

# **PRE FEASIBILITY REPORT**

## **1. Introduction**

### **1. Identification of project and project proponent**

The Agariya Crusher Stone ( Basalt) project is located at Village – Agariya , Tehsil & Dist. Raisen (MP). The 3.797 ha quarry area with production of 25365 cubic meter is being operated by the lessee M/s Pioneer Infrastructure partner Shri sanjay Kothari Resi – B- 73 , Alkapuri , Bhopal (M.P) . The lessee is a private individual. The fresh query lease was granted for period of 10 years. The lease area comes under govt. barren land and non agriculture land.

### **Brief description & nature of the project**

Opencast Semi Mechanized method has been proposed. All operations of mining will be done by deployment of heavy earth moving machineries for excavation, loading & transport. Regular drilling will be done for heaving purpose in the lease area. Blasting will be done as and when required. Depth of hole – 6 m . Haul road will be proposed extended to every working bench and to the floor of the quarry.

### **Need for the project and its importance to the country and or region**

Metal stone has been used for making of road, construction of house and many other places.

### **2. Demand –Supply gap**

Metal Stone is easily available in country.

### **3. Imports vs. Indigenous production**

No import has been proposed for the metal stone as state as well as country has enough reserve.

### **4. Employment generation (direct and indirect) due to the project**

During mining operation skilled, semi-skilled and un-skilled labours will be required for drilling, blasting, sizing, loading etc.

## **2. Project description**

**1. Types of project:** Proposed quarry project of metal stone

### **2. Location of the Project**

<b>District/ State</b>	<b>Tehsil</b>	<b>Village</b>	<b>Khasara No</b>	<b>Area in hect</b>	<b>Ownership of land</b>
Raisen (M.P)	Goharganj	Agariya	95, 107/1/1/1	3.797 ha	Govt. waste Land

The area lies at the cross section of N- 23° 03' 10.60 " E- 77° 46' 00.24" and N- 23° 03' 13.90 " , E- 77° 46' 03.07" is covered under **Toposheet no. 55E/16**

**3. Details of alternate site:** Mining is site specific project and Mineral deposit has been identified by certifying agency; hence alternative site is not applicable.

**4. Size or magnitude of operation:** The total lease area is 3.797ha area and total production is proposed 25365 cubic meter through opencast semi mechanized mining method.

**5. Project description with process details:**

Opencast method of mining (Semi mechanized mines) has been carried out. Method of mining using tools such as hand tool such as spades, chisel, hammer and poclain and JCB machine. All operations of mining have been done by deployment of heavy earth moving machineries for excavation, loading & transportation on single shift basis. Area covered by the proposed 5 year working will be 2.250 ha. During the proposed five year mining about 6175 m<sup>3</sup> mine waste will be generated which will be generate which will be used for backfilling in mined out no more mineralization area.

**6. Proposed Rate of Production When The Mine Is Fully Developed:**

Proposed production 25365 Cu Mt/ per Year.

**Proposed Method of Mining:**

The proposed method of mining is by open cast semi mechanized method.

**Blasting**

Blasting will be done as and when required.

**Reclamation/Backfilling: -**

During the conceptual period backfilling will not proposed.

**7. Raw Material Requirement:** No raw material is required for the mining of Mineral.

**8. Recycling and Reuse**

No sub grades mineral likely to be generated.

**9. Water source:**

Hand Pump facility is available at Village Agariya.

**Electric System**

There is no Electric line in the area. Electric line is present in village Agariya at 1 km distance.

**Solid waste management:**

The waste material comprises of soil, overburden and physical rejects during the sizing of basalt. The estimated quantity of soil , waste and rejects are as follows:

Year	Soil	Waste Reject	Total
2015-16	100	1235	1335
2016-17	100	1235	1335
2017-18	100	1235	1335
2018-19	100	1235	1335
2019 -20	100	1235	1335
<b>Total</b>	<b>500</b>	<b>6175</b>	<b>6675</b>

## Site analysis

### i. Connectivity

The lease area is located at a distance at 55 km from south of Rasien, Nearest PWD rest house is located towards of the Q.1 area. Nearest railway station is Rasien located at a distance of 55 km.

ii. **Land form, land use & land ownership:** Land use of the area is govt. waste land.

District/ State	Tehsil	Village	Khasara No	Area in ha
Raisen (M.P)	Goharganj	Agariya	95, 107/1/1/1	3.797ha

### iii. Topography :-

Topographically the applied area having gentle slope towards from east to west direction. Highest elevation area is 442 m above MSL.

### iv. Existing land use pattern:

Existing land use pattern of the quarry area is govt. land.

#### Details of nearest environmental setting of the lease area

S. No.	Particulars	Details
1	Latitude	N- 23° 03' 10.60 "
2	Longitude	E- 77° 46' 00.24"
3	Height above mean sea level	440- 438
4	Nearest City	
5	Nearest Railway Station	Obdulaganj – 22 km
6	Nearest Airport	Bhopal – 47 km
7	Nearest National or State Highway	National Highway – NH – 12 ( Badi – Goharganj national highway )
8	Nearest Village	Panjara
9	Hills/Valley	None within 10km radius
10	Ecological Sensitive Zone	
11	Reserve Forest	Ratapani National park – 1.00 km
12	Historical Place	
13	Pipelines	
14	Nearest River/ Nalla	Barna river – 100 m
15	Industries	
16	Mines within 500m	11 mines within 500m 1) Meena chuhan 3.643ha 2) Jasbant singh chuhan 3.643ha 3) Gopal das Sharma 3.684ha 4) Mohd. Gani khan 1.720 ha 5) Govind Khanna 1.619ha 6) Govind Khanna 1.900 ha 7) Khijar hussain 1.761ha 8) Danish Aanvar 1..214ha 9) Nirnjan singh pal 1.914ha 10) Pradeep Malviya 1.214ha 11) Manoj Dhakad 2.833ha

**v. Existing infrastructure:** Rest shelter and mine office will be proposed within quarry area.

**vi Soil classification:**

**Local Geology:**

The basalt found in the proposed lease area. It is dark grey to black in color, fine grained hard and break with earthy fracture. Joint is the main structural feature of this feature of the deposit. Most of the rock broken by relatively smooth fracture known as joints. The waste is in the form of weathered basalt and murum the litho – sequence of the area as:

Weathered formation: 0.25- 0.50 m or say average 0.35m

Basalt (Metal stone ): 0.5 to 20 m ( continued exposed thickness in nearby quarry).

**Vii Climate data from secondary sources:**

The climate of the area is generally dry except during the south – west monsoon season. The monsoon sets in generally during June and continues till the end of September. The annual rain fall of the area is between 1000 and 1100 mm. the air is generally dry over the year.

**4 Planning brief:**

**a. Planning concept:** It is a mining project, and planning for excavation shall be governed by the approved mining plan.

**b. Population projection:** The project is small in magnitude. No influx of population is expected as labor shall be deployed from the local villages.

**c. Assessment of infrastructure demand (physical and social)**

Mining Machineries like Excavator, Tractor Mounted Compressor Hydraulic Shovels, Jack Hammers & dumpers will be required for mining operation.

**d. Amenities/facilities**

Rest shelters, Toilets, drinking water facilities, first aid facilities, and regular medical checkup facilities has been provided for labors and their families.

**5 Proposed infrastructure**

**a. Industrial area (processing area)**

The project is mining project and hence site office shall be required.

**Residential area (non processing area)**

No residential area is proposed for the subject project

**b. Green belt**

Green belt not proposed.

**Social infrastructure**

Rs. 50,000.00 per year shall be provided to the local gram panchayat for the social developmental programmes on the need base assessment, which shall be incurred as per the requirement.

**c. Connectivity (traffic and transportation road/rail/metro/water ways etc):**

The lease area is located at a distance at 55 km from south of Rasien, Nearest PWD rest house is located towards of the Q.1 area. Nearest railway station is Raisen located at a distance of 55 km.

**d. Drinking water management (source & supply of water):**

Drinking water is available in near the quarry area.

**e. Sewerage system:** No construction or sewage waste is expected from the quarry process. However the domestic waste from the toilets will be given treatment through septic tank and soak pit arrangement.

**f. Industrial waste management:** No industrial waste will be generated.

**6 Solid waste management:**

During the proposal period about 6175 cubic meter mine waste and 500 cubic meter soil will be generated.

**7 Rehabilitation and Resettlement (R & R) Plan** Reclamation and rehabilitation will be started at the end of mine life. The excavated pit will not reclaimed by back filling. The top soil is used for plantation. The mined out pit is develop as water reservoir in future.

**8 Analysis of proposal (final recommendations)**

**i. Financial and social benefits with special emphasis on the benefit to the local people including tribal population, if any, in the area.**

The mining project will create local employment to the villagers and they will get employment in non agricultural season. Further royalty shall be paid to the Govt., which will create revenue generation for the Govt. Further project proponent shall provide Rs. 50,000.00 every year to the local panchayat, and number of developmental work which will be need based can be executed through the same fund.