

**BEFORE THE NATIONAL GREEN TRIBUNAL  
SOUTHERN ZONE AT CHENNAI**

**APPEAL No. 15 of 2022**

Arjun Gopalaratnam,

... Appellant

Vs

Tamil Nadu SEIAA and anr.

... Respondents

**INDEX TO ADDITIONAL TYPED SET**

<b>S No.</b>	<b>Date</b>	<b>Description</b>	<b>Page No.</b>
1.	20.10.2020	Letter of Intent issued by Geology and Mining Department	<b>1</b>
2.	-	Geo Referenced Toposheet showing Lease Applied Area	<b>4</b>
3.	23.10.2020	Mining Plan	<b>5</b>
4.	10.11.2020	Environment Management Plan	<b>16</b>
5.	20.11.2020	Mining Plan Approval	<b>29</b>
6.	-	Risk Assessment and Disaster Management Plan	<b>32</b>
7.	-	FORM I	<b>34</b>
8.	-	FORM 1 M	<b>48</b>

Dated at Chennai on this the 12<sup>th</sup> day of September 2022

  
**COUNSEL FOR 2<sup>ND</sup> RESPONDENT**

நக.எண். 47/க்யூ3 /2019,  
நாள். 20.10.2020

உதவி இயக்குநர் அலுவலகம்,  
புவியியல் மற்றும் சுரங்கத்துறை,  
காஞ்சிபுரம்.



அறிவிக்கை

பொருள் : கனிமங்களும் குவாரிகளும் - சாதாரண கற்கள் மற்றும் கிராவல் மண் - காஞ்சிபுரம் மாவட்டம் - உத்திரமேரூர் வட்டம் - எடமச்சி கிராமம் - புல எண்கள். 367/1, 367/2, 368/1G, 368/1H, 368/1I, 376/1, 376/2, 376/3, 376/4, 376/5 - மொத்த பரப்பு 2.77.00 - பட்டா நிலங்கள் - சாதாரண கற்கள் / கிராவல் மண் வெட்டி எடுக்க திரு.R.கிரிதரன் த/பெ. ராஜேந்திரன் என்பவர் தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959 விதி எண்.19(1) -ன்கீழ் மனு செய்தது - அங்கீகரிக்கப்பட்ட சுரங்கத்திட்டம் மற்றும் - மாநில அளவிலான சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் ஒப்புதல் பெற்று அளிக்க தெரிவித்தல் - தொடர்பாக.

- பார்வை :
1. திரு.R.கிரிதரன் த/பெ. ராஜேந்திரன், எண்.12/113, 1வது மெயின்ரோடு, மூகாம்பிகை நகர், சிக்கராயபுரம் விரிவு, கெருகம்பாக்கம், சென்னை - 600 128 என்பவரின் விண்ணப்பம் பெறப்பட்ட நாள்.24.02.2020.
  2. காஞ்சிபுரம் சார் ஆட்சியர் அறிக்கை எண். நக.777/2020/அ1, நாள்.04.09.2020.
  3. உதவி இயக்குநர் மற்றும் உதவி புவியியலாளர், புவியியல் மற்றும் சுரங்கத்துறை, காஞ்சிபுரம் அவர்களின் கூட்டு இடப்பார்வை அறிக்கை நாள் :07.10.2020.
  4. அரசாணை எண்.Ms.79, தொழில் (எம்.எம்.சி.1) துறை, நாள். 06.04.2015.
  5. அரசாணை எண்.Ms.No.169, தொழில் (எம்.எம்.சி.1) துறை, நாள். 04.08.2020.
  6. அரசாணை எண்.Ms.No.208, தொழில் (எம்.எம்.சி.1) துறை, நாள். 21.09.2020.

காஞ்சிபுரம் மாவட்டம், உத்திரமேரூர் வட்டம், எடமச்சி கிராமம், புல எண்கள்.367/1 (0.08.50), 367/2 (0.20.00), 368/1G (0.26.00), 368/1H (0.11.50), 368/1I (0.12.50), 376/1 (0.29.00), 376/2 (0.12.00), 376/3 (0.33.50), 376/4 (1.15.00), 376/5 (0.09.00) மொத்த பரப்பு 2.77.00 ஹெக்டேர் பட்டா நிலத்தில் சாதாரண கற்கள் மற்றும் கிராவல்மண் வெட்டியெடுக்க ஐந்து ஆண்டுகளுக்கு க சென்னை - 600 128, கெருகம்பாக்கம், சிக்கராயபுரம் விரிவு, மூகாம்பிகை நகர், 1வது மெயின்ரோடு எண்.12/113 என்ற முகவரியில் வசிக்கும் திரு.R.கிரிதரன் த/பெ. ராஜேந்திரன் என்பவர் குவாரி குத்தகை உரிமம் கோரி



விண்ணப்பித்துள்ள மனுவின் பேரில் காஞ்சிபுரம், சார் ஆட்சியர் மற்றும் காஞ்சிபுரம், புவியியல் மற்றும் சுரங்கத்துறை, உதவி இயக்குநர் (கனிமம்) ஆகியோர் மேற்காணும் விண்ணப்ப புலங்களில் தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959 திருத்திய விதி எண்.19(a), (b), (c) மற்றும் 20-ன் கீழ் பார்வை 6-ல் கண்ட அரசாணையின்படி பத்து ஆண்டுகளுக்கு சாதாரண கற்கள் மற்றும் கிராவல் மண் குவாரி குத்தகை அனுமதி கீழ்க்கண்ட நிபந்தனைகளுக்குட்பட்டு வழங்கலாம் என பார்வை 2 மற்றும் 3-ல் கண்டவாறு பரிந்துரை செய்துள்ளனர்.

1. விண்ணப்பப் புலங்களுக்கு அருகிலுள்ள அரசு புறம்போக்கு மற்றும் பட்டா நிலங்களுக்கு முறையே 10 மீட்டர் மற்றும் 7.5 மீட்டர் பாதுகாப்பு இடைவெளிவிட்டு குவாரிப்பணி செய்யப்பட வேண்டும்.
2. விண்ணப்பப் புலங்களுக்கு மேற்கே உள்ள ஏரி உள்வாய் நீர்நிலை புறம்போக்கு புல எண்கள்.371, 372, 373-ல் எவ்வித ஆக்ரமணங்கள் செய்யக்கூடாது மேலும் 50 மீட்டர் பாதுகாப்பு இடைவெளிவிட்டு பராமரித்து குவாரிப்பணி செய்யப்பட வேண்டும்.
3. விண்ணப்ப புலங்களுங்களுக்கு இடையே அமைந்துள்ள கல்லாங்குத்து புறம்போக்கு புல எண்.369 இப்புலத்தினை எவ்வித மாறுதல்கள் செய்யாமல் பூமியில் உள்ளவாறே பராமரிக்க வேண்டும். மேலும் இப்புலத்திற்கு 10 மீட்டர் பாதுகாப்பு இடைவெளிவிட்டு குவாரிப்பணி செய்யப்பட வேண்டும்.
4. விண்ணப்ப புலங்களுங்களுக்கு கிழக்கே புல எண். 258 முதல் 274 வரை அமைந்துள்ள எடமச்சி சமூகநலக்காடுகளுக்கும், மேலும் மேய்க்கால் நிலத்தில் அ பதிவேட்டின்படி புலஎண். 379 சமூக நலக்காடுகள் என உள்ளதால் இப்புலங்களினை எவ்வித மாறுதல்கள் செய்யாமல் பூமியில் உள்ளவாறே பராமரிக்க வேண்டும். மேலும் இப்புல எண்.379-னை ஒட்டியுள்ள விண்ணப்பப் புல எண்கள்.367/1, 367/2, 376/4க்கு 60 மீட்டர் பாதுகாப்பு இடைவெளிவிட்டு கம்பி வேலி அமைத்து குவாரிப்பணி செய்யப்பட வேண்டும்.
5. விண்ணப்ப புல எண்.376/1-ல் தென்மேற்கிலிருந்து வடகிழக்கு வழியாக குறைந்த மின்னழுத்த கம்பி செல்கிறது. எனவே குவாரி குத்தகை வழங்குவதற்குமுன் அகற்றப்படவேண்டும் என்ற நிபந்தனையுடனும், இல்லையேல் பாதுகாப்பு இடைவெளி 50 மீட்டர் விடப்பட்டு குவாரிப்பணி செய்யப்பட வேண்டும்.
6. தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959 விதி எண்.41-ன்படி விண்ணப்ப புலங்களுக்கு ஏற்பளிக்கப்பட்ட சுரங்கத்திட்டம் (Approved Mining Plan) ஒப்புதல் பெற்றளிக்கப்பட வேண்டும்.
7. தமிழ்நாடு சிறுகனிம சலுகை விதிகள் 1959 விதி எண்.42-ன்படி விண்ணப்ப புலத்திற்கு மாநில அளவிலான சுற்றுச் சூழல் தாக்க மதிப்பீட்டு ஆணையத்தின் சுற்றுச்சூழல் ஒப்புதல் (Environment Clearance) பெற்று சமர்ப்பிக்கப்பட வேண்டும்.



எனவே பார்வை 5-ல் கண்ட அரசாணையில் அளிக்கப்பட்டுள்ள அதிகாரங்களின் அடிப்படையில் மேற்காணும் விண்ணப்பப் புலங்களில் சாதாரண கற்கள் மற்றும் கிராவல்மண் வெட்டியெடுக்க குத்தகை உரிமம் வழங்க அங்கீகரிக்கப்பட்ட சுரங்கத் திட்டத்தை (Approved Mining Plan) மூன்று மாதத்திற்குள் மாவட்ட ஆட்சியர் / உதவி இயக்குநர் முன்பு சமர்ப்பிக்க வேண்டியது. மேலும் மேற்காணும் விண்ணப்பப் புலங்களில் சாதாரண கற்கள் & கிராவல் மண் வெட்டியெடுக்க அனுமதி வழங்குவது தொடர்பாக மாநில சுற்றுச் சூழல் தாக்க மதிப்பீட்டு ஆணையம் (SEIAA) ஒப்புதலை பெற்று சமர்ப்பிக்க அறிவுறுத்தப்படுகிறது.

20102  
உதவி இயக்குநர்,  
புவியியல் மற்றும் சுரங்கத்துறை,  
காஞ்சிபுரம்.

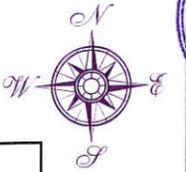
பெறுநர்,  
திரு.R.கிரிதரன்  
த/பெ. ராஜேந்திரன்,  
எண்.12/113, 1வது மெயின்ரோடு,  
முகாம்பிகை நகர், சிக்கராயபுரம் விரிவு,  
கெருகம்பாக்கம், சென்னை - 600 128

நகல்:-

- 1) தலைவர், மாநில சுற்றுச்சூழல் தாக்க மதிப்பீட்டு ஆணையம், சென்னை.
- 2) இயக்குநர், புவியியல் மற்றும் சுரங்கத்துறை, கிண்டி, சென்னை 600 032.

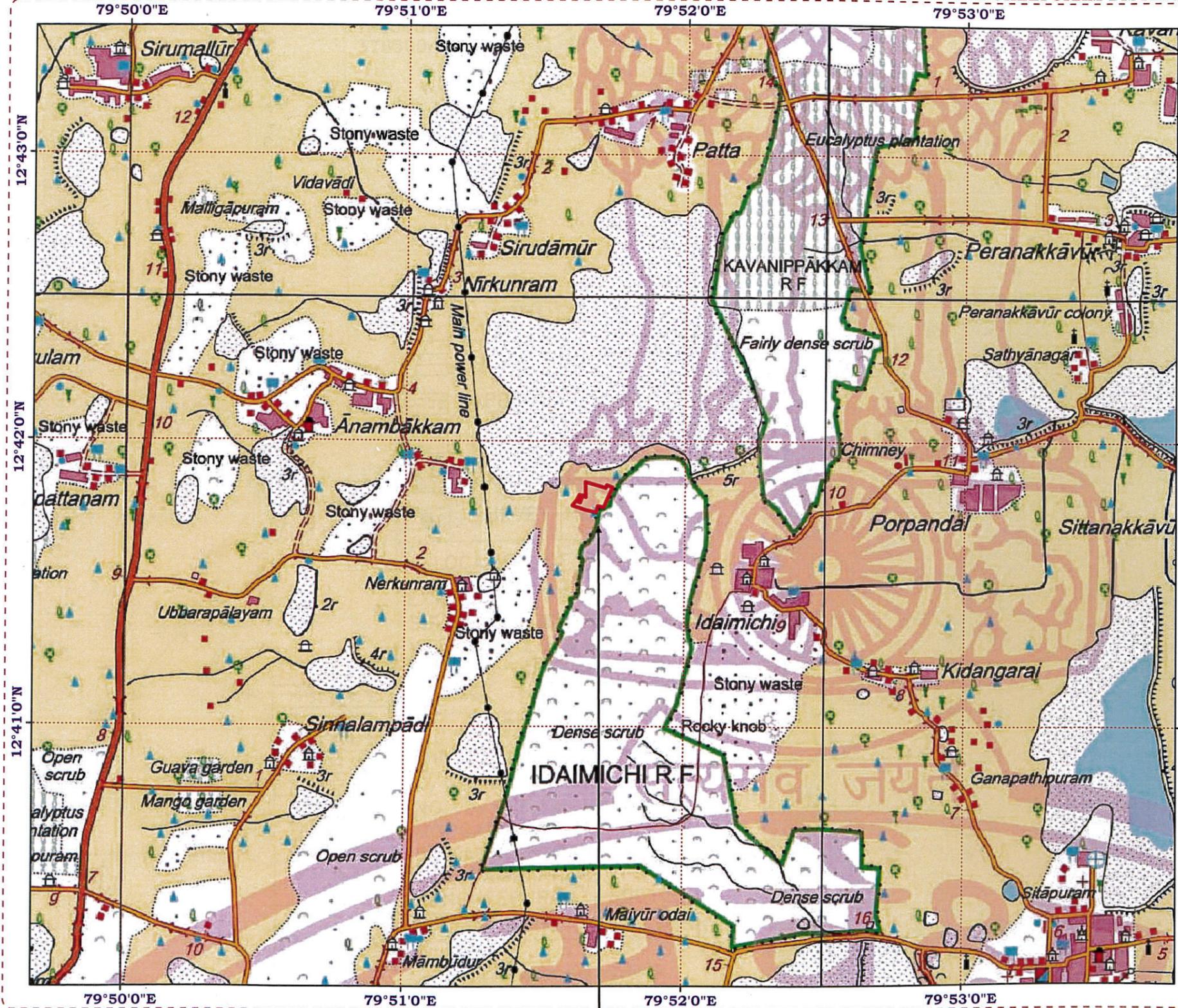
S. Suriyakumar  
S SURIYAKUMAR  
Recognised Qualified Person  
Reg No RQP/MAS/013/87'A

GEO REFERENCED TOPOSHEET SHOWING LEASE APPLIED AREA



TOPOSHEET NO: 57 P/14

KANCHEEPURAM DISTRICT



LEGEND

CONVENTIONAL SYMBOLS

Express highway: with toll, with bridge, with distance stone	
Roads, metalled: according to importance	
Roads, double cartage-way: according to importance	
Unmetalled road, Cart-track, Pack-track with pass, Foot-path	
Streams: with track in bed; undefined; Canal	
Dams: masonry or rock-filled; earthwork; Weir	
River: dry with water channel; with island & rocks; Tidal river	
Submerged rocks, Shoal, Swamp, Reeds	
Wells: lined; unlined; Tube-well; Spring; Tanks: perennial; dry	
Embankments: road or rail; tank; Broken ground	
Railways, broad gauge: double, single with station; under constn.	
Railways, other gauge: double, single with distance stone; do.	
Mineral line or tramway, Kin, Cutting with tunnel	
Contours with sub-features: Rocky slopes, Cliffs	
Sand features: (1) flat, (2) sand-hill(permanent), (3) dunes(shifting)	
Towns or Villages: inhabited, deserted, Fort	
Huts: permanent; temporary; Tower, Antiquities	
Temple, Chhatri, Church, Mosque, Idgah, Tomb, Graves	
Lighthouses, Lighthouse, Buoys: lighted, unlighted, Anchorage	
Mine, Vine on trellis, Grass, Scrub	
Palm: palmyra; other; Plantain, Coconut, Bamboo, Other trees	
Area: cultivated; wooded; Surveyed tree	
Boundary, international	
state: demarcated, undemarcated	
district; subdivision; tahsil or taluk; forest	
Boundary pillars: surveyed; unlocated	
Heights, triangulated: station; point; approximate	
Bench-mark: geodetic; tertiary, canal	
Post office, Telegraph office, Overhead tank	
Rest house or inspection bungalow, Circuit house, Police station	
Camping ground, Forest: reserved; protected	
Speed name: administrative, locality or tribal	
Hospital, Dispensary, Veterinary; Hospital / Dispensary	
Aerodrome, Helipad, Tourist site	
Power line: with pylons surveyed; with poles unsurveyed	

**Lease Applied Area**

**LOCATION OF QUARRY**  
 SF. NO: 367/1,367/2 etc.,  
 EXTENT : 2.77.00 HA,  
 VILLAGE : Edamachi,  
 TALUK : Uthiramerur,  
 DISTRICT : Kancheepuram,  
 STATE : Tamilnadu.

**NAME OF THE CLIENT**  
 Thiru.R.GIRIDHARAN,  
 C/O Rajendran,  
 No.12/113, 1st Main Road,  
 Moogambigai Nagar,  
 Sikkarayapuram Extn,  
 Gerugambakkam,  
 Kancheepuram -600128  
 EIA COORDINATOR

*S. Suriyakumar*  
**S SURIYAKUMAR,**  
 Recognised Qualified Person  
 Reg No RQP/MAS/013/87/A



Lease Applied Area

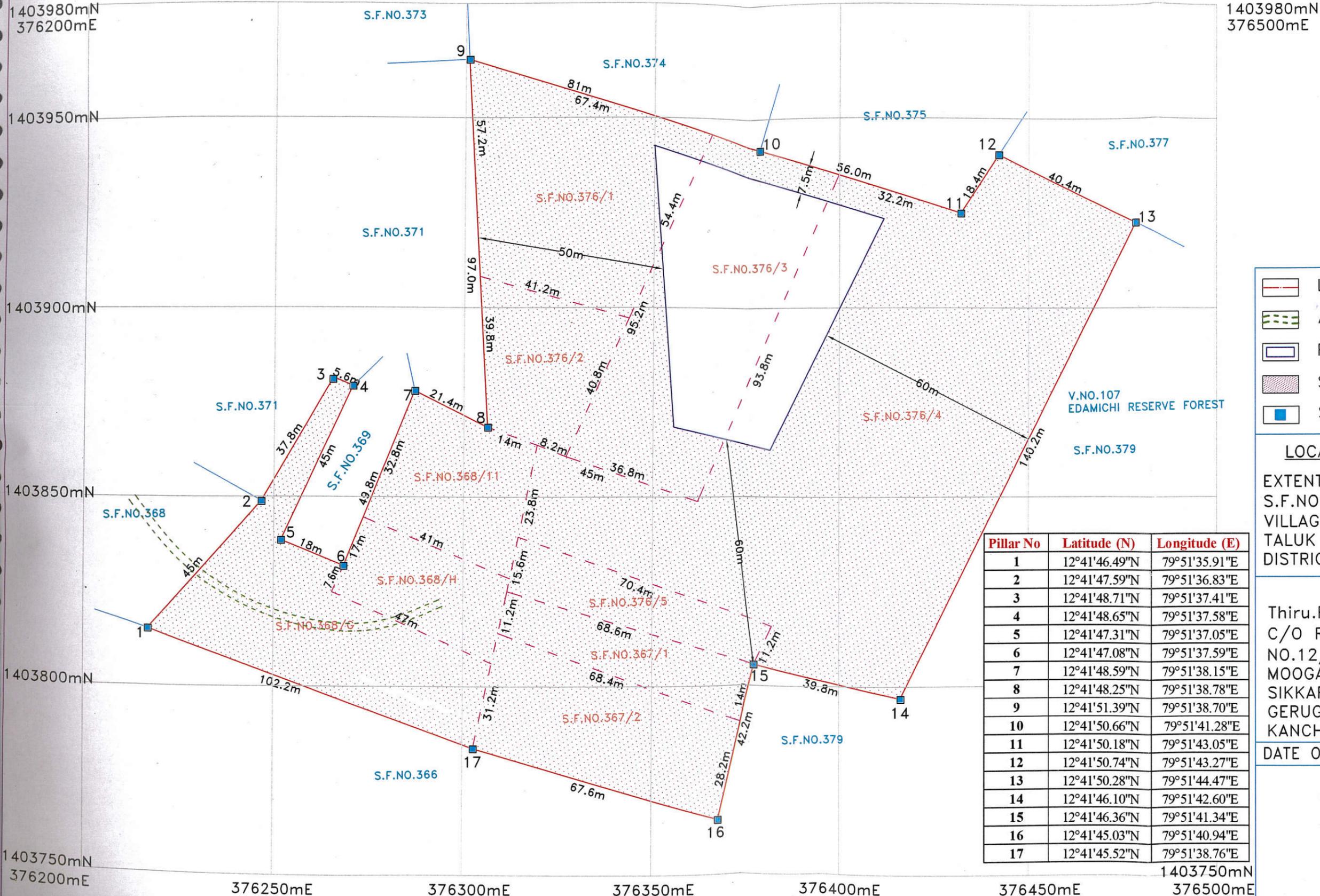
Scale 1:50,000

# LEASE PLAN

EDAMACHI ROUGH STONE & GRAVEL QUARRY

Scale - 1:1000

PLATE - II



### INDEX

- LEASE BOUNDARY
- APPROACH ROAD
- PERMISSIBLE AREA
- SAFETY BARRIER
- SURVEY PILLAR

### LOCATION OF QUARRY

EXTENT : 2.77.00Ha  
 S.F.NO : 136/1,2,376/5,4 etc..  
 VILLAGE : EDAMACHI  
 TALUK : UTHIRAMERUR  
 DISTRICT : KANCHEEPURAM

### APPLICANT

Thiru.R.GIRIDHARAN,  
 C/O RAJENDRAN,  
 NO.12/113,1st MAINROAD,  
 MOOGAMBIGAI NAGAR,  
 SIKKARAYAPURAM EXTN,  
 GERUGAMBAKKAM,  
 KANCHEEPURAM - 600128

DATE OF SURVEY: 23.10.2020

Pillar No	Latitude (N)	Longitude (E)
1	12°41'46.49"N	79°51'35.91"E
2	12°41'47.59"N	79°51'36.83"E
3	12°41'48.71"N	79°51'37.41"E
4	12°41'48.65"N	79°51'37.58"E
5	12°41'47.31"N	79°51'37.05"E
6	12°41'47.08"N	79°51'37.59"E
7	12°41'48.59"N	79°51'38.15"E
8	12°41'48.25"N	79°51'38.78"E
9	12°41'51.39"N	79°51'38.70"E
10	12°41'50.66"N	79°51'41.28"E
11	12°41'50.18"N	79°51'43.05"E
12	12°41'50.74"N	79°51'43.27"E
13	12°41'50.28"N	79°51'44.47"E
14	12°41'46.10"N	79°51'42.60"E
15	12°41'46.36"N	79°51'41.34"E
16	12°41'45.03"N	79°51'40.94"E
17	12°41'45.52"N	79°51'38.76"E

Certified that plans and section are prepared as per TNMMCR, 1959 and MMCDR.

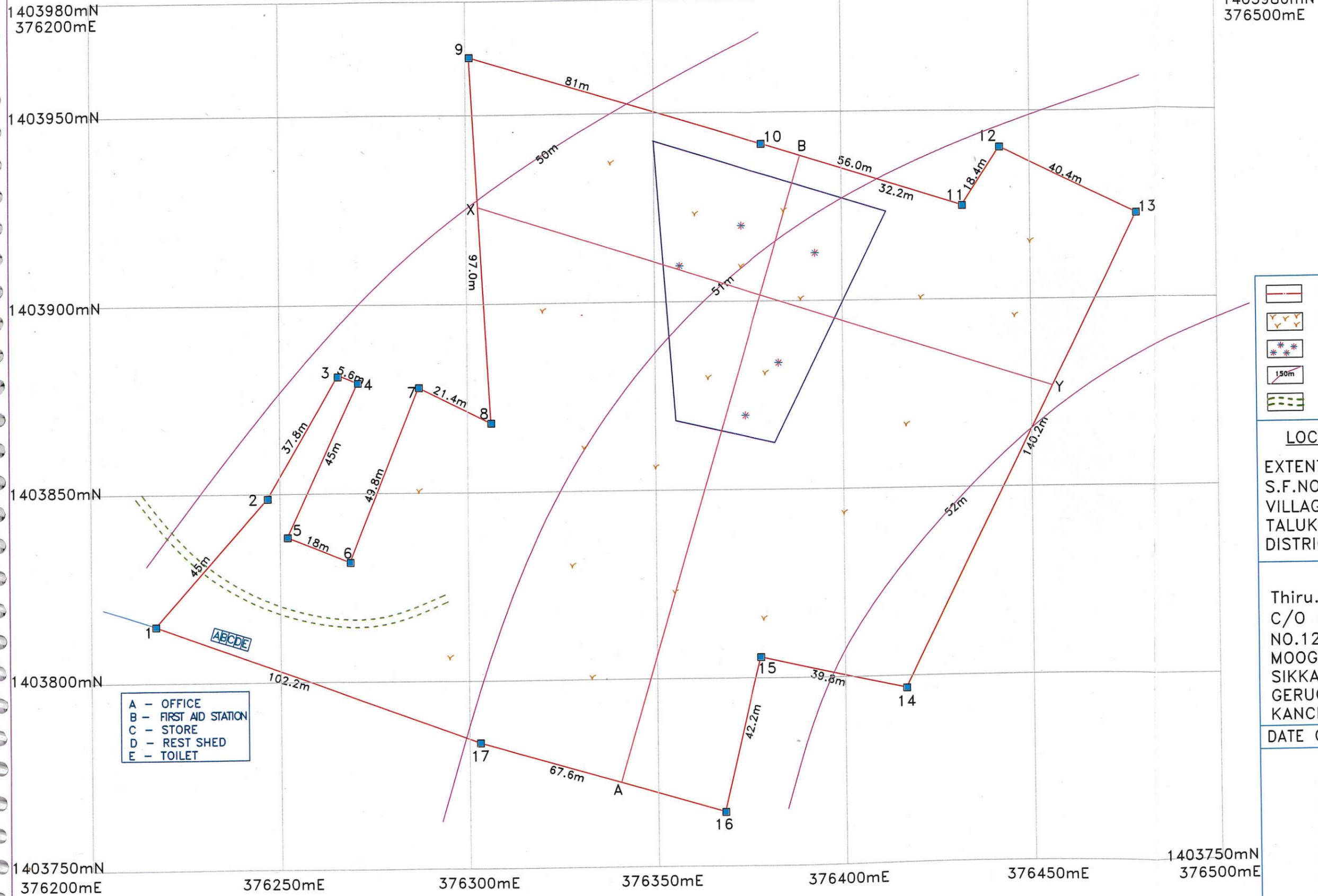
*S. Suriya Kumar*

**S. SURIYA KUMAR,**  
 Recognised Qualified Person,  
 Reg. No. RQP/MAS/013/87/A

# GEOLOGICAL & SURFACE PLAN

## EDAMACHI ROUGH STONE & GRAVEL QUARRY

Scale - 1:1000



### INDEX

- LEASE BOUNDARY
- GRAVEL
- CHARNOCKITE
- 150m CONTOUR
- APPROACH ROAD

### LOCATION OF QUARRY

EXTENT : 2.77.00Ha  
 S.F.NO : 136/1,2,376/5,4 etc..  
 VILLAGE : EDAMACHI  
 TALUK : UTHIRAMERUR  
 DISTRICT : KANCHEEPURAM

### APPLICANT

Thiru.R.GIRIDHARAN,  
 C/O RAJENDRAN,  
 NO.12/113,1st MAINROAD,  
 MOOGAMBIGAI NAGAR,  
 SIKKARAYAPURAM EXTN,  
 GERUGAMBAKKAM,  
 KANCHEEPURAM - 600128

DATE OF SURVEY: 23.10.2020

Certified that plans and section  
 are prepared as per TNMMCR,  
 1959 and MMCDR.

*S. Suriya Kumar*

**S. SURIYA KUMAR,**  
 Recognised Qualified Person,  
 Reg. No. RQP/MAS/013/87/A

- A - OFFICE
- B - FIRST AID STATION
- C - STORE
- D - REST SHED
- E - TOILET

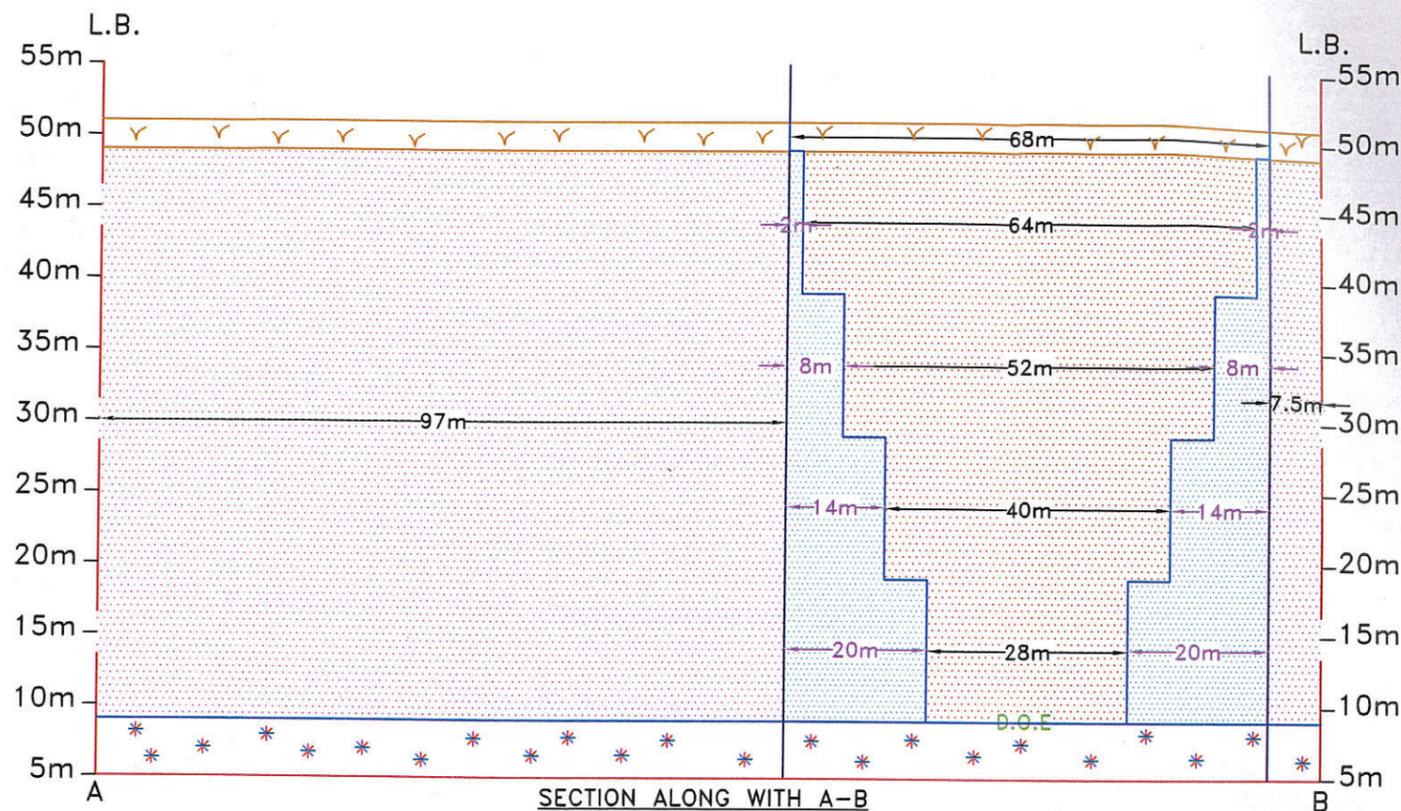
# GEOLOGICAL SECTIONS

EDAMACHI ROUGH STONE & GRAVEL QUARRY

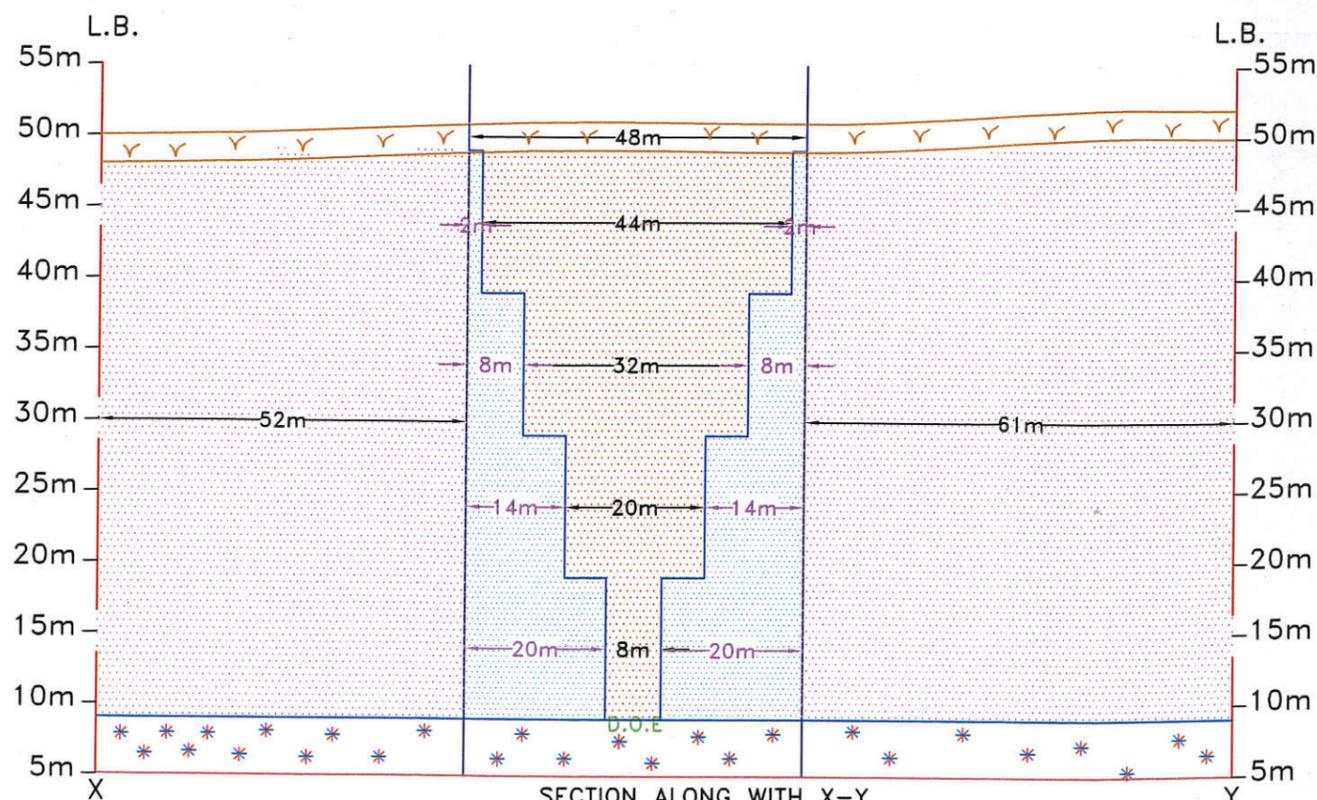
Scale : Horizontal = 1:1000  
Vertical = 1:500



PLATE - IV



SECTION ALONG WITH A-B



SECTION ALONG WITH X-Y

MINERAL RESOURCES AND RESERVES		
DESCRIPTION	VOLUME (m <sup>3</sup> )	COLOR INDEX
Mineral Reserves	55040	
Mineral Resources Loss in Benches	26560	
Mineral Resources loss in safety barrier	472340	
<b>GEOLOGICAL RESOURCE</b>	<b>553940</b>	

## INDEX

- L.B. LEASE BOUNDARY
- GRAVEL
- CHARNOCKITE
- UPL ULTIMATE PIT LIMIT
- D.O.E. DEPTH OF ESTIMATION

## LOCATION OF QUARRY

EXTENT : 2.77.00Ha  
S.F.NO : 136/1,2,376/5,4 etc..  
VILLAGE : EDAMACHI  
TALUK : UTHIRAMERUR  
DISTRICT : KANCHEEPURAM

## APPLICANT

Thiru.R.GIRIDHARAN,  
C/O RAJENDRAN,  
NO.12/113,1st MAINROAD,  
MOOGAMBIGAI NAGAR,  
SIKKARAYAPURAM EXTN,  
GERUGAMBAKKAM,  
KANCHEEPURAM -600128

DATE OF SURVEY: 23.10.2020

Certified that plans and section are prepared as per TNMMCR, 1959 and MMCDR.

*S. Suriya Kumar*

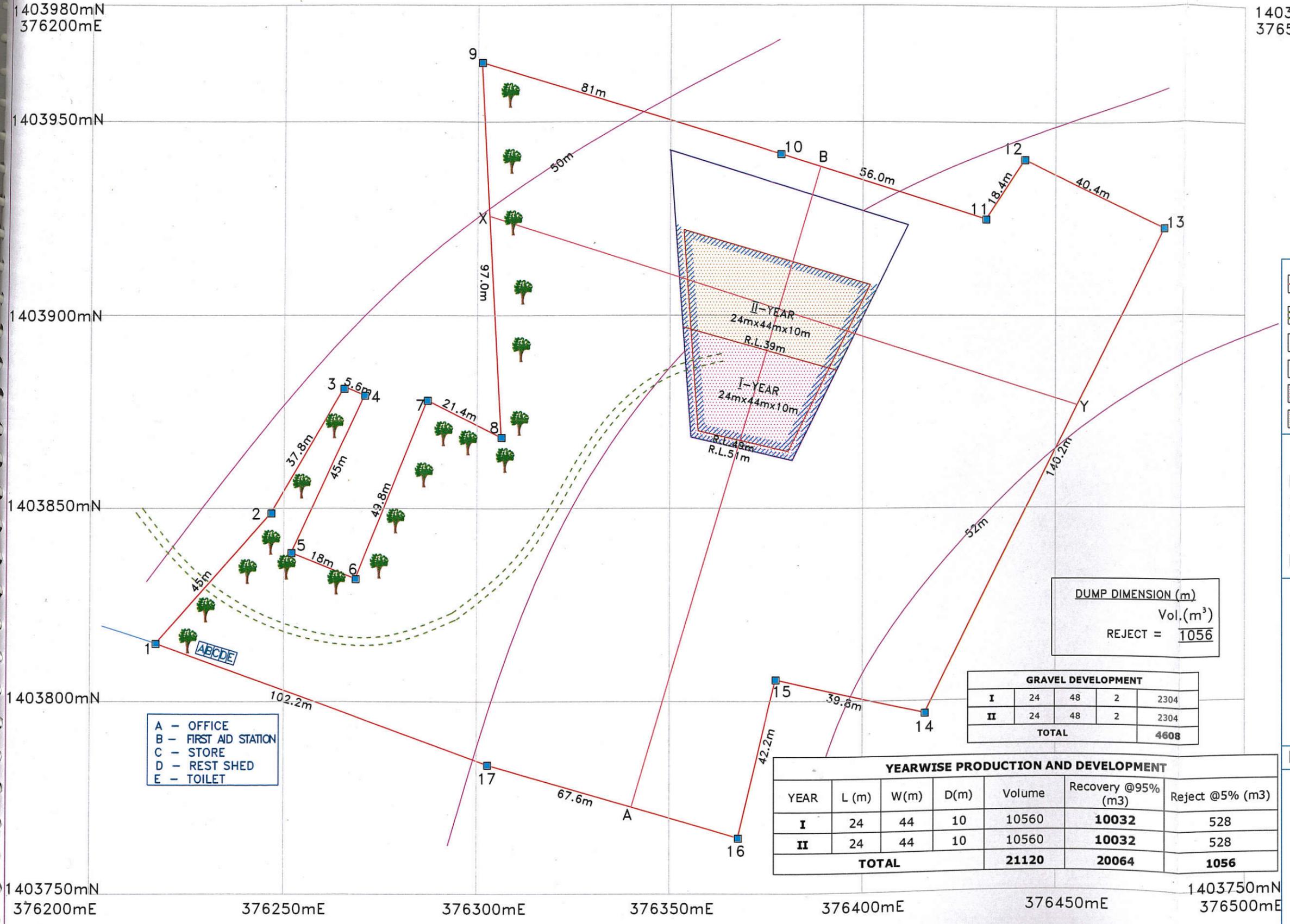
**S. SURIYA KUMAR,**  
Recognised Qualified Person,  
Reg. No. RQP/MAS/013/87/A

# PRODUCTION AND DEVELOPMENT PLAN FOR THE FIRST TWO YEARS

EDAMACHI ROUGH STONE & GRAVEL QUARRY

Scale - 1:1000

PLATE - V



**INDEX**

- LEASE BOUNDARY
- APPROACH ROAD
- MINE WORKING
- AREA OF AFFORESTATION
- FIRST YEAR EXCAVATION
- SECOND YEAR EXCAVATION

**LOCATION OF QUARRY**

EXTENT : 2.77.00Ha  
 S.F.NO : 136/1,2,376/5,4 etc..  
 VILLAGE : EDAMACHI  
 TALUK : UTHIRAMERUR  
 DISTRICT : KANCHEEPURAM

**APPLICANT**

Thiru.R.GIRIDHARAN,  
 C/O RAJENDRAN,  
 NO.12/113,1st MAINROAD,  
 MOOGAMBIGAI NAGAR,  
 SIKKARAYAPURAM EXTN,  
 GERUGAMBAKKAM,  
 KANCHEEPURAM - 600128

DATE OF SURVEY: 23.10.2020

DUMP DIMENSION (m)  
 Vol.(m<sup>3</sup>)  
 REJECT = 1056

GRAVEL DEVELOPMENT				
I	24	48	2	2304
II	24	48	2	2304
<b>TOTAL</b>				<b>4608</b>

- A - OFFICE
- B - FIRST AID STATION
- C - STORE
- D - REST SHED
- E - TOILET

YEARWISE PRODUCTION AND DEVELOPMENT						
YEAR	L (m)	W(m)	D(m)	Volume	Recovery @95% (m <sup>3</sup> )	Reject @5% (m <sup>3</sup> )
I	24	44	10	10560	10032	528
II	24	44	10	10560	10032	528
<b>TOTAL</b>				<b>21120</b>	<b>20064</b>	<b>1056</b>

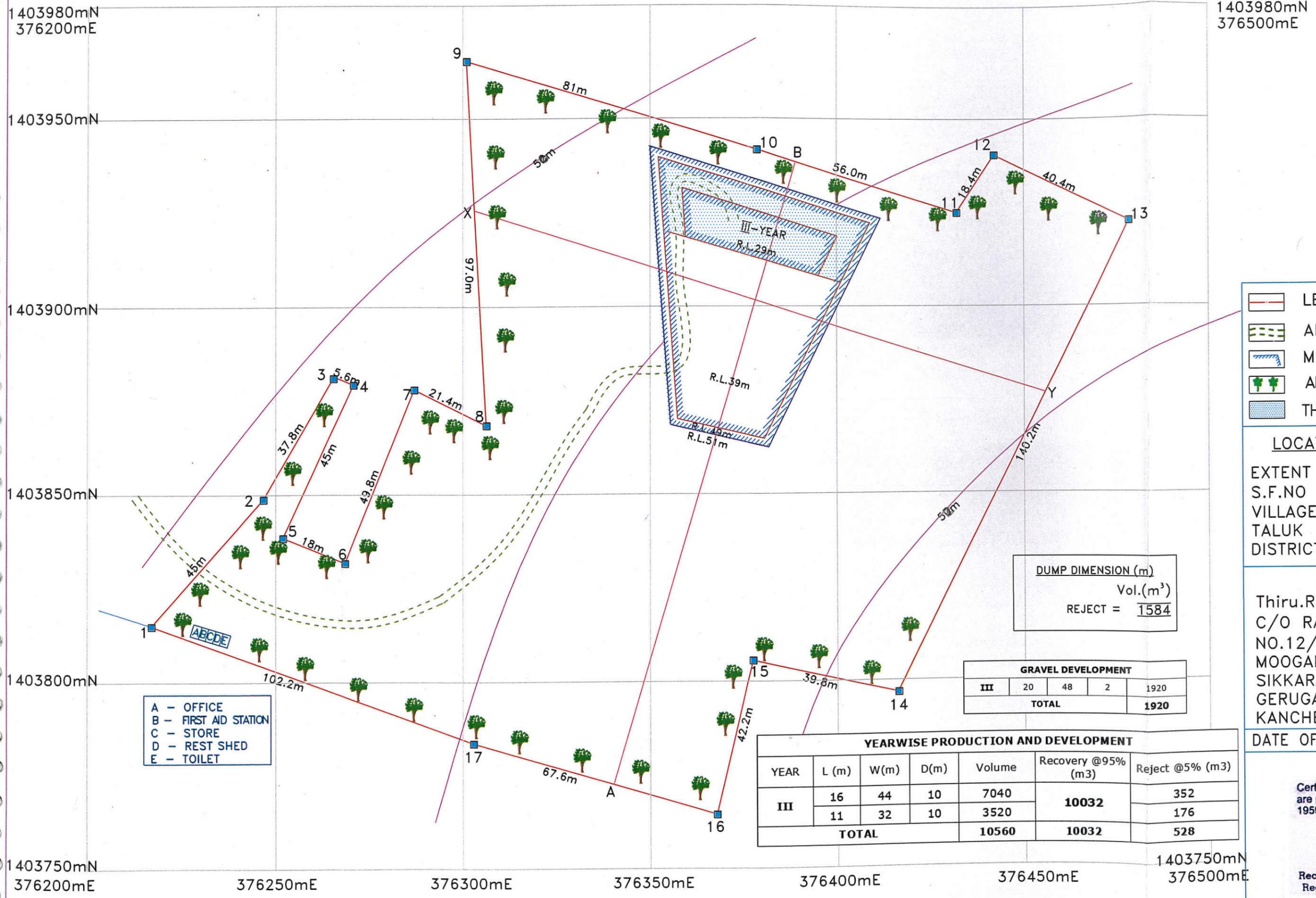
Certified that plans and section are prepared as per TNMMCR, 1959 and MMCDR.

*S. Suriya Kumar*  
**S. SURIYA KUMAR,**  
 Recognised Qualified Person,  
 Reg. No. RQP/MAS/013/87/A

# PRODUCTION AND DEVELOPMENT PLAN FOR THE THIRD YEAR

EDAMACHI ROUGH STONE & GRAVEL QUARRY  
Scale - 1:1000

PLATE - VA



**INDEX**

- LEASE BOUNDARY
- APPROACH ROAD
- MINE WORKING
- AREA OF AFFORESTATION
- THIRD YEAR EXCAVATION

**LOCATION OF QUARRY**

EXTENT : 2.77.00Ha  
S.F.NO : 136/1,2,376/5,4 etc..  
VILLAGE : EDAMACHI  
TALUK : UTHIRAMERUR  
DISTRICT : KANCHEEPURAM

**APPLICANT**

Thiru.R.GIRIDHARAN,  
C/O RAJENDRAN,  
NO.12/113,1st MAINROAD,  
MOOGAMBIGAI NAGAR,  
SIKKARAYAPURAM EXTN,  
GERUGAMBAKKAM,  
KANCHEEPURAM - 600128

DATE OF SURVEY: 23.10.2020

Certified that plans and section are prepared as per TNMMCR, 1959 and MMCDR.

*S. Suriya Kumar*

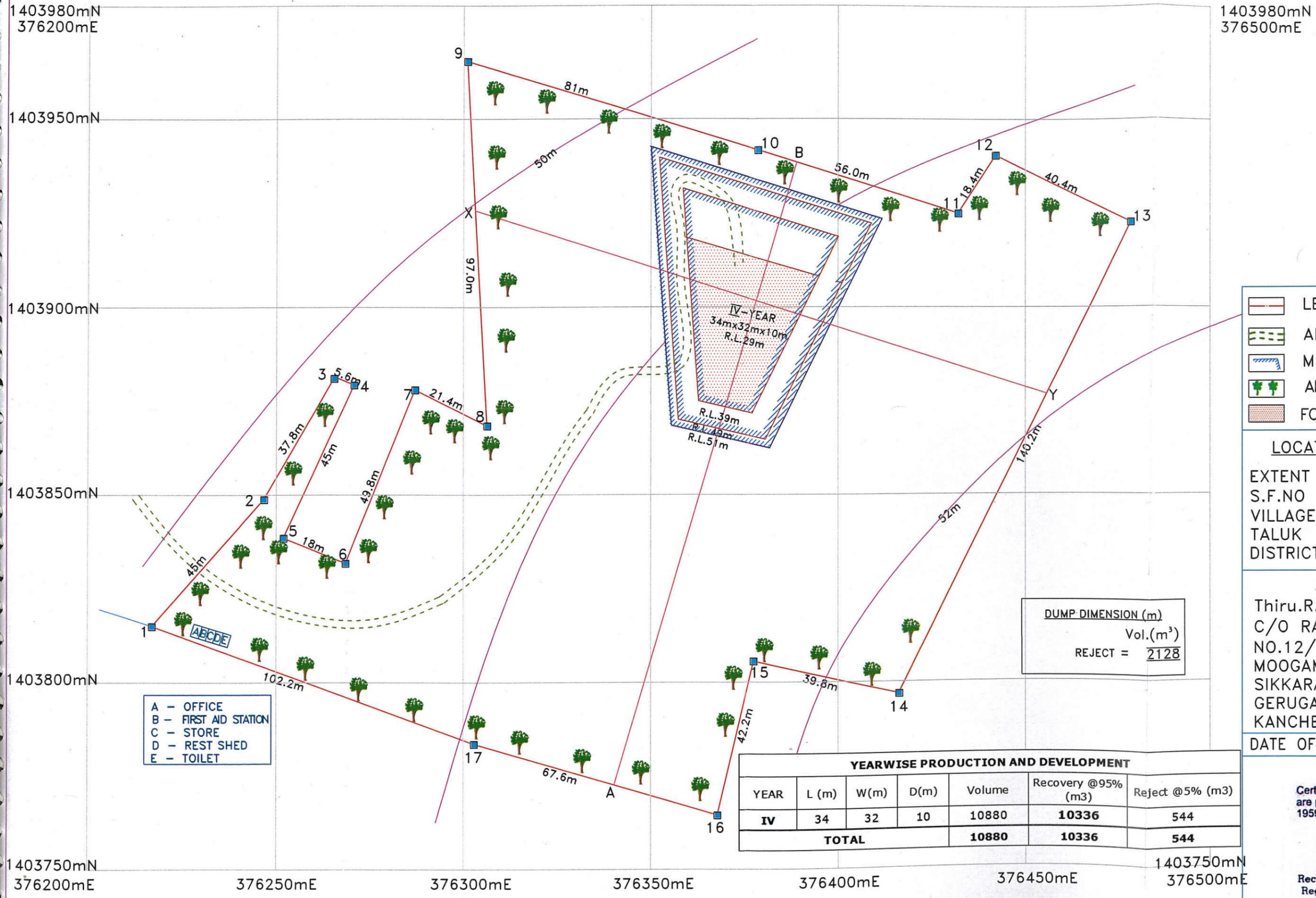
**S. SURIYA KUMAR,**  
Recognised Qualified Person,  
Reg. No. RQP/MAS/013/87/A

# PRODUCTION AND DEVELOPMENT PLAN FOR THE FOURTH YEAR

EDAMACHI ROUGH STONE & GRAVEL QUARRY

Scale - 1:1000

PLATE - VB



**INDEX**

- LEASE BOUNDARY
- APPROACH ROAD
- MINE WORKING
- AREA OF AFFORESTATION
- FOURTH YEAR EXCAVATION

**LOCATION OF QUARRY**

EXTENT : 2.77.00Ha  
 S.F.NO : 136/1,2,376/5,4 etc..  
 VILLAGE : EDAMACHI  
 TALUK : UTHIRAMERUR  
 DISTRICT : KANCHEEPURAM

**APPLICANT**

Thiru.R.GIRIDHARAN,  
 C/O RAJENDRAN,  
 NO.12/113,1st MAINROAD,  
 MOOGAMBIGAI NAGAR,  
 SIKKARAYAPURAM EXTN,  
 GERUGAMBAKKAM,  
 KANCHEEPURAM - 600128

DATE OF SURVEY: 23.10.2020

**YEARWISE PRODUCTION AND DEVELOPMENT**

YEAR	L (m)	W(m)	D(m)	Volume	Recovery @95% (m3)	Reject @5% (m3)
IV	34	32	10	10880	10336	544
<b>TOTAL</b>				<b>10880</b>	<b>10336</b>	<b>544</b>

Certified that plans and section are prepared as per TNMMCR, 1959 and MMCDR.

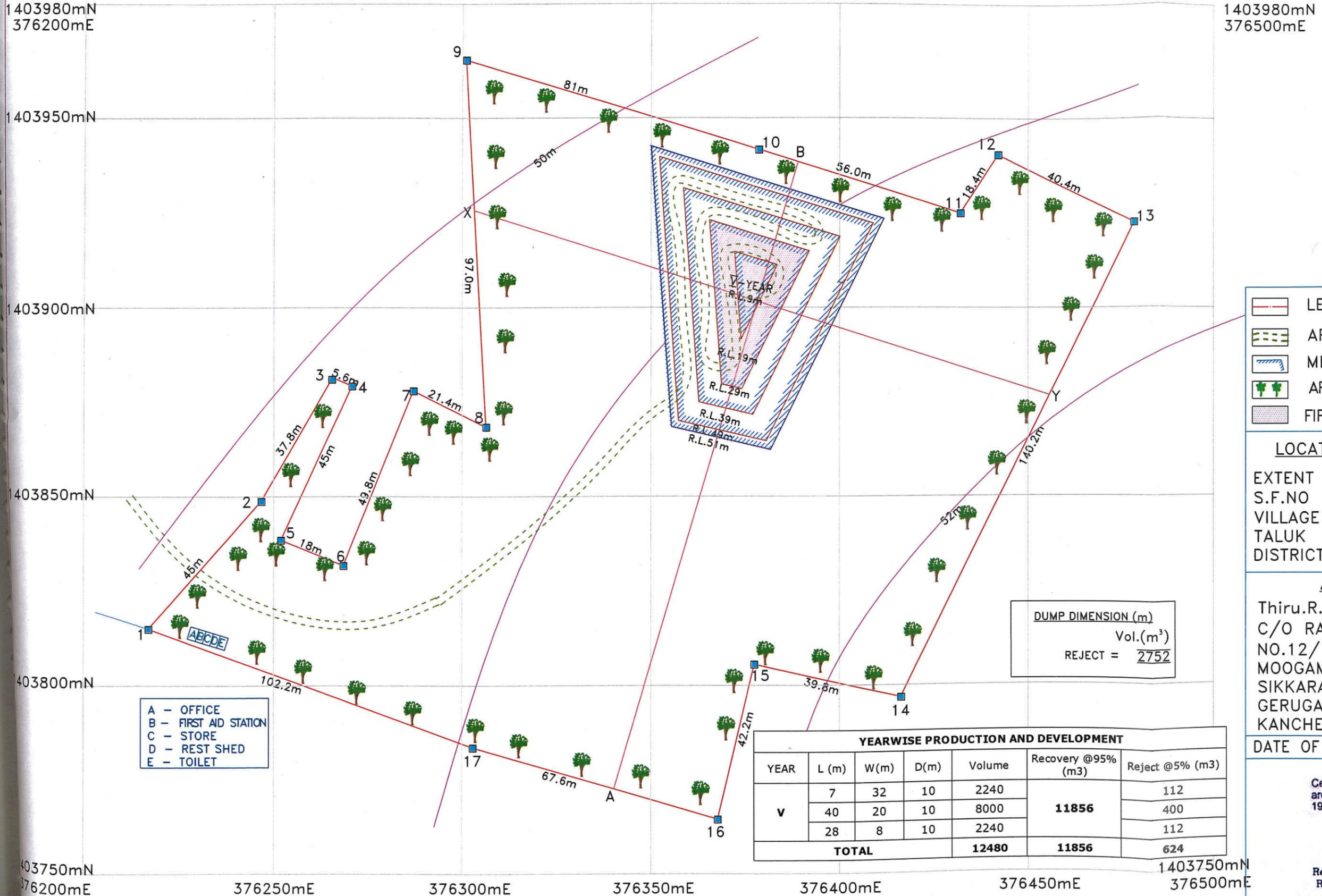
*S. Suriya Kumar*

**S. SURIYA KUMAR,**  
 Recognised Qualified Person,  
 Reg. No. RQP/MAS/013/87/A

# PRODUCTION AND DEVELOPMENT PLAN FOR THE FIFTH YEAR

EDAMACHI ROUGH STONE & GRAVEL QUARRY  
Scale - 1:1000

PLATE - VC



- A - OFFICE
- B - FIRST AID STATION
- C - STORE
- D - REST SHED
- E - TOILET

DUMP DIMENSION (m)  
Vol.(m<sup>3</sup>)  
REJECT = 2752

**INDEX**

- LEASE BOUNDARY
- APPROACH ROAD
- MINE WORKING
- AREA OF AFFORESTATION
- FIFTH YEAR EXCAVATION

**LOCATION OF QUARRY**  
 EXTENT : 2.77.00Ha  
 S.F.NO : 136/1,2,376/5,4 etc..  
 VILLAGE : EDAMACHI  
 TALUK : JTHIRAMERUR  
 DISTRICT : KANCHEEPURAM

**APPLICANT**  
 Thiru.R.GIRIDHARAN,  
 C/O RAJENDRAN,  
 NO.12/113,1st MAINROAD,  
 MOOGAMBIGAI NAGAR,  
 SIKKARAYAPURAM EXTN,  
 GERUGAMBAKKAM,  
 KANCHEEPURAM -600128  
 DATE OF SURVEY: 23.10.2020

**YEARWISE PRODUCTION AND DEVELOPMENT**

YEAR	L (m)	W(m)	D(m)	Volume	Recovery @95% (m3)	Reject @5% (m3)
V	7	32	10	2240	11856	112
	40	20	10	8000		400
	28	8	10	2240		112
<b>TOTAL</b>				<b>12480</b>	<b>11856</b>	<b>624</b>

Certified that plans and section are prepared as per TNMMCR, 1959 and MMCDR.

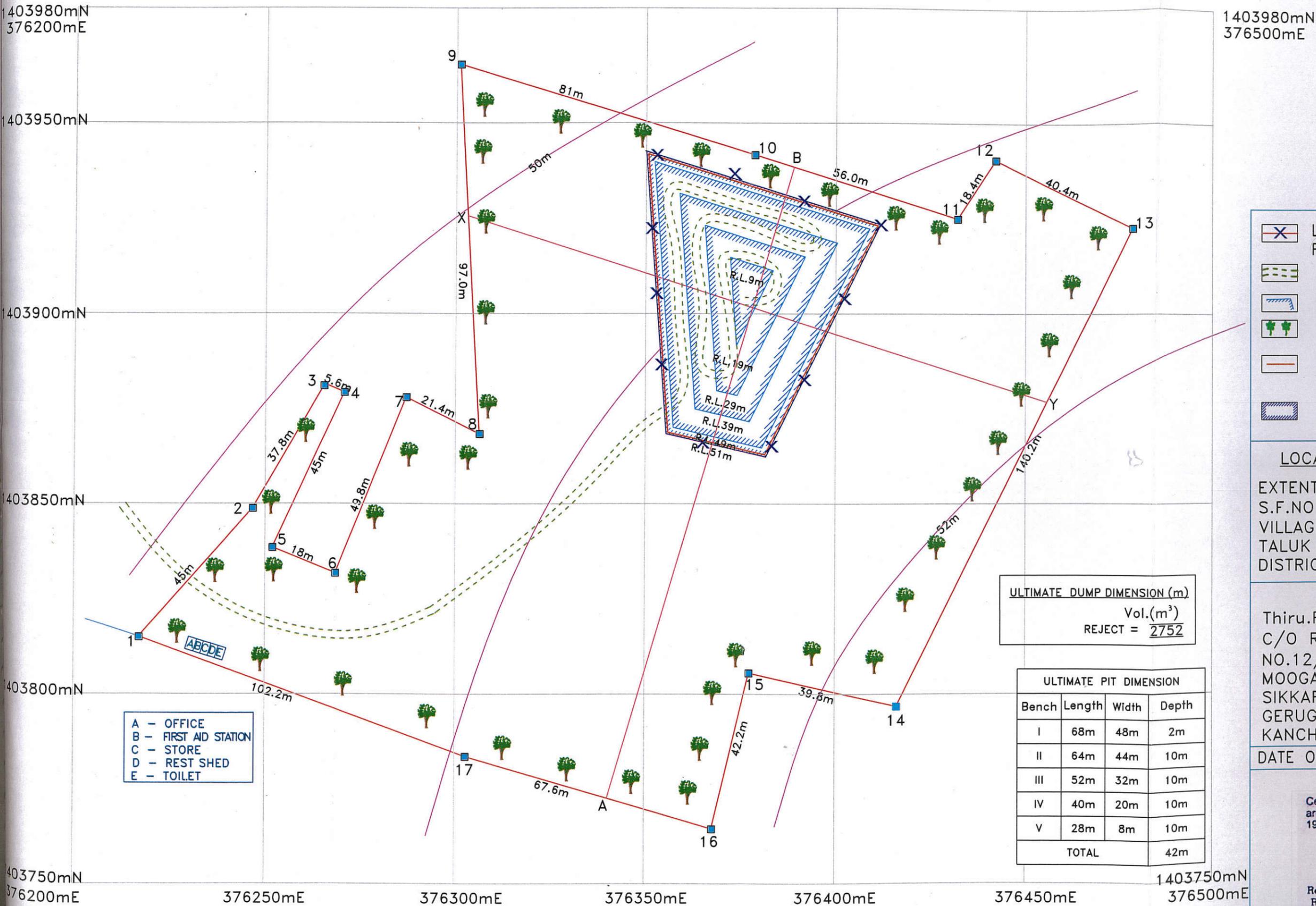
*S. Suriya Kumar*  
**S. SURIYA KUMAR,**  
 Recognised Qualified Person,  
 Reg. No. RQP/MAS/013/87/A

# CONCEPTUAL MINING PLAN / MINE CLOSURE PLAN

EDAMACHI ROUGH STONE & GRAVEL QUARRY  
Scale - 1:1000

PLATE - VII

N



INDEX

- LEASE BOUNDARY FOR FENCING
- APPROACH ROAD
- MINE WORKING
- AREA OF AFFORESTATION
- PIT LIMIT AT THE END OF THE 1-V YEARS
- PIT LIMIT AT THE END OF THE MINE LIFE

LOCATION OF QUARRY

EXTENT : 2.77.00Ha  
S.F.NO : 136/1,2,376/5,4 etc..  
VILLAGE : EDAMACHI  
TALUK : UTHIRAMERUR  
DISTRICT : KANCHEEPURAM

APPLICANT

Thiru.R.GIRIDHARAN,  
C/O RAJENDRAN,  
NO.12/113,1st MAINROAD,  
MOOGAMBIGAI NAGAR,  
SIKKARAYAPURAM EXTN,  
GERUGAMBAKKAM,  
KANCHEEPURAM - 600128

DATE OF SURVEY: 23.10.2020

ULTIMATE DUMP DIMENSION (m)  
Vol.(m<sup>3</sup>)  
REJECT = 2752

ULTIMATE PIT DIMENSION			
Bench	Length	Width	Depth
I	68m	48m	2m
II	64m	44m	10m
III	52m	32m	10m
IV	40m	20m	10m
V	28m	8m	10m
TOTAL			42m

- A - OFFICE
- B - FIRST AID STATION
- C - STORE
- D - REST SHED
- E - TOILET

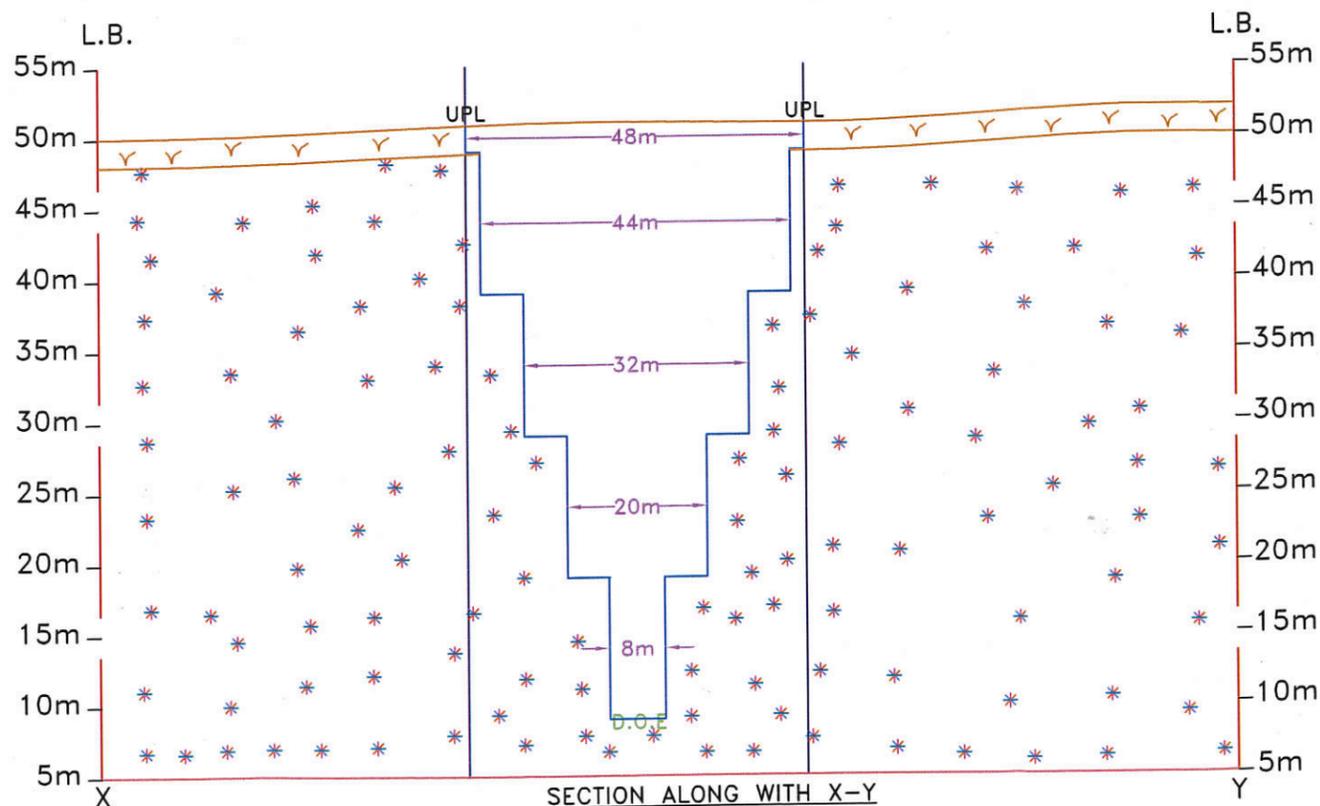
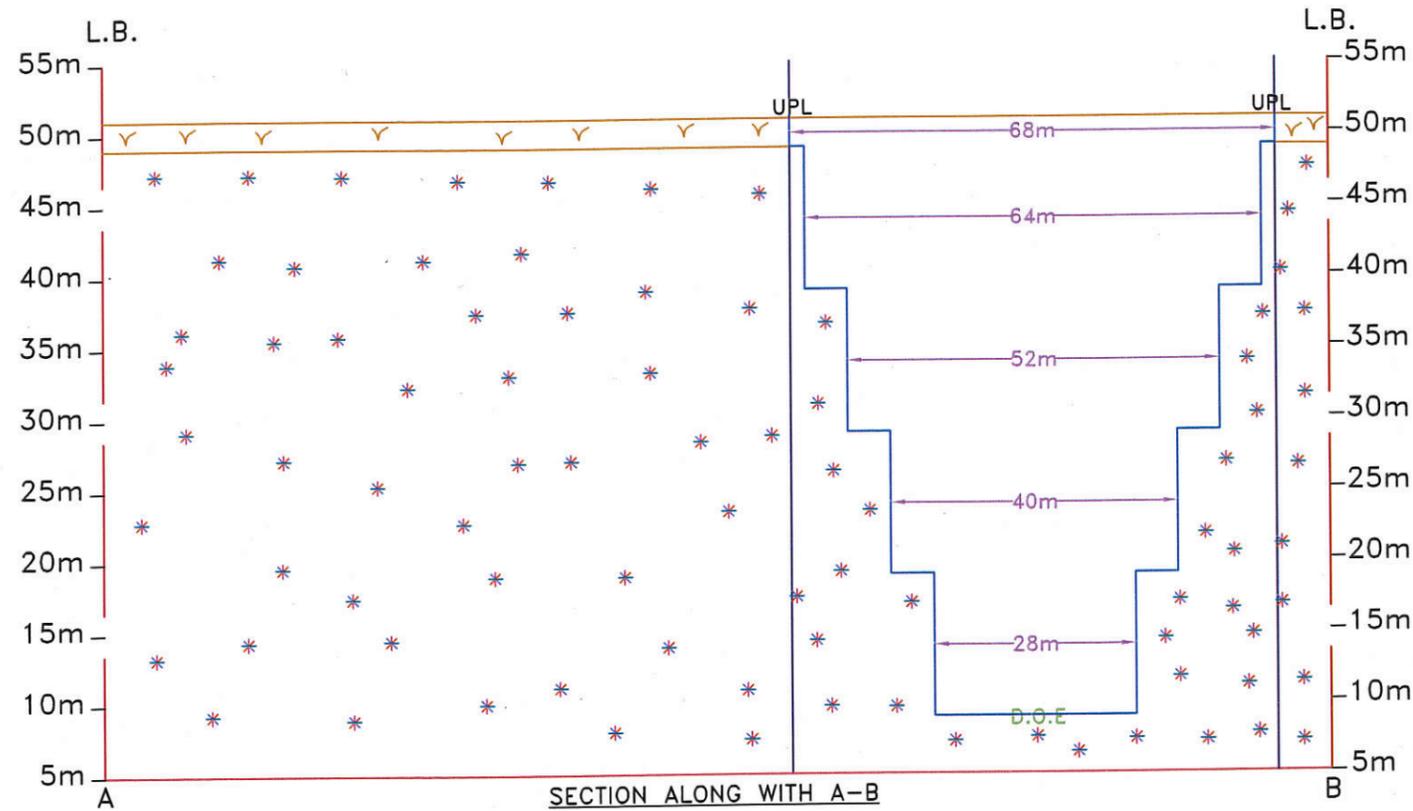
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*S. Suriya Kumar*  
S. SURIYA KUMAR,  
Recognised Qualified Person,  
Reg. No. RQP/MAS/013/87/A

# SECTIONS OF ULTIMATE PIT LIMIT

EDAMACHI ROUGH STONE & GRAVEL QUARRY

Scale : Horizontal = 1:1000  
Vertical = 1:500



INDEX

	LEASE BOUNDARY
	GRAVEL
	CHARNOCKITE
	ULTIMATE PIT LIMIT
	DEPTH OF ESTIMATION

LOCATION OF QUARRY

EXTENT : 2.77.00Ha  
S.F.NO : 136/1,2,376/5,4 etc..  
VILLAGE : EDAMACHI  
TALUK : UTHIRAMERUR  
DISTRICT : KANCHEEPURAM

APPLICANT

Thiru.R.GIRIDHARAN,  
C/O RAJENDRAN,  
NO.12/113,1st MAINROAD,  
MOOGAMBIGAI NAGAR,  
SIKKARAYAPURAM EXTN,  
GERUGAMBAKKAM,  
KANCHEEPURAM - 600128

DATE OF SURVEY: 23.10.2020

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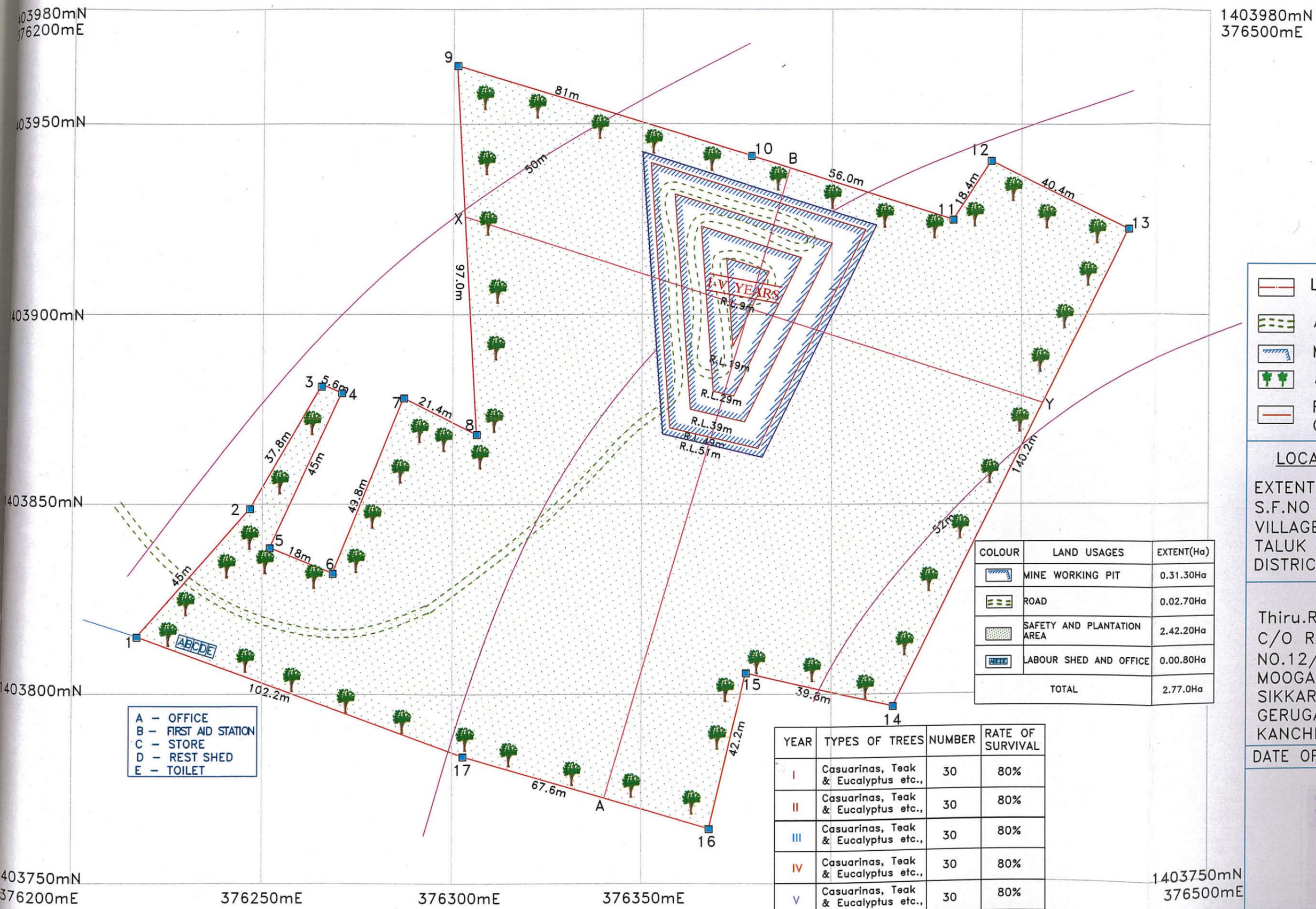
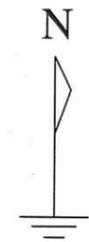
*S. Suriya Kumar*

S. SURIYA KUMAR,  
Recognised Qualified Person,  
Reg. No. RQP/MAS/013/87/A

# PROGRESSIVE MINE CLOSURE PLAN SHOWING LAND USE AND AFFORESTATION

EDAMACHI ROUGH STONE & GRAVEL QUARRY

Scale - 1:1000



**INDEX**

- LEASE BOUNDARY
- APPROACH ROAD
- MINE WORKING
- AREA OF AFFORESTATION
- PIT LIMIT AT THE END OF THE 1-V YEARS

**LOCATION OF QUARRY**

EXTENT : 2.77.00Ha  
 S.F.NO : 136/1,2,376/5,4 etc..  
 VILLAGE : EDAMACHI  
 TALUK : UTHIRAMERUR  
 DISTRICT : KANCHEEPURAM

COLOUR	LAND USAGES	EXTENT(Ha)
	MINE WORKING PIT	0.31.30Ha
	ROAD	0.02.70Ha
	SAFETY AND PLANTATION AREA	2.42.20Ha
	LABOUR SHED AND OFFICE	0.00.80Ha
TOTAL		2.77.0Ha

**APPLICANT**

Thiru.R.GIRIDHARAN,  
 C/O RAJENDRAN,  
 NO.12/113,1st MAINROAD,  
 MOOGAMBIGAI NAGAR,  
 SIKKARAYAPURAM EXTN,  
 GERUGAMBAKKAM,  
 KANCHEEPURAM - 600128

DATE OF SURVEY: 23.10.2020

- A - OFFICE
- B - FIRST AID STATION
- C - STORE
- D - REST SHED
- E - TOILET

YEAR	TYPES OF TREES	NUMBER	RATE OF SURVIVAL
I	Casuarinas, Teak & Eucalyptus etc.,	30	80%
II	Casuarinas, Teak & Eucalyptus etc.,	30	80%
III	Casuarinas, Teak & Eucalyptus etc.,	30	80%
IV	Casuarinas, Teak & Eucalyptus etc.,	30	80%
V	Casuarinas, Teak & Eucalyptus etc.,	30	80%

Certified that plans and section are prepared as per TNMMCR, 1959 and MMCDR.

*S. Suriya Kumar*

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 Reg. No. RQP/MAS/013/87/A

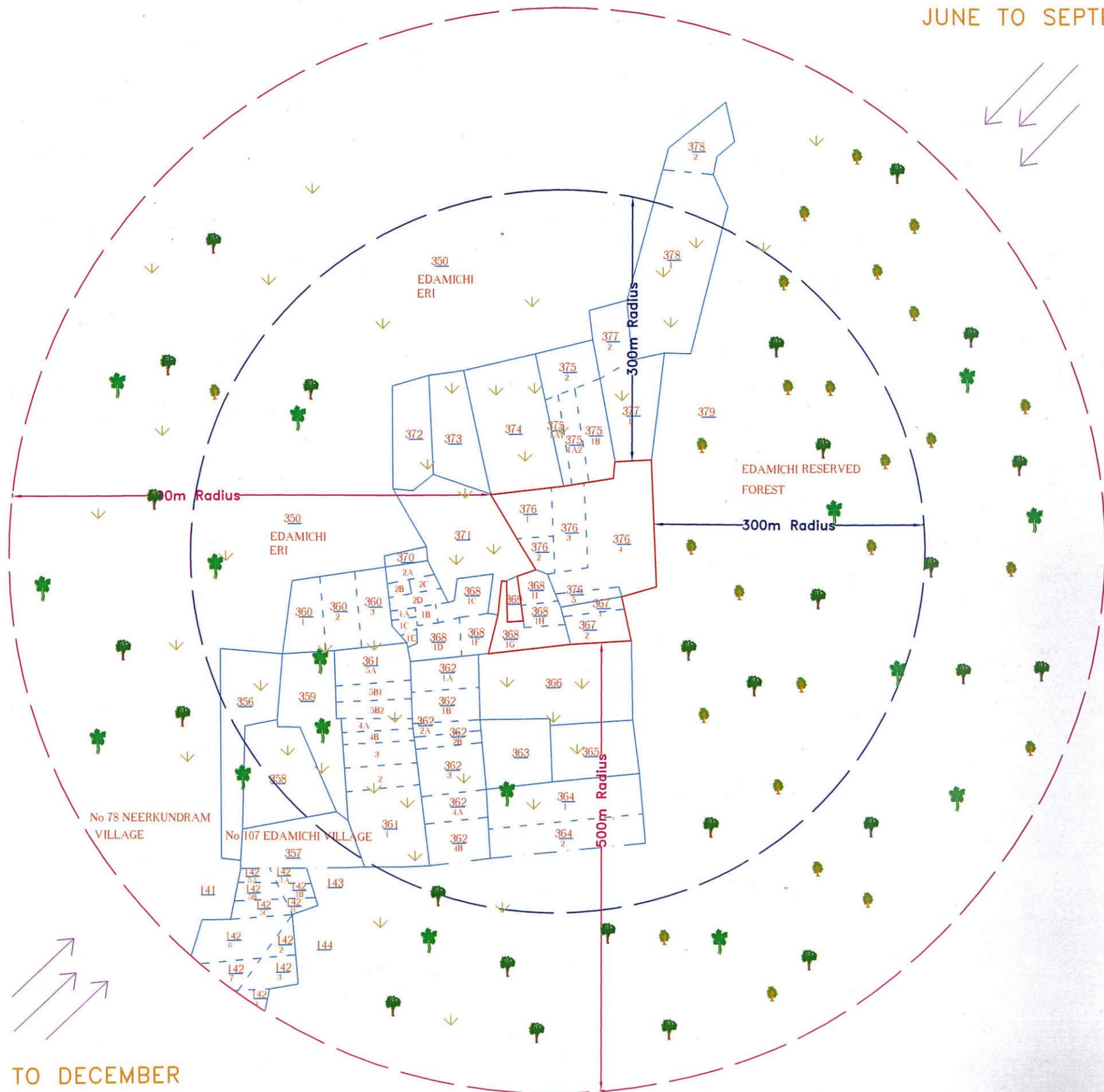
# ENVIRONMENT PLAN

(SHOWING LOCATIONS OF HABITATION, WATER BODIES, RESERVE FOREST, AROUND 500M)

Scale - 1:5000



JUNE TO SEPTEMBER



OCTOBER TO DECEMBER

DESCRIPTION	NEAREST DISTANCE (m)	DIRECTION
LEASE BOUNDARY	-	CENTRE
HABITATIONS	-	-
WATER BODIES	-	-
WELLS	-	-
ROAD	-	-
QUARRIES	-	-
E.B. LINE	-	-
300m BUFFER ZONE	-	-
500m BUFFER ZONE	-	-
WIND DIRECTION	-	-
TREES	-	-
DRY LAND	-	-
ODAI	-	-
ACASIA BUSHES	-	-
<b>LOCATION</b>		<b>APPLICANT</b>
EXTENT : 2.77.00Ha S.F.NO : 136/1,2,376/5,4 etc.. VILLAGE : EDAMACHI TALUK : UTHIRAMERUR DISTRICT : KANCHEEPURAM		Thiru.R.GIRIDHARAN, C/O RAJENDRAN, NO.12/113,1st MAINROAD, MOOGAMBIGAI NAGAR, SIKKARAYAPURAM EXTN, GERUGAMBAKKAM, KANCHEEPURAM -600128

DATE OF SURVEY: 23.10.2020

Certified that plans and section are prepared as per TNMMCR, 1959 and MMCDR.

*S. Suriya Kumar*  
**S. SURIYA KUMAR,**  
 Recognised Qualified Person,  
 Reg. No. RQP/MAS/013/87/A

# 16 ENVIRONMENTMANAGEMENT PLAN

## FOR ROUGH STONE AND GRAVEL QUARRY

### AREA DETAILS

Extent of 2.77.0 Hectares,

In S.F.Nos. 367/1, 367/2, 368/1G, 368/1H, 368/1I, 376/1,  
376/2, 376/3,376/4, & 376/5

Edamachi village,

Uthiramerur Taluk,

Kancheepuram District,

Tamil Nadu.

### PROJECT PROPONENT

*Thiru.R.Giridharan*

S/o.Rajendran,

No.12/113, 1st main road,

Moogambigainagar,

Sikkarayapuram extension,

Gerugambakkam ,

chennai , Tamil Nadu

Pincode-600 128.

### CONSULTANT



**AADHI BOOMI MINING AND ENVIRO TECH (P) LTD.,**

**(NABET Accredited EIA Consultant "A" Category)**

**Accreditation No. NABET/EIA/1821/RA-0103**

No. 3/216, K.S.V. Nagar,Narasothipatti,

Alagapuram post,Salem – 636 004. Tamil Nadu.

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Mobile: 98427 29655

Website: [www.abmenvirotec.com](http://www.abmenvirotec.com)

# ENVIRONMENT MANAGEMENT PLAN

## 1. INTRODUCTION

The Environmental Management Plan (EMP) has been formulated and integrated with the mine planning to mitigate the adverse impacts which are likely to be caused due to the quarrying operation.

## 2. QUARRYING PROCESS

Open cast, semi-mechanized mining will be adopted to extract rough stones of required size from the area for which lease applied for. Before opening a mine, several aspects should be considered like construction of semi-permanent structures, planning for the development / production works, formation of faces, lying of approach road to various benches for movement of dumpers, recruitment of man power, deployment of machinery, selection of dump sites, stacking yards etc. Top soil, weathered materials shall be removed prior to development of working benches.

### 2.1 PRODUCTION DETAILS

Production Schedule is proposed as **52288m<sup>3</sup>(95%)** of Rough Stone & Gravel for five years and average production is **10457.6m<sup>3</sup>** per annum or **6 loads** per day. Average Production of **Gravel** shall be **6528m<sup>3</sup>** to a depth of 2m **and 1.3 loads** for the **300** working day per year by open cast mining.

## 3. MANPOWER REQUIREMENT

The manpower requirement for the proposed project will be around 20. This includes manpower for excavation as well as loading of minerals.

## 4. BASELINE ENVIRONMENT

The EMP has been developed considering its implementation and monitoring of environmental protection measures during quarrying operations. Baseline study was carried out during 22.10.2020.

### 4.1. Land environment

The quarrying activity will result in disturbance of the land use pattern of the quarry lease area. The land degradation is unavoidable during mining activities like excavation, overburden dumping, etc. 0.31.3Ha will be utilized for quarrying activities at the end of 5<sup>th</sup> year. However, in the proposed quarrying activity there will not be much impact on the land environment due to the following reasons.



- There is no removal of vegetation such as plants, bushes in the quarry area
- No effluent generation as any further processing of mineral is proposed. Hence no ground water contamination due to the proposed quarrying activity.
- Opencast, Semi mechanized mining is followed to produce slab stone, fencing pillars etc.,

## **i. Mitigation measures**

Land requirement for the project has been assessed considering functional needs. For this Green belt development is proposed all around quarry lease area. The mined out area is small, the pit will be developed as water body to restore the rain water which will be further used for pisciculture & irrigation purpose.

## **4.2 Water quality**

Quarrying does not have any significant impact on the water quality, as the neither quarrying nor intercept with the ground water level neither there is any surface water body near the site.



**Fig No: 1. Collection of Water sample**  
**12°41'55.4"N 79°51'44.5"E**

*R. Ind.*

Table 1: Physical and Chemical properties

S.no	Parameters	Unit	Results (Bore water)	As per IS 10500: 2012	
				Requirement (Acceptable limit)	Permissible limit in the absence of alternate source
1	pH value at 25°C	-	8.09	6.5 – 8.5	6.5 – 8.5
2	Turbidity	NTU	<1.0	1	5
3	Electrical conductivity at 25°C	Microm hos/cm	392	-	-
4	Total Suspended Solids	mg/l	6	-	-
5	Total Dissolved Solids	mg/l	310	500	2000
6	Total Hardness as CaCO <sub>3</sub>	mg/l	196.2	200	600
7	Chlorides as Cl	mg/l	41.58	250	1000
8	Sulphates as SO <sub>4</sub>	mg/l	-	200	400
9	Total Iron as Fe	mg/l	-	0.3	0.3
10	Silica (Reactive) as SiO <sub>2</sub>	mg/l	-	-	-

Microbiological Examination				
SI. No	PARAMETERS	UNITS	RESULTS	PROTOCOL
1	Total Coliforms	MPN / 100ml	14	IS:1622-1981 Amd.4 RA 2012
2	E.coli	MPN / 100ml	5	IS:1622-1981 Amd.4 RA 2012

#### i. Mitigation measures

- The quality of ground water is fairly good. There is no liquid waste discharge from quarrying activity, which is likely to pollute water.
- Drinking water will be utilized from the Mineral water Industries.
- Total water requirement will be 3.5 KLD.

#### 4.3 Noise and vibration



Major noise generating sources may be considered as excavation, drilling blasting, loading and vehicle movement during transportation of minerals. With the starting of quarrying operations, it is imperative that noise levels shall increase. In order to assess the impact baseline ambient noise level, noise monitoring has been carried out at different points using Sound level meter.



**Fig No:2. Monitoring of Noise levels**

**Table 2: Ambient Noise levels**

S. No	Location	Latitude	Longitude	Noise levels dB (A)	TNPCB Standards
1	Core zone	12°41'48.21"N	79°51'40.18"E	32.7	<b>Day Time</b>
2	Lease boundary (Pillar No.13)	12°41'50.28"N	79°51'44.47"E	36.4	Industrial –
3	Lease boundary (Pillar No.16)	12°41'45.03"N	79°51'40.94"E	37.3	75 dB (A) Residential –
4	Lease boundary (Pillar No.1)	12°41'46.49"N	79°51'35.91"E	37.9	55 dB (A)
5	Lease boundary (Pillar No.9)	12°41'51.39"N	79°51'38.70"E	38.0	

The noise level found to be within the limits as per TNPCB Standards.

### **i. Mitigation Measures**

- Greenbelt will be developed around the mine lease as well as safety zones which will help in arresting noise at source
- Safety devices provided to workers, where noise is more than 80dB (A)
- Limiting time exposure of workers to excessive noise
- Proper and regular maintenance of vehicles, machinery and other equipment
- Periodic inspection of all equipment and risk prone areas
- Regular lubrication & replacement of worn out parts etc.,

*R. Ind*

## A. GROUND VIBRATIONS

Ground vibration due to quarrying activities in the area is anticipated due to blasting and during movement of vehicles, etc. However, the major source of ground vibration is blasting. The major impact of the ground vibrations is observed on the domestic houses located in the villages surrounding the quarry lease area. The kuchha houses are more prone to cracks and damage due to the vibrations. Another impact due to blasting activities is fly rocks.

### a. Noise Control Measures

The nearest village from the quarry lease area is Edamachi about 854m on S. The study area currently does not involve any quarrying activity.

### Mitigation Measures

1. No deep hole blasting shall be practiced.
2. Proper warning signals should be used.
3. If the vibration still exceeds the limit a long Trench to a depth of 6m may cut in the direction of wave's movement to break longitudinal waves which travel close to surface, preferably near mine buffer zone.
4. In spite of all measures periodical testing of vibration and noise using approved seismograph by DGMS has to be followed as a part of Environmental monitoring.

### 4.4 Air Quality

Drilling and blasting operations are source of fugitive dust emission but its effect is more or less localized. Ambient Air monitoring has been carried out in the core zone.



R. Ind

The major part of the dust generated during such operations usually gets settle down and thus the effect of such operation will be localized phenomenon.

**Table 3: Ambient Air Monitoring**

S.No	Parameters ( $\mu\text{g}/\text{m}^3$ )	Measured Value	NAAQS
1	Particulate Matter (PM <sub>2.5</sub> )	27	60
2	Respirable Particulate Matter (PM <sub>10</sub> )	42	100
3	Sulphur Dioxide (SO <sub>2</sub> )	12	80
4	Nitrogen Dioxide (NO <sub>2</sub> )	10	80
5	Ozone (O <sub>3</sub> )	20	180
6	Lead (Pb)	BDL (DL = 0.1)	1
7	Carbon Monoxide (CO) 1 hour	BDL (DL = 1.15)	4
8	Ammonia (NH <sub>3</sub> )	21	400
9	Arsenic (As)	BDL (DL = 1.0)	6
10	Nickel (Ni)	BDL (DL = 0.1)	20
11	Benzene (C <sub>6</sub> H <sub>6</sub> )	BDL (DL = 0.1)	5
12	Benzo (a) Pyrene	BDL (DL = 0.1)	1
BDL = Below Detectable Limit, DL = Detection Limit NAAQS = National Ambient Air Quality Standards			

The above results comply with NAAQS. The generation of dust is controlled and suppressed at source by sprinkling of water on haul roads, loading points at regular intervals as shown below.

#### i. Mitigation Measures

- Dust extractor or wet drilling to be followed to control dust at source of emission
- Water sprinklers along the sides of haul road shall be fixed to control fly of dust while transporting minerals and waste
- Avenue trees along roads around ML boundary shall be planted as per the norms of MoEF&CC to control fly of dust, noise etc...
- Labours engaged in such dust prone areas should be provided with safety devices like ear muff, mask, and goggles as per the MMR, 1961 amendments and circulars of DGMS.

#### 4.5 Soil Environment

Soil sample has been collected in the quarry lease area for analysis its physical and chemical characteristics.





**Fig No: 4. Collection of Soil Sample**  
**Location-12°41'49.2"N 79°51'41.3"E**

**Table 4 Soil Test Report**

<b>Physical Parameters</b>	<b>Results</b>
pH value (10% Solution)	7.46
EC@ 25°C (Micromhos/cm) (10% solution)	81
Moisture	1.91%
Bulk Density	1.16 g/cc
Texture	Sand- 42% Silt- 58% Silt loam
<b>Chemical Parameters</b>	<b>Results</b>
Calcium	0.1632 %
Magnesium	0.0816%
Chlorides	0.0004%
Organic Matter	0.0311%
Water Holding Capacity	56 %

#### **i. Observations & Mitigation measures**

- The pH of the soil found to be 7.46 indicating neutral in nature.
- Bulk Density of the soil found to be 1.16 g/cc.
- The Water Holding Capacity of the soil is found to be 56%.

#### **4.6 Flora and Fauna**

Flora as observed and identified in the field are covered by photograph and shown below. Mostly Neem tree, Acacia bushes tree are found more on regional scale. The Applicant has

*R. Ind*

developed trees like panai, teak, Casuarinas and Eucalyptus etc., with proper nursery garden and plantation on vacant land.

### List of flora and fauna of the lease area

#### a) TREES:

S. No.	Tamil /English Name	Botanical Name	Number of Trees	Photograph
1.	Veppamaram/ Margosa tree	AzadirachtaIndica	Innumerable	
2.	Karuvelmaram/ Gum tree	Acacia Arabica wild	Innumerable	
3.	Panai/Palmyra tree	Borassusfiabellifer	Innumerable	
4.	EechaMaram	Phoenix sylvestris	5	

R. Ind.

5.	MulluMaram	Prosopisjuliflora	Innumerable	
7.	PoovarasamMaram	Thespesiapopulnea	Innumerable	

## b) Climbers:

S.No.	Tamil/English Name	Botanical Name	Number of Trees	Photograph
1.	Oonangodi	FragorMonstrum	Innumerable	
2.	Veliparuthi/ Trellis vine	Pergulariadaemia	Innumerable	

## C) SHRUBS

S.No.	Tamil Name	Botanical Name	Number of Trees	Photograph
1.	Unnichi	Lantana Camara	Innumerable	

R. G. S.

2.	Kallimaram/ Milk hedge	Euphorbia triucallilinn	Innumerable	
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**D) HERBS:**

S.No.	Tamil Name	Botanical Name	Number of Plants	Photograph
1.	Erukkanchedi	Calotropis gigantea	Innumerable	

**2) Fauna:**

The fauna species may be found around the project site is given below,

The fauna species may be found around this project site.

**a) Mammals:**

S.No.	Tamil & English Name	Zoological Name
1.	Eali (Rabbits)	Lepus curpaeums
2.	Keeri ( <i>Common Mongoose</i> )	Herpestes edwardsii
3.	Anil ( <i>Three Striped Squirrel</i> )	Funambulus palmarum

**b) Avian Fauna:**

S.No.	Tamil & English Name	Zoological Name
1	Myna (Black drogue)	Dicrurus macrocercus
2	Kakka (House crow)	Corvus splendens

R. G. S.

3	Chittukuruvi (Indian Robin)	Saxicoloidesfulicatus
4	Parunthu( <b>Brahminy Kite</b> )	Haliasturindus

### c) Butterfly/Insects:

S.No.	Tamil & English Name	Zoological Name
1	Theil (Scorpion)	Scorpiones
2	Vannthupoochi (Millipedes)	Diplopoda

## 5. SOLID WASTE MANAGEMENT

Rough stone rejects which amounts to 5% of the total excavation; about 2752m<sup>3</sup> will be generated for mining up to 42m depth from surface. It is revealed in the final mine closure plan showing the ultimate depth of mining and ultimate pit configuration.

## 6. GREEN BELT

Local trees like Neem will be planted along the lease boundary and avenues as well as over Non-active dumps at a rate of 30 trees per annum with interval 5min between. The rate of survival expected to be 80% in this area.

## 7. COST OF EMP IMPLEMENTATION

### a) EMP Cost

- |                                  |   |            |
|----------------------------------|---|------------|
| b) Personal protective equipment | = | Rs 75,000  |
| c) Environmental Monitoring      | = | Rs1,50,000 |
| d) Occupation Health             | = | Rs 75,000  |
| e) Green Belt & Dust suppression | = | Rs 20,000  |

**Total = Rs3.50lakhs**

The quarrying activity shall be undertaken in accordance with the environmental conditions as prescribed in the EC.

R. G. S.

## 8. PROJECT BENEFITS

The quarrying activities in this area will benefit to the local people both directly and indirectly. The direct beneficiaries will be those who get employed in the mines as skilled and un-skilled workers. 20 persons will be employed in this quarry. The extent of impact will however be confined to lease area only. This operation doesn't need relocation of any habitats.

The proponent is proposed to spend CSR @ 2.5% of profit as per the Companies Act, 2013 and CSR Rules, 2014 and 2% of the Project Cost will be spend as corporate Environmental Responsibility (CER)through local Panchayat for maintenance of road, street light, school sanitation etc.

Green belt will be developed around the quarry lease boundary. At the end of life of mine, excavated pit will be backfilled and reclaimed and rehabilitated by plantation with native species so as to restore the natural eco-system which could have positive impact on the environment.

**Signature of Project Proponent Along  
with name and address**

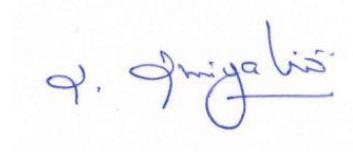


**R.Giridharan**  
**(Project proponent)**  
S/o.Rajendran,  
No.12/113, 1st main road,  
Moogambigai nagar, Sikkarayapuram extension,  
Gerugambakkam ,  
chennai , Tamil Nadu  
Pincode-600 128

Date : 10.11.2020

Place : Salem

**Signature of the Qualified person**



**Mr.S.Suriyakumar**  
M.Sc., M.Phil, F.C.C. (Min)  
PGDBA, DIPC  
EIA Co-ordinator (Mining)



From  
R. Perumal Raja, M.Sc.,  
Assistant Director,  
Geology and Mining,  
Kancheepuram.

To  
Thiru. R.Giridharan,  
S/o. Rajendran,  
No.12/113, 1<sup>st</sup> Main Road,  
Moogambigai Nagar,  
Sikkarayapuram Extn.,  
Gerugambakkam,  
Chennai - 600 128.

**Rc. No.47/Q3/2020, dated:20.11.2020**

Sir,

Sub: Mines and Minerals - Kancheepuram District - Minor Mineral - Rough Stone & Gravel Quarry in Patta lands - S.F.Nos. 367/1, 367/2, 368/1G, 368/1H, 368/1I, 376/1, 376/2, 376/3, 376/4, 376/5 - Over an Extent of 2.77.00 Hectares in Edamachi Village - Uthiramerur Taluk - Thiru. R. Giridharan S/o. Rajendran Submission of Mining Plan for obtaining Environment Clearance - Mining Plan Approved - Regarding.

- Ref: 1. Application for Rough Stone/Gravel Quarry permission preferred Thiru. R.Giridharan S/o. Rajendran, No.12/113, 1<sup>st</sup> Main Road, Moogambigai Nagar, Sikkarayapuram Extn., Gerugambakkam, Chennai - 600 128 dated.20.03.2020.
2. G.O. Ms. No. 79 / Industries (MMC 1) Department dated 06.04.2015.
3. G.O. Ms. No. 169 / Industries (MMC 1) Department, dated.04.08.2020.
4. G.O. Ms. No. 208 / Industries (MMC 1) Department, dated.21.09.2020.
5. The Assistant Director, Geology and Mining, Kancheepuram, Precise Area Communication letter No.47/Q3/2020, dated.20.10.2020.
6. Mining Plan submitted by Thiru. R.Giridharan S/o. Rajendran, No.12/113, 1<sup>st</sup> Main Road, Moogambigai Nagar, Sikkarayapuram Extn., Gerugambakkam, Chennai - 600 128 in letter dated.07.11.2020.

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In the reference 5<sup>th</sup> cited, Precise Area has been Communicated to Thiru. R.Giridharan S/o. Rajendran was directed to produce the mining plan for approval and to obtain Environmental Clearance from competent authority for the Rough Stone & Gravel Quarry In S.F.Nos. 367/1 (0.08.50), 367/2 (0.20.00), 368/1G (0.26.00), 368/1H (0.11.50), 368/1I (0.12.50), 376/1 (0.29.00), 376/2 (0.12.00), 376/3

(0.33.50), 376/4 (1.15.00), 376/5 (0.09.00) Over an Extent of 2.77.00 Hectares in Edamachi Village, Uthiramerur Taluk, Kancheepuram District for a period of Ten years.

In the reference 6<sup>th</sup> cited above, by Thiru. R.Giridharan S/o. Rajendran, No.12/113, 1<sup>st</sup> Main Road, Moogambigai Nagar, Sikkarayapuram Extn., Gerugambakkam, Chennai - 600 128 have submitted three copies of Mining Plan prepared by the RQP, for the Rough Stone & Gravel Quarry in S.F.Nos. S.F.Nos. 367/1 (0.08.50), 367/2 (0.20.00), 368/1G (0.26.00), 368/1H (0.11.50), 368/1I (0.12.50), 376/1 (0.29.00), 376/2 (0.12.00), 376/3 (0.33.50), 376/4 (1.15.00), 376/5 (0.09.00) Over an Extent of 2.77.00 Hectares in Edamachi Village, Uthiramerur Taluk, Kancheepuram District and requested to approve the Mining Plan.

Now in the reference 6<sup>th</sup> cited the lessee has been submitted a Mining Plan prepared by RQP with a request to approve the same for enhanced production of Rough Stone and Gravel Quarry S.F.Nos. 367/1 (0.08.50), 367/2 (0.20.00), 368/1G (0.26.00), 368/1H (0.11.50), 368/1I (0.12.50), 376/1 (0.29.00), 376/2 (0.12.00), 376/3 (0.33.50), 376/4 (1.15.00), 376/5 (0.09.00) Over an Extent of 2.77.00 Hectares in Edamachi Village, Uthiramerur Taluk, Kancheepuram District. The Mining Plan has been prepared for the production of 52,288 M<sup>3</sup> of Roughstone and 6,528 M<sup>3</sup> of Gravel for a period of five years.

The Mining Plan has been verified in detail and found that it has been prepared in accordance with the guidelines / instructions issued by the Commissioner of Geology and Mining vide letter in Rc.No.3868/LC/2012 dated 19.11.2012.

Therefore in exercise of the powers conferred under Rule 41(2) of Tamil Nadu Minor Mineral Concession Rules, 1959, read with G.O. (Ms). No.79 / Industries (MMC 1) Department dated 06.04.2015, the Mining Plan is hereby approved subject to the following conditions.

**Part-I**

- (i) The mining plan is approved without prejudice to any other Law applicable to the quarry lease from time to time whether such laws are made by the Central Government, State Government or any other authority.
- (ii) This approval of the mining plan does not in any way convey the approval of the Government in terms or any other provisions of the Mines and Minerals (Development and Regulation) Act, 1957, or any other connected laws including Forest (Conservation) Act, 1980, Forest Conservation Rules, 1981, Environment Protection Act, 1980,

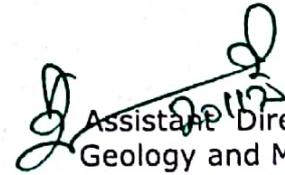
- Explosives Act, 1884 (Central Act IV of 1884) Minor Mineral Concession and Development Rules, 2010 and the Rules made there under and the Tamil Nadu Minor Mineral Concession Rules, 1959.
- (iii) The mining plan is approved without prejudice to any other order or direction from any court of competent jurisdiction.
- (iv) The validity of the mining plan is co-terminus with the lease period.
- (v) Quarrying shall be done in accordance with the approved Mining Plan and that the mining plan is approved without prejudice to any other law applicable to the quarry lease from time to time whether such laws are made by the Central Government, State Government or any other authority.
- (vi) If anything is found to be concealed as required by the Mines Act in the contents of the Mining Plan and the proposal for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.
- (vii) If any black granite deposit found in the applied area during quarry work the lease granted will be cancelled as per Rules.
- (viii) விண்ணப்பப் புலங்களுக்கு மேற்கே உள்ள ஏரி உள்வாய் நீர்நிலை புறம்போக்கு புல எண்கள்.371, 372, 373-ல் எவ்வித ஆக்ரமணங்கள் செய்யக்கூடாது மேலும் 50 மீட்டர் பாதுகாப்பு இடைவெளிவிட்டு பராமரித்து குவாரிப்பணி செய்யப்பட வேண்டும்.
- (ix) விண்ணப்பப் புலங்களுக்கு இடையே அமைந்துள்ள கல்லாங்குத்து புறம்போக்கு புல எண்.369 இப்புலத்தினை எவ்வித மாறுதல்கள் செய்யாமல் பூமியில் உள்ளவாறே பராமரிக்க வேண்டும். மேலும் இப்புலத்திற்கு 10 மீட்டர் பாதுகாப்பு இடைவெளிவிட்டு குவாரிப்பணி செய்யப்பட வேண்டும்.
- (x) விண்ணப்பப் புலங்களுக்கு கிழக்கே புல எண். 258 முதல் 274 வரை அமைந்துள்ள எடமச்சி சமூகநலக்காடுகளுக்கும், மேலும் மேய்க்கால் நிலத்தில் அ பதிவேட்டின்படி புலஎண். 379 சமூக நலக்காடுகள் என உள்ளதால் இப்புலங்களினை எவ்வித மாறுதல்கள் செய்யாமல் பூமியில் உள்ளவாறே பராமரிக்க வேண்டும். மேலும் இப்புல எண்.379-னை ஒட்டியுள்ள விண்ணப்பப்.புல எண்கள்.367/1, 367/2, 376/4க்கு 60 மீட்டர் பாதுகாப்பு இடைவெளிவிட்டு கம்பி வேலி அமைத்து குவாரிப்பணி செய்யப்பட வேண்டும்.
- (xi) விண்ணப்பப் புல எண்.376/1-ல் தென்மேற்கிலிருந்து வடகிழக்கு வழியாக குறைந்த மின்னழுத்த கம்பி செல்கிறது. எனவே குவாரி குத்தகை வழங்குவதற்குமுன் அகற்றப்படவேண்டும் என்ற நிபந்தனையுடனும், இல்லையேல் பாதுகாப்பு இடைவெளி 50 மீட்டர் விடப்பட்டு குவாரிப்பணி செய்யப்பட வேண்டும்.

### Part-II

- (a) There are no minor mineral quarries exceeding an extent of 25.00.0 hectares in total within a radial distance of 500 meters from the periphery of the applied fields.

#### Encl:

Two copy of Approved Mining Plan

  
Assistant Director,  
Geology and Mining,  
Kancheepuram.

#### Copy to:

1. Thiru.S. Suriyakumar, M.Phil., F.C.C., PGDBA, Recognized Qualified person, No.3/216, KSV Nagar, narasothipatti, Salem District.
2. The Director of Geology and Mining, Chennai-32. (with AMP).

## RISK ASSESSMENT AND DISASTER MANAGEMENT PLAN

S.No	Risk Prone zones	Mitigation measures
1	<b>Surface Fire</b>	<ul style="list-style-type: none"> <li>▪ Fire Extinguishers</li> <li>▪ Sand Buckets</li> </ul>
2	<b>Explosives/Blasting</b>	<ul style="list-style-type: none"> <li>▪ The applicant is directly purchasing explosives from an authorized dealer and they are blasting with help of certified blaster. Agreement is made with License holder in Form-22 for store, use and sale of explosives.</li> </ul>
3	<b>Flooding of Rain water</b>	<ul style="list-style-type: none"> <li>▪ Escape Routes will be provided to prevent inundation of storm water</li> <li>▪ Garland drains with check dam will be provided</li> </ul>
4	<b>Radioactive hazard</b>	<ul style="list-style-type: none"> <li>▪ Not Anticipated</li> </ul>
5	<b>Failure of Mine Benches and Pit Slope</b>	<ul style="list-style-type: none"> <li>▪ A bench height of 6m and a width not less than the height and three working benches, each with a height of 6m as equal to the height of the excavator boom and the width more than 6m is proposed to be maintained for safe movement of machinery. The bench slope is maintained not more than 45° from horizontal.</li> </ul>
6	<b>Failure of Waste Dumps</b>	<ul style="list-style-type: none"> <li>▪ Stabilization of dump with top soil and tree plantation shall make the dump more stable.</li> <li>▪ Garland drainage around dump shall prevent under wash of dump by hydrostatic pressure to be developed by surface water and control wash outs and collapse.</li> </ul>
7	<b>Dust</b>	<ul style="list-style-type: none"> <li>▪ Periodical wetting of land by spraying MgCl<sub>2</sub> solutions.</li> <li>▪ Regular water sprinkling on haul roads</li> <li>▪ Provision of Dust mask to workers</li> <li>▪ Green Belt shall be carried out within the quarry premises by planting trees, to improve the aesthetics of the area and also to reduce the pollution outside the activity area</li> </ul>
8	<b>Noise</b>	<ul style="list-style-type: none"> <li>▪ Rotation of workers to minimize exposure time of noise</li> <li>▪ The equipments and machineries shall be maintained properly</li> <li>▪ Provision of earmuffs to workers</li> </ul>



9	<b>Transportation</b>	<ul style="list-style-type: none"><li>▪ Concave mirrors should be kept at all corners</li><li>▪ All vehicles should be fitted with reverse horn with one spotter at every tipping point</li><li>▪ Loading according to the vehicle capacity</li><li>▪ Regular checking of brakes to avoid failures</li></ul>
<b>10</b>	<b>General measures</b>	<ul style="list-style-type: none"><li>▪ No entry for any unauthorized persons</li><li>▪ S1 type fencing as per DGMS circulars</li><li>▪ Quarrying as per Approved Plans only</li><li>▪ Provision of Personal Protective Equipments</li><li>▪ In case of any closure of mine the compensation under Industrial Dispute Act will be paid as per law</li></ul>



# 34 FORM -I

## (I) Basic Information

S.No	Items	Details
1	Name of the Project	R.Giridharan rough stone and gravel Quarry
2	S.No. in the Schedule	1 (a)
3	Proposed capacity area/length/tonnage to be handled/command area/lease area/number of wells to be drilled	52288m <sup>3</sup> of Rough stone and 6528m <sup>3</sup> of Gravel
4	New/Expansion/Modernization	New
5	Existing Capacity/Area etc.,	2.77.0Hectares
6	Category of project i.e. (A) or (B)	B <sub>2</sub> Category
7	Does it attract the general condition? If yes, please specify	Not applicable
8	Does it attract the specific condition? If yes, please specify	Not applicable
9	Location	Latitude: : 12°41'45.03"N to 12°41'51.39"N Longitude: 79°51'35.91"E to 79°51'44.47"E
	Plot No/Survey No/Khasra No.	367/1, 367/2, 368/1G, 368/1H, 368/1I, 376/1, 376/2, 376/3,376/4, & 376/5
	Village	Edamachi
	Taluk	Uthiramerur
	District	Kancheepuram
	State	Tamil Nadu
10	Nearest railway station/airport along with distance in km	Palayaseevaram RS- 8.9km – N Meenambakkam, Chennai airport – 44 km -NE
11	Nearest Town ,City, District Headquarters along with distance in km.	Town: Walajabad – 11 km -NW City: Kancheepuram – 20km- NW District : Kancheepuram – 20km- NW
12	Village Panchayat, ZillaParishad, Municipal	Edamachi Village, Uthiramerur Taluk, Kancheepuram District,
13	Name of the applicant	<b>R.Giridharan,</b>
14	Registered Address	S/o.Rajendran,
15	Address for correspondence	No.12/113, 1st main road, Moogambigai nagar, Sikkarayapuram extension, Gerugambakkam , Kancheepuram , chennai Tamil Nadu Pincode-600 128
16	Details of Alternative Sites examined, if	No alternative sites are considered as the

*R. Giridharan*

	any.	project is site and mineral specific.
17	Interlinked Projects	Does not arise
18	Whether separate application of Interlinked project has been submitted?	Does not arise
19	If Yes , date of submission	Does not arise
20	If no, reason	As the project involves quarrying Rough Stone only; no interlinked project arose
21	Whether the proposal involves approval/ clearance under: if yes, details of the same and their status to be given. a) The Forest (Conservation) Act, 1980? b)The Wildlife (Protection) Act 1972? c)The C.R.Z Notification, 2018?	1. The Edamachi social forest is situated on eastern side. The kaveripakkam RF is situated about 930m on NE side. The Marutham RF is situated at 5.7km on SW side. 2. There is no wild life animal sanctuary within 10km radius from the project site under the wildlife (protection) Act, 1972. 3. The proposed mining project is located more than 10km away coast. Hence, the project doesn't attract the C.R.Z. Notification, 2011.
22	Whether there is any Government order/ Policy relevant /relating to the site?	AD mines, Kancheepuram proceeding letter No.47/Q3/2020/Mines, dated 20.10.2020
23	Forest land involved(hectares)	The proposed area is not a forest land
24	Whether there is any litigation pending against the project and/or land in which the project is propose to be set up?(a) Name of the Court (b) Case No. (c) Orders/directions of the court, if any and its relevance with the proposed project	No

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R. G. S.

## (II) Activity

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

S.No.	Information/Check list confirmation	Yes /No	Details thereof (with approximate quantities /rates, wherever possible)with source of information data																								
1.1	Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)	Yes	<table border="1"> <thead> <tr> <th>S.No</th> <th>Description</th> <th>Present area (Ha)</th> <th>Proposed land use (Ha)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Mining area</td> <td>Nil</td> <td>0.31.3</td> </tr> <tr> <td>2</td> <td>Road</td> <td>Nil</td> <td>0.02.7</td> </tr> <tr> <td>3</td> <td>Green belt &amp; Safety area</td> <td>Nil</td> <td>2.42.2</td> </tr> <tr> <td>4</td> <td>Labour shed</td> <td>Nil</td> <td>0.00.80</td> </tr> <tr> <td colspan="2"><b>Total</b></td> <td><b>2.77.0</b></td> <td><b>2.77.0</b></td> </tr> </tbody> </table>	S.No	Description	Present area (Ha)	Proposed land use (Ha)	1	Mining area	Nil	0.31.3	2	Road	Nil	0.02.7	3	Green belt & Safety area	Nil	2.42.2	4	Labour shed	Nil	0.00.80	<b>Total</b>		<b>2.77.0</b>	<b>2.77.0</b>
S.No	Description	Present area (Ha)	Proposed land use (Ha)																								
1	Mining area	Nil	0.31.3																								
2	Road	Nil	0.02.7																								
3	Green belt & Safety area	Nil	2.42.2																								
4	Labour shed	Nil	0.00.80																								
<b>Total</b>		<b>2.77.0</b>	<b>2.77.0</b>																								
1.2	Clearance of existing land, vegetation and buildings?	No	There is no vegetation available here. Cleaning of shrubs and vegetation																								
1.3	Creation of new land uses?	Yes	The excavated pit shall be used for storage of rain water.																								
1.4	Pre-construction investigations e.g. bore houses, soil testing?	No	Not applicable																								
1.5	Construction works?	No	Not applicable																								
1.6	Demolition works?	No	Not applicable																								
1.7	Temporary sites used for construction works or housing of construction workers?	No	No housing facility will be provided for the labors as people from the nearby villages are proposed to be employed.																								
1.8	Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations	No	The project does not involve any construction process.																								
1.9	Underground works including mining or tunneling?	No	It is an open cast, semi-mechanized mine. No tunneling work.																								
1.10	Reclamation works?	No	The pit will be used for rain water harvesting. Plantation will be developed all around the lease boundary.																								
1.11	Dredging?	No	No Dredging.																								



1.12	Offshore structures?	No	No offshore structures.
1.13	Production and manufacturing processes?	Yes	Mining would be carried out by opencast method by semi mechanized machinery and using Hydraulic excavator and tipper combination.
1.14	Facilities for storage of goods or materials?	No	The recovered material will be directly transported to the consumer points. No storage of goods or materials within the lease area.
1.15	Facilities for treatment or disposal of solid waste or liquid effluents?	No	No rejects are proposed
1.16	Facilities for long term housing of operational workers?	No	No housing facility is required, as labors from the nearby villages are proposed to be employed.
1.17	New road, rail or sea traffic during construction or operation?	No	Existing village road will be used for transportation of mined minerals. Traffic congestion will not occur
1.18	New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airportsetc?	No	The existing transport facilities in the project area will be utilized. There is no interlinked rail air water borne or any other transport facilities are will be utilized.
1.19	Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?	No	The project will not cause any changes in the existing traffic movements.
1.20	New or diverted transmission lines or pipelines?	No	There is no electric line within 50m radius.
1.21	Impoundment, damming, culverting, realignment or other changes to the hydrology of water courses or aquifers?	No	The quarried area can be used for storage of rainwater which may support ground water recharge.
1.22	Storm water crossings?	No	Nil
1.23	Abstraction or transfers of water from ground or surface waters?	No	The ground water table is observed at a depth of 48mbgl whereas mining is proposed to the depth of 42m only from the top.

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1.24	Changes in water bodies or the land surface affecting drainage or run-off?	No	There will be no changes in the water bodies or the land surface affecting drainage or run-off.
1.25	Transport of personnel or materials for construction, operation or decommissioning?	Yes	The quarry personnel will be using their own conveyance to the quarry. As no construction or decommissioning works involved, the necessity of transport of personnel or materials is not required.
1.26	Long-term dismantling or decommissioning or restoration works?	No	As no long-term dismantling or decommissioning works, restoration work is not required.
1.27	Ongoing activity during decommissioning which could have an impact on the environment?	No	No environmental impact factor demanding restoration during decommissioning; as no long-term work is required.
1.28	Influx of people to an area in either Temporarily or permanently?	No	Only authorized persons are allowed to work and the working is restricted to the general shift in daytime only.
1.29	Introduction of alien species?	No	There is no introduction of alien species.
1.30	Loss of native species or genetic diversity?	No	No loss of native species or genetic diversity by the proposed project.
1.31	Any other actions?	Yes	As per Mines regulations and EC conditions, safety and environmental measures will be implemented.

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**2. Use of Natural resources for Construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply)**

<b>S.No.</b>	<b>Information/checklist confirmation</b>	<b>Yes/ No</b>	<b>Details there of (with approximate quantities /rates, wherever possible) with source of information data</b>
2.1	Land especially undeveloped or agricultural land (ha)	Yes	It is a nonagricultural land.
2.2	Water (expected source & competing users) unit: KLD	Yes	Quantity for drinking 0.3 KLD, domestic purposes 0.7KLD, Green belt of water is 1.5KLD, water sprinkling on haul roads 1.0KLD.Total water requirement is 3.5KLD has to be maintained as per the Rule. Drinking water is obtained by Mineral water industries by water canes. Dust suppression and green belt is obtained from water tank. Drinking water will be procured from water vendors and for dust suppression and green belt will be utilized from nearby open wells of proponent
2.3	Minerals (MT)	No	No minerals are used for production of Rough stoned.
2.4	Construction material – stone, aggregates, and/soil (expected source – MT)	No	Proposed project does not require usage of any construction materials.
2.5	Forests and timber (source – MT)	No	Nil.
2.6	Energy including electricity and fuels(source, competing users) Unit: fuel(MT), energy (MW)	Yes	Fuel is required for hydraulic excavator, trucks/ tippers. 75lit per day will be utilized for this purpose.
2.7	Any other natural resources (use appropriate standard units)	No	Nil

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**3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.**

<b>S.NO</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof (with approximate quantities/rates, wherever possible)</b>
3.1	Use of substances or materials, which are hazardous (as per MSIHCrules) to human health or the environment (flora, fauna, and water supplies)	No	No hazardous materials required for this project.
3.2	Changes in occurrence of disease or affect disease vectors	No	There are no changes in occurrence of disease or affect the disease vectors.
3.3	Affect the welfare of people e.g. by changing living conditions?	Yes	The project will provide direct and indirect employment to the people surrounding the villages and thereby improvement of the economic standard shall be ensured.
3.4	Vulnerable groups of people who could be affected by the project e.g. Hospital patients, children, the elder lies.,	No	The villages surrounding the proposed area lie at a distance more than 1km and no dwellings noticed within the safety zone of the project area.
3.5	Any other causes	No	NIL

**4. Production of solid wastes during operation or decommissioning (MT/month)**

<b>S.No</b>	<b>Information/Checklist confirmation</b>	<b>Yes/No</b>	<b>Details thereof(with approximate quantities/rates, wherever possible)with source of information data</b>
4.1	Spoil, overburden or mine wastes	No	No spoil over burden or wastes are proposed.
4.2	Municipal waste (domestic and or commercial wastes)	No	No generation of municipal or domestic waste material during quarrying process.
4.3	Hazardous wastes (as per Hazardous Waste Management Rules)	No	No hazardous waste is likely to be generated.
4.4	Other industrial process wastes	No	None
4.5	Surplus Product	No	None

R. G. G.

4.6	Sewage sludge or other sludge from effluent treatment	No	There will not be any generation of sewage sludge or trade effluent from the quarrying activity.
4.7	Construction or demolition wastes	No	There is no construction or demolition waste.
4.8	Redundant machinery or equipment	No	There is no redundant machinery or equipment storage in the project site.
4.9	Contaminated soils or other materials	No	Only excavator will be used to load the materials into the vehicles. The repair and service works of the machinery are done locally. There is no possibility of oil spillage. If there is any sudden leakage, the waste will be disposed of properly into the earmarked sites.
4.10	Agricultural wastes	No	NA
4.11	Other solid wastes	No	NA

#### 5. Release of pollutants or any hazardous, toxic or noxious substances to air (Kg/hr)

S.No	Information/Checklist confirmation	Yes/No	Details thereof(with approximate quantities/rates, wherever possible)with source of information data
5.1	Emissions from combustion of fossil fuels from stationary or mobile sources	No	The machinery proposed for quarrying shall be maintained as per Mines safety provisions and environmental standards. The emission from the excavator shall be very less. Diesel engine flue gases like SO <sub>2</sub> from Excavator and Tippers shall be monitored as prescribed by the RTO.
5.2	Emissions from production processes	No	No emission of gases from the production process except from the excavator, which is well within the permissible limits.
5.3	Emissions from materials handling including storage or transport.	No	The generation of dust is controlled and suppressed at source by sprinkling of water on haul roads, loading points at regular intervals.

R. G. G.

5.4	Emissions from Construction activities including plant and equipment.	No	Not Applicable
5.5	Dust or odours from handling of materials including mining materials, sewage and waste	No	No odor will be formed, as mining is proposed for extraction of Rough stone and gravel. The least dust emission during handling and transporting of material shall be controlled
5.6	Emissions from incineration of waste.	No	No emission from incineration of waste
5.7	Emissions from burning of waste in open air (e.g. slash materials, construction debris)	No	Nil
5.8	Emissions from any other sources	No	Nil

#### 6. Generation of Noise and Vibration, and Emissions of Light and Heat

S.No.	Information/Checklist confirmation	Yes /No	Details of (with approximate quantities/rates, wherever possible)with source of information data with source of information data
6.1	From operation of equipment e.g. engines, ventilation plant, crushers	Yes	Noise generated from the excavator and tippers will be maintained lesser than 75dB as prescribed by CPCB.
6.2	From industrial or similar processes	No	No activity of drilling and blasting
6.3	From construction or demolition	No	No construction and demolition activities involved.
6.4	From blasting or piling	No	No activity of blasting.
6.5	From construction or operational traffic	Yes	Noise will be generated during movement of vehicles and maintained at the standard level as prescribed by CPCB.
6.6	From lighting or cooling systems	No	There is no lighting or cooling systems.
6.7	From any other sources	No	No other sources

#### 7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

S.No.	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/rates, wherever possible) quantities/rates, wherever possible)with source of information
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			<b>data</b>
7.1	From handling, storage, use or spillage of hazardous materials	No	Only <b>1 hydraulic excavator</b> is proposed to be used for handling the material and loading into tippers. The repairs and service work of the machinery shall be undertaken locally. There is no possibility of oil spillage. If there is any sudden leakage, the waste will be disposed of properly into the earmarked sites.
7.2	From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)	No	No generation of sewage and effluents.
7.3	By deposition of pollutants emitted to air or into the land or into water	No	No emission except flue gases from the moving vehicles.
7.4	From any other sources	No	No other sources
7.5	Is there a risk of long term buildup of pollutants in the environment from the resources?	No	There is no risk of long term buildup of pollutants in the environment, since it is an opencast semi mechanized method

**8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment**

<b>S.No.</b>	<b>Information/Checklist confirmation</b>	<b>Yes/ No</b>	<b>Details thereof (with approximate quantities/rates, wherever possible)with source of information data</b>
8.1	From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances	Yes	Safety provisions like helmets, goggles, safety shoes will be provided to employees as per the Mines Act and Regulations
8.2	From any other causes	No	Mines safety preventive measures will be followed during operation of the machinery. No person shall be allowed within the swing area of the excavator and tippers during loading operation.

R. G. G.

8.3	Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburstetc)?	No	The proposed project will not be affected by any natural disasters.
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**9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned activities in the locality**

<b>S.No</b>	<b>Information/Checklist confirmation</b>	<b>Yes/ No</b>	<b>Details thereof (with approximate quantities/rates, wherever possible) with source of information data</b>
9.1	Lead to development of supporting. Utilities, ancillary development or development stimulated by the project which could have impact on the environment e.g. Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.)housing development, extractive industries, supply industries and other	No	No housing development or extractive industries or supply industries involved in this project which will not lead any environmental effects.
9.2	Lead to after-use of the site, which could have an impact on the environment	No	The excavated area will be used as storage tank.
9.3	Set a precedent for later development	No	Does not arise.
9.4	Have cumulative effects due to proximity to other existing or planned projects with similar effects	No	No

**(II) Environmental Sensitivity**

R. G. G.

S.No.	Areas	Name/identity	Aerial distance (within 15 km.) Proposed project location boundary								
1	Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value	No	There is no ecological landscape, Cultural or other related value areas within 10km radius.								
2	Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forest	No	<p>i. <b>Forest (Conservation) Act 1980:</b> The Edamachi social forest is situated on eastern side. The kaveripakkam RF is situated about 930m on NE side. The Marutham RF is situated at 5.7km on SW side</p> <p>ii. <b>Wild Life (Protection) Act, 1972:</b> There is no wild animal sanctuary within 10 km radius from the project site under the Wildlife (Protection) Act, 1972.</p> <p>iii. <b>Coastal Zone:</b> The proposed mining project is located about 38km away from coast. Hence, the project doesn't attract the C.R.Z. Notification, 2011.</p>								
3	Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, overwintering, migration	No	The area is not used by protected, important or sensitive species of flora or fauna for breeding, nesting, Foraging, resting, over wintering and migration. There is no endangered species.								
4	Inland, coastal, marine or underground waters	No	The proposed mining project is located about 38km away from coast								
5	State, National boundaries	No	Tamil Nadu- Andhra state boundary – 40km (NW) B2 Project it is exempted under General Conditions of EIA Notification 2006.								
6	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	No	There are no routes or facilities used by the public for access to recreation or other tourist in the proposed project site.								
7	Defense installations	No	None								
8	Densely populated or built-up area	Yes	<table border="1" data-bbox="906 1839 1497 1966"> <thead> <tr> <th data-bbox="906 1839 1070 1966">Name of village</th> <th data-bbox="1070 1839 1182 1966">Direction</th> <th data-bbox="1182 1839 1337 1966">Distance from Mines</th> <th data-bbox="1337 1839 1497 1966">Population</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>	Name of village	Direction	Distance from Mines	Population				
Name of village	Direction	Distance from Mines	Population								

R. G. S.

					(Km)	
			Edamachi	South	854m	1860
			Malaipattu	East	550m	1078
			Vellari	West	1.8kms	426
			Gunduperu mbedu	SW	3kms	1020
9	Areas occupied by sensitive man-made land uses(hospitals, schools, places of worship, community facilities)	Yes	Edamachi - 854m- S			
10	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	No	None			
11	Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)	No	The project area is not subjected to any existing pollution or environmental damage.			
12	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	No	It is not an earth quake prone area or any other natural disasters. Adequate measures will be adopted to prevent flooding in the project site during rainy seasons.			

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R. G. S.

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

**Signature of Project Proponent along  
With name and address**



**R.Giridharan,**  
**(Project proponent)**  
S/o.Rajendran,  
No.12/113, 1st main road,  
Moogambigai nagar,  
Sikkarayapuram extension,  
Gerugambakkam, Chennai.

Date : 10.11.2020

Place : Salem

**Signature of the qualified person**



**Mr.S.Suriyakumar**  
M.Sc., M.Phil, F.C.C. (Min)  
PGDBA, DIPC  
EIA Co-ordinator (Mining)

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**Application for mining of minor minerals under category 'B<sub>2</sub>' for less than 5 Ha**

<b>Basic Information</b>		
1	Name of the mining lease site	<b>R.Giridharan rough stone and gravel Quarry</b>
2	Location / site	367/1, 367/2, 368/1G, 368/1H, 368/1I, 376/1, 376/2, 376/3,376/4, & 376/5
3	Land Use classification of the site	Patta
4	GPS Co-ordinates	Latitude: : 12°41'45.03"N to 12°41'51.39"N Longitude: 79°51'35.91"E to 79°51'44.47"E
5	Size of the Mining Lease (Hectare)	<b>2.77.0 ha</b>
6	Capacity of Mining Lease (M3/annum)	52288m <sup>3</sup> of Rough stone and 6528m <sup>3</sup> of Gravel
7	Period of Mining Lease	Ten Years
8	New or existing quarry	Fresh Lease quarry
9	If in case of existing Rough Stone/ Blue Metal/ Granite Quarry, etc., the length, width and depth to which quarrying has already been done (below the ground level)	It is fresh Lease quarry
10	If quarrying had been below the ground level/above the ground level, the height of quarrying already done	Fresh lease
11	Ground water table in meter	48m bgl
12	Depth of mining	42m the BGL
13	Name of the owner who had earlier undertaken the quarrying & a copy of mining lease issued with date, if he is different from the present applicant	Fresh lease
14	Proof of ownership: a) If owned patta copy b) If not own patta land agreement/ lease copy entered with the owner (to be enclosed details)	Patta enclosed in approved mining plan
15	Expected cost of the Project	Rs. 23.0 Lakhs
16	Environment Management Plan cost:	Rs 3.5 Lakhs
17	Contact Information	Thiru.R.Giridharan S/o.Rajendran, No.12/113, 1st main road, Moogambigai nagar, Sikkarayapuram extension, Gerugambakkam ,

*R.Giridharan*

		Chennai, Tamil Nadu Pincode-600 128
18	Approved Mining Plan/Scheme approval detail	Roc.No.47/Q3/2020 dated 20.11.2020
19	District Survey Report (DSR) is provided (applicable in case of minor minerals only)	Attached
20	CER plan with proposed expenditure	2% of total project cost.
21	Precise area communication approved by the Competent Authority	Roc.No.47/Q3/2020 dated 20.10.2020 from Assistant Director, Department of G&M, Kancheepuram.
22	Mining plan approved by the Competent Authority	Mining Plan approved under Roc. No.47/Q3/2020 dated 20.11.2020 By Assistant director of Geology and Mining, Kancheepuram
23	Green Belt area	2.42.2 ha
24	VAO Certificate 300m Habitation	Attached
25	AD/DD Letter to 500m Radius List of quarry Details (Existing/Abounded/Proposed)	Roc. No.47/Q3/2020 dated 20.11.2020.
<b>Method of working</b>		
26	<b>Category type:</b> (a) Mechanized (b) Semi – Mechanized (c) Manual	Open Semi – Mechanized Open cast, semi-mechanized mining will be adopted to extract rough stones of required size from the area for which lease applied for. Before opening a mine, several aspects should be considered like construction of semi-permanent structures, planning for the development / production works, formation of faces, lying of approach road to various benches for movement of dumpers, recruitment of man power, deployment of machinery, selection of dump sites, stacking yards etc. Top soil, weathered materials shall be removed prior to development of working benches.
27	<b>Construction and design of haul roads:</b> a) Dimension as per the statutory requirements which were followed or otherwise	The approach road is already available and the exiting road within the mines could be used for proper transport of materials by tippers. For convenience of operation and increase of production together with safety and environment. Internal road is formed in 1: 10 gradient.



	<p>b) Number of vehicles plying on the main haul roads inside the mine and the approach road to the pit located outside the mine, if any.</p> <p>c) Are any measures taken to minimize fugitive dust generated from mine haul roads? Does it comply with the CPCB/PCB Guidelines?</p> <p>d) Is there a possibility that air pollutants emitted from the project area that do not comply with air quality standards as per CPCB/PCB?</p>	<p>Road gradient is designed as 1: 10 for short ramp and 1:16 for haul roads.</p> <p>Loading of waste and Rough stone shall be done by Hydraulic Excavators into 10/20 tonner's tippers from the working place periodically. The applicant is engaging one Hydraulic excavator with 0.9m<sup>3</sup> capacity and 2 tippers of 10/20 tones capacity for transport.</p> <p>The loading and clearing works done by Hydraulic excavators very slowly and therefore raising of dust is negligible in quarry and tipper movement also very slow due to carrying load from quarry and therefore raising of dust from haul road also extremely low or nil. However, Dust expected to be generated from hauling roads will be suppressed by periodical wetting of land by spraying using MgCl<sub>2</sub> solutions.</p> <p>The air pollutants emitted from the project area will comply with air quality standards as per CPCB/PCB.</p>
28	<p><b>Mechanized / Semi - Mechanized Method of Mining:</b></p> <p>i) Number of loading / excavating equipments as per approved mining plan and capacity.</p> <p>ii) Number of loading / excavating equipments actually being deployed and capacity.</p> <p>iii) Type and number of transporting equipments.</p> <p>iv) Capacity and Number of trucks used as per approved mining plan</p>	<p>i) Loading shall be done by Hydraulic Excavator of 1.2m<sup>3</sup> capacity.</p> <p>ii) One Hydraulic Excavator of 1.2m<sup>3</sup> capacity</p> <p>iii) Tipper – 2Nos</p> <p>iv) 10/20 tones capacity of Tipper used for transport. tipper – 2Nos</p>



	<p>v) Capacity and Number of trucks used actually in the mine.</p> <p>vi) Does the deployment of loading equipments (excavators) and trucks fulfill the statutory requirements as per MMR 1961, with respect to the site conditions?</p> <p>vii) Number and capacity of loading equipments and trucks used not in line with approved mining plan.</p> <p>viii) Impact of excess deployment of loading equipment (excavators) and transporting equipment on environment.</p> <p style="margin-left: 40px;">(a) Air pollutants (b) Water Quality (c) Land Quality (d) Noise level</p> <p>ix) Type of transporting system used - (a) trucks (b) Any other mode</p>	<p>v) Same as approved mining plan</p> <p>vi) No excess deployment of loading and transporting equipments other than Approved Mining Plan. However the quarry is non-working at present and it will be operated with aid of above equipments. The environmental load derived by using above equipments is calculated as under w.r.t meteorological conditions.</p> <p>vii) Transport of Rejects and waste shall be done by Tippers and tractor.</p> <p>viii) There is no excess deployment of equipment.</p> <p>ix) (a) Trucks – 10/20 Tonners (b) Nil</p>
29	<p><b>Method of Rock Breaking/Material preparation for the excavation:</b></p>	
	<p><b>a) Methodology adopted :</b></p> <p>i. Drilling and blasting</p>	<p>Drilling of shot-holes will be carried out by using a portable compressor with Jack Hammers. Depth of holes shall be 1-2m bench height. The spacing shall be 0.75m and the burden shall be 0.60m from the preface.</p> <p>To achieve a correct blasting geometry, certain amount of trial blast is pre-requisite to effect a perfect pre-determined fragmentation and fly rock control. In case of heavy blasting, a qualified Mines</p>

*R. G. G.*

	<ul style="list-style-type: none"> <li>ii. Rock breakers</li> <li>iii. Rippers</li> <li>iv. Surface miners</li> <li>v. Direct mucking by excavators</li> <li>vi. Manual means</li> <li>vii. Any other methods or combination of above.</li> </ul>	<p>manager has to be appointed for proper calculation of powder factor, control blasting, sequencing and arrangements of explosives.</p> <ul style="list-style-type: none"> <li>ii. The excavator with rock breaker attachment.</li> <li>iii. No rippers.</li> <li>iv. No surface miners</li> <li>v. the boulder will be loaded by excavators</li> <li>vi. Cleaning debris and shrubs.</li> <li>vii. Conventional methods shall be adopted for quarrying operation.</li> </ul>
	<p><b>b) In case of drilling and blasting method:</b></p> <ul style="list-style-type: none"> <li>i. Type of blasting: short hole or deep hole</li> <li>ii. Whether controlled blasting technique adopted? If yes, specify the technique with details of study, year of study</li> <li>iii. Impacts due to blasting defined as per the studies, if any carried out previously as indicated</li> </ul>	<ul style="list-style-type: none"> <li>i) Drilling of shot-holes will be carried out by using a portable compressor with Jack Hammers. Depth of holes shall be 1-2m bench height. The spacing shall be 0.75m and the burden shall be 0.60m from the preface.</li> <li>ii) To achieve a correct blasting geometry, certain amount of trial blast is pre-requisite to effect a perfect pre-determined fragmentation and fly rock control. In case of heavy blasting, a qualified Mines manager has to be appointed for proper calculation of powder factor, control blasting, sequencing and arrangements of explosives.</li> <li>iii) The massive formation shall be broken into pieces of portable size by jack hammer drilling and shot hole blasting. Powder factor of explosives for breaking such hard rock shall be in the order of 6-7 tones per Kg of explosives. Blasting parameter proposed to be adopted for shot holes shall be,  <math>\text{Depth (m)} * \text{Burden (m)} * \text{Spacing (m)} = \text{Volume (m}^3\text{)}</math> </li> </ul>



	<p>iv. Dust pollution</p> <p>v. Noise level (dB(A))</p> <p>vi. Ground vibration studies and Fly rock projection</p>	$1.00 \times 0.60 \times 0.75 = 0.45 \text{ M}^3$ <p>Quantity of broken rock per hole = <math>0.45 \times 2.6</math> = <math>1.17 \text{ M}^3</math></p> <p>Blasting efficiency @90% = <math>1.17 \times 90\%</math> = <math>1.05 \text{ M}^3/\text{hole}</math></p> <p>Charge per hole = 140gm of 25 mm dia. cartridge.</p> <p>Quantity of rock broken per day = <math>36.7 \text{ m}^3</math> or 95.42M.T.</p> <p>Requirement of explosives per day = 13.6 Kg @ 7 M.T. per Kg of explosives</p> <p>No. of holes to be drilled per day = <math>36.7/1.05</math> = 35 Holes</p> <p>iv) Dust extractor or wet drilling to be followed to control dust at source of emission</p> <p>Water sprinklers along the sides of haul road shall be fixed to control fly of dust while transporting minerals and waste</p> <p>Avenue trees along roads around ML boundary shall be planted as per the norms of MoEF&amp;CC to control fly of dust, noise etc.</p> <p>v) The nearest village from the quarry lease area is Edamachi Village at 854m. The study area currently does not involve any quarrying activity.</p> <p>vi) Ground vibration due to quarrying activities in the area is anticipated due to blasting and during movement of vehicles, etc. However, the major source of ground vibration is blasting. The major impact of the ground vibrations is observed on the domestic houses located in the villages surrounding the quarry lease area. The kuchha houses are more prone to cracks and damage due to the vibrations</p>
	<p><b>c) Impact of preparation of Ore and waste environment:</b></p> <p>a) Air Pollution</p> <p>b) Noise Pollution</p> <p>c) Water Pollution</p> <p>d) Safety standards</p> <p>e) Traffic density</p> <p>f) Road Condition (vulnerability)</p>	<p>NA</p>



30	<p><b>Construction and Design of Reject Dumps.</b></p> <p>i. Place location</p> <p>ii. Approach to Dump from the mine-distance and safety standards.</p> <p>iii. Area of extent occupied</p> <p>iv. Dimension of Dump and No. of terrace with heights (benches)</p> <p>v. Vegetation covered : If yes, specify the details of plants</p>	<p>Reject is only 5% it is stored on the Corners of the safety area, and it is used for Haul road maintenance.</p> <p>NA</p> <p>NA</p> <p>NA</p> <p>NA</p>
31	<p><b>Construction and Design of Waste Dumps.</b></p> <p>(i) Numbers and Location of Dumps as per approved Mining Plan</p> <p>(ii) Specify whether reject dumps are located within or outside mining lease</p> <p>(iii) Area occupied in excess of the approval mining plan.</p> <p>iv) Dimension of Terracing, Light, Shapes etc., Dump as per approved Mining Plan</p> <p>v) Fresh/Existing Dimension Height, shape, width, etc., of Dumps in the mine.</p> <p>vi) Volume /Quantity added to Waste/Dump during the violated period.</p> <p>vii) Approach to the Dump-Dimensions, distance.</p>	<p>NA</p> <p>NA</p> <p>Nil</p> <p>NA.</p> <p>NA</p> <p>NA</p> <p>No dump. Small amount of fines shall be used for road making.</p>



	<p>Viii) Number of and type of equipments deployed in Dump</p> <p>ix) Provision of Garland drains around the Dumps.</p> <p>x) Any vegetation made on the slopes.</p> <p>xi) Provision of safety standards.</p> <p>xii) Impact of waste/Dumps on environment</p> <p>a) Air Pollution</p> <p>b) Water Pollution</p> <p>c) Dust Pollution</p> <p>d) Noise Pollution</p>	<p>Nil</p> <p>NA, No dumps</p> <p>Vegetation is proposed over proposed on safety area at an interval of 5 x 5m covering about 2.42.2ha</p> <p>No dump</p> <p>a) Air Pollution</p> <p>Raise of dust during transport along haul roads shall be controlled by permanent water sprinkler arrangements.</p> <p>b) Water Pollution: No much water pollution anticipated being hard rock mining. No surface water body nearby.</p> <p>c) Water spraying arrangements at loading site and along haul roads while transporting the waste and products.</p> <p>d) Prohibited Air Horn should not be used for Mine vehicles. Permitted reverse horn or camera should be used to control noise at dumping point.</p>
32	<p><b>Construction and design of Ore and sub grade ore/mineral stacks:-</b></p> <p>i) Number and location of Ore stacks.</p> <p>ii) Dimension of Ore/sub grade</p>	NA



	<p>stacks as per the Approved Mining Plan</p> <p>iii) Volume/Quantity added during the violation period.</p> <p>iv) Any screening plant or any other loading equipment engaged during the violated period.</p> <p>v) Approach to Ore/sub grade stack-Distance, hazards.</p> <p>vi) Safety standards adopted while operation.</p> <p>vii) Impact of Ore/sub grade on environment</p> <p>a)Air pollution</p> <p>b)Water Pollution</p> <p>C)Dust Pollution</p> <p>d)Noise Pollution</p>	
33	<p><b>Mine Pit Water</b></p> <p>i) Intersection of Ground water table, specify the measures taken.</p> <p>ii) Ground water table as per hydro geological studies (pumping test).</p> <p>iii) Provision of Garland drains around pit and dumps</p> <p>iv) Water pollution</p> <p>v) Management of mine water.</p>	<p>The depth of quarrying will be 42m from BGL where as water table is observed at a depth of 48m bgl hence, there will not be any intersection with ground water table.</p> <p>No pump test was conducted. Through VES, the ground water table is delineated at 48m BGL.</p> <p>Garland drainage is provided around mine pit to collect rain water with leachites to pass through soak pits before discharge into natural drains.</p> <p>Rain water mixed mud become slurry with high suspended particles Such Slurry water to be stored in a mine sump and decant it before discharge into natural system. Mine pit pumped out and utilized for agricultural activities and development of green belt.</p> <p>Mine water shall be used for Afforestation and dust control purposes as yield of water during monsoon</p>



	vi) Ultimate pit limit, w.r.t ground water intersection and management of drainage of ground water.	is very low.  There is no major river found nearby the site. The drainage pattern in this area is dendritic in nature.																				
34	Diversion of general drainage/River/Nallah course for mining	NA																				
35	Clearing of vegetation before the commencement of mining operation- Number of trees species wise)	NA. shrubs will be cleaned before commence the mining operation																				
36	<b>Man Power</b> a) Statutory management b) Regular (Non-Statutory) manpower	4Nos 16 Nos																				
37	<b>Population (Nearby Habitation)</b>  a) Population/Significant population/dense population within the buffer zone of 10kms  b) People displacements due to mining activities  c) Location/Existence of habitation near the river or any other historical/sensitive forest distance.  d) Impact of mining on surrounding and habitation- Air, Water, Noise, Pollution.	<table border="1"> <thead> <tr> <th>Name of village</th> <th>Direction</th> <th>Distance from Mines (Km)</th> <th>Population</th> </tr> </thead> <tbody> <tr> <td>Edamachi</td> <td>South</td> <td>854m</td> <td>1860</td> </tr> <tr> <td>Malaipattu</td> <td>East</td> <td>550m</td> <td>1078</td> </tr> <tr> <td>Vellari</td> <td>West</td> <td>1.8kms</td> <td>426</td> </tr> <tr> <td>Gunduperumbedu</td> <td>SW</td> <td>3kms</td> <td>1020</td> </tr> </tbody> </table> <p>The quarrying operation will be concentrated in the quarry lease area and there is no displacement of people due to quarrying activity.</p> <p>There is no place of worship like School, temple and Villages found around 500m radius.</p> <p>a) <b>Air Quality</b> The concentrations of SO<sub>2</sub> and NO<sub>x</sub> generated from mining area expected to be low due to absence of</p>	Name of village	Direction	Distance from Mines (Km)	Population	Edamachi	South	854m	1860	Malaipattu	East	550m	1078	Vellari	West	1.8kms	426	Gunduperumbedu	SW	3kms	1020
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any major source. Dust will be suppressed at source by periodical wetting of land. Dust extractor or wet drilling to be followed to control dust at source of emission. Water sprinklers along the sides of haul road shall be fixed to control fly of dust while transporting minerals and waste.

**a) Water Quality**

Water requirement for drinking will be sourced from water vendors. Quarrying activity always above ground water table. The proponent will collect and judiciously utilize the rainwater as part of rain water harvesting being a semi critical area under PWD Classification.

**d) Noise Quality**

Major noise generating sources may be considered as excavation, drilling, blasting, loading and transportation of minerals. The reported noise levels meet the requirements of TNPCB Standards of Residential – 55 dB (A) and Industrial – 75 dB (A). The resultant noise level due to monitored values and calculated values at the receptors are based on the mathematical formula and it can be seen that the ambient noise levels meet the prescribed limit and will remain within permissible limits even when the project will be in operation phase after getting EC..

Ground vibration due to quarrying activities in the area is anticipated due to blasting and during movement of vehicles, etc. However, the major source of ground vibration is blasting. The major impact of the ground vibrations is observed on the domestic houses located in the villages surrounding the quarry lease area. The kuchha houses are more prone to cracks and damage due to the vibrations. Another impact due to blasting activities is fly rocks.

Greenbelt will be developed around the mine lease as well as safety zones which will help in arresting noise at source. Safety devices will be provided to workers, where noise is more than 80dB (A). Limiting time exposure of workers to excessive noise. Proper

R. G. J.

	i) Socio Economic aspects of mining.	and regular maintenance of vehicles, machinery and other equipments. Periodic inspection of all equipments and risk prone areas. Regular lubrication & replacement of worn out parts etc.,  i) The local people will get preference. About 16 persons are employed in the quarry. The proponent is proposed to spend CSR @ 2.5% of profit as per the Companies Act, 2013 and CSR Rules, 2014 through local panchayat and CER @ 2% of the project cost for maintenance of road, street light, school sanitation etc.,																								
38	Conceptual post mining land use/ restoration	<table border="1"> <thead> <tr> <th>S.No</th> <th>Description</th> <th>Present area (Ha)</th> <th>Proposed land use (Ha)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Mining area</td> <td>Nil</td> <td>0.31.3</td> </tr> <tr> <td>2</td> <td>Road</td> <td>Nil</td> <td>0.02.7</td> </tr> <tr> <td>3</td> <td>Green belt &amp; Safety area</td> <td>Nil</td> <td>2.42.2</td> </tr> <tr> <td>4</td> <td>Labour shed</td> <td>Nil</td> <td>0.00.80</td> </tr> <tr> <td colspan="2"><b>Total</b></td> <td><b>2.77.0</b></td> <td><b>2.77.0</b></td> </tr> </tbody> </table>	S.No	Description	Present area (Ha)	Proposed land use (Ha)	1	Mining area	Nil	0.31.3	2	Road	Nil	0.02.7	3	Green belt & Safety area	Nil	2.42.2	4	Labour shed	Nil	0.00.80	<b>Total</b>		<b>2.77.0</b>	<b>2.77.0</b>
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3	Green belt & Safety area	Nil	2.42.2																							
4	Labour shed	Nil	0.00.80																							
<b>Total</b>		<b>2.77.0</b>	<b>2.77.0</b>																							
39	Disaster management plan for the mine	To overcome such risks, help/aid would be sought from emergency services providers like Police station, fire station, Hospital, Ambulance services from the authorities in the vicinity of the mine site. Their contact telephone numbers and communication facilities are provided and displayed on the board at the mine office as well as mine site. Responsibility of coordinating rescue activities is entrusted to quarry-in-charge at the quarry site in addition to quarry-in-charge is also looking after statutory obligatory under Mines Act,1952. Primary Health centre is available in Salavakkam, Govt Hospital for medical emergencies, about 4.4km away from the mine.																								
40	Mine closure plan to be furnished in Mining Plan.																									



## Environmental Sensitivity

Sl.No	Areas	Distance in kilometer /details
1.	Distance of project site from nearest rail or road bridge over the concerned River, Rivulnet, Nallah etc.	Palayaseevaram bridge on Palaru river-7.3km - N
2.	Distance from Infrastructure facilities	Edamachi -854m- SE
	a) Railway line	Kanjeepuram to Chengalpattu railyway line- 8.9km – NE Palayaseevaram Railway station – 8.9km- E
	b) National Highway	NH45 – 10km – W- Chennai to Theni
	c) State Highway	The SH-58- 8.3km- N- Kanjeeपुरam to Chengalpattu
	d) Major District Road	MDR 789- 2.8km- W- Walajabad- Thirukalukundram
	e) Any other Road	Village metal road is available to reach the quarry
	f) Electric transmission line pole or tower	There is no HT line in around 300m radius. There is one LT electric line passing in S.F No. 376/1 this will be removed before grant of quarrying.
	g) Canal or check dam or reservoirs or lake or pond	Nil
	h) In-take for drinking water pump house	NIL
	i) Intake for irrigation canal pumps	NIL
3.	Areas protected under international conventions, national or local legislation for their ecological landscape, cultural or other related value.	NA
4.	Area which are important or sensitive for ecological reasons- wetlands, water courses or other water bodies, coastal zone, biospheres, mountains, forests	The Edamachi social forest is situated on eastern side. The kaveripakkam RF is situated about 930m on NE side. The Marutham RF is situated at 5.7km on SW side
5.	Area used by protected, important or sensitive species of flora and fauna for breeding, nesting, foraging resting, over wintering, migration	NA
6.	Inland, coastal, marine or underground waters	The quarry is located 38km away from sea coast on eastern side

R. G. S.

7.	State, National boundaries	There is no Interstate, National boundaries located around 10km radius
8.	Whether the project site attracts the HACA clearance? If so, also furnish the HACA clearance for the mining from the competent authority.	The area does not fall under HACA Village.
9.	Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas	NA
10.	Defense installations	NA
11.	Densely populated or built-up area, distance from nearest human habitation	Edamachi – 854m- SE
12.	Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)	Edamachi – 854m- SE
13.	Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)	No
14.	Areas already subjected to pollution or environmental damage. (those where existing legal environmental standards are exceeded)	No
15.	Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)	No
16.	Is proposed mining site located over or near fissure/fracture for ground water recharge	No
17.	Whether the proposal involves approval or clearance under the following Regulations or Acts, namely:-	



	a. The Forest (Conservation) Act, 1980; b. The Wildlife (Protection) Act, 1972: C. The Costal Regulation Zone Notification, 2011. if yes, details of the same and their status to be given.	a) NA b) NA c) NA
18.	Forest land involved (hectares)	NA
19.	Whether there is any litigation pending against the project and / or land in which the project is propose to be set up? a. Name of the court b. Case No. c. Orders or directions of the court, if any, and its relevance with the proposed project.	NA

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

**Signature of Project Proponent Along  
with name and address**



**R.Giridharan,**  
**(Project proponent)**  
S/o.Rajendran,  
No.12/113, 1st main road,  
Moogambigai nagar,  
Sikkarayapuram extension,

**Signature of the Qualified person**



**Mr.S.Suriyakumar**  
M.Sc., M.Phil, F.C.C. (Min)  
PGDBA, DIPC  
EIA Co-ordinator (Mining)



Gerugambakkam, Kancheepuram.

Date : 10.11.2020

Place : Salem

A handwritten signature in blue ink, appearing to read 'R. G. S.', is located in the bottom right corner of the page.

**BEFORE THE NATIONAL GREEN  
TRIBUNAL  
SOUTHERN ZONE AT CHENNAI**

**APPEAL No. 15 of 2022**

Arjun Gopalaratnam,  
... Appellant

Vs

Tamil Nadu SEIAA and anr.  
... Respondents

**ADDITIONAL TYPED SET OF  
PAPERS**

**M/s. ABDUL SALEEM**

**COUNSEL FOR 2<sup>nd</sup> RESPONDENT**