

**MINING PLAN  
FOR  
GRANITE (BUILDING STONE) QUARRY  
(as per KMMCR 2015)**


**PROPONENT  
ULAHANNAN  
EDAPUTHUSSERIYIL VEEDU,  
THALAPPUZHA, VALAD (P.O),  
WAYANAD DISTRICT,  
KERALA - 670 644.**

**SITE AT  
RE-SURVEY NOS: 57/16, 57/1270, 57/1069 & 57/1273  
VILLAGE: VALAD, TALUK: MANANTHAVADY,  
DISTRICT: WAYANAD, STATE: KERALA.  
LEASE AREA: 4.2689 HA**



**PREPARED BY  
MAHESH. S,  
RQP/BNG/338/2014/A  
TC 31/580, NAVADEEPAM,  
S.N NAGAR, HOUSE NO: 24,  
PETTAH POST OFFICE,  
TRIVANDRUM, KERALA.  
PHONE : 91-9446 303 422  
EMAIL : maheshsurendranpillai@gmail.com**

**Approved Vide Letter No: DOW/M-2324/17  
Dtd...19-06-18**

  
**GEOLOGIST  
DISTRICT OFFICE  
DEPT. OF MINING & GEOLOGY  
MEENANGADI, WAYANAD - 673 591**

# QUARRY OWNED BY ULAHANNAN

EDAPUTHUSSERIYIL VEEDU, THALAPPUZHA, VALAD (P.O),  
WAYANAD DISTRICT, KERALA - 670 644.

Date: 08-01-2018

To

The Geologist,  
Department of Mining and Geology,  
District Office, Wayanad, Kerala

Respected Sir/Madam,

**Sub:** Submission of Mining Plan for approval of proposed Granite  
(Building Stone) Quarry site under B2 Category less than 5 Hectares

\*\*\*\*\*

- Ref: 1) Site at Re-Survey Nos. 57/16, 57/1270, 57/1069 & 57/1273 in Valad Village,  
Mananthavady Taluk, Wayanad District, Kerala.  
2) Quarry/Mining Area: 4.2689 hectare  
3) Proponent: Ulahannan, Edaputhusseriyil Veedu, Thalappuzha, Valad (P.O),  
Wayanad District, Kerala - 670 644.

With reference to the above subject, I am pleased to submit the Mine Plan with  
required Annexure for proposed Granite (Building Stone) Quarry with Quarry/Mining  
area of 4.2689 hectare under category B2, at Re-Survey Nos. 57/16, 57/1270, 57/1069 &  
57/1273 in Valad Village, Mananthavady Taluk, Wayanad District, Kerala for your kind  
perusal.

I request you to kindly process our application and grant us the Mine plan  
approval at the earliest.

Thanking You,

Ulahannan

- Enclosure: 1) Mining Plan with PMCP  
2) Required Annexure



**MINING PLAN**  
**WITH**  
**PROGRESSIVE MINE CLOSURE PLAN**  
**FOR**  
**GRANITE (BUILDING STONE) MINING**  
**PROJECT**

*Minor Mineral*

*(Submitted under rule 53 & 58 of Kerala Minor Mineral Concession Rules, 2015)*

Village	:-	Valad
Taluk	:-	Mananthavady
District	:-	Wayanad
State	:-	Kerala
Re-Survey Nos	:-	57/16, 57/1270, 57/1069 & 57/1273
Application area	:-	4.2689 Hectares
Working proposed	:-	Semi-mechanized open-cast
Land	:-	Lease land

LESSEE

**ULAHANNAN**  
EDAPUTHUSSERIYIL VEEDU,  
THALAPPUZHA, VALAD (P.O),  
WAYANAD DISTRICT,  
KERALA - 670 644.

PREPARED BY

**MAHESH. S,**  
**RQP/BNG/338/2014/A**  
TC 31/580, NAVADEEPAM,  
S.N NAGAR, HOUSE NO: 24,  
PETTAH POST OFFICE,  
TRIVANDRUM, KERALA.  
PHONE : 91-9446 303 422

EMAIL : maheshsurendranpillai@gmail.com



# APPENDIX





# QUARRY OWNED BY ULAHANNAN

EDAPUTHUSSERIYIL VEEDU, THALAPPUZHA, VALAD (P.O),  
WAYANAD DISTRICT, KERALA - 670 644.

## AUTHORIZATION

I, Ulahannan, Owner and authorized signatory hereby authorize RQP, Mr. Mahesh. S to prepare the Mining Plan and the PMCP as per rules and regulation of the Central/State Government, statutory organization, Court etc. for the proposed Granite (Building Stone) Quarry with Quarry/Mining area of 4.2689 hectare under B2 category at Re-Survey Nos. 57/16, 57/1270, 57/1069 & 57/1273 in Valad Village, Mananthavady Taluk, Wayanad District, Kerala.

I request the District Geologist, Department of Mining & Geology, Wayanad District, Kerala to contact the RQP with given below address for any detailing and clarifications regarding the Mining Plan and PMCP of Granite (Building Stone) Quarry whom I have authorized and trusted to prepare the same.

RQP Address:

**Mahesh. S,**  
**RQP/BNG/338/2014/A**  
TC 31/580, Navadeepam,  
S.N Nagar, House No: 24,  
Pettah Post Office, Trivandrum.  
Phone : 91-9446 303 422  
Email : maheshsurendranpillai@gmail.com

Place: Valad

Date: 08-01-2018




**Ulahannan**

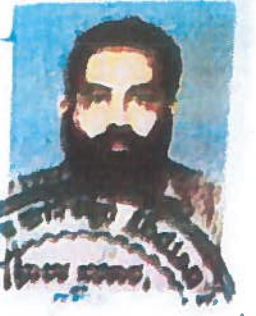
Owner and Authorized Signatory



Approved Vide Letter No: DOWM.....  
Dtd.....



**GEOLOGIST**  
**DISTRICT OFFICE**  
**DEPT. OF MINING & GEOLOGY**  
**MEENANGADI, WAYANAD - 673 591**



खननयोजना तैयार करने के लिए अर्हता प्राप्त व्यक्ति के रूप में मान्यता

प्रमाण पत्र

CERTIFICATE OF RECOGNITION AS QUALIFIED PERSON TO PREPARE MINING PLAN

(खनिज विन्यायन नियमावली 1960 के नियम 22 सी के अंतर्गत)

(Under Rule 22C of Mineral Concession Rules, 1960)

श्री महेश एस. पुत्र श्री पी. सुरेन्द्रन पिल्लई, निवासी - टी.सी. - 31/580, नवदीपम, एस.एन. नगर, हाउस नं. 24, पेठा पोस्ट ऑफिस, त्रिवेन्द्रम, तामुक - त्रिवेन्द्रम, जिला - त्रिवेन्द्रम 695024, राज्य केरला, जिनका फोटो एवं हस्ताक्षर दिया गया है उनकी योग्यता तथा अनुभवों के संतोषजनक प्रमाण पत्र देने के एवज में एतद द्वारा खनिज विन्यायन नियमावली 1960 के नियम 22 सी के अंतर्गत खनन योजना / खनन अभियोजना / उत्तरोत्तर-खान बंद / अंतिम खान बंद करने की योजना तैयार करने के लिये अर्हता प्राप्त व्यक्ति के रूप में मान्यता दी जाती है।

Shri Mahesh S. son of Shri P. Surendran Pillai, resident of :- T.C 31/580, Navadeepam S.N Nagar, House No.-24, Pettah Post Office, Trivandrum, Taluk- Trivandrum,

District- Trivandrum-695024, State- Kerala whose Photograph and Signature is appended herewith having given satisfactory evidence of his qualifications & experience is hereby granted RECOGNITION under Rule 22C of the Mineral Concession Rules, 1960 as a Qualified Person to prepare Mining Plan / Scheme of Mining / Progressive Mine Closure Plan / Final Mine closure plan.

उनका पंजीकरण क्रमांक/ His Registration Number is

आर.क्यू.पी./बेंग/338/2014/ए

/

RQP/BNG/338/2014/A

यह मान्यता दस वर्ष की अवधि के लिए वैध है जो दिनांक 01.07.2024 को समाप्त होगी।

The recognition is valid for a period of Ten Years, ending on 01.07.2024.

खनन योजना / खनन अभियोजना / उत्तरोत्तर खान बंद / अंतिम खान बंद करने की योजना में यदि कोई गलत/झूठ सूचनाएँ दी गई हो तो उनका यह प्रमाण पत्र वापस ले लिया जाएगा।

Furnishing any wrong/false information in the Mining Plan/Scheme of Mining / PMCP / FMCP may lead to withdrawal of this certificate.

आर.क्यू. पी. के हस्ताक्षर / Signature of RQP

स्थान/Place: बेंगलूर/Bangalore

दिनांक/Date: 02.07.2014



*Mann* 02.07.14  
क्षेत्रीय खान नियंत्रक/

Regional Controller of Mines

E. RAMANUJAN

क्षेत्रीय खान नियंत्रक

Regional Controller of Mines

भारतीय खान ब्यूरो

Indian Bureau of Mines

दोस्तद/बेंगलूर/BANGALORE



**MAHESH. S,**  
**RQP/BNG/338/2014/A**  
TC 31/580, Navadeepam, S.N Nagar, House No: 24,  
Pettah Post Office, Trivandrum, Kerala.  
Mobile No: + 91 9446 303 422  
Email: - maheshsurendranpillai@gmail.com

**CERTIFICATE**

I MAHESH. S hereby certifies that:

1. "The provisions of Kerala Minor Mineral Concession Rules, 2015 have been observed in the Mining Plan including Progressive Mine Closure Plan for Granite (Building Stone) Quarry, over an area of 4.2689 hectares in Village - Valad, Taluk - Mananthavady & District - Wayanad, State- Kerala belonging to Shri. **Ulahanan** R/O - Wayanad District, Kerala and wherever specific permission is required, the lessee will approach the concerned authorities of Department of Mining & Geology for granting the permission.
2. It is also certified that the provisions of Mines Act, Rules and Regulations made there under have been observed in the aforesaid Mining Plan including PMCP and wherever specific permissions are required, the Lessee will approach the Director General of Mines Safety.
3. It is further certified that the aforesaid Mining Plan including PMCP is prepared as per the copies of the records and documents provided by the lessee and information given as per discussions held with the lessee.
4. It is also certified that the information's furnished in the aforesaid Mining Plan including PMCP are true and correct to the best of my knowledge & belief and in case of default, the approval would be withdrawn.

Place: Thiruvananthapuram

Date: 08-01-2018



  
**MAHESH. S**

**RQP/BNG/338/2014/A**

**Validity: - 01-07-2024**

**MAHESH S.**  
**MTech Applied Geology**  
**RQP**  
**RQP No: BNG/338/2014/A**

# QUARRY OWNED BY ULAHANNAN

EDAPUTHUSSERIYIL VEEDU, THALAPPUZHA, VALAD (P.O),  
WAYANAD DISTRICT, KERALA - 670 644.

## CERTIFICATE

1. It is certified that the provisions of Mines Act, Rules and Regulations has been observed in preparing the Mining Plan including Progressive Mine Closure Plan at Re-Survey Nos. 57/16, 57/1270, 57/1069 & 57/1273 in Valad Village, Mananthavady Taluk, Wayanad District, Kerala with Quarry/Mining area of 4.2689 hectare for the proposing Granite (Building Stone) Quarry and wherever specific permissions are required, I will approach the Director of Mines Safety. Further the standards as prescribed by DGMS in respect of miner's health will be strictly implemented.
2. The Progressive Mine Closure Plan of Granite (Building Stone) Quarry at Re-Survey Nos. 57/16, 57/1270, 57/1069 & 57/1273 in Valad Village, Mananthavady Taluk, Wayanad District, Kerala with Quarry/Mining area of 4.2689 hectare complies with all the Statutory Rules, Regulations, Orders made by the Central or State Government, statutory organization, Court etc. and the same have been taken into consideration. Wherever any specific permission is required, I will approach the concerned authorities.

Place: Valad

Date: 08-01-2018



Ulahannan

Owner and Authorized Signatory



# QUARRY OWNED BY ULAHANNAN

EDAPUTHUSSERIYIL VEEDU, THALAPPUZHA, VALAD (P.O),  
WAYANAD DISTRICT, KERALA - 670 644.

## DECLARATION

1. I, **Ulahannan**, aged 51, S/o Joseph, residing at Edaputhusseriyil Veedu, Thalappuzha, Valad (P.O), Wayanad District, Kerala - 670 644 also Owner and authorized signatory with Quarry/Mining area of 4.2689 hectare under category B2, at Re-Survey Nos. 57/16, 57/1270, 57/1069 & 57/1273 in Valad Village, Mananthavady Taluk, Wayanad District, Kerala hereby declare that the Mining Plan including Progressive Mine Closure Plan has been prepared in full consultation with me and I understand its contents and agree to implement the same in accordance with the law and in case of default the approval would be withdrawn.
2. I, **Ulahannan**, Owner and authorized signatory of Granite (Building Stone) Quarry further declare that during the pendency period of approval of the above said documents or thereafter if any changes occur in the name and address of mine, the same will be informed to the authorities promptly.

Place: Valad

Date: 08-01-2018

**Ulahannan**

Owner and Authorized Signatory



# QUARRY OWNED BY ULAHANNAN

EDAPUTHUSSERIYIL VEEDU, THALAPPUZHA, VALAD (P.O),  
WAYANAD DISTRICT, KERALA - 670 644.

## UNDERTAKING

1. I, **Ulahannan**, aged 51, S/o Joseph, residing at Edaputhusseriyil Veedu, Thalappuzha, Valad (P.O), Wayanad District, Kerala - 670 644 also Owner and authorized signatory proposing Granite (Building Stone) Quarry with Quarry/Mining area of 4.2689 hectare under category B2, at Re-Survey Nos. 57/16, 57/1270, 57/1069 & 57/1273 in Valad Village, Mananthavady Taluk, Wayanad District, Kerala hereby undertake that all the commitments so made in the aforesaid Mining Plan & PMCP by the RQP, Mahesh. S is deemed to have been made with my knowledge and consent and so such shall be acceptable to me and binding on me in all respects.
2. I, **Ulahannan**, Owner and authorized signatory proposing Granite (Building Stone) Quarry with Quarry/Mining area of 4.2689 hectare under category B2 at Re-Survey Nos. 57/16, 57/1270, 57/1069 & 57/1273 in Valad Village, Mananthavady Taluk, Wayanad District, Kerala, hereby also undertake that all the measures proposed in this Mining plan and Progressive Mine Close Plan will be implemented in a time bound manner from the date of approval of this Mining plan and PMCP as proposed.

Place: Valad  
Date: 08-01-2018

**Ulahannan**

Owner and Authorized Signatory





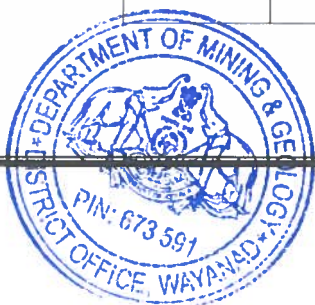
**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

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**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

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**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

**INTRODUCTION**

Granite (Building Stone) is one of the most common rock types in the Geology of Kerala. Granite (Building Stone) is commonly used as Building, Construction 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 plan in this area.

This Mine plan is prepared for the proposed existing quarry of Granite (Building Stone) mining project, which is situated at Re-Survey Nos. 57/16, 57/1270, 57/1069 & 57/1273 in Valad Village, Mananthavady Taluk, Wayanad District, Kerala for an area of 4.2689 hectares in favor of Mr. Ulahannan.

As per Kerala Minor Minerals Concession Rules, 2015, approved Mining Plan (including Progressive Mine Closure Plan) is necessary for the quarrying lease, and the Mining Plan is to be duly certified by a RQP, recognized by Dept. of Mining & Geology, Government of Kerala/Indian Bureau of Mines. The information and data collection for preparing this Mining Plan has been obtained from the field visit, complete survey of lease area and from base line data collection done while preparing EMP.

Location of the Granite (Building Stone) quarry is prepared and attached. Area survey plan approved by the village officer showing lease area is enclosed.

The lease area is a private land and comprises in Re-Survey Nos. 57/16, 57/1270, 57/1069 & 57/1273 in Valad Village, Mananthavady Taluk, Wayanad District, Kerala for an area of 4.2689 hectares. Letter Of Intent, Possession Certificates, Tax Receipts, Thandapper Account, Consents from other Land Owners, Village Affidavit & Single Owner Affidavit are enclosed as Annexure - 1, 2, 3, 4, 5, 6 & 7.



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

## CHAPTER - 1

### 1.0 GENERAL

S. No.	Particulars	
1.	General	
(a)	Name of the Lessee	Mr. Ulahannan
	Address	Edaputhusseriyil Veedu, Thalappuzha, Valad (P.O), Wayanad District, Kerala - 670 644.
	District	Wayanad
	State	Kerala
b.	Status of the Lessee	Individual Owner
c.	Mineral which are Occurring in the area and which the Lessee intends to mine	Granite (Building Stone) - (Minor Minerals)
d.	Period for which the Quarry lease is proposed to be applied	Proposed lease for 12 years
e.	Name of the RQP preparing the mining plan	
	Name	Maresh. S
	Address	TC 31/580, Navadeepam, S.N Nagar, House No: 24, Pettah Post Office, Trivandrum, Kerala.
	Phone	91-9446 303 422
	E-mail	mareshsurendranpillai@gmail.com
	Registration No.	RQP/BNG/338/2014/A
	Date of grant	02-07-2014
	Valid Up to	01-07-2024



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

**f) NAME OF THE PROSPECTION AGENCY:- Mahesh. S (RQP)**

**Reg.No. RQP/BNG/338/2014/A**

*Address of RQP: TC 31/580, Navadeepam,*

*S.N Nagar, House No: 24,*

*Pettah Post Office, Trivandrum,*

*Kerala.*

The lease area has been prospected by the Geological Survey of India and Dept. of Mining & Geology, Government of Kerala and based on the deposits available, the area is proposed for quarrying /mining with lease for the extraction of Granite (Building Stone).

The RQP has carried out a topographical survey and other field work. On the above survey and field observations, a surface cum geological plan were prepared and annexed as Plate No. 3.





**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

## CHAPTER - 2

### 2. LOCATION AND ACCESSIBILITY

#### a) DETAILS OF AREA (WITH LOCATION MAP):

The location map of the lease area has been given in Plate No. 1(B).

The details of the land covered in the lease area are below:

- 1- State : Kerala
- 2- District : Wayand
- 3- Taluk : Mananthavady
- 4- Village : Valad
- 5- Re-Survey no : 57/16, 57/1270, 57/1069 & 57/1273
- 6- Lease area : 4.2689 hectares
- 7- Whether the area is recorded to be in forest: No
- 8- Ownership/occupancy : Private owned land with Rocky land.
- 9- Existence of public road/ railway line, if any nearby and approximate distance: is as under :-

### INFRASTRUCTURE

Following infrastructure facilities are available in lease area:-

S. No.	Name	Distance	Direction
		(From Lease Boundary)	
Nearest Railway Station			
1	Thalassery Railway Station	60 km	W
Nearest Airport			
2	Calicut International Airport	140 km	S
Nearest Highway			
3	Mananthavady - Thalassery (SH 54)	12 km	S
Electric line			
4	Valad	500 mtrs	S





**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

Telephone			
5	Valad	1 km	S
Water			
6	Pond & Open Well	-	-
Dispensary			
7	Govt Health Centre, Valad	2 km	S
Post office			
8	Valad Post Office	2 km	S
Education			
9	Govt School, Valad	2 km	S
Police Station			
10	Thalapuzha Police Station	15 km	NE

## WATER

The total water requirement is about 3.5 KLD in which 0.5 KLD is for domestic uses, 1.5 KLD for dust suppression and 1.5 KLD for plantation purposes and will be sourced from open well.

a. The geographical location of the mine with respect to the pillar boundary of the lease area is given below:-

Latitude (N)	11°48'9.01"N to 11°48'16.19"N
Longitude (E)	75°54'10.80"E to 75°54'18.94"E

b. Present Land use pattern:

S. No.	Particulars	Present Area
1.	Pits	0.0512
2.	Road	0.065
3.	Building	-
4.	Un-worked Area	4.1527
<b>Total</b>		<b>4.2689</b>

b) **General location and vicinity map:** The general location and vicinity map showing area boundaries has been shown in Plate No. 1(B).



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

**CHAPTER - 3**

**3.0 GEOLOGY AND EXPLORATION**

**3.1 TOPOGRAPHY**

The topography of the surrounding lease area is an elevated terrain with quarry land covered with native trees, shrubs, herbs, grass, climbers, bushes etc. Small Part of the proposed land is already under mining and there is no vegetation in that area. The highest elevation of the lease area is 840m MSL and lowest is 760m MSL. As the proposed area is hillock, the drainage of the lease area is towards south direction. No habitants are located in the lease area. Exposed rocks in the lease area are marked on geological plan.

**3.2 REGIONAL GEOLOGY**

The district can be broadly divided into four geological domains viz., the Peninsula Gneissic Complex in the north and central part, ii) the Migmatite Complex in the southcentral part, (iii) the Charnockite Group in the south and (iv) the Wayanad Group in the north. Wayanad Group of supracrustal rocks include garnet-sillimanite-biotite gneiss with or without graphite, kyanite-fuchsite-muscovite-quartz schist, hornblende-biotite schist and gneiss+garnet, amphibolite bands, quartz-sericite schist/quartz-mica schist and meta ultramafites, representing upper amphibolites to lower granulite facies metamorphism. These rocks are found as linear bands in the north. The main member of this group garnet-silimanite-biotite gneiss+graphite occurs as large bodies north of Kabani river. Peninsular Gneissic complex represented by hornblende-biotite gneiss and pink granite gneiss occupies a major part of the district. Charnockite Group comprises charnockite forming the hilly terrain in the south and southeast. Pyroxene Granulite and banded Magnetite Quartzite occur as narrow bands within charnockite. Migmatite Complex is represented by biotite-hornblende gneiss, occurring over a large area in the south-central part. The other member of this group, namely garnetiferous quartzo-feldspathic gneiss+sillimanite occur are narrow bands within the older charnockite. In the east, large bodies of intrusive pink granite occur near Kalpetta and Sulthan Battery. Pegmatite veins are also associated with the granites. Dolerite and gabbro are intrusive into the older rocks.



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

**3.3 LOCAL GEOLOGY**

The local geology belongs to the regional geology. Main rock type in the study area is charnockite. At places where they are exposed, the charnockite is medium to coarse grained with dark grey quartz. The soil & over burden thickness varies from average 1.8m to 1.2m topographically, the area is undulating.

**3.4 GENERAL DESCRIPTION OF FORMATIONS:-**

The details of the pits observed to estimate the top soil and overburden from the proposed area is given below:-

Particulars	Pit - 1
Top soil (thickness in m.)	1.8
Over burden (thickness in m.)	1.2

**3.5 GEOLOGICAL SECTION:**

Geological cross sections have been drawn at fixed intervals across the lease area in Plate No. 3. The section line along which the geological sections have been prepared has been shown in Plate No. 3. The Sections has been drawn across the strike of the host rock.

**3.6 DETAILS OF EXPLORATION:-**

**The lease area is already explored;** the excavated pits give the idea of minerals depth. So no further exploration is required and proposed in this mining plan.

The details of pits such as already made inside the mine area, which have been shown in Surface cum Geological plan. (Plate No. 3).

**3.7 METHOD OF ESTIMATION OF RESERVES:-**

The following points have been considered while calculating the reserves of stone.

- 1- The reserves of minerals have been estimated by using the method of preparation of sections and applying the influence of such sections to limited distance and multiplying it by width.



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- 2- Based on the actual geological mapping and cross section preparation, the proved reserve has been taken.
- 3- The specific gravity of minerals has been taken as 2.5 i.e. 1 m<sup>3</sup> of mineral in situ = 2.5 Ton

### 3.8 RESERVES OF MINERALS

The reserves of minerals have been calculated and the geological and mineable reserves have been given in table no. 3.1.

### 3.9 SUMMARY OF GEOLOGICAL & MINEABLE RESERVES

In this area the Granite (Building Stone) exposures are bordering to the lease boundary. The mineable reserves are arrived after deducting the reserves locked in mines safety slope along with boundary in compliance with mineral concession rules. The quantity of such kind of reserves is arrived as following:-

**Table 3.1 - Mineable Reserves Estimation**

Table 3.1 – Mineable Reserves Estimation										
	BLOCKED						MINEABLE			
BENCH	M2	M	DENSITY	TON		BENCH	M2	M	DENSITY	TON
					A-A1					
775-780	581	57	2.5	82792.5		775-780	136	59	2.5	20060
780-785	502	57	2.5	71535		780-785	207	59	2.5	30532.5
785-790	437	57	2.5	62272.5		785-790	275	59	2.5	40562.5
790-795	369	57	2.5	52582.5		790-795	343	59	2.5	50592.5
795-800	301	57	2.5	42892.5		795-800	412	59	2.5	60770
800-805	234	57	2.5	33345		800-805	479	59	2.5	70652.5
805-810	173	57	2.5	24652.5		805-810	583	59	2.5	85992.5
810-815	140	57	2.5	19950		810-815	352	59	2.5	51920
815-820	112	57	2.5	15960		815-820	143	59	2.5	21092.5
820-825	81	57	2.5	11542.5		820-825	106	59	2.5	15635
825-830	52	57	2.5	7410		825-830	71	59	2.5	10472.5
830-835	27	57	2.5	3847.5		830-835	33	59	2.5	4867
835-840	-	57	2.5	-		835-840	12	59	2.5	1770
				428782.5						464920
					B-B1					
745-750	868	53	2.5	115010		745-750	96	53	2.5	12720
750-755	826	53	2.5	109445		750-755	153	53	2.5	20272.5





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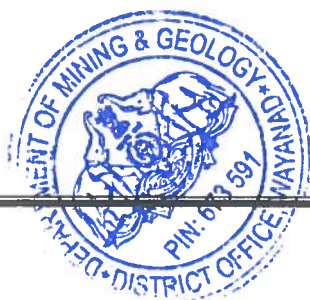
755-760	764	53	2.5	101230		755-760	208	53	2.5	27560
760-765	711	53	2.5	94207.5		760-765	262	53	2.5	34715
765-770	657	53	2.5	87052.5		765-770	316	53	2.5	41870
770-775	603	53	2.5	79897.5		770-775	370	53	2.5	49025
775-780	551	53	2.5	73007.5		775-780	422	53	2.5	55915
780-785	499	53	2.5	66117.5		780-785	473	53	2.5	62672.5
785-790	447	53	2.5	59227.5		785-790	442	53	2.5	58565
790-795	419	53	2.5	55517.5		790-795	303	53	2.5	40147.5
795-800	381	53	2.5	50482.5		795-800	267	53	2.5	35377.5
800-805	343	53	2.5	45447.5		800-805	226	53	2.5	29945
805-810	305	53	2.5	40412.5		805-810	172	53	2.5	22790
810-815	267	53	2.5	35377.5		810-815	149	53	2.5	19742.5
815-820	229	53	2.5	30342.5		815-820	108	53	2.5	14310
820-825	177	53	2.5	23452.5		820-825	84	53	2.5	11130
825-830	56	53	2.5	7420		825-830	131	53	2.5	17357.5
830-835	-	53	2.5	-		830-835	62	53	2.5	8215
				1073647.5						562330
					C-C1					
730-735	624	47	2.5	73320		730-735	277	47	2.5	32547.5
735-740	561	47	2.5	65917.5		735-740	340	47	2.5	39950
740-745	498	47	2.5	58515		740-745	403	47	2.5	47352.5
745-750	436	47	2.5	51230		745-750	465	47	2.5	54637.5
750-755	387	47	2.5	45472.5		750-755	512	47	2.5	60160
755-760	335	47	2.5	39362.5		755-760	493	47	2.5	57927.5
760-765	309	47	2.5	36307.5		760-765	75	47	2.5	8812.5
765-770	283	47	2.5	39352.5		765-770	71	47	2.5	8342.5
770-775	258	47	2.5	30315		770-775	93	47	2.5	10927.5
775-780	232	47	2.5	27260		775-780	119	47	2.5	13982.5
780-785	206	47	2.5	24205		780-785	145	47	2.5	17037.5
785-790	180	47	2.5	21150		785-790	179	47	2.5	21032.5
790-795	155	47	2.5	18212.5		790-795	194	47	2.5	22795
795-800	129	47	2.5	15157.5		795-800	218	47	2.5	25615
800-805	103	47	2.5	12102.5		800-805	202	47	2.5	23735
805-810	77	47	2.5	9047.5		805-810	153	47	2.5	17977.5



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810-815	53	47	2.5	6227.5		810-815	104	47	2.5	12220
815-820	24	47	2.5	2820		815-820	50	47	2.5	5875
820-825	-	47	2.5	-		820-825	14	47	2.5	1645
				569875						482572.5
					D-D1					
760-765	537	62.5	2.5	83906.25		760-765	174	61	2.5	26535
765-770	328	62.5	2.5	51250		765-770	389	61	2.5	59322.5
770-775	274	62.5	2.5	42812.5		770-775	434	61	2.5	66185
775-780	226	62.5	2.5	35312.5		775-780	486	61	2.5	74115
780-785	175	62.5	2.5	27343.75		780-785	539	61	2.5	82197.5
785-790	154	62.5	2.5	24062.5		785-790	563	61	2.5	85857.5
790-795	129	62.5	2.5	20156.25		790-795	506	61	2.5	77165
795-800	103	62.5	2.5	16093.75		795-800	442	61	2.5	67405
800-805	78	62.5	2.5	12187.5		800-805	353	61	2.5	53832.5
805-810	52	62.5	2.5	8125		805-810	299	61	2.5	45597.5
810-815	29	62.5	2.5	4531.25		810-815	217	61	2.5	33092.5
815-820	-	62.5	2.5	-		815-820	83	61	2.5	12657.5
				325781.25						683962.5

SECTION	BLOCKED RESERVE (MT)	MINEABLE RESERVE (MT)	GEOLOGICAL RESERVE (MT)
A-A1	428782.5	464920	893702.5
B-B1	1073647.5	562330	1635977.5
C-C1	569875	482572.5	1052447.5
D-D1	325781.25	683962.5	1009743.75
TOTAL	2398086.25	2193785	4591871.25





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**CHAPTER- 4**

**4.1 MINING**

This section outlines current mining method, estimated production on yearly basis, methods of current production and proposed changes if any and list of mining equipment.

**A) EXISTING/PROPOSED MINING METHOD**

The proposed method of mining will be Semi mechanized open cast mining. The basic mining techniques adopted will be uses of machines. For the systematic working of open cast mines, the main development work will be the forming of systematic benching. The height of bench will not be kept more than 5.0m at a time and the width of the benches will be always kept safe according to provisions. The mining will be done with the help of tools such as drills, jack-hammer, compressors, excavators, rock breaker etc. The targeted annual production of Granite (Building Stone) is about 1,00,000 MT.

**Table: Year wise production of Granite (Building Stone) for five years of mine**

Year	Benches	Minerals (MT)
I	815-820, 820-825, 825-830, 830-835, 835-840	1,00,000
II	810-815, 815-820	1,00,000
III	805-810, 810-815	1,00,000
IV	805-810	1,00,000
V	800-805	1,00,000
	TOTAL	5,00,000

**Drilling:** The excavation of mineral is proposed by excavators. The mineral is fractured and easily exploitable by rock breaker and excavators. The hard strata are proposed to excavate after drilling and blasting.

**Blasting:** The controlled blasting is proposed by adopting all the safety measures as per "MMR 1961" and with the permission of DGMS. In this area for fragmentation of the rock, the blasting will be conducted. Multiple blast holes of 1.0 to 1.5 m depth will be drilled with the help of 32 mm drill rod, Jack Hammer and Air Compressor of 100 Cfm capacity.



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It is estimated about 250g of explosives per hole is required. About 10-15 holes per blast are proposed. Therefore, the requirement of explosives will be about 3.75 kg/blast.

**Loading and Transportation:** Loading of mineral will be done by excavator and will be sent to the crusher located outside the lease area for sizing. Trucks / Tippers of 10T will be used for transportation of mineral from mine site. It is expected that 35-40 trips will be required to transport on daily basis. For this, movement of truck per hour will be 4-5 only. Thus, the impact due to movement of trucks from the mine will be marginal.

**B) Composite Plan and Year wise Section** – Proposed working Plan and Sections for next 5 years are attached.

**C) Plan Showing pit layouts, Dumps, Sub-grade Mineral stack etc.** – The proposed development year wise working is shown in plate. The Sub grade mineral and waste will be stacked in side and boundary barrier of lease area. The 5% marketable mineral will be sub grade, which is saleable in the rainy season when production of mineral is very low due to rain. So there is no as such need of permanent stacking of sub grade mineral. The temporary stacking site of sub grade mineral shown in proposed year-wise development plan.

**D) Proposed Rate of Production and Expected Life of Mine-**

The proposed rate of production for the mine is 1,00,000 MTA. As per mineable reserves, life of mine is 21 years.

**E) Opencast Mines**

**Salient Features of Mode of working-**

The mining will be done open cast Semi mechanized. The working will be done by forming benches of 5.0m (Average) height. The proposals of mining for the next five year workings are given in the table. The Granite (Building Stone) production will be started from the first year. The systematic working of open cast mines, the main development work will be the forming of systematic benching. The height of bench will not be kept more than 5.0m at a time and the width of the benches will be always kept safe according to provisions. The Mining will be done with the help of tools such as drills, jack-hammer, compressors, hand shovel,



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picks, excavators etc. Loading of material will be done with the help of shovel and excavators at face and at stock yard. The truck / tipper will be used for transportation of material from mine to the destination. The cost of the material is directly dependent on the size of the material mined. First Rock bench will be opened by removal of Soil / Over Burden and then Stone will be mined out either by labor or with the help of Excavators/Rock Breaker.

**Production proposed in first five years**

Total Overburden/Waste will generate in 5 years 14851 cu.m (topsoil) & 9900 cu.m (Over burden) Total Stone will excavated in 5 years = 5,00,000MT

**(F) Extent of Mechanization -**

Machines will be deployed as per requirement to meet production target. Brief details of machinery are as follows:-

**(i) Drilling Machines**

Sr. No.	Machine Type	Required No. of M/c	Size/Capacity
1.	Excavator	2	0.9 m <sup>3</sup>
2.	Rock Breaker	2	--
3.	Compressor	1	CFM/100
4.	Tippers/Trucks	5	10T
5.	Jack hammer	1	32 mm
6.	DG set	Nil	--`

**(ii) Loading Equipment**

Mechanical loading equipment such as shovel and excavators will be used for removal and loading of the mineral at face and stock yard.

**(iii) Haulage and Transport Equipment**

**a) Haulage within mining lease hold:** Loading of Stone will be done with the help of Shovel and Excavators at face and stock yard. Stone gitti are loaded manually in the truck.



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**Transport from Mine head to destination:** The truck will be used for transportation of Stone and Stone Ballast from mine site to destination.

**Conceptual Mining plan:**

The final slope angle will be 45°.

**Post Mining Reclamation Plan including afforestation.**

Plantation at 3 m. x 3 m. grid will be done. Plantation will be planted every year. Saplings of local plants will be planted as per the consultation of the local Forests Department Officers.



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## **CHAPTER-5**

### **5.0 BLASTING**

#### **BROAD BLASTING PARAMETERS**

Following are the parameters which is used

Depth of Hole - 1.0 m to 1.5 m

Diameter of hole - 32 mm

Spacing between holes - 1 m

#### **BLASTING PATTERN:**

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

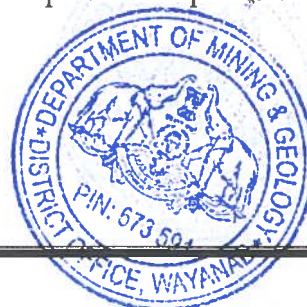
#### **TYPE OF EXPLOSIVE TO BE USED**

Only class 2 and class 6 explosive is proposed for use as given below:-

SL.NO	NAME AND DESCRIPTION	CLASS & DIVISION	SUB-DIVISION (IF ANY)
1	Nitrate Mixture	2,0	0
2	Safety Fuse	6,1	0
3	Ordinary Detonator	6,3	0
4	Electric Detonators	6,3	0

#### **STORAGE OF EXPLOSIVE**

Considering low consumption, a 100 kg magazine exists for storing the explosive. The magazine is nearby the mine boundary. The controlled blasting is proposed by adopting all the safety measures as per "MMR 1961" and with the permission of DGMS. Blasting will be performed as per requirement on the face. The explosives are supplied by authorized dealers and the blasting will be carried out under personal supervision of DGMS approved Blaster/Mate.





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**PRECAUTIONS:**

- a. Proper and safe storage of explosives in approved and Licensed Magazine.
- b. Proper, safe and careful handling and use of explosives by competent Blasters having Blaster's Certificate of Competency issued by DGMS.
- c. Proper security system to prevent theft/ pilferage, unauthorized entry into Magazine area and checking authorized persons to prevent carrying of match box, lights, mobile phones, cigarette etc.
- d. The explosives of class 2 will be used in their original cartridge packing and such cartridge shall not be cut to remove explosive for making cartridge of different size.
- e. Detonators will be conveyed in special containers. These will not be carried with other explosives.
- f. The holes which have been charged with explosives will not be left unattended till blasting is completed.
- g. Before starting charging, clear audible warning signals by Sirens will be given so that people nearby can take shelter.
- h. Blasting operations will be carried out in day times only at designated hours as in this project the mining operations are proposed to be carried out in the day time only.





## **CHAPTER-6**

### **6.0 MINE DRAINAGE**

#### **6.1 Topography:**

The topography of the surrounding lease area is an elevated terrain with quarry land covered with native trees, shrubs, herbs, grass, climbers, bushes etc. Small part of the proposed land is already under mining and there is no vegetation in that area. The highest elevation of the lease area is 840m MSL and lowest is 760m MSL. As the proposed area is hillock, the drainage of the lease area is towards south direction. No habitants are located in the lease area.

Normally, the mine will be closed during rains, in case of necessity accumulated rainy water (free from suspended solid material) from pit bottom may be pumped out & may spilled over adjoining areas, which may be used by native plants (rubber, kongu & tea plantation) and the same will be used for watering saplings/trees in the plantation side.

#### **6.2 Rain Fall:**

The average annual rainfall of the district is 2322 mm. Out of this, major rainfall contribution is from SW monsoon followed by the NE.

#### **6.3 Water Table:**

There is no prominent nalla or river flowing within the lease area. The ground water depths were observed from the available nearby sources. The observation made during the field studies are varying between 20m to 30m below the exiting ground level.



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**CHAPTER-7**

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

**7.1 Nature and Quality of Top-Soil and overburden to be generated**

**7.1.1 Top Soil**

A total quantity of 44007 cu.m of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility. It will be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage.

**7.1.2 Overburden**

About 29338 cu.m of overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, overburden can be reutilized as soil base for plantation.

YEAR	TOPSOIL (CU.M.)	OVERBURDEN (CU.M.)	AREA (HA.)
I-XXI	44007 (concurrent used)	29338 (concurrent used)	0.2 (OUTSIDE)



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**CHAPTER-8**

**8.0 USE OF MINERALS**

The material produced from the quarry is sold to the contractors and to the consumers which is finally consumed locally for road (State Highway & National Highway) & building construction works. Fine Material is also sold to the hollow block/ solid block manufactures.



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**CHAPTER-9**

**9.0 SITE SERVICES AND EMPLOYMENT POTENTIAL**

There is no infrastructure available in the mine area.

The total number of employees including skilled and un-skilled workers is 15 which include workers for mine and ancillary unit. The details of the staff and workmen employed in the mine are given below:-

TOTAL TEAM OF QUARRY OPERATION		
Sr. No.	NAME OF THE POST	NOS.
1	HIGHLY SKILLED	2
2	SKILLED	3
3	SEMI-SKILLED	8
4	UN- SKILLED	2
	TOTAL	15

"The medical facility & other benefits to be provided for the miner's health in accordance with the law". As per Mines Rule-1955, periodical medical examination thereafter of every person employed in the mine at intervals of not more than five years will be arranged. The said examination shall be so arranged over a period of five years that one fifth of the persons employed at the mine undergo the examination every year.





## **CHAPTER-10**

### **10.0 MINERAL PROCESSING**

**10.0 Processing / Beneficiation of the minerals mined:** Granite obtained from the proposed quarry area owned by Ulahannan is transported to the crusher units situated outside the lease area, for crushing, processing / beneficiation needed is sizing and screening / sorting only. The scope of processing of Granite to upgrade the quality is therefore practically limited to size reduction and screening.

**10.2 Disposal method for tailings or waste from the processing plant:** There is no need of any chemical treatment and so no chemical or other waste will not be generated and there will be no cause for effluent discharge.

**10.3 A flow sheet or schematic diagram of the processing procedure:** No processing of mineral is planned in the lease area, only size reduction and screening will be done with the help of crusher and screening machineries outside the lease area.

**10.4 Quantity and type of chemicals used in the processing plant:** Not applicable. Mineral is being crushed and sorted with the help of crusher and screening machineries, hence no chemicals are used.

**10.5 Quantity and type of chemicals stored.** Not applicable and use of chemicals is not envisaged.

**10.6 Quantity (cu.m. per day) of water required for mining and processing and sources of supply of water. Disposal of water and extent of recycling:** Total 3.5 KLD of water is required, for plantation - 1 KLD, Dust Suppression - 1 KLD and for Domestic purpose - 0.5 KLD. This will be obtained from pond & open well. No significant waste water will be generated and so no proposal of recycling of wastewater.



## **CHAPTER-11**

### **11.0 ENVIRONMENTAL MANAGEMENT PLAN**

Environment Management Plan is a systematic programme which includes environment impact assessment, planning for offsetting the ill effects of development, implementing the programme for resource management, development planning, and close control over day-to-day operations, regular monitoring and auditing of environmental performance.

Collection of base line information is essential which serve as a guide to determine how the future development will affect the environment compared to the present base line status.

#### **11.0 (A) BASE LINE INFORMATION:-**

Most of the useful base line information has been collected in the field which are very helpful in preparation of this mining plan which is as given below:-

##### **11.0 (A) (i) EXISTING LAND USE PATTERN:-**

Existing land use pattern has been described for land use in lease area, core zone and buffer zone separately.

##### **11.0 (A) (ii) LAND USE IN LEASE AREA:-**

The land in the lease area is private own land. Part of the proposed land is already under mining and there is no vegetation in that area. The remaining land in the proposed land is mostly covered with native trees, shrubs, herbs, grass, climbers, bushes etc.

##### **11.0 (A) (iii) LAND USE IN CORE ZONE:-**

Land, in core zone i.e. 500 m around the lease area is generally hillock and is used for mining. The other area is covered with mixed plantation of rubber, kongu & tea plantation. In addition to above, there are no houses within 100m radius from the proposed quarry and the nearest house is located at 105.5m of the mine boundary.



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**11.0 (A) (iv) LAND USE IN BUFFER ZONE:-**

Area around the lease area within a radius of 10 km is dominated by hillocks and mixed plantation of rubber, kongu & tea plantation and water body is flowing far away from the mine boundary.

In addition to above, there are villages, panchayat roads, perennial water body, power transmission line and telephone lines etc. in this zone.

**11.0 (A) (v) DEGRADATION OF LAND & CHANGE OF PROFILE-IMPACT ON LAND USE:-**

There will be no change on existing land use in the lease area and there will not be any change in buffer zone.

**11.0 (A) (vi) WATER REGIME:-**

In the buffer zone, there is no prominent nalla or river flowing within the lease area. The ground water depths were observed from the available nearby sources. The observation made during the field studies are varying between 20m to 30m below the exiting ground level.

**11.0 (A) (vii) RAINFALL:-**

The average annual rainfall of the district is 2322 mm. Out of this, major rainfall contribution is from SW monsoon followed by the NE.

**11.0 (A) (viii) QUALITY OF AIR:-**

Quality of present ambient air is within the permissible limit of CPCB norms.

**11.0 (A) (ix) FLORA:-**

Part of the proposed land is already under mining and there is no vegetation in that area. The remaining land in the proposed land is mostly covered with native trees, shrubs, herbs, grass, climbers, bushes etc.



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**11.0 (A) (x) FAUNA:-**

There is no wild life in core zone, buffer zone and lease area. The barren and agricultural lands with urban activities all around the area do not provide favorable home land to wild fauna. The details studies were carried out and are provided.

**11.0 (A) (xi) AMBIENT NOISE LEVEL:-**

Mining will be by semi-mechanized opencast method so no significant increase in noise level is expected.

**11.0 (A) (xii) CLIMATIC CONDITIONS:-**

The district has more or less the same climatic conditions prevalent elsewhere in the State viz. dry season from December to February and hot season from March to May, the South-West monsoon from June to September and the North East monsoon from October to December. The average annual rainfall of the district is 2322 mm. Out of this, major rainfall contribution is from SW monsoon followed by the NE. The South West monsoon is usually very heavy and nearly 80% of the rainfall is received during this season. NE monsoon contributes nearly 20%.

**11.0 (A) (xiii) HUMAN SETTLEMENT:-**

There are no houses within 100m radius from the proposed quarry and the nearest house is located at outside the 105.5m of the mine boundary. The occupation of the inhabitants of these villages is mainly connected with mining of different minerals & crushing industry. They work as subcontractors, transporters and mine workers. Some are also employed in different industries in the nearby town and do trading and agricultural work.

**11.0 (A) (xiv) PUBLIC BUILDING, PLACES OF WORSHIP AND MONUMENTS:-**

There are no public buildings, places of monuments within 50m of applied area.



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**11.0 (A) (xv) LOCATION OF SAMPLING STATIONS:-**

Location of sampling stations has been selected and results obtained from site.

**11.0 (A) (xvi-a) DOES AREA (PARTLY OR FULLY) FALL UNDER NOTIFIED AREA  
UNDER WATER (PREVENTION & CONTROL OF POLLUTION) ACT, 1974:-**

No

**11.0(A)(xvi-b)ENVIRONMENT IMPACT ASSESSMENT STATEMENT DESCRIBING  
THE IMPACT OF MINING AND BENEFICIATION ON ENVIRONMENT OVER  
THE NEXT 5 YEARS :-**

There will not be any significant impact of mining on environment due to various mitigation measures.

**11.0 (B) LAND USE:-**

The details of land area indicating the area likely to be degraded due to mining will be as under:-

S. No.	Land Use Category	Pre-Operational (Ha.)	Operational (Ha.)	Post-Operational (Ha.)
1	Top Soil Dump	Nil	0.20 (Outside)	-
2	Over burden	Nil		-
3	Excavation	0.0512	1.200(1.00ha Reclaimed by plantation)	3.612 (Reclaimed by plantation)
4	Road	0.065	0.075	0.075
5	Built Up Area	-	-	-
6	Drainage	-	-	-
7	Green belt	-	0.5819	0.5819
8	Undisturbed Area	4.1527	2.412	-
<b>Total</b>		<b>4.2689</b>	<b>4.2689</b>	<b>4.2689</b>

**11.0(B) (i) BASE LINE DATA:-**

The base line data of the existing environment around the applied area has been undertaken with respect to the following:-

1-Ambient air quality

2-Water quality





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3- Soil quality

4-Noise

**11.0(B) (ii) AMBIENT AIR QUALITY:-**

Quality of present ambient air is within permissible limit. There is no industrial activity in and around the lease area.

The mining has been proposed by semi-mechanized open cast method. Water spraying will be done on haul/service roads, mining area, loading and unloading places etc. There will not be any significant impact on ambient air quality.

**11.0(B) (iii) WATER QUALITY:-**

Drinking water is made available in the site from open well.

**11.0(B) (iv) NOISE LEVEL:-**

Since mining has been proposed as semi-mechanized open cast method, the noise level will be within permissible limit.

**11.0(B) (v) VIBRATION LEVELS (DUE TO BLASTING)**

The only source of ground vibrations is due to blasting operations. Based on the ground vibration studies made earlier proper care will be taken during blasting operations.

**11.0(B) (vi) WATER REGIME:-**

There is no natural water body in the lease area. Mining operation will terminate much before the water table and there is no intersection.

**11.0(B) (vii) SOCIO-ECONOMICS:-**

The mining in the region will open the gates for socio-economic upliftment of the area and the area in and around the lease area. People will either be employed in the mines getting reasonable wages or will be self-employed in the ancillary work of mining. At the same time people will be getting better facilities of communication and amenities due to mining activities in the region.



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**11.0(B) (viii) HISTORICAL MONUMENTS ETC.:-**

There are no historical monuments within 50m of applied area, hence there will not be any affect on historical monuments.

**11.0 (C) ENVIRONMENT MANAGEMENT PLAN**

**11.0 (C) (i) TEMPORARY STORAGE AND UTILISATION OF TOP SOIL:-**

**Topsoil Management**

A total quantity of 44007 cu. m. of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility and shelf life. It will be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage.

**Overburden Management**

About 29338 cu. m. of overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, overburden can be reutilized as soil base for plantation.

**11.0(C) (ii) YEAR WISE PROPOSALS FOR RECLAMATION OF LAND AFFECTED BY  
ABANDONED QUARRIES AND OTHER MINING ACTIVITIES DURING FIRST  
FIVE YEARS:-**

As the mining will progress, the areas where ultimate pit depth is reached, backfilling will be started. This will be reducing the transportation of overburden and waste outside the pit area.

**11.0 (C) (iii) EXTENT OF BACKFILLING AND RECONTOURING:-**

There is proposal of backfilling and re-contouring during the next five years of this mining plan.



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**11.0(C)(iv) ALTERNATE USE OF UNFILLED/PARTIALLY FILLED/ EXCAVATIONS/  
ROAD SIDES/ SLOPES AND MINE:-**

The reclaimed area may also be considered for plantation to develop green belts.

**11.0 (C) (v) USE OF ABANDONED QUARRIES/PITS PROPOSED TO BE USED AS  
RESERVOIR ETC:-**

Abandoned pits will be utilized for water storage during rainy season. This water will be utilized for irrigation and plantation etc. It will also help in recharging the ground water.

**11.0 (C) (vi) PROGRAMME FOR AFFORESTATION:-**

The year wise programme of eco-restoration for the life of mine, about 1400 trees will be planted in an area of 0.5819 ha.

Biological reclamation / ecological restoration for the mined area by plantation of the species as per the time schedule suggested below: -

First Six months	--	Herbs & grass
Next Six months	--	Shrubs
Next Six months onwards	--	Trees

Selection of species is based on High Dust Capturing, Soil Holding Capacity, ground water recharge capacity etc. More focus is given for medicinal plants.

**11.0 (C) (vii) PLANTATION PROGRAMME:-**

(i) Plantation along the boundary of the lease area i.e. within 7.5 m barrier of the lease area boundary has been proposed which will help to improve the environment and ecology.

(ii) Plantation will be done around offices, road side and fencing boundary etc.

**11.0 (C) (xiv) SPECIES TO BE PLANTED:-**

Further afforestation programme up to conceptual plan period will be similar to the above five years programme which will be repeated every three years.



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**11.0 (C) (xv) POST PLANTING CARE:-**

Post planting care is most essential for healthy growth of vegetation. This will comprise:-

- (i) Replacement of casualties at the first opportunity itself.
- (ii) Weeding monthly for first two months and later on six monthly.
- (iii) Irrigation fortnightly from October to March, once in 10 days between April and June.
- (iv) Soil working, Manuring, mulching etc. twice in a year.
- (v) Protection from grazing cattle etc.

**11.0 (C) (xviii) TREATMENT AND DISPOSAL OF WATER FROM MINE:-**

There will not be any disposal of water from the mine and hence no treatment of water is required. The mines working have been proposed quite above the ground water table.

**MEASURES FOR MINIMISING ADVERSE EFFECTS ON WATER REGIME:-**

There is no natural water body in the leased area. The garland drains / check dam will be built around the dump to channelize runoff water through settling ponds.

**11.0 (C) (xix) PROTECTIVE MEASURES FOR GROUND VIBRATIONS / AIR BLAST  
CAUSED BY BLASTING:-**

The controlled blasting is proposed by adopting all the safety measures as per "MMR 1961" and with the permission of DGMS.

In this area for fragmentation of granite the blasting will be conducted. Multiple blast holes of 1.0 to 1.5 m depth will be drilled with the help of 32 mm drill rod, Jack Hammer and Air Compressor of 100 cfm capacity.

It is estimated about 250g of explosives per hole is required. About 10-15 holes per blast are proposed. Therefore, the requirement of explosives will be about 3.75 kg/ blast.

**11.0 (C) (xx) MEASURES FOR PROTECTING HISTORICAL MONUMENTS:-**

Since there are no historical monuments within 50m of applied area, no measures for protecting of these monuments are required.



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**11.0 (C) (xxi) REHABILITATION OF HUMAN SETTLEMENTS LIKELY TO BE DISTURBED  
DUE TO MINING ACTIVITY:-**

The mining activity will be confined to areas away from villages. No population will be affected by mining activities and as such the question of rehabilitation of the people displaced by mining operations does not arise.

**11.0 (C) (xxii) SOCIO-ECONOMIC BENEFITS ARISING OUT OF MINE:-**

It is expected that mining can boost the gross economic production of the area other than industrial activities. It provides new avenues of direct or indirect employment and business. These coupled with growth in infrastructural facilities results in improved socio-economic prospects.

The mining in the region will open the gates for socio-economic upliftment of the area. People will be employed in the mines and will be self-employed in the ancillary works. People will be getting better facilities of communication and amenities due to mining activities in the region.

**11.0 (D) ENVIRONMENTAL MONITORING:-**

An environment protection cum afforestation cell has been proposed. It will be responsible for implementing the proposed measures and monitor the progress of implementation and reinforce them wherever necessary.

**11.0 (D) (i) LAND USE MANAGEMENT:-**

**(i) Topsoil Management**

Topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility and shelf life. It will be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage.





**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
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**(ii) Overburden Management**

Overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, Overburden can be reutilized as soil base for plantation.

**(iii) End Land Use Plan**

As a result of phase wise working of the pit area will be reclaimed at the end of mining operation leaving no void.

**11.0(D) (ii) MANAGEMENT OF MINING ENVIRONMENT DEGRADATION  
(GENERAL):-**

Following control measures will be taken to abate the deteriorating impact on environment and improving the same. For affective management of this, a few persons will be exclusively provided who will be responsible for implementing the control measures and to monitor the progress of implementation of these measures in order to minimize environmental degradation.

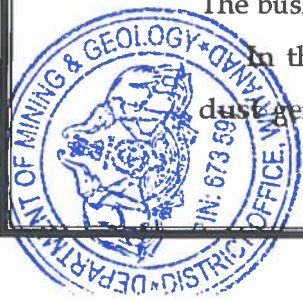
**11.0(D) (iii) SOLID WASTE MANAGEMENT:-**

The mine waste proposed is to be stacked in the dump area specially provided for the purpose. Care will be taken in selecting the site for the stacking yards for the stacking purpose. It will be located in a secure place and having solid base and on a non-used zone. These dump yards have been protected by toe walls. The toe walls will be constructed during first year period. The height of these dumps will also be restricted and benched. A retaining wall 0.5 m x 1.0 m will be made on the low altitude side of the dump.

**11.0(D) (v) MONITORING OF AIR BORNE DUST:-**

Vegetation cover will help in restricting the spread of dust in surrounding area. The bushes and scrubs will also act as barriers for arresting spread of dust there.

In the mine, dust is generated mostly by plying of tractor/trucks. Air borne dust generated by plying of trucks can be considerably reduced by sprinkling water on



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roads. A tanker of about 1000 liters capacity will be deployed for this purpose especially in the dry seasons.

**11.0(D) (vi) MANAGEMENT OF NOISE PROBLEM:-**

Source of noise pollution have already been dealt.

To reduce the noise caused by machineries and equipments at the mine, mufflers of adequate size and capacity shall be provided with equipments at the mine.

Chief sources of noise pollution in the mine will be vehicle.

Based on LOI practice, in Directorate General of Mines Safety circular no.-158 (Tech.) of 1975, noise standards have been recommended. According to this, there is a warning limit value of 85 db (A) by which the danger of hearing impairment and deafness may result from unprotected ear.

Personnel protective equipment have to be used if there are single isolated out bursts of noise which can go above 130 db (A) impulse or 120 db (A). Noise from trucks can be reduced by using mufflers of adequate size and strength and better maintenance of the equipments.

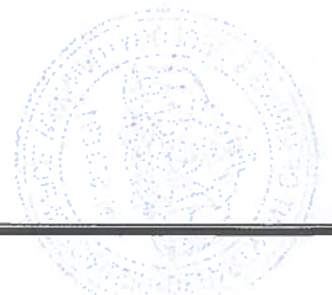
Noise will not be the problem as the mining has been proposed by semi-mechanized open cast method.

**11.0(D) (vii) MANAGEMENT OF GROUND VIBRATIONS:-**

The only source of ground vibration is due to blasting operation. Based on the Ground Vibration study studies made earlier, proper care will be taken during blasting operation.

**11.0(D) (viii) MANAGEMENT OF LAND SLIDE PROBLEM:-**

The final pit slope is kept at not steeper than 45° which is not likely to cause any problem in respect of slope stability. Thus there is no likelihood of any landslide at any stage in future.



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**11.0(D) (ix) MANAGEMENT OF HUMAN SETTLEMENT PROBLEM:-**

The mining activity will be confined to remote area away from villages. No population will be affected by such mining activities. As such the question of rehabilitation of the people displaced by mining operations does not arise.

**11.0(D) (x) MANAGEMENT OF WILD LIFE HABITATE:-**

No specific management is proposed because there is no wildlife, sanctuary etc. within the study area.

**11.0(D) (xi) MANAGEMENT OF FLORA:-**

Existing flora will be improved by plantation of trees.

**11.0(D) (xii) MANAGEMENT OF TOP OVERBURDEN:-**

Top overburden will be stored in the non used zone and sold out as per market demand.

**11.0(D) (xiii) MANAGEMENT OF CROPPING PATTERN:-**

No management is specifically being proposed because of any apparent adverse impact on cropping pattern due to mining.

**11.0(D) (xiv) WATER COURSES, SPRINGS ETC. MANAGEMENT THEREOF:-**

Not Applicable.

**11.0(D) (xv) MANAGEMENT OF SOCIO-ECONOMIC PROBLEMS:-**

The mine is situated in a remote area, where the socio-economic status of the people is not satisfactory. There are no industries in the area. There will be positive impact on socio-economic conditions of the area due to mining. The mining operations in such remote places would provide direct and indirect employment to local people.



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**11.0(D) (xvi) CLIMATE-MANAGEMENT FOR IMPROVEMENT:-**

Proposed plantation will improve present climatic conditions. This will be continuously monitored by environment management cell.



**ULAHANNAN**

(Lessee)



**MAHESH. S**

RQP/BNG/338/2014/A

**MAHESH S.**

**MTech Applied Geology  
RQP**

RQP No: **BNG/338/2014/A**



**GEOLOGIST  
DISTRICT OFFICE  
DEPT. OF MINING & GEOLOGY  
MEENANGADI, WAYANAD - 673 591**

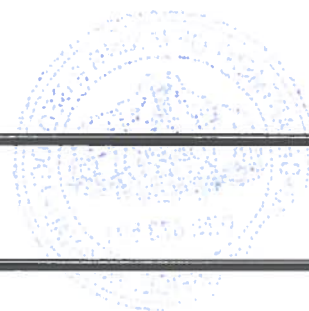
## CHAPTER – 12

# MINING PLAN WITH

# PROGRESSIVE

# MINE

# CLOSURE PLAN





**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

**1.0 INTRODUCTION**

**(a) Name & Address of lessee:**

**Ulahannan**  
Edaputhusseriyil Veedu,  
Thalappuzha, Valad (P.O),  
Wayanad District, Kerala - 670 644.

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

District and State : Wayanad, Kerala  
Tehsil : Mananthavady  
Village : Valad

**(c) Extent of the Lease Area**

Type of Land	Lease Area (in hect.)
Private Land	4.2689

**(d) Present Land Use Pattern:**

S. No.	Particulars	Present Area (in Ha.)
1.	Pits	0.0512
2.	Road	0.065
3.	Drainage / Pond	Nil
4.	Un-worked Area	4.1527
5.	Infrastructure	-
<b>Total</b>		<b>4.2689</b>



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
Valad Village, Mananthavady Taluk & Wayanad District, Kerala.**

**(e) Method of mining**

It is a working quarry under permit. Mining is carried out by open cast semi mechanized method. As per the mining lease area and geological formation of the mining lease area, the manual mining is proposed to achieve the annual targeted production.

**(f) Mineral processing operation:**

Sorting of mineral has been carried out manually. No other processes of mineral processing have been proposed in the mining lease area.

**1.1 Reasons for Closure:**

This is an existing mine and the economical mineral reserve does exist in the mining lease area so reasons for closure of mine is not applicable at present.

**1.2 Statutory Obligations:**

This is an existing Mining lease area, The PMCP Prepared in Compliance of Rules 37E (VI) so statutory obligation for closure of mine is not applicable at present.



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
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**1.3 Closure Plan Preparations**

**A. NAME, ADDRESS AND REGISTRATION NUMBER OF THE  
RECOGNISED PERSONS WHO PREPARED THE PROGRESSIVE  
CLOSURE PLAN**

Name of RQP- MAHESH. S

Reg.No. RQP/BNG/338/2014/A

Validity: 01-07-2024

Address of RQP: TC 31/580, Navadeepam,  
S.N Nagar, House No: 24,  
Pettah Post Office, Trivandrum,  
Kerala.  
Mobile No: 91-9446 303 422  
Email: - maheshsurendranpillai@gmail.com

**Executing Agency**



**Ulahannan**

(Lessee)



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
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**2.0 MINE DESCRIPTION:**

Refer Chapter 3

**Mineral Beneficiation:**

No beneficiation is required at mine site. The mineral is directly marketable.



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
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**4.0 CLOSURE PLAN**

**4.1 Mined-Out Land:**

At the end of mining Plan period about 4.2689 ha area will be disturbed in form of pit, road and building. Life of the mine is 21 years. The proposal for reclamation or rehabilitation of mined out land with manner in which the actual site of the pit will be restored for future use is given below:

Sr. No.	Land Use Category	Pre Operational (Ha.)	Operational (Ha.)	Post-Operational (Ha.)
1	Top Soil Dump	Nil	0.10 (Outside)	-
2	Over burden	Nil		
3	Excavation	0.0512	1.200 (1.0 ha Reclaimed by plantation)	3.612 ( Reclaimed by plantation)
4	Road	0.065	0.075	0.075
5	Built Up Area	-	-	-
6	Township Area	Nil	Nil	Nil
7	Afforestation	Nil	-	-
8	Reclamation (Backfilled)	Nil	Nil	Nil
9	Green belt	-	0.5819	0.5819
10	Processing	Nil	Nil	Nil
11	Drainage / pond	Nil	-	-
12	Undisturbed Area	4.1527	2.412	-
<b>Total</b>		<b>4.2689</b>	<b>4.2689</b>	<b>4.2689</b>

Towards the closure activity plantation at the end of Plan Period is as follows:

ACTIVITY	First	Second	Third	Fourth	Fifth
PLANTATION (NO. OF PLANTS)	50	50	50	50	50





**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
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**4.2 Water quality management:**

**Surface water: -**

There is no surface water body within existing lease area and hence impact of mining on surface water will not take place.

**Ground water quality: -** Mining will not take place upto the water table and there will be no intersection, hence there will be no impact on ground water. Therefore, its quality will remain unchanged. No ground water management is required.

**4.3 Air Quality management**

Mining operation is of small scale so air pollution due to dust will be negligible. Water sprinklers are proposed on haul road once in a day especially during dry seasons. The drilling and blasting, excavation and loading shall not be done during high wind.

**4.4 Waste management**

About 29338 cu. m. of overburden will be generated throughout the mine life. This waste will be utilized within the pit for lying of haul roads. At the end use, Overburden can be reutilized as soil base for plantation.

**4.5 Top Soil Management**

A total quantity of 44007 cu. m. of topsoil is proposed to be removed during the mining operations. The topsoil excavated from the quarry will be dumped separately at pre-determined place and subsequently will be utilized in spreading over reclaimed areas for plantation. Precautions will be taken to limit the height of the topsoil dump to 5 to 6 meters in order to preserve its fertility. It will be suitably protected from soil erosion and infertility by planting fodder grass and leguminous plants during temporary storage.



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**4.6 Tailing Dam Management:**

Not Applicable.

**4.7 Infrastructure**

No infrastructure is proposed to develop inside the lease area.

**4.8 Disposal of Mining Machinery**

Machines will be deployed as per requirement to meet production target. The question of disposal of mining machinery does not arise as the closure plan is progressive in nature. Brief details of machinery are as follows:-

**(i) Drilling Machines**

Sr. No.	Machine Type	Required Number
1.	Excavator	2
2.	Rock Breaker	2
3.	Compressor	1
4.	Tippers/Trucks	5
5.	Jack hammer	1
6.	DG set	Nil

**4.9 Safety & Security**

Safety measures will be implemented to prevent access to surface opening excavations as per mines Act 1952. This is a small-scale open cast mine and so only some part of the area will be the working zone. The area shall be fenced with proper gates which shall be guarded by security personals.

**4.10 Disaster Management and Risk Assessment**

Open cast mining method is adopted in this mine. If the benches are made with proposed height and width no risk will be there. Even then if any minor or major accident happens, the mines staffs having First Aid facilities with first aid box with all



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the necessary medicines etc to give the first aid treatment at the site and will arrange a vehicle immediately to reach the nearest hospital which is situated 2 km from the site. If any disaster happens the lessee is capable to meet such eventualities.

**Care and Maintenance during temporary discontinuance**

During the temporary discontinuance the working place will be fenced completely and a board of discontinuance will be displayed at the main entrance of the working place. One worker will be kept on the leased area to watch the area and look after the survival of the plants.

**5.0 Economic Repercussions of closure of mine and Manpower retrenchments.**

In case of the closure of the mine, there will be a plan for the voluntary retirement scheme as per rules.

**6.0 Time scheduling for abandonment:**

As per mineable reserves, the life of the mine is around 21 years as on now hence no scheduling for abandonment operations are proposed.

**7.0 Abandonment Cost**

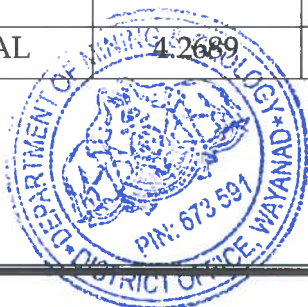
Abandonment is not proposed during five years of Mining operation. But implementation of waste management like retaining wall and afforestation is proposed as continuous process. Cost of these is around Rs. 1,00,000 per year.



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
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**Table Indicating the Break Areas in the Mining Lease For Calculation of Financial  
Surface.**

Sr. NO	Head	Area put on use at start of Plan. (In Ha.)	Additional requirement during Plan period. (In Ha.)	Total (In Ha.)	Area considered as fully reclaimed & rehabilitated (In Ha.)	Net area considered for calculation (In Ha.)
1.	Area under mining	0.0512	2.3608	2.412	3.577	3.577
2.	Storage for top soil	0.0000	0.1 (Outside)	0.1 (Outside)	0.0	0.0
3.	Overburden /dump	0.0000	0.1 (Outside)	0.1 (Outside)	0.0	0.0
4.	Mineral storage	0.0000	0.0000	0.0000	0.0000	0.0000
5.	Infrastructure Workshop, administrative Building etc.)	0.0	0.0	0.0	0.0	0.0
6.	Road	0.065	0.01	0.075	0.075	0.075
7.	Green Belt	0.0000	0.5819	0.5819	0.5819	0.5819
8.	Drainage/ pond	0.0000	0.035	0.035	0.035	0.035
9.	Effluent Treatment Plan	0.0000	0.0000	0.0000	0.0000	0.0000
10.	Mineral Separation Plan	0.0000	0.0000	0.0000	0.0000	0.0000
11.	Afforestation	0.0000	0.0	0.0	0.0	0.0
12.	Undisturbed Area	4.1527	1.2912	1.165	0.0000	0.0000
GRAND TOTAL		4.2689	4.2689	4.2689	4.2689	4.2689



**Mining Plan for Granite (Building Stone) Quarry owned by Ulahannan at  
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**9.0 PLANS, SECTIONS etc.**

All relevant plans & sections have been enclosed.

1. Key Map
2. Route Map And Vicinity Map
3. Area Survey Sketch
4. Google Map With Site Superimposed
5. Digital Lease Plan
6. Surface cum Geological Plan
7. Geological Sections
8. Development Plan
9. Development Sections
10. Year wise Tentative Excavation Plan (PMCP)
11. Year wise Sections
12. Reclamation Plan
13. Reclamation Sections
14. Environmental Plan
15. Conceptual Plan
16. Conceptual Sections
17. Drainage Plan

Place: Thiruvananthapuram

Date: 08-01-2018

  
**GEOLOGIST  
DISTRICT OFFICE  
DEPT. OF MINING & GEOLOGY  
MEENANGADI, WAYANAD - 673 591**

  
MAHESH. S

RQP/BNG/338/2014/A

Validity: - 01-07-2024

**MAHESH S.  
MTech Applied Geology  
RQP  
RQP No: BNG/338/2014/A**



MAP 11.2  
MTECH Applied Geology  
R112  
R09 No: BNG00010141A

11.2  
MTECH Applied Geology  
R112  
R09 No: BNG00010141A

# ANNEXURE



# **ANNEXURE 1**

## **LETTER OF INTENT**



No. 1833/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 : 21-03-2018

From

The Director of Mining & Geology

To

✓ Shri. Ulahannan,  
S/o Joseph, Edaputhusseriyil Veedu,  
Thalappuzha, Valat.P.O,  
Wayanad District— 670 644

Sir,

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

Ref:- 1. Letter No. DOW/M-2324/2017 dtd. 14/02/2018 of the Geologist, District  
Office, Wayanad.  
2. KMMC Rules 2015.

Attention is invited to the above references. As per the reference 1<sup>st</sup> cited, you have applied for obtaining a quarrying lease from this office for the extraction of granite building stone from an area of 4.2689 Hectares in Re-Survey No. 57/16, 57/1270, 57/1069, 57/1273 of Valad Village of Mananthavady Taluk in Wayanad District (Geo co-ordinates Lat. (N) 11° 48' 10.52" and 75° 54' 17.07" ) as shown in the Survey Map submitted along with the application. On verifying the documents received from the Geologist, District Office, Wayanad, it is seen that a quarrying lease can be granted to the area applied for under the provisions contained in the KMMC Rules 2015 subject to the production of under mentioned valid documents. It is further informed that a quarrying lease would be granted under the said rules to you to the said area if you produce the said documents to the satisfaction of this office in accordance with the relevant statutes.





## DOCUMENTS TO BE PRODUCED

1. Mining plan and environmental clearance as stipulated in the KMMC rules 2015, to the area applied for.
2. Consent from the Pollution Control Board.
3. Explosive licence from the authorities concerned.
4. D & O Licence from the Local Self Government authorities concerned.

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/NOC etc. by the other statutory authorities concerned. All the Survey Nos. included in the survey map submitted in this connection shall be included in all the afore said documents.

It is further informed that this letter of intent is valid up to the date of grant of quarrying lease for the purpose of obtaining other statutory licences concerned.

Yours faithfully,

*Arjun*  
for DIRECTOR OF MINING & GEOLOGY(I/C)

### Copy to:-

1. The District Collector & Chairman, DEIAA, Wayanad.
2. The Geologist, District Office, Wayanad.
3. The Chief Controller of Explosives, Ernakulam
4. Kerala State Pollution Control Board, District Office, Wayanad.
5. The Secretary, Thavinjal Grama Panchayath, Wayanad District.





# **ANNEXURE 2**

---

# **POSSESSION**

# **CERTIFICATE**





GOVERNMENT OF KERALA  
VALAD VILLAGE OFFICE  
POSSESSION CERTIFICATE

No. 27399485

Date: 30/08/2017

Name of Person to whom certificate is issued	BERLY BABY
Name of Father	BABY
Address	EDAPUTHUSSERY HOUSE, 340, VALAD
Post Office with PIN Code	VALAD, 670644
District	Wayanad

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
Mananthavady/ Valad		001	57/16	1.3719	263	Dry

Certificate Issued Date	30/08/2017
Designation of the Issuing officer	Special Village Officer
Purpose for which the certificate is issued for	MINING AND GEOLOGY DEPARTMENT

This certificate is issued based on the details given in the application, local enquiry, facts and records produced.



Security Code : BKIZE

Signature valid

Digitally signed by SAVI M G  
Date: 2017.08.30 14:24:20 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), 04712335523/04712115094/04712115098(from other networks) and quote the Certificate Number to the operator.



GOVERNMENT OF KERALA  
VALAD VILLAGE OFFICE  
POSSESSION CERTIFICATE

No. 27399430

Date: 30/08/2017

Name of Person to whom certificate is issued	ULAHANNAN
Name of Father	JOSEPH
Address	EDAPUTHUSSERY, 340, VALAD
Post Office with PIN Code	VALAD, 670644
District	Wayanad

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
Mananthavady/ Valad		001	57/1273	0.8701	2187	Dry
Mananthavady/ Valad		001	57/1270	1.2141	2187	Dry
Mananthavady/ Valad		001	57/1069	1.2141	2187	Dry

Certificate Issued Date	30/08/2017
Designation of the Issuing officer	Special Village Officer
Purpose for which the certificate is issued for	MINING AND GEOLOGY DEPARTMENT

This certificate is issued based on the details given in the application, local enquiry, facts and records produced.

Security Code : 98A2Q



Signature valid

Digitally signed by S A V I M G  
Date: 2017.08.30 14:23:21 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), 04712335523/04712115094/04712115098(from other networks) and quote the Certificate Number to the operator.

# **ANNEXURE 3**

# **TAX RECEIPT**





# കേരള സർക്കാർ

## രസീത്

തണ്ടപ്പേർ നമ്പർ 263 അനുസരിച്ച് കരം ഒടുക്കിയതിന് രസീത്



ജില്ല : വയനാട്

KL1201160433/2017

താലൂക്ക് : മാനന്തവാടി

വില്ലേജ് : വാളാട്

ബ്ലോക്ക് : 001

സർവ്വേ നമ്പരും & സബ് ഡിവിഷൻ നമ്പരും ലെറ്ററും	വിസ്തീർണ്ണം			പട്ടാദാരന്റെയോ പട്ടാദാരന്മാരുടെയോ പേര്	ഒടുക്കിയ സ്വഭാവം	പണം ഒടുക്കിയ ആളിന്റെ പേര്	ഏത് കാലത്തേക്കെന്നോ ഏത് തവണക്കെന്നോ	തുക		റിമാർക്സ്
	ഹെ.	ആർ	സ്ക്വ.മീ.					രൂപ	പൈസ	
57/16, പുരയിടം വിസ്തീർണ്ണം: 1 ഹെ., 37 ആർ, 19 സ്ക്വ.മീ. പട്ടാദാരന്മാരുടെ വിവരങ്ങൾ: ബേർളി ബേബി, എടപ്പള്ളിയിൽ, വാളാട്,						AKSHAYA VALAD	2017-2018			
					ഭൂമികൃതി:					
ആകെ തുക									₹276	

മേൽ വിവരിച്ച പ്രകാരം ₹276(ഇരുന്നൂറ്റി എഴുപത്തിയാറ് രൂപ) 2017 മെയ് മാസം 02 തീയതിയായ ഇന്നേ ദിവസം സ്വീകരിച്ച് വില്ലേജ് കണക്കിൽ മുതൽ വച്ചിരിക്കുന്നു.

ടി വില്ലേജിലെ റീസർവ്വേ നടപടികൾ പൂർത്തിയാക്കാത്തതിനാൽ രസീതിൽ സൂചിപ്പിച്ചിരിക്കുന്ന ഭൂവിവരങ്ങളുടെ ആധികാരികത റീസർവ്വേ/മാപ്പിങ് നടപടികൾക്ക് വിധേയമായിരിക്കും.

സ്ഥലം: വാളാട്

തീയതി: 02/05/2017

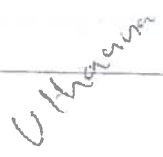
sd

വില്ലേജ് ഓഫീസർ

ഈ രസീത് റവന്യൂ വകുപ്പിന്റെ ഓൺലൈൻ സംവിധാനം മുഖേന തയ്യാറാക്കി ലഭ്യമാക്കുന്നതിനാൽ വില്ലേജ് ഓഫീസറുടെ ഒപ്പോ/ ഓഫീസ് സീലോ ആവശ്യമില്ല. രസീതിന്റെ ആധികാരികത റവന്യൂ വകുപ്പിന്റെ [www.revenue.kerala.gov.in](http://www.revenue.kerala.gov.in) എന്ന പോർട്ടലിൽ പരിശോധിക്കാവുന്നതാണ്.







രസീത്



ബ്ലോക്ക്: 001

ഭൂമിയിലെ വാളാട്

Integrated Land Information System

ഭൂനികുതി:



# കേരള സർക്കാർ

## രസീത്

തണ്ടപ്പേർ നമ്പർ 2187 അനുസരിച്ച് കരം ഒടുക്കിയതിന് രസീത്



ജില്ല : വയനാട്

KL1201161233/2017

താലൂക്ക് : മാനന്തവാടി

വില്ലേജ് : വാളാട്

ബ്ലോക്ക് : 001

സർവ്വേ നമ്പരും & സബ് ഡിവിഷൻ നമ്പരും വെറുവും	വിസ്തീർണ്ണം			പട്ടാദാരന്റെയോ പട്ടാദാരന്മാരുടെയോ പേര്	ഒടുക്കിയ സ്വഭാവം	പണം ഒടുക്കിയ ആളിന്റെ പേര്	ഏത് കാലത്തോ ക്കെന്നോ ഏത് രാവണ ക്കെന്നോ	തുക		റിമാർക്സ്
	ഹെ.	ആർ	സ്ക്വ.മീ.					രൂപ	പൈസ	
57/1069, പുരയിടം വിസ്തീർണ്ണം: 1 ഹെ., 21 ആർ, 41 സ്ക്വ.മീ. പട്ടാദാരന്മാരുടെ വിവരങ്ങൾ: ഉലഹന്നന്, ജോസഫ് പിതാവ്. എടച്ചുശ്ശേരിയില്, വാളാട്, വാളാട്					ഭൂമികൃതി:	AKSHAYA VALAD	2017-2018		₹244	
ആകെ തുക								₹244		

മേൽ വിവരിച്ച പ്രകാരം ₹244(ഇരുനൂറ്റി നാല്പത്തിനാല് രൂപ) 2017 ജൂൺ മാസം 01 തീയതിയായ ഇന്നേ ദിവസം സ്വീകരിച്ച് വില്ലേജ് കണക്കിൽ മുതൽ വച്ചിരിക്കുന്നു.

ടി വില്ലേജിലെ റീസർവേ നടപടികൾ പൂർത്തിയാക്കാത്തതിനാൽ രസീതിൽ സൂചിപ്പിച്ചിരിക്കുന്ന ഭൂവിവരങ്ങളുടെ ആധികാരികത റീസർവ്വേ/മാപ്പിങ്ങ് നടപടികൾക്ക് വിധേയമായിരിക്കും.

സ്ഥലം: വാളാട്

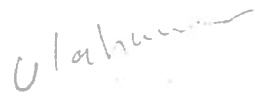
തീയതി: 01/06/2017

sd

വില്ലേജ് ഓഫീസർ

ഈ രസീത് വയനാട് ജില്ലാ ഓഫീസിന്റെ ഓൺലൈൻ സംവിധാനം മുഖേന തയ്യാറാക്കി ലഭ്യമാക്കുന്നതിനാൽ വില്ലേജ് ഓഫീസറുടെ ഒപ്പോ ഓഫീസ് സീലോ ആവശ്യമില്ല. ആധികാരികത വെബ്സൈറ്റ് [www.revenue.kerala.gov.in](http://www.revenue.kerala.gov.in) എന്ന പോർട്ടലിൽ പരിശോധിക്കാവുന്നതാണ്.





രസീത്

ബ്ലോക്ക്: 001

# **ANNEXURE 4**

# **THANDAPPER**

# **ACCOUNT**





**കേരള സർക്കാർ**  
**തണ്ടപ്പേർ അക്കൗണ്ട്**  
(Thandapper Account)

കൃഷ്ണൻ : 2017/16708/12  
തണ്ടപ്പേർ അക്കൗണ്ട് നമ്പർ: 2187

ജില്ല : നയനാട്  
താലൂക്ക് : ചാനനാട്  
വില്ലേജ് : നാളാട്  
ഒഡാ : 001

പട്ടണത്തിന്റെ പേര് :

ഇതു ചാനനാട് ജോസഫ് പീരാനി  
തണ്ടപ്പേർപ്പള്ളിയിലെ നാളാട്  
നാളാട്

**ഭൂമിയുടെ വിവരങ്ങൾ**

നടപ്പു നമ്പർ	സബ് റെവീനയ്ക്ക് നമ്പർ	ഭൂമിയുടെ നമ്പർ	വിസ്തീർണ്ണം			അടിസ്ഥാന നികുതി		അനുബന്ധ വിവരങ്ങൾ			
			ഹെക്ടർ	ആർ	ച.മീ	രൂപ	പൈ	ചിഴക്ക്	പിടിത്താന	നടക്ക്	മുറപ്പ്
57	1069	പുറയിടം	1	21	41	()					

മുഖം:

This area came from the BTR : 57 / 1 & TP NO : 60 .  
Last transacted from : 57 / 1 & TP No : 60.

തീയതി 24/11/2017

വില്ലേജ് ഓഫീസർ

- \* The data related to the remittance/holding are provisional and subject to re survey or settlement  
\* അടിസ്ഥാന നികുതി വില്ലേജ് ഓഫീസിൽ ഒട്ടക്കൂടി രേഖീയ് കൈനാശം സൂക്ഷിക്കുക  
\* This is a computer generated document and no signature is required







**കേരള സർക്കാർ**  
**തണ്ടപ്പേർ അക്കൗണ്ട്**  
(Thandapper Account)

ക്രമ നമ്പർ : 2017/16712/12  
തണ്ടപ്പേർ അക്കൗണ്ട് നമ്പർ: 263

ജില്ല : വയനാട്  
താലൂക്ക് : മാനന്തവാടി  
വില്ലേജ് : വാളാട്  
ഗ്രാമം : 001

പട്ടാഭയാളുടെ പേര് :

11 ബെർളി ബേ.ബി , എടപ്പയ്യശ്ശേരിയിൽ  
വാളാട്

ഭൂമിയുടെ വിവരങ്ങൾ

സർവ്വേ നമ്പർ	സബ് ഡിവിഷൻ നമ്പർ	ഭൂമിയുടെ തരം	വിസ്തീർണ്ണം			അടിസ്ഥാന നികുതി		അതിരുകൾ (എലിക്)			
			ഹെക്ടർ	ആർ	ച. മീ	രൂപ	പൈ	കിഴക്ക്	പടിഞ്ഞാറ്	വടക്ക്	തെക്ക്
57	16	പുരയിടം	1	37	19	0					

ആകെ :

This area came from the **BTR : 57 / 1 & TP NO : 60** .  
Last transacted from : 57 / 1 & TP No : 60.

തീയതി: 24/11/2017

വില്ലേജ് ഓഫീസർ

- \* The data related to the remittance/holding are provisional and subject to re-survey or settlement
- \* അടിസ്ഥാന നികുതി വില്ലേജ് ഓഫീസിൽ ഒടുക്കി ര - പിന് കൈവശം സൂക്ഷിക്കുക
- \* This is a computer generated document and no signature is required.



# **ANNEXURE 5**

## **CONSENT FROM**

### **OTHER LAND**

### **OWNERS**





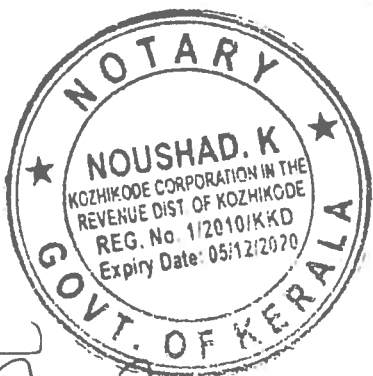
കേരളം കേരल KERALA

BP 458667

സമ്മതപത്രം

വയനാട് ജില്ലയിൽ മാനന്തവാടി താലൂക്കിൽ വാളാട് അംശം ദേശത്ത് വാളാട് വില്ലേജ് എടപുതുശ്ശേരി ഉലഹന്നാൻ എന്നവരുടെ ഭാര്യ ബെർലി ബേബി വയനാട് ജില്ലയിൽ മാനന്തവാടി താലൂക്കിൽ വാളാട് അംശം ദേശത്ത് വാളാട് വില്ലേജ് എടപുതുശ്ശേരി ജോസഫ് എന്നവരുടെ മകൻ ഉലഹന്നാൻ എന്നാൾക്ക് എഴുതി കൊടുക്കുന്ന സമ്മതപത്രം.

Berly Baby  
Ulahannan



NO: 18488  
VALUE: 1000/-  
NAME: ബെർലി ബേബി  
MSOM: 11215  
TALUK: മാനന്തവാടി  
DATE: 26-8-17  
Sg. M.C. VENDOR  
ANJER: SINDU - P.S.

WAYNAD  
NOTARY  
2017

24 AUG 2017



കേരളം കേരള KERALA

BP 458654

2

വയനാട് ജില്ലയിൽ മാനന്തവാടി താലൂക്കിൽ വാളാട് വില്ലേജിൽ എന്റെ കൈവശത്തിലിരിക്കുന്ന റീസർവ്വേ നമ്പർ 57/16 ത്തപെട്ട 1.3719 ഹെക്ടർ സ്ഥലത്ത് നിന്ന് കരിങ്കല്ല് ധാതുഖനനം ചെയ്ത് വിൽപ്പന നടത്തുന്നതിന് മൈനിംഗ് & ജിയോളജി വകുപ്പിൽനിന്ന് ക്വാറി ലീസ് അനുവദിക്കുന്ന തീയതി മുതൽ 15 വർഷം വരെ കാലയളവിൽ താഴെ പേരെഴുതി ഒപ്പിട്ടിരിക്കുന്ന രണ്ട് സാക്ഷികൾ മുമ്പാകെ ഞാൻ പരിപൂർണ്ണമായും സമ്മതിച്ചിരിക്കുന്നു.

മൈനിംഗ് മേമ്പെറി

എന്ന് 2017 ആഗസ്റ്റ് മാസം 30 ന്

സാക്ഷികൾ

1. Beeta  
Badapuhussery (H)  
Vellal - Muvattupuzha
2. Abdul Kader - K.S.  
Kannambalam (Kannur)  
S/o Koyaketty M. K. K.

NO: 18404  
VALUE: 100000/-  
NAME: മൈനിംഗ്  
AMSOM: 01215  
TALUK: മനോരമ  
DATE: 26-8-17  
Ag. M.C. VENDOR  
MANJERI - SINDU - P



# **ANNEXURE 6**

## **VILLAGE**

## **AFFIDAVIT**





No: 1074/2017

വിജേഷ് ഓഫീസ്, വാളാട്  
തീയതി: 15/11/2017

സാക്ഷ്യപത്രം

വയനാട് ജില്ലാ മാനന്തവാടി താലൂക്കിൽ വാളാട് വില്ലേജിൽ 57/16, 57/1069, 57/1270, 57/1273 റി.സ.നമ്പറിൽപ്പെട്ടതും ശ്രീ ഉലഹന്നാൻ എടപുതുശ്ശേരി വാളാട്, ബർളി ബേബി എന്നിവരുടെ കൈവശത്തിലുള്ളതുമായ 4.6702 ഹെക്ടർ സ്ഥലം ഏതെങ്കിലും പ്രത്യേക ആവശ്യത്തിന് അസൈൻ ചെയ്ത് നൽകിയതല്ല. കൃഷിക്കു വേണ്ടി നൽകിയതല്ല, റിസർവ്വ് വനത്തിന്റെ പരിധിയിൽ പെട്ടതല്ല, KLU, KLR കേരള നെൽവയൽ തണ്ണീർതട നിയമം എന്നിവയുടെ പരിധിയിൽ ഉൾപ്പെടുന്നതല്ല. സർക്കാർ ഭൂമി/മിച്ച ഭൂമിയിൽ പെട്ടതല്ല, ആദിവാസി വിഭാഗങ്ങളുടെ ഭൂമിയിൽ പെട്ടതല്ല, വനഭൂമിയിലോ വനഭൂമിയിൽ പട്ടയം നൽകിയ ഭൂമിയിലോ ഉൾപ്പെട്ടതല്ല, കോടതി കേസുകൾ, ബാങ്ക് അറ്റാച്ച്മെന്റ് എന്നിവ നിലവിലില്ല എന്നുള്ള വിവരം സാക്ഷ്യപ്പെടുത്തുന്നു.

സ്ഥലം : വാളാട്  
തീയതി : 15/11/2017



15/11/17  
വില്ലേജ് ഓഫീസർ  
വില്ലേജ് ഓഫീസ്  
P.O. വാളാട്, Pin-670544



# **ANNEXURE 7**

# **SINGLE OWNER**

# **AFFIDAVIT**





കേരളം KERALA

BU 035945

### AFFIDAVIT

I, **Ulahannan**, S/o. Joseph aged 51 years residing at Edaputhussery House, Valad. P.O., Manathavadi, Wayanad Dt. do hereby solemnly affirm and confirm that:

1. I am the owner & authorized signatory of Building Stone Quarry with lease in an extent of 4.6702 hectar at Survey No. 57/1, 57/1, 57/1270, 57/1273 in Valad Village, Manathavadi Taluk, Wynad District,



No 27.229 Kerala Rs. 100

Name : **S. R. O. Vender, MUKIAM (Ag)**

Date : **3.1.17**

S.R.O VENDER, MUKIAM (Ag)

SINDHU. R. **S**





കേരളം KERALA

BP 458657

2

Kerala and empowered to represent any or all of the matters related with this quarry.

Ulahannan

DEPONENT

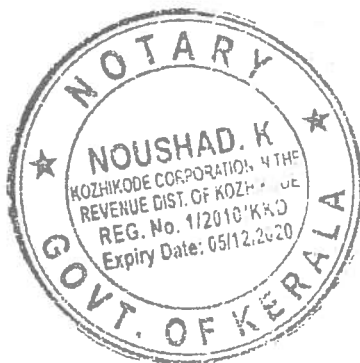
Place:

Date:

Witness:

1.

2.



NU: 1847

VALUE: 1000/-

NAME: 20000000

AMSOM: 21213

TALUK: 21000000

DATE: 26-8-17

Ag. M. Q. VENDOR

MANJERI - SINDU - P

24 AUG 2017

# **ANNEXURE 8**

## **ID PROOF OF**

### **AUTHORIZED**

#### **SIGNATORY**







ഭാരത സർക്കാർ  
Unique Identification Authority of India  
Government of India

പ്രവേശന നമ്പർ : Enrollment No. : 2007/60357/01869

25/12/2012

To  
Uthahannan Joseph  
EDAPUTHUSSERIYIL VEEDU  
THALAPPUZHA VIA  
VALAT P O  
Vallat, Wyanad  
Kerala - 670644  
4935286541



KL022432983DF

2243298



നിങ്ങളുടെ ആധാർ നമ്പർ / Your Aadhaar No. :

**5405 2165 2705**

ആധാർ - സാധാരണക്കാരുടെ അവകാശം

വിവരങ്ങൾ

- ആധാർ തിരിച്ചറിയലുള്ള രേഖയാണ്, പൗരത്വത്തിനുള്ളതല്ല.
- തിരിച്ചറിയലുള്ള രേഖയിൽ ഭാരതീയർക്ക് മാത്രമേ ഉണ്ടാവൂ.

INFORMATION

- Aadhaar is proof of identity, not of citizenship.
- To establish identity, authenticate online.

- ആധാർ രാജ്യത്തുടനീളം അംഗീകാരമുള്ളത്.
- ഭാരതീയർക്ക് മാത്രമേ, സർക്കാരിനോ സേവനങ്ങൾ പ്രദാനം ചെയ്യുന്നതിന് ആധാർ അനവശ്യമാകൂ.

- Aadhaar is valid throughout the country.
- Aadhaar will be helpful in availing Government and Non-Government services in future.



GOVERNMENT OF INDIA



Uthahannan Joseph  
Father: JOSEPH

Year of Birth: 1965  
Gender: Male

**5405 2165 2705**



ആധാർ - സാധാരണക്കാരുടെ അവകാശം



UNIQUE IDENTIFICATION AUTHORITY OF INDIA

Address:  
EDAPUTHUSSERIYIL VEEDU, THALAPPUZHA  
VIA, VALAT P O, Vallat,  
Wyanad, Kerala, 670644

Address:  
EDAPUTHUSSERIYIL  
VEEDU, THALAPPUZHA  
VIA, VALAT P O, Vallat,  
Wyanad, Kerala,  
670644



MEDICAL OFFICER,  
Govt. PRIMARY HEALTH CENTRE,  
KAPPALA, THE NILGIRIS



# PLATE





# GRANITE (BUILDING STONE) QUARRY LESSEE: ULAHANNAN

## KEY PLAN OF MINE AREA

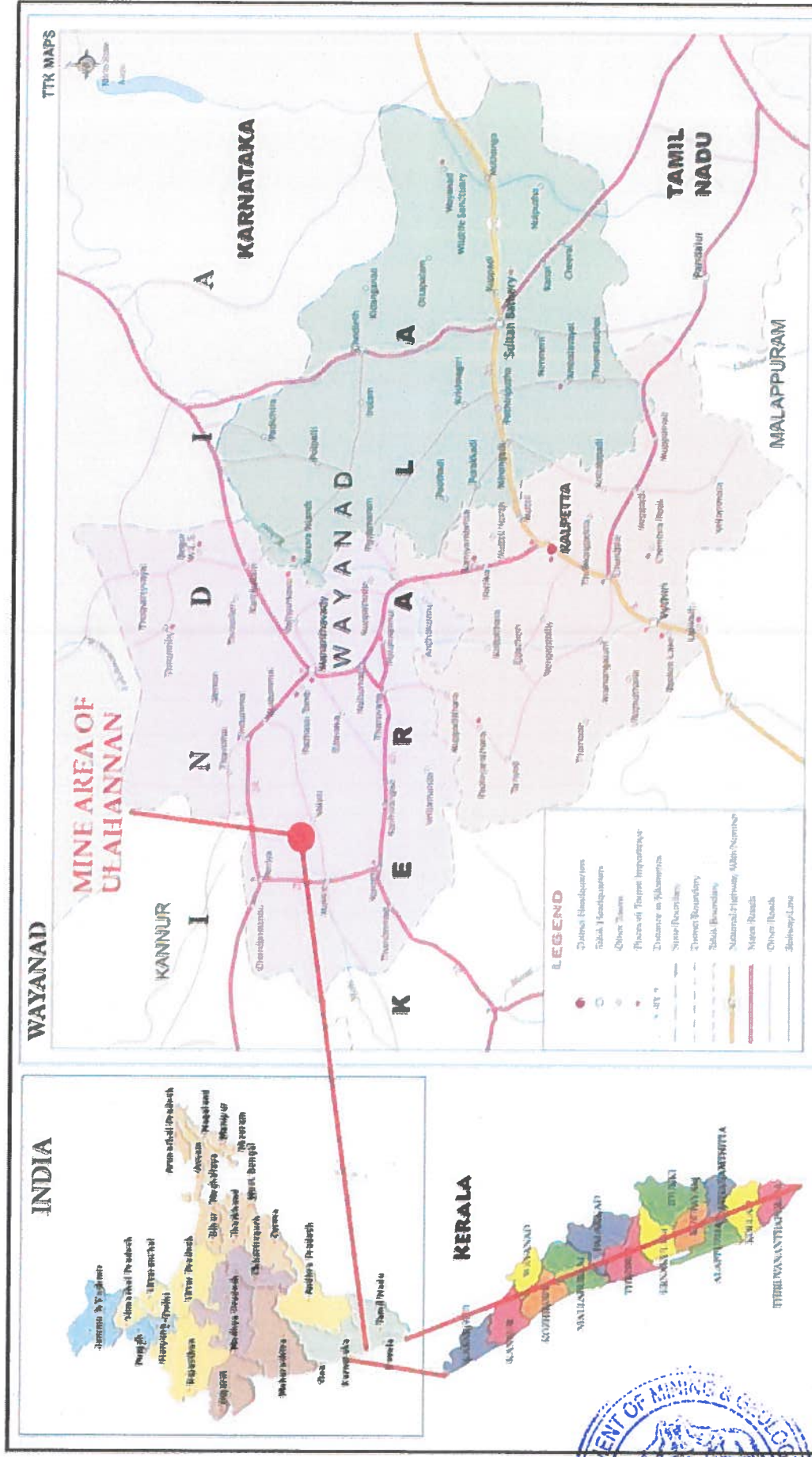


PLATE.NO : 1(A)  
NOT TO SCALE

EXTENT : 4.2689 Ha  
VILLAGE : VALAD  
DISTRICT : WAYANAD

SY.NOS : 57/16, 57/1270, 57/1069, 57/1273  
TALUK : MANANTHAVADY  
STATE : KERALA





**GRANITE (BUILDING STONE) QUARRY LESSEE: ULAHANNAN**  
**ROUTE MAP & VICINITY MAP OF MINE AREA**



**PLATE.NO:1(B)**  
**NOT TO SCALE**

**EXTENT : 4.2689 Ha**  
**VILLAGE : VALAD**  
**DISTRICT : WAYANAD**

**SY.NOS: 57/16,57/1270,57/1069,57/1273**  
**TALUK : MANANTHAVADY**  
**STATE : KERALA**

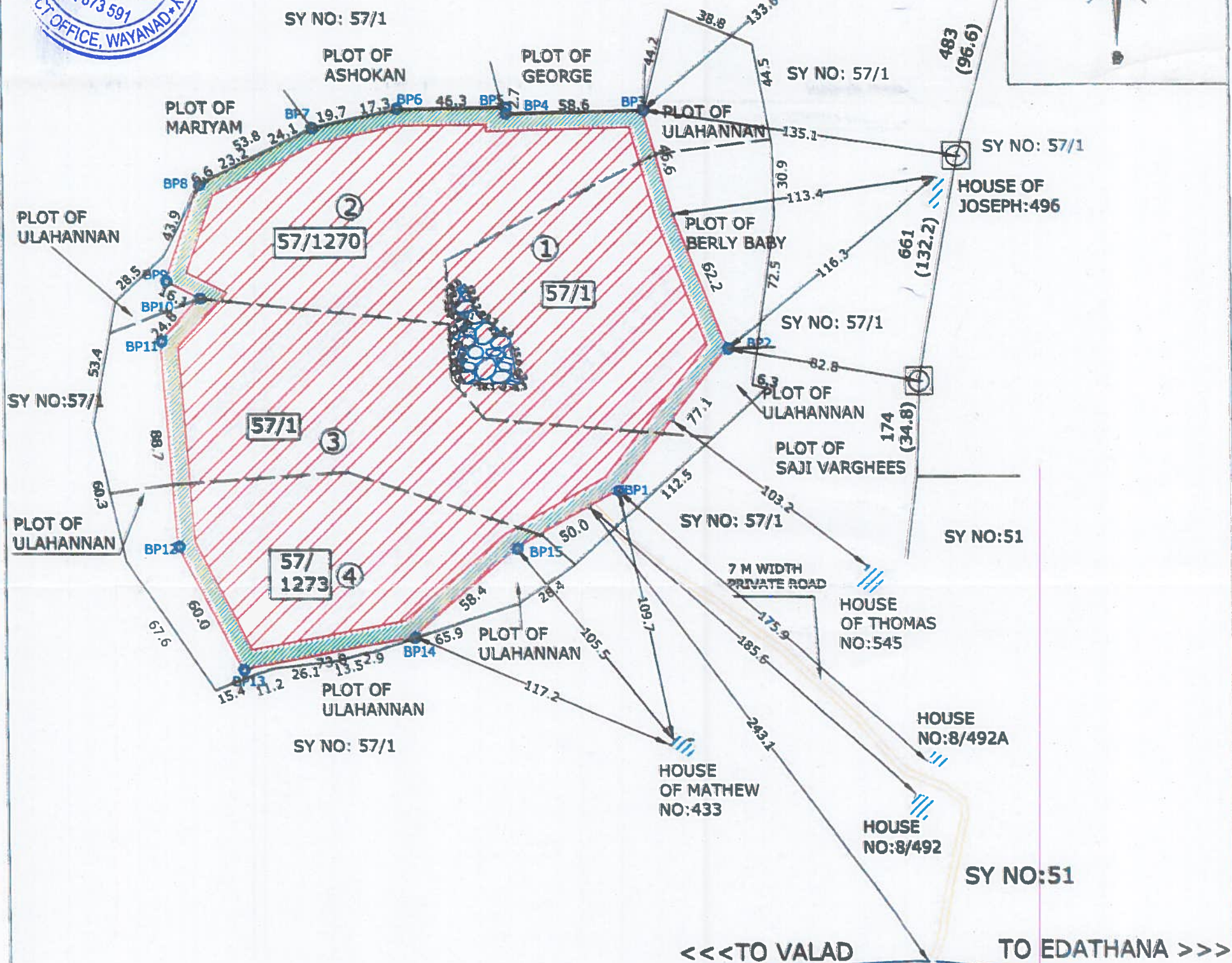
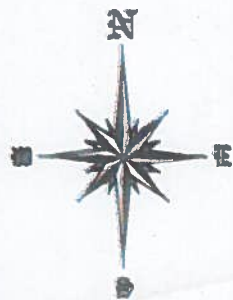


DISTRICT : WAYANAD  
TALUK : MANANTHAVADY  
VILLAGE : VALAD

## SURVEY MAP

DESAM:VALAD

SY NO : 57/1PT(57/1,57/1270,57/1273)



THIS PLAN IS ISSUED TO SUBMIT BEFORE MINING GEOLOGY DEPARTMENT

LEGEND		PROPERTY DETAILS								
		AREA OF LAND							NAME OF OWNER	
		SL NO	DOCUMENT NO	SY NO	AS PER DODUMENT	MINING AREA	BUFFER AREA	BALANCE AREA	PROPOSED	
	PROPOSED LEASE AREA INCLUDING BUFFER & QUARRY	1	608/2005	57/1PT	1.3719 HA	0.8949 HA	0.0996 HA	0.3774 HA	0.9945 HA	BERLY BABY
	BUFFER AREA 7.5 METRE	2	2287/1993	57/1270 (57/1PT)	1.2141 HA	1.0009 HA	0.2017 HA	0.0114 HA	1.2027 HA	ULAHANNAN
	EXISTING QUARRY : 0.0684 HA	3	1729/2016	57/1PT	1.2141 HA	1.0890 HA	0.1158 HA	0.0093 HA	1.2048 HA	ULAHANNAN
	SURVEY LINE	4	1794/1993	57/1273 (57/1PT)	0.8701 HA	0.7022 HA	0.1648 HA	0.0032 HA	0.8669 HA	ULAHANNAN
	DOCUMENT BOUNDARY LINE	TOTAL AREA :			4.6702 HA	3.6870 HA	0.5819 HA	0.4013 HA	4.2689 HA	
	BOUNDARY PILLER									
	PRIVATE /SERVICE ROAD									
	PWD / PANCHAYATH ROAD									
	SURVEY STONE / ROCK MARK									
MINING AREA : 3.6870 HA										
BUFFER AREA : 0.5819 HA										
PROPOSED LEASE AREA : 4.2689 HA										
SCALE 1 CM = 20 M										

Handwritten notes and stamps:

- Handwritten: *Handwritten signature and date 30/11/17*
- Handwritten: *താലൂക്ക് സർവ്വേ ഓഫീസ്*
- Handwritten: *30/11/17*
- Handwritten: *23/11/17*
- Stamp: *NOV 2017*
- Stamp: *TANSILCAR MANANTHAPADY*
- Stamp: *വില്ലേജ് ഓഫീസ്*
- Handwritten: *8/9/17*
- Handwritten: *വില്ലേജ് ഓഫീസർ*
- Handwritten: *വില്ലേജ് ഓഫീസ്*
- Handwritten: *Pin 670644*

Handwritten signature and date 23/11/17



Handwritten signature and date 8/9/17



GRANITE (BUILDING STONE) QUARRY  
Lessee: ULAHANNAN

GOOGLE MAP SHOWING LEASE AREA

PLATE :- 1(D)

DISTRICT :- WAYANAD

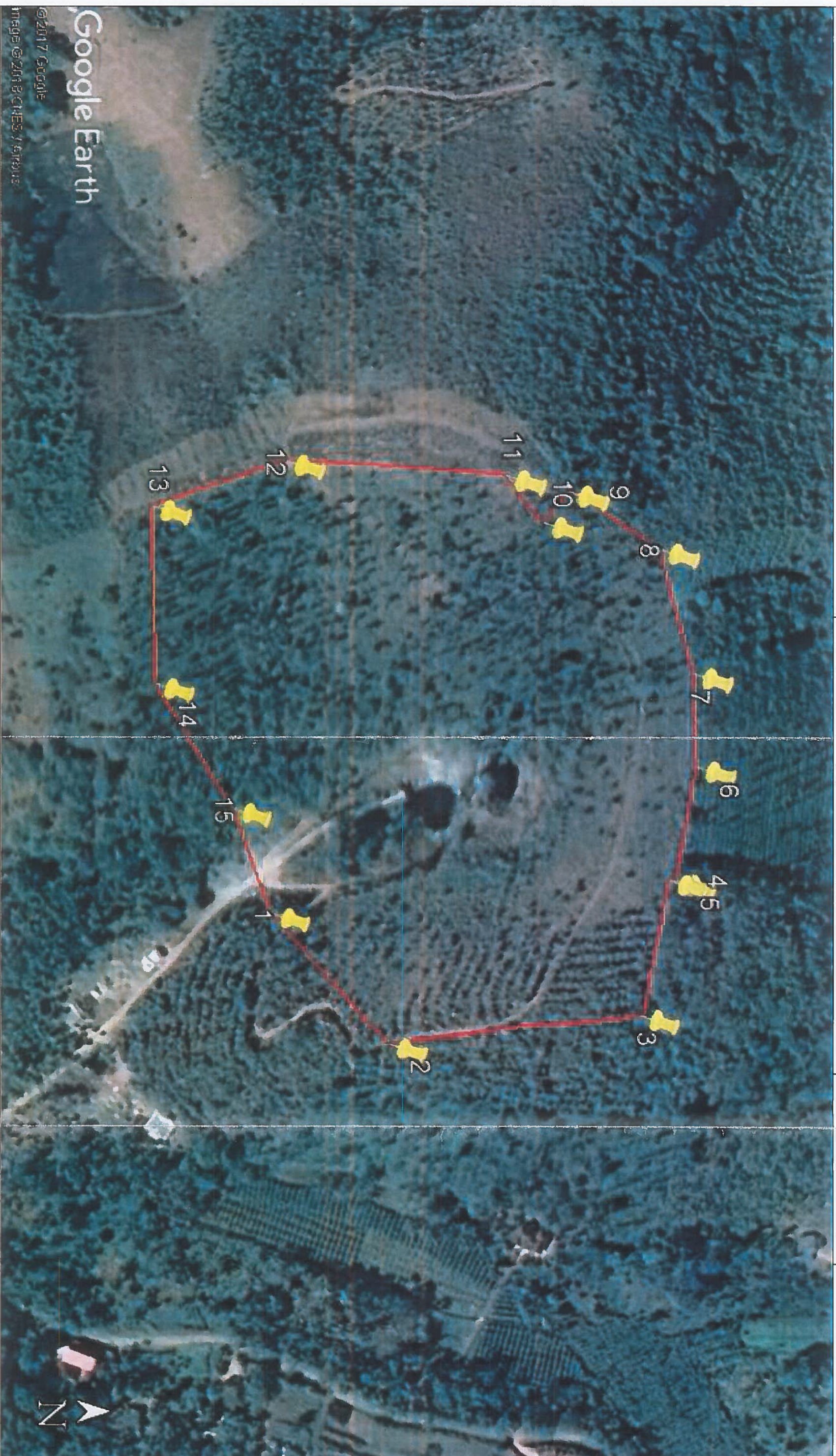
VILLAGE :- VALAD

EXTENT :- 4.2689 Ha

Re-Survey  
number :- 57/16.57/12309/1860.52/4209

TALUK :- Mananthavady

STATE :- Kerala



Google Earth

@2017 Google

Image © 2018 CNES / Airbus

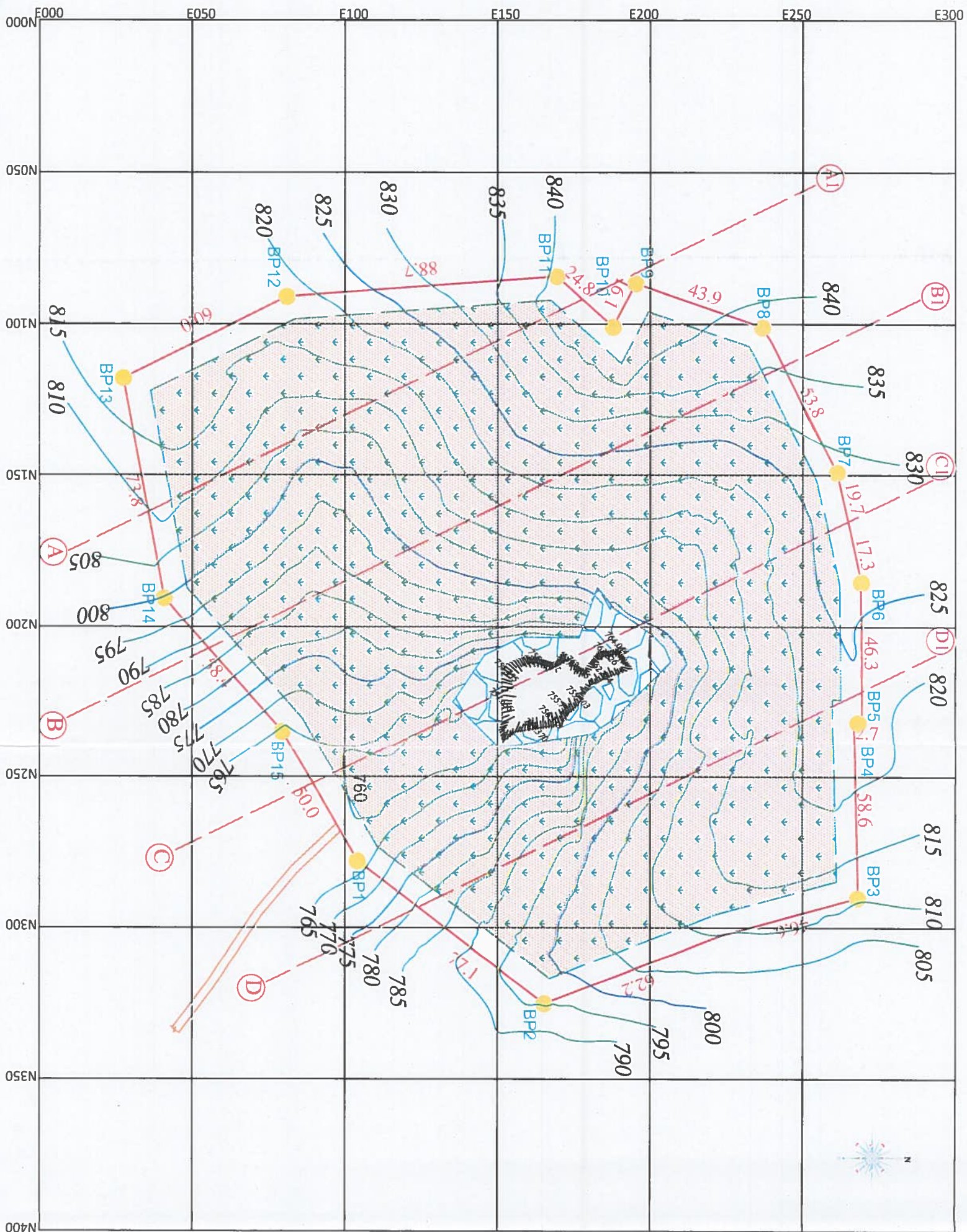


PLATE -2



**MAHESH S.**  
**MTech Applied Geology**  
**RQP**  
**RQP No: BNG/338/2014/A**





### LEGEND

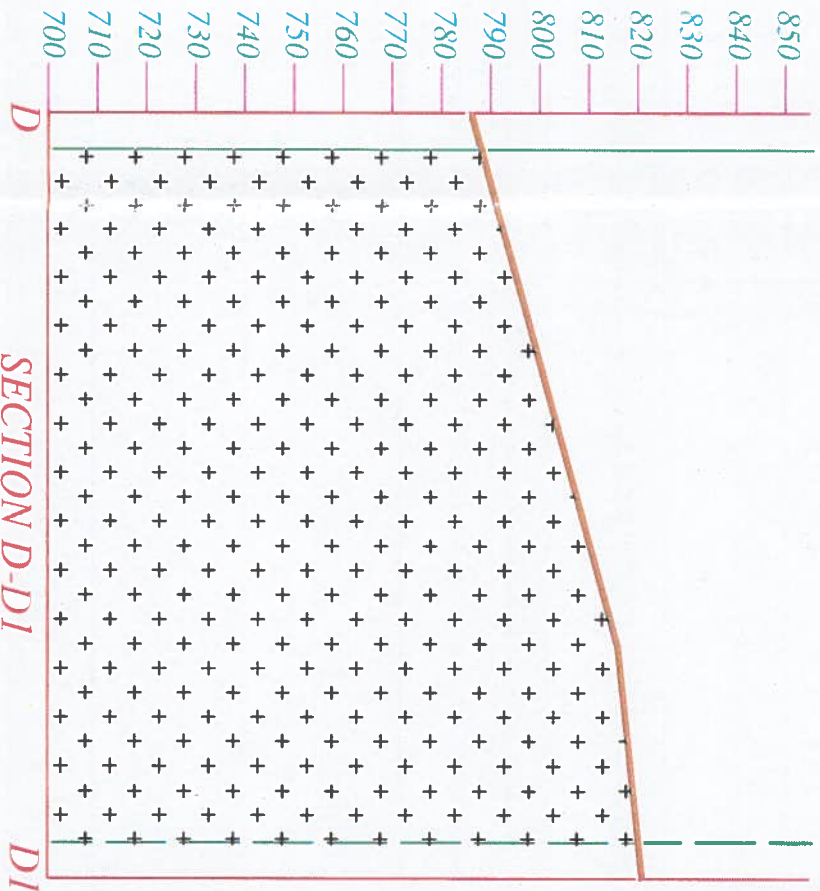
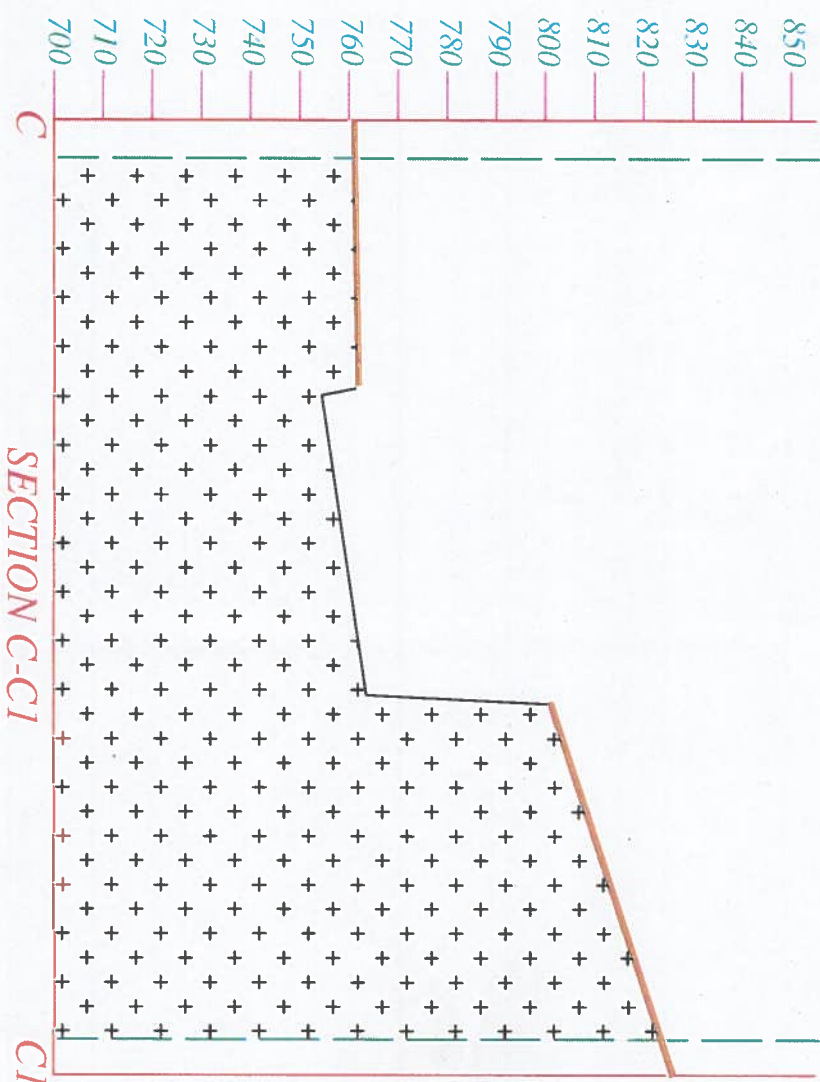
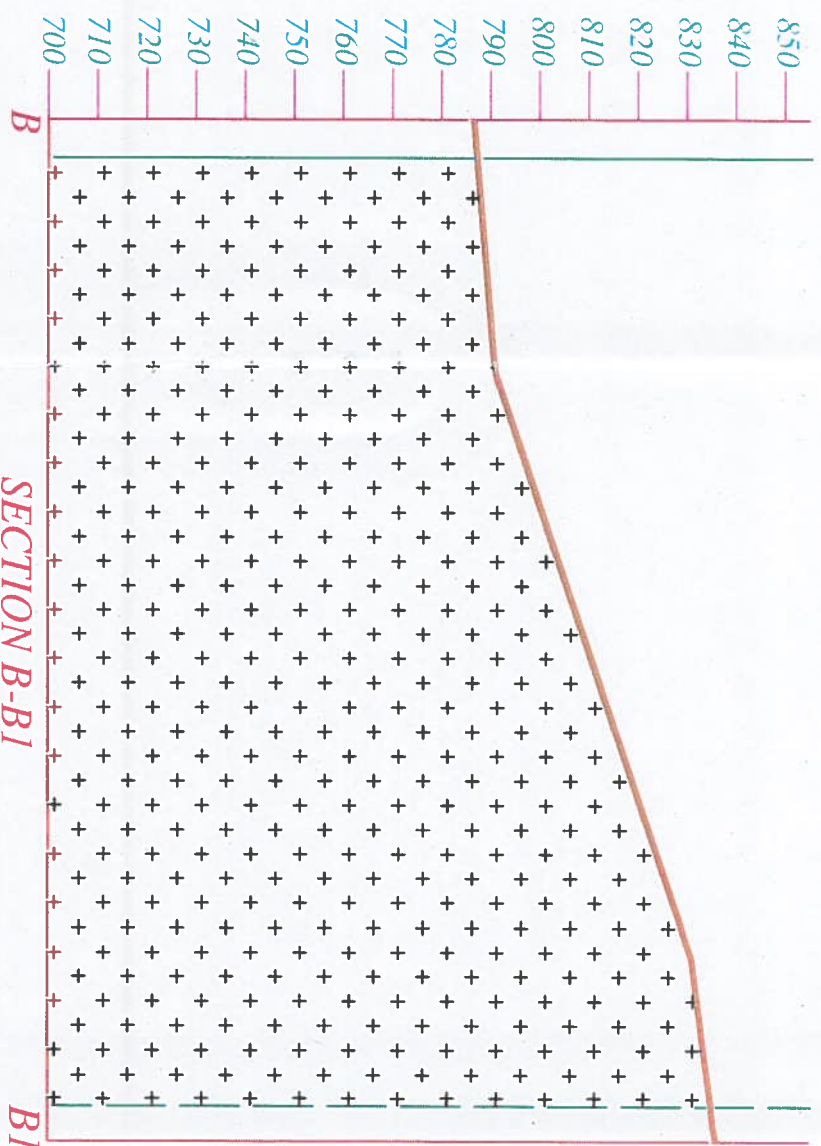
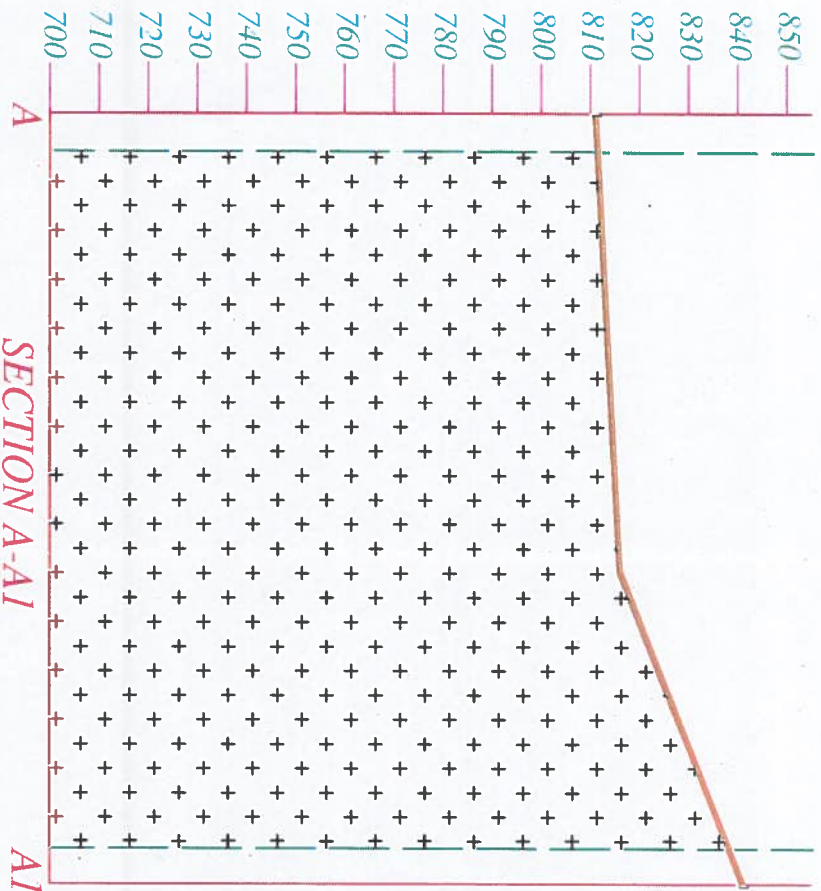
	LEASE BOUNDARY
	7.5 m BUFFER ZONE
	QUARRY ROAD
	BOUNDARY STONE
	CONTOUR LINE
	SECTION LINE
	SOIL COVER
	GRASS
	EXISTING QUARRY

GRANITE (BUILDING STONE)  
QUARRY OWNED BY:  
Ulahannan

### SURFACE CUM GEOLOGICAL PLAN & SECTION

EXTENT :- 4.2689 Ha  
Re-survey No:-57/16,57/1270,  
57/1069,57/1273  
VILLAGE :- Valad  
TALUK :- Mananthavady  
DISTRICT :- Wayanad  
STATE :- Kerala  
MAHESH. S  
Recognition Qualified Person (RQP),  
(RQP No - RQP/BNG/338/2014/A )  
Thiruvananthapuram District, Kerala  
SCALE - 1:1500  
PLATE NO.: 3





INDEX	
	Q L BOUNDARY
	7.5m SAFETY LINE
	SOIL COVER & OB
	GRANITE

GRANITE (BUILDING STONE) QUARRY  
OF : Uthaman

**GEOLOGICAL SECTIONS**

EXTENT :- 4.2689 Ha  
VILLAGE :- Valad  
TALUK :- Mananthavady  
STATE :- Kerala

Plan Prepared by :-

MAHESH S.

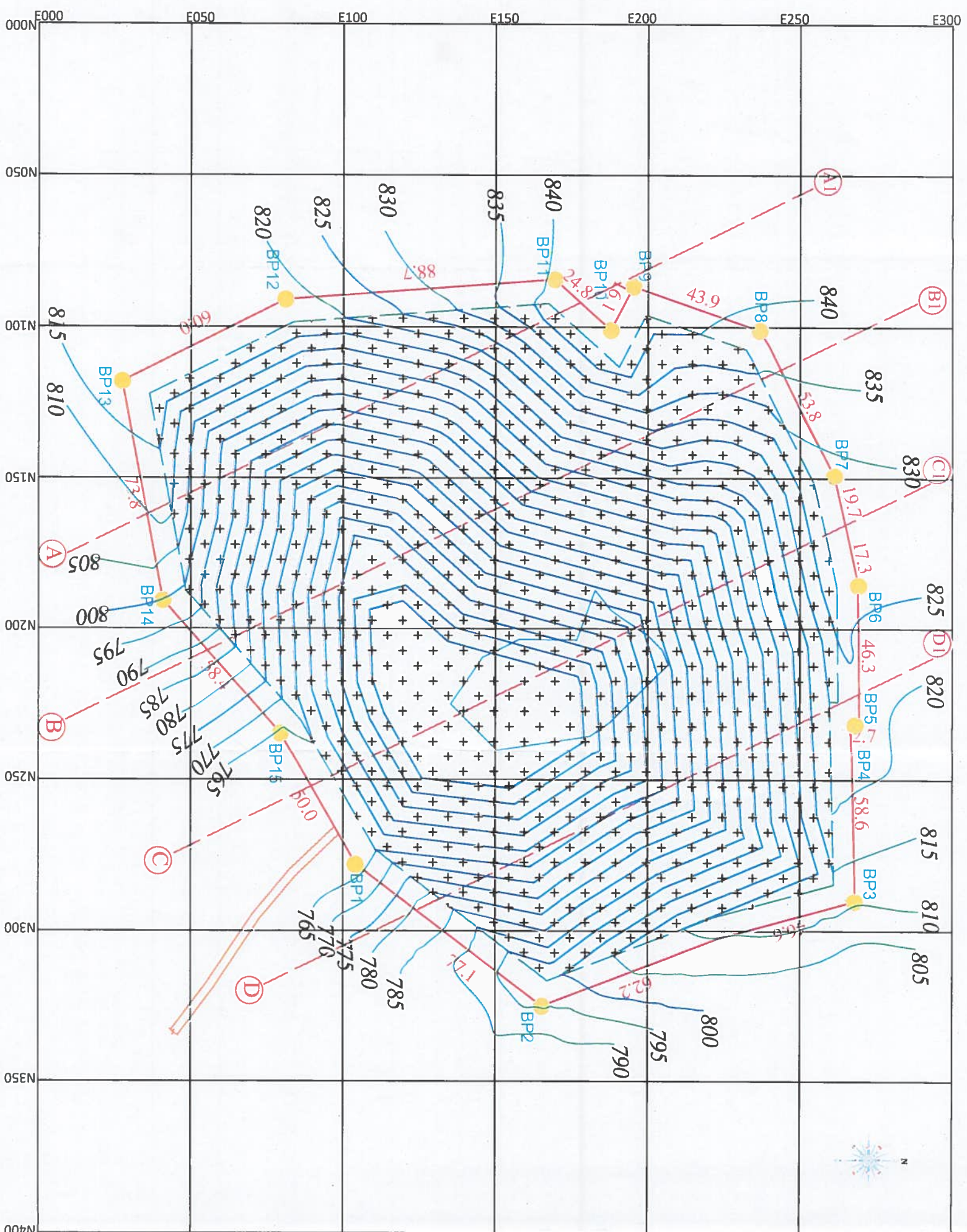
Recognition Qualified Person (RQP),

(RQP No - RQP/BNG/338/2014/A)

Thiruvananthapuram District, Kerala

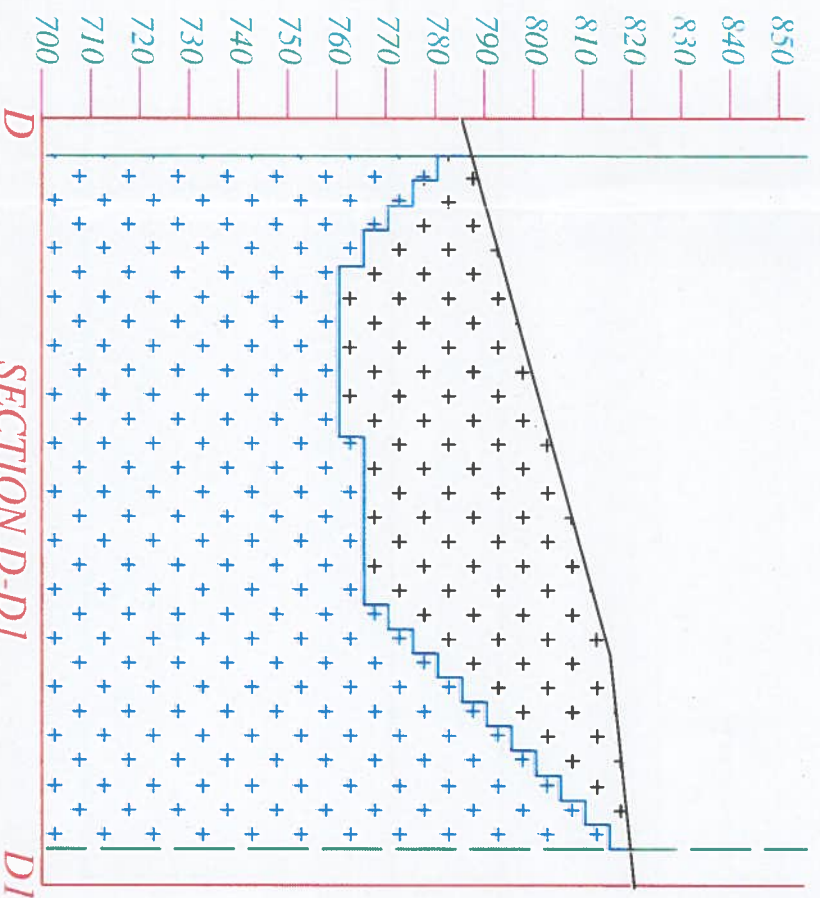
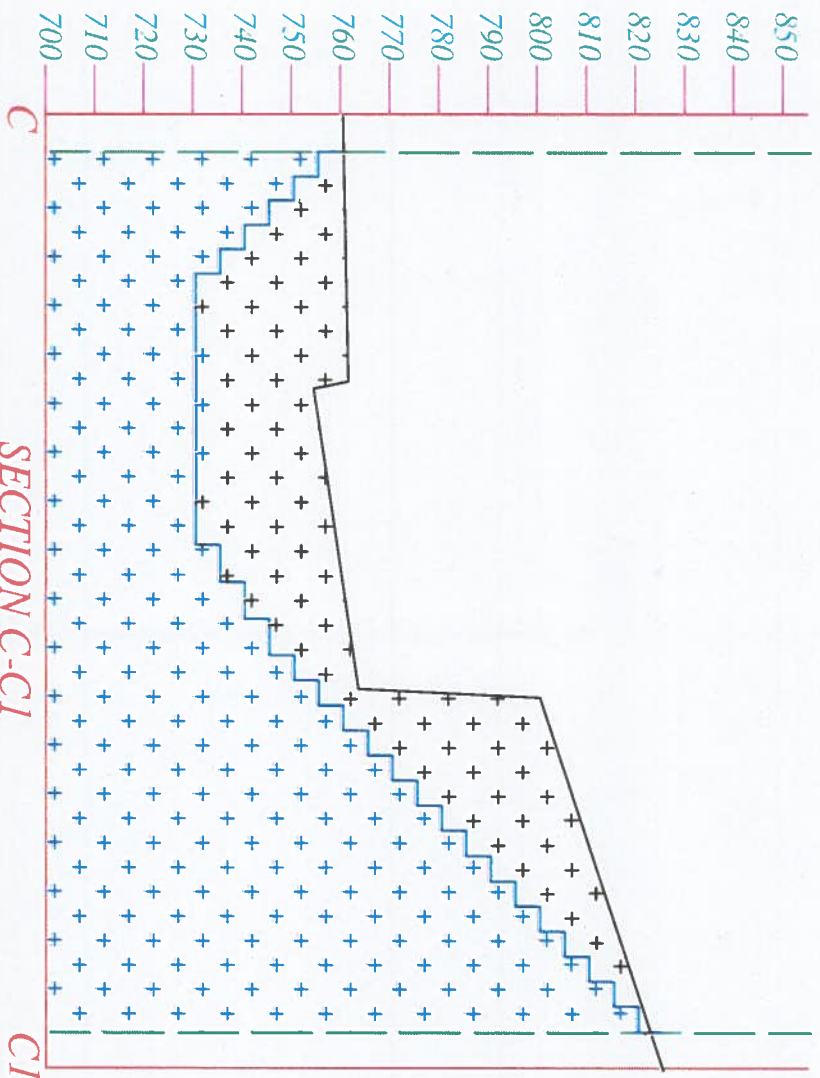
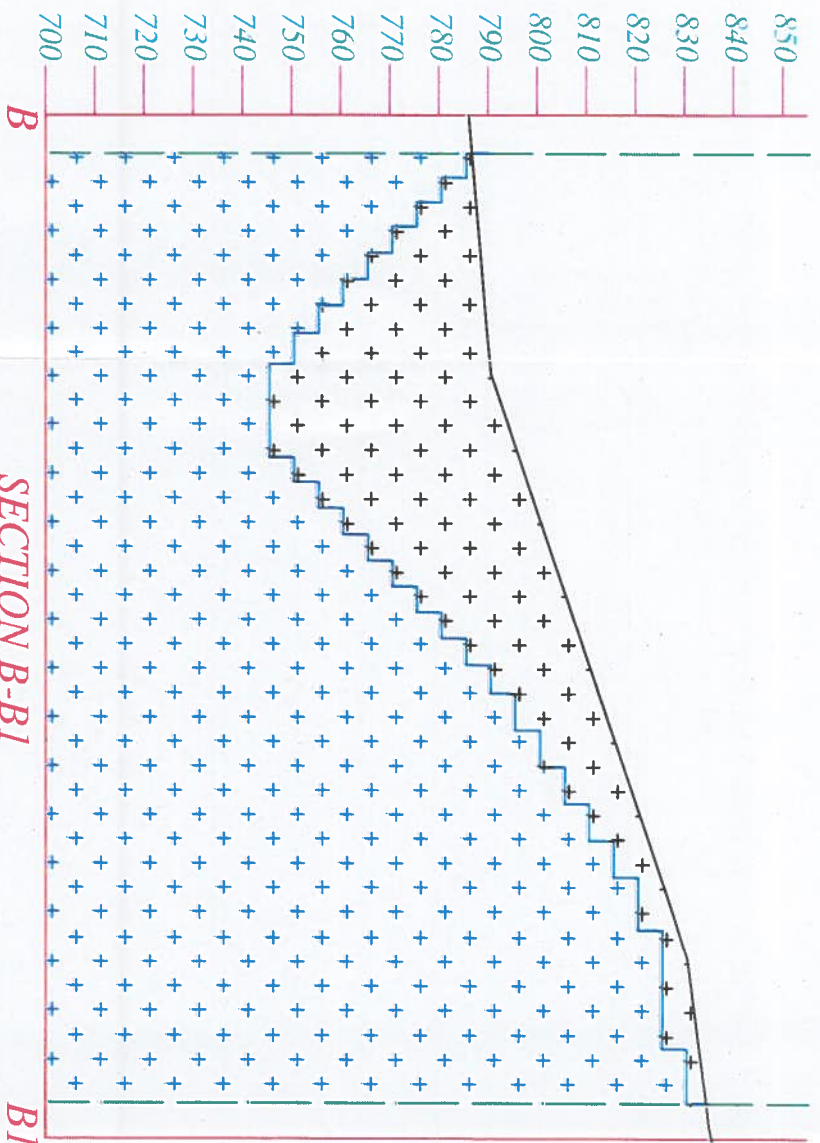
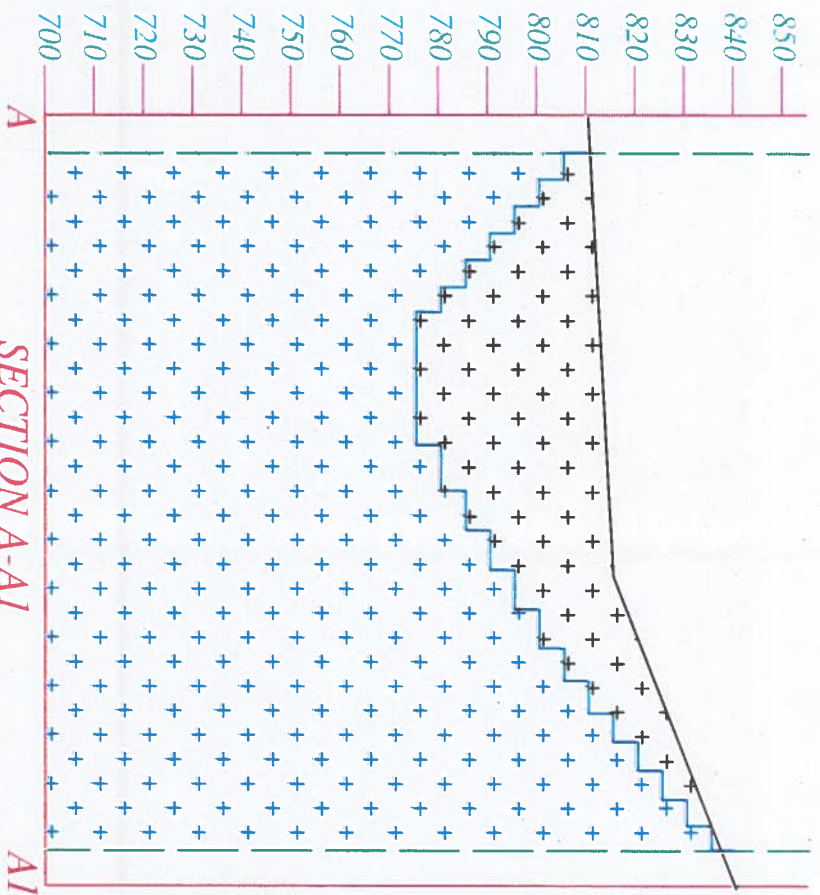
SCALE - 1:1500  
PLATE NO.: 3A





LEGEND	
	LEASE BOUNDARY
	7.5 m BUFFER ZONE
	QUARRY ROAD
	CONTOUR LINE
	BOUNDARY STONE
	SECTION LINE
	GRANITE
	WORKING BENCH
GRANITE (BUILDING STONE) QUARRY OWNED BY: Uthannan	
DEVELOPMENT PLAN & SECTION	
EXTENT :- 4.2689 Ha	
Re-survey No:-57/16,57/1270, 57/1069,57/1273	
VILLAGE :- Valad	
TALUK :- Mananthavady	
DISTRICT :- Wayanad	
STATE :- Kerala	
MAHESH. S Recognition Qualified Person (RQP), (RQP No - RQP/BNG/338/2014/A) Thiruvananthapuram District, Kerala	
SCALE - 1:1500	PLATE NO.4





INDEX	
QL BOUNDARY	
7.5m SAFETY LINE	
WORKING BENCHES	
MINNEABLE RESERVES	
BLOCKED RESERVES	

GRANITE (BUILDING STONE) QUARRY  
OF : Uthannan

#### DEVELOPMENT SECTIONS

EXTENT :- 4.2689 Ha  
VILLAGE :- Valad  
TALUK :- Mananthavady  
DISTRICT :- Wayanad  
STATE :- Kerala

Plan Prepared by :-

MAHESH, S

Recognition Qualified Person (RQP),  
(RQP No - RQP/BNG/338/2014/A)

Thiruvananthapuram District, Kerala

SCALE - 1:1500

MAHESH, S  
RQP

MTech Applied Geology

RQP

RQP No: BNG/338/2014/A





**LEGEND**

	LEASE BOUNDARY
	7.5 m BUFFER ZONE
	QUARRY ROAD
	SECTION LINE
	CONTOUR LINE
	BOUNDARY STONE
	GRANITE
	WORKING BENCH
	1st YEAR MINING AREA
	2nd YEAR MINING AREA
	3rd YEAR MINING AREA
	4th YEAR MINING AREA
	5th YEAR MINING AREA

GRANITE (BUILDING STONE)  
QUARRY OWNED BY:  
Ulahannan

YEARWISE EXCAVATION  
PLAN & SECTION

EXTENT :- 4.2689 Ha  
Re-survey No:-57/16,57/1270,  
57/1069,57/1273

VILLAGE :- Valad

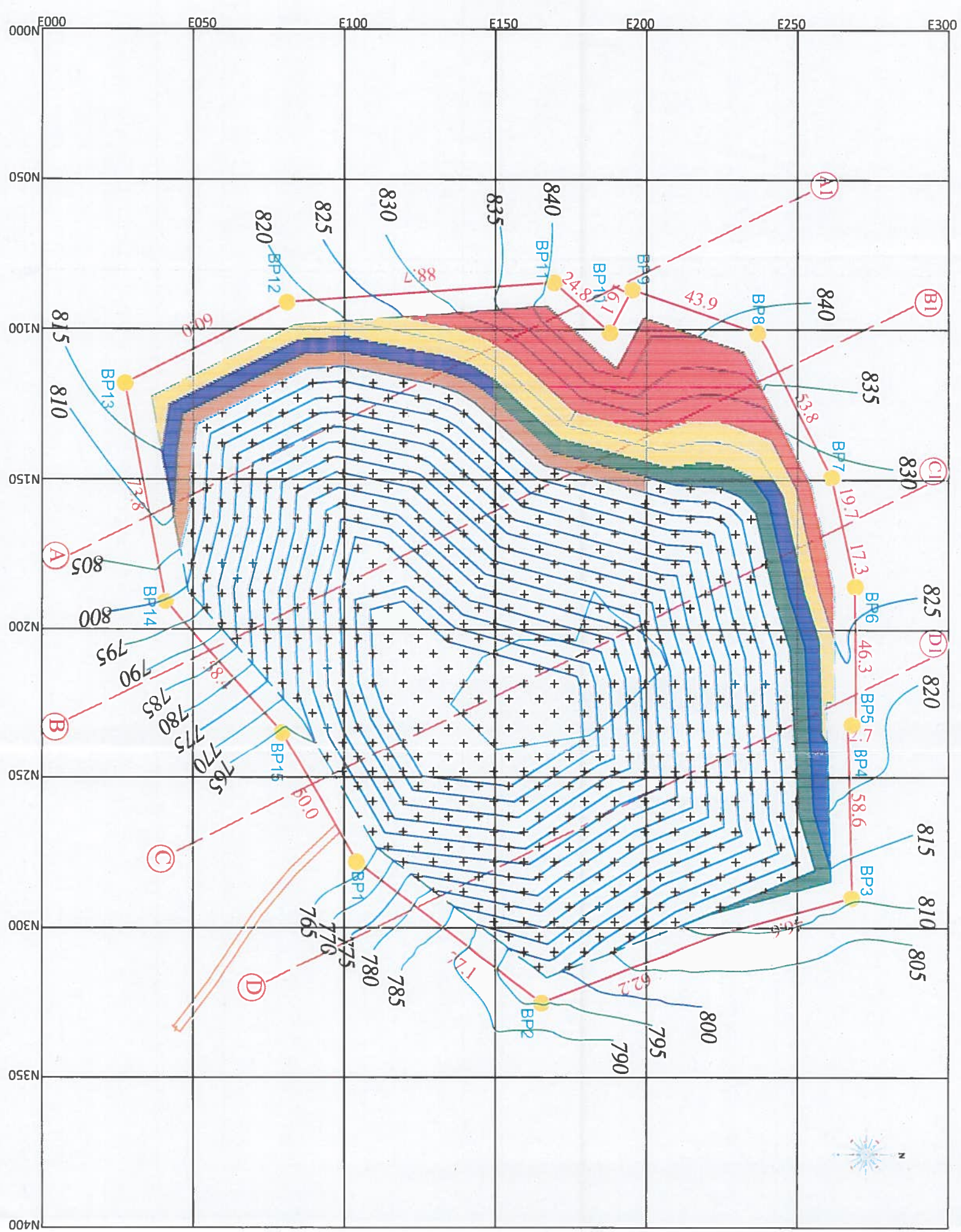
TALUK :- Mananthavady

DISTRICT :- Wayanad

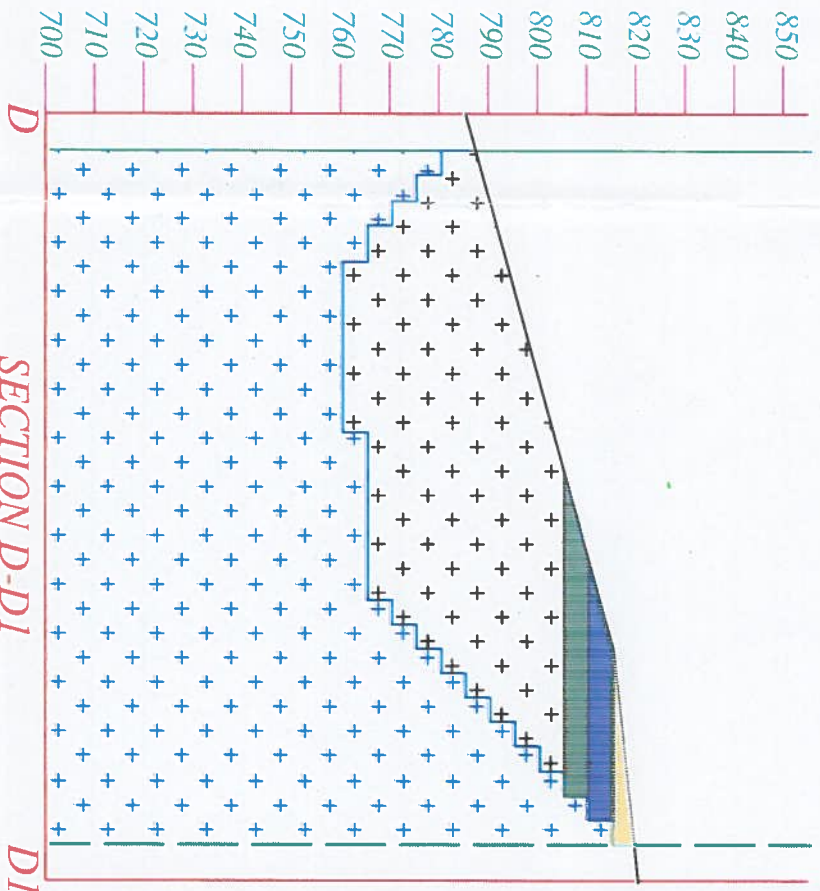
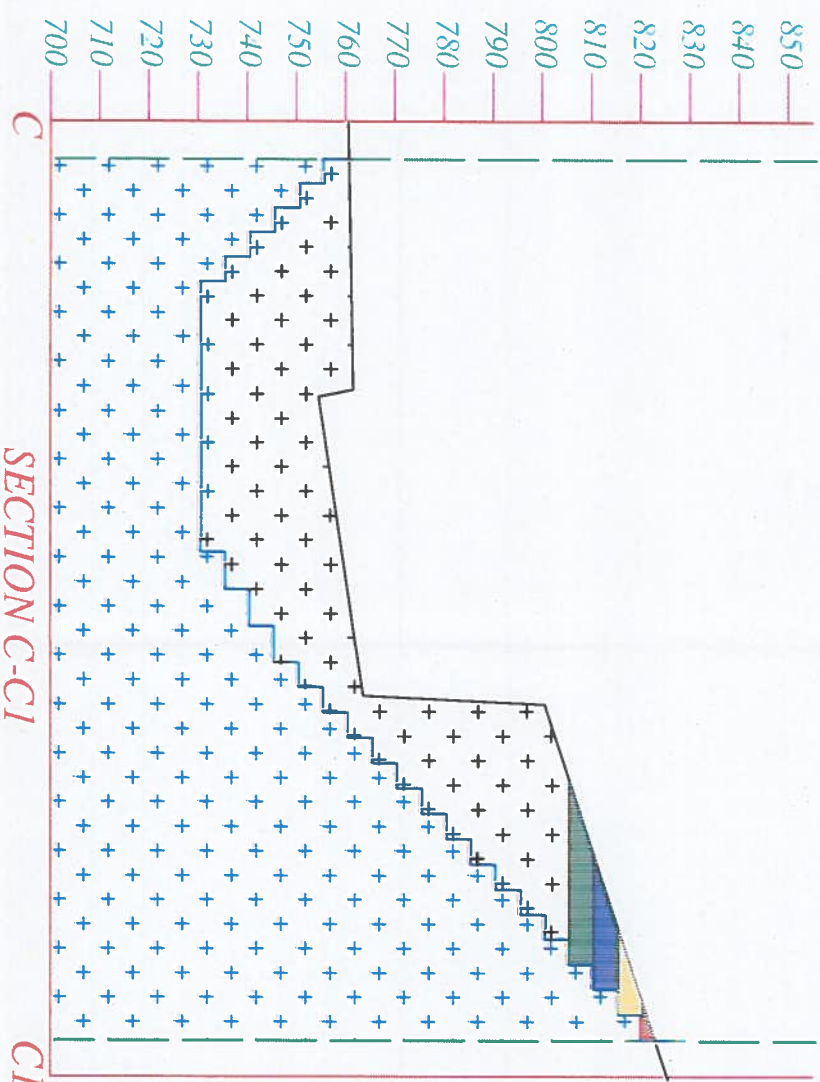
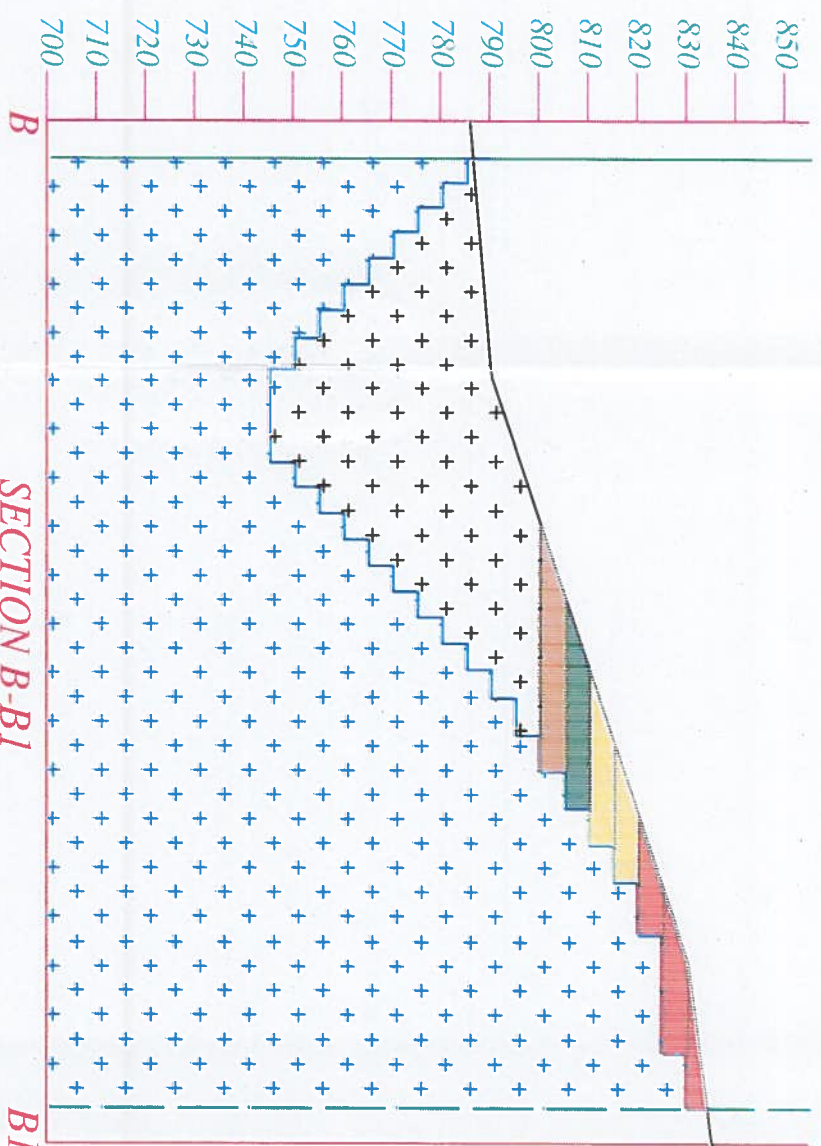
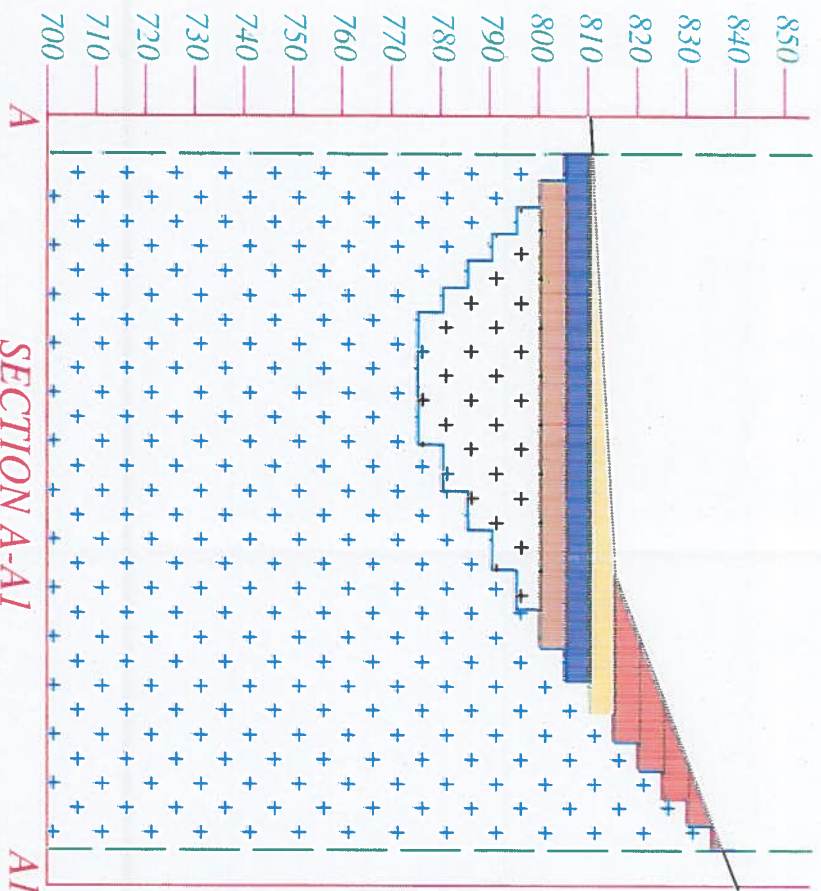
STATE :- Kerala

MAHESH. S  
Recognition Qualified Person (RQP),  
(RQP No - RQP/BNG/338/2014/A )  
Thiruvananthapuram District, Kerala

SCALE - 1:1500  
PLATE NO.: 5





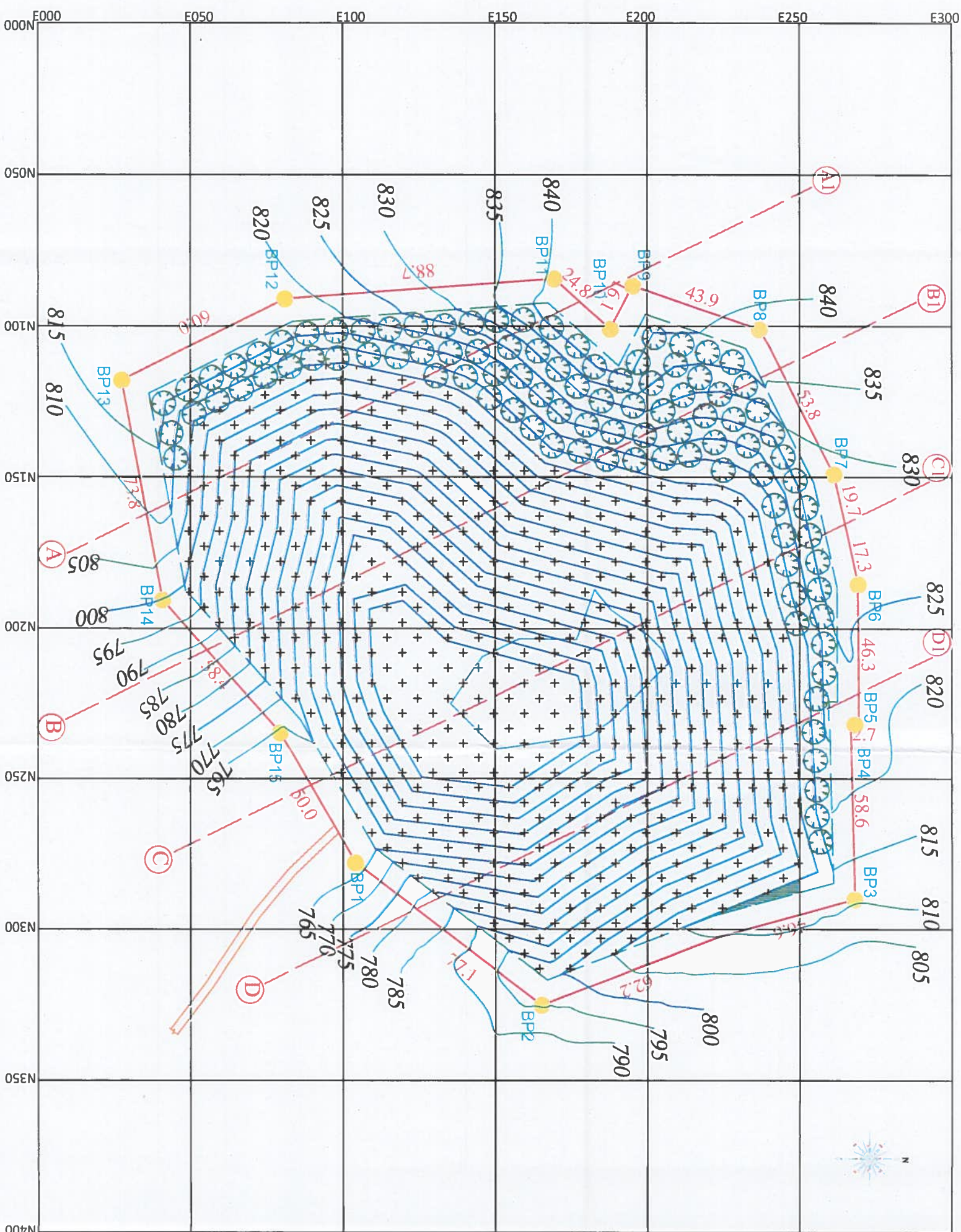


	1st YEAR MINING AREA
	2nd YEAR MINING AREA
	3rd YEAR MINING AREA
	4th YEAR MINING AREA
	5th YEAR MINING AREA

INDEX	
	QL BOUNDARY
	7.5m SAFETY LINE
	WORKING BENCHES
	MINEABLE RESERVES
	BLOCKED RESERVES

GRANITE (BUILDING STONE) QUARRY OF : Ulahanan	
YEARWISE EXCAVATION SECTIONS	
EXTENT :- 4.2689 Ha	Re-SY No :- 57/16,57/1270,57/1069,57/1273
VILLAGE :- Valad	DISTRICT :- Wayanad
TALUK :- Mananthavady	STATE :- Kerala
Plan Prepared by :- MAHESH S. Recognition Qualified Person (RQP), (RQP No - RQP/BNG/338/2014/A ) Thiruvananthapuram District, Kerala	
SCALE - 1:1500	PLATE NO.: 5A





### LEGEND

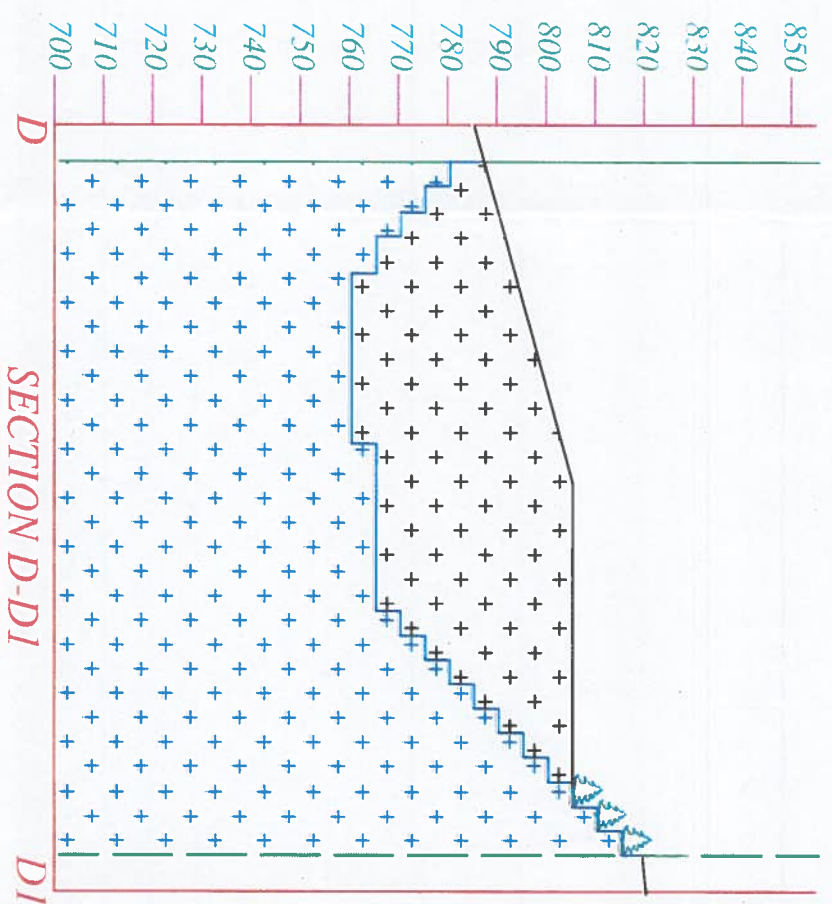
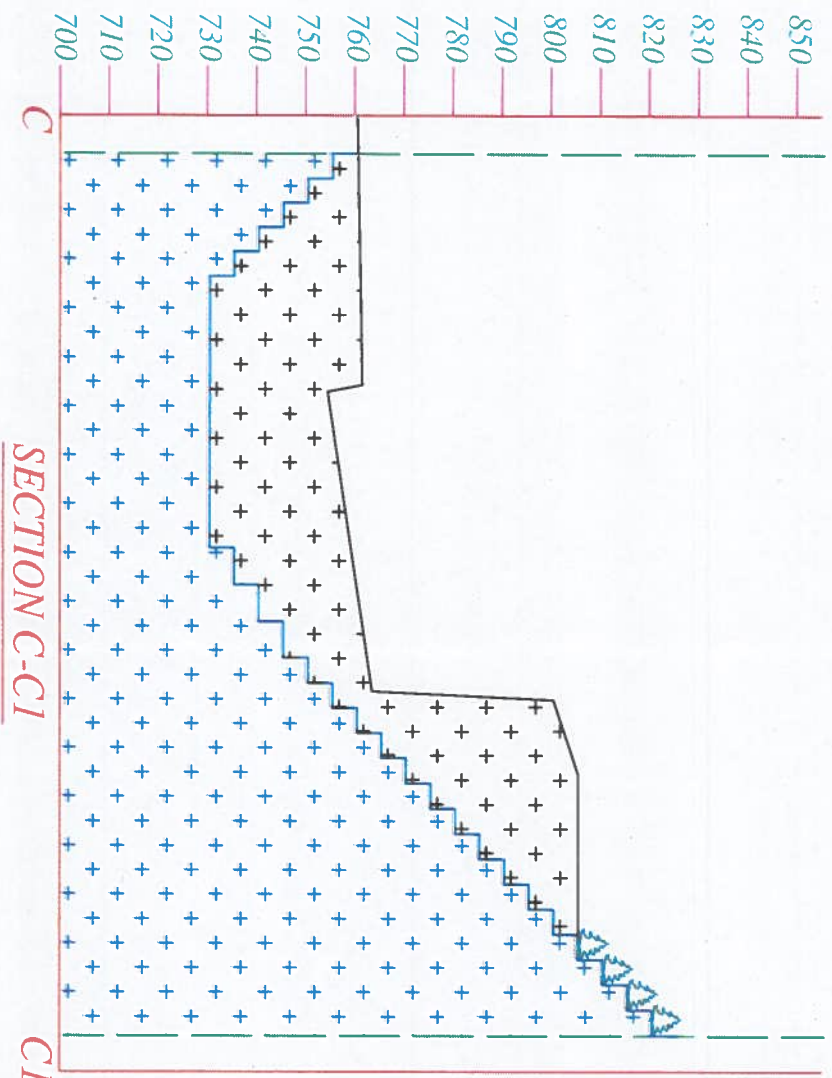
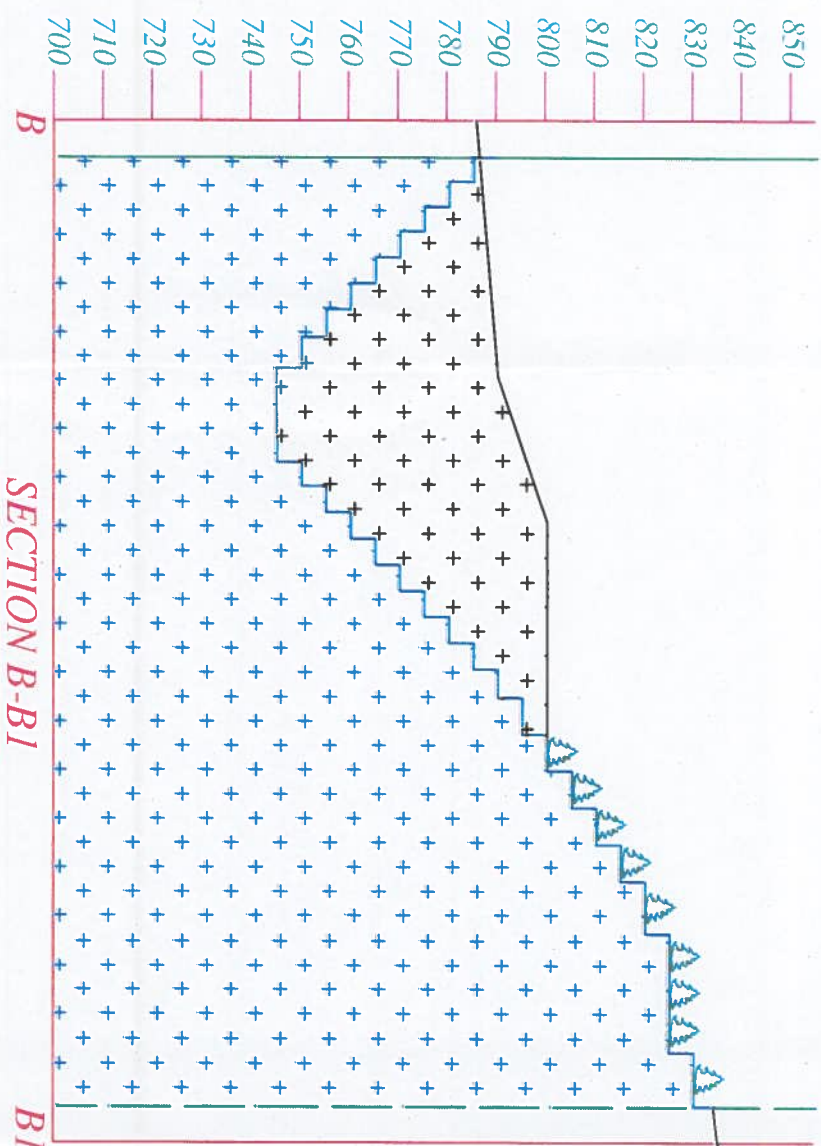
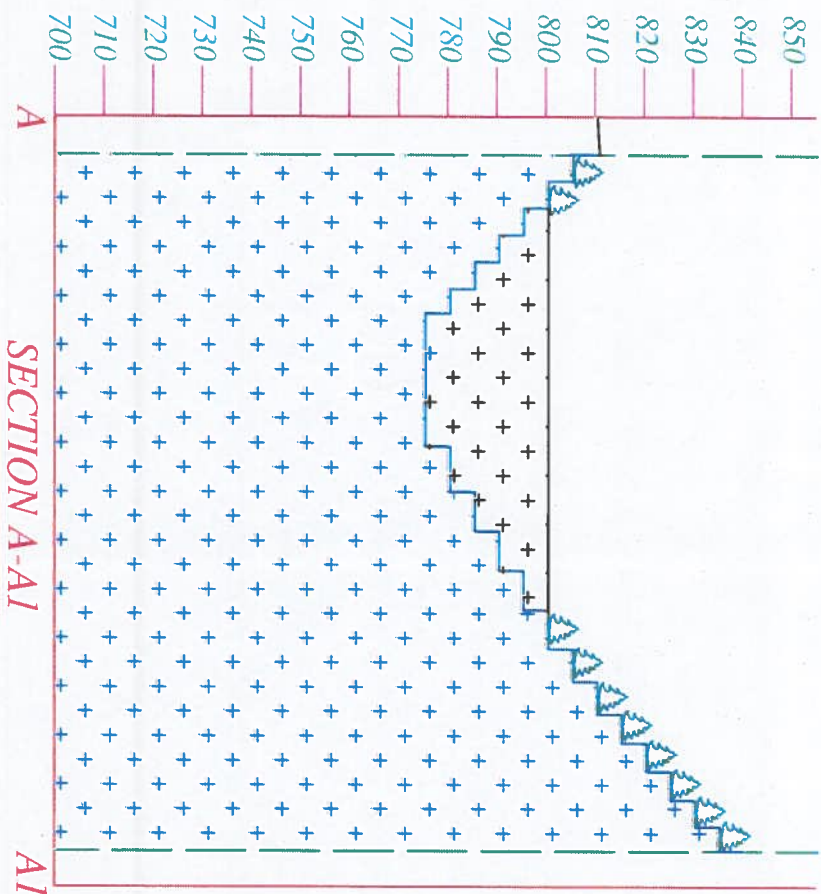
	LEASE BOUNDARY
	7.5 m BUFFER ZONE
	QUARRY ROAD
	CONTOUR LINE
	BOUNDARY STONE
	SECTION LINE
	GRANITE
	WORKING BENCH
	PLANTATION
	1-1.5 YEAR RECLAMATION

GRANITE (BUILDING STONE)  
QUARRY OWNED BY:  
Uthannan

### RECLAMATION PLAN & SECTION

EXTENT :- 4.2689 Ha  
Re-survey No:-57/16,57/1270,  
57/1069,57/1273  
VILLAGE :- Valad  
TALUK :- Mananthavady  
DISTRICT :- Wayanad  
STATE :- Kerala  
MAHESH S  
Recognition Qualified Person (RQP),  
(RQP No - RQP/BNG/338/2014/A)  
Thiruvananthapuram District, Kerala  
SCALE - 1:1500 PLATE NO.: 6





INDEX	
Q.L. BOUNDARY	
7.5m SAFETY LINE	
WORKING BENCHES	
BLOCKED RESERVES	
MINEABLE RESERVES	
PLANTATION	

GRANITE (BUILDING STONE) QUARRY  
OF : Ulahannan

**RECLAMATION SECTIONS**

EXTENT :- 4.2689 Ha	Re-SY No :- 57/16,57/1270,57/1069,57/1273
VILLAGE :- Valad	DISTRICT :- Wayanad
TALUK :- Mananthavady	STATE :- Kerala

Plan Prepared by :-

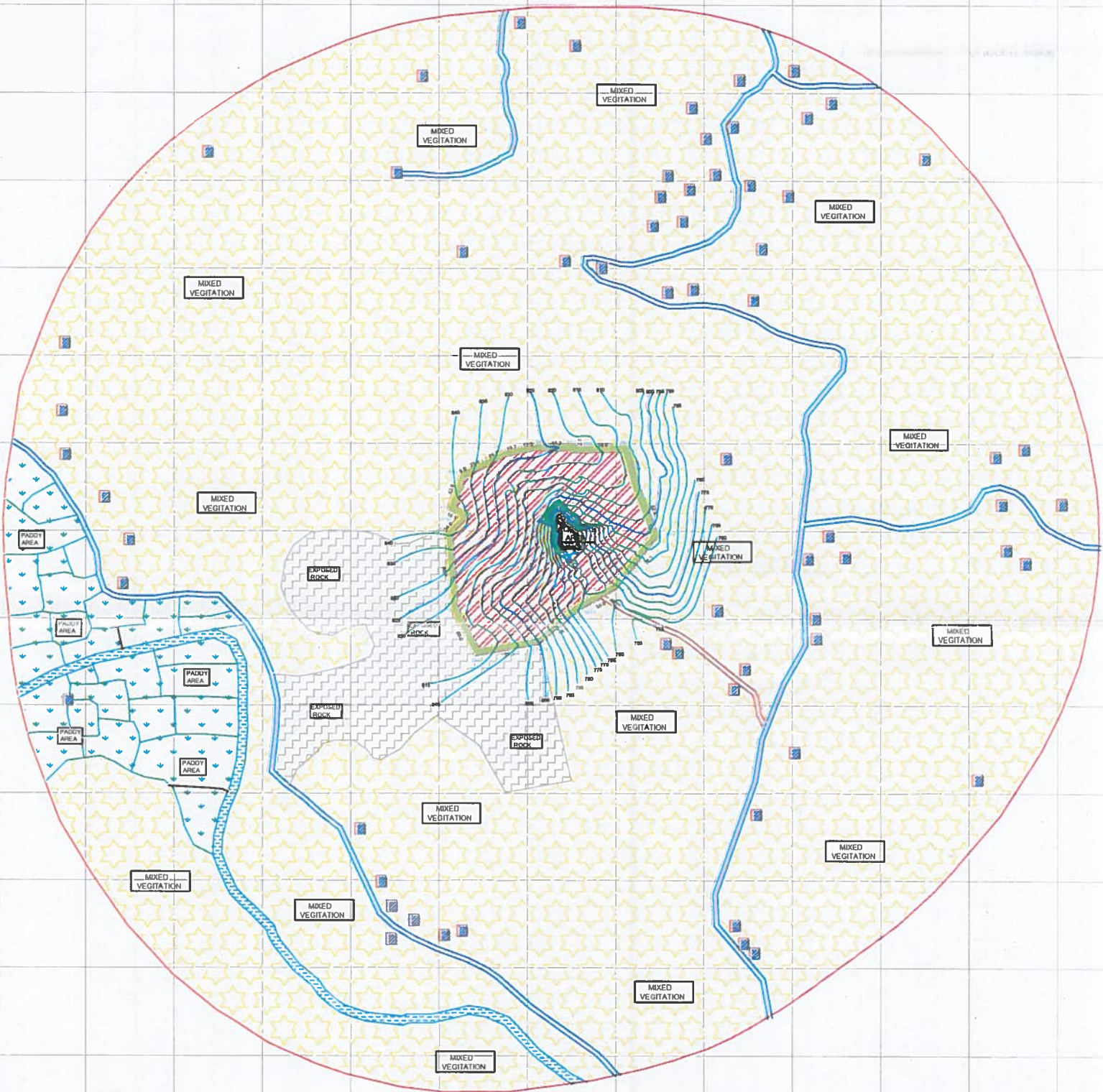
MAHESH. S.  
Recognition Qualified Person (RQP),  
(RQP No - RQP/BNG/338/2014/A)

Thiruvananthapuram District, Kerala

SCALE - 1:1500

MAHESH. S.  
PLATE NO.: 6A





*[Signature]*

PLATE :-7

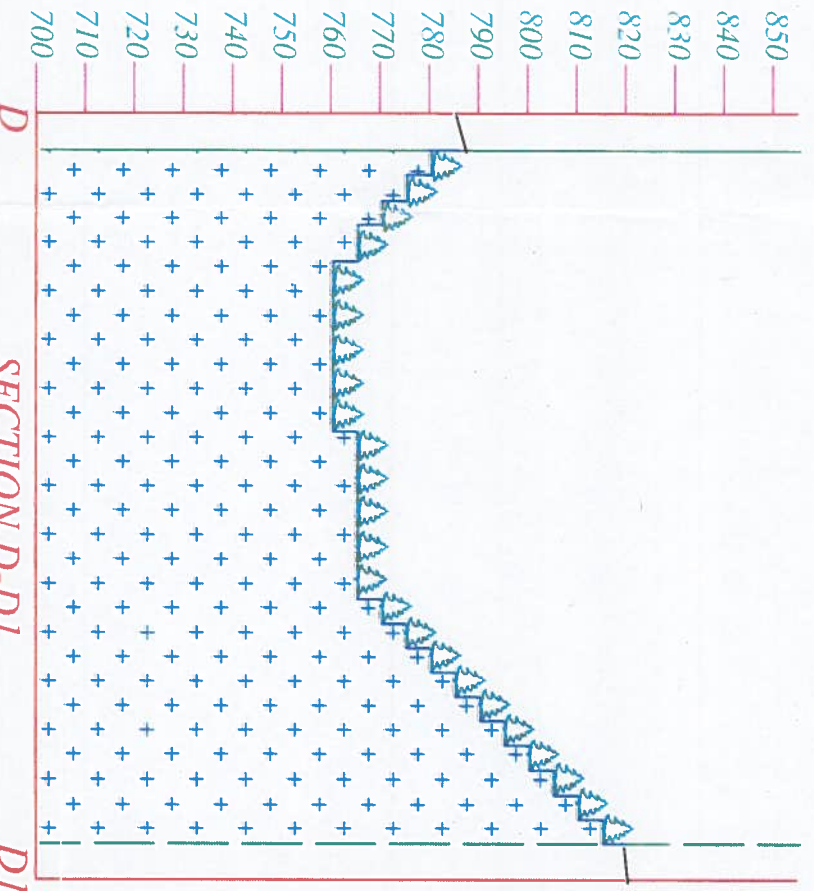
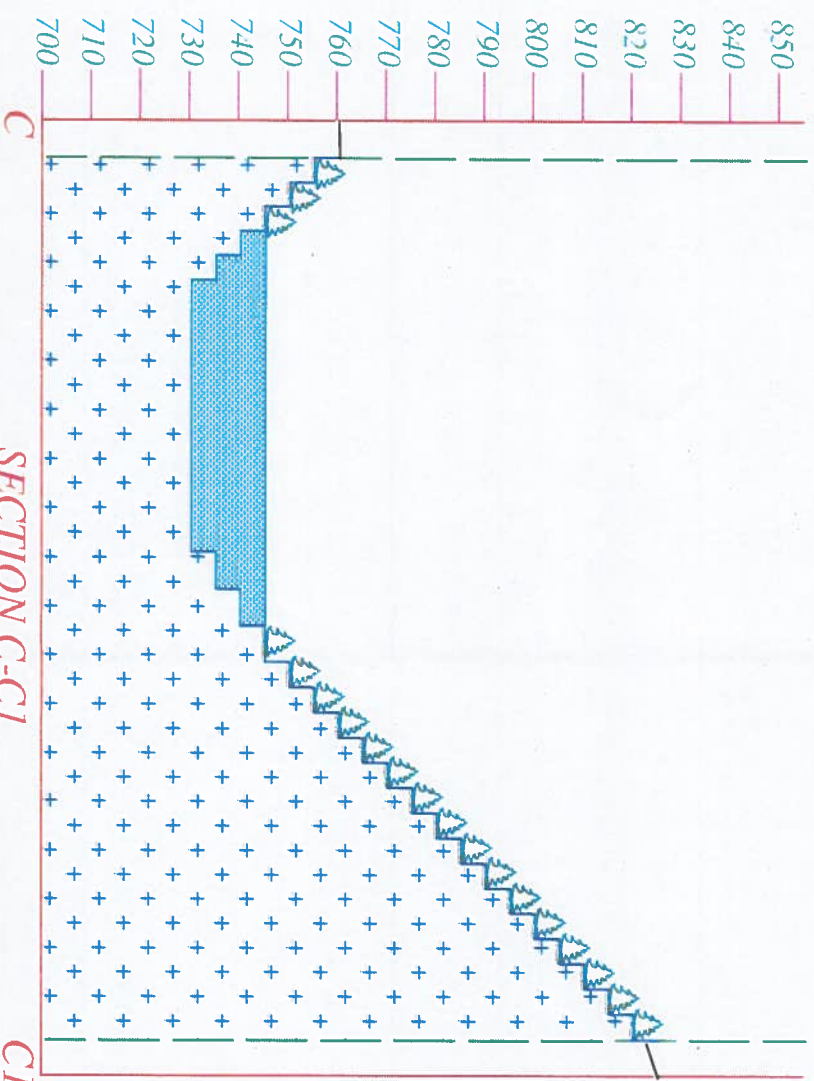
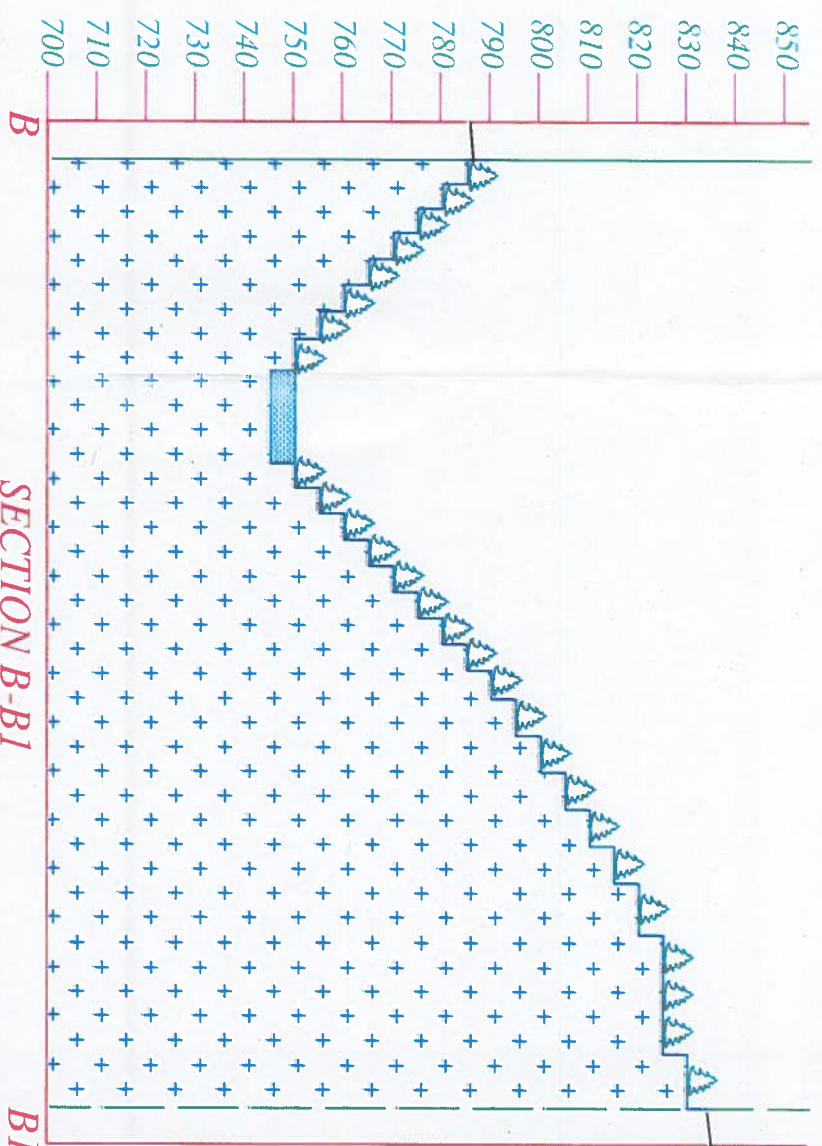
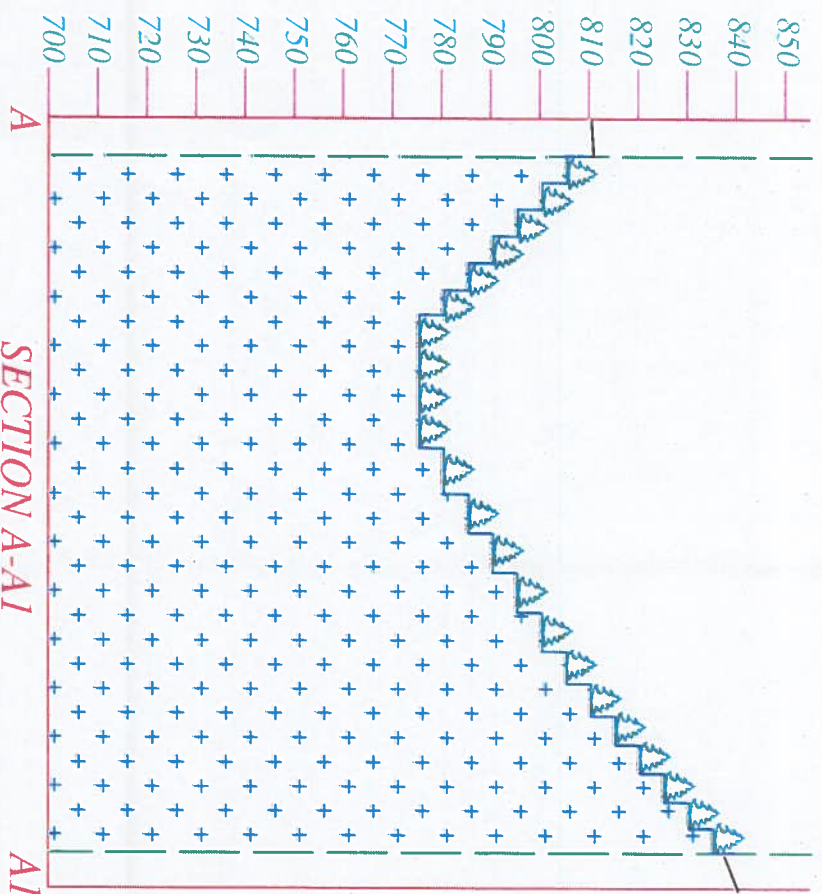
TITLE	
ENVIRONMENTAL PLAN	
SCALE = 1 : 3750	

GRANITE (BUILDING STONE) QUARRY OWNED BY: ULAHANNAN	
VILLAGE : VALAD	DISTRICT : WAYANAD
TALUK : MANANTHAVADY	STATE : KERALA
LEASE AREA : 4.269 Ha	
TOTAL AREA : 4.8702 Ha	
SCALE : 1:5000	Re-SY No-57/16,57/1270, 57/1069,57/1273

LEGEND	
	PROPOSED LEASE AREA
	BUFFER ZONE
	CONTOUR LINE
	HOUSE/BUILDING
	EXPOSED ROCK
	QUARRY AREA
	THODU
	PADDY AREA
	MIXED VEGETATION
	MINED AREA
	SERVICE ROAD
	PWD ROAD

**MAHESH S.**  
M.Tech Applied Technology  
RQP  
BNG/3 014/A





INDEX	
Q L BOUNDARY	
7.5m SAFETY LINE	
WORKING BENCHES	
BLOCKED RESERVES	
WATER STORAGE PIT	
PLANTATION	

GRANITE (BUILDING STONE) QUARRY  
OF : Ulahannan

CONCEPTUAL SECTIONS

EXTENT :- 4.2689 Ha	Re-SY No :- 57/16,57/12/0,57/1069,57/1273
VILLAGE :- Valad	DISTRICT :- Wayanad
TALUK :- Mananthavady	STATE :- Kerala

Plan Prepared by :-

MAHESH S

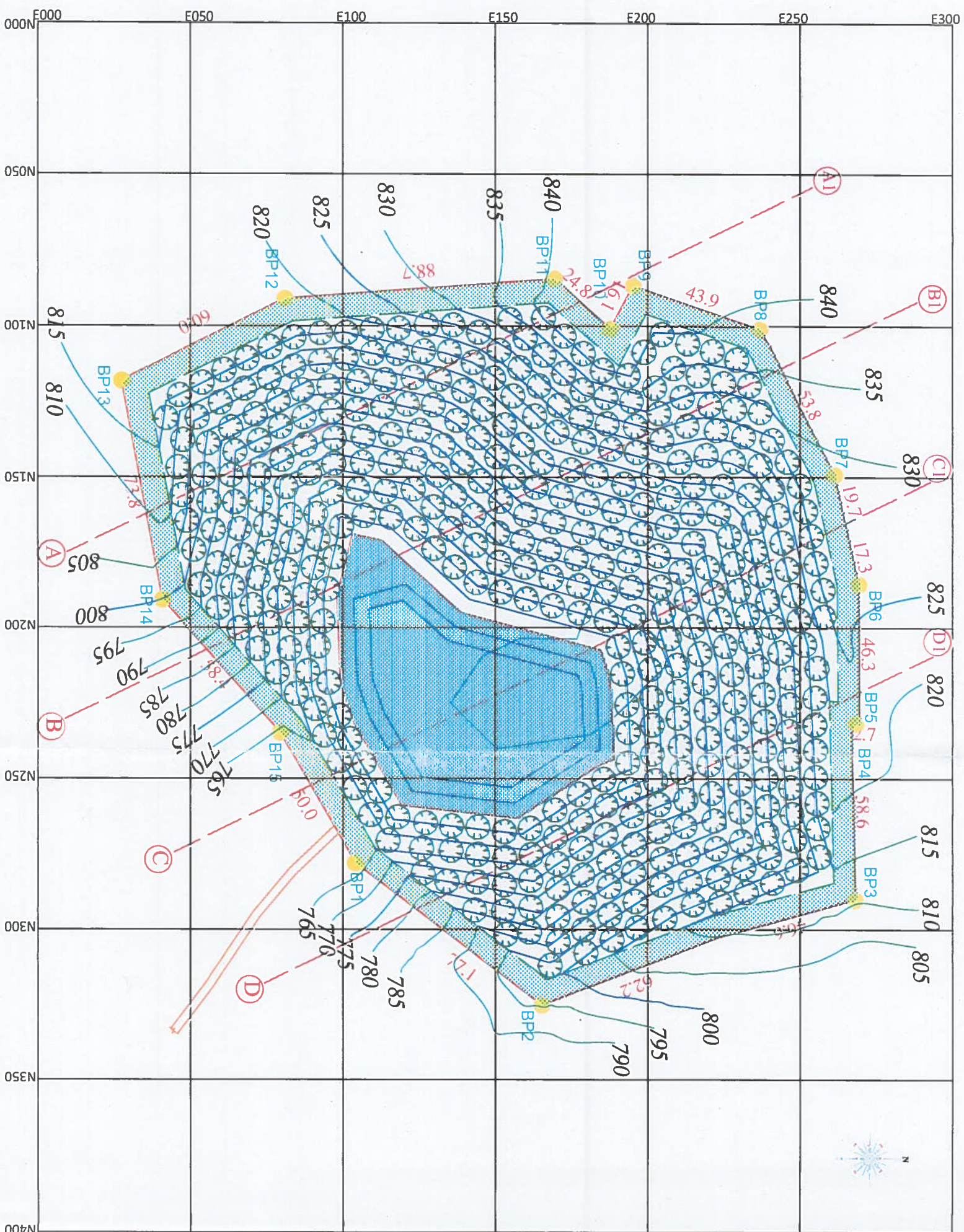
Recognition Qualified Person (RQP),

(RQP No - RQP/BNG/338/2014/A)

Thiruvananthapuram District, Kerala

SCALE - 1:1500  
MAHESH S. PLATE NO.: 8A





### LEGEND

	LEASE BOUNDARY
	7.5 m BUFFER ZONE
	QUARRY ROAD
	SECTION LINE
	CONTOUR LINE
	BOUNDARY STONE
	STORAGE PIT
	WORKING BENCH
	PLANTATION

GRANITE (BUILDING STONE)  
QUARRY OWNED BY:  
Ulahannan

### CONCEPTUAL PLAN & SECTION

EXTENT :- 4.2689 Ha

Re-survey No:-57/16,57/1270,  
57/1069,57/1273

VILLAGE :- Valad

TALUK :- Mananthavady

DISTRICT :- Wayanad

STATE :- Kerala

MAHESH, S.

Recognition Qualified Person (RQP),  
(RQP No - RQP/BNG/338/2014/A )  
Thiruvananthapuram District, Kerala

SCALE - 1:1500 PLATE NO.: 8

MAHESH S.

Mtech Applied Geology

RQP

RQP No: BNG/338/2014/A



Approved Vide Letter No: DOW/M... 2324/117  
Dtd... 12-06-15

**GEOLOGIST**  
DISTRICT OFFICE  
DEPT. OF MINING & GEOLOGY  
MEENANGADI, WAYANAD - 673 591



### LEGEND

	LEASE BOUNDARY
	7.5 m BUFFER ZONE
	QUARRY ROAD
	CONTOUR LINE
	BOUNDARY STONE
	SECTION LINE
	DRAINAGE WAY
	STORAGE PIT
	SEDIMENTATION

GRANITE (BUILDING STONE)  
QUARRY OWNED BY:  
Uthaman

### DRAINAGE RUNOFF PLAN & SECTION

EXTENT :- 4.2689 Ha  
Re-survey No:-57/16,57/1270,  
57/1069,57/1273  
VILLAGE :- Valad  
TALUK :- Mananthavady  
DISTRICT :- Wayanad  
STATE :- Kerala  
MAHESH. S.  
Recognition Qualified Person (RQP),  
(RQP No - RQP/BNG/338/2014/A)  
Thiruvananthapuram District, Kerala  
SCALE - 1:1500 PLATE NO.: 9

