36/Q/2022 DATED 11.7.2022
- Exhibit P8 TRUE PHOTOCOPY OF THE CONSENT ISSUED BY THE KERALA STATE POLLUTION CONTROL BOARD DATED 17.9.2022
- Exhibit P9 TRUE PHOTOCOPY OF THE EXPLOSIVE LICENSE DATED 26.3.2019 ISSUED BY THE DEPUTY CHIEF CONTROLLER OF EXPLOSIVES, ERNAKULAM
- Exhibit P10 TRUE PHOTOCOPY OF THE APPLICATION DATED 19.10.2022 SUBMITTED BY THE PETITIONER BEFORE THE 1ST RESPONDENT

- PANCHAYAT.
- Exhibit P11 TRUE PHOTOCOPY OF THE ACKNOWLEDGEMENT RECEIPT DATED 29.10.2022 ISSUED BY THE 1DST RESPONDENT PANCHAYAT
- Exhibit P12 TRUE PHOTOCOPY OF THE ORDER DATED 15.11.2022 ISSUED BY THE RESPONDENTS TO THE PETITIONER
- Exhibit P13 TRUE PHOTOCOPY OF THE INTERIM ORDER DATED 21.2.2022 IN WPC NO 28202/2021.
- RESPONDENT EXHIBITS
- Exhibit R3(a) A TRUE COPY OF THE NOTIFICATION DATED 15.01.2016 ISSUED BY MOEF & CC.
- Exhibit R3(b) A TRUE COPY OF THE CERTIFICATE ISSUED BY THE GEOLOGIST, KANNUR DATED 17.07.2019 TO THE PETITIONER.
- Exhibit R3(C) A TRUE PHOTOCOPY OF THE JUDGMENT IN W.A NO.962 OF 2022 DATED 20.09.2022.
- Exhibit R3(d) A TRUE COPY OF THE G.O(MS) NO.4/2014/ENVT DATED 19.03.2014.
- Exhibit R3(e) A TRUE COPY OF THE JUDGMENT IN WP(C) NO.20583 OF 2021 DATED 04.01.2022.
- Exhibit R3(f) A TRUE COPY OF THE RELEVANT PAGES OF THE DISASTER MANAGEMENT PLAN, 2016.
- Exhibit R3(g) A TRUE COPY OF THE G.O(RT) NO.3667/2006/DMO DATED 09.09.2016 ISSUED BY THE DISASTER MANAGEMENT DEPARTMENT.
- Exhibit R3(h) A TRUE PHOTOCOPY OF THE DAILY ORDER DATED 22.11.2022 IN APPEAL NO.43 OF 2022(SZ) BEFORE THE NATIONAL GREEN TRIBUNAL (SZ) CHENNAI.



കേരള ഗസറ്റ്  
KERALA GAZETTE

അസാധാരണം  
EXTRAORDINARY

ആധികാരികമായി പ്രസിദ്ധപ്പെടുത്തുന്നത്  
PUBLISHED BY AUTHORITY

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GOVERNMENT OF KERALA

Industries (A) Department

NOTIFICATION

G. O. (P) No. 25/2017/ID.

Dated, Thiruvananthapuram, 22nd June, 2017  
8th Mithunam, 1192.

S. R. O. No. 346/2017.—In exercise of powers conferred by sub-section (1) of section 15 of the Mines and Minerals (Development and Regulation) Act, 1957 (Central Act 67 of 1957), the Government of Kerala hereby make the following Rules further to amend the Kerala Minor Mineral Concession Rules, 2015 issued by notification under G. O. (P) No. 16/2015/ID dated 7th February, 2015 and published as S.R.O. No. 72/2015 in the Kerala Gazette Extraordinary No. 288 dated 7th February, 2015, namely:—

PRINTED AND PUBLISHED BY THE SUPERINTENDENT OF GOVERNMENT PRESSES AT THE  
GOVERNMENT CENTRAL PRESS, THIRUVANANTHAPURAM, 2017.

33/2190/2017/S-5.

## RULES

1. *Short title and commencement.*—(1) These Rules may be called the Kerala Minor Mineral Concession (Amendment) Rules, 2017.

(2) They shall come into force at once.

2. *Amendment of the Rules.*—In the Kerala Minor Mineral Concession Rules, 2015,—

in rule 2, in sub-rule (1),—

(i) after clause (ix), the following clause shall be inserted, namely:—

“(ix)(a) “Minor Mineral” means building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes, ordinary earth and such other minerals declared as minor minerals by the Government of India”;

(ii) for clause (xv), the following clause shall be substituted, namely:—

“(xv) “Quarrying Permit” means a short term permit granted under these rules for a period not exceeding one year at a time to extract minerals specified in item numbers 1, 2, 3 and 5 of Schedule I”;

(iii) for clause (xvi), the following clause shall be substituted, namely:—

“(xvi) “Quarrying Lease” means a mining lease granted under these rules for extraction of minerals specified in item numbers 4, 5, 6, 7, 8 and 9 of Schedule I, for a period as specified in Rule 39”;

(2) in rule 3, in sub-rule (1), for the words “other than dimension stone,” the words “other than the minerals specified in item numbers 4, 6, 7, 8 and 9 of Schedule I” shall be substituted;

(3) in rule 7, the following proviso shall be inserted, namely:—

“Provided that in cases where extraction of minerals are from Revenue Puramboke lands or from lands possessed by other Government Departments or Local Self Governments, the person who extracts minerals

from such lands shall pay compensation or value of minerals, as the case may be, to the department concerned for the quantity of such extraction, as fixed by such departments from time to time."

(4) in rule 9,—

(i) in sub-rule (1), for the existing proviso, the following proviso shall be substituted, namely:—

"Provided that the approved mining plan shall not be insisted, for the grant and renewal of quarrying permits for ordinary earth, ordinary clay, and laterite (building stone), in cases where the depth of mining does not exceed 2 metres.";

(ii) in sub-rule (2), after the words "No Objection Certificate etc." the words "as the case may be" shall be inserted.

(5) in rule 10,—

(i) in clause (a), in the second proviso, the words, symbols and figures "The Regional Controller of Mines, Yeshwantpur, Bengaluru-560 022" shall be omitted.

(ii) for clause (f), the following clause shall be substituted, namely:—

"(f) the permit holder shall not carry on or allow to be carried on any quarrying operations at or to any points within a distance of 100 metres from any railway line except with the previous written permission of the Railway Administration concerned and any bridge on National Highway or 50 metres from any reservoir, tanks, canals, rivers, bridges, other public works, residential buildings, the boundary walls of places of worship, burial grounds, burning ghats or village roads or one kilometre from the boundaries of National Park or Wildlife Sanctuaries except with the previous permission of the authorities concerned or the Government or the competent authority.";

Provided that the Railway Administration or the State Government or any other authority in this behalf may in granting such permission impose other such conditions as may be found proper and necessary:

(6) in rule 13, for the words and figures "3 years", the words "five years" shall be substituted;

(7) in rule 14,—

(i) in sub-rule (2), for the existing provisos the following proviso shall be substituted, namely:—

“Provided that in cases where transportation of ordinary earth is required, the owner of the land shall obtain mineral transit passes for the quantity to be transported under the Kerala Minerals (Prevention of Illegal Mining, Storage and Transportation) Rules, 2015 after making payment of royalty, on an application submitted in this regard. Such application shall be accompanied by (1) valid building permit for construction of building obtained from the Local Self Government authorities concerned, (2) land development permit obtained from the Local Self Government authorities concerned in cases where the levelling of the land and extraction of ordinary earth is involved and (3) possession and enjoyment certificate of the land issued by the Village Officer concerned:

Provided further that in cases where levelling of land and extraction of ordinary earth is involved, the building permit shall be accompanied by an approved building plan obtained from the Local Self Government authorities concerned which shall contain the area of land to be developed for the construction of the building and the quantity of ordinary earth to be extracted for such construction.”;

(8) (ii) after sub-rule (2) the following sub-rules shall be inserted, namely:—

“(3) A person who applies for mineral transit passes for transportation of ordinary earth under this rule shall also submit along with the application a sworn affidavit in stamped paper to the effect that he will carry out the proposed construction as per the building plan and building permit and shall complete at least the construction of basement of the building within one year from the date of issuance of mineral transit passes and intimate the same to the competent authority.

(4) In the event of extraction of ordinary earth outside the permitted area, the permission granted for extraction and transportation shall be liable for cancellation and the offender shall be liable to pay an amount equal to five times the royalty of the ordinary earth extracted outside the area of permission as penalty.

(5) In the event of failure to complete at least the construction of basement of building within one year from the date of issuance of mineral transit passes the act of extraction of ordinary earth shall be treated as illegal and the offender shall be liable to pay an amount equal to five times the royalty of the ordinary earth extracted from the area, in addition to the amount already paid.”;

(9) in rule 18, in item (ii), before the words “all those group of rocks” the words “Granite (building stone) which includes” shall be inserted.

(10) in rule 32, after sub-rule (2), the following sub-rule shall be inserted, namely:—

“(3) In cases where extraction of minerals is from Revenue Puramboke lands or from lands possessed by other Government Departments or Local Self Governments, the person who extracts minerals from such lands shall be liable to pay compensation or value of minerals, as the case may be, to the department concerned for the quantity of such extraction, as fixed by such departments from time to time.”.

(11) in rule 37, in sub-rule (1), after the existing proviso, the following proviso shall be inserted, namely:—

“Provided further that in the case of silica sand, the restrictions in minimum area for grant and renewal of quarrying lease shall not be applicable.”;

(12) in rule 40, in sub-rule (1),—

(i) for clause (i), the following clause shall be substituted, namely:—

“(i) the lessee shall not carry on or allow to be carried on any quarrying operations at or to any points within a distance of 100 metres from any railway line except with the previous written

permission of the railway administration concerned and any bridge on National Highway 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 one kilometre from the boundaries of National Park or Wildlife Sanctuaries except with the previous permission of the authorities concerned or the Government or competent authority:

Provided that the railway administration or the State Government or any other authority in this behalf may in granting such permission impose such other conditions as may be found proper and necessary.”;

(ii) item (ii) of clause (m) shall be omitted.

(13) after rule 45, the following rule shall be inserted, namely:—

“45A. *Amalgamation of quarrying leases.*—The State Government or the competent authority may, in the interest of quarry development, with reasons to be recorded in writing, permit amalgamation of two or more adjoining leases held by a lessee:

Provided that the period of amalgamated leases shall be co-terminus with the lease of which period will expire first:

Provided further that the leaseholds to be amalgamated shall be contiguous:

Provided also that along with the application for amalgamation of leases, copy of the survey map of the combined area for amalgamation attested by an officer not below the rank of a Tahsildar of the Department of Land Revenue or Assistant Director of the Department of Survey and Land Records shall be submitted:

Provided also that amalgamation of leases shall be subject to submission of approved mining plan for the entire leasehold and Environmental Clearance.”;

(14) after rule 65, the following rule shall be inserted, namely:—

“65A. The holder of a quarrying permit/a quarrying lease issued under these rules after the date of commencement of the Kerala District Mineral Foundation Rules, 2017, shall pay to the District Mineral Foundation of the district in which the mining operations are carried on, an amount equivalent to such percentage of the royalty/consolidated royalty paid, as may be prescribed in the Kerala District Mineral Foundation Rules, 2017 in addition to the royalty/consolidated royalty instead of quarry safety fund specified in rules 63, 64 and 65 of these rules.

*Note:*—Rules 63, 64 and 65 shall cease to operate from the date of commencement of the Kerala District Mineral Foundation Rules, 2017.”;

(15) in rule 66,—

(i) for sub-rule (1) the following sub-rule shall be substituted, namely:—

(1) “Where quarrying operations for minor minerals have been undertaken before 7th day of February, 2015 without an approved mining plan, the holder of such lease shall not be permitted to operate such quarry unless he submits a mining plan for the remaining period of lease to the competent authority in this behalf.”;

(ii) sub-rules (2) and (3) shall be omitted;

(16) in rule 89, after sub-rule (3), the following sub-rule shall be inserted, namely:—

“(4) In cases where the lessees who opted for registration of metal crusher units under sub-rule (1) for a financial year do not desire to opt for such registration in the succeeding year they shall pay royalty at the rates specified in Schedule I for removal and transport of balance quantity of granite aggregates stocked in the crusher units during the period of registration.”;

(17) for rule 95, the following rule shall be substituted, namely:—

“95. *Cancellation of registration.*—If a lessee operates any type of machine that is not included in the registration certificate or fails to comply with any of the conditions of registration, the competent authority shall, by an order in writing, rescind the registration granted to the metal crusher unit.”;

(18) for rule 104, the following rule shall be substituted, namely:—

“104. *Power to grant special permission to extract and remove minor minerals in special circumstances.*—In certain cases where extraction and removal of minor minerals is inevitable and in which the Government is of the opinion that the extraction is not for the purpose of winning the minerals and for reasons to be recorded in writing, the Government may by an order grant permission with conditions as they deem fit.”;

(19) in rule 108,—

(i) in sub-rule (2), in the first proviso, the words and symbols “limited to twice the royalty amount,” and “In such a case while calculating the amount of royalty and price payable, the amount already paid by the permit holder/lessee for obtaining permission shall be deducted” shall be omitted;

(ii) after the 2nd proviso, the following note shall be inserted, namely:—

“*Note:*—In this rule the price of the mineral shall be limited to two times the royalty.”;

(iii) after sub-rule (3), the following sub-rule shall be inserted, namely:—

“(4) whenever any person raises without any lawful authority any mineral from any land for the purpose of winning minerals and for that purpose brings on the land any tool, equipment, vehicle or any other thing, such mineral, tool, equipment, vehicle or any other thing shall be seized by an officer or authority specially empowered in this behalf by the Government.”;

(20) in the SCHEDULES,—

(i) in SCHEDULE I, for the entry against item number 5 in column (2), the following entry shall be substituted, namely:—

“Granite (building stone) and Laterite (building stone)”

(ii) after item number 5, and the entry against it in columns (2) and (3) the following items and entries shall respectively be inserted, namely:—

6. Laterite (used for industrial purposes)	95 (Ninety-five) per tonne
7. China clay/Kaolin including ball clay, white shale and white clay	
(i) Crude	(i) 50 (Fifty) per tonne
(ii) Processed/washed	(ii) 750 (Seven hundred and fifty) per tonne
8. Silica sand	250 (Two hundred and fifty) per tonne
9. Quartz	50 (Fifty) per tonne

(iii) for Schedule III, the following shall be substituted, namely:—

“SCHEDULE III  
CONSOLIDATED ROYALTY  
(See rule 89)”

Sl. No.	Description of Crusher	Annual Consolidated royalty per machine (in Rupees)
(1)	(2)	(3)
<b>Secondary Jaw Crusher (in terms of area of feed opening)</b>		
1	Up to 929.03 sq.cm.	2,00,000
2	Greater than 929.03 sq.cm. but less than or equal to 1548.38 sq.cm.	4,00,000
3	Greater than 1548.38 sq.cm.	6,00,000

(1)	(2)	(3)
<b>Cone Crusher (in terms of 'Horse Power' of motor used)</b>		
4	Up to 300	16,00,000
5	Greater than 300	26,00,000
<b>Sand Making Units (in terms of 'Horse Power' of motor used) (for those who use sand making machine only)</b>		
6	Up to 300	16,00,000
7	Greater than 300	26,00,000 .";

Exemption from payment of consolidated royalty is applicable to Vertical Shaft Impactor, Horizontal Shaft Impactor, Auto Sand Units which are fed by granite aggregates produced in the secondary jaw crushers or cone crushers for which the consolidated royalty has been paid and are located in the premises of those crusher units;

(iv) in Schedule IV,

(i) under the heading "A. Granite (Building stone)" for the entry against serial number 5 in column (3), the figures "7000" shall be substituted;

(ii) under the heading "B. laterite (Building Stone)" for the entry against serial number 5, in column (3), the figures "7000" shall be substituted;

(21) in Form D, the words "The Regional Controller of Mines, Yeshwantpur, Bengaluru-560 022" shall be omitted.

(22) in Form H, for condition No. 7, the following condition shall be substituted, namely:—

The lessee shall not carry on or allow to be carried on any quarrying operations at or to any points within a distance of 100 metres from any railway line except with the previous written permission of the railway administration concerned and any bridge on National Highway 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 one kilometre from the boundaries of National Park or Wildlife Sanctuaries except with the previous permission of the authorities concerned or the Government or competent authority:

Provided that the railway administration or the State Government or any other authority in this behalf may in granting such permission impose such other conditions as may be found proper and necessary.

By order of the Governor,

PAUL ANTONY,  
*Additional Chief Secretary to Government.*

#### **Explanatory Note**

(This does not form part of the notification, but is intended to indicate its general purport.)

The Kerala Minor Mineral Concession Rules, 2015 were framed by the Government of Kerala to regulate extraction of minor minerals in the State. As per S.O. 423 (E) of Ministry of Mines dated 10th February, 2015, thirty-one minerals have been included in the category of minor minerals. Among these minerals mining leases were being granted to laterite used for industrial purpose, china clay, silica sand and quartz as per the provisions contained in the Mineral Concession Rules, 1960. As these minerals are now declared as minor minerals, these minerals are to be included in the Kerala Minor Mineral Concession Rules, 2015. When the minerals are extracted from the Government owned lands, the Government have to get compensation for the minerals extracted other than the mere payment of royalty and hence new provisions have been introduced in rules 7 and 32. The Regional Controller of Mines, Bengaluru is not the authority to deal with mining of minor minerals and hence there is no need to send Form 'D' of the rules to the said authority. In the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 for major minerals the distance criteria adopted for the mining activities were retained as stipulated earlier in the Mineral Concession Rules, 1960. Hence a different criterion cannot be adopted in

the case of minor minerals. In such circumstances, in order to make it in tune with the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016, it is decided to incorporate the same distance criterion in Rules 10 and 40 as well as Form H. As per S.O. 141(E) dated 15-1-2016, environmental clearance has been exempted for digging of foundation for buildings which do not require prior environmental clearance and hence amendment is necessitated in rule 14. In Writ Petition (C) No. 29710/2014 and 23251/2016, the Honourable High Court of Kerala has observed that there is possibility of misuse of rule 14 in the guise of building permit issued by Local Self Government authorities and directed the Government to find ways to avoid such misuse. Hence an amendment to this extent is necessitated. Since mining plan has been introduced in the rules, it is impractical for the lessees who have obtained two or more leases adjacent to one another to leave, a buffer zone of 7.5 meter between two lease areas and hence a new rule, 'Amalgamation of quarrying leases' has to be introduced in the rules for practicing scientific mining. Since quarry safety related activities mentioned in rule 65 have been included as one of the permissible activities in Kerala District Mineral Foundation Rules, rules 63, 64 and 65 have to be amended. As per rule 66 mining plan is to be submitted by the existing lessees within a period of one year from 7th February, 2015. As per existing sub-rules (2) and (3) of rule 66, there is provision for extension of time for one year for those who cannot submit mining plan within such period. Now two years have been passed by and there is no need to give time extension. In order to rectify this, an amendment is necessitated. In order to clarify the price of the mineral to be realized while compounding offences, amendment is to be made in rule 108. Provision for seizure of tools, minerals and equipment as existed in the earlier rules is reintroduced by amending rule 108. Since there are different sizes of jaws as stipulated in Schedule III available, it is difficult to fix royalty for a jaw crusher which is not mentioned in Schedule III. Since the area of a feed opening of a jaw crusher is the basic criteria for determining the quantum of production of granite building stone aggregates, this can be included in Schedule III instead of sizes of jaws for easy determination of royalty for a different size of jaw crusher and hence this notification.

The notification is intended to achieve the above objects.

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## THE DISASTER MANAGEMENT ACT, 2005

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## THE DISASTER MANAGEMENT ACT, 2005

ACT No. 53 OF 2005

[23rd December, 2005.]

An Act to provide for the effective management of disasters and for matters connected therewith or incidental thereto.

BE it enacted by Parliament in the Fifty-sixth Year of the Republic of India as follows:—

## CHAPTER I

## PRELIMINARY

**1. Short title, extent and commencement.**—(1) This Act may be called the Disaster Management Act, 2005.

(2) It extends to the whole of India.

(3) It shall come into force on such date<sup>1</sup> as the Central Government may, by notification in the Official Gazette appoint; and different dates\* may be appointed for different provisions of this Act and for different States, and any reference to commencement in any provision of this Act in relation to any State shall be construed as a reference to the commencement of that provision in that State.

**2. Definitions.**—In this Act, unless the context otherwise requires,—

(a) “affected area” means an area or part of the country affected by a disaster;

(b) “capacity-building” includes—

(i) identification of existing resources and resources to be acquired or created;

(ii) acquiring or creating resources identified under sub-clause (i);

(iii) organisation and training of personnel and coordination of such training for effective management of disasters;

(c) “Central Government” means the Ministry or Department of the Government of India having administrative control of disaster management;

(d) “disaster” means a catastrophe, mishap, calamity or grave occurrence in any area, arising from natural or man made causes, or by accident or negligence which results in substantial loss of life or human suffering or damage to, and destruction of, property, or damage to, or degradation of, environment, and is of such a nature or magnitude as to be beyond the coping capacity of the community of the affected area;

(e) “disaster management” means a continuous and integrated process of planning, organising, coordinating and implementing measures which are necessary or expedient for—

(i) prevention of danger or threat of any disaster;

(ii) mitigation or reduction of risk of any disaster or its severity or consequences;

(iii) capacity-building;

(iv) preparedness to deal with any disaster;

(v) prompt response to any threatening disaster situation or disaster;

(vi) assessing the severity or magnitude of effects of any disaster;

1. 28th July, 2006 (ss. 2, 3, 4, 5, 6, 8, 10, 75, 77, 79), *vide* notification No. S.O. 1216(E), dated 28th July, 2006;

\*1st August, 2007 [ss. 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 38, 39, 40, 41, 48, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, sub-sec. (2) of s. 70, 71, 72, 73, 74, 78, 79], *vide* notification No. S.O. 722(E), dated 7th May, 2007;

\*17th March, 2008 (ss. 44, 45), *vide* notification No. 517(E), dated 17th March, 2008;

\*18th October, 2011 (s. 46), *vide* notification No. S.O. 2397(E), dated 18th October, 2011, *see* Gazette of India, Extraordinary, Part II, sec. 3(ii).

\*5th February, 2021, sub-sec. (1) of s. 47, *vide* notification No. S.O. 564(E), dated 5th February, 2021, *see* Gazette of India, Extraordinary, Part II, sec. 3(ii).

(vii) evacuation, rescue and relief;

(viii) rehabilitation and reconstruction;

(f) “District Authority” means the District Disaster Management Authority constituted under sub-section (1) of section 25;

(g) “District Plan” means the plan for disaster management for the district prepared under section 31;

(h) “local authority” includes panchayati raj institutions, municipalities, a district board, cantonment board, town planning authority or Zila Parishad or any other body or authority, by whatever name called, for the time being invested by law, for rendering essential services or, with the control and management of civic services, within a specified local area;

(i) “mitigation” means measures aimed at reducing the risk, impact or effects of a disaster or threatening disaster situation;

(j) “National Authority” means the National Disaster Management Authority established under sub-section (1) of section 3;

(k) “National Executive Committee” means the Executive Committee of the National Authority constituted under sub-section (1) of section 8;

(l) “National Plan” means the plan for disaster management for the whole of the country prepared under section 11;

(m) “preparedness” means the state of readiness to deal with a threatening disaster situation or disaster and the effects thereof;

(n) “prescribed” means prescribed by rules made under this Act;

(o) “reconstruction” means construction or restoration of any property after a disaster;

(p) “resources” includes manpower, services, materials and provisions;

(q) “State Authority” means the State Disaster Management Authority established under sub-section (1) of section 14 and includes the Disaster Management Authority for the Union territory constituted under that section;

(r) “State Executive Committee” means the Executive Committee of a State Authority constituted under sub-section (1) of section 20;

(s) “State Government” means the Department of Government of the State having administrative control of disaster management and includes Administrator of the Union territory appointed by the President under article 239 of the Constitution;

(t) “State Plan” means the plan for disaster management for the whole of the State prepared under section 23.

## CHAPTER II

### THE NATIONAL DISASTER MANAGEMENT AUTHORITY

**3. Establishment of National Disaster Management Authority.**—(1) With effect from such date as the Central Government may, by notification in the Official Gazette appoint in this behalf, there shall be established for the purposes of this Act, an authority to be known as the National Disaster Management Authority.

(2) The National Authority shall consist of the Chairperson and such number of other members, not exceeding nine, as may be prescribed by the Central Government and, unless the rules otherwise provide, the National Authority shall consist of the following:—

(a) the Prime Minister of India, who shall be the Chairperson of the National Authority, *ex officio*;

(b) other members, not exceeding nine, to be nominated by the Chairperson of the National Authority.

(3) The Chairperson of the National Authority may designate one of the members nominated under clause (b) of sub-section (2) to be the Vice-Chairperson of the National Authority.

(4) The term of office and conditions of service of members of the National Authority shall be such as may be prescribed.

**4. Meetings of National Authority.**—(1) The National Authority shall meet as and when necessary and at such time and place as the Chairperson of the National Authority may think fit.

(2) The Chairperson of the National Authority shall preside over the meetings of the National Authority.

(3) If for any reason the Chairperson of the National Authority is unable to attend any meeting of the National Authority, the Vice-Chairperson of the National Authority shall preside over the meeting.

**5. Appointment of officers and other employees of the National Authority.**—The Central Government shall provide the National Authority with such officers, consultants and employees, as it considers necessary for carrying out the functions of the National Authority.

**6. Powers and functions of National Authority.**—(1) Subject to the provisions of this Act, the National Authority shall have the responsibility for laying down the policies, plans and guidelines for disaster management for ensuring timely and effective response to disaster.

(2) Without prejudice to generality of the provisions contained in sub-section (1), the National Authority may —

(a) lay down policies on disaster management;

(b) approve the National Plan;

(c) approve plans prepared by the Ministries or Departments of the Government of India in accordance with the National Plan;

(d) lay down guidelines to be followed by the State Authorities in drawing up the State Plan;

(e) lay down guidelines to be followed by the different Ministries or Departments of the Government of India for the purpose of integrating the measures for prevention of disaster or the mitigation of its effects in their development plans and projects;

(f) coordinate the enforcement and implementation of the policy and plan for disaster management;

(g) recommend provision of funds for the purpose of mitigation;

(h) provide such support to other countries affected by major disasters as may be determined by the Central Government;

(i) take such other measures for the prevention of disaster, or the mitigation, or preparedness and capacity building for dealing with the threatening disaster situation or disaster as it may consider necessary;

(j) lay down broad policies and guidelines for the functioning of the National Institute of Disaster Management.

(3) The Chairperson of the National Authority shall, in the case of emergency, have power to exercise all or any of the powers of the National Authority but exercise of such powers shall be subject to *ex post facto* ratification by the National Authority.

**7. Constitution of advisory committee by National Authority.**—(1) The National Authority may constitute an advisory committee consisting of experts in the field of disaster management and having practical experience of disaster management at the national, State or district level to make recommendations on different aspects of disaster management.

(2) The members of the advisory committee shall be paid such allowances as may be prescribed by the Central Government in consultation with the National Authority.

**8. Constitution of National Executive Committee.**—(1) The Central Government shall, immediately after issue of notification under sub-section (1) of section 3, constitute a National Executive Committee to assist the National Authority in the performance of its functions under this Act.

(2) The National Executive Committee shall consist of the following members, namely:—

(a) the Secretary to the Government of India in charge of the Ministry or Department of the Central Government having administrative control of the disaster management, who shall be Chairperson, *ex officio*;

(b) the Secretaries to the Government of India in the Ministries or Departments having administrative control of the agriculture, atomic energy, defence, drinking water supply, environment and forests, finance (expenditure), health, power, rural development, science and technology, space, telecommunication, urban development, water resources and the Chief of the Integrated Defence Staff of the Chiefs of Staff Committee, *ex officio*.

(3) The Chairperson of the National Executive Committee may invite any other officer of the Central Government or a State Government for taking part in any meeting of the National Executive Committee and shall exercise such powers and perform such functions as may be prescribed by the Central Government in consultation with the National Authority.

(4) The procedure to be followed by the National Executive Committee in exercise of its powers and discharge of its functions shall be such as may be prescribed by the Central Government.

**9. Constitution of sub-committees.**—(1) The National Executive Committee may, as and when it considers necessary, constitute one or more sub-committees, for the efficient discharge of its functions.

(2) The National Executive Committee shall, from amongst its members, appoint the Chairperson of the sub-committee referred to in sub-section (1).

(3) Any person associated as an expert with any sub-committee may be paid such allowances as may be prescribed by the Central Government.

**10. Powers and functions of National Executive Committee.**—(1) The National Executive Committee shall assist the National Authority in the discharge of its functions and have the responsibility for implementing the policies and plans of the National Authority and ensure the compliance of directions issued by the Central Government for the purpose of disaster management in the country.

(2) Without prejudice to the generality of the provisions contained in sub-section (1), the National Executive Committee may—

(a) act as the coordinating and monitoring body for disaster management;

(b) prepare the National Plan to be approved by the National Authority;

(c) coordinate and monitor the implementation of the National Policy;

(d) lay down guidelines for preparing disaster management plans by different Ministries or Departments of the Government of India and the State Authorities;

(e) provide necessary technical assistance to the State Governments and the State Authorities for preparing their disaster management plans in accordance with the guidelines laid down by the National Authority;

(f) monitor the implementation of the National Plan and the plans prepared by the Ministries or Departments of the Government of India;

(g) monitor the implementation of the guidelines laid down by the National Authority for integrating of measures for prevention of disasters and mitigation by the Ministries or Departments in their development plans and projects;

(h) monitor, coordinate and give directions regarding the mitigation and preparedness measures to be taken by different Ministries or Departments and agencies of the Government;

(i) evaluate the preparedness at all governmental levels for the purpose of responding to any threatening disaster situation or disaster and give directions, where necessary, for enhancing such preparedness;

(j) plan and coordinate specialised training programme for disaster management for different levels of officers, employees and voluntary rescue workers;

(k) coordinate response in the event of any threatening disaster situation or disaster;

(l) lay down guidelines for, or give directions to, the concerned Ministries or Departments of the Government of India, the State Governments and the State Authorities regarding measures to be taken by them in response to any threatening disaster situation or disaster;

(m) require any department or agency of the Government to make available to the National Authority or State Authorities such men or material resources as are available with it for the purposes of emergency response, rescue and relief;

(n) advise, assist and coordinate the activities of the Ministries or Departments of the Government of India, State Authorities, statutory bodies, other governmental or non-governmental organisations and others engaged in disaster management;

(o) provide necessary technical assistance or give advice to the State Authorities and District Authorities for carrying out their functions under this Act;

(p) promote general education and awareness in relation to disaster management; and

(q) perform such other functions as the National Authority may require it to perform.

**11. National Plan.**—(1) There shall be drawn up a plan for disaster management for the whole of the country to be called the National Plan.

(2) The National Plan shall be prepared by the National Executive Committee having regard to the National Policy and in consultation with the State Governments and expert bodies or organisations in the field of disaster management to be approved by the National Authority.

(3) The National Plan shall include—

(a) measures to be taken for the prevention of disasters, or the mitigation of their effects;

(b) measures to be taken for the integration of mitigation measures in the development plans;

(c) measures to be taken for preparedness and capacity building to effectively respond to any threatening disaster situations or disaster;

(d) roles and responsibilities of different Ministries or Departments of the Government of India in respect of measures specified in clauses (a), (b) and (c).

(4) The National Plan shall be reviewed and updated annually.

(5) Appropriate provisions shall be made by the Central Government for financing the measures to be carried out under the National Plan.

(6) Copies of the National Plan referred to in sub-sections (2) and (4) shall be made available to the Ministries or Departments of the Government of India and such Ministries or Departments shall draw up their own plans in accordance with the National Plan.

**12. Guidelines for minimum standards of relief.**—The National Authority shall recommend guidelines for the minimum standards of relief to be provided to persons affected by disaster, which shall include,—

(i) the minimum requirements to be provided in the relief camps in relation to shelter, food, drinking water, medical cover and sanitation;

(ii) the special provisions to be made for widows and orphans;

(iii) *ex gratia* assistance on account of loss of life as also assistance on account of damage to houses and for restoration of means of livelihood;

(iv) such other relief as may be necessary.

**13. Relief in loan repayment, etc.**—The National Authority may, in cases of disasters of severe magnitude, recommend relief in repayment of loans or for grant of fresh loans to the persons affected by disaster on such concessional terms as may be appropriate.

### CHAPTER III

#### STATE DISASTER MANAGEMENT AUTHORITIES

**14. Establishment of State Disaster Management Authority.**—(1) Every State Government shall, as soon as may be after the issue of the notification under sub-section (1) of section 3, by notification in the Official Gazette, establish a State Disaster Management Authority for the State with such name as may be specified in the notification of the State Government.

(2) A State Authority shall consist of the Chairperson and such number of other members, not exceeding nine, as may be prescribed by the State Government and, unless the rules otherwise provide, the State Authority shall consist of the following members, namely:—

(a) the Chief Minister of the State, who shall be Chairperson, *ex officio*;

(b) other members, not exceeding eight, to be nominated by the Chairperson of the State Authority;

(c) the Chairperson of the State Executive Committee, *ex officio*.

(3) The Chairperson of the State Authority may designate one of the members nominated under clause (b) of sub-section (2) to be the Vice-Chairperson of the State Authority.

(4) The Chairperson of the State Executive Committee shall be the Chief Executive Officer of the State Authority, *ex officio*:

Provided that in the case of a Union territory having Legislative Assembly, except the Union territory of Delhi, the Chief Minister shall be the Chairperson of the Authority established under this section and in case of other Union territories, the Lieutenant Governor or the Administrator shall be the Chairperson of that Authority:

Provided further that the Lieutenant Governor of the Union territory of Delhi shall be the Chairperson and the Chief Minister thereof shall be the Vice-Chairperson of the State Authority.

(5) The term of office and conditions of service of members of the State Authority shall be such as may be prescribed.

**15. Meetings of the State Authority.**—(1) The State Authority shall meet as and when necessary and at such time and place as the Chairperson of the State Authority may think fit.

(2) The Chairperson of the State Authority shall preside over the meetings of the State Authority.

(3) If for any reason, the Chairperson of the State Authority is unable to attend the meeting of the State Authority, the Vice-Chairperson of the State Authority shall preside at the meeting.

**16. Appointment of officers and other employees of State Authority.**—The State Government shall provide the State Authority with such officers, consultants and employees, as it considers necessary, for carrying out the functions of the State Authority.

**17. Constitution of advisory committee by the State Authority.**—(1) A State Authority may, as and when it considers necessary, constitute an advisory committee, consisting of experts in the field of disaster management and having practical experience of disaster management to make recommendations on different aspects of disaster management.

(2) The members of the advisory committee shall be paid such allowances as may be prescribed by the State Government.

**18. Powers and functions of State Authority.**—(1) Subject to the provisions of this Act, a State Authority shall have the responsibility for laying down policies and plans for disaster management in the State.

(2) Without prejudice to the generality of provisions contained in sub-section (1), the State Authority may—

(a) lay down the State disaster management policy;

(b) approve the State Plan in accordance with the guidelines laid down by the National Authority;

(c) approve the disaster management plans prepared by the departments of the Government of the State;

(d) lay down guidelines to be followed by the departments of the Government of the State for the purposes of integration of measures for prevention of disasters and mitigation in their development plans and projects and provide necessary technical assistance therefor;

(e) coordinate the implementation of the State Plan;

(f) recommend provision of funds for mitigation and preparedness measures;

(g) review the development plans of the different departments of the State and ensure that prevention and mitigation measures are integrated therein;

(h) review the measures being taken for mitigation, capacity building and preparedness by the departments of the Government of the State and issue such guidelines as may be necessary.

(3) The Chairperson of the State Authority shall, in the case of emergency, have power to exercise all or any of the powers of the State Authority but the exercise of such powers shall be subject to *ex post facto* ratification of the State Authority.

**19. Guidelines for minimum standard of relief by State Authority.**—The State Authority shall lay down detailed guidelines for providing standards of relief to persons affected by disaster in the State:

Provided that such standards shall in no case be less than the minimum standards in the guidelines laid down by the National Authority in this regard.

**20. Constitution of State Executive Committee.**—(1) The State Government shall, immediately after issue of notification under sub-section (1) of section 14, constitute a State Executive Committee to assist the State Authority in the performance of its functions and to coordinate action in accordance with the guidelines laid down by the State Authority and ensure the compliance of directions issued by the State Government under this Act.

(2) The State Executive Committee shall consist of the following members, namely:—

(a) the Chief Secretary to the State Government, who shall be Chairperson, *ex officio*;

(b) four Secretaries to the Government of the State of such departments as the State Government may think fit, *ex officio*.

(3) The Chairperson of the State Executive Committee shall exercise such powers and perform such functions as may be prescribed by the State Government and such other powers and functions as may be delegated to him by the State Authority.

(4) The procedure to be followed by the State Executive Committee in exercise of its powers and discharge of its functions shall be such as may be prescribed by the State Government.

**21. Constitution of sub-committees by State Executive Committee.**—(1) The State Executive Committee may, as and when it considers necessary, constitute one or more sub-committees, for efficient discharge of its functions.

(2) The State Executive Committee shall, from amongst its members, appoint the Chairperson of the sub-committee referred to in sub-section (1).

(3) Any person associated as an expert with any sub-committee may be paid such allowances as may be prescribed by the State Government.

**22. Functions of the State Executive Committee.**—(1) The State Executive Committee shall have the responsibility for implementing the National Plan and State Plan and act as the coordinating and monitoring body for management of disaster in the State.

(2) Without prejudice to the generality of the provisions of sub-section (1), the State Executive Committee may—

(a) coordinate and monitor the implementation of the National Policy, the National Plan and the State Plan;

(b) examine the vulnerability of different parts of the State to different forms of disasters and specify measures to be taken for their prevention or mitigation;

(c) lay down guidelines for preparation of disaster management plans by the departments of the Government of the State and the District Authorities;

(d) monitor the implementation of disaster management plans prepared by the departments of the Government of the State and District Authorities;

(e) monitor the implementation of the guidelines laid down by the State Authority for integrating of measures for prevention of disasters and mitigation by the departments in their development plans and projects;

(f) evaluate preparedness at all governmental or non-governmental levels to respond to any threatening disaster situation or disaster and give directions, where necessary, for enhancing such preparedness;

(g) coordinate response in the event of any threatening disaster situation or disaster;

(h) give directions to any Department of the Government of the State or any other authority or body in the State regarding actions to be taken in response to any threatening disaster situation or disaster;

(i) promote general education, awareness and community training in regard to the forms of disasters to which different parts of the State are vulnerable and the measures that may be taken by such community to prevent the disaster, mitigate and respond to such disaster;

(j) advise, assist and coordinate the activities of the Departments of the Government of the State, District Authorities, statutory bodies and other governmental and non-governmental organisations engaged in disaster management;

(k) provide necessary technical assistance or give advice to District Authorities and local authorities for carrying out their functions effectively;

(l) advise the State Government regarding all financial matters in relation to disaster management;

(m) examine the construction, in any local area in the State and, if it is of the opinion that the standards laid for such construction for the prevention of disaster is not being or has not been followed, may direct the District Authority or the local authority, as the case may be, to take such action as may be necessary to secure compliance of such standards;

(n) provide information to the National Authority relating to different aspects of disaster management;

(o) lay down, review and update State level response plans and guidelines and ensure that the district level plans are prepared, reviewed and updated;

(p) ensure that communication systems are in order and the disaster management drills are carried out periodically;

(q) perform such other functions as may be assigned to it by the State Authority or as it may consider necessary.

**23. State Plan.**—(1) There shall be a plan for disaster management for every State to be called the State Disaster Management Plan.

(2) The State Plan shall be prepared by the State Executive Committee having regard to the guidelines laid down by the National Authority and after such consultation with local authorities, district authorities and the people's representatives as the State Executive Committee may deem fit.

(3) The State Plan prepared by the State Executive Committee under sub-section (2) shall be approved by the State Authority.

(4) The State Plan shall include,—

(a) the vulnerability of different parts of the State to different forms of disasters;

(b) the measures to be adopted for prevention and mitigation of disasters;

(c) the manner in which the mitigation measures shall be integrated with the development plans and projects;

(d) the capacity-building and preparedness measures to be taken;

(e) the roles and responsibilities of each Department of the Government of the State in relation to the measures specified in clauses (b), (c) and (d) above;

(f) the roles and responsibilities of different Departments of the Government of the State in responding to any threatening disaster situation or disaster.

(5) The State Plan shall be reviewed and updated annually.

(6) Appropriate provisions shall be made by the State Government for financing for the measures to be carried out under the State Plan.

(7) Copies of the State Plan referred to in sub-sections (2) and (5) shall be made available to the Departments of the Government of the State and such Departments shall draw up their own plans in accordance with the State Plan.

**24. Powers and functions of State Executive Committee in the event of threatening disaster situation.**—For the purpose of, assisting and protecting the community affected by disaster or providing relief to such community or, preventing or combating disruption or dealing with the effects of any threatening disaster situation, the State Executive Committee may—

(a) control and restrict, vehicular traffic to, from or within, the vulnerable or affected area;

(b) control and restrict the entry of any person into, his movement within and departure from, a vulnerable or affected area;

(c) remove debris, conduct search and carry out rescue operations;

(d) provide shelter, food, drinking water, essential provisions, healthcare and services in accordance with the standards laid down by the National Authority and State Authority;

(e) give direction to the concerned Department of the Government of the State, any District Authority or other authority, within the local limits of the State to take such measure or steps for rescue, evacuation or providing immediate relief saving lives or property, as may be necessary in its opinion;

(f) require any department of the Government of the State or any other body or authority or person in charge of any relevant resources to make available the resources for the purposes of emergency response, rescue and relief;

(g) require experts and consultants in the field of disasters to provide advice and assistance for rescue and relief;

(h) procure exclusive or preferential use of amenities from any authority or person as and when required;

- (i) construct temporary bridges or other necessary structures and demolish unsafe structures which may be hazardous to public;
- (j) ensure that non-governmental organisations carry out their activities in an equitable and non-discriminatory manner;
- (k) disseminate information to public to deal with any threatening disaster situation or disaster;
- (l) take such steps as the Central Government or the State Government may direct in this regard or take such other steps as are required or warranted by the form of any threatening disaster situation or disaster.

## CHAPTER IV

### DISTRICT DISASTER MANAGEMENT AUTHORITY

**25. Constitution of District Disaster Management Authority.**—(1) Every State Government shall, as soon as may be after issue of notification under sub-section (1) of section 14, by notification in the Official Gazette, establish a District Disaster Management Authority for every district in the State with such name as may be specified in that notification.

(2) The District Authority shall consist of the Chairperson and such number of other members, not exceeding seven, as may be prescribed by the State Government, and unless the rules otherwise provide, it shall consist of the following, namely:—

- (a) the Collector or District Magistrate or Deputy Commissioner, as the case may be, of the district who shall be Chairperson, *ex officio*;
  - (b) the elected representative of the local authority who shall be the co-Chairperson, *ex officio*;
- Provided that in the Tribal Areas, as referred to in the Sixth Schedule to the Constitution, the Chief Executive Member of the district council of autonomous district, shall be the co-Chairperson, *ex officio*;
- (c) the Chief Executive Officer of the District Authority, *ex officio*;
  - (d) the Superintendent of Police, *ex officio*;
  - (e) the Chief Medical Officer of the district, *ex officio*;
  - (f) not exceeding two other district level officers, to be appointed by the State Government.

(3) In any district where zila parishad exists, the Chairperson thereof shall be the co-Chairperson of the District Authority.

(4) The State Government shall appoint an officer not below the rank of Additional Collector or Additional District Magistrate or Additional Deputy Commissioner, as the case may be, of the district to be the Chief Executive Officer of the District Authority to exercise such powers and perform such functions as may be prescribed by the State Government and such other powers and functions as may be delegated to him by the District Authority.

**26. Powers of Chairperson of District Authority.**—(1) The Chairperson of the District Authority shall, in addition to presiding over the meetings of the District Authority, exercise and discharge such powers and functions of the District Authority as the District Authority may delegate to him.

(2) The Chairperson of the District Authority shall, in the case of an emergency, have power to exercise all or any of the powers of the District Authority but the exercise of such powers shall be subject to *ex post facto* ratification of the District Authority.

(3) The District Authority or the Chairperson of the District Authority may, by general or special order, in writing, delegate such of its or his powers and functions, under sub-section (1) or (2), as the case may be, to the Chief Executive Officer of the District Authority, subject to such conditions and limitations, if any, as it or he deems fit.

**27. Meetings.**—The District Authority shall meet as and when necessary and at such time and place as the Chairperson may think fit.

**28. Constitution of advisory committees and other committees.**—(1) The District Authority may, as and when it considers necessary, constitute one or more advisory committees and other committees for the efficient discharge of its functions.

(2) The District Authority shall, from amongst its members, appoint the Chairperson of the Committee referred to in sub-section (1).

(3) Any person associated as an expert with any committee or sub-committee constituted under sub-section (1) may be paid such allowances as may be prescribed by the State Government.

**29. Appointment of officers and other employees of District Authority.**—The State Government shall provide the District Authority with such officers, consultants and other employees as it considers necessary for carrying out the functions of District Authority.

**30. Powers and functions of District Authority.**—(1) The District Authority shall act as the district planning, coordinating and implementing body for disaster management and take all measures for the purposes of disaster management in the district in accordance with the guidelines laid down by the National Authority and the State Authority.

(2) Without prejudice to the generality of the provisions of sub-section (1), the District Authority may—

(i) prepare a disaster management plan including district response plan for the district;

(ii) coordinate and monitor the implementation of the National Policy, State Policy, National Plan, State Plan and District Plan;

(iii) ensure that the areas in the district vulnerable to disasters are identified and measures for the prevention of disasters and the mitigation of its effects are undertaken by the departments of the Government at the district level as well as by the local authorities;

(iv) ensure that the guidelines for prevention of disasters, mitigation of its effects, preparedness and response measures as laid down by the National Authority and the State Authority are followed by all departments of the Government at the district level and the local authorities in the district;

(v) give directions to different authorities at the district level and local authorities to take such other measures for the prevention or mitigation of disasters as may be necessary;

(vi) lay down guidelines for prevention of disaster management plans by the department of the Government at the districts level and local authorities in the district;

(vii) monitor the implementation of disaster management plans prepared by the Departments of the Government at the district level;

(viii) lay down guidelines to be followed by the Departments of the Government at the district level for purposes of integration of measures for prevention of disasters and mitigation in their development plans and projects and provide necessary technical assistance therefor;

(ix) monitor the implementation of measures referred to in clause (viii);

(x) review the state of capabilities for responding to any disaster or threatening disaster situation in the district and give directions to the relevant departments or authorities at the district level for their up gradation as may be necessary;

(xi) review the preparedness measures and give directions to the concerned departments at the district level or other concerned authorities where necessary for bringing the preparedness measures to the levels required for responding effectively to any disaster or threatening disaster situation;

(xii) organise and coordinate specialised training programmes for different levels of officers, employees and voluntary rescue workers in the district;

(xiii) facilitate community training and awareness programmes for prevention of disaster or mitigation with the support of local authorities, governmental and non-governmental organisations;

(xiv) set up, maintain, review and upgrade the mechanism for early warnings and dissemination of proper information to public;

(xv) prepare, review and update district level response plan and guidelines;

(xvi) coordinate response to any threatening disaster situation or disaster;

(xvii) ensure that the Departments of the Government at the district level and the local authorities prepare their response plans in accordance with the district response plan;

(xviii) lay down guidelines for, or give direction to, the concerned Department of the Government at the district level or any other authorities within the local limits of the district to take measures to respond effectively to any threatening disaster situation or disaster;

(xix) advise, assist and coordinate the activities of the Departments of the Government at the district level, statutory bodies and other governmental and non-governmental organisations in the district engaged in the disaster management;

(xx) coordinate with, and give guidelines to, local authorities in the district to ensure that measures for the prevention or mitigation of threatening disaster situation or disaster in the district are carried out promptly and effectively;

(xxi) provide necessary technical assistance or give advise to the local authorities in the district for carrying out their functions;

(xxii) review development plans prepared by the Departments of the Government at the district level, statutory authorities or local authorities with a view to make necessary provisions therein for prevention of disaster or mitigation;

(xxiii) examine the construction in any area in the district and, if it is of the opinion that the standards for the prevention of disaster or mitigation laid down for such construction is not being or has not been followed, may direct the concerned authority to take such action as may be necessary to secure compliance of such standards;

(xxiv) identify buildings and places which could, in the event of any threatening disaster situation or disaster, be used as relief centers or camps and make arrangements for water supply and sanitation in such buildings or places;

(xxv) establish stockpiles of relief and rescue materials or ensure preparedness to make such materials available at a short notice;

(xxvi) provide information to the State Authority relating to different aspects of disaster management;

(xxvii) encourage the involvement of non-governmental organisations and voluntary social-welfare institutions working at the grassroots level in the district for disaster management;

(xxviii) ensure communication systems are in order, and disaster management drills are carried out periodically;

(xxix) perform such other functions as the State Government or State Authority may assign to it or as it deems necessary for disaster management in the District.

**31. District Plan.**—(1) There shall be a plan for disaster management for every district of the State.

(2) The District Plan shall be prepared by the District Authority, after consultation with the local authorities and having regard to the National Plan and the State Plan, to be approved by the State Authority.

(3) The District Plan shall include—

(a) the areas in the district vulnerable to different forms of disasters;

(b) the measures to be taken, for prevention and mitigation of disaster, by the Departments of the Government at the district level and local authorities in the district;

(c) the capacity-building and preparedness measures required to be taken by the Departments of the Government at the district level and the local authorities in the district to respond to any threatening disaster situation or disaster;

(d) the response plans and procedures, in the event of a disaster, providing for—

(i) allocation of responsibilities to the Departments of the Government at the district level and the local authorities in the district;

(ii) prompt response to disaster and relief thereof;

(iii) procurement of essential resources;

(iv) establishment of communication links; and

(v) the dissemination of information to the public;

(e) such other matters as may be required by the State Authority.

(4) The District Plan shall be reviewed and updated annually.

(5) The copies of the District Plan referred to in sub-sections (2) and (4) shall be made available to the Departments of the Government in the district.

(6) The District Authority shall send a copy of the District Plan to the State Authority which shall forward it to the State Government.

(7) The District Authority shall, review from time to time, the implementation of the Plan and issue such instructions to different departments of the Government in the district as it may deem necessary for the implementation thereof.

**32. Plans by different authorities at district level and their implementation.**—Every office of the Government of India and of the State Government at the district level and the local authorities shall, subject to the supervision of the District Authority,—

(a) prepare a disaster management plan setting out the following, namely:—

(i) provisions for prevention and mitigation measures as provided for in the District Plan and as is assigned to the department or agency concerned;

(ii) provisions for taking measures relating to capacity-building and preparedness as laid down in the District Plan;

(iii) the response plans and procedures, in the event of, any threatening disaster situation or disaster;

(b) coordinate the preparation and the implementation of its plan with those of the other organisations at the district level including local authority, communities and other stakeholders;

(c) regularly review and update the plan; and

(d) submit a copy of its disaster management plan, and of any amendment thereto, to the District Authority.

**33. Requisition by the District Authority.**—The District Authority may by order require any officer or any Department at the district level or any local authority to take such measures for the prevention or mitigation of disaster, or to effectively respond to it, as may be necessary, and such officer or department shall be bound to carry out such order.

**34. Powers and functions of District Authority in the event of any threatening disaster situation or disaster.**—For the purpose of assisting, protecting or providing relief to the community, in response to any threatening disaster situation or disaster, the District Authority may—

(a) give directions for the release and use of resources available with any Department of the Government and the local authority in the district;

(b) control and restrict vehicular traffic to, from and within, the vulnerable or affected area;

- (c) control and restrict the entry of any person into, his movement within and departure from, a vulnerable or affected area;
- (d) remove debris, conduct search and carry out rescue operations;
- (e) provide shelter, food, drinking water and essential provisions, healthcare and services;
- (f) establish emergency communication systems in the affected area;
- (g) make arrangements for the disposal of the unclaimed dead bodies;
- (h) recommend to any Department of the Government of the State or any authority or body under that Government at the district level to take such measures as are necessary in its opinion;
- (i) require experts and consultants in the relevant fields to advise and assist as it may deem necessary;
- (j) procure exclusive or preferential use of amenities from any authority or person;
- (k) construct temporary bridges or other necessary structures and demolish structures which may be hazardous to public or aggravate the effects of the disaster;
- (l) ensure that the non-governmental organisations carry out their activities in an equitable and non-discriminatory manner;
- (m) take such other steps as may be required or warranted to be taken in such a situation.

## CHAPTER V

### MEASURES BY THE GOVERNMENT FOR DISASTER MANAGEMENT

**35. Central Government to take measures.**—(1) Subject to the provisions of this Act, the Central Government shall take all such measures as it deems necessary or expedient for the purpose of disaster management.

(2) In particular and without prejudice to the generality of the provisions of sub-section (1), the measures which the Central Government may take under that sub-section include measures with respect to all or any of the following matters, namely:—

- (a) coordination of actions of the Ministries or Departments of the Government of India, State Governments, National Authority, State Authorities, governmental and non-governmental organisations in relation to disaster management;
- (b) ensure the integration of measures for prevention of disasters and mitigation by Ministries or Departments of the Government of India into their development plans and projects;
- (c) ensure appropriate allocation of funds for prevention of disaster, mitigation, capacity-building and preparedness by the Ministries or Departments of the Government of India;
- (d) ensure that the Ministries or Departments of the Government of India take necessary measures for preparedness to promptly and effectively respond to any threatening disaster situation or disaster;
- (e) cooperation and assistance to State Governments, as requested by them or otherwise deemed appropriate by it;
- (f) deployment of naval, military and air forces, other armed forces of the Union or any other civilian personnel as may be required for the purposes of this Act;
- (g) coordination with the United Nations agencies, international organisations and governments of foreign countries for the purposes of this Act;
- (h) establish institutions for research, training, and developmental programmes in the field of disaster management;
- (i) such other matters as it deems necessary or expedient for the purpose of securing effective implementation of the provisions of this Act.

(3) The Central Government may extend such support to other countries affected by major disaster as it may deem appropriate.

**36. Responsibilities of Ministries or Departments of Government of India.**—It shall be the responsibility of every Ministry or Department of the Government of India to—

(a) take measures necessary for prevention of disasters, mitigation, preparedness and capacity-building in accordance with the guidelines laid down by the National Authority;

(b) integrate into its development plans and projects, the measures for prevention or mitigation of disasters in accordance with the guidelines laid down by the National Authority;

(c) respond effectively and promptly to any threatening disaster situation or disaster in accordance with the guidelines of the National Authority or the directions of the National Executive Committee in this behalf;

(d) review the enactments administered by it, its policies, rules and regulations, with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness;

(e) allocate funds for measures for prevention of disaster, mitigation, capacity-building and preparedness;

(f) provide assistance to the National Authority and State Governments for—

(i) drawing up mitigation, preparedness and response plans, capacity-building, data collection and identification and training of personnel in relation to disaster management;

(ii) carrying out rescue and relief operations in the affected area;

(iii) assessing the damage from any disaster;

(iv) carrying out rehabilitation and reconstruction;

(g) make available its resources to the National Executive Committee or a State Executive Committee for the purposes of responding promptly and effectively to any threatening disaster situation or disaster, including measures for—

(i) providing emergency communication in a vulnerable or affected area;

(ii) transporting personnel and relief goods to and from the affected area;

(iii) providing evacuation, rescue, temporary shelter or other immediate relief;

(iv) setting up temporary bridges, jetties and landing places;

(v) providing, drinking water, essential provisions, healthcare, and services in an affected area;

(h) take such other actions as it may consider necessary for disaster management.

**37. Disaster management plans of Ministries or Departments of Government of India.**—(1) Every Ministry or Department of the Government of India shall—

(a) prepare a disaster management plan specifying the following particulars, namely:—

(i) the measures to be taken by it for prevention and mitigation of disasters in accordance with the National Plan;

(ii) the specifications regarding integration of mitigation measures in its development plans in accordance with the guidelines of the National Authority and the National Executive Committee;

(iii) its roles and responsibilities in relation to preparedness and capacity-building to deal with any threatening disaster situation or disaster;

(iv) its roles and responsibilities in regard to promptly and effectively responding to any threatening disaster situation or disaster;

(v) the present status of its preparedness to perform the roles and responsibilities specified in sub-clauses (iii) and (iv);

(vi) the measures required to be taken in order to enable it to perform its responsibilities specified in sub-clauses (iii) and (iv);

(b) review and update annually the plan referred to in clause (a);

(c) forward a copy of the plan referred to in clause (a) or clause (b), as the case may be, to the Central Government which Government shall forward a copy thereof to the National Authority for its approval.

(2) Every Ministry or Department of the Government of India shall—

(a) make, while preparing disaster management plan under clause (a) of sub-section (1), provisions for financing the activities specified therein;

(b) furnish a status report regarding the implementation of the plan referred to in clause (a) of sub-section (1) to the National Authority, as and when required by it.

**38. State Government to take measures.**—(1) Subject to the provisions of this Act, each State Government shall take all measures specified in the guidelines laid down by the National Authority and such further measures as it deems necessary or expedient, for the purpose of disaster management.

(2) The measures which the State Government may take under sub-section (1) include measures with respect to all or any of the following matters, namely:—

(a) coordination of actions of different departments of the Government of the State, the State Authority, District Authorities, local authority and other non-governmental organisations;

(b) cooperation and assistance in the disaster management to the National Authority and National Executive Committee, the State Authority and the State Executive Committee, and the District Authorities;

(c) cooperation with, and assistance to, the Ministries or Departments of the Government of India in disaster management, as requested by them or otherwise deemed appropriate by it;

(d) allocation of funds for measures for prevention of disaster, mitigation, capacity-building and preparedness by the departments of the Government of the State in accordance with the provisions of the State Plan and the District Plans;

(e) ensure that the integration of measures for prevention of disaster or mitigation by the departments of the Government of the State in their development plans and projects;

(f) integrate in the State development plan, measures to reduce or mitigate the vulnerability of different parts of the State to different disasters;

(g) ensure the preparation of disaster management plans by different departments of the State in accordance with the guidelines laid down by the National Authority and the State Authority;

(h) establishment of adequate warning systems up to the level of vulnerable communities;

(i) ensure that different departments of the Government of the State and the District Authorities take appropriate preparedness measures;

(j) ensure that in a threatening disaster situation or disaster, the resources of different departments of the Government of the State are made available to the National Executive Committee or the State Executive Committee or the District Authorities, as the case may be, for the purposes of effective response, rescue and relief in any threatening disaster situation or disaster;

(k) provide rehabilitation and reconstruction assistance to the victims of any disaster; and

(l) such other matters as it deems necessary or expedient for the purpose of securing effective implementation of provisions of this Act.

**39. Responsibilities of departments of the State Government.**—It shall be the responsibility of every department of the Government of a State to—

(a) take measures necessary for prevention of disasters, mitigation, preparedness and capacity-building in accordance with the guidelines laid down by the National Authority and the State Authority;

(b) integrate into its development plans and projects, the measures for prevention of disaster and mitigation;

(c) allocate funds for prevention of disaster, mitigation, capacity-building and preparedness;

(d) respond effectively and promptly to any threatening disaster situation or disaster in accordance with the State Plan, and in accordance with the guidelines or directions of the National Executive Committee and the State Executive Committee;

(e) review the enactments administered by it, its policies, rules and regulations with a view to incorporate therein the provisions necessary for prevention of disasters, mitigation or preparedness;

(f) provide assistance, as required, by the National Executive Committee, the State Executive Committee and District Authorities, for—

(i) drawing up mitigation, preparedness and response plans, capacity-building, data collection and identification and training of personnel in relation to disaster management;

(ii) assessing the damage from any disaster;

(iii) carrying out rehabilitation and reconstruction;

(g) make provision for resources in consultation with the State Authority for the implementation of the District Plan by its authorities at the district level;

(h) make available its resources to the National Executive Committee or the State Executive Committee or the District Authorities for the purposes of responding promptly and effectively to any disaster in the State, including measures for—

(i) providing emergency communication with a vulnerable or affected area;

(ii) transporting personnel and relief goods to and from the affected area;

(iii) providing evacuation, rescue, temporary shelter or other immediate relief;

(iv) carrying out evacuation of persons or live-stock from an area of any threatening disaster situation or disaster;

(v) setting up temporary bridges, jetties and landing places;

(vi) providing drinking water, essential provisions, healthcare and services in an affected area;

(i) such other actions as may be necessary for disaster management.

**40. Disaster management plan of departments of State.**—(1) Every department of the State Government, in conformity with the guidelines laid down by the State Authority, shall—

(a) prepare a disaster management plan which shall lay down the following :—

(i) the types of disasters to which different parts of the State are vulnerable;

(ii) integration of strategies for the prevention of disaster or the mitigation of its effects or both with the development plans and programmes by the department;

(iii) the roles and responsibilities of the department of the State in the event of any threatening disaster situation or disaster and emergency support function it is required to perform;

(iv) present status of its preparedness to perform such roles or responsibilities or emergency support function under sub-clause (iii);

(v) the capacity-building and preparedness measures proposed to be put into effect in order to enable the Ministries or Departments of the Government of India to discharge their responsibilities under section 37;

(b) annually review and update the plan referred to in clause (a); and

(c) furnish a copy of the plan referred to in clause (a) or clause (b), as the case may be, to the State Authority.

(2) Every department of the State Government, while preparing the plan under sub-section (1), shall make provisions for financing the activities specified therein.

(3) Every department of the State Government shall furnish an implementation status report to the State Executive Committee regarding the implementation of the disaster management plan referred to in sub-section (1).

## CHAPTER VI

### LOCAL AUTHORITIES

**41. Functions of the local authority.**—(1) Subject to the directions of the District Authority, a local authority shall—

(a) ensure that its officers and employees are trained for disaster management;

(b) ensure that resources relating to disaster management are so maintained as to be readily available for use in the event of any threatening disaster situation or disaster;

(c) ensure all construction projects under it or within its jurisdiction conform to the standards and specifications laid down for prevention of disasters and mitigation by the National Authority, State Authority and the District Authority;

(d) carry out relief, rehabilitation and reconstruction activities in the affected area in accordance with the State Plan and the District Plan.

(2) The local authority may take such other measures as may be necessary for the disaster management.

## CHAPTER VII

### NATIONAL INSTITUTE OF DISASTER MANAGEMENT

**42. National Institute of Disaster Management.**—(1) With effect from such date as the Central Government may, by notification in the Official Gazette appoint in this behalf, there shall be constituted an institute to be called the National Institute of Disaster Management.

(2) The National Institute of Disaster Management shall consist of such number of members as may be prescribed by the Central Government.

(3) The term of office of, and vacancies among, members of the National Institute of Disaster Management and manner of filling such vacancies shall be such as may be prescribed.

(4) There shall be a governing body of the National Institute of Disaster Management which shall be constituted by the Central Government from amongst the members of the National Institute of Disaster Management in such manner as may be prescribed.

(5) The governing body of the National Institute of Disaster Management shall exercise such powers and discharge such functions as may be prescribed by regulations.

(6) The procedure to be followed in exercise of its powers and discharge of its functions by the governing body, and the term of office of, and the manner of filling vacancies among the members of the governing body, shall be such as may be prescribed by regulations.

(7) Until the regulations are made under this section, the Central Government may make such regulations; and any regulation so made may be altered or rescinded by the National Institute of Disaster Management in exercise of its powers.

(8) Subject to the provisions of this Act, the National Institute of Disaster Management shall function within the broad policies and guidelines laid down by the National Authority and be responsible for planning and promoting training and research in the area of disaster management, documentation and development of national level information base relating to disaster management policies, prevention mechanisms and mitigation measures.

(9) Without prejudice to the generality of the provisions contained in sub-section (8), the National Institute, for the discharge of its functions, may—

(a) develop training modules, undertake research and documentation in disaster management and organise training programmes;

(b) formulate and implement a comprehensive human resource development plan covering all aspects of disaster management;

(c) provide assistance in national level policy formulation;

(d) provide required assistance to the training and research institutes for development of training and research programmes for stakeholders including Government functionaries and undertake training of faculty members of the State level training institutes;

(e) provide assistance to the State Governments and State training institutes in the formulation of State level policies, strategies, disaster management framework and any other assistance as may be required by the State Governments or State training institutes for capacity-building of stakeholders, Government including its functionaries, civil society members, corporate sector and people's elected representatives;

(f) develop educational materials for disaster management including academic and professional courses;

(g) promote awareness among stakeholders including college or school teachers and students, technical personnel and others associated with multi-hazard mitigation, preparedness and response measures;

(h) undertake, Organise and facilitate study courses, conferences, lectures, seminars within and outside the country to promote the aforesaid objects;

(i) undertake and provide for publication of journals, research papers and books and establish and maintain libraries in furtherance of the aforesaid objects;

(j) do all such other lawful things as are conducive or incidental to the attainment of the above objects; and

(k) undertake any other function as may be assigned to it by the Central Government.

**43. Officers and other employees of the National Institute.**—The Central Government shall provide the National Institute of Disaster Management with such officers, consultants and other employees, as it considers necessary, for carrying out its functions.

## CHAPTER VIII

### NATIONAL DISASTER RESPONSE FORCE

**44. National Disaster Response Force.**—(1) There shall be constituted a National Disaster Response Force for the purpose of specialist response to a threatening disaster situation or disaster.

(2) Subject to the provisions of this Act, the Force shall be constituted in such manner and, the conditions of service of the members of the Force, including disciplinary provisions therefore, be such as may be prescribed.

**45. Control, direction, etc.**—The general superintendence, direction and control of the Force shall be vested and exercised by the National Authority and the command and supervision of the Force shall vest in an officer to be appointed by the Central Government as the Director General of the National Disaster Response Force.

## CHAPTER IX

## FINANCE, ACCOUNTS AND AUDIT

**46. National Disaster Response Fund.**—(1) The Central Government may, by notification in the Official Gazette, constitute a fund to be called the National Disaster Response Fund for meeting any threatening disaster situation or disaster and there shall be credited thereto—

(a) an amount which the Central Government may, after due appropriation made by Parliament by law in this behalf provide;

(b) any grants that may be made by any person or institution for the purpose of disaster management.

(2) The National Disaster Response Fund shall be made available to the National Executive Committee to be applied towards meeting the expenses for emergency response, relief and rehabilitation in accordance with the guidelines laid down by the Central Government in consultation with the National Authority.

**47. National Disaster Mitigation Fund.**—(1) The Central Government may, by notification in the Official Gazette, constitute a Fund to be called the National Disaster Mitigation Fund for projects exclusively for the purpose of mitigation and there shall be credited thereto such amount which the Central Government may, after due appropriation made by Parliament by law in this behalf, provide.

(2) The National Disaster Mitigation Fund shall be applied by the National Authority.

**48. Establishment of funds by State Government.**—(1) The State Government shall, immediately after notifications issued for constituting the State Authority and the District Authorities, establish for the purposes of this Act the following funds, namely:—

(a) the fund to be called the State Disaster Response Fund;

(b) the fund to be called the District Disaster Response Fund;

(c) the fund to be called the State Disaster Mitigation Fund;

(d) the fund to be called the District Disaster Mitigation Fund.

(2) The State Government shall ensure that the funds established—

(i) under clause (a) of sub-section (1) is available to the State Executive Committee;

(ii) under sub-clause (c) of sub-section (1) is available to the State Authority;

(iii) under clauses (b) and (d) of sub-section (1) are available to the District Authority.

**49. Allocation of funds by Ministries and Departments.**—(1) Every Ministry or Department of the Government of India shall make provisions, in its annual budget, for funds for the purposes of carrying out the activities and programmes set out in its disaster management plan.

(2) The provisions of sub-section (1) shall, *mutatis mutandis*, apply to departments of the Government of the State.

**50. Emergency procurement and accounting.**—Where by reason of any threatening disaster situation or disaster, the National Authority or the State Authority or the District Authority is satisfied that immediate procurement of provisions or materials or the immediate application of resources are necessary for rescue or relief,—

(a) it may authorise the concerned department or authority to make the emergency procurement and in such case, the standard procedure requiring inviting of tenders shall be deemed to be waived;

(b) a certificate about utilisation of provisions or materials by the controlling officer authorised by the National Authority, State Authority or District Authority, as the case may be, shall be deemed to be a valid document or voucher for the purpose of accounting of emergency, procurement of such provisions or materials.

## CHAPTER X

## OFFENCES AND PENALTIES

**51. Punishment for obstruction, etc.**—Whoever, without reasonable cause—

(a) obstructs any officer or employee of the Central Government or the State Government, or a person authorised by the National Authority or State Authority or District Authority in the discharge of his functions under this Act; or

(b) refuses to comply with any direction given by or on behalf of the Central Government or the State Government or the National Executive Committee or the State Executive Committee or the District Authority under this Act,

shall on conviction be punishable with imprisonment for a term which may extend to one year or with fine, or with both, and if such obstruction or refusal to comply with directions results in loss of lives or imminent danger thereof, shall on conviction be punishable with imprisonment for a term which may extend to two years.

**52. Punishment for false claim.**—Whoever knowingly makes a claim which he knows or has reason to believe to be false for obtaining any relief, assistance, repair, reconstruction or other benefits consequent to disaster from any officer of the Central Government, the State Government, the National Authority, the State Authority or the District Authority, shall, on conviction be punishable with imprisonment for a term which may extend to two years, and also with fine.

**53. Punishment for misappropriation of money or materials, etc.**—Whoever, being entrusted with any money or materials, or otherwise being, in custody of, or dominion over, any money or goods, meant for providing relief in any threatening disaster situation or disaster, misappropriates or appropriates for his own use or disposes of such money or materials or any part thereof or wilfully compels any other person so to do, shall on conviction be punishable with imprisonment for a term which may extend to two years, and also with fine.

**54. Punishment for false warning.**—Whoever makes or circulates a false alarm or warning as to disaster or its severity or magnitude, leading to panic, shall on conviction, be punishable with imprisonment which may extend to one year or with fine.

**55. Offences by Departments of the Government.**—(1) Where an offence under this Act has been committed by any Department of the Government, the head of the Department shall be deemed to be guilty of the offence and shall be liable to be proceeded against and punished accordingly unless he proves that the offence was committed without his knowledge or that he exercised all due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a Department of the Government and it is proved that the offence has been committed with the consent or connivance of, or is attributable to any neglect on the part of, any officer, other than the head of the Department, such officer shall be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

**56. Failure of officer in duty or his connivance at the contravention of the provisions of this Act.**—Any officer, on whom any duty has been imposed by or under this Act and who ceases or refuses to perform or withdraws himself from the duties of his office shall, unless he has obtained the express written permission of his official superior or has other lawful excuse for so doing, be punishable with imprisonment for a term which may extend to one year or with fine.

**57. Penalty for contravention of any order regarding requisitioning.**—If any person contravenes any order made under section 65, he shall be punishable with imprisonment for a term which may extend to one year or with fine or with both.

**58. Offence by companies.**—(1) Where an offence under this Act has been committed by a company or body corporate, every person who at the time the offence was committed, was in charge of, and was responsible to, the company, for the conduct of the business of the company, as well as the company,

shall be deemed to be guilty of the contravention and shall be liable to be proceeded against and punished accordingly:

Provided that nothing in this sub-section shall render any such person liable to any punishment provided in this Act, if he proves that the offence was committed without his knowledge or that he exercised due diligence to prevent the commission of such offence.

(2) Notwithstanding anything contained in sub-section (1), where an offence under this Act has been committed by a company, and it is proved that the offence was committed with the consent or connivance of or is attributable to any neglect on the part of any director, manager, secretary or other officer of the company, such director, manager, secretary or other officer shall also, be deemed to be guilty of that offence and shall be liable to be proceeded against and punished accordingly.

*Explanation.*—For the purpose of this section—

(a) “company” means any body corporate and includes a firm or other association of individuals; and

(b) “director”, in relation to a firm, means a partner in the firm.

**59. Previous sanction for prosecution.**—No prosecution for offences punishable under sections 55 and 56 shall be instituted except with the previous sanction of the Central Government or the State Government, as the case may be, or of any officer authorised in this behalf, by general or special order, by such Government.

**60. Cognizance of offences.**—No court shall take cognizance of an offence under this Act except on a complaint made by—

(a) the National Authority, the State Authority, the Central Government, the State Government, the District Authority or any other authority or officer authorised in this behalf by that Authority or Government, as the case may be; or

(b) any person who has given notice of not less than thirty days in the manner prescribed, of the alleged offence and his intention to make a complaint to the National Authority, the State Authority, the Central Government, the State Government, the District Authority or any other authority or officer authorised as aforesaid.

## CHAPTER XI

### MISCELLANEOUS

**61. Prohibition against discrimination.**—While providing compensation and relief to the victims of disaster, there shall be no discrimination on the ground of sex, caste, community, descent or religion.

**62. Power to issue direction by Central Government.**—Notwithstanding anything contained in any other law for the time being in force, it shall be lawful for the Central Government to issue direction in writing to the Ministries or Departments of the Government of India, or the National Executive Committee or the State Government, State Authority, State Executive Committee, statutory bodies or any of its officers or employees, as the case may be, to facilitate or assist in the disaster management and such Ministry or Department or Government or Authority, Executive Committee, statutory body, officer or employee shall be bound to comply with such direction.

**63. Powers to be made available for rescue operations.**—Any officer or authority of the Union or a State, when requested by the National Executive Committee, any State Executive Committee or District Authority or any person authorised by such Committee or Authority in this behalf, shall make available to that Committee or authority or person, such officers and employees as requested for, to perform any of the functions in connection with the prevention of disaster or mitigation or rescue or relief work.

**64. Making or amending rules, etc., in certain circumstances.**—Subject to the provisions of this Act, if it appears to the National Executive Committee, State Executive Committee or the District Authority, as the case may be, that provisions of any rule, regulation, notification, guideline, instruction, order, scheme or bye-laws, as the case may be, are required to be made or amended for the purposes of prevention of disasters or the mitigation thereof, it may require the amendment of such rules, regulation,

notification, guidelines, instruction, order, scheme or bye-laws, as the case may be, for that purpose, and the appropriate department or authority shall take necessary action to comply with the requirements.

**65. Power of requisition of resources, provisions, vehicles, etc., for rescue operations, etc.—**(1) If it appears to the National Executive Committee, State Executive Committee or District Authority or any officer as may be authorised by it in this behalf that—

(a) any resources with any authority or person are needed for the purpose of prompt response;

(b) any premises are needed or likely to be needed for the purpose of rescue operations; or

(c) any vehicle is needed or is likely to be needed for the purposes of transport of resources from disaster affected areas or transport of resources to the affected area or transport in connection with rescue, rehabilitation or reconstruction,

such authority may, by order in writing, requisition such resources or premises or such vehicle, as the case may be, and may make such further orders as may appear to it to be necessary or expedient in connection with the requisitioning.

(2) Whenever any resource, premises or vehicle is requisitioned under sub-section (1), the period of such requisition shall not extend beyond the period for which such resource, premises or vehicle is required for any of the purposes mentioned in that sub-section.

(3) In this section,—

(a) “resources” includes men and material resources;

(b) “services” includes facilities;

(c) “premises” means any land, building or part of a building and includes a hut, shed or other structure or any part thereof;

(d) “vehicle” means any vehicle used or capable of being used for the purpose of transport, whether propelled by mechanical power or otherwise.

**66. Payment of compensation.—**(1) Whenever any Committee, Authority or officer referred to in sub-section (1) of section 65, in pursuance of that section requisitions any premises, there shall be paid to the persons interested compensation the amount of which shall be determined by taking into consideration the following, namely:—

(i) the rent payable in respect of the premises, or if no rent is so payable, the rent payable for similar premises in the locality;

(ii) if as consequence of the requisition of the premises the person interested is compelled to change his residence or place of business, the reasonable expenses (if any) incidental to such change:

Provided that where any person interested being aggrieved by the amount of compensation so determined makes an application within the thirty days to the Central Government or the State Government, as the case may be, for referring the matter to an arbitrator, the amount of compensation to be paid shall be such as the arbitrator appointed in this behalf by the Central Government or the State Government, as the case may be, may determine:

Provided further that where there is any dispute as to the title to receive the compensation or as to the apportionment of the amount of compensation, it shall be referred by the Central Government or the State Government, as the case may be, to an arbitrator appointed in this behalf by the Central Government or the State Government, as the case may be, for determination, and shall be determined in accordance with the decision of such arbitrator.

*Explanation.*—In this sub-section, the expression “person interested” means the person who was in actual possession of the premises requisitioned under section 65 immediately before the requisition, or where no person was in such actual possession, the owner of such premises.

(2) Whenever any Committee, Authority or officer, referred to in sub-section (1) of section 65 in pursuance of that section requisitions any vehicle, there shall be paid to the owner thereof compensation the amount of which shall be determined by the Central Government or the State Government, as the case may be, on the basis of the fares or rates prevailing in the locality for the hire of such vehicle:

Provided that where the owner of such vehicle being aggrieved by the amount of compensation so determined makes an application within the prescribed time to the Central Government or the State Government, as the case may be, for referring the matter to an arbitrator, the amount of compensation to be paid shall be such as the arbitrator appointed in this behalf by the Central Government or the State Government, as the case may be, may determine:

Provided further that where immediately before the requisitioning the vehicle or vessel was by virtue of a hire purchase agreement in the possession of a person other than the owner, the amount determined under this sub-section as the total compensation payable in respect of the requisition shall be apportioned between that person and the owner in such manner as they may agree upon, and in default of agreement, in such manner as an arbitrator appointed by the Central Government or the State Government, as the case may be, in this behalf may decide.

**67. Direction to media for communication of warnings, etc.**—The National Authority, the State Authority, or a District Authority may recommend to the Government to give direction to any authority or person in control of any audio or audio-visual media or such other means of communication as may be available to carry any warning or advisories regarding any threatening disaster situation or disaster, and the said means of communication and media as designated shall comply with such direction.

**68. Authentication of orders or decisions.**—Every order or decision of the National Authority or the National Executive Committee, the State Authority, or the State Executive Committee or the District Authority, shall be authenticated by such officers of the National Authority or the National Executive Committee or, the State Executive Committee, or the District Authority, as may be authorised by it in this behalf.

**69. Delegation of powers.**—The National Executive Committee, State Executive Committee, as the case may be, by general or special order in writing, may delegate to the Chairperson or any other member or to any officer, subject to such conditions and limitations, if any, as may be specified in the order, such of its powers and functions under this Act as it may deem necessary.

**70. Annual report.**—(1) The National Authority shall prepare once every year, in such form and at such time as may be prescribed, an annual report giving a true and full account of its activities during the previous year and copies thereof shall be forwarded to the Central Government and that Government shall cause the same to be laid before both Houses of Parliament within one month of its receipt.

(2) The State Authority shall prepare once in every year, in such form and at such time as may be prescribed, an annual report giving a true and full account of its activities during the previous year and copies thereof shall be forwarded to the State Government and that Government shall cause the same to be laid before each House of the State Legislature where it consists of two Houses, or where such Legislature consists of one House, before that House.

**71. Bar of jurisdiction of court.**—No court (except the Supreme Court or a High Court) shall have jurisdiction to entertain any suit or proceeding in respect of anything done, action taken, orders made, direction, instruction or guidelines issued by the Central Government, National Authority, State Government, State Authority or District Authority in pursuance of any power conferred by, or in relation to its functions, by this Act.

**72. Act to have overriding effect.**—The provisions of this Act, shall have effect, notwithstanding anything inconsistent therewith contained in any other law for the time being in force or in any instrument having effect by virtue of any law other than this Act.

**73. Action taken in good faith.**—No suit or prosecution or other proceeding shall lie in any court against the Central Government or the National Authority or the State Government or the State Authority or the District Authority or local authority or any officer or employee of the Central Government or the National Authority or the State Government or the State Authority or the District Authority or local authority or any person working for on behalf of such Government or authority in respect of any work done or purported to have been done or intended to be done in good faith by such authority or Government or such officer or employee or such person under the provisions of this Act or the rules or regulations made thereunder.

**74. Immunity from legal process.**—Officers and employees of the Central Government, National Authority, National Executive Committee, State Government, State Authority, State Executive Committee or District Authority shall be immune from legal process in regard to any warning in respect of any impending disaster communicated or disseminated by them in their official capacity or any action taken or direction issued by them in pursuance of such communication or dissemination.

**75. Power of Central Government to make rules.**—(1) The Central Government may, by notification in the Official Gazette, make rules for carrying out the purposes of this Act.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(a) the composition and number of the members of the National Authority under sub-section (2), and the term of office and conditions of service of members of the National Authority under sub-section (4), of section 3;

(b) the allowances to be paid to the members of the advisory committee under sub-section (2) of section 7;

(c) the powers and functions of the Chairperson of the National Executive Committee under sub-section (3) of section 8 and the procedure to be followed by the National Executive Committee in exercise of its powers and discharge of its functions under sub-section (4) of section 8;

(d) allowances to be paid to the persons associated with the sub-committee constituted by the National Executive Committee under sub-section (3) of section 9;

(e) the number of members of the National Institute of Disaster Management under sub-section (2), the term of the office and vacancies among members and the manner of filling such vacancies under sub-section (3) and the manner of constituting the Governing Body of the National Institute of Disaster Management under sub-section (4) of section 42;

(f) the manner of constitution of the Force, the conditions of service of the members of the Force, including disciplinary provisions under sub-section (2) of section 44;

(g) the manner in which notice of the offence and of the intention to make a complaint to the National Authority, the State Authority, the Central Government, the State Government or the other authority or officer under clause (b) of section 60;

(h) the form in which and the time within which annual report is to be prepared under section 70;

(i) any other matter which is to be, or may be, prescribed, or in respect of which provision is to be made by rules.

**76. Power to make regulations.**—(1) The National Institute of Disaster Management, with the previous approval of the Central Government may, by notification in the Official Gazette, make regulations consistent with this Act and the rules made thereunder to carry out the purposes of this Act.

(2) In particular, and without prejudice to the generality of the foregoing power, such regulations may provide for all or any of the following matters, namely:—

(a) powers and functions to be exercised and discharged by the governing body;

(b) procedure to be followed by the governing body in exercise of the powers and discharge of its functions;

(c) any other matter for which under this Act provision may be made by the regulations.

**77. Rules and regulations to be laid before Parliament.**—Every rule made by the Central Government and every regulation made by the National Institute of Disaster Management under this Act shall be laid, as soon as may be after it is made, before each House of Parliament, while it is in session, for a total period of thirty days which may be comprised of one session or in two or more successive sessions, and if, before the expiry of the session immediately following the session or the successive sessions aforesaid, both Houses agree in making any modification in the rule or regulation or both Houses agree that the rule or regulation should not be made, the rule or regulation shall thereafter have effect only

in such modified form or be of no effect, as the case may be; so, however, that any such modification or annulment shall be without prejudice to the validity of anything previously done under that rule or regulation.

**78. Power of State Government to make rules.**—(1) The State Government may, by notification in the Official Gazette, make rules to carry out the provisions of this Act.

(2) In particular, and without prejudice to the generality of the foregoing power, such rules may provide for all or any of the following matters, namely:—

(a) the composition and number of the members of the State Authority under sub-section (2), and the term of office and conditions of service of the members of the State Authority under sub-section (5), of section 14;

(b) the allowances to be paid to the members of the advisory committee under sub-section (2) of section 17;

(c) the powers and functions of the Chairperson of the State Executive Committee under sub-section (3), and the procedure to be followed by the State Executive Committee in exercise of its powers and discharge of its functions under sub-section (4) of section 20;

(d) allowances to be paid to the persons associated with the sub-committee constituted by the State Executive Committee under sub-section (3) of section 21;

(e) the composition and the number of members of the District Authority under sub-section (2), and the powers and functions to be exercised and discharged by the Chief Executive Officer of the District Authority under sub-section (3) of section 25;

(f) allowances payable to the persons associated with any committee constituted by the District Authority as experts under sub-section (3) of section 28;

(g) any other matter which is to be, or may be, prescribed, or in respect of which provision is to be made by rules.

(3) Every rule made by the State Government under this Act shall be laid, as soon as may be after it is made, before each House of the State Legislature where it consists of two Houses, or where such Legislature consists of one House before that House.

**79. Power to remove difficulties.**—(1) If any difficulty arises in giving effect to the provisions of this Act, the Central Government or the State Government, as the case may be, by notification in the Official Gazette, make order not inconsistent with the provisions of this Act as may appear to it to be necessary or expedient for the removal of the difficulty:

Provided that no such order shall be made after the expiration of two years from the commencement of this Act.

(2) Every order made under this section shall be laid, as soon as may be after it is made, before each House of Parliament or the Legislature, as the case may be.

**BEFORE THE HON'BLE NATIONAL GREEN  
TRIBUNAL  
SOUTHERN ZONE, CHENNAI**

**APPEAL NO. 43 OF 2022 (SZ)**

**IN THE MATTER OF:**

Ratheesh Karattu,  
S/O R.K. Vasu, Rayaroth House,  
Tholambra P.O, Peravoor, Kannur District – 670 673  
& Anr

... Appellants

Versus

Ministry of Environment, Forests and Climate Change  
And Ors

... Respondents

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