Proposal

for

Preliminary Exploration (G-3) for Cement Grade Limestone Around Shambhunath Ji Ka Kheda, Thakarda Etc. Tahsil Rawatbhata District Chittorgarh, Rajasthan

(Basemetals/ Ferrous/ Non-Ferrous/ Industrial/ Strategic & Critical/ Precious metals etc.)

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1 GENERAL INFORMATION:

	Features	**Details**
	Block ID	Rawatbhata Limestone Block
	Current Exploration Agency	United Exploration India Pvt. Ltd. (UEIPL)
	Previous Exploration Agency	DMG Rajasthan
	Commodity	Limestone
	Mineral Belt	Lower Bhander group of Vindhyan Super Group
	Completion period with entire time schedule to complete the project	1 Year
	Objectives	The present exploration program (G3) has been formulated on the basis of the outcomes of previous work to fulfill the following objectives: i. Geological mapping on 1:4000 scale to record the lithological and structural features present within the proposed block. ii. Topographical contouring on 1:4000 scale to generate the topography of the area. iii. Exploratory drilling will be carried out at 800 m grid intervals to prove the limestone occurrences up to 100 m vertical depth. iv. To establish the various grades of limestone along with the estimation of resources (333) as per the UNFC norms & Minerals (Evidence of Mineral Contents) Rules- 2015. v. To assess the feasibility of the block for auction purpose.
	Whether the work will be carried out by the proposed agency or	UEIPL and its associates

	Features	**Details**
	through outsourcing and details thereof Components to be outsourced and name of the outsourced agency	
	Name / number of the geoscientists	4 geoscientists will involve (2 Field Geologist, 1 Headquarter Geologist, 1 GIS specialists)
	Expected field days (Geology, Geological party days)	120 days
1	**Location**	

Block Corner Points / Cardinal Points	Latitude	Longitude
1	24° 59' 41.743" N	75° 20' 0.147" E
2	24° 59' 41.543" N	75° 19' 36.051" E
3	25° 0' 15.826" N	75° 19' 35. 404" E
4	25° 0' 17.826" N	75° 20' 37.160" E
5	25° 0' 47.803" N	75° 20' 37.038" E
6	25° 0' 47.419" N	75° 22' 0.303" E
7	24° 59' 12.774" N	75° 22' 0.252" E
8	24° 59' 12.442" N	75° 20' 0.789" E

	Village	Shambhoo nath Ji Ka Khera, Peepalda, Takarda, Pratappura
	Tehsil/Taluk	Rawatbhata Tehsil
	Districts	Chittorgarh
	State	Rajasthan
2	**Area (hectares/square Kilometers)**	
	Block Area	9.60 Sq. Km.
	Forest Area	Partly falling in forest land.
	Govt Land Area	Data Not Available
	Private Land Area	Data Not Available
3	**Accessibility (Arial Distance)**	
	Nearest Rail Head	Kota (55 km)
	Road	NH-148 (Bhilwara- Modak Road) passes just south of the proposed block boundary.

	Features	**Details**
	Airport	Maharana Pratap Airport (UDR) in Udaipur (170km). Kota Airport is nearest but nonfunctional.
4	**Hydrography**	
	Local/Surface Drainage Pattern	The drainage pattern is dendritic with moderate drainage density.
	Rivers/Streams	The general water flows in the area is north to south. The small nalas unite to form major nala which ultimately joined in the river Brahmani which flows west to east.
5	**Climate**	
	Mean Annual Rainfall	The area has a semi-arid climate with an average annual rainfall of 65 to 90 cm.
	Temperature (December)(Minimum) Temperatures (June)(Maximum)	In winter, the temperature ranges from a minimum of 5°C to 24°C and in summer, from 30°C to 43°C.
6	**Topography**	
	Toposheet Number	45 P 05 and 45 O 08.
	Morphology of the area	A major part of the proposed block is flat land. In the eastern part, hilly terrain noted. Elevation of the block is varying from 385m in the southern part to 500m in the eastern part.
7	**Availability of baseline geoscience data**	
	Geological Map (1.50k/25k)	1:50000
	Geochemical Map	Partly Available
	Geophysical Map (Aero-physical, Ground geophysical, regional as well as local scale GP maps)	Available Ground geophysical data
8	**Justification for taking up Reconnaissance Survey/ Regional exploration**	Work carried out by Purohit and Swami during 1994-95 of DMG Rajasthan shows presence of limestone belonging to lower Bhander group of Vindhyan Super Group.

	Features	Details
		The study shows; - ❖ Pinkish dolomitic limestone and red to greyish limestone mapped by them. ❖ The grey limestone bands have shown Cao 44.10%, MgO 2.76% and Si02 13.06% and is cement grade in nature. However, exposure is limited. ❖ The dolomitic limestone is massive hard compact and pinkish banded in nature. It has MgO 15.71% and Si02 17.36%• It can be used as decorative stone after cutting & polishing. Therefore, the study shows the area is favourable for limestone deposits. However, it is requiring further stage of exploration to establish the deposits as mineable prospect.

2 DETAILED DESCRIPTION OF THE PROPOSAL:

2.1 Block Summary:

2.1.1 PHYSIOGRAPHY:

The area within the proposed block is both plain and hilly in nature. The majority portion of the block is plain whereas NE portion of the block occupies hilly terrain. In plain area average elevation is 415m. Elevation increase towards the NE part up to 500m.

2.1.2 DRAINAGE:

The overall direction of water flow in the area is from north to south. The drainage system follows a dendritic pattern, where small nalas merge to form a larger stream. This major nala eventually joins the Brahmani River, which flows from west to east.

2.1.3 BACKGROUND GEOLOGY (REGIONAL GEOLOGY & GEOLOGY OF THE BLOCK):

2.1.3.1 Regional Geology

Chittorgarh district in southeastern Rajasthan exhibits a geologically diverse framework, representing a significant segment of the Aravalli Craton. The area is underlain by a sequence of lithostratigraphic units ranging from Archean crystalline basement rocks to Proterozoic sedimentary cover, and locally by Cretaceous-Paleocene Deccan Traps in the southern parts.

At the base lies the Mangalwar Complex of the Bhilwara Supergroup, comprising banded gneisses, metasedimentary rocks, and metabasites. Geochemical and isotopic studies suggest that these basement gneisses were emplaced in multiple tectonic episodes, possibly within a rift-related crustal setting of the early Aravalli Craton (Ahmad et al., 2018). The Berach Granite, which intrudes these older gneisses, has been dated at approximately 2,610 million years, indicating a significant phase of crustal stabilization during the Archean (Sivaraman & Odom, 1982).

Unconformably overlying the basement rocks is the Vindhyan Supergroup, part of a stable platformal sequence deposited in Proterozoic time. This sedimentary package includes sandstones, shales, limestones, and conglomerates. These sediments were deposited in a range of shallow marine to continental settings, marking a long phase of tectonic quiescence and passive margin development following the Archean basement evolution. (Biswa et al., 2021a).

Structurally, the region is influenced by the Great Boundary Fault, also referred to as the Eparchian Unconformity, which defines a significant tectonic discontinuity

between the Archean–Proterozoic basement complex and the overlying Vindhyan sequences. This unconformity not only marks a major stratigraphic boundary but also represents a key structural lineament that has influenced sedimentation and tectonic patterns across southeastern Rajasthan (Biswa et al., 2021b).

In the southern parts of the district, the Vindhyan rocks and, in some areas, the older basement is overlain by Deccan Trap basalt flows, which belong to the Late Cretaceous to Paleocene period. These flat-lying basalt flows represent fissure eruptions and are part of the extensive Deccan Volcanic Province, forming plateau-like features that cap the older formations in this region (Biswa et al., 2021).

TABLE 1: Stratigraphic succession of Vindhyan Supergroup

	Group	Formation	Alternative Names
VINDHYAN SUPERGROUP (Meso-Neoproterozoic)	Bhander Group (1300-1500 m)	Maihar Sandstone	Upper Bhander Sst.
		Sirbu Shale	
		Bundi Hill Sandstone	Lower Bhander Sst.
		Lakheri Limestone	Bhander Lst., Nagod Lst.
		Ganurgarh Shale	Simrawal Shale
	----------Unconformity/Gradational contact----------		
	Rewa Group (100-300 m)	Govindgarh Sandstone	Upper Rewa Sst.
		Drummondganj Sandstone	
		Jhiri Shale	Variegated Shale
		Asan Sandstone	Upper Rewa Sst.
		Panna Shale	
	----------Normal contact/Facies change----------		
	Kaimur Group (400 m)	Dhandraul Quartzite	Upper Kaimur Sst.
		Mangesar Formation	Scarp Sandstone
		Bijaigarh Shale	
		Markundi Sandstone	Ghaghar Sandstone
		Ghurma Shale	Susnai Breccia
		Sasaram Sandstone	Lower Kaimur Sst.
	----------Unconformity/Normal contact ----------		
	Semri Group (3000-4000 m)	Suket Shale	Baghwar Shale
		Rohtas limestone	Nimbhahera Lst.
		Chorhat Sandstone	Glauconitic bed, Rampur Sst., Basuhari Sst.
		Bargawan Limestone	Salkhan Lst., Fawn Lst.,Chorhat Lst.
		Kheinjua Shale	Olive Shale, Binota Shale, Koldaha Shale
		Chopan Porcellanite	Deonar Porcellanite
		Kajrahat Limestome	Kuteshwar Lst., Tirohan Lst.
		Arangi Shale	
		Deoland Sandstone	Khardeola Sst., Pandwafall Sst.
	----------Angular Unconformity/Non-conformity----------		
	Gneisses and supracrustals		

2.1.3.2 Local Geology

The area is geologically dominated by shales, sandstones, and limestones belonging to the Lower Bhander Group of the Vindhyan Supergroup. The Ganurgarh shales occupy the southern part of the area but are mostly covered by agricultural fields, with only a few exposures along the roadside and in well sections. These shales vary in color from greenish and reddish to black.

The Lower Bhander limestone covers the majority of the area and appears in shades of grey, red, and pink. It is thickly bedded and sometimes associated with magnesian bands, which give it a distinctive banded appearance. The limestone is generally shaly and brittle in nature. Both the grey and banded limestones in the vicinity of Shambhunath Ji Ka Khera exhibit intraformational breccia structures.

The general strike direction of the limestone beds is N65°E – S65°W, with dips ranging from 10° to 25° towards the northwest. The limestone here is predominantly magnesian to cement-grade, being hard, compact, and massive. The magnesian and dolomitic limestones are particularly well-cemented and strong.

The Samariya shales occur on the southern slope of the northern hills but are mostly concealed below surface materials, which consist of greenish and reddish scree.

General sequence of the rocks is as follows:

Table 2: **Local Stratigraphic succession within the proposed block**

Age	Supergroup	Group	Lithology
Upper Proterozoic	Vindhyan Supergroup	Lower Bhander Group	Samariya Shale Lower Bhander Limestone Ganurgarh Shale

2.1.4 MINERAL POTENTIALITY BASED ON GEOLOGY, GEOPHYSICS, GROUND GEOCHEMISTRY):

To determine the cement-grade characteristics of the grey and red limestone, an area of 100 sq. km was carried out on a scale of 1:50,000 under Regional Mineral Survey (RMS) around the villages of Shabhunath Ji Ka Khera, Kalipalda, Shalarda, Nahargarh, Bhatapur, Temboliya, Borav, Shilkhapura, Laxmipura, Lothiyara, and Khumangarh. Apart from the RMS survey Regional geological mapping over an area of 15 sq. km was carried out on a scale of 1:10,000 around the villages of Shambhunath Ji Ka Khera, Pipalda, Thakarda, and Nahargarh and detailed geological mapping

covering 2 sq. km in the northern part of Shambhunath Ji Ka Khera was conducted on a larger scale of 1:2,000. (S.N Purohit & S.K Swami, 1994-95, DGM Rajasthan).

Based on color and megascopic features, the limestone has been classified into five varieties, a) Pinkish, b) Brownish, c) Greyish, d) Grey limestone with pinkish band, e) Red and grey limestone with intraformational Brecciated structures (S.N Purohit & S.K Swami, 1994-95, DGM Rajasthan).

Western part of the Sambhunath Ji Ka Khera and NW of Pipalda village is covered with pinkish & brownish limestone, which is hard, compact and magnesian in nature. The grey limestone band is generally of cement grade. The red limestone is shaly in character and therefore appears to be of low grade. (S.N Purohit & S.K Swami, 1994-95, DGM Rajasthan).

The following table shows the chemical analysis of limestone samples from Sambhunath JI Ka Khera, conducted by DGM Rajasthan in 1994-95 Field session.

Table 3: Results of Chemical analysis of Limestone (S.N Purohit & S.K Swami, 1994-95, DGM Rajasthan)

S.No	Type of Rock	Chemical Analysis				
		SiO_2 %	CaO%	MgO%	R_2O_3%	BOI%
1.	Grey Limestone	13.48	43.12	3.42	2.04	37.74
2.	Grey Limestone	12.64	45.08	2.01	2.40	37.70
3.	Pink dolomitic Limestone (Pipalda area)	17.36	25.76	15.71	2.92	37.64

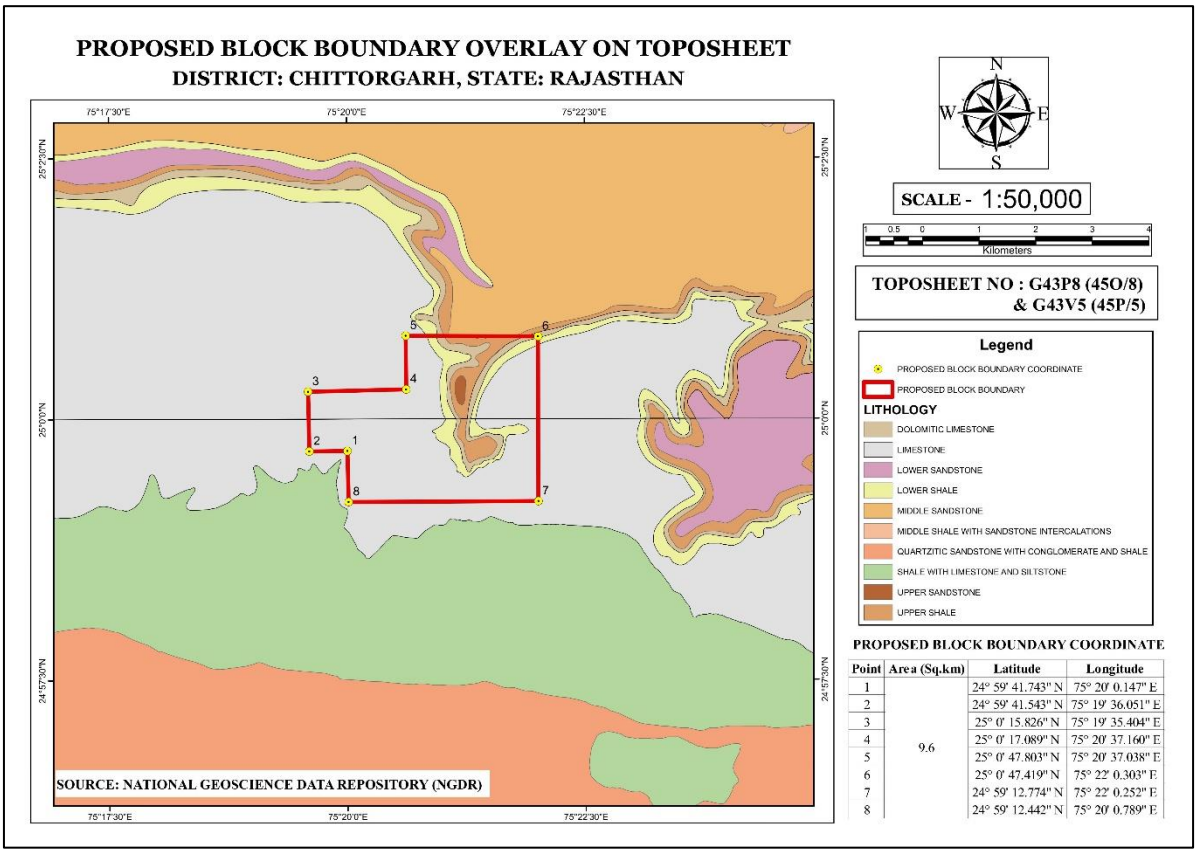

Figure 1: Geological map in and around proposed block

2.1.5 SCOPE FOR THE EXPLORATION:

a. Geological mapping on a 1:4000 scale.
b. Topographical survey on 1:4000 scale.
c. Exploratory drilling at 800 m grid interval.
d. Geochemical sampling and Analysis.
e. Petrographic study
f. Geological report preparation

2.1.6 OBSERVATION AND RECOMMENDATIONS OF G4 REPORT

The g4 stage of exploration in the proposed area has been carried out by Purohit and Swami during 1994-95 of DMG Rajasthan. shows presence of limestone belonging to lower Bhander group of Vindhyan Super Group. The study shows presence of cement grade greyish limestone and pinkish dolomitic limestone which can be used as decorative purpose.

2.2 Previous work:

The preliminary study in the proposed area has been carried out by Purohit and Swami during 1994-95 of DMG Rajasthan shows presence of limestone belonging to lower Bhander group of Vindhyan Super Group.

An area of 100 sq. km was carried out on a scale of 1:50,000 under Regional Mineral Survey (RMS) around the villages of Shabhunath Ji Ka Khera, Kalipalda, Shalarda, Nahargarh, Bhatapur, Temboliya, Borav, Shilkhapura, Laxmipura, Lothiyara, and Khumangarh. Apart from the RMS survey Regional geological mapping over an area of 15 sq. km was carried out on a scale of 1:10,000 around the villages of Shambhunath Ji Ka Khera, Pipalda, Thakarda, and Nahargarh and detailed geological mapping covering 2 sq. km in the northern part of Shambhunath Ji Ka Khera was conducted on a larger scale of 1:2,000.

The study shows presence of Pinkish dolomitic limestone and red to greyish limestone. The grey limestone bands have shown Cao 44.10%, MgO 2.76% and Si02 13.06% and is cement grade in nature. However, exposure is limited. The dolomitic limestone is massive hard compact and pinkish banded in nature. It has MgO 15.71% and Si02 17.36%. It can be used as decorative stone after cutting & polishing.

2.3 Block Boundary:

The coordinates of the corner points of the proposed block area are given below.

Table 4: Boundary Co-ordinate of the proposed block

Block Corner Points / Cardinal Points	Latitude	Longitude
1	24° 59' 41.743" N	75° 20' 0.147" E
2	24° 59' 41.543" N	75° 19' 36.051" E
3	25° 0' 15.826" N	75° 19' 35. 404" E
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8	24° 59' 12.442" N	75° 20' 0.789" E

2.4 Planned Methodology

In accordance with the objective set for Preliminary Exploration (G-3) of the block, the exploration programme is proposed. The Exploration shall be carried out as per Minerals (Evidence of Mineral Contents) Rule-2015. Accordingly, the following scheme of exploration is formulated in order to achieve the objectives. The details of different activities to be carried out are presented in subsequent paragraphs.

i) **Geological Mapping:** Detailed geological mapping will be carried out in the 9.60 sq.km area on 1:4,000 scale. Rock types, their contact, structural features will be mapped by taking traverses and marked in the map. The surface disposition of limestone will be marked in the map.

ii) **Topographical Survey:** The block area would be tied up with the triangulation network and contouring/ topographical survey will be updated in the entire block area of 9.60 sq.km. The surface features in the block area will be picked up and marked on the map on 1:4,000 scale. The reduced levels and co-ordinates of boreholes and boundary coordinates would be determined. The contouring will be carried out at 2m interval. The exploratory boreholes and block boundary shall be surveyed by DGPS and total station in WGS-84 datum, for demarcation of block boundary/corner points.

iii) **Drilling**: Based on Geological Mapping, Geochemical Sampling, the extension of the limestone body will be marked. To find out the potentiality of mineralized zones in strike & dip direction, 17 no boreholes involving 1700m of drilling will be carried.

iv) **Geochemical Sampling:**

   a. Bed Rock Sampling: During the course of Geological mapping, bedrock samples shall be collected to analyse the grade and quality of various limestone units.

   b. Drill core Sampling: Core sampling will be carried out from boreholes to established grade variation over the depth of the limestone units.

v) **Chemical Analysis:** All primary and check samples will be analysed for 09 radicals i.e., CaO, MgO, SiO_2, Fe_2O_3, Al_2O_3, SO_3, P_2O_5, K_2O and LOI. Also few samples will undergo trace element analysis.

vi) **Petrographic study:** Thin sections and ore microscopy will be done to identify targeted minerals.

vii) **Bulk Density:** A provision kept for determination Bulk Density for 5 samples.

viii) **Report Preparation:** Geological report will be prepared based on the findings of the exploration activity carried out. As per the UNFC norms & Minerals (Evidence of Mineral Contents) Rules- 2015, resource (333) will be established for various grades of limestone.

Components	Unit	Quantum of Work
Geological Mapping (1:4000)	sq.km	9.60
Topographical Survey (1:4000)	sq.km	9.60
Core Drilling	m	17 BH, 100m each= 1700 Total 1700m
DGPS Survey	Points	17-BH and BP-8= 25
XRF (9 radicals i.e., CaO, MgO, SiO_2, Fe_2O_3, Al_2O_3, SO_3, P_2O_5, K_2O, Na_2O & LOI)	Nos	BRS-100, Core Sample-1290= 1390 and 10% check samples. **Total 1529**
ICPMS for Trace elements	Nos	50
Petrological Studies	Nos	10
Bulk Density Determination	Nos	10
Report Preparation	Nos	1

2.5 Reference

1. Purohit, S.N and Swami, S.K. Prospacting for cement grad limestone around Shanbhunath Ji Ka Khera, Thakarda Rawatbhat a Dist Chittorgarh, FS 1994-95. DMG Udaipur, Rajasthan.

2.6 Project Schedule

Sl. No.	Particulars	Month-1	Month-2	Month-3	Month-4	Month-5	Month-6		Month-7	Month-8	Month-9	Month-10	Month-11	Month-12
1	Camp Setting/ mobilization													
2	Geological Mapping													
3	Topographical Survey													
4	BRS Sample Preparation													
5	BRS sample analysis													
6	Drilling (2 rig)							Review						
7	DGPS Survey													
8	Sample Preparation													
9	Petrographic study													
10	Laboratory Studies													
11	Report Preparation													

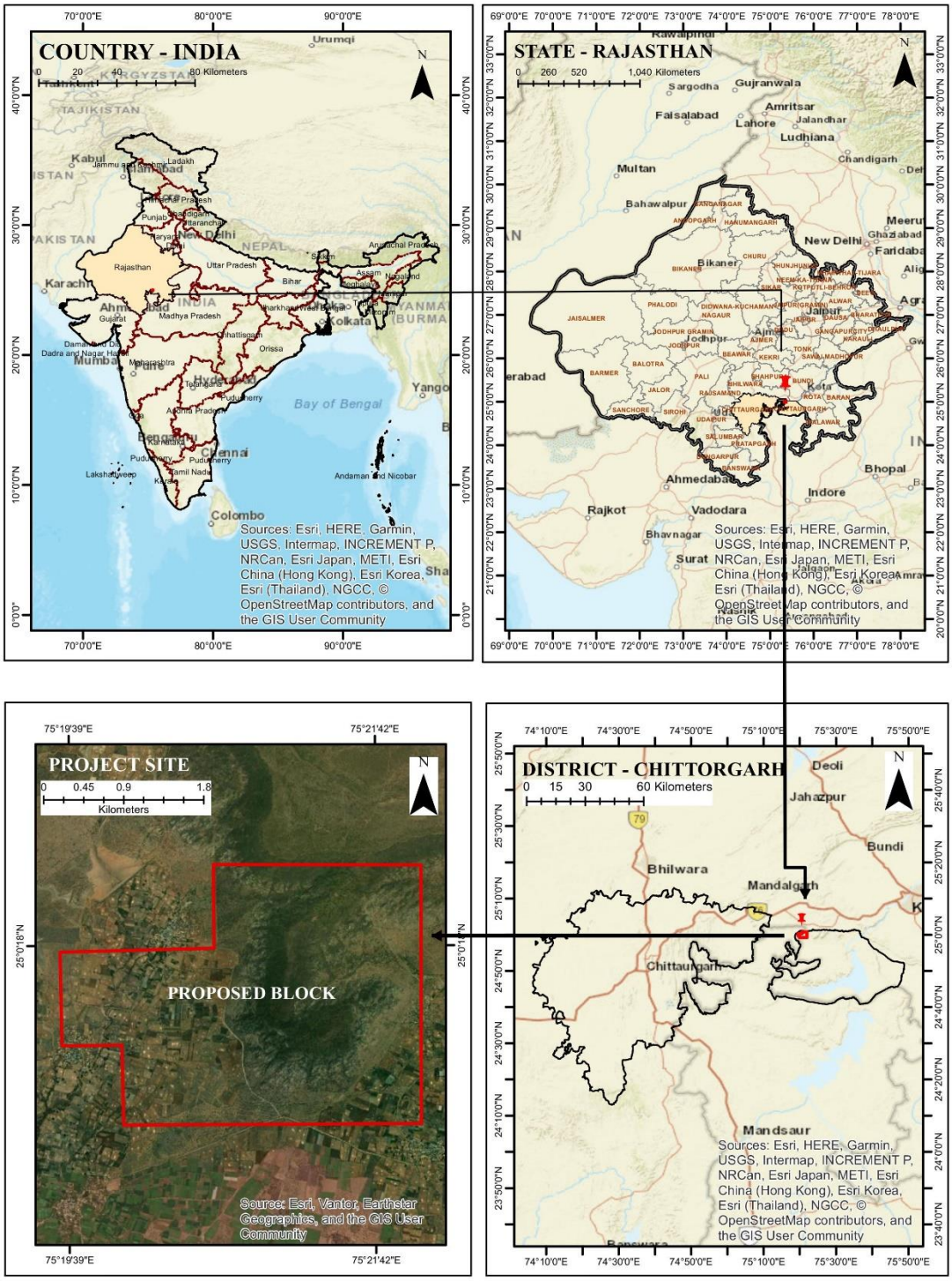
2.7 Cost of the Project

Preliminary Exploration (G-3) for Cement Grade Limestone Around Shambhunath Ji Ka Kheda, Thakarda Etc. Tahsil Rawatbhata District Chittorgarh, Rajasthan' Area: 9.60 sq.km, Timeline- 12 months							
S. No.	**Item of Work**	**Unit**	**Rates as per NMEDT SoC 2025**		**Estimated Cost of the Proposal**		**Remarks**
			SoC-Item -Sl No.	**Rates as per SoC**	**Qty.**	**Amount (Rs)**	
A	**GEOLOGICAL WORK**						
1	**Detailed Geological Mapping (1:4000)**	per sq.km	1.1	18300	9.6	175680	
i	Charges for Geologist- Field	day	1.2.1a	14,500	120	1740000	
ii	Charges for one Geologist - HQ	day	1.2.1a	10,500	30	315000	
iii	Labours Charges; Base rate	day	5.8	556	240	133440	
2	**Samples Preparation**						
i	Charges for one Sampler per day	one sampler per day	1.2.1b	7,850	15	117750	BRS-100
ii	Labours (4 Nos)	day	5.8	556	60	33360	
3	**Survey**						
i	Topographical Survey	day	1.3.1	10500	120	1260000	Topographical Survey on 1:4000 (2 m contour interval)
ii	Labours (4 Nos)	day	5.8	556	480	266880	
iii	Bore Hole Fixation and determination of co- ordinates & Reduced Level of the boreholes by DGPS and boundary coordinates	Per Point of observation	1.3.2	24,000	25	600000	17 BHs and 8 boundary coordinates
	Sub Total- A					**44,66,430.00**	
B	**DRILLING**						
i	Drilling upto 300m (Hard Rock) (1 rig)	m	2.2.1.1d	10,000	1,700	17000000	
ii	Land / Crop Compansation	per BH	5.6	3,000	17	51000	

Preliminary Exploration (G-3) for Cement Grade Limestone Around Shambhunath Ji Ka Kheda, Thakarda Etc. Tahsil Rawatbhata District Chittorgarh, Rajasthan' Area: 9.60 sq.km, Timeline- 12 months							
iii	Construction of concrete Pillar (12"x12"x30")	per borehole	2.2.7a	2,000	17	34000	
iv	Misc Charges	Lumsum	2.2.9.3	2000000	1	20,00,000.00	
ix	Core Preservation: One complete borehole plus mineralised cores of all the remaining Bhs	m	5.3	1,590	1,700	2703000	
x	Charges for Geologist per day (Field) for Drilling monitoring	day	1.5.1a	14500	120	1740000	
xi	Labours (4 Nos)	day	5.8	556	240	133440	
xii	Sampler	day	1.2.1b	7850	60	471000	
xii	Labours (4 Nos)	day		541	640	346240	
	Sub Total- B					**2,44,78,680.00**	
C	**LABORATORY STUDIES**						
1	**Chemical Analysis**						
i	**Primary & Check samples for Limstone**						
	a. Primary samples for 9 radicals i.e., CaO, MgO, SiO_2, Fe_2O_3, Al_2O_3, SO_3, P_2O_5, K_2O, Na_2O & LOI	Nos	4.1.17a	4,200	1,390	5838000	Core sample-1290, BRS 100
	b-External(10%) Check samples from NABL Lab for 9 radicals i.e., CaO, MgO, SiO_2, Fe_2O_3, Al_2O_3, SO_3, P_2O_5, K_2O, Na_2O & LOI	Nos	4.1.17a	4,200	139	583800	
ii	**ICPMS for Trace elements**						
	Primary samples	Nos	4.1.15	7,400	50	370000	
	Check samples	Nos	4.1.15	7,400	5	37000	
2	**Physical & Petrological Stusies**						

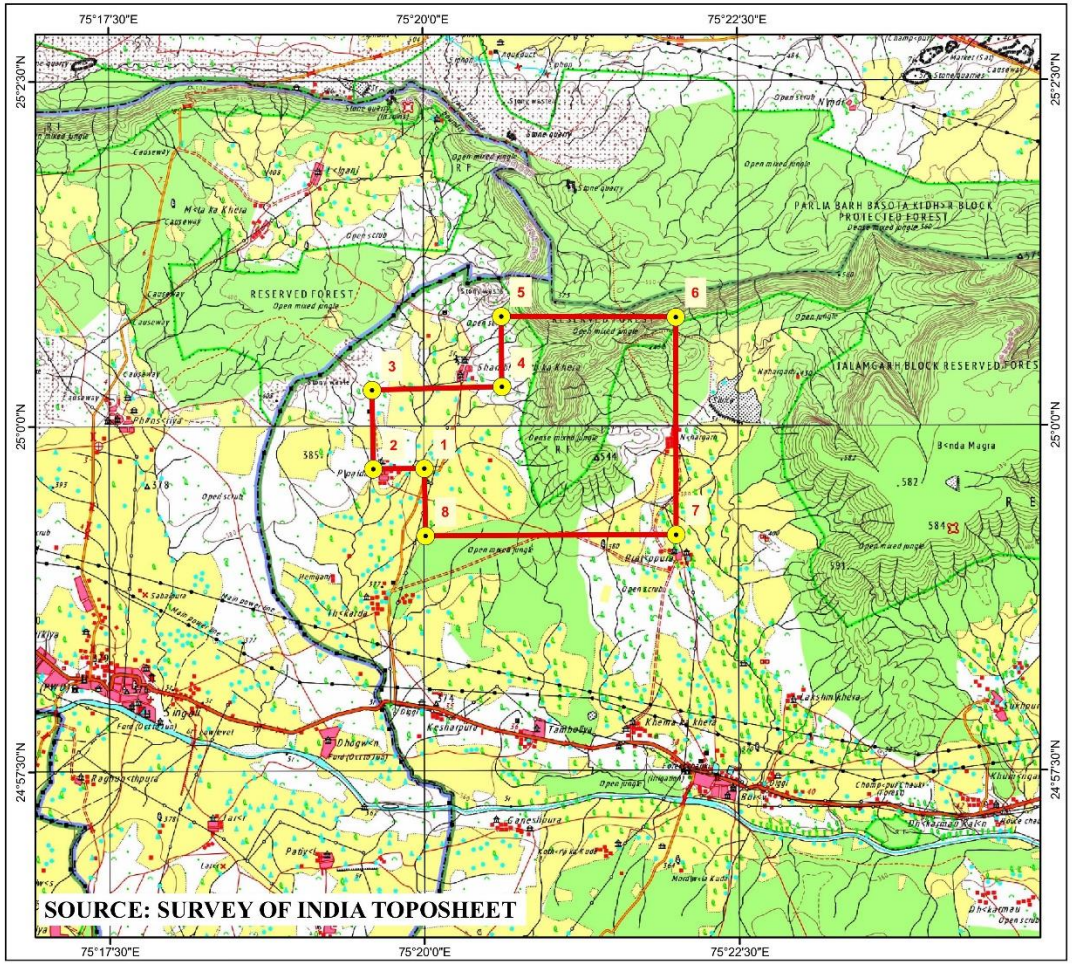
Preliminary Exploration (G-3) for Cement Grade Limestone Around Shambhunath Ji Ka Kheda, Thakarda Etc. Tahsil Rawatbhata District Chittorgarh, Rajasthan' Area: 9.60 sq.km, Timeline- 12 months							
i	Preparation of polished thin section	Nos	4.3.2	800	10	8000	
ii	Complete petrographic study report	Nos	4.3.4	2,800	10	28000	
vi	Specific Gravity	Nos	4.8.1	2,500	10	25000	
	Sub Total- C					**6889800**	
D	**Total A to C**					**3,58,34,910.00**	
E	**Geological Report Preparation**		**5.2.iv**	exploration with cost of work exceeding ₹ 300 lakh: A minimum of ₹ 9 lakh or 3% of the value of work whichever is more		**10,75,047.30**	
F	**Peer review Charges**		**As per EC decision**			**30000**	
G	**Preparation of Exploration Proposal (5 Hard copies with a soft copy)**	**5 Hard copies with a soft copy**	**5.1**	2% of the Cost or Rs. 5 Lakhs whichever is lower		**5,00,000**	
H	**Total Estimated Cost without GST**					**3,69,39,957.30**	
I	**Provision for GST (18% of H)**					**66,49,192.31**	
J	**Total Estimated Cost with GST**					**4,35,89,149.61**	***or Say Rs. 435.89 Lakh***

Location Map of Proposed Limestone Block Chittorgarh District, Rajasthan



PROPOSED BLOCK BOUNDARY OVERLAY ON TOPOSHEET

DISTRICT: CHITTORGARH, STATE: RAJASTHAN



N
W E
S

SCALE - 1:50,000

1 0.5 0 1 2 3 4
Kilometers

TOPOSHEET NO : G43P8 (45O/8) & G43V5 (45P/5)

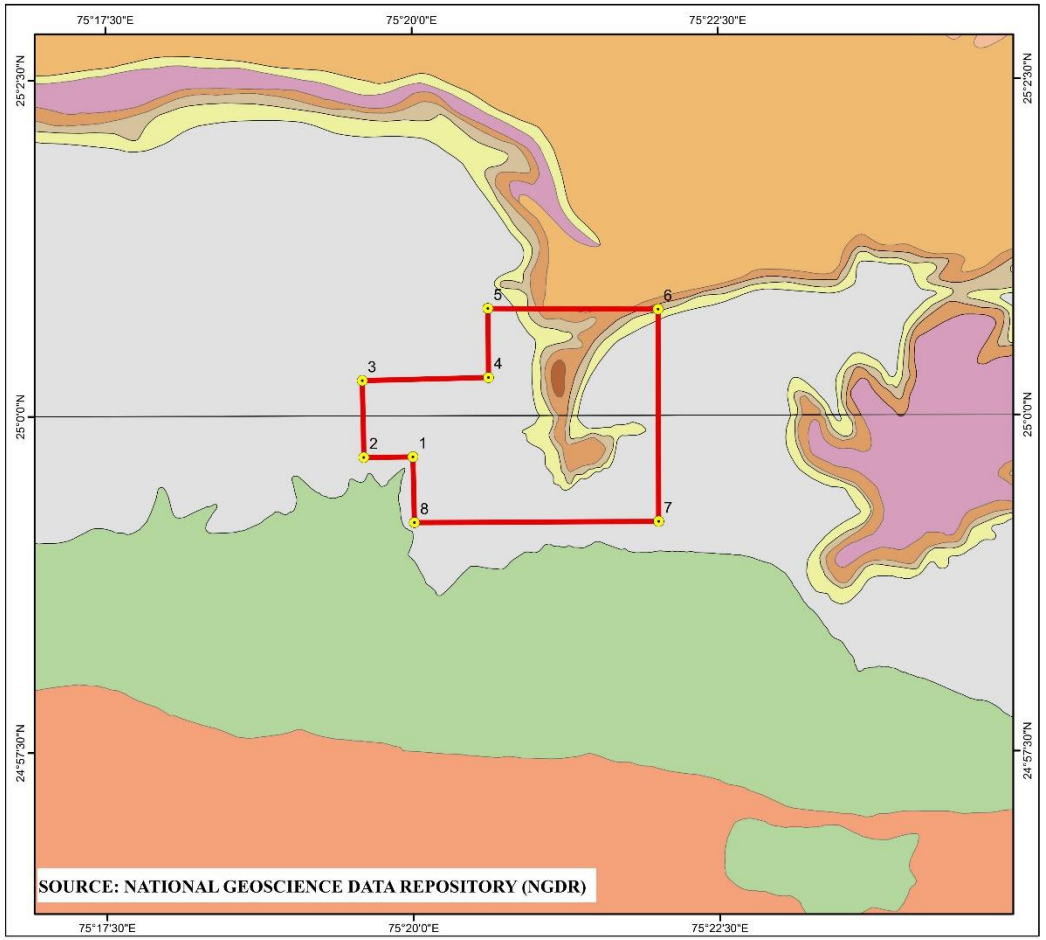
Legend

- PROPOSED BLOCK BOUNDARY COORDINATE
- PROPOSED BLOCK BOUNDARY

PROPOSED BLOCK BOUNDARY COORDINATE

Point	Area (Sq.km)	Latitude	Longitude
1	9.6	24° 59' 41.743" N	75° 20' 0.147" E
2		24° 59' 41.543" N	75° 19' 36.051" E
3		25° 0' 15.826" N	75° 19' 35.404" E
4		25° 0' 17.089" N	75° 20' 37.160" E
5		25° 0' 47.803" N	75° 20' 37.038" E
6		25° 0' 47.419" N	75° 22' 0.303" E
7		24° 59' 12.774" N	75° 22' 0.252" E
8		24° 59' 12.442" N	75° 20' 0.789" E

PROPOSED BLOCK BOUNDARY OVERLAY ON TOPOSHEET
DISTRICT: CHITTORGARH, STATE: RAJASTHAN



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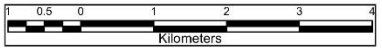

TOPOSHEET NO : G43P8 (45O/8) & G43V5 (45P/5)

Legend

- PROPOSED BLOCK BOUNDARY COORDINATE
- PROPOSED BLOCK BOUNDARY

LITHOLOGY

- DOLOMITIC LIMESTONE
- LIMESTONE
- LOWER SANDSTONE
- LOWER SHALE
- MIDDLE SANDSTONE
- MIDDLE SHALE WITH SANDSTONE INTERCALATIONS
- QUARTZITIC SANDSTONE WITH CONGLOMERATE AND SHALE
- SHALE WITH LIMESTONE AND SILTSTONE
- UPPER SANDSTONE
- UPPER SHALE

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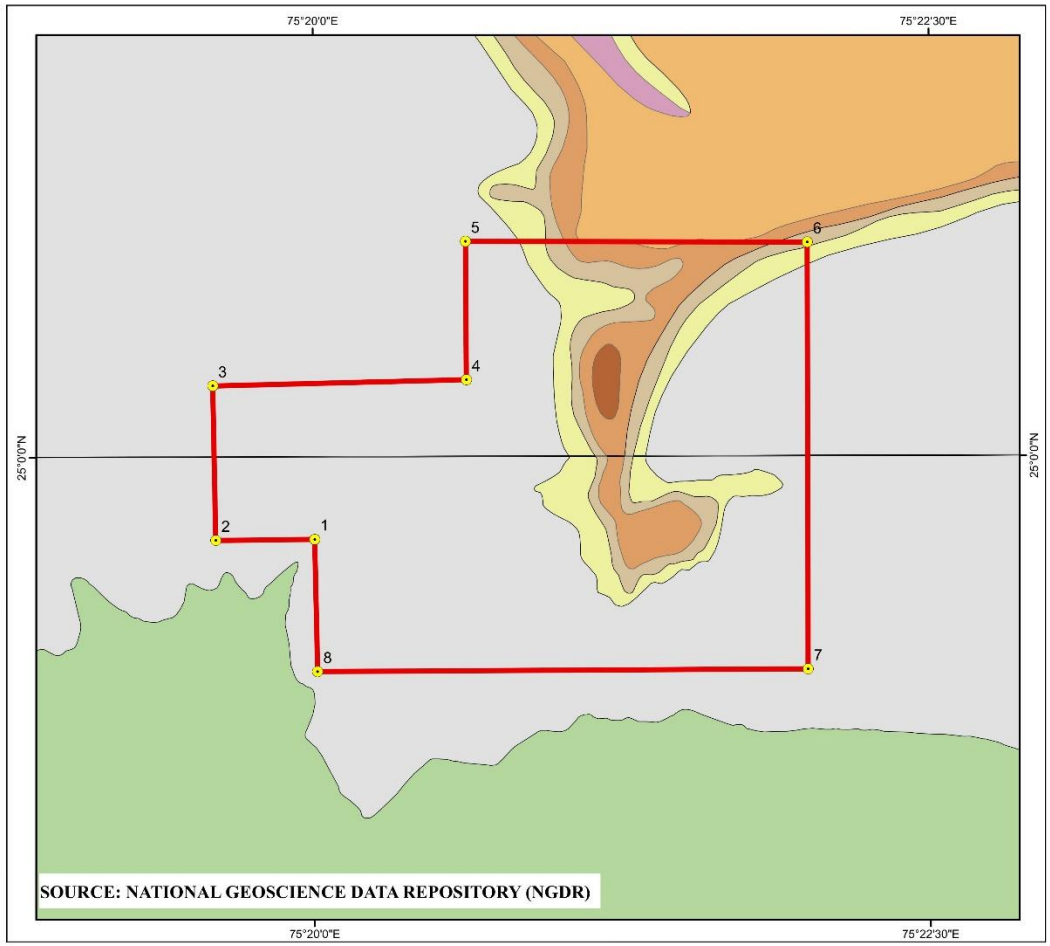
PROPOSED BLOCK BOUNDARY OVERLAY ON TOPOSHEET

DISTRICT: CHITTORGARH, STATE: RAJASTHAN



SCALE - 1:25,000

0.5 0.25 0 0.5 1 1.5 2
Kilometers

TOPOSHEET NO : G43P8 (45O/8) & G43V5 (45P/5)

Legend

- PROPOSED BLOCK BOUNDARY COORDINATE
- PROPOSED BLOCK BOUNDARY

LITHOLOGY

- DOLOMITIC LIMESTONE
- LIMESTONE
- LOWER SANDSTONE
- LOWER SHALE
- MIDDLE SANDSTONE
- SHALE WITH LIMESTONE AND SILTSTONE
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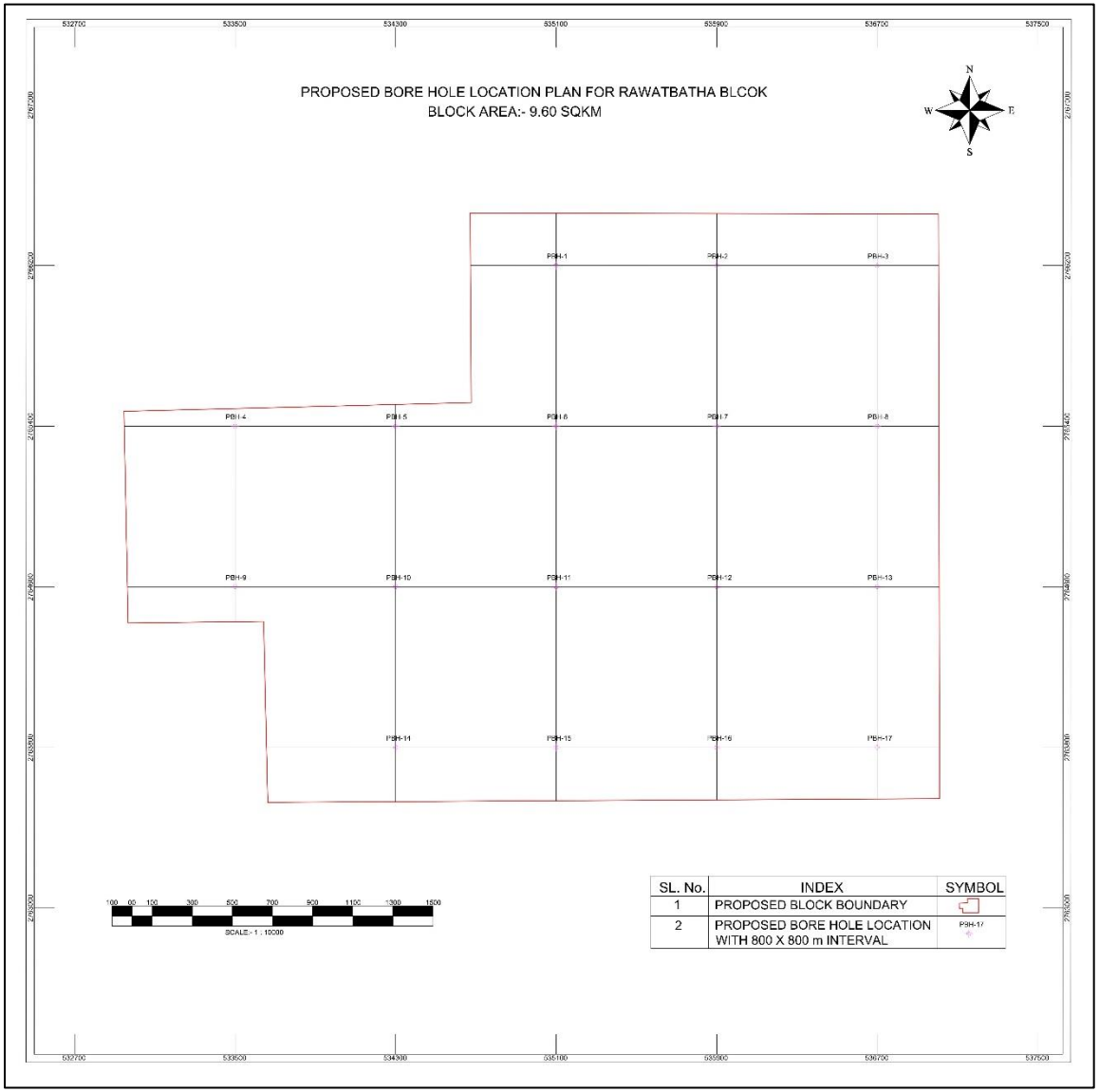
PROPOSED BORE HOLE LOCATION PLAN FOR RAWATBATHA BLCOK
BLOCK AREA:- 9.60 SQKM
N
W
E
S
PBH-1
PBH-2
PBH-3
PBH-4
PBH-5
PBH-6
PBH-7
PBH-8
PBH-9
PBH-10
PBH-11
PBH-12
PBH-13
PBH-14
PBH-15
PBH-16
PBH-17
SCALE:- 1 : 10000
SL. No.
INDEX
SYMBOL
1
PROPOSED BLOCK BOUNDARY
2
PROPOSED BORE HOLE LOCATION WITH 800 X 800 m INTERVAL