PRE FEASIBILITY REPORT

1.0 EXECUTIVE SUMMARY

The salient feature of the project is given below:

<table>
<tr><th colspan="3">2. Basic Information</th></tr>
<tr><th>S. No.</th><th>Item</th><th>Details</th></tr>
<tr><td>1.</td><td>Project Name and Location</td><td>Environmental Clearance for Proposed “(Khanda, Gitty/Boulders) Project at Gata No.- 1939, Area: 1.214 ha Village-Pahra , Tehsil & District-Mahoba , U.P.</td></tr>
<tr><td>2.</td><td>Location / site (GPS Co-ordinates)</td><td><table>
<tr><td>Pillar No</td><td>N</td><td>E</td></tr>
<tr><td>A</td><td>25° 21’47.40”</td><td>80° 03’50.24”</td></tr>
<tr><td>B</td><td>25° 21’50.28”</td><td>80° 03’54.54”</td></tr>
<tr><td>C</td><td>25° 21’48.14”</td><td>80° 03’56.16”</td></tr>
<tr><td>D</td><td>25° 21’45.57”</td><td>80° 03’52.25”</td></tr>
</table></td></tr>
<tr><td>3.</td><td>Size of the Mining Lease (Hectare)</td><td>Proposed Production: 12140 m3 annum
Area 1.214 ha</td></tr>
<tr><td>4.</td><td>Capacity of Mining Lease (TPA)</td><td>Approximately 30350 Tonne /Annum minor mineral will be extracted.</td></tr>
<tr><td>5.</td><td>Period of Mining Lease</td><td>20 Years</td></tr>
<tr><td>6.</td><td>Expected cost of the Project</td><td>Rs. 75.0 lakh per Year</td></tr>
<tr><td>7.</td><td>Name and Address of the Applicant</td><td>Janmejay Singh S/o Sri Mangal Singh
R/o Kotwali Near kali devi Temple Banda
Uttar Pradesh.</td></tr>
<tr><td>8.</td><td>Land Use</td><td>Govt Waste Land</td></tr>
<tr><td>9.</td><td>Minerals of mine</td><td>Khanda, Gitty/Boulders (Building stone)</td></tr>
<tr><td>10.</td><td>Method of mining</td><td>Opencast, Manual/Semi-mechanized</td></tr>
<tr><td>11.</td><td>Drilling/Blasting</td><td>Proposed as per Drilling and Blasting rules.</td></tr>
<tr><td>12.</td><td>Sources of water</td><td>Nearby dugwell /borewells or private tankers.</td></tr>
<tr><td>13.</td><td>Solid Waste</td><td>Temporary laborers from nearby villages are hired, no generation of solid waste is generated</td></tr>
</table>

		due to proposed project activity.

2.0 INTRODUCTION

2.1 Identification of Project/ project background

The lease over an area of 1.214 ha. was granted to Shri Janmejay Singh S/o Sri Mangal Singh , , for Khanda, Gitty, Boulders (Building stone) in Village-Pahra , Tehsil & District-Mahoba , U.P (U.P.) was submitted on e-tendering portal in the office of District Magistrate, Mahoba

Details of area	The lease hold falls in village Pahra which is about 18.0 kms from Mahoba which is connected with 76 NH through local road
District and State:	District-Mahoba , U.P
Taluka	Mahoba
Village	Pahra
Araji No	1939
Lease Area	1.214 Ha.

Name and address of project proponent:

Janmejay Singh S/o Sri Mangal Singh
R/o Kotwali Near kali devi Temple Banda
Uttar Pradesh.

2.2 Brief description of the nature of the project

The proposed project under operation is to mine Khanda, Gitty Boulder (Building stone) for a period of 20 years having production capacity Approximately 30350 Tonne /Annum minor mineral will be extracted with sustainably and scientifically. Following geo-scientific methods are under taken to carry out the activity.

Existing Method of mining:

It was opencast manual/Semi-mechanised mine with adoption of drilling & blasting. Drilling was carried out with 32mm dia jack hammer drill rods & blasting material was explosive. The blasted material broken by manually up to sized 2ft & loaded into tippers manually dispatch to crusher plant which is about 1.5km away from mine site. Mining was carried through the formation of one bench. The height of bench was kept 6.0m width of benches was kept 6.0m with face slope 60^{o}. Approach road having width 5 m & gradient 1:16 was provided to mining faces from the transportation of mineral.

Proposed method of mining:

It shall be opencast semi-mechanized mine. To meet required production wagon drilling with deep hole blasting shall be carried out. The blasted material will be handelled with excavator & loaded into dumpers. The height & width of bench shall be kept 6m with face slopes 70o. Secondary blasting with jackhammer drilling shall be carried out if required.

Indicate quantum of development & tonnage & grade of production expected pit wide as in table below:

Year	Overburden (cum)	ROM Gitty/Khanda Boulder (cum)
1st	Nil	12140
2nd	Nil	12140
3rd	Nil	12140
4th	Nil	12140
5th	Nil	12140
Total		**60700**

2.3 Need for the project and its importance to the country and region

The Gitty will be used for making the aggregates. The Gitty of lease area is hard, medium to coarse grained greyish in color & porphyritic texture.

The production of Gitti/boulders benefits to the state in the form of royalty. Apart from this project operation is providing employment directly and indirectly to the people residing in vicinity, thus improving the Socio-economic status of the area.

2.4 Demands-Supply Gap

Gitti/Boulders has become a very important mineral for the expansion of society. With the increase of urbanization the demand for Gitti/Boulders is growing in infrastructure sector in our country. The mineral is used for making concrete, filling roads, building sites, brick making, making glass, Gitti/Boulders papers, reclamations etc.

Individual and private companies are increasingly demanding Gitti/Boulders for construction purposes and this has immense pressure on Gitti/Boulders resources. This increasing demand makes this an environmental issue.

Gitti/Boulders is one of the most plentiful natural resource and has got ability to replenish itself. The demand of Gitti/Boulders is directly proportional to the supply.

2.5 Imports vs. Indigenous Production

There will be no import for the project. There will be indigenous inputs in the entire mining activity.

2.6 Export Possibility:

In Jhansi district of Uttar Pradesh, numbers of Gitti/Boulders mines are there. There is abundance of Gitti/Boulders in the area; it had become a major raw material for the infrastructure development and is at high demand in the north-west Uttar Pradesh .The proposed mining project will fulfill its end uses in buildings and construction, paving, monuments and many other exterior projects.

2.7 Domestic/ Export Markets

Due to the increased industrial and infrastructural growth of the rural and urban areas demand of Gitti/Boulders is very high. Construction companies and local vendors in the nearby town and cities are the potential market for the minor minerals.

2.8 Employment Generation (Direct and indirect) Due to project:

Yes, through this project peoples get employment. The project directly generates the employment for the local people and indirectly for the others. Also the marketing of the product generates the employment for peoples. By this project, approximately 21 persons employed directly on project site.

3.0 PROJECT DESCRIPTION

3.1 Type of project including interlinked and interdependent projects, if any

This is an independent under operation of a mining project. The proposed project is for the extraction of Gitti/Boulders manually and mechanically.

3.2 Location (map showing general location and project boundary and project site specific layout) with coordinates.

The lease hold falls in village Dasna which is about 42.0kms from Jhansi on Kanpur Jhansi Highway & State Highway-45 which is about 4.5km from SW direction connected from lease area. A diversion takes place from 10.5km milestone before Moth & area is approachable about 2.0 kms from milestone. The area is well connected by local bus services, which connects Jhansi to Dasna Village. The nearest Railway Station is at Moth is 15.0km far from the lease area and nearest Airport is at Gwalior.

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A	25^{o} 21’47.40”	80^{o} 03’50.24”
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3.3 Details of alternate sites considered and the basis of selecting the proposed site, particularly the environment considerations gone into should be highlighted:

No, alternative sites considered.

3.4 Size or Magnitude of operation:

- The mine has lease agreement over an area of 1.214 Ha Only Gitti/Boulders is to be extracted, Approximately 30350 Tonne /Annum minor mineral will be extracted.

3.5 Project description with process details:

The under operation project is to mine Gitti/Boulders from river bed sustainably and scientifically. Mining will be opencast manually and mechanically. Following geo-scientific methods are proposed to carry out the activity:

- It shall be opencast semi-mechanized mine. To meet required production wagon drilling with deep hole blasting shall be carried out. The blasted material will be handelled with excavator & loaded into dumpers. The height & width of bench shall be kept 6m with face slopes 70o. Secondary blasting with jackhammer drilling shall be carried out if required.

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:

The operation involves the extraction of Gitti/Boulders and loaded into trucks and will transport the material to the local market directly. The existing roads are being utilized for the transport of Gitti/Boulders from mine site to market.

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 end users. Some of the rejects /waste will be used for the maintenance of roads. Rainwater harvesting will be done in excavated pit void and will be used for water conservation thereby reducing exploitation of groundwater.

3.8 Availability of water its source, energy/ power requirement and source:

a. Water requirement:-

There is very little requirement of water to carry out operation as it is being done manually. The water is required either for drinking purposes or for dust suppression. Total required manpower is 26 for the project. The drinking water requirement will be 4.28 KLD, which is met by tankers. The water required for dust suppression is taken from tankers.

b. Energy power source:-

All the activities are being carried out manually and mechanically. The operation is being done in day time; hence there is no power requirement for the project at site.

3.9 Quantity of wastes to be generated (liquid and solid) and scheme for their management/ disposal.

The entire mineral extracted is saleable. The laborers from nearby villages are hired to carry out work in day time only, hence there is no or very less waste is generated expected to generate. No liquid effluent is generated at site.

4. SITE ANALYSIS

(i) Connectivity:

The lease hold falls in village Pahra which is about 18.0 kms from mahoab on mahoba kabrai 76 NH .A diversions takes place from kabrai & area is approachable about 3.0 kms from milestone. The area is well connected by local bus services, which connects Mahoba to Pahra Village. The nearest Railway Station is at Kabrai is 3.0 km far from the lease area and nearest Airport is at Kanpur.

5.0 PLANNING BRIEF

5.1 Planning Concept (type of industries, facilities, transportation etc) Town and Country Planning/Development authority Classification:

The mineral is being directly transported to the nearby markets in towns and cities. No mining activity is to undertaken during the monsoon season. So the river bed material is to be replenished during the monsoon season every year.

The project is under operation to mine Gitti/Boulders from river bed sustainably and scientifically. Mining is opencast manually along the centre of river bed keeping both the shores unaffected.

5.2 Population projection

There is no permanent influx of the population, as the workers are being hired locally from nearby villages.

5.3 Land use planning

The land use of the mine lease area is the river bed of River and there is no change in landuse after operation as the Gitti/Boulders will be replenished every year during the monsoon season. The ultimate land use of the mine lease area will not be change.

5.4 Assessment of Infrastructure Demand (Physical & Social)

Extracted mineral transported directly to the local markets, there is no stock yard required for storage, also the workers are hired locally and temporarily, no housing facility is required.

5.4 Amenities/facilities

Temporary rest shelters, drinking water and first aid facility will be made available to the mine workers.

6.0 PROPOSED INFRASTRUCTURE

6.1 Industrial area (Processing Area)

No industrial area is proposed.

6.2 Residential area (Non Processing Area)

The mine workers are hired from nearby villages, no housing facility is required.

6.3 Green belt Development

The lease area is marked by large exposure of barren land. The lease area is rocky terrain so it is not feasible to undertake the plantation with in lease hold. The plantation will be undertaken outside the lease area around crusher plant.

The tree species recommended are Ficus religosa (pipal), Boswellia serrata (Salai), Shorea robusta (sal) and tactone grandis (teak) may also be recommended. Mangifera indica (Aam), Emblica officinalis (Anwala), Aegle marmerlos (Ibei), Planting should be done in large sized 90 cm x 90 cm. due in advance and filled about 50 days before planting. The plantation raised earlier should be carefully maintained. Mortalities should be replaced by fresh planting.

6.4 Social Infrastructure

Temporary rest shelters, drinking water and first aid facility are made available to the mine workers.

6.5 Connectivity:

The lease hold falls in village Dasna which is about 42.0kms from Jhansi on Kanpur Jhansi Highway & State Highway-45 which is about 4.5km from SW direction connected from lease area. A diversion takes place from 10.5km milestone before Moth & area is approachable about 2.0 kms from milestone. The area is well connected by local bus services, which connects Jhansi to Dasna Village. The nearest Railway Station is at Moth is 15.0km far from the lease area and nearest Airport is at Gwalior.

6.6 Drinking Water Management (Source & Supply of water)

In order to meet the drinking water requirement for site workers water from dug wells/bore wells by tankers are used.

6.7 Sewerage System

No sewerage system is required at the mine site.

6.8 Industrial Waste Management

Not applicable

6.9 Solid Waste management

No solid waste generation is expected from the mining operation.

6.10 Power Requirement & Supply/ Source

All the activities are being carried out manually and mechanically. The operation is restricted to day time only; hence there is no power requirement for the project at site.

7 .0 REHABILITATION AND RESETTLEMENT (R&R) PLAN

Not Applicable

8.0 PROJECT SCHEDULE & COST ESTIMATES

The total cost of project is approx Rs. 75 lakh per Year

9.0 ANALYSIS OF PROPOSAL (FINAL RECOMMENDATION)

Overall the project will have positive and long term impact on environment. The project will also bring positive changes in terms of socio economic development by way of generating direct and indirect employment opportunities to the people of vicinity.

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