PRE – FEASIBILITY REPORT

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AUTHORISED SIGNATORY

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AUTHORISED SIGNATORY

1.0 EXECUTIVE SUMMARY

Khandel Ki Pal Soapstone & Dolomite Mining Project (M.L No. 01/2003) situated at Near village- Khandel Ki Pal, Tehsil- Salumber, District- Udaipur (Raj.) over an area of 156.31 Hect.

The Mining lease for mineral Soapstone mineral was originally granted to M/s Oriental Talc Products Pvt. Ltd., Udaipur vide Govt. order no. F-3(1) (5)IND/65/1826 on dated- 26/02/1965. The lease deed was executed on dated- 14/05/1965 and the lease deed was registered on dated 24/06/1965 for 20 Years from 14/05/1965 to 13/05/1985).

The first reneweal of mining lease was granted in favor of M/s Oriental Talc Products Pvt. Ltd., Udaipur vide Govt. order no. F-2(41) Khan/Gr.-2/85 on dated- 02/03/1987. The lease deed was executed on dated- 25/08/1987 and the lease deed was registered on dated 28/08/1987 for 20 Years from14/05/1985 to 13/05/2005).

The mining lease was transferred in favor of M/s Mahaveer Trading Company, E-263, Mewar Industrial area, Madri, Udaipur (Raj.) vide Govt. order No. ADM/udr/Zone/Salu/7/84/318-324 on dated- 27/01/2003.

The entire lease area of 156.310 ha is situated in Reserve Forest. The Ministry of Environment & Forest & Climate Change (FC division) Govt. of India issued final diversion of 34.22 ha. forest land out of 156.310 ha as per Forest (Conservation) Act 1980 in favour of M/s Mahaveer Trading Company. The balance part of un-diverted area of lease 122.09 ha is in possession of forest department, Udaipur for mining of Soapstone & Dolomite vide letter no. 8-95/2004- FC dated 29/06/2005.

EC is granted by MoEF vide letter no. NJ-11015/21/2005-IA. II (M)IA division dated 7 September 2005. EC is valid for a period of 20 years; co-terminus with mining lease as per MMDR Act 1957.

The second mining lease renewal was granted for an area of 156.310 ha in favour of M/s Mahaveer Trading Company, E-263, Mewar Industrial area, Madri, Udaipur (Raj.) vide Govt. order no. F-5(110)Khan/Gr.-2/2005 on dated- 25/11/2006. The lease deed was executed on dated- 17/01/2007 and the lease deed was registered on dated 20/01/2007 for 20 Years form 14/05/2005 to 13/05/2025. (Enclosed as annexure 8)

The Dolomite mineral was included by State Govt. letter no. P.5/110/Khan/Gr-2/2005 dated 18/08/2007 and rider agreement on dated 07/02/2008.

Consent to operate by Rajasthan State Pollution Control Board letter no. F (Mines) Udaipur (Salumber)/1(1)/2009-2010/1537-1542 dated 22/05/2014.

The Consent to Operate (CTO) is valid for a period from 22/05/2014 to 30/04/2017.

At the time of lease renewal it was to be confirmed for renewing the lease whether Mining lease fall in Aravali range or not.

Mines fall in Aravali range. However vide Supreme Court order no 301 & 304 (letter enclosed) renewal was allowed by forest department and mining department vide Govt. order no. F-5(110)Khan/Gr.-2/2005 on dated- 25/11/2006 for 20 years and co-terminus with mining lease.

1.1 SALIENT FEATURES OF THE PROJECT

<table>
<tr><th>Particulars</th><th>Details</th></tr>
<tr><td>Geographical location</td><td>
<table>
<tr><th>Latitude (N)</th><th>Longitude (E)</th></tr>
<tr><td>24^0 5' 54.42''</td><td>74^0 11' 48.57''</td></tr>
<tr><td>24^0 6' 03.19''</td><td>74^0 11' 24.51''</td></tr>
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<tr><td>24^0 6' 50.88''</td><td>74^0 11' 22.15''</td></tr>
<tr><td>24^0 5' 54.42''</td><td>74^0 11' 48.67''</td></tr>
</table>
</td></tr>
<tr><td>Total Mine Lease area</td><td>156.31 ha</td></tr>
<tr><td>Mineable Reserves</td><td>10273389 Tons (Soapstone & Dolomite)</td></tr>
<tr><td>Production</td><td>Soapstone 16,000 TPA and Dolomite 15,200 TPA</td></tr>
<tr><td>Life of Mine</td><td>~36 years</td></tr>
<tr><td>Estimated Project Cost</td><td>Rs 10 Crore</td></tr>
<tr><td>Man Power</td><td>48 Persons</td></tr>
<tr><td>Land Use</td><td>Govt. & Forest Land</td></tr>
<tr><td>Nearest Airport</td><td>
<table>
<tr><th>Name</th><th>Distance (Km)</th><th>Direction</th></tr>
<tr><td>Airport</td><td>Dabok Airport, Udaipur</td><td>69 km NNW</td></tr>
</table>
</td></tr>
<tr><td>Nearest Highway</td><td>
<table>
<tr><th>S. No.</th><th>Name</th><th>Distance (km) (From Lease Boundary)</th><th>Direction</th></tr>
<tr><td>1</td><td>SH- 32</td><td>12.46</td><td>SW</td></tr>
<tr><td></td><td></td><td></td><td></td></tr>
</table>
</td></tr>
<tr><td>Nearest Railway Station</td><td>
<table>
<tr><th>S. No.</th><th>Name</th><th>Distance (km) (From Lease Boundary)</th><th>Direction</th></tr>
<tr><td>1</td><td>Sur Khand Ka Khera</td><td>26</td><td>W</td></tr>
</table>
</td></tr>
<tr><td>Power Supply</td><td></td></tr>
<tr><td>Water Demand and Supply</td><td>22.5 KLD
Water demand will be met from tanker supply& water store in mine pit.</td></tr>
<tr><td>Defense Installations</td><td>None within the Study Area</td></tr>
</table>

Archeological Features	None within the Study Area
Ecological Sensitive Zones	None
Forests	as given in Form 1 Environmental settings
Nearest Streams/ Rivers/ Water Bodies (From Mine Boundary)	None
Seismic Zone	Zone-II, Low Damage Risk Zone as per BMTPC, Vulnerability Atlas Seismic Zone of India IS: 1893-2002.

1.2 PROPOSED PLANNING

Mining Method: Underground Mining

Project Cost : Rs. 10 Crore

Production : Soapstone 16,000 TPA & Dolomite 15,200 TPA

Table 1.2: Land Use of lease area

S. No.	Land use Category	Pre-operational Existing (Ha.)	Operational (Ha.)	Post-Operational (Ha.)
1	Pits & Quarries	9.63	11.201	--
2	Top soil Dump	--	--	--
3	Dumps	5.39	6.2115	--
4	Mineral Stack Yard	--	--	--
5	Sub Grade Stack Yard	--	0.4213	--
6	Infrastructure	1.0757	1.0757	1.0757
7	Road	1.4816	1.4816	--
8	Green Belt	2.96	3.26	--
9	Tailing Pond	--	--	--
10	Reclamation (Backfilled)	--	--	--
11	Undisturbed Area	135.7737	132.6589	--
Total		**156.31**	**156.31**	**156.31**

2.0 INTRODUCTION OF THE PROJECT / BACKGROUND INFORMATION

2.1 IDENTIFICATION OF PROJECT AND PROJECT PROPONENT

Khandel Ki Pal Soapstone & Dolomite Mining Project (M.L No. 01/2003) situated at Near village- Khandel Ki Pal, Tehsil- Salumber, District- Udaipur (Raj.) over an area of 156.31 Hect.

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The Project Proponent is engaged in mining. The main objective to be pursued by the applicant is to carry the business of prospecting, exploring, operating and working of mines. There is huge potential and demand in the domestic market. Mineral is exported outside also.

Name and address of the Applicant	M/s Mahaveer Trading Company E-263, Mewar Industrial Area, Madri, District- Udaipur (Rajasthan)

2.2 BRIEF DESCRIPTION OF NATURE OF THE PROJECT

The project has been proposed for mining of 16000 TPA (Soapstone) & 15200 TPA (Dolomite) by underground Method. The lease area is 156.31 ha. Total minable reserve available is 10273389 MT. The expected life of mine is 36 years. Total OB/waste generated during the plan period of the mine will be 88465.31 tons. The mineral will be transported through trucks/ tippers.

Water requirement will be 22.5 KLD for the project and will be met by water tanker supply & store water in mine pits. Ground water table will not be intersected during the scheme period / conceptual phase.

2.3 NEED FOR THE PROJECT AND ITS IMPORTANCE TO THE COUNTRY AND OR REGION

The lessee has soapstone/dolomite based industry of his own at Udaipur and mostly the mineral in crude form is transported to factory at Udaipur for making Soapstone/Dolomite powder in different specification. Crude soapstone is also sold. The mineral is not sorted in different grades at mines. Various grades soapstone is produced and transported. The mineral is sorted right at the pit mouth and stacked separately and then send to the factory. The soapstone powder is sold to the consumers industries i.e Soap & Detergent, paper, talcum, paint, chemical, rubber. The soapstone powder as per specifications of the user Industries/consumer is prepared by blending different grade of soapstone brought/purchased from different mines. The Quality of soapstone depends on the brightness of the powder, which can be increased or decreased by mixing with different grade of soapstone.

The mining project will provide employment to local people. Applicant will pay royalty for the mineral produced from the mine, direct and indirect taxes will be paid thereby contributing to the regional revenue. The public revenue so generated will further be put for use in infrastructural development and other sectors like health, education and social welfare. The applicant will spend 1% of total project cost on the development of the area i.e. medical facilities, schools, temples and other social work.

2.4 DEMAND - SUPPLY GAP

The soapstone powder is sold to the consumers industries i.e Soap & Detergent, paper, talcum, paint, chemical, rubber.

2.5 IMPORTS VS. INDIGENOUS PRODUCTION

Development needs will be met only through indigenous produced minerals against the high cost of imported material.

2.6 EXPORT POSSIBILITY

There is no proposal to export the minerals. However, mineral produced from the mine will fulfill the needs of the region and surplus if any, will be considered for export.

2.7 DOMESTIC/ EXPORT MARKETS

Mineral excavated will be used for domestic consumption. The proposed mining activity is for indigenous consumption only there is no proposal for export.

2.8 EMPLOYMENT GENERATION (DIRECT AND INDIRECT) DUE TO THE PROJECT

The project generates employment for local people. Priority for employment will be given to local persons. Following staff & workers are proposed to be employed:-

Table 2.8:Provisional Number of Staff and Workers

S. No.	Particulars	Details
1.	Skilled workers	28
2.	Unskilled workers	12
3.	**Total**	**40**

3.0 PROJECT DESCRIPTION

3.1 TYPE OF PROJECT INCLUDING INTERLINKED AND INTERDEPENDENT PROJECTS, IF ANY.

This will be an underground mining project over an area of 156.31 Hect. with a proposed production is 16000 TPA (Soapstone) & 15200 TPA (Dolomite) of Soapstone & Dolomite. This is an independent mining project and there are no interlinked projects involved.

3.2 LOCATION (MAP SHOWING GENERAL LOCATION, SPECIFIC LOCATION, AND PROJECT BOUNDARY AND PROJECT SITE LAYOUT) WITH COORDINATES

The Mine site is located at near Village: Khandel Ki Pal; Tehsil: Salumber; District – Udaipur, Rajasthan. The mining lease area falls in Topo sheet number - 45 L/4.

The geographical location with respect to boundary pillars of the project are:-

Table 3.2: Geographical Position of the Boundary Pillars

Latitude (N)	Longitude (E)
24^0 5' 54.42''	74^0 11' 48.57''
24^0 6' 03.19''	74^0 11' 24.51''
24^0 5' 49.62''	74^0 11' 18.63''
24^0 5' 43.26''	74^0 11' 36.07''
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24^0 6' 50.88''	74^0 11' 22.15''
24^0 5' 54.42''	74^0 11' 48.67''

3.3 DETAILS OF ALTERNATE SITES CONSIDERED AND THE BASIS OF SELECTING THE PROPOSED SITE, PARTICULARLY THE ENVIRONMENTAL CONSIDERATIONS GIVEN INTO SHOULD BE HIGHLIGHTED.

No alternate site was considered as mining project is a mineral specific activity. It is already an existing mine.

3.4 SIZE OR MAGNITUDE OF OPERATION

Salient features of the project are as follows:-

Table 3.4: Size or Magnitude

S. No.	Particulars	Details
1.	Lease Area	156.31 hectare
2.	Mineable Reserves (Marble stone)	10273389 tons
3.	Production	16000 TPA of Soapstone & 15200 TPA of Dolomite
4.	Mine Waste (Plan period)	88465 tons
5.	Life of Mine	36
6.	Total Man Power (Nos.)	48

3.4.1 REGIONAL GEOLOGY

Post- Delhi……..Intrusive (Erinpura Granite).

Delhi Super group	Ajabgarh Group	Schist, Gneisses, marble and Amphibolites
	Alwar Group	Quartzite
Post Aravali ……		Ultra basic rocks
		Granite, Pegmatite (Intrusive)
Aravali Super group	Debari Group	Quartzite
	Jharol Group	Phyllite, Conglomerate, Quartzite, Conglomerate
	Udaipur Group	Phyllite, Schist, Meta-volcanic
		Dolomite & marble

Pre Aravali……Schist, Gneisses & Magmatite

3.4.4 MINERAL RESERVES

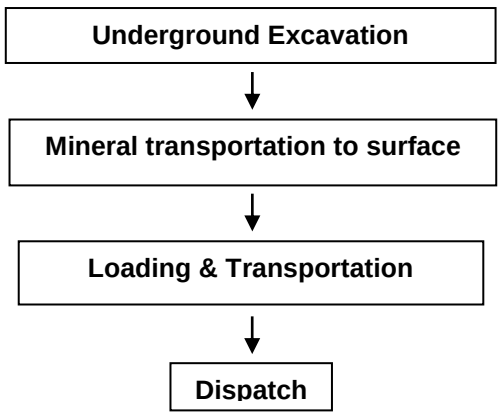
The mineral reserves have been estimated by plan area method. Based on the experience and the estimated reserves have been classified in to proved, probable & possible reserves. The quantity of reserves is arrived as per the details below:-

Table 3.4.4: Reserve Estimation according to UNFC Classification

S. No.	Total Mineral Resources	Quantity in tones (all grades / sizes)	
A.	**Mineral Reserves**		
		Soapstone	Dolomite
1.	Proved mineral reserve	385824	5299057
2.	Probable mineral reserve	311172	4277336

3.5 PROJECT DESCRIPTION WITH PROCESS DETAILS (A SCHEMATIC DIAGRAM/ FLOW CHART SHOWING THE PROJECT LAYOUT, COMPONENTS OF THE PROJECT ETC. SHOULD BE GIVEN).

The mining operations will be carried out by open cast semi-mechanized method. The process flow diagram given below depicts the mining process:-



3.5.1 YEAR WISE PRODUCTION DETAILS

The details of year wise production for the first five years are given below:-

Table 3.5.1 (ii): Year wise production for the Five Years Plan Period

Year	ROM in tons	Mineral Soapstone	Dolomite Useable	Dolomite Waste
1st year	38,615.35	15,445.34	5,792.50	17,377.51
2nd year	38,914.50	15,564.20	5,837.60	17,512.70
3rd year	39,126.00	15,651.00	5,869.00	17,606.00
4th year	39,933.50	15,976.00	5,989.40	17,968.10
5th year	40,001.00	16,000.00	6,000.00	18,001.00
Total	**1,96,590.35**	**78,636.54**	**29,488.50**	**88,465.31**

3.5.2 PROPOSED METHOD OF MINING

Mine will be developed by underground mining which includes excavation, loading, transport and dispatch.

3.5.2.1 Method of Mining

The mining will be done by underground mining method as per approved Mining Plan. It includes excavation, loading, and transport activities.

The salient features of mining method are:-

- The mode of entry to the different pits is by incline and by shaft. The entry is properly supported by wooden/concrete support. The entries are driven along the dip of the ore body and further deepening is proposed along the dip of the ore body. At few pits, vertical shaft is developed.
- At present, for hoisting of ore and waste rocks, incline/shaft are already in existence at each pit. Shafts/inclines are driven in footwall of the vein upto the last level. All shafts/inclines are equipped with hoists.
- The layout of the working on underground, plan & section has been given in mining plan.
- Dumping arrangements have been made for unusable dolomite waste.
- Transportation of the mineral from pit-mouth to destination will be by trucks.

3.5.3 EXTENT OF MECHANIZATION

The details of equipment to be used in mining operation are listed below:-

Table 3.5.3: List of Machineries

S. No.	Machine Type	Nos.
1	Mechanical Hoist	3
2	Compressor 300 cfm	1
3	Tractor Compressor	3
4	JCB Loader	1
5	Dumpers	2
6	Jack Hammer	3
7	DG 65 KVA	3

3.5.4.1 Land Use Pattern

The land use for mining and allied purposes is given in point no 1.2.

3.5.7 MINERAL / WASTE TRANSPORTATION

Mineral will be transported by trucks.

Table 3.5.7 Transportation

Particulars	Production (TPD)	Vehicles Required (Trips / day)
Mineral	124.8	6
Mine waste	70.77	4

3.6 RAW MATERIAL REQUIRED ALONG WITH ESTIMATED QUANTITY, LIKELY SOURCE, MARKETING AREA OF FINAL PRODUCT/S, MODE OF TRANSPORT OF RAW MATERIAL AND FINISHED PRODUCT

No raw material will be required for production of soapstone and dolomite. The final product will be sent to consumer based on their demand. The mode of transportation of raw material and finished product will be by road. Tippers/ trucks will be used for transportation to the end users.

3.7 RESOURCE OPTIMIZATION/ RECYCLING AND REUSE ENVISAGED IN THE PROJECT, IF ANY, SHOULD BE BRIEFLY OUTLINED

Mineral will be utilized and sent for use to different users. The OB / Inter Burden / waste will be dumped in the ear marked government allotted dumping area.

Rainwater harvesting will be done using excavated pit void. Water conservation will thereby reduce exploitation of groundwater.

3.8 AVAILABILITY OF WATER ITS SOURCE, ENERGY / POWER REQUIREMENT AND SOURCE SHOULD BE GIVEN

3.8.1 WATER

The detailed breakup of the same is given below:-

Table 3.8.1: Water Demand

S. No.	Particulars	Details
1.	Domestic	9.0
2.	Dust Suppression	4.0
3.	Plantation	7.5
4.	Wet Drilling	2.0
Total		**22.5**

The drinking water demand will be met from tanker supply and, stored water in the pits will be utilized in mine operations**.**

3.9 QUANTITY OF WASTES TO BE GENERATED (LIQUID AND SOLID) AND SCHEME FOR THEIR MANAGEMENT/ DISPOSAL.

This waste will be used in maintenance of approach roads from time to time and transported to dumping area.

The details as tabulated below:-

Table 3.9 - Waste Generation (Liquid and Solid)

Waste		Quantity (TPD)	Treatment / Disposal
Mine Waste	overburden / inter burden / waste	70.77	Dump site
Municipal Solid Waste	No. of mine workers	48	Municipality sites
	Total Waste Generation @ 0.15 kg/day approx	7.2	
	Biodegradable Waste (kg /day)	5.4	
	Non-biodegradable waste (kg /day)	1.8	
Domestic Wastewater	Wastewater Generation (KLD)	1.8	Septic tank followed by soak pit

4.0 SITE ANALYSIS

4.1 CONNECTIVITY

As given in form I

4.2 LAND FORM, LAND USE AND LAND OWNERSHIP

4.2.1 LANDFORM

The mining lease area comprises hilly terrain. There is no water body or nallah within the lease area..

4.2.2 LAND USE

The land use pattern is given in point no. 1.2.

4.2.3 LAND OWNERSHIP

The land as per revenue records is Govt. Land.

4.3 TOPOGRAPHY (ALONG WITH MAP)

Topographically, the applied area comprises of hilly land. (Surface plan)

4.4 EXISTING LAND USE PATTERN (AGRICULTURE, NON-AGRICULTURE, FOREST, WATER BODIES (INCLUDING AREA UNDER CRZ)), SHORTEST DISTANCES FROM THE PERIPHERY OF THE PROJECT TO PERIPHERY OF THE FORESTS, NATIONAL PARK, WILD LIFE SANCTUARY, ECO SENSITIVE AREAS, WATER BODIES (DISTANCE FROM THE HFL OF THE RIVER), CRZ. IN CASE OF NOTIFIED INDUSTRIAL AREA, A COPY OF THE GAZETTE NOTIFICATION SHOULD BE GIVEN.

There is no Eco-sensitive Zone and details given in Form I

4.5 EXISTING INFRASTRUCTURE

The same has been given in point no. 3.8 and 4.0.

4.5.1 BASIC AMENITIES

The details of basic amenities like schools, hospitals and community center located nearby the mine site are mention in Form I.

4.6 SOIL CLASSIFICATION

The proposed dumping site is covered practically by very little soil cover.

4.7 SOCIAL INFRASTRUCTURE AVAILABLE

The well established social infrastructure like hospitals, educational facilities, temple, community centre, roads, bridges, telecommunication and others similar are available/ existing within 15 km radius.

5.0 PLANNING BRIEF

5.1 PLANNING CONCEPT (TYPE OF INDUSTRIES, FACILITIES, TRANSPORTATION ETC) TOWN AND COUNTRY PLANNING/ DEVELOPMENT AUTHORITY CLASSIFICATION.

It is a mining activity in which underground mining method will be practiced. Mineral will be used in various industries. Mineral will be transported by trucks/ tippers to final consumers.

5.2 POPULATION PROJECTION

The detail demographic profile of villages located in the study area is given in point no. 4.7.7.

5.2 LAND USE PLANNING (BREAKUP ALONG WITH GREEN BELT ETC.)

As per year wise afforestation programme, plantation is proposed. The main aim of the green belt development is to improve the ecosystem to a maximum possible extent by designing the green cover with the same native species. The species of plants are given below:-

Table 5.2(ii). Suggested plant list for greenbelt:

S No	Type of Plants (Common name)	Botanical name
1.	Shisham	*Dalbergia sissoo*
2.	Neem	*Azadirachta indica*
3	Ardu	*Ailanthus excelsa*
4	Siris tree	*Albizia lebbeck*
5	Kiker or Babool	*Acacia nilotica*
6	Khejri	*Prosopis cineraria*
7	Reonja or Safed babool	*Acacia leucophloea*

5.3 ASSESSMENT OF INFRASTRUCTURE DEMAND (PHYSICAL AND SOCIAL)

On the basis of the preliminary site visit, the infrastructure demand in the nearby villages will be assessed on the basis of need and priority. Job opportunities are limited and newer avenues of skill development for income generation are required.

5.4 AMENITIES/ FACILITIES

Following facilities are provided for the smooth working of the mine:-

Table 5.4: Facilities provided to workers

S. No.	Activities	Capital Cost *Rs	Recurring Cost *Rs
1.	Shelter	1,00,000	25,000
2.	Health Facility	1,00,000	50,000
3.	Drinking Water	1,00,000	50,000
4.	Sanitation Facilities	50,000	20,000
5.	Education	1,00,000	1,00,000
Total		**4,50,000**	2,45,000

6.0 PROPOSED INFRASTRUCTURE

6.1 INDUSTRIAL AREA (PROCESSING AREA)

The area is very well connected by road network to the mine, district headquarter etc. The area is self sufficient to cater the needs of the project. Hence, no infrastructure is proposed.

6.2 RESIDENTIAL AREA (NON PROCESSING AREA)

As the local person will be given employment, no residential area/ housing is proposed.

6.3 GREEN BELT

The same has been given in point 5.2.

S. No.	Year	Area (ha)	No. of Plants
1.	First Year	10.31	10,310
2.	Second Year	10.31	10,310
3.	Third Year	10.31	10,310
4.	Fourth Year	10.31	10,310
5.	Fifth Year	10.34	10,340

6.4 SOCIAL INFRASTRUCTURE

Local population will be employed by the project proponent in the Mine. Further, indirect means of earnings have been created in the area of contractual jobs, vehicle driving, shops, construction etc. Therefore this project brought a positive impact on the adjoining society. The proponent will spend 2% of project cost for the development of the area i.e. medical facilities, schools, temples and other social work.

Budget for Corporate Social Responsibility

S. No.	Activities	Recurring Cost *Rs
1.	Drinking water facility in village Khandel Ki Pal	1,00,000
2.	Health Camp and free medicine	1,00,000
3.	Clothes distribution to poor villagers	1,00,000
4.	Sanitation Facilities	1,00,000
5.	Educational support to poor students	2,00,000
Total		6,00,000

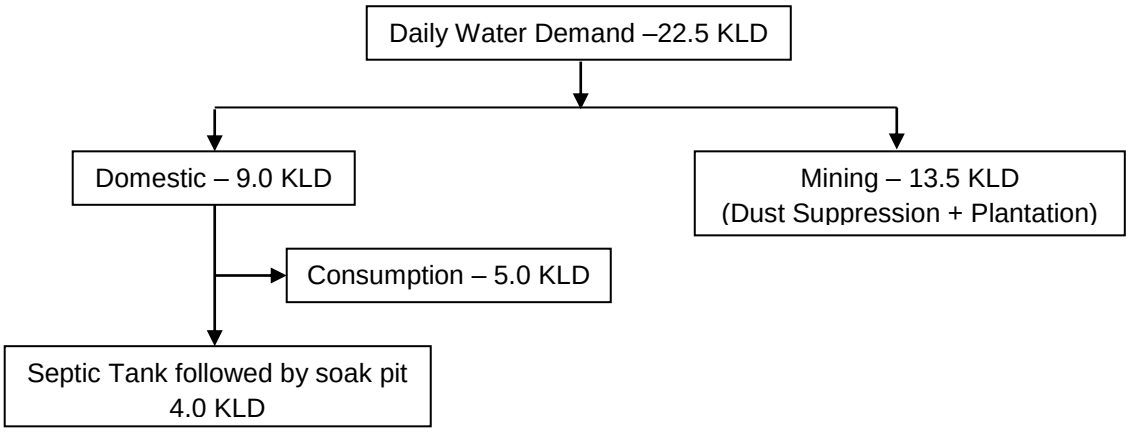
6.5 CONNECTIVITY (TRAFFIC AND TRANSPORTATION ROAD / RAIL / METRO / WATER WAYS ETC.)

Given in point no. 4.0

6.6 DRINKING WATER MANAGEMENT (SOURCE AND SUPPLY OF WATER)

The drinking and other water demand will be sourced by the tanker supply.

The water demand is given below:-



6.7 SEWERAGE SYSTEM

Toilet facilities will be provided. The generated sewage will be channelized to septic tank followed by soak pit.

6.8 INDUSTRIAL WASTE MANAGEMENT

There will be no industrial waste generation due to project.

6.9 SOLID WASTE MANAGEMENT

The same has been given in point no. 3.9.

7.0 REHABILITATION AND RESETTLEMENT (R & R PLAN)

7.1 POLICY TO BE ADOPTED (CENTRAL/ STATE) IN RESPECT OF THE PROJECT AFFECTED PERSONS INCLUDING HOME OUSTEES, LAND OUSTEES AND LANDLESS LABOUR (A BRIEF OUTLINE TO BE GIVEN)

There is no habitation in the lease area, therefore rehabilitation & resettlement plan is not required/ applicable.

8.0 PROJECT SCHEDULE AND COST ESTIMATES

8.1 LIKELY DATE OF START OF CONSTRUCTION AND LIKELY DATE OF COMPLETION (TIME SCHEDULE FOR THE PROJECT WILL BE GIVEN).

The project will commence once Environmental Clearance and other necessary approvals will be obtained from the concern departments.

8.2 ESTIMATED PROJECT COST ALONG WITH ANALYSIS IN TERMS OF ECONOMIC VIABILITY OF THE PROJECT

The project cost will be Rs. 10 Crore.

Table 8.2 i: Estimated Project Cost and Economic Viability

S. No.	Particulars	Details
1.	Estimated Project Cost (Fixed cost)	10 Crore (including operational cost)

Expenditure Proposed for Environmental protection activities:-

It is proposed to invest an amount as mention below per annum towards environmental action plan and the details of the same are given below:-

Table 8.2 ii: Expenditure Proposed for Environmental Protection Activities

S. No.	Description of Item	Recurring Cost (Rs.)
1	Air Pollution Control - Water Sprinkling	3,50,000
2	Water Pollution Control	20,000
3	Environmental Monitoring and Management	1,00,000
4	Green Belt Development	5,00,000
Total		**9,70,000/-**

9.0 ANALYSIS OF PROPOSAL

9.1 FINANCIAL AND SOCIAL BENEFITS WITH SPECIAL EMPHASIS ON THE BENEFITS TO THE LOCAL PEOPLE INCLUDING TRIBAL POPULATION, IF ANY, IN THE AREA

There will be social benefits from the mining operations. The core benefit of the project is the availability of marble. The underlying benefits through the proposed are:-

Table 9.1(i): Financial & Social Benefits

S. No.	Activities
1.	It aims to provide additional employment to the local population of the study area. Direct employment to locals: 48 Approx. Indirect Employment to locals : 50 Approx.

As a Entrepreneur Social Responsibility, following activities along with budget provision are proposed for improving the conditions in and around the project area.

Table 9.1(ii): Entrepreneur Social Responsibility

S. No.	Activities	Recurring Cost *Rs
1.	Drinking water facility in village Khandel Ki Pal	1,00,000
2.	Health Camp and free medicine at Vilalge Khandel Ki Pal	1,00,000
3.	Clothes distribution to poor villagers	1,00,000
4.	Sanitation Facilities at village Khandel Ki Pal	1,00,000
5.	Educational support to poor students	2,00,000
Total		6,00,000

10.0 ENVIRONMENTAL MANAGEMENT PLAN

Potential Impacts	Mitigation Measures
LAND ENVIRONMENT	
Land use change	Any mining activity may alter the land use pattern in the lease area. In order to minimize the adverse affects, the following suggestions have been made. ➢ Garland drains all around the working pit will be constructed to channelize the rain water. ➢ Rain / storm water will be collected in sedimentation pond for various uses within the mine lease area. ➢ Green belt development along the boundary of the lease area will be carried out as afforestation activity. ➢ The pit area will be used as water storage cum ground water recharge pit and will be utilized for dust suppression and plantation. ➢ Proper barricading and monitoring of the water stored in mine area will be taken up to prevent accidents.
SOIL ENVIRONMENT	
Soil is available in overburden, which will be removed and will be used for plantation.	Top soil is a valuable resource and will be stored and used at the time of green belt development.
WATER ENVIRONMENT	
Domestic waste water	**Domestic wastewater** The sewage generated will be channelized to the septic tank followed by soak pit.
AIR ENVIRONMENT	
Excavation, drilling, blasting, loading and unloading, Transportation etc.	Mining activities will generate certain quantities of dust during excavation, loading and unloading, transportation operations. The following measures will be taken to mitigate the fugitive dust from different operations. ➢ Laying of haul road as per the standards to reduce air born dust. ➢ Drill machines will be equipped with dust collectors. ➢ Use of appropriate explosives for blasting and avoiding overcharging of blast holes. ➢ Watering of haul roads and other roads at regular intervals. ➢ Provision of dust filters / mask to workers working in dust prone and affected areas. ➢ Provision of green belt all along the periphery of the lease area. ➢ Periodical monitoring of ambient air quality in and around the lease area. **The extracted mineral will be transported from the mine pit to the end user by adopting following measures so as to minimize dust emissions.**

	➢ In case of long transportation the trucks after loading will be covered with tarpaulin sheets. ➢ Speed of the vehicles will be maintained within the prescribed limits. ➢ Trucks will not be over loaded and will be maintained to the body level.
NOISE ENVIRONMENT	
noise contributing sources area are mainly drilling, blasting, loading and unloading of mineral and movement of trucks/ tippers	The major noise generating source from the activity will be working machinery, and plying of vehicles. The following control measures are to be undertaken to bring down the noise levels ➢ Proper maintenance of machinery, equipments and improvement on design of machines. ➢ Use of personal protective devices i.e., earmuffs and earplugs by workers, working in high noise areas. ➢ Creation of wide green belts of dense foliage in mine areas. ➢ Conducting periodical medical checkup of all workers for any noise related health problems ➢ Proper training to personnel to create awareness about adverse noise level effects. ➢ Planned noise monitoring at suitable locations in the plant and outside location for proper effective remedial actions.
BIOLOGICAL ENVIRONMENT	
Afforestation programme with precautions proposed for survival and protection of plantations.	**Post plantation care** ➢ Suitable protection by way of fencing and tree guards. ➢ The dry grass has to be cleared from the plantation around trees and bushes within a distance of 2 meters all around. ➢ Frequent watering during dry spell. ➢ Cow and goat dung to be used. ➢ Protection from pest by spraying insecticide.
SOCIO-ECONOMIC ENVIRONMENT	
Employment generation	The following measures will be taken up to improve the socioeconomic conditions of the area:- ➢ Local people will be employed on priority basis as per their skills ➢ Direct & indirect development of the society. ➢ As a part of Entrepreneur Social Responsibility, various local development activities like conducting medical checkups for the local people, Assistance to Local Schools, Scholarships to Students, Sanitations and Drinking Water Facilities, Vocational Training to Persons for Income Generation, Women Empowerment & Development Programme etc. ➢ Medical facilities to the workers employed at site.

11.0 CONCLUSION

It is predicted that socio-economic impact due to this project will positively increase the chance of more employment opportunities for local inhabitants. There are no Resettlement and Rehabilitation issues involved in this project. The project infrastructures will be of use to people of the area. The revenue of the State Govt. will be definitely increasing due to the activity. The entire project area is devoid of any endangered flora and fauna. Thus, the project is not likely to affect the environment or adjacent ecosystem adversely.

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AUTHORISED SIGNATORY