Coal India Limited
कोल इंडिया लिमिटेड

Office of the Project Officer
Ashok Project
Piparwar Area, Central Coalfields Limited
At & P.O. : Bachra, Dist. : Chatra

Ref No. PO (Ashok)/[illegible]/[illegible]-24/696

Date: 23/02/2024

To,
The Divisional Forest Officer
Chatra (South) Forest Division

विषय : टण्डवा प्रखण्ड अन्तर्गत सी.सी.एल. द्वारा पिपरवार परियोजना हेतु 43.30 हे0 वन भूमि अपयोजन प्रस्ताव का नवीकरण के संबंध में।

Ref: 1141 दिनांक 15.05.2023

Dear Sir,

Please find query compliance in respect of forest diversion application of Piparwar (43.30 Ha):

S.N	Query	Reply
1	विषयगत परियोजना 43.30 हे0 खुली खदान परियोजना 17.02.2012 को लीज समाप्त हो गया था परन्तु माईनिंग चलता रहा है। लीज अवधि समाप्त होने के उपरांत उक्त भूमि को समतल कर पौधारोपा करते हुए वन विभाग को हस्तगत कराना था जो नही किया गया है।	उक्त भूमि पर भूमिगत माइनिंग प्रस्तावित है । 43.30 Ha के कुछ भाग मे रिक्लेमेशन कार्य हो चुका है , प्रस्तावित भूमिगत खदान के उपर अतिरिक्त डेड लोड नहीं बढे जिससे भूमिगत माइनिंग मे सेफ्टी इशू हो सकता है।
2	प्रस्ताव में संलग्न पार्ट -1 की कंडिका III में Scheme for which the forest land is required के संबंध में कोई उल्लेख नही है।	प्रस्ताव मे संलग्न पार्ट -1 की कंडिका III मे सुधार कर दिया गया है।
3	प्रस्ताव में संलग्न पार्ट-1 की कंडिका A-2 (xiii) में Proposal Submitted in past के column में वर्तमान समर्पित किये जाने का प्रस्ताब का उल्लेख किया गया है इसमें संशोधन की आवश्यकता है।	पार्ट-1 की कंडिका A-2 (xiii) मे Proposal Submitted in past मे सुधार कर दिया गया है ।
4	प्रस्ताव में संलग्न पार्ट-1 की कंडिका A-5 में Stage-II Compliance के कंडिका 2 में अपयोजित होनेवाले वन भूमि के विरूद्ध क्षतिपूरक वनरोपण कराने हेतु समतुल्य गैर वन भूमि जो आपके द्वारा । उपलब्ध कराया गया है उसे भारतीय वन अधिनियम 1927 के तहत अधिसूचित किया जाना है परन्तु इस संबंध में आपके द्वारा कोई सकारात्मक जबाब नहीं दिया गया है। विदित हो कि क्षेत्रीय मुख्य वन संरक्षक, हजारीबाग की अध्यक्षता में सी.सी.एल. के पदाधिकारियों के साथ हुई बैठक में यह निर्देश दिया गया था कि 43.30 हे0 अपयोजित होनेवाले वन भूमि के विरूद्ध समतुल्य गैर वन भूमि विभाग को उपलब्ध नहीं करा दिए जाते हैं तब तक प्रस्ताव पर कोई विचार नहीं किया। जायेगा।	43.30 हे0 अपयोजित होनेवाले वन भूमि के विरूद्ध समतुल्य गैर वन भूमि का डिटेल्स संलग्न किया जा रहा है।
5	प्रस्ताव में संलग्न पार्ट-1 की कंडिका A-5 में Stage-II Compliance के कंडिका 5 में अपयोजित होनेवाले वन भूमि में प्रतिवर्ष किये गये माईनिंग क्षेत्र को Reclaim उसमें पौधारोपण करते हुए नक्शा एवं अभिलेख विभाग को समर्पित करना था जो अबतक नहीं किया गया है। इस शर्त के अनुपालन में विषयगत	Reclamation plan attached as annexure.

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	परियोजना के अतिरिक्त किये गये Reclamation एवं Plantation का उल्लेख किया गया है।	
6	प्रस्ताव में संलग्न पार्ट-1 की कंडिका A-5 में Stage-II Compliance के कॉडिका 6 के अनुपालन में विषयगत माईनिंग परियोजना से संबंधित अन्य एवं सी.सी.एल. स्टाफ को एल.पी.जी. गैस उपलब्ध कराये जाने का उल्लेख किया गया है परन्तु इस संबंध में कोई अभिलेख एवं साक्ष्य संलग्न नहीं है, संलग्न किया जाय।	परियोजना से संबंधित अन्य एवं सी.सी.एल. स्टाफ को एल.पी.जी. गैस उपलब्ध कराया जाता है जिसकी प्रति संलग्न की जा रही है।
7	प्रस्ताव में संलग्न पार्ट-1 की कंडिका A-9 में Details of transfer of lease के कॉलम में Nil अंकित है इसके सभी कॉलमों में सही डाटा अंकित किया जाय।	पार्ट-1 की कंडिका A-9 में सुधार कर दिया गया है। Land has been acquired under CBA Act.
8	प्रस्ताव में संलग्न पार्ट-1 की कंडिका B-1 (i) में Proposal submitted in past के कॉलम में वर्तमान में समर्पित किये जाने वाले प्रस्तावों का उल्लेख किया गया है जो सही नहीं है इसमें सुधार की आवश्यकता है।	Proposal submitted in past के कॉलम में सुधार कर दिया गया है।
9	प्रस्ताव में संलग्न पार्ट -1 की कंडिका C-ii(a) में Number of Patch- 5 अंकित है जबकि पंचवार रकबा जोड़ने पर 4 ही पैच में अप्रयोजित होनेवाले वन भूमि का कुल रकबा 43.30 है हो जाता है। इसमें सुधार की आवश्यकता है।	पार्ट -1 की कंडिका C-ii(a) में KML patch में सुधार कर दिया गया है।
10	प्रस्ताव में संलग्न पार्ट-1 की कंडिका K-(i) में वनाधिकार अधिनियम 2006 से संबंधित प्रमाण-पत्र एवं इस क्रम में हुई ग्राम सभा कार्यवाही की प्रति को आनलाईन अपलोड करते हुए हार्ड कॉपी प्रस्ताव में संलग्न करना है, जो नहीं है। हार्ड कॉपी प्रस्ताव में संलग्न करें एवं ऑन लाईन प्रस्ताव में सुधार कर अपलोड किया जाय।	Undertaking for FRA has been attached as annexure
11	प्रस्ताव के साथ ऑथेन्टिकेटेड लैण्ड शिड्यूल संलग्न नहीं है।	प्रस्ताव के साथ ऑथेन्टिकेटेड लैण्ड शिड्यूल संलग्न कर दिया गया है।
12	प्रस्ताव के साथ अन्डरग्राउण्ड माईनिंग का स्वीकृत माईनिंग प्लान संलग्न है, ऐसी स्थिति में सक्षम स्तर से स्वीकृत Surface Strain Predicted by 3-D subsidence prediction model Reportप्रस्ताव के साथ संलग्न करना अनिवार्य है।	3-D subsidence prediction model Report प्रस्ताव के साथ संलग्न कर दिया गया है।
13	प्रस्ताव में संलग्न Geo-reference Map के अवलोकन से प्रतीत होता है कि माईनिंग क्षेत्र 4 पैचो में प्रस्तावित है जो सभी पैच एक दूसरे से कनेक्ट नहीं है ऐसी स्थिति में बीच में पड़ने वाले क्षेत्र हो सकता है कि वन भूमि एवं जंगल झाड़ी भूमि हो इसलिए इसे कनेक्टीविटी को दर्शाते हुए मैप समर्पित करें।	Combined cadastral plan attached showing all the released forest land and applied renewal forest land.
14	प्रस्ताव के साथ कैडेस्ट्रल मैप 1इंच 16 माईल के स्केल पर माईनिंग क्षेत्र को दर्शाते हुए संलग्न नहीं है।	कैडेस्ट्रल मैप 1इंच 16 माईल के स्केल पर माईनिंग क्षेत्र को दर्शाते हुए संलग्न कर दिया गया है।

Thanking you

Yours Faithfully

23.2.24

(Project Officer)
Piparwar UG Phase I

23/02/24

Copy to:
1. General Manager, Piparwar Area, CCL
2. Office Copy

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ANNEXURE – III ANNEX – III

SCHEDULE OF LAND FOR COMPENSATORY AFFORESTATION AT VILLAGE KALYANPUR.

Name of village	[illegible]	Plot No.	Area (in acres)
Kalyanpur		13	1.55
		16A	3.75
		16B	25.00
		53A	7.90
		53B	0.75
		55A	16.50
		55B	3.25
		61	0.72
		75	3.50
		79	5.55
			78.47 acres
		or	31.77 hectares.
Mandar		512/A	1.45
		512/B	11.00
		149	9.00
		151	12.86
		152	6.35
		355	13.75
			54.41
		or	22.02 hectares.

ABSTRACT	Area in acres	Area in Hectares
Kalyanpur	78.47	31.77
Mandar	54.41	22.02
	132.88	53.79

वन संरक्षक [illegible] पदाधिकारी रांची

General Manager (EM) [illegible] Ranchi

AnyScanner

THE BIHAR GAZETTE

FOREST AND ENVIRONMENT, BIHAR

NOTIFICATIONS

No. ..... in exercise of the powers conferred by Section 29 of the Indian Forest Act, 1927 (Act XVI of 1927), the Government of Bihar is pleased to declare the provisions of chapter IV of the said Act applicable from the date of this notification, to the Forest lands and waste lands specified in the Schedule here to annexed and situated in the district of Santhal Pragana.

The forest lands and waste lands comprised in this notification shall be called a protected Forest.

The nature and extent of the rights of Govt. and private persons in or over the forest lands and waste lands comprised in this notification have not yet been enquired in this notification have not yet been enquired into and recorded as laid down in sub-section (2) of section 29 of the said Act, but as the State Government thinks that such ehquiry and record will occupy such length of time as in the meantime to endanger the rights of Govt. and as the enquiry and record of rights will hereafter be made, this notification is issued subject to all existing right of individuals or communities.

SCHEDULE.

Sl. No.	Name of Owners	Name of Village	Thana	Thana No.	District	Area in Acre	Plot No.	
1	2	2	4	5	6	7	8	
1.	State of Bihar.	Kalyanpur	Taadwa	85	Chatra	78.47	13	11.55
							16A	3.75
							16B	25.00
							53A	7.90
							53B	0.75
							55A	16.50
							55B	3.25
							61	0.72
							76	3.50
							79	5.55
								78.47 A
								or
								31.77 H.
2.	-do-	Mandar	-do-	71	Chatra	54.41	512A	1.47
							512B	11.00
							149	9.00
							151	12.86
							152	6.35
							355	13.75
								54.41
								or
								22.02 Hc.

By order of the
Governor of Bihar,

बिहार गजट

[illegible] एवं पर्यावरण विभाग

अधिसूचना

संख्या— [illegible] भारतीय वन अधिनियम (एक्ट सन 1927) की धारा 29 के अन्तर्गत दी [illegible] का प्रयोग करते हुए बिहार के राज्यपाल इस अधिसूचना के प्रकाशन [illegible] निम्नलिखित भूमि और बंजर भूमि पर उपरोक्त अधिनियम के चौथे अध्याय [illegible] करने की घोषणा करते हैं जो रैयती जिला अन्तर्गत है।

[illegible] भूमि एवं बंजर भूमि जिसका विवरण इस अधिसूचना में संकलित है [illegible] कहा जायेगा।

[illegible] उपरोक्त अधिनियम की धारा 29(3) के अनुसार किसी व्यक्तियों के अधिकारों [illegible] भूमि एवं बंजर भूमि की तत्संबंधी जाँच नहीं हो पायी है तब तक सरकार और किसी व्यक्ति के अधिकारों का इस वन भूमि और बंजर भूमि की तत्संबंधी जाँच अभी तक नहीं हुई है, जिसे समाप्त करने में काफी समय लगेगा तथा इस अवधि में सरकार के अधिकारों पर अतिक्रमण होने की सम्भावना प्रतीत होती है। अतः व्यक्ति विशेष एवं समुदाय के सभी वर्तमान अधिकारों को बिना अतिक्रमण किये यह अधिसूचना प्रकाशित की जाती है।

विवरण

[illegible]	नाम ग्राम	थाना	थाना नं०	किस्म	प्लॉट नं०	रकबा
1.	2.	3.	4.	5.	6.	7.
बिहार शरीफ	कल्याणपुर	टपडवा	85	पहाड़	13	11.55
					16 ए	3.75
					16 बी	25.00
					55 ए	7.90
					53 बी.	0.75
					55 ए	16.50
					55 बी.	3.25
					61	0.72
					76	3.50
					79	5.55
						78.47 एकड़
						31.77 हे०
वही-	नावडर	टपडवा	71	पहाड़	512 ए	1.47
					512 बी	11.00
					149	9.00
					151	12.86
					152	6.35
					355	13.75
						54.41 एकड़
						22.02 हेक्टेयर

राज्यपाल के आदेश से,

(584) ANX-II/2

[illegible] बिहार, राँची।

[illegible] शक संवत्, 1914

राँची, दिनांक 2 दिसम्बर, 1992.

[illegible]

सेवा में,

[illegible]

विषय:- [illegible] परियोजना के लिए सी०सी०एल० द्वारा [illegible] हे० [illegible] भूमि [illegible] हेतु [illegible] के लिए गैर वनभूमि दिये जाने के सम्बन्ध में।

महाशय,

उपर्युक्त विषयक पर सरकार के ज्ञापांक- [illegible] दिनांक- [illegible].8.92 के क्रम में कहना है कि क्षेत्रीय मुख्य वन संरक्षक, हजारीबाग ने अपने पत्रांक- 1708 दिनांक- 16.11.92 में सूचित किया है कि दिनांक- 12.10.92 को राँची में सी०सी०एल०, वन एवं पर्यावरण विभाग, [illegible] सरकार के साथ विचार-विमर्श हुआ था जिसमें [illegible] परियोजना के पूर्व प्रस्ताव में से 43.30 हे० वनभूमि का प्रस्ताव [illegible] को किया जाय।

तदनुसार क्षेत्रीय मुख्य वन संरक्षक, हजारीबाग ने [illegible] परियोजना के लिए सी०सी०एल० द्वारा अतिरिक्त वनरोपण हेतु ग्राम- [illegible], थाना- [illegible], जिला- [illegible] एवं ग्राम- [illegible], थाना- [illegible], जिला- [illegible] में क्रमशः 31.77 हे० एवं 22.02 हे० कुल 53.79 हे० गैर वनभूमि उपलब्ध कराते हैं। उक्त भूमि का संयुक्त सी०सी०एल० एवं वन विभाग के पदाधिकारियों द्वारा एक साथ की गयी है और यह पाया गया है कि उक्त भूमि अतिक्रमण रहित एवं वनरोपण के योग्य है।

इस संबंध में निम्नलिखित कागजात की तीन-तीन प्रतियाँ [illegible] सुलभार्थ एवं आवश्यक कार्रवाई हेतु संलग्न कर भेजी जा रही है :-

1. क्षेत्रीय मुख्य वन संरक्षक, हजारीबाग के पत्रांक- 1708 दिनांक- 16.11.92
2. भारतीय वन अधिनियम 1927 की धारा 29 के अन्तर्गत सुरक्षित वन घोषित करने हेतु अधिसूचना हिन्दी एवं अंग्रेजी में [illegible] प्रतियाँ।

कृ०पृ०उ०

3. कल्याणपुर एवं माण्डर ग्राम में क्षतिपूरक वनरोपण कार्य कराने का सी०सी०एल० की [illegible] ।

4. ग्राम-कल्याणपुर, थाना-टण्डवा, जिला-चतरा (पुराना हजारीबाग) में उपलब्ध कराये जाने वाले गैर वनभूमि का मानचित्र ।

5. ग्राम-माण्डर, थाना-माण्डर, जिला-चतरा (पुराना हजारीबाग) में उपलब्ध कराये जाने वाले गैर वनभूमि का मानचित्र ।

6. सी०सी०एल० द्वारा 10 वर्षों के लिये खनन कार्य हेतु हस्तान्तरित किए जाने वाले वनभूमि का ब्योरा ।

7. सी०सी०एल० के महाप्रबन्धक (भूमि एवं पर्यावरण) के पत्रांक- 861-70 दिनांक- 18.7.92 की छाया प्रति ।

8. वन प्रमंडल पदाधिकारी, हजारीबाग पश्चिमी वन प्रमंडल के ज्ञापांक- 3194 दिनांक- 10.12.92 की छाया प्रति ।

अतः सरकार से आग्रह है कि कृपया सी०सी०एल० के पिपरवार प्रोजेक्ट हेतु 53.79 हे० गैर वनभूमि उपलब्ध करा रही है उसपर सरकारी स्तर से शीघ्र कार्रवाई की जाय ।

अनु०यथोक्त ।

आपका विश्वासी,

19/12/92

प्रधान मुख्य वन संरक्षक, बिहार,
राँची ।

19/12

13737
19.12

(109)

ANX-IV/

[illegible]

CENTRAL COALFIELDS LIMITED

(A Subsidiary of Coal India Limited)
DARBHANGA HOUSE, RANCHI 834 001
Gram COLDENT Phone PBX 301660
Telex 0626-201

Ref. No. [illegible]/117-2004 Date 27th November,93.

27/

To

The Divisional Forest Officer
Hazaribagh East
Hazaribagh

Sub: Diversion of 43.30 Ha of forest land for coal mining in Piparwar OCP of CCL in Hazaribagh District.

Dear Sir,

Kindly refer to letter No.8-172/89-F.C. dated 3.11.1993 issued by Shri Munindra, Under Secretary to Government of India. A photo copy of which is enclosed for your ready reference. The comments of CCL are as under:-

1. The land for compensatory afforestation was provided from Government land in village Kalyanpur and village Mandar. 53.79 Ha of non-forest Government land was accepted and approved and forest proposal was forwarded to MOEF,New Delhi. The P.C.C.F. has already written to Secretary (Forest) for issue of Gazette Notification for declaring it as protected forest. Hence condition No.1 has already been implemented by C.C.L. and Forest Department.

2. You are requested to kindly place the demand of forest growth etc. for 43.30 Ha of forest land to be released. In this connection, this is to inform you that the cost of raising afforestation in 1.5 times of forest area in safety zone has already been deposited to State Forest Department when approval for release of 13.11 Ha of forest land was received for Piparwar OCP. A photo copy of the correspondence made by CCF(Development/Nodal Officer) is enclosed for your kind information. Hence compliance of item No.2 will be done only on receipt of demand from your office.

3. The cost of enrichment plantation over degraded forest land equal to 1.1/2 times safety zone area has already been paid by CCL as mentioned above. Therefore this condition No.3 has already been implemented by CCL.

..2..

AnyScanner

I therefore request you to kindly send the demand letter for cost of forest growth, net present value, cost of compensatory afforestation and value of forest produce at the earliest so that necessary payment can be made by C.C.L. without delay.

Thanking you,

Yours faithfully

A.K.Tripathi
General Manager (Env.-Land)

Enclosed above.

Copy to:

1. The Principal Chief Conservator of Forest
   P.H.Minoo
   Ranchi
2. Chief Conservator of Forest (Dev.)
   P.H.Minoo
   Ranchi
3. Regional Chief Conservator of Forest
   Hazaribagh
4. Conservator of Forest
   Hazaribagh.
5. General Manager
   Piparwar.
6. Adviser(Forest & Environment)
   Govt. of Bihar
   Patna.

AnyScanner

Central Coalfields Limited
Darbhanga House:Ranchi

1st February. 94.

To
The Divisional Forest Officer
Hazaribagh (E)
Hazaribagh

Sub : Payment of Rs.78,98,408.12 for release of 43.30 Ha of forest land for Piparwar OCP of CCL.

Ref : Your letter No.3291 dated 16-12-93.

Dear Sir,

With reference to the above letter, a demand for Rs.86,39,408.12 (Rupees Eightysix lakhs thirtynine thousand four hundredeight and paise twelve only) was placed towards the net present value, compensatory afforestation, fencing in safety zone and re-generation/ cost of forest growth etc. for release of 43.30 Ha of forest land for Piparwar OCP.

In this connection, kindly refer to letter No. GM(Env-Land)/94/29-30 dated 5-1-94 from the undersigned addressed to you wherein, it was mentioned that fencing in safety zone and re-generation will be done by CCL. This has also been accepted by the Forest Deptt in all the cases where approval of MOEF for d release of forest land has been received. It may also be mentioned here that for Parej East OCP in Hazaribagh (East) and Urimari OCP in Hazaribagh (West), CCL has committed for fencing in safety zone area and re-generation and this was accepted by Bihar State Forest officials and a proposal was forwarded to MOEF, New Delhi and based on this, the final approval was received. Therefore, Rs.7,43,000/- (Rupees seven lakhs fortythree thousand only) has been deducted from the total demand placed by you.

Enclosed please find herewith the following cheques in favour of DFO, Hazaribagh (West) for release of 43.30 Ha of forest land for Piparwar OCP which may kindly be acknowledged :-

(1) Cheque No.	\71/100-424943	- Rs. 74,43,408.12
(2) -do-	A71/100-424944	- Rs. 4,33,000.00
Total		Rs 78,76,408.12

contd...p/2.

Since the compensatory land has already been provided from the Govt land in village Kalyanpur and same has been made for notification in protected forest and also the cost of forest growth etc has been deposited.

You are kindly requested to send the compliance report to the Ministry of Env & Forest so that the final approval can be received from them.

Thanking you.

Yours faithfully.

Sd/-

(A.K.Tripathi)
General Manager (Env-Land)

Encls : Two cheques

Copy to (1) PCCF, Bihar
P.O. Hinoo, Ranchi

(2) CCF (Development)/Nodal Officer.
P.O. Hinoo, Ranchi.

(3) RCCF, Hazaribagh.
(4) CF, Hazaribagh.

cc (1) Dir(Tech)/P&P - for kind information.

(2) Chief of Rev.
(3) GM,Piparwar.

GM (Env-Land) 1/5/94

AnyScanner

GM(Env.Land)/94/ 1237

18th July, 94.
21

To

The Principal Chief Conservator of Forest
P.O.Hinoo
Ranchi

Sub: Diversion of 43.3 Ha of forest land for coal mining in Piparwar OCP of CCL in Hazaribagh District/

Dear Sir,

Conditional approval for release of 43.3 Ha of forest land was issued by Ministry of Environment and Forest,New Delhi vide letter No.8-172/89-F.C. dated 3/11.1993. The following conditions were laid down in the conditional approval:

1. Immediate action should be taken for transfer and mutation of equivalent non-forest land in favour of State Forest Department.

   Action taken by C.C.L.

   Equivalent Government land was provided for compensatory land from the village Kalyanpur and Mandar. The same was accepted by State Forest Department and has been notified as protected forest.

   Thus CCL has fulfilled this condition.

2. The user agency will transfer the cost of compensatory afforestation in favour of Forest Department.

   Action taken by CCL

   C.C.L. has deposited Rs.78,96,408.12 vide cheque No.A-71/100-424944 and A-71/100-424943 dated 31.1.94 towards cost of forest growth, net present value,etc. Thus C.C.L. has deposited the amount as has been demanded by D.F.O. Hazaribagh West.

3. The user agency will transfer the cost of enrichment plant over degraded forest land equivalent to 1.1/2 times of safety zone area and also cost of re-generation and fencing of safety zone area.

   Action by C.C.L.

   The cost of plantation over degraded forest land equivalent to 1.5 times of safety zone has been deposited by C.C.L. along with the approval of release of 13.11 Ha of forest land for Piparwar OCP for which final clearance has been obtained vide dated 2.12.1992 by Ministry of

..2..

AnyScanner

Environment and Forest. The cost of re-generation and fencing of safety zone to the tune of Rs.7,43,000-00 are paid vide cheque No.0499813 dated 5.7.94 enclosed with letter No.LA/1-571/91-2000-06 dated 13.7.1994 addressed to D.F.O.,Hazaribagh West(copy enclosed).

From the above it can be seen that C.C.L. has fulfilled all the conditions as has been mentioned in the conditional approval letter. It is therefore requested that the compliance report may kindly be sent to Ministry of Environment and Forest,New Delhi for issue of final approval letter.

Thanking you,

Yours faithfully

/

A.K. Tripathi
General Manager (Env.- Land)

Copy to:

The Chief Conservator of Forest/
Nodal Officer
P.O.Hinoo
Ranchi

General Manager(Env.Land)

AnyScanner

ANX-III/4

कार्यालय प्रधान मुख्य वन संरक्षक, झारखंड, राँची ।

पत्रांक-उप्रो-[illegible]-129 दिनांक- 10.1.03

प्रेषक,

प्रधान मुख्य वन संरक्षक,
झारखंड, राँची ।

सेवा में,

सरकार के सचिव,
वन एवं पर्यावरण विभाग,
झारखंड राँची ।

प्राप्ति
वन एवं पर्यावरण विभाग
क्र॰ सं॰ 263
11 JAN 2003
झारखण्ड, राँची

विषय:- पिपरवार परियोजना के लिए सी॰सी॰एल॰ द्वारा 43.80 हे॰ वनभूमि हस्तान्तरण हेतु वनरोपण के लिए गैर वनभूमि दिये जाने के सम्बन्ध में ।

प्रसंग:- (1) इस कार्यालय के पत्रांक 6504 दिनांक 20.12.92 एवं पत्रांक 2565 दिनांक 24.6.96

महाशय,

उपर्युक्त विषय के सम्बन्ध में सूचित करना है कि पिपरवार परियोजना के लिए सी॰सी॰एल॰ द्वारा क्षतिपूरक वृक्षारोपण हेतु ग्राम कल्याणपुर थाना टण्डवा जिला चतरा एवं ग्राम मांगडा थाना टण्डवा जिला चतरा में क्रमश: 31.77 हे॰ एवं 22.02 हे॰ कुल 53.79 हे॰ गैर वनभूमि उपलब्ध कराया गया है । उक्त गैर वनभूमि का संयुक्त सर्वेक्षण सी॰सी॰एल॰ एवं वन पदाधिकारियों द्वारा की गयी थी और यह गैर वनभूमि अतिक्रमणमुक्त एवं वृक्षारोपण के योग्य पाया गया था ।

भारतीय वन अधिनियम 1927 की धारा 29 के अन्तर्गत उक्त गैर वनभूमि को सुरक्षित वन घोषित करने हेतु अधिसूचना का प्रारूप हिन्दी एवं अंग्रेजी में तीन-तीन प्रतियों के साथ बिहार सरकार वन एवं पर्यावरण विभाग, पटना को इस कार्यालय के पत्रांक 6504 दिनांक 20.12.92 (छाया प्रति संलग्न) द्वारा भेजा गया था, परन्तु उक्त गैर वनभूमि को अभी तक राज्य सरकार द्वारा सुरक्षित वन के रूप में घोषित किया गया है, अथवा नहीं, इसकी जानकारी बिहार सरकार से अभी तक अप्राप्त है । पुन: उक्त भूमि को सुरक्षित वन घोषित करने हेतु इस कार्यालय के पत्रांक 2565 दिनांक 24.6.96 द्वारा बिहार सरकार वन एवं पर्यावरण विभाग, पटना को स्मारित किया गया है परन्तु राजकीय गजट में सुरक्षित वन घोषित करने की कार्रवाई से संबंधित सूचना अप्राप्त है । पूर्व प्रेषित अधिसूचना प्रारूप की प्रतिलिपि भेजी जा रही है ।

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अतः अनुरोध है कि बिहार सरकार वन एवं पर्यावरण विभाग द्वारा यदि उक्त गैर वनभूमि को सुरक्षित वन (Protected Forests) के रूप में घोषित किया जा चुका है तो अधिसूचना संबंधी अभिलेख बिहार सरकार से अपने स्तर से भी प्राप्त करने हेतु आवश्यक कार्रवाई करने की कृपा की जाय। यदि बिहार सरकार द्वारा संबंधित अधिसूचना अभी तक जारी नहीं की गयी है, तो वैसी स्थिति में संबंधित भूमि को पी॰एफ॰ घोषित करने की कार्रवाई की जाय।

अनु:- यथोक्त।

विश्वासभाजन,
10.1.03
प्रधान मुख्य वन संरक्षक,
झारखंड, रांची।
10/1/2003

(टिप्पणी)
30/12/02

CHAPTER –I

INTRODUCTION

1.1 BACKGROUND

Piparwar UG(Phase-I) (0.87 Mty) has been prepared for extraction of lower bachra seam in Piparwar coal block (including part of extended lease boundary of Piparwar opencast) and is approved by CCL Board in 465rd meeting of CCL Board held on 18.09.2018 and 73rd meeting of the ESC of CCL held on 18.09.2020.

1.1.1 BRIEF ABOUT EARLIER REPORT

The details of earlier report are as under:

Year of Preparation	Year of Approval (In Principle)	Technology adopted	Production Capacity(Mty)
2009	2011	CM + LHD	1.38

Earlier report was in the combined area of Piparwar and Mangardaha coal block.

1.2 EXPLORATION STATUS

The area considered for the proposed Piparwar Underground(Phase-I) project falls in Piparwar Block and is geologically explored but the borehole intersection up to the considered Lower Bachra seam is very low. The exploration work was mainly to prove the quarriable seams i.e. up to lower Dakra seam. Number of boreholes and meterage drilled by the various agencies and period of drilling thereof, in the Piparwar blocks is as under:

Table no.-1.1: Details of Drilling

Period of drilling	Agency	Area (Sq. Km)	No. of BH	Borehole Intersected LBS	Meterage (m)
1963-65	GSI	6.38	2		535.95
1979-82	CMPDI	6.38	70		7664.20
Total			**72**	**28**	**8000.15**

Borehole Density within Piparwar Block & within proposed UG mining area of Piparwar UG (Phase-I) for Lower Bachra seam are around 4.38 & 4.21 respectively. Total 17 number of borehole intersection within the proposed UG mining area (4.03 sq.km within Piparwar block) of Piparwar UG (Phase-I).

1.3 MINING ACTIVITY, IF ANY

Piparwar opencast for extraction of overlying seam (i.e up to Lower Dakra Seam) was in operation within the geological block considered for planning. Presently opencast mining in lower Dakra seam is already complemented in the extended lease area of Piparwar opencast

SANJAY KUM...
Project Officer
Piparwar U/G

(i.e in Bijan Basti). The proposed UG mining area / project area of Piparwar UG (Phase-I) will be either within the de-coaled area or below internal dump of piparwar opencast.

1.4 JUSTIFICATION OF PROJECT REPORT

- Seams from Karkatta to lower Dakra is extracted by Piparwar opencast.The underlying seams of Lower Dakra seam within the geological block are upper Bachra and lower Bachra seam. Upper bachra seam is not workable due to its low thickness (generally less than 0.90m). Lower Bachra seam lies around 100m below the floor of Piparwar opencast (i.e floor of lower Dakra seam) having thickness ranges from 0.74m (NNKP-46) to 8.42m (NNKP-16) (in major part 2 to 3m) is workable. The extraction of lower Bachra seam by opencast will not be economically viable. Hence, extraction of lower Bachra seam is possible only by underground mining method.
- Underground coal production of CCL is declining gradually. Hence, to enhance the underground coal production of CCL by introducing mass production technology. The geo-mining parameters of the area selected for the project is very much suitable for introduction of mass production technology as continuous miner. Introduction of CM will help in meeting the demand of good quality non-coking coal and will reduce the gap between demand and supply of coal in CCL.
- Area selected for the project is already acquired and are in possession of Piparwar opencast and have sufficient extractable reserve (at least one life cycle) for deployment of continuous miner technology as mass production. No rehabilitation & resettlement will be required for the proposed Piparwar UG (Phase-I).

1.5 SALIENT FEATURES OF PROPOSED PROJECT REPORT

The salient features of the proposed project report is as under:

S.N	Parameters	Values
1	Production Capacity (Nominal Capacity)	0.87 MTY
2	Recommended Capacity for EMP (150%)	1.305 MTY
3	Life of the Project	14 Years
4	Seam Proposed to work	Lower Bachra (Bottom Section)
5	Range / Av. grade of Coal	G-4 to G-8 *(Generally G-4 to G-6)* (Weighted average. G-5)
6	Total Extractable Reserve (M.Te)	8.83 M.Te
7	Method of Mining Proposed	Bord & Pillar with CM (Low Height CM & Standard Height CM)

17/5/23
SANJAY KUMAR
Project Officer
Piparwar UG

9	Underground Coal Evacuation System	Through Belt Conveyors
10	Man & Material Supply System	Free Steered Vehicles & multi utility Vehicles
11	Total Land required for the Project	464.69 Ha
12	Acquisition & Possession Status of Land	Acquired & Possessed by Piparwar OC

1.6 DIFFICULTIES AND CONSTRAINTS IN MINING WITH ASSOCIATED RISK

- Seam considered for underground mining (i.e Lower Bachra seam) falls in Karharbari group of seam which shows very erratic behavior in roof, floor and quality of seam in the coalfield. Borehole density for lower Bachra seam is low. Therefore, there may be chances of getting erratic roof & floor behaviour (i.e weak roof & floor) and variation in seam thickness & coal quality while actual mining.
- Drilling from surface for increasing borehole density is practically difficult due to internal dumping over the proposed UG mining area.
- The general thickness of lower Bachra seam in the proposed mining area varies from 1.5m to 7.0m (as per isochore plan).The concentration of bands generally exists in upper part of the seam. Working entire seam thickness in higher seam thickness range may reduce the quality of coal. The proposed PR envisages extraction of generally clean bottom section along the floor of seam to maintain the quality of coal. Hence selection of proper working horizon i.e. generally clean bottom section of Lower Bachra Seam will be essential. Improper selection of bottom section may lead to quality reduction.
- The propose UG working will be below internal dump of Piparwar opencast. The dead weight of internal dump may cause problem in maintaining the roof strata in underground. Further increase in dump height within the proposed UG mining area may also endanger the pillar stability of the proposed underground.
- The mine entries for the proposed underground are proposed from the floor of the quarry which will be around 70m below original surface level. Diverted Bendi Nala and Mangardaha nala are flowing in the south and north of proposed UG project area & Damodar River makes the eastern boundary of proposed Piparwar UG(Phase-I). These rivers / nala may be potential source of surface inundation. However, the proposed PR envisages required safety precaution for the same.
- The present status of proposed incline site (i.e at the floor of Quarry-1 of Piparwar OC) is waterlogged (around 242 million gallon water) which needs to be de-watered. Surface sump area is filled in patches which need to be cleaned.

SANJAY KUMAR
Project Officer
Piparwar U/G

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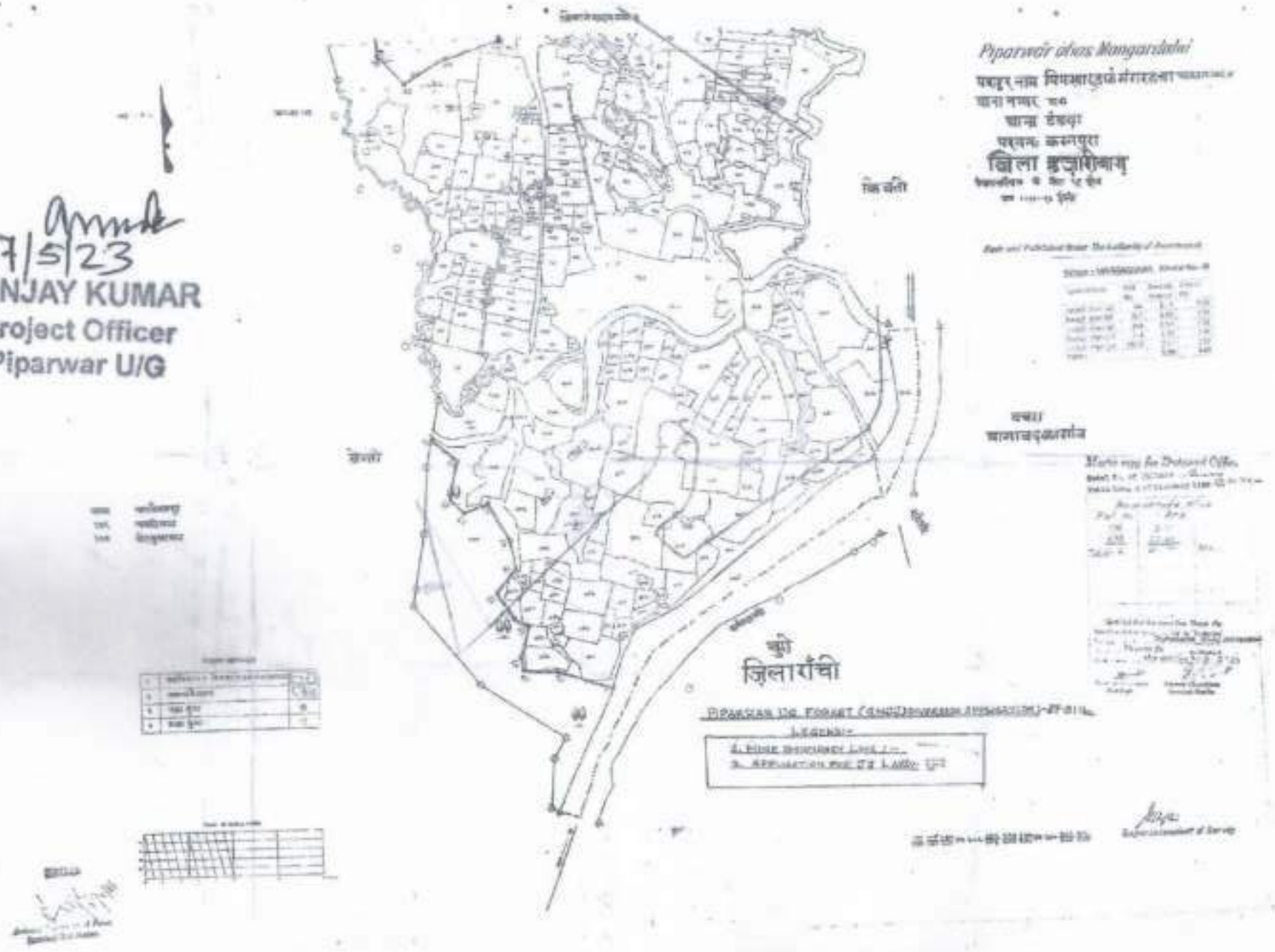
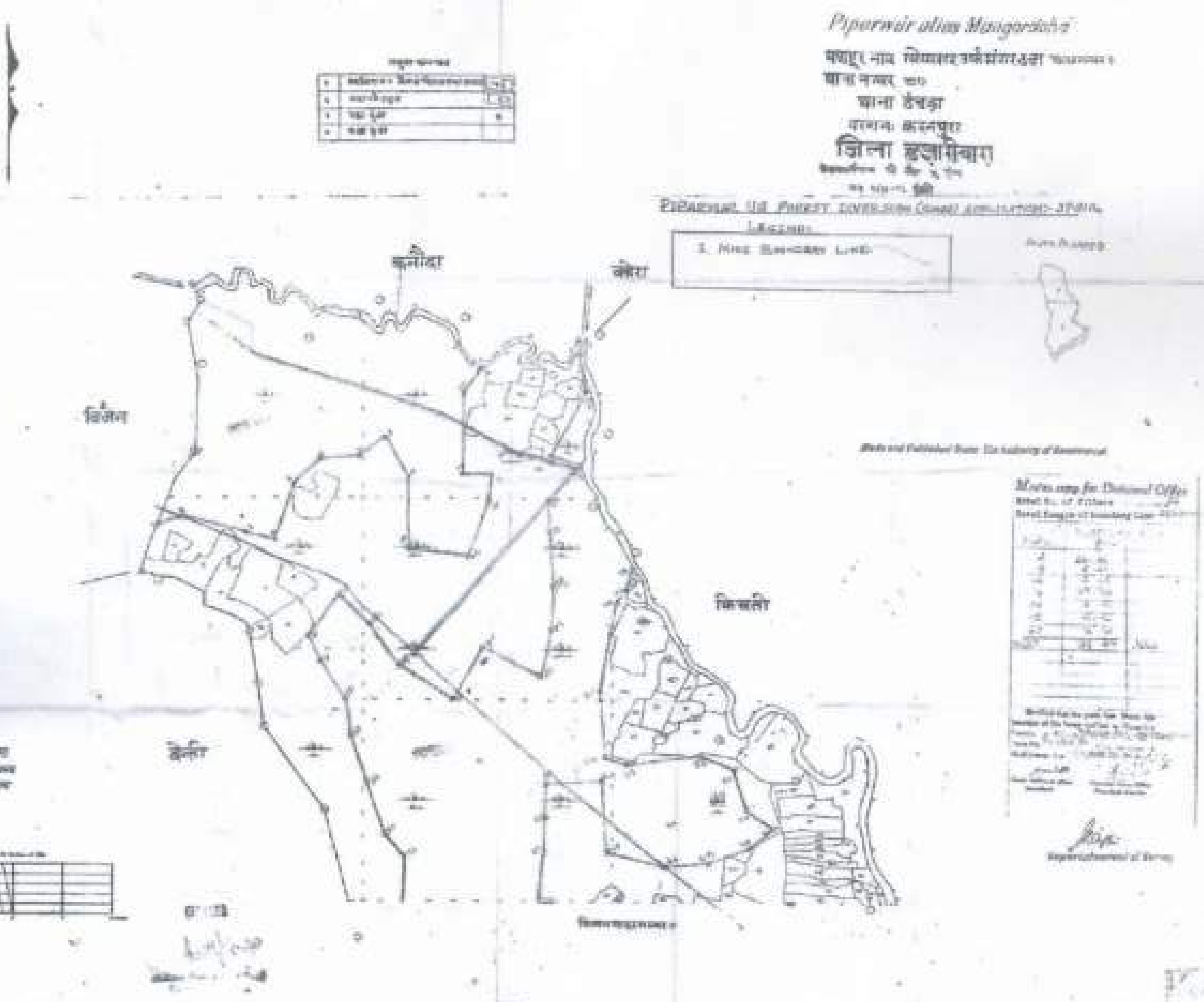
SANJAY KUMAR
Project Officer
Piparwar U/G

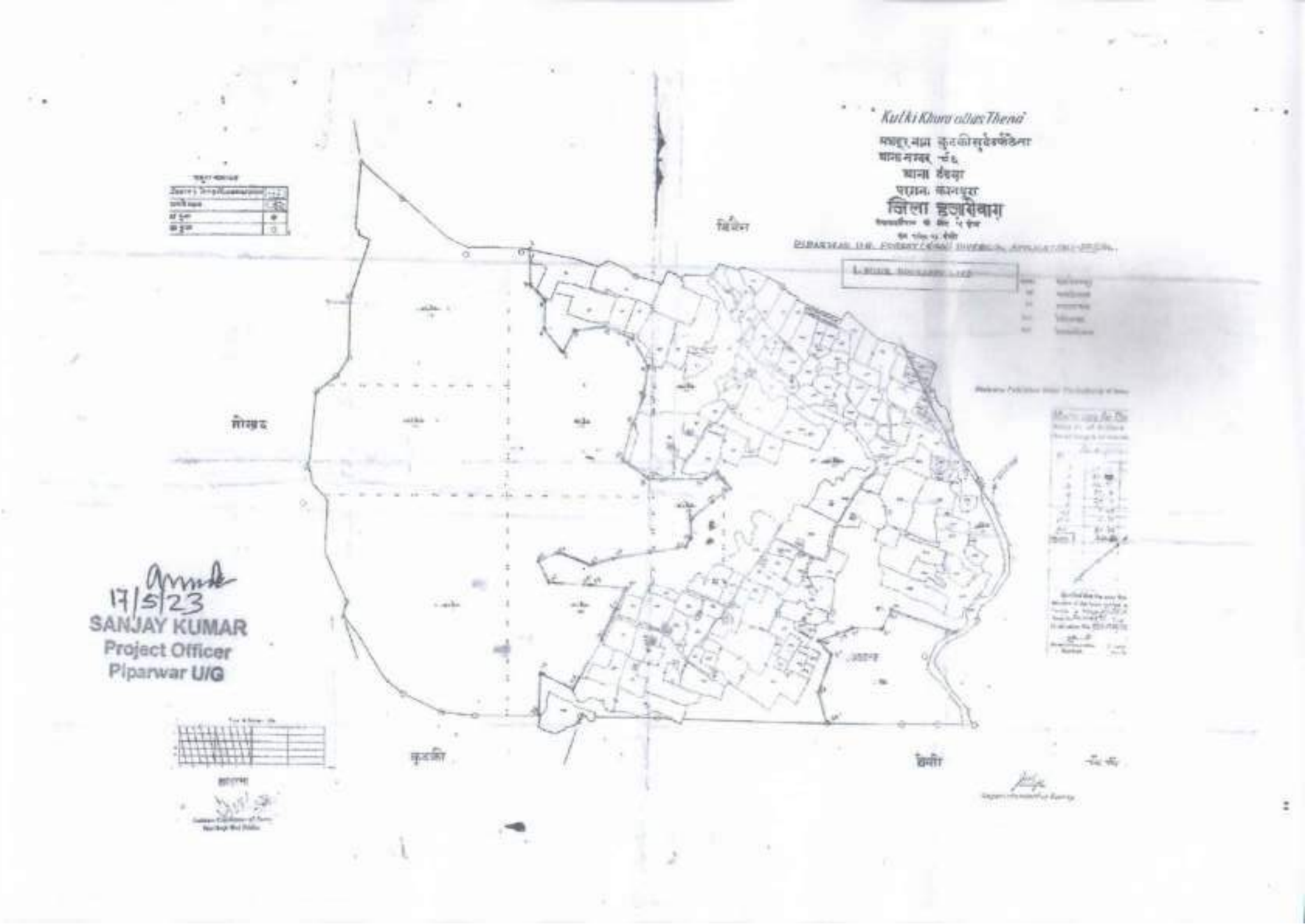


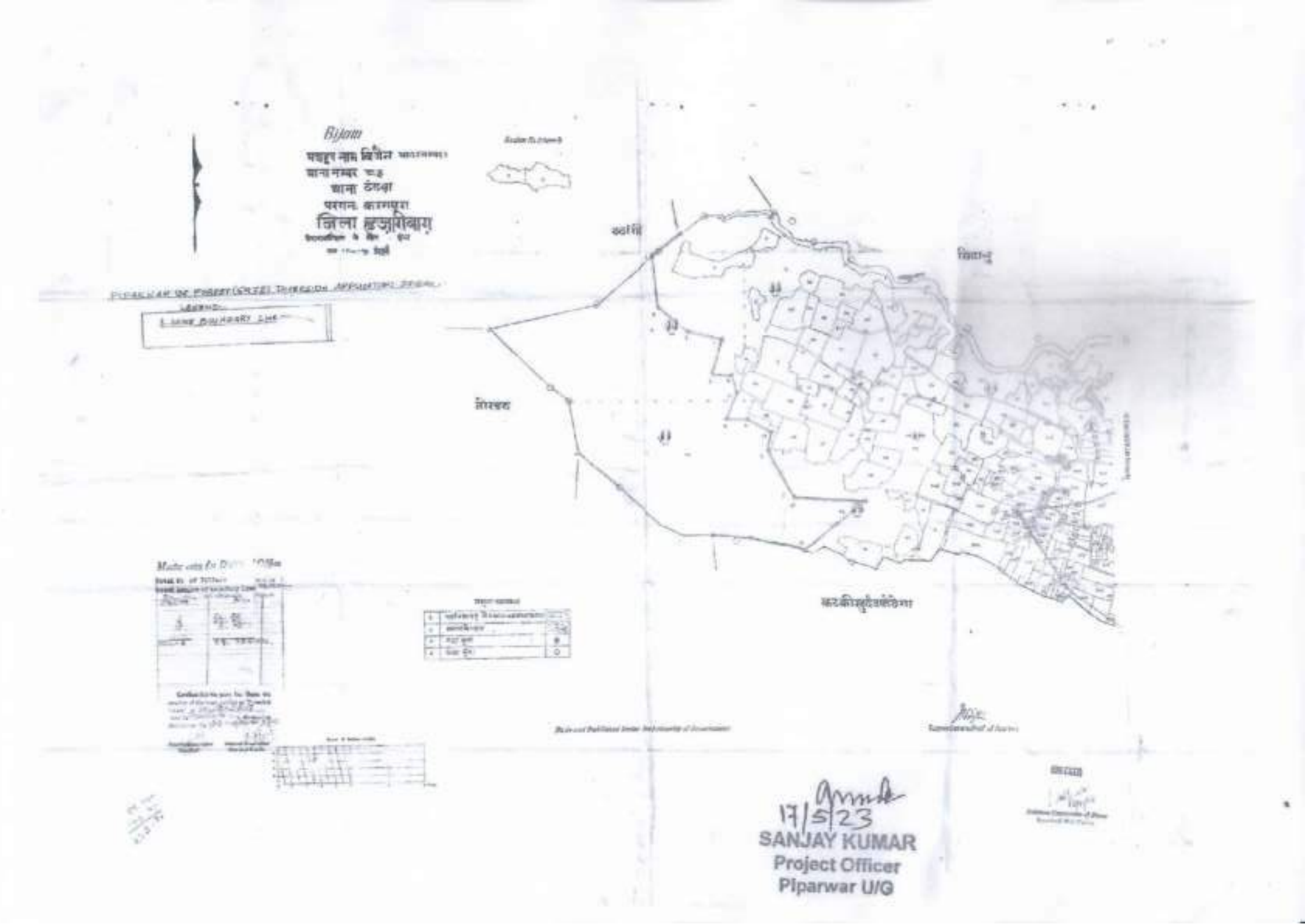
17/5/23
SANJAY KUMAR
Project Officer
Piparwar U/G



17/5/23
SANJAY KUMAR
Project Officer
Piparwar U/G

17/5/23
SANJAY KUMAR
Project Officer
Piparwar U/G


Kurki Khurd alias Thenia
जिला हजारीबाग
17/5/23
SANJAY KUMAR
Project Officer
Piparwar U/G


Bijom
जिला हजारीबाग
17/5/23
SANJAY KUMAR
Project Officer
Piparwar U/G

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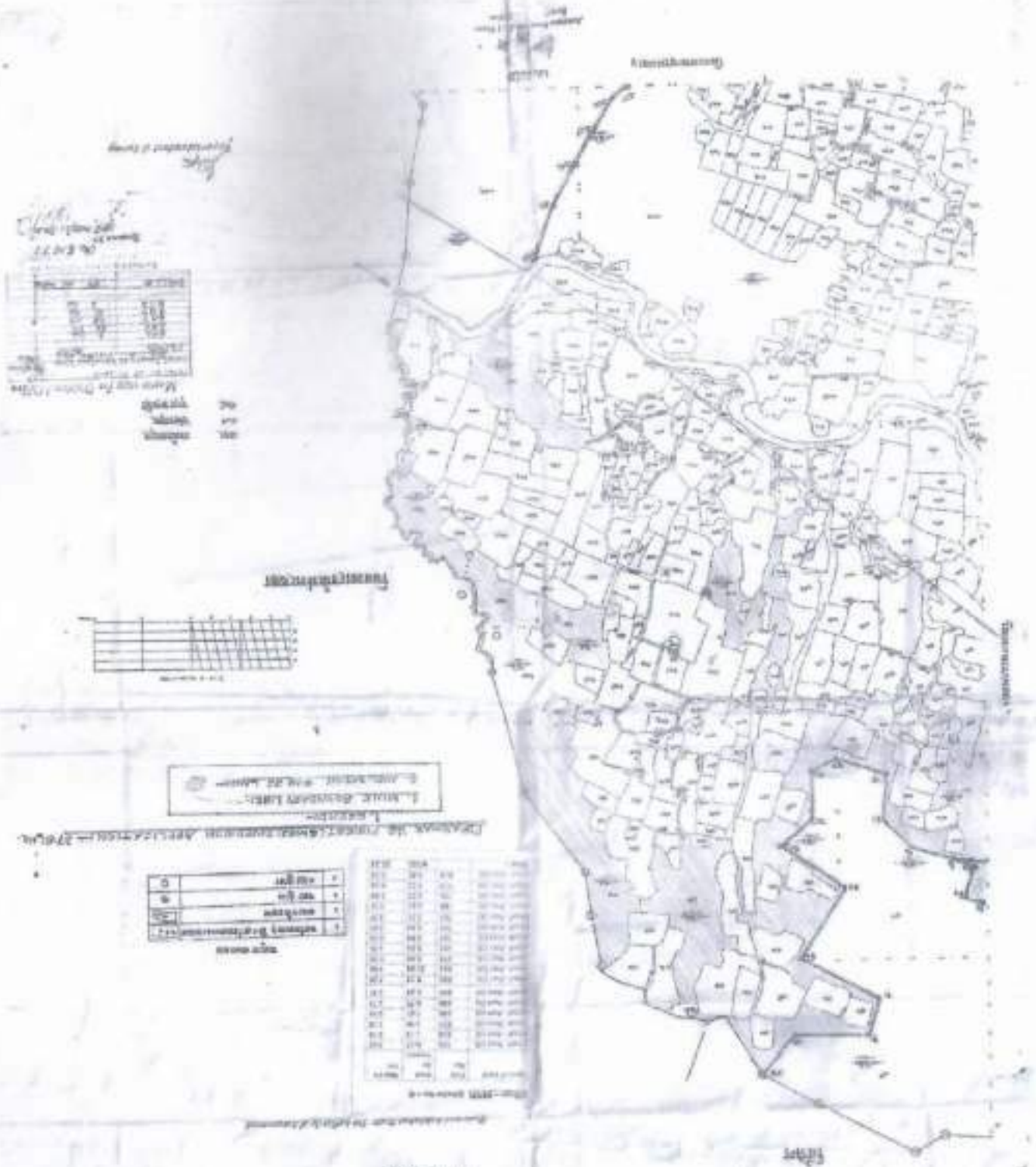
SANJAY KUMAR
Project Officer
Piparwar U/G

17/5/23
SANJAY KUMAR
Project Officer
Piparwar U/G



17/5/23
SANJAY KUMAR
Project Officer
Piparwar U/G

(113)

कार्यालय, अनुमण्डल पदाधिकारी, सिमरिया (चतरा)।

पत्रांक– 18 / दिनांक– 08.01.020

प्रेषक,

अनुमण्डल पदाधिकारी,
सिमरिया।

सेवा में,

अपर समाहर्त्ता,
चतरा।

विषय:– दिनांक–08.01.2020 को अनुमण्डल स्तरीय वनाधिकार समिति में पारित प्रस्तावों का प्रेषण के संबंध में।

प्रसंग:– अंचल अधिकारी, टण्डवा का पत्रांक–1313, दिनांक–26.11.2019

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के संदर्भ में वन अधिकार अधिनियम 2006 के तहत् सी०सी०एल० अंतर्गत पिपरवार फेज–1 भूमिगत खदान के लिए ग्राम– मंगरदाहा, बिजैन एवं मासनहुवा के [illegible] हे० वन भूमि एवं 37.82 हे० जंगल झाड़ी भूमि अपयोजन हेतु अनुमण्डल स्तरीय वनाधिकार समिति में पारित प्रस्ताव एवं उक्त ग्रामों के ग्राम सभा की पंजी को इस पत्र के साथ संलग्न कर अग्रेतर कार्रवाई हेतु भेजा जाता है।

कृपया प्राप्ति स्वीकार करें।

अनुलग्नक – यथोक्त।

विश्वासभाजन

08/01/2020

अनुमण्डल पदाधिकारी,
सिमरिया।

8/1/2020

17/5/23
SANJAY KUMAR
Project Officer
Piparwar U/G

(112)

आज दिनांक–08.01.2020 को अनुमण्डल स्तरीय वन अधिकार समिति–सह–अनुमण्डल पदाधिकारी, सिमरिया की अध्यक्षता में वन अधिकार अधिनियम से संबंधित बैठक की कार्यवाही।

उपस्थिति: पंजी में संलग्नित।

सर्वप्रथम बैठक में उपस्थित पदाधिकारियों एवं सदस्यों का स्वागत किया गया तथा निम्नलिखित निर्णय लिया गया।

1 सी०सी०एल० अन्तर्गत पिपरवार फेज–1 भूमिगत खदान :–

सी०सी०एल० अन्तर्गत पिपरवार फेज–1 भूमिगत खदान के लिए 128.14 हे० वन भूमि एवं 32.42 हे० जंगल–झाड़ी भूमि अपयोजन हेतु वन अधिकार अधिनियम, 2006 अंतर्गत दिनांक–27.09.2019 को ग्राम–संगरदाहा, बिजैन एवं ग्राम–गालबहुरा में ग्रामसभा का आयोजन किया गया। उक्त ग्रामसभा की पंजी अंचल अधिकारी, टण्डवा के पत्रांक–1313, दिनांक–26.11.2019 के द्वारा प्राप्त है।

उक्त परियोजना हेतु ग्राम–संगरदाहा, बिजैन एवं ग्राम–गालबहुरा में भूमि अपयोजन हेतु ग्रामसभा में सदस्यों द्वारा सहमति जताते हुए NOC दिया गया, जिसकी विवरणी निम्नवत् है:–

क्र० सं०	ग्राम	खाता सं०	प्लॉट संख्या	वन भूमि (हे०)	जंगल–झाड़ी (हे०)	कुल रकबा (हे०)	अभ्युक्ति
1.	संगरदाहा	22	04	2.19	–	2.19	
2.		22	12	1.00	–	1.00	
3.		22	13	15.80	–	15.80	
4.		22	14	7.63	–	7.63	
5.		22	57	5.46	–	5.46	
6.		22	64	–	0.30	0.30	
7.		22	176	1.50	–	1.50	
8.		22	267	–	0.02	0.02	
9.		22	275P	10.97	–	10.97	
10.		22	344	–	0.22	0.22	
11.		22	354	–	0.76	0.76	
12.		22	281P	–	1.12	1.12	
	कुल			44.55	2.42	46.97	
13.	बिजैन	01	278P	6.68	–	6.68	
14.		01	289P	9.32	–	9.32	
15.		01	279P	8.80	–	8.80	
	कुल			24.80	000	24.80	

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17.		98	2P	–	2.85	2.85	
18.		98	9	11.13	–	11.13	
19.		98	16P	2.33	0.90	3.23	
20.		98	52P	14.09	4.53	18.62	
21.		98	591	–	0.02	0.02	
22.		98	618	–	0.49	0.49	
23.		98	624	–	1.58	1.58	
24.		98	640	0.95	0.99	1.94	
25.		98	644	10.12	2.73	12.85	
26.		98	647	11.53	2.12	13.66	
27.		98	660	–	3.28	3.28	
28.	गढ़महुरा	98	661	–	4.86	4.86	
29.		98	701	–	0.59	0.59	
30.		98	703	–	1.36	1.36	
31.		98	707	–	0.76	0.76	
32.		98	740	–	2.55	2.55	
33.		98	761	–	1.30	1.30	
34.		98	766	–	1.56	1.56	
35.		98	790	–	2.68	2.68	
36.		98	813	–	0.09	0.09	
37.		98	814	–	0.16	0.16	
			887P	8.64	–	8.64	
		कुल		58.79	35.39	94.18	
	तीनों ग्रामो का कुलयोग–			128.14	37.82	165.97	

उपर्युक्त परियोजना हेतु उक्त ग्रामो के ग्राम–सभा की अनापत्ति के आधार पर राजस्व, निबंधन एवं भूमि सुधार विभाग, झारखण्ड सरकार के पत्रांक–05/सदमू0 विविध–250/2018/4908(5)रा0, दि0 17.12.2019 के आलोक में गैरमजरूआ Deemed Forest (जंगल–झाड़ी, जंगल–सखुआ, जगल इत्यादि) भूमि के उपयोजन हेतु NOC/FRA उक्त भूमि का 90 प्रतिशत राशि सरकारी कोषागार में अधियाची संस्थान द्वारा जमा कराने के पश्चात् ही निर्गत करने की कार्रवाई करने का निर्देश प्राप्त है।

9-1-2020

17/1/20

(110)

अतः अनुमण्डल स्तरीय वनाधिकार समिति सर्वसम्मति से उक्त परियोजना हेतु इस प्रस्ताव को अनुशंसा जिला स्तरीय वनाधिकार समिति को इस शर्त के साथ करती है कि अधियाची संस्थान द्वारा उक्त भूमि का 80 प्रतिशत राशि सरकारी कोषागार में जमा करने के पश्चात् NOC/FRA निर्गत करने की कार्रवाई की जाय।

अंत में धन्यवाद ज्ञापन के साथ बैठक की कार्यवाही समाप्त की गई ।

श्रीमति मीना देवी, सदस्य
अनुमण्डल स्तरीय वन अधिकार समिति

सुश्री पुष्पा नाग, सदस्य
अनुमण्डल स्तरीय वन अधिकार समिति

अंचल अधिकारी
टण्डवा

वन क्षेत्र पदाधिकारी,
टण्डवा वन प्रक्षेत्र

प्रभारी अनुमण्डल कल्याण पदाधिकारी,
सिमरिया

सहायक वन संरक्षक,
चतरा दक्षिणी वन प्रमण्डल

अध्यक्ष,
अनुमण्डल स्तरीय वन अधिकार समिति
–सह–
अनुमण्डल पदाधिकारी,
सिमरिया।

ज्ञापांक– 17 / सा0, दिनांक– 08/01/2020

प्रतिलिपि:–
1. उपायुक्त, चतरा को सादर सूचनार्थ प्रेषित।
2. वन प्रमण्डल पदाधिकारी, दक्षिणी वन प्रमण्डल, चतरा को सूचनार्थ प्रेषित।
3. जिला कल्याण पदाधिकारी, चतरा को सूचनार्थ प्रेषित।
4. सम्बद्ध सभी ग्रामों के वन अधिकार समिति को अध्यक्ष/सचिव को सूचनार्थ प्रेषित
5. सभी सदस्यों को सूचनार्थ प्रेषित।

अध्यक्ष,
अनुमण्डल स्तरीय वन अधिकार समिति
–सह–
अनुमण्डल पदाधिकारी,
सिमरिया।

17/5/23
SANJAY KUMAR
Project Officer
Piparwar U/G

अँचल अधिकारी टण्डवा
जिला-चतरा

पत्रांक : 1082 दिनांक : 06/09/19

प्रेषक,

अंचल अधिकारी
टण्डवा।

सेवा में,

अनुमण्डल पदाधिकारी
सिमरिया।

विषय :- सी०सी०एल० अन्तर्गत पिपरवार फेज - 1 भूमिगत खदान के लिए अपर्यांवित वन भूमि के FRA/NOC के संबंध में।

प्रसंग :- अपर समाहर्ता, चतरा का पत्रांक - 982 / रा० दिनांक 03-09-2019

महाशय,

[illegible] विषयक प्रासंगिक पत्र के आलोक में सी०सी०एल० अन्तर्गत पिपरवार फेज - 1 भूमिगत परियोजना हेतु कोयला खनन के लिए अपर्यांवित वन भूमि - 128.14 Ha. एवं गैरमजरूआ खास जंगल-झाड़ी - 37.81 Ha. (कुल- 165.95 Ha. - जिसका Authenticated [illegible] Data संलग्न है) के FRA / NOC के लिए अनुशंसा की जाती है।

उक्त भूमि में पूर्व में पिपरवार परियोजना अन्तर्गत कोयला खनन किया जा चुका है एवं [illegible]6.50 Ha. वन भूमि का पिपरवार परियोजना के लिए भारत सरकार के वन एवं पर्यावरण मंत्रालय से Forest Clearance प्राप्त है।

अनुलग्नक :- यथोक्त

विश्वासभाजन

अँचल अधिकारी
टण्डवा

पत्रांक : 1082 दिनांक : 06/09/19

प्रतिलिपि :- अपर समाहर्ता, चतरा को सूचनार्थ प्रेषित।

अंचल अधिकारी [illegible]

17/5/23
S[illegible]JAY KUMAR
Project Officer /
Piparwar U/G

अँचल अधिकारी, टण्डवा
जिला - चतरा

पत्रांक : – 1313

दिनांक- 26.11.2019

प्रेषक,

अँचल अधिकारी
टण्डवा।

सेवा में,

अनुमण्डल पदाधिकारी
सिमरीया।

विषय : सी0 सी0 एल0 अन्तर्गत पिपरवार फेज - 1 भूमिगत खदान के लिए अपयोजित वन भूमि एवं गैरमजरूआ खास जंगल-झाड़ी के FRA / NOC के संबंध में।

प्रसंग : 1. अपर समाहंता, चतरा का पत्रांक 982/ रा0 दिनांक 03-09-19 एवं
2. अनुमंडल पदाधिकारी, सिमरीया का पत्रांक 1026/अनु0 दिनांक 12-09-2019.

महाशय,

उपर्युक्त विषयक प्रासंगिक पत्र के आलोक में सी0 सी0 एल0 अन्तर्गत पिपरवार फेज - 1 भूमिगत परियोजना हेतु कोयला खनन के लिए अपयोजित वन भूमि - 128.14 Ha. एवं गैरमजरूआ खास जंगल - झाड़ी - 37.81 Ha. (कुल -165.95 Ha.- जिसका Authenticated Land Schedule पत्र के साथ संलग्न है) के FRA / NOC के लिए ग्राम - सभा की सहमति / अनुमोदन के आलोक में उक्त अपयोजित वन भूमि एवं गैरमजरूआ खास जंगल-झाड़ी के FRA / NOC के लिए अनुशंसा की जाती है। ग्राम - सभा की सहमति / अनुमोदन की कार्यवाही पंजी की छायाप्रति संलग्न की जा रही है।

उक्त भूमि में पूर्व में पिपरवार परियोजना अन्तर्गत कोयला खनन किया जा चुका है एवं 186.50 Ha. वन भूमि का पिपरवार परियोजना के लिए भारत सरकार के वन एवं पर्यावरण मंत्रालय से Forest Clearance प्राप्त है।

अनुलग्नक :- यथोक्त

किया
26/11/19

विश्वासभाजन

अँचल अधिकारी
टण्डवा

पत्रांक : 1313 दिनांक : 26/11/19

प्रतिलिपी :- अपर समाहंता, चतरा को सूचनार्थ प्रेषित।

17/5/23
SANJAY KUMAR

अँचल अधिकारी

कार्यालय, अँचल अधिकारी, टण्डवा (चतरा)

पत्रांक: -1625

दिनांक - 20.09.2019

कार्यालय आदेश

अनुमण्डल पदाधिकारी सिमरिया के पत्रांक संख्या 1026 / अनु० दिनांक 12/09/2019 के आलोक में पिपरवार फेज - I भूमिगत परियोजना हेतु अपेक्षित वन-भूमि (128.14 हे०) एवं गैरमजरुआ खास (जंगल / झाड़ी-37.81 हे०) कुल 165.95 हे० भूमि के FRA / NOC के लिए संबंधित ग्राम वनाधिकार समिति के तत्वाधान में ग्राम-सभा का आयोजन किया जाना है।

उक्त के निमित ग्राम वनाधिकार समिति के अध्यक्ष के अध्यक्षता में निम्न कार्यक्रम के अनुसार ग्राम-सभा आयोजित कर भूमि का अनापत्ति प्रस्ताव संबंधित अँचल निरीक्षक / राजस्व कर्मचारी / अमीन के माध्यम से आवश्यक प्रतिवेदन के साथ उपलब्ध कराएँ।

ग्राम-सभा आयोजन का कार्यक्रम

क्रम	ग्राम वनाधिकार समिति	राजस्व निरीक्षक	दिनांक
क)	ग्राम वनाधिकार समिति बिजैत	श्री धर्मेन्द्र कुमार	27-09-19
ख)	ग्राम वनाधिकार समिति नंगरदाहा	श्री राजेन्द्र दोगी	27-09-19
ग)	ग्राम वनाधिकार समिति बेंती	श्री राजकुमार	27-09-19

अँचल अधिकारी
टण्डवा

13/5/23
SANJAY KUMAR
Project Officer
Pipparwar U/G

Note Books

Page No.
Date : 1 1

पिपरवार फेज -1 भुमिगत परियोजना हेतु

ग्राम सभा का

आयोजन

दिनांक :- 27/09/2019

17/5/23
SANJAY KUMAR

ग्राम - मंगरदाहा में ग्राम सभा का आयोजन

दिनांक - 27-09-2019

Note Books
Page No.
Date : / /

आज दिनांक 27-09-2019 को पंचायत - बहेरा के ग्राम मंगरदाहा, में अँचल अधिकारी, टड़वा के पत्रांक - 1129 दिनांक 20-09-2019 के आलोक में पिपरवार फेज - 1, भूमिगत परियोजना हेतु वनाधिकार अधिनियम - 2006 के तहत प्रस्ताव / सहमति हेतु ग्राम सभा का आयोजन किया गया।

ग्राम सभा की अध्यक्षता मुखिया श्रीमती कतरीना खाखा द्वारा की गई। मुखिया द्वारा ग्राम सभा को यह जानकारी दी गई की वर्त्तमान में मंगरदाहा गाँव में पिपरवार खुली खदान परियोजना हेतु खनन कार्य किया जा चुका है एवं ग्रामीणों का पुर्नवास भी किया जा चुका है।

कतरीना खाखा
मुखिया
बहेरा पंचायत

मुखिया
ग्राम पंचायत-बहेरा
प्रखंड-टण्डवा, जिला-चतरा

17/5/23

ग्राम सभा की कार्यवाही

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सभाध्यक्ष द्वारा ग्रामीणों को जानकारी दी गई कि पिपरवार फेज -1, भूमिगत परियोजना का निर्माण किया जाना है, जिसमें उक्त ग्राम में अधियोजित वन भूमि (मंगरदाहा - 44.55 Ha) एवं गैर मजरुआ खास जंगल झाड़ी (मंगरदाहा - 2.42Ha) है।

पिपरवार फेज -1, भूमिगत परियोजना हेतु वनाधिकार समिति एवं ग्रामीणों की सहमति की आवश्यकता है।

जमीन का खाता प्लोट निम्न है।

ग्राम	खाता संo	प्लोट संo	वनभूमि (हे०)	जंगलझाड़ी (हे०)	कुलवनभूमि (रकबा-हेक्टेयर)
मंगरदाहा	22	4	2.19	0.00	2.19
मंगरदाहा	22	12	1.00	0.00	1.00
मंगरदाहा	22	13	15.80	0.00	15.80
मंगरदाहा	22	14	7.63	0.00	7.63
मंगरदाहा	22	57	5.46	0.00	5.46
मंगरदाहा	22	64	0.00	0.30	0.30
मंगरदाहा	22	176	1.50	0.00	1.50
मंगरदाहा	22	267	0.00	0.02	0.02
मंगरदाहा	22	275P	10.97	0.00	10.97
मंगरदाहा	22	344	0.00	0.22	0.22
मंगरदाहा	22	354	0.00	0.76	0.76
मंगरदाहा	22	281P	0.00	1.12	1.12
			44.55	2.42	46.97

कुल वनभूमि - 46.97 Ha (वनभूमि - 44.55Ha एवं जंगलझाड़ी ... 1x

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मंगरहा गाँव को पूर्व में पुनर्वास रूप से पुर्नस्थापना कर कोयला खनन किया जा चुका है जिसके कारण वर्तमान में यहाँ कोई बसावट नहीं है।

अतः उक्त खाता / प्लॉट में पिपरवार फेज -1, भूमिगत परियोजना हेतु प्रस्ताव / सहमति का अनुमोदन किया जाता है।

कटरीना खाखा
मुखिया / सभाध्यक्ष
का हस्ताक्षर

मुखिया
ग्राम पंचायत [illegible]
[illegible], जिला- चतरा

C.C.L. प्रतिनिधि

1. [signature]

2. संजय कुमार

17/5/23
SANJAY KUMAR

ग्राम - बिर्जेन, में ग्राम-सभा का आयोजन

दिनांक - 27-09-2019

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आज दिनांक 27/09/2019 को पंचायत - बहेरा के ग्राम - बिर्जेन, में अंचल अधिकारी टंडवा के पत्रांक - 1129 दिनांक - 20/09/2019 के आलोक में पिपरवार फेज-1, भूमिगत परियोजना हेतु वनाधिकार अधिनियम 2006 के तहत प्रस्ताव | सहमति हेतु ग्राम सभा का आयोजन किया गया|

ग्राम सभा की अध्यक्षता मुखिया श्रीमती कतरीना खाखा द्वारा की गई| मुखिया द्वारा ग्राम सभा को यह जानकारी दी गई की वर्तमान में बिर्जेन गाँव में पिपरवार खुली खदान परियोजना हेतु खनन कार्य किया जा रहा है एवं ग्रामीणों का पुनर्वास किया जा रहा है|

पंचकौड़ी
अध्यक्ष
वनाधिकार समिति

कतरीना खाखा
मुखिया
बहेरा पंचायत

मुखिया
ग्राम पंचायत-बहेरा
प्रखण्ड-टण्डवा, जिला-[illegible]

17/5/23

ग्राम सभा की कार्यवाही

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सभाध्यक्ष द्वारा ग्रामीणों को जानकारी दी गई कि पिपरवार फेज -1, भूमिगत परियोजना का निर्माण किया जाना है. जिसमें उक्त ग्राम में अपयोजित वनभूमि (बिजैन - 24.80 Ha) एवं गैर मजरुआ खास जंगल झाड़ी (बिजैन - 0.00 Ha) है। पिपरवार फेज -1. भूमिगत परियोजना हेतु वनाधिकार समिति एवं ग्रामीणों की सहमति की आवश्यकता है।

जमीन का खाता प्लाट निम्न है।

ग्राम	खाता सं०	प्लोट सं०	वनभूमि (हे०)	जंगलझाड़ी (हे०)	कुल वनभूमि (रकबा-हेक्टेयर)
बिजैन	01	278P	6.68	0.00	6.68
बिजैन	01	289P	9.32	0.00	9.32
बिजैन	01	279P	8.80	0.00	8.80
			24.80	0.00	24.80

कुल वनभूमि - 24.80 हे० (जंगल झाड़ी - शुन्य)

अतः उक्त खाता/प्लोट में पिपरवार फेज-1 भूमिगत परियोजना हेतु वनाधिकार समिति ने सहमति प्रदान की एवं ग्राम सभा सर्व सम्मति से उक्त प्रस्ताव अनुमोदन करती है।

अंत में सधन्यवाद बैठक समाप्त की गई।

सचिव
वनाधिकार समिति

अध्यक्ष
वनाधिकार समिति

कतरीना खाखा
सभाध्यक्ष का हस्ताक्षर

मुखिया
ग्राम पंचायत-बहेरा
प्रखण्ड-टण्डवा, जिला-चतरा

CCL प्रतिनिधि

17/3/22
SANJAY KUMAR

1.

Page No.
Date : / /

	ग्रामीणों के नाम	हस्ताक्षर
1.	Shahnuddin munda	Shahnuddin munda
2.	[illegible]	[illegible]
3.	[illegible]	[illegible]
4.	[illegible]	[illegible]
5.	[illegible]	[illegible]
6.	md Abbas	md Abbas
7	[illegible]	[illegible]
8		

7/5/23
SANJAY KUMAR

ग्राम – मालमहुरा (बेंती) में ग्रामसभा का आयोजन

दिनांक – 27-09-2019

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Date : / /

आज दिनांक 27-09-2019 को पंचायत – बेंती के ग्राम – मालमहुरा में अँचल अधिकारी टंडवा के पत्रांक–नाम्रछ दिनांक 20-09-2019 के आलोक मे पिपरवार फेज–1 भूमिगत परियोजना हेतु वनाधिकार अधिनियम – 2006 के तहत प्रस्ताव। सहमति हेतु ग्राम सभा का आयोजन किया गया।

ग्रामसभा को यह जानकारी दी गयी की वर्तमान में ग्राम – मालमहुरा (बेंती) में पिपरवार खुली खदान परियोजना हेतु खनन कार्य किया जा चुका है एवं ग्रामीणों का पुर्नवास भी किया जा चुका है।

Pradip Kumar Kashi
वार्ड सदस्य
वार्ड संख्या–11
ग्राम पंचायत–बेंती
प्रखण्ड–टंडवा, जिला–चतरा

17/5/23
SANJAY KUMAR

ग्राम सभा की कार्यवाही

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सम्मेलन द्वारा ग्रामीणों को जानकारी दी गई कि पिपरवार फेज - I भूमिगत परियोजना का निर्माण किया जाना है जिसमें उक्त ग्राम में अपयोजित वन भूमि (मालमहुरा | बेंती - 58.79 Ha) एवं गैर मजरुआ खास जंगल झाड़ी (~~संचर~~ मालमहुरा | बेंती - 35.39 Ha) है।

पिपरवार फेज -1 भूमिगत परियोजना हेतु वनाधिकार समिति एवं ग्रामीणों की सहमति की आवश्यकता है।

जमीन का खाता प्लोट निम्न है।

ग्राम	खाता सं०	प्लोट सं०	वनभूमि (हे०)	जंगल झाड़ी (हे०)	कुल वनभूमि (रकबा-हेक्टेयर)
मालमहुरा (बेंती)	98	2P	0.00	2.85	2.85
मालमहुरा (बेंती)	98	9	11.13	0.00	11.13
मालमहुरा (बेंती)	98	~~16P~~	2.33	0.90	3.23
मालमहुरा (बेंती)	98	52P	14.09	4.53	18.62
मालमहुरा (बेंती)	98	591	0.00	0.02	0.02
मालमहुरा (बेंती)	98	618	0.00	0.49	0.49
मालमहुरा (बेंती)	98	624	0.00	1.58	1.58
मालमहुरा (बेंती)	98	640	0.95	0.99	1.94
मालमहुरा (बेंती)	98	644	10.12	2.73	12.85
मालमहुरा (बेंती)	98	647	11.53	2.12	13.66
मालमहुरा (बेंती)	98	650	0.00	3.28	3.28
मालमहुरा (बेंती)	98	661	0.00	4.86	4.86
मालमहुरा (बेंती)	98	701	0.00	0.59	0.59
मालमहुरा (बेंती)	98	702	0.00	1.36	1.36
मालमहुरा (बेंती)	98	707	0.00	0.76	0.76
मालमहुरा (बेंती)	98	740	0.00	2.55	2.55
मालमहुरा (बेंती)	98	764	0.00	1.30	1.30

17/5/23
SANJAY KUMAR

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ग्राम	खाता सं०	प्लॉट सं०	वनभूमि (हे०)	जंगल झाड़ी (हे०)	कुलवनभूमि रकबा हेक्टेयर
मालमहुरा (बेंती)	98	766	0.00	1.56	1.56
मालमहुरा (बेंती)	98	790	0.00	2.68	2.68
मालमहुरा (बेंती)	98	813	0.00	0.09	0.09
मालमहुरा (बेंती)	98	814	0.00	0.16	0.16
मालमहुरा (बेंती)	98	887/1	8.64	0.00	8.64
			58.79	35.39	94.18

कुल वनभूमि :- 94.18 Ha (वनभूमि - 58.79 Ha, एवं जंगल झाड़ी - 35.39 Ha.)

ग्राम - मालमहुरा (बेंती) का पुर्व में पुर्ण रुप से पुर्नस्थापन हेतु कोयला खनन किया जा चुका है, जिसके कारण वर्तमान में यहाँ कोई बसावट नहीं है।

अतः उक्त खाता/प्लॉट में विस्तारित फेज-II भूमिगत परियोजना हेतु प्रस्ताव/सहमति का अनुमोदन किया जाता है।

CCL प्रतिनिधि

1.

2. संजय कुमार

वार्ड सदस्य
वार्ड संख्या-11
ग्राम पंचायत-बेंती
प्रखण्ड-टण्डवा, जिला-बोकारो

17/5/23
SANJAY KUMAR

ग्रामीणों का हस्ताक्षर

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ग्राम - लालमहुरा (बैती पंचायत)

1. Pradip Kumar Kashd
2. हरिनारायण गंझू
3. रतन उरॉव
4. बसिंदु उरांव
5. धन्नी उरॉव
6. भोगवा उरांव
7. Sonmar Ganjhu
8. दिवाकर गंझू
9. कुलदीप उरांव
10. सुनील उरॉव
(11) तेजू गंझू
(12) चमन गंझू
(13) Sulendra Ganjhu
(14) [illegible]
(15) परमेश्वर उरॉव
(16) लालु उरॉव
(17) सूरजी देवी
(18) बीरो
(19) रोपन
(20) चांदो
(21). सुगनी

[signature]
19/5/23

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(22) विनोद गंझू

(23) महेश्वर उरांव

(24) Shyamlal Kr. Ganjhu.

(25) ~~विजय कुमार साहु~~

17/5/23

SANJAY KUMAR

Project Officer

Piparwar U/G

LAND SCHEDULE OF IN RESPECT OF PIPARWAR UNDER GROUND (PHASE -I)

Village	Khata no.	Plot no.	Land Required for PPR Phase 1 U/G in Ha.					Total Land Required for PPR Phase 1 U/G in Ha.
			Tenancy	GMK	Forest	Jangal Jhari	GMA	
Benti	98	2P	0.00	0.00	0.00	2.85	0.00	2.85
Benti	98	3	0.00	0.03	0.00	0.00	0.00	0.03
Benti	82	4	0.68	0.00	0.00	0.00	0.00	0.68
Benti	90	5	0.54	0.00	0.00	0.00	0.00	0.54
Benti	98	6	0.00	0.09	0.00	0.00	0.00	0.09
Benti	18	7	0.68	0.00	0.00	0.00	0.00	0.68
Benti	98	8	0.00	0.19	0.00	0.00	0.00	0.19
Benti	98	9	0.00	4.82	11.13	0.00	0.00	15.94
Benti	82	10	0.83	0.00	0.00	0.00	0.00	0.83
Benti	90	11	0.63	0.00	0.00	0.00	0.00	0.63
Benti	83	12	0.48	0.00	0.00	0.00	0.00	0.48
Benti	98	13	0.00	0.06	0.00	0.00	0.00	0.06
Benti	16	14	1.54	0.00	0.00	0.00	0.00	1.54
Benti	28	15	0.70	0.00	0.00	0.00	0.00	0.70
Benti	98	16P	0.00	9.51	2.33	0.90	0.00	12.74
Benti	16	40	1.37	0.00	0.00	0.00	0.00	1.37
Benti	12	41	0.42	0.00	0.00	0.00	0.00	0.42
Benti	12	42P	0.10	0.00	0.00	0.00	0.00	0.10
Benti	41	51P	0.16	0.00	0.00	0.00	0.00	0.16
Benti	98	52P	0.00	1.00	14.09	4.53	0.00	19.62
Benti	57	580P	0.04	0.00	0.00	0.00	0.00	0.04
Benti	98	581	0.00	0.02	0.00	0.00	0.00	0.02
Benti	57	582	0.13	0.00	0.00	0.00	0.00	0.13
Benti	98	583	0.00	0.25	0.00	0.00	0.00	0.25
Benti	14	586P	0.31	0.00	0.00	0.00	0.00	0.31
Benti	49	587	0.13	0.00	0.00	0.00	0.00	0.13
Benti	98	588	0.00	0.02	0.00	0.00	0.00	0.02
Benti	17	589	0.81	0.00	0.00	0.00	0.00	0.81
Benti	63	590	0.09	0.00	0.00	0.00	0.00	0.09
Benti	98	591	0.00	0.00	0.00	0.02	0.00	0.02
Benti	98	592	0.00	0.01	0.00	0.00	0.00	0.01
Benti	98	593	0.00	0.03	0.00	0.00	0.00	0.03
Benti	54	594	0.03	0.00	0.00	0.00	0.00	0.03
Benti	17	595	0.56	0.00	0.00	0.00	0.00	0.56
Benti	23	596	0.39	0.00	0.00	0.00	0.00	0.39

2-Jan
अंचल अधिकारी

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Benti	16	597	0.54	0.00	0.00	0.00	0.00	0.54
Benti	60	598	0.43	0.00	0.00	0.00	0.00	0.43
Benti	60	599	0.53	0.00	0.00	0.00	0.00	0.53
Benti	81	600	0.06	0.00	0.00	0.00	0.00	0.06
Benti	81	601	0.36	0.00	0.00	0.00	0.00	0.36
Benti	98	602	0.00	0.05	0.00	0.00	0.00	0.05
Benti	60	603	0.02	0.00	0.00	0.00	0.00	0.02
Benti	60	604	1.30	0.00	0.00	0.00	0.00	1.30
Benti	60	605	0.37	0.00	0.00	0.00	0.00	0.37
Benti	98	606	0.00	0.51	0.00	0.00	0.00	0.51
Benti	41	607P	0.07	0.00	0.00	0.00	0.00	0.07
Benti	32	610P	0.99	0.00	0.00	0.00	0.00	0.99
Benti	69	611	0.47	0.00	0.00	0.00	0.00	0.47
Benti	69	612	0.17	0.00	0.00	0.00	0.00	0.17
Benti	13	613	0.57	0.00	0.00	0.00	0.00	0.57
Benti	69	614	0.05	0.00	0.00	0.00	0.00	0.05
Benti	69	615	0.30	0.00	0.00	0.00	0.00	0.30
Benti	63	616	0.54	0.00	0.00	0.00	0.00	0.54
Benti	63	617	0.02	0.00	0.00	0.00	0.00	0.02
Benti	98	618	0.00	0.00	0.00	0.49	0.00	0.49
Benti	41	619	0.25	0.00	0.00	0.00	0.00	0.25
Benti	98	620	0.00	0.15	0.00	0.00	0.00	0.15
Benti	63	621	0.14	0.00	0.00	0.00	0.00	0.14
Benti	23	622	0.38	0.00	0.00	0.00	0.00	0.38
Benti	60	623	0.20	0.00	0.00	0.00	0.00	0.20
Benti	98	624	0.00	0.00	0.00	1.58	0.00	1.58
Benti	61	625	0.27	0.00	0.00	0.00	0.00	0.27
Benti	42	626	0.17	0.00	0.00	0.00	0.00	0.17
Benti	42	627	0.18	0.00	0.00	0.00	0.00	0.18
Benti	90	628	0.44	0.00	0.00	0.00	0.00	0.44
Benti	98	629	0.00	0.02	0.00	0.00	0.00	0.02
Benti	41	630	0.78	0.00	0.00	0.00	0.00	0.78
Benti	90	631	0.53	0.00	0.00	0.00	0.00	0.53
Benti	14	632	0.15	0.00	0.00	0.00	0.00	0.15
Benti	14	633	0.16	0.00	0.00	0.00	0.00	0.16
Benti	25	634	0.41	0.00	0.00	0.00	0.00	0.41
Benti	17	635	0.18	0.00	0.00	0.00	0.00	0.18
Benti	78	636	0.46	0.00	0.00	0.00	0.00	0.46

2-May
अंचल अधिकारी
इचागढ़

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Benti	72	637	0.64	0.00	0.00	0.00	0.00	0.64
Benti	62	638	0.66	0.00	0.00	0.00	0.00	0.66
Benti	75	639	0.34	0.00	0.00	0.00	0.00	0.34
Benti	98	640	0.00	0.00	0.95	0.99	0.00	1.94
Benti	75	641	0.56	0.00	0.00	0.00	0.00	0.56
Benti	75	642	0.28	0.00	0.00	0.00	0.00	0.28
Benti	61	643	0.42	0.00	0.00	0.00	0.00	0.42
Benti	98	644	0.00	0.00	10.12	2.73	0.00	12.85
Benti	61	645	0.28	0.00	0.00	0.00	0.00	0.28
Benti	17	646	0.47	0.00	0.00	0.00	0.00	0.47
Benti	98	647	0.00	0.00	11.53	2.12	0.00	13.66
Benti	42	648	0.28	0.00	0.00	0.00	0.00	0.28
Benti	61	649	0.77	0.00	0.00	0.00	0.00	0.77
Benti	61	650	0.57	0.00	0.00	0.00	0.00	0.57
Benti	90	651	0.72	0.00	0.00	0.00	0.00	0.72
Benti	98	652	0.00	0.11	0.00	0.00	0.00	0.11
Benti	61	653	0.43	0.00	0.00	0.00	0.00	0.43
Benti	42	654	0.98	0.00	0.00	0.00	0.00	0.98
Benti	98	655	0.00	0.21	0.00	0.00	0.00	0.21
Benti	61	656	0.76	0.00	0.00	0.00	0.00	0.76
Benti	98	657	0.00	0.04	0.00	0.00	0.00	0.04
Benti	42	658	0.56	0.00	0.00	0.00	0.00	0.56
Benti	72	659	0.49	0.00	0.00	0.00	0.00	0.49
Benti	98	660	0.00	0.00	0.00	3.28	0.00	3.28
Benti	98	661	0.00	0.00	0.00	4.86	0.00	4.86
Benti	75	662	1.03	0.00	0.00	0.00	0.00	1.03
Benti	75	663	0.08	0.00	0.00	0.00	0.00	0.08
Benti	79	664	0.16	0.00	0.00	0.00	0.00	0.16
Benti	90	665	0.26	0.00	0.00	0.00	0.00	0.26
Benti	17	666	0.47	0.00	0.00	0.00	0.00	0.47
Benti	90	667	0.39	0.00	0.00	0.00	0.00	0.39
Benti	98	668	0.00	0.03	0.00	0.00	0.00	0.03
Benti	61	669	0.25	0.00	0.00	0.00	0.00	0.25
Benti	61	670	0.01	0.00	0.00	0.00	0.00	0.01
Benti	61	671	0.01	0.00	0.00	0.00	0.00	0.01
Benti	90	672	0.10	0.00	0.00	0.00	0.00	0.10
Benti	55	673	0.14	0.00	0.00	0.00	0.00	0.14
Benti	61	674	0.36	0.00	0.00	0.00	0.00	0.36

2-Jay
अंचल अधिकारी
टण्डवा

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Benti	98	675	0.00	0.02	0.00	0.00	0.00	0.02
Benti	42	676	0.17	0.00	0.00	0.00	0.00	0.17
Benti	42	677	0.48	0.00	0.00	0.00	0.00	0.48
Benti	90	678	0.13	0.00	0.00	0.00	0.00	0.13
Benti	61	679	0.20	0.00	0.00	0.00	0.00	0.20
Benti	55	680	0.02	0.00	0.00	0.00	0.00	0.02
Benti	78	681	0.78	0.00	0.00	0.00	0.00	0.78
Benti	98	682	0.00	0.03	0.00	0.00	0.00	0.03
Benti	90	683	0.61	0.00	0.00	0.00	0.00	0.61
Benti	90	684	0.01	0.00	0.00	0.00	0.00	0.01
Benti	61	685	0.02	0.00	0.00	0.00	0.00	0.02
Benti	99	686	0.00	0.00	0.00	0.00	0.03	0.03
Benti	61	687	0.39	0.00	0.00	0.00	0.00	0.39
Benti	98	688	0.00	0.02	0.00	0.00	0.00	0.02
Benti	17	689	0.16	0.00	0.00	0.00	0.00	0.16
Benti	17	690	0.02	0.00	0.00	0.00	0.00	0.02
Benti	17	691	0.08	0.00	0.00	0.00	0.00	0.08
Benti	98	692	0.00	0.23	0.00	0.00	0.00	0.23
Benti	99	693	0.00	0.00	0.00	0.00	0.19	0.19
Benti	99	694	0.00	0.00	0.00	0.00	0.39	0.39
Benti	89	695	0.11	0.00	0.00	0.00	0.00	0.11
Benti	49	696	0.51	0.00	0.00	0.00	0.00	0.51
Benti	54	697	0.50	0.00	0.00	0.00	0.00	0.50
Benti	92	698	0.47	0.00	0.00	0.00	0.00	0.47
Benti	98	699	0.00	0.06	0.00	0.00	0.00	0.06
Benti	69	700	0.30	0.00	0.00	0.00	0.00	0.30
Benti	98	701	0.00	0.00	0.00	0.59	0.00	0.59
Benti	75	702	1.02	0.00	0.00	0.00	0.00	1.02
Benti	98	703	0.00	0.00	0.00	1.36	0.00	1.36
Benti	89	704	0.07	0.00	0.00	0.00	0.00	0.07
Benti	75	705	0.27	0.00	0.00	0.00	0.00	0.27
Benti	84	706	0.06	0.00	0.00	0.00	0.00	0.06
Benti	98	707	0.00	0.00	0.00	0.76	0.00	0.76
Benti	72	708	0.10	0.00	0.00	0.00	0.00	0.10
Benti	89	709	0.12	0.00	0.00	0.00	0.00	0.12
Benti	98	710	0.00	0.01	0.00	0.00	0.00	0.01
Benti	60	711	0.42	0.00	0.00	0.00	0.00	0.42

अंचल अधिकारी

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Benti	75	712	1.44	0.00	0.00	0.00	0.00	1.44
Benti	98	713	0.00	0.01	0.00	0.00	0.00	0.01
Benti	75	714	0.01	0.00	0.00	0.00	0.00	0.01
Benti	42	715	0.63	0.00	0.00	0.00	0.00	0.63
Benti	42	716	0.36	0.00	0.00	0.00	0.00	0.36
Benti	42	717	0.01	0.00	0.00	0.00	0.00	0.01
Benti	75	718	1.29	0.00	0.00	0.00	0.00	1.29
Benti	75	719	0.04	0.00	0.00	0.00	0.00	0.04
Benti	89	720	0.02	0.00	0.00	0.00	0.00	0.02
Benti	55	721	0.01	0.00	0.00	0.00	0.00	0.01
Benti	55	722	0.38	0.00	0.00	0.00	0.00	0.38
Benti	99	723	0.00	0.00	0.00	0.00	0.08	0.08
Benti	89	724	0.37	0.00	0.00	0.00	0.00	0.37
Benti	21	725	0.75	0.00	0.00	0.00	0.00	0.75
Benti	21	726	0.23	0.00	0.00	0.00	0.00	0.23
Benti	17	727	0.02	0.00	0.00	0.00	0.00	0.02
Benti	17	728	0.18	0.00	0.00	0.00	0.00	0.18
Benti	17	729	0.66	0.00	0.00	0.00	0.00	0.66
Benti	98	730	0.00	0.08	0.00	0.00	0.00	0.08
Benti	78	731	1.25	0.00	0.00	0.00	0.00	1.25
Benti	80	732	0.36	0.00	0.00	0.00	0.00	0.36
Benti	55	733	0.21	0.00	0.00	0.00	0.00	0.21
Benti	98	734	0.00	0.00	0.00	0.00	0.00	0.00
Benti	98	735	0.00	0.08	0.00	0.00	0.00	0.08
Benti	89	736	0.54	0.00	0.00	0.00	0.00	0.54
Benti	75	737	0.24	0.00	0.00	0.00	0.00	0.24
Benti	98	738	0.00	2.53	0.00	0.00	0.00	2.53
Benti	75	739	0.37	0.00	0.00	0.00	0.00	0.37
Benti	98	740	0.00	0.00	0.00	2.55	0.00	2.55
Benti	21	741	0.50	0.00	0.00	0.00	0.00	0.50
Benti	89	742	0.11	0.00	0.00	0.00	0.00	0.11
Benti	75	743	0.08	0.00	0.00	0.00	0.00	0.08
Benti	99	744	0.00	0.00	0.00	0.00	0.08	0.08
Benti	21	745	0.66	0.00	0.00	0.00	0.00	0.66
Benti	99	746	0.00	0.00	0.00	0.00	0.17	0.17
Benti	78	747	0.27	0.00	0.00	0.00	0.00	0.27
Benti	89	748	0.16	0.00	0.00	0.00	0.00	0.16

2-Jay
अंचल अधिकारी
इचागढ़

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Benti	75	749	0.12	0.00	0.00	0.00	0.00	0.12
Benti	75	750	0.40	0.00	0.00	0.00	0.00	0.40
Benti	78	752	0.34	0.00	0.00	0.00	0.00	0.34
Benti	42	753	0.42	0.00	0.00	0.00	0.00	0.42
Benti	43	754	0.90	0.00	0.00	0.00	0.00	0.90
Benti	78	755	0.19	0.00	0.00	0.00	0.00	0.19
Benti	75	756	0.67	0.00	0.00	0.00	0.00	0.67
Benti	42	757	0.55	0.00	0.00	0.00	0.00	0.55
Benti	84	758	0.29	0.00	0.00	0.00	0.00	0.29
Benti	72	759	0.34	0.00	0.00	0.00	0.00	0.34
Benti	78	760	0.28	0.00	0.00	0.00	0.00	0.28
Benti	98	761	0.00	0.00	0.00	1.30	0.00	1.30
Benti	25	762	0.76	0.00	0.00	0.00	0.00	0.76
Benti	80	763	0.32	0.00	0.00	0.00	0.00	0.32
Benti	78	764	0.12	0.00	0.00	0.00	0.00	0.12
Benti	51	765	0.12	0.00	0.00	0.00	0.00	0.12
Benti	98	766	0.00	0.00	0.00	1.56	0.00	1.56
Benti	79	768	0.81	0.00	0.00	0.00	0.00	0.81
Benti	21	769	0.75	0.00	0.00	0.00	0.00	0.75
Benti	42	770	0.77	0.00	0.00	0.00	0.00	0.77
Benti	25	771	0.47	0.00	0.00	0.00	0.00	0.47
Benti	51	772	0.37	0.00	0.00	0.00	0.00	0.37
Benti	50	773	0.75	0.00	0.00	0.00	0.00	0.75
Benti	43	774	0.55	0.00	0.00	0.00	0.00	0.55
Benti	25	775	0.56	0.00	0.00	0.00	0.00	0.56
Benti	98	776	0.00	0.13	0.00	0.00	0.00	0.13
Benti	43	777	0.63	0.00	0.00	0.00	0.00	0.63
Benti	98	778	0.00	0.00	0.00	0.00	0.00	0.00
Benti	98	779	0.00	0.10	0.00	0.00	0.00	0.10
Benti	98	780	0.00	0.02	0.00	0.00	0.00	0.02
Benti	98	781	0.00	0.02	0.00	0.00	0.00	0.02
Benti	25	782	0.84	0.00	0.00	0.00	0.00	0.84
Benti	98	783	0.00	0.05	0.00	0.00	0.00	0.05
Benti	98	784	0.00	0.01	0.00	0.00	0.00	0.01
Benti	43	785	0.74	0.00	0.00	0.00	0.00	0.74
Benti	98	786	0.00	0.02	0.00	0.00	0.00	0.02
Benti	69	787	0.21	0.00	0.00	0.00	0.00	0.21

2-10-21
अंचल अधिकारी
इचाक

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Benti	98	788	0.00	0.25	0.00	0.00	0.00	0.25
Benti	80	789	0.43	0.00	0.00	0.00	0.00	0.43
Benti	98	790	0.00	0.00	0.00	2.68	0.00	2.68
Benti	80	791	0.91	0.00	0.00	0.00	0.00	0.91
Benti	2	792	0.61	0.00	0.00	0.00	0.00	0.61
Benti	2	794P	0.22	0.00	0.00	0.00	0.00	0.22
Benti	2	795P	0.09	0.00	0.00	0.00	0.00	0.09
Benti	2	796	0.32	0.00	0.00	0.00	0.00	0.32
Benti	2	797	0.22	0.00	0.00	0.00	0.00	0.22
Benti	2	798	0.50	0.00	0.00	0.00	0.00	0.50
Benti	98	799	0.00	0.01	0.00	0.00	0.00	0.01
Benti	98	800	0.00	0.04	0.00	0.00	0.00	0.04
Benti	72	801	0.17	0.00	0.00	0.00	0.00	0.17
Benti	79	802	0.42	0.00	0.00	0.00	0.00	0.42
Benti	94	803	0.15	0.00	0.00	0.00	0.00	0.15
Benti	81	804	0.09	0.00	0.00	0.00	0.00	0.09
Benti	21	805	0.17	0.00	0.00	0.00	0.00	0.17
Benti	2	806	0.59	0.00	0.00	0.00	0.00	0.59
Benti	51	807	0.04	0.00	0.00	0.00	0.00	0.04
Benti	98	808	0.00	0.09	0.00	0.00	0.00	0.09
Benti	72	809	0.17	0.00	0.00	0.00	0.00	0.17
Benti	98	810	0.00	0.04	0.00	0.00	0.00	0.04
Benti	72	811	1.14	0.00	0.00	0.00	0.00	1.14
Benti	98	812	0.00	0.02	0.00	0.00	0.00	0.02
Benti	98	813	0.00	0.00	0.00	0.09	0.00	0.09
Benti	98	814	0.00	0.00	0.00	0.16	0.00	0.16
Benti	84	815	0.28	0.00	0.00	0.00	0.00	0.28
Benti	78	816	0.18	0.00	0.00	0.00	0.00	0.18
Benti	99	817	0.00	0.00	0.00	0.00	0.04	0.04
Benti	42	818	0.42	0.00	0.00	0.00	0.00	0.42
Benti	98	819	0.00	0.11	0.00	0.00	0.00	0.11
Benti	98	820	0.00	0.31	0.00	0.00	0.00	0.31
Benti	75	821	0.04	0.00	0.00	0.00	0.00	0.04
Benti	79	822	0.10	0.00	0.00	0.00	0.00	0.10
Benti	98	823	0.00	0.00	0.00	0.00	0.00	0.00
Benti	75	824	0.08	0.00	0.00	0.00	0.00	0.08
Benti	43	825	0.01	0.00	0.00	0.00	0.00	0.01

2-Jay
अंचल अधिकारी
इचागढ़

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Benti	98	827	0.00	0.01	0.00	0.00	0.00	0.01
Benti	98	828	0.00	0.01	0.00	0.00	0.00	0.01
Benti	98	829	0.00	0.01	0.00	0.00	0.00	0.01
Benti	98	830	0.00	0.01	0.00	0.00	0.00	0.01
Benti	79	831	0.17	0.00	0.00	0.00	0.00	0.17
Benti	79	832	0.06	0.00	0.00	0.00	0.00	0.06
Benti	79	833	0.06	0.00	0.00	0.00	0.00	0.06
Benti	79	834	0.04	0.00	0.00	0.00	0.00	0.04
Benti	79	835	0.17	0.00	0.00	0.00	0.00	0.17
Benti	21	836	0.21	0.00	0.00	0.00	0.00	0.21
Benti	98	837	0.00	0.02	0.00	0.00	0.00	0.02
Benti	75	838	0.06	0.00	0.00	0.00	0.00	0.06
Benti	75	839	0.15	0.00	0.00	0.00	0.00	0.15
Benti	42	840	0.04	0.00	0.00	0.00	0.00	0.04
Benti	99	841	0.00	0.00	0.00	0.00	0.13	0.13
Benti	84	842	0.12	0.00	0.00	0.00	0.00	0.12
Benti	78	843	0.16	0.00	0.00	0.00	0.00	0.16
Benti	80	844	0.66	0.00	0.00	0.00	0.00	0.66
Benti	75	845	0.19	0.00	0.00	0.00	0.00	0.19
Benti	50	846	0.25	0.00	0.00	0.00	0.00	0.25
Benti	50	847	0.20	0.00	0.00	0.00	0.00	0.20
Benti	50	848	0.17	0.00	0.00	0.00	0.00	0.17
Benti	50	849	0.17	0.00	0.00	0.00	0.00	0.17
Benti	98	850	0.00	0.00	0.00	0.00	0.00	0.00
Benti	75	851	0.16	0.00	0.00	0.00	0.00	0.16
Benti	98	852	0.00	0.02	0.00	0.00	0.00	0.02
Benti	98	853	0.00	0.11	0.00	0.00	0.00	0.11
Benti	98	854	0.00	0.01	0.00	0.00	0.00	0.01
Benti	75	855	0.10	0.00	0.00	0.00	0.00	0.10
Benti	75	856	0.02	0.00	0.00	0.00	0.00	0.02
Benti	50	857	0.18	0.00	0.00	0.00	0.00	0.18
Benti	75	858	0.56	0.00	0.00	0.00	0.00	0.56
Benti	78	859	0.21	0.00	0.00	0.00	0.00	0.21
Benti	25	860P	0.23	0.00	0.00	0.00	0.00	0.23
Benti	75	865	0.47	0.00	0.00	0.00	0.00	0.47
Benti	78	867	0.31	0.00	0.00	0.00	0.00	0.31
Benti	60	868	0.83	0.00	0.00	0.00	0.00	0.83

2-10-24
अंचल अधिकारी
इचागढ़

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Benti	60	869	0.04	0.00	0.00	0.00	0.00	0.04
Benti	89	870P	0.06	0.00	0.00	0.00	0.00	0.06
Benti	89	871	0.11	0.00	0.00	0.00	0.00	0.11
Benti	23	872	0.30	0.00	0.00	0.00	0.00	0.30
Benti	23	876P	0.09	0.00	0.00	0.00	0.00	0.09
Benti	99	877	0.00	0.00	0.00	0.00	0.84	0.84
Benti	98	887P	0.00	2.33	8.64	0.00	0.00	10.97
TOTAL			**79.90**	**23.98**	**58.79**	**35.39**	**1.94**	**200.00**

2-Jay
अंचल अधिकारी
झरिया

LAND SCHEDULE OF IN RESPECT OF PIPARWAR UNDER GROUND (PHASE -I)

Village	Khata no.	Plot no.	Land Required for PPR Phase 1 U/G in Ha.					Total Land Required for PPR Phase 1 U/G in Ha.
			Tenancy	GMK	Forest	Jangal Jhari	GMA	
Mangardaha	22	4	0	4.49	2.19	0	0	6.68
Mangardaha	18	5	0.2	0	0	0	0	0.20
Mangardaha	19	7	0.68	0	0	0	0	0.68
Mangardaha	9	8	1.04	0	0	0	0	1.04
Mangardaha	18	9	0.34	0	0	0	0	0.34
Mangardaha	9	10	0.59	0	0	0	0	0.59
Mangardaha	22	12	0	1	1	0	0	2.00
Mangardaha	22	13	0	4.71	15.8	0	0	20.51
Mangardaha	22	14	0	13.16	7.63	0	0	20.79
Mangardaha	4	56	0.81	0	0	0	0	0.81
Mangardaha	22	57	0	2.94	5.46	0	0	8.40
Mangardaha	11	58	0.23	0	0	0	0	0.23
Mangardaha	22	59	0	0.02	0	0	0	0.02
Mangardaha	22	60	0	0.14	0	0	0	0.14
Mangardaha	7	61	1.37	0	0	0	0	1.37
Mangardaha	19	62	0.3	0	0	0	0	0.30
Mangardaha	12	63	0.1	0	0	0	0	0.10
Mangardaha	22	64	0	0	0	0.3	0	0.30
Mangardaha	11	65	0.06	0	0	0	0	0.06
Mangardaha	22	66	0	0.3	0	0	0	0.30
Mangardaha	3	67	0.23	0	0	0	0	0.23
Mangardaha	22	68	0	1.12	0	0	0	1.12
Mangardaha	22	76	0	0.44	0	0	0	0.44
Mangardaha	7	77	0.09	0	0	0	0	0.09
Mangardaha	7	78	0.09	0	0	0	0	0.09
Mangardaha	9	79	0.1	0	0	0	0	0.10
Mangardaha	11	80	0.22	0	0	0	0	0.22
Mangardaha	5	81	0.04	0	0	0	0	0.04
Mangardaha	3	94	0.03	0	0	0	0	0.03
Mangardaha	3	95	0.06	0	0	0	0	0.06
Mangardaha	3	96	0.07	0	0	0	0	0.07
Mangardaha	9	97	0.76	0	0	0	0	0.76
Mangardaha	7	99	0.15	0	0	0	0	0.15
Mangardaha	9	100	0.09	0	0	0	0	0.09
Mangardaha	3	101	0.02	0	0	0	0	0.02

2-May
अंचल अधिकारी

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Mangardaha	3	102	0.34	0	0	0	0	0.34
Mangardaha	9	103	0.26	0	0	0	0	0.26
Mangardaha	7	105	0.06	0	0	0	0	0.06
Mangardaha	7	106	0.22	0	0	0	0	0.22
Mangardaha	1	107	0.9	0	0	0	0	0.90
Mangardaha	22	108	0	0.06	0	0	0	0.06
Mangardaha	9	110	0.39	0	0	0	0	0.39
Mangardaha	1	111	1.03	0	0	0	0	1.03
Mangardaha	22	112	0	0.26	0	0	0	0.26
Mangardaha	1	113	0.21	0	0	0	0	0.21
Mangardaha	13	114	0.53	0	0	0	0	0.53
Mangardaha	6	115	0.64	0	0	0	0	0.64
Mangardaha	7	116	0.08	0	0	0	0	0.08
Mangardaha	22	117	0	0.3	0	0	0	0.30
Mangardaha	9	118	0.38	0	0	0	0	0.38
Mangardaha	11	119	0.54	0	0	0	0	0.54
Mangardaha	22	120	0	0.05	0	0	0	0.05
Mangardaha	21	121	0.02	0	0	0	0	0.02
Mangardaha	19	122	0.16	0	0	0	0	0.16
Mangardaha	22	123	0	0.06	0	0	0	0.06
Mangardaha	4	124	0.06	0	0	0	0	0.06
Mangardaha	4	125	0.01	0	0	0	0	0.01
Mangardaha	11	126	0	0	0	0	0	0.00
Mangardaha	14	127	0.1	0	0	0	0	0.10
Mangardaha	4	128	0.31	0	0	0	0	0.31
Mangardaha	6	129	0.06	0	0	0	0	0.06
Mangardaha	22	130	0	0.06	0	0	0	0.06
Mangardaha	4	131	0.08	0	0	0	0	0.08
Mangardaha	5	132	0.2	0	0	0	0	0.20
Mangardaha	5	133	0.03	0	0	0	0	0.03
Mangardaha	1	134	0.48	0	0	0	0	0.48
Mangardaha	1	135	0.13	0	0	0	0	0.13
Mangardaha	22	136	0	0.37	0	0	0	0.37
Mangardaha	14	138	0.06	0	0	0	0	0.06
Mangardaha	9	139	0.65	0	0	0	0	0.65
Mangardaha	8	140	0.02	0	0	0	0	0.02
Mangardaha	8	141	0.24	0	0	0	0	0.24
Mangardaha	22	142	0	0.53	0	0	0	0.53

अंचल अधिकारी

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Mangardaha	1	143	1.24	0	0	0	0	1.24
Mangardaha	11	144	0.67	0	0	0	0	0.67
Mangardaha	3	145	0.22	0	0	0	0	0.22
Mangardaha	15	146	0.19	0	0	0	0	0.19
Mangardaha	22	147	0	5.16	0	0	0	5.16
Mangardaha	8	148	0.04	0	0	0	0	0.04
Mangardaha	22	149	0	0.48	0	0	0	0.48
Mangardaha	18	150	0.08	0	0	0	0	0.08
Mangardaha	8	151	0.01	0	0	0	0	0.01
Mangardaha	13	152	0.46	0	0	0	0	0.46
Mangardaha	9	153	0.3	0	0	0	0	0.30
Mangardaha	13	154	0.09	0	0	0	0	0.09
Mangardaha	13	155	0.23	0	0	0	0	0.23
Mangardaha	13	156	0.01	0	0	0	0	0.01
Mangardaha	23	157	0	0	0	0	0.04	0.04
Mangardaha	22	158	0	0.67	0	0	0	0.67
Mangardaha	22	159	0	0.04	0	0	0	0.04
Mangardaha	21	160	0.15	0	0	0	0	0.15
Mangardaha	1	161	0.16	0	0	0	0	0.16
Mangardaha	11	162	0.15	0	0	0	0	0.15
Mangardaha	11	163	0.02	0	0	0	0	0.02
Mangardaha	9	164	0.02	0	0	0	0	0.02
Mangardaha	9	165	0.38	0	0	0	0	0.38
Mangardaha	19	166	0.02	0	0	0	0	0.02
Mangardaha	14	167	0.07	0	0	0	0	0.07
Mangardaha	19	168	0.19	0	0	0	0	0.19
Mangardaha	4	169	0.16	0	0	0	0	0.16
Mangardaha	9	170	0.23	0	0	0	0	0.23
Mangardaha	8	171	0.2	0	0	0	0	0.20
Mangardaha	15	172	0.1	0	0	0	0	0.10
Mangardaha	19	173	0.42	0	0	0	0	0.42
Mangardaha	23	174	0	0	0	0	0.8	0.80
Mangardaha	4	175	0.14	0	0	0	0	0.14
Mangardaha	22	176	0	3.66	1.5	0	0	5.16
Mangardaha	23	177	0	0	0	0	0.06	0.06
Mangardaha	5	178	2.46	0	0	0	0	2.46
Mangardaha	5	179	0.03	0	0	0	0	0.03
Mangardaha	4	180	0.04	0	0	0	0	0.04

2-7-19
अंचल अधिकारी
हथुआ

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Mangardaha	11	181	0.02	0	0	0	0	0.02
Mangardaha	7	182	0.02	0	0	0	0	0.02
Mangardaha	23	183	0	0	0	0	0.08	0.08
Mangardaha	22	184	0	0.02	0	0	0	0.02
Mangardaha	12	185	0.01	0	0	0	0	0.01
Mangardaha	12	186	0.46	0	0	0	0	0.46
Mangardaha	5	187	0.13	0	0	0	0	0.13
Mangardaha	7	188	0.23	0	0	0	0	0.23
Mangardaha	7	189	0.02	0	0	0	0	0.02
Mangardaha	14	190	0.02	0	0	0	0	0.02
Mangardaha	14	191	0.01	0	0	0	0	0.01
Mangardaha	4	192	0.07	0	0	0	0	0.07
Mangardaha	4	193	0	0	0	0	0	0.00
Mangardaha	23	194	0	0	0	0	0	0.00
Mangardaha	12	195	0.01	0	0	0	0	0.01
Mangardaha	17	196	0.13	0	0	0	0	0.13
Mangardaha	17	197	0.01	0	0	0	0	0.01
Mangardaha	5	198	0.03	0	0	0	0	0.03
Mangardaha	5	199	0.55	0	0	0	0	0.55
Mangardaha	1	200	0.32	0	0	0	0	0.32
Mangardaha	5	201	0.32	0	0	0	0	0.32
Mangardaha	23	202	0	0	0	0	0.11	0.11
Mangardaha	22	203	0	0.54	0	0	0	0.54
Mangardaha	12	204	0.36	0	0	0	0	0.36
Mangardaha	12	205	0.02	0	0	0	0	0.02
Mangardaha	22	206	0	0.55	0	0	0	0.55
Mangardaha	22	207	0	2.12	0	0	0	2.12
Mangardaha	22	208	0	0.28	0	0	0	0.28
Mangardaha	10	209	0.03	0	0	0	0	0.03
Mangardaha	10	210	0.26	0	0	0	0	0.26
Mangardaha	10	211	0.1	0	0	0	0	0.10
Mangardaha	8	212	0.38	0	0	0	0	0.38
Mangardaha	23	213	0	0	0	0	0.11	0.11
Mangardaha	1	214	0.8	0	0	0	0	0.80
Mangardaha	3	215	0.01	0	0	0	0	0.01
Mangardaha	10	216	0.11	0	0	0	0	0.11
Mangardaha	3	217	0.19	0	0	0	0	0.19
Mangardaha	6	219	0.54	0	0	0	0	0.54

अधिकृत अधिकारी

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Mangardaha	23	220	0	0	0	0	0.24	0.24
Mangardaha	18	221	0.13	0	0	0	0	0.13
Mangardaha	18	222	0.01	0	0	0	0	0.01
Mangardaha	16	223	0.11	0	0	0	0	0.11
Mangardaha	16	224	0.01	0	0	0	0	0.01
Mangardaha	8	225	0.17	0	0	0	0	0.17
Mangardaha	8	226	0.03	0	0	0	0	0.03
Mangardaha	10	227	0.02	0	0	0	0	0.02
Mangardaha	10	228	0.17	0	0	0	0	0.17
Mangardaha	6	229	0.01	0	0	0	0	0.01
Mangardaha	6	230	0.69	0	0	0	0	0.69
Mangardaha	6	231	0.02	0	0	0	0	0.02
Mangardaha	23	232	0	0	0	0	0.04	0.04
Mangardaha	3	233	0.15	0	0	0	0	0.15
Mangardaha	22	234	0	0.01	0	0	0	0.01
Mangardaha	20	235	0.15	0	0	0	0	0.15
Mangardaha	2	236	0.01	0	0	0	0	0.01
Mangardaha	2	237	0.13	0	0	0	0	0.13
Mangardaha	1	238	0.1	0	0	0	0	0.10
Mangardaha	18	239	0.11	0	0	0	0	0.11
Mangardaha	20	240	0.17	0	0	0	0	0.17
Mangardaha	2	241	0.19	0	0	0	0	0.19
Mangardaha	12	242	0.25	0	0	0	0	0.25
Mangardaha	4	243	0.02	0	0	0	0	0.02
Mangardaha	4	244	0.12	0	0	0	0	0.12
Mangardaha	1	245	0.13	0	0	0	0	0.13
Mangardaha	22	246	0	0.02	0	0	0	0.02
Mangardaha	3	247	0.02	0	0	0	0	0.02
Mangardaha	3	248	0.03	0	0	0	0	0.03
Mangardaha	1	249	0.4	0	0	0	0	0.40
Mangardaha	22	250	0	0.04	0	0	0	0.04
Mangardaha	20	251	0.01	0	0	0	0	0.01
Mangardaha	18	252	0.12	0	0	0	0	0.12
Mangardaha	18	253	0.01	0	0	0	0	0.01
Mangardaha	19	254	0.19	0	0	0	0	0.19
Mangardaha	16	255	0.02	0	0	0	0	0.02
Mangardaha	16	256	0.15	0	0	0	0	0.15
Mangardaha	8	257	0.28	0	0	0	0	0.28

2-7-24
अंचल अधिकारी
झरिया

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Mangardaha	10	258	0.28	0	0	0	0	0.28
Mangardaha	15	259	0.01	0	0	0	0	0.01
Mangardaha	15	260	0.38	0	0	0	0	0.38
Mangardaha	9	261	0.21	0	0	0	0	0.21
Mangardaha	6	262	0.62	0	0	0	0	0.62
Mangardaha	22	263	0	0.7	0	0	0	0.70
Mangardaha	10	264	0.08	0	0	0	0	0.08
Mangardaha	15	265	0.01	0	0	0	0	0.01
Mangardaha	8	266	0.08	0	0	0	0	0.08
Mangardaha	22	267	0	0	0	0.02	0	0.02
Mangardaha	8	268	0.07	0	0	0	0	0.07
Mangardaha	1	269	0.44	0	0	0	0	0.44
Mangardaha	22	270	0	0.13	0	0	0	0.13
Mangardaha	22	271	0	0.85	0	0	0	0.85
Mangardaha	8	272	0.39	0	0	0	0	0.39
Mangardaha	22	273	0	0.44	0	0	0	0.44
Mangardaha	10	274	0.85	0	0	0	0	0.85
Mangardaha	22	275P	0	1.83	10.97	0	0	12.80
Mangardaha	10	276	0.46	0	0	0	0	0.46
Mangardaha	23	277	0	0	0	0	0.53	0.53
Mangardaha	8	278	0.55	0	0	0	0	0.55
Mangardaha	19	279	1.27	0	0	0	0	1.27
Mangardaha	22	280	0	0.06	0	0	0	0.06
Mangardaha	15	282	1.25	0	0	0	0	1.25
Mangardaha	22	283	0	0.04	0	0	0	0.04
Mangardaha	14	287	0.16	0	0	0	0	0.16
Mangardaha	8	288	0.14	0	0	0	0	0.14
Mangardaha	22	289	0	0.01	0	0	0	0.01
Mangardaha	14	318	0.11	0	0	0	0	0.11
Mangardaha	3	321	0.35	0	0	0	0	0.35
Mangardaha	1	322	0.91	0	0	0	0	0.91
Mangardaha	22	323	0	0.33	0	0	0	0.33
Mangardaha	4	324	0.13	0	0	0	0	0.13
Mangardaha	4	325	0.15	0	0	0	0	0.15
Mangardaha	1	326	0.15	0	0	0	0	0.15
Mangardaha	3	327	0.19	0	0	0	0	0.19
Mangardaha	4	328	0.18	0	0	0	0	0.18
Mangardaha	3	329	0.3	0	0	0	0	0.30

अंचल अधिकारी

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Mangardaha	22	330	0	0.22	0	0	0	0.22
Mangardaha	1	331	0.34	0	0	0	0	0.34
Mangardaha	5	332	0.2	0	0	0	0	0.20
Mangardaha	5	333	0.34	0	0	0	0	0.34
Mangardaha	10	334	0.16	0	0	0	0	0.16
Mangardaha	1	335	1.1	0	0	0	0	1.10
Mangardaha	13	336	0.2	0	0	0	0	0.20
Mangardaha	22	338	0	0.03	0	0	0	0.03
Mangardaha	9	339	0.94	0	0	0	0	0.94
Mangardaha	20	340	0.76	0	0	0	0	0.76
Mangardaha	10	343	0.1	0	0	0	0	0.10
Mangardaha	22	344	0	0	0	0.22	0	0.22
Mangardaha	6	345	0.56	0	0	0	0	0.56
Mangardaha	7	346	0.11	0	0	0	0	0.11
Mangardaha	7	347	0.25	0	0	0	0	0.25
Mangardaha	9	348	0.57	0	0	0	0	0.57
Mangardaha	11	349	0.48	0	0	0	0	0.48
Mangardaha	12	350	0.09	0	0	0	0	0.09
Mangardaha	11	351	0.15	0	0	0	0	0.15
Mangardaha	6	352	0.97	0	0	0	0	0.97
Mangardaha	6	353	0.57	0	0	0	0	0.57
Mangardaha	22	354	0	0	0	0.76	0	0.76
Mangardaha	1	361	0.37	0	0	0	0	0.37
Mangardaha	20	362	0.37	0	0	0	0	0.37
Mangardaha	18	363	0.16	0	0	0	0	0.16
Mangardaha	5	364	0.59	0	0	0	0	0.59
Mangardaha	19	365	0.13	0	0	0	0	0.13
Mangardaha	23	366	0	0	0	0	0.65	0.65
Mangardaha	18	367	0.16	0	0	0	0	0.16
Mangardaha	22	368	0	0.14	0	0	0	0.14
Mangardaha	20	369	0.16	0	0	0	0	0.16
Mangardaha	20	373	0.16	0	0	0	0	0.16
Mangardaha	19	374	0.13	0	0	0	0	0.13
Mangardaha	22	375	0	2.42	0	0	0	2.42
Mangardaha	22	376	0	0.29	0	0	0	0.29
Mangardaha	1	377	0.6	0	0	0	0	0.60
Mangardaha	22	281P	0	0	0	1.12	0	1.12
Mangardaha	4	284P	0.98	0	0	0	0	0.98

2-Jay
अंचल अधिकारी
झरिया

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
Mangardaha	20	285P	0.21	0	0	0	0	0.21
Mangardaha	15	286P	0.12	0	0	0	0	0.12
Mangardaha	7	312P	0.97	0	0	0	0	0.97
Mangardaha	22	313P	0	0.06	0	0	0	0.06
Mangardaha	11	314P	0.31	0	0	0	0	0.31
Mangardaha	5	337P	2.58	0	0	0	0	2.58
Mangardaha	3	341P	0.32	0	0	0	0	0.32
Mangardaha	9	342P	1.73	0	0	0	0	1.73
Mangardaha	14	355P	0.2	0	0	0	0	0.20
Mangardaha	11	356P	0.69	0	0	0	0	0.69
Mangardaha	3	360P	1.09	0	0	0	0	1.09
Mangardaha	6	370P	1.59	0	0	0	0	1.59
Mangardaha	19	371P	0.93	0	0	0	0	0.93
Mangardaha	6	372P	1.26	0	0	0	0	1.26
Mangardaha	11	6P	0.81	0	0	0	0	0.81
TOTAL			**67.86**	**51.15**	**44.55**	**2.42**	**2.66**	168.64

2-May
अंचल अधिकारी
झरिया

LAND SCHEDULE OF IN RESPECT OF PIPARWAR UNDER GROUND (PHASE -I)

Village	Khata no.	Plot no.	Land Required for PPR Phase 1 U/G in Ha.					Total Land Required for PPR Phase 1 U/G in Ha.
			Tenancy	GMK	Forest	Jangal Jhari	GMA	
Kitchto	8	616	0.55	0.00	0.00	0.00	0.00	0.55
Kitchto	16	613	0.00	1.50	0.00	0.00	0.00	1.50
Kitchto	16	617	0.00	0.21	0.00	0.00	0.00	0.21
Kitchto	14	618	0.57	0.00	0.00	0.00	0.00	0.57
Kitchto	12	619	0.56	0.00	0.00	0.00	0.00	0.56
Kitchto	39	620	0.00	0.44	0.00	0.00	0.00	0.44
Kitchto	16	621	0.00	0.12	0.00	0.00	0.00	0.12
Kitchto	12	622	0.98	0.00	0.00	0.00	0.00	0.98
Kitchto	16	623	0.00	0.27	0.00	0.00	0.00	0.27
Kitchto	15	624P	0.52	0.00	0.00	0.00	0.00	0.52
Kitchto	7	625P	0.60	0.00	0.00	0.00	0.00	0.60
Kitchto	15	626P	0.20	0.00	0.00	0.00	0.00	0.20
TOTAL			**3.99**	**2.54**	**0.00**	**0.00**	**0.00**	**6.53**

अंचल अधिकारी

LAND SCHEDULE OF IN RESPECT OF PIPARWAR UNDER GROUND (PHASE -I)

Village	Khata no.	Plot no.	Tenency	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 UG in Ha.
Thena	19	154P	0.22	0.00	0.00	0.00	0.00	0.22
Thena	10	155P	0.16	0.00	0.00	0.00	0.00	0.16
Thena	13	156P	0.10	0.00	0.00	0.00	0.00	0.10
Thena	13	158	0.04	0.00	0.00	0.00	0.00	0.04
Thena	10	159	0.05	0.00	0.00	0.00	0.00	0.05
Thena	13	160	0.04	0.00	0.00	0.00	0.00	0.04
Thena	10	161P	0.52	0.00	0.00	0.00	0.00	0.52
TOTAL			**1.14**	**0.00**	**0.00**	**0.00**	**0.00**	- 1.14

2-Jay
अंचल अधिकारी
इचागढ़

LAND SCHEDULE OF IN RESPECT OF PIPARWAR UNDER GROUND (PHASE -I)

Village	Khata no.	Plot no.	Tenency	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 UG in Ha.
BIJAIN	16	140	0.01	0.00	0.00	0.00	0.00	0.01
BIJAIN	5	141	0.08	0.00	0.00	0.00	0.00	0.08
BIJAIN	17	146	0.24	0.00	0.00	0.00	0.00	0.24
BIJAIN	23	148	0.00	0.08	0.00	0.00	0.00	0.08
BIJAIN	2	164	0.12	0.00	0.00	0.00	0.00	0.12
BIJAIN	2	166	1.39	0.00	0.00	0.00	0.00	1.39
BIJAIN	8	167	0.10	0.00	0.00	0.00	0.00	0.10
BIJAIN	8	168	0.01	0.00	0.00	0.00	0.00	0.01
BIJAIN	23	169	0.00	0.22	0.00	0.00	0.00	0.22
BIJAIN	8	170	0.15	0.00	0.00	0.00	0.00	0.15
BIJAIN	13	172	0.23	0.00	0.00	0.00	0.00	0.23
BIJAIN	13	173	0.01	0.00	0.00	0.00	0.00	0.01
BIJAIN	7	174	0.12	0.00	0.00	0.00	0.00	0.12
BIJAIN	7	175	0.01	0.00	0.00	0.00	0.00	0.01
BIJAIN	18	176	0.10	0.00	0.00	0.00	0.00	0.10
BIJAIN	2	177	0.08	0.00	0.00	0.00	0.00	0.08
BIJAIN	6	185	0.23	0.00	0.00	0.00	0.00	0.23
BIJAIN	12	186	0.07	0.00	0.00	0.00	0.00	0.07
BIJAIN	21	187	0.11	0.00	0.00	0.00	0.00	0.11
BIJAIN	15	188	0.02	0.00	0.00	0.00	0.00	0.02
BIJAIN	15	189	0.24	0.00	0.00	0.00	0.00	0.24
BIJAIN	9	190	0.11	0.00	0.00	0.00	0.00	0.11
BIJAIN	2	191	0.08	0.00	0.00	0.00	0.00	0.08
BIJAIN	8	192	0.03	0.00	0.00	0.00	0.00	0.03
BIJAIN	2	193	0.14	0.00	0.00	0.00	0.00	0.14
BIJAIN	2	194	0.12	0.00	0.00	0.00	0.00	0.12
BIJAIN	7	195	0.13	0.00	0.00	0.00	0.00	0.13
BIJAIN	2	196	0.21	0.00	0.00	0.00	0.00	0.21
BIJAIN	2	197	0.26	0.00	0.00	0.00	0.00	0.26
BIJAIN	15	199	0.23	0.00	0.00	0.00	0.00	0.23
BIJAIN	6	200	0.08	0.00	0.00	0.00	0.00	0.08
BIJAIN	12	201	0.01	0.00	0.00	0.00	0.00	0.01
BIJAIN	6	202	0.02	0.00	0.00	0.00	0.00	0.02
BIJAIN	9	207	0.24	0.00	0.00	0.00	0.00	0.24
BIJAIN	24	209	0.00	0.00	0.00	0.00	0.02	0.02

अंचल अधिकारी

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
BIJAIN	8	211	0.36	0.00	0.00	0.00	0.00	0.36
BIJAIN	8	212	0.09	0.00	0.00	0.00	0.00	0.09
BIJAIN	15	213	0.22	0.00	0.00	0.00	0.00	0.22
BIJAIN	24	214	0.00	0.00	0.00	0.00	0.01	0.01
BIJAIN	22	215	0.32	0.00	0.00	0.00	0.00	0.32
BIJAIN	8	216	0.25	0.00	0.00	0.00	0.00	0.25
BIJAIN	15	217	0.54	0.00	0.00	0.00	0.00	0.54
BIJAIN	6	218	0.33	0.00	0.00	0.00	0.00	0.33
BIJAIN	2	219	0.36	0.00	0.00	0.00	0.00	0.36
BIJAIN	5	220	0.11	0.00	0.00	0.00	0.00	0.11
BIJAIN	9	221	0.07	0.00	0.00	0.00	0.00	0.07
BIJAIN	11	222	0.04	0.00	0.00	0.00	0.00	0.04
BIJAIN	11	223	0.04	0.00	0.00	0.00	0.00	0.04
BIJAIN	2	224	0.20	0.00	0.00	0.00	0.00	0.20
BIJAIN	2	227	0.30	0.00	0.00	0.00	0.00	0.30
BIJAIN	2	228	0.44	0.00	0.00	0.00	0.00	0.44
BIJAIN	2	232	0.11	0.00	0.00	0.00	0.00	0.11
BIJAIN	7	233	0.12	0.00	0.00	0.00	0.00	0.12
BIJAIN	18	234	0.02	0.00	0.00	0.00	0.00	0.02
BIJAIN	2	237	0.13	0.00	0.00	0.00	0.00	0.13
BIJAIN	8	239	0.19	0.00	0.00	0.00	0.00	0.19
BIJAIN	2	240	0.11	0.00	0.00	0.00	0.00	0.11
BIJAIN	2	241	0.10	0.00	0.00	0.00	0.00	0.10
BIJAIN	6	242	0.03	0.00	0.00	0.00	0.00	0.03
BIJAIN	2	243	0.06	0.00	0.00	0.00	0.00	0.06
BIJAIN	7	245	0.30	0.00	0.00	0.00	0.00	0.30
BIJAIN	4	246	0.10	0.00	0.00	0.00	0.00	0.10
BIJAIN	2	247	0.17	0.00	0.00	0.00	0.00	0.17
BIJAIN	7	249	0.17	0.00	0.00	0.00	0.00	0.17
BIJAIN	3	250	0.23	0.00	0.00	0.00	0.00	0.23
BIJAIN	1	268	0.00	5.46	0.00	0.00	0.00	5.46
BIJAIN	16	271	0.14	0.00	0.00	0.00	0.00	0.14
BIJAIN	1	278P	0.00	0.00	6.68	0.00	0.00	6.68
BIJAIN	4	288	0.98	0.00	0.00	0.00	0.00	0.98
BIJAIN	1	289P	0.00	5.85	9.32	0.00	0.00	15.17
BIJAIN	1	290	0.00	10.82	0.00	0.00	0.00	10.82
BIJAIN	22	291	0.27	0.00	0.00	0.00	0.00	0.27
BIJAIN	13	292	1.62	0.00	0.00	0.00	0.00	1.62

अंचल अधिकारी
झरिया

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
BIJAIN	8	293	0.81	0.00	0.00	0.00	0.00	0.81
BIJAIN	1	295	0.00	0.52	0.00	0.00	0.00	0.52
BIJAIN	5	296	0.12	0.00	0.00	0.00	0.00	0.12
BIJAIN	5	297	0.11	0.00	0.00	0.00	0.00	0.11
BIJAIN	11	298	0.11	0.00	0.00	0.00	0.00	0.11
BIJAIN	11	299	0.13	0.00	0.00	0.00	0.00	0.13
BIJAIN	5	300	0.07	0.00	0.00	0.00	0.00	0.07
BIJAIN	11	301	0.01	0.00	0.00	0.00	0.00	0.01
BIJAIN	5	302	0.06	0.00	0.00	0.00	0.00	0.06
BIJAIN	9	303	0.01	0.00	0.00	0.00	0.00	0.01
BIJAIN	15	304	0.08	0.00	0.00	0.00	0.00	0.08
BIJAIN	23	305	0.01	0.00	0.00	0.00	0.00	0.01
BIJAIN	5	306	0.23	0.00	0.00	0.00	0.00	0.23
BIJAIN	23	307	0.00	0.03	0.00	0.00	0.00	0.03
BIJAIN	9	308	0.58	0.00	0.00	0.00	0.00	0.58
BIJAIN	1	309	0.00	0.25	0.00	0.00	0.00	0.25
BIJAIN	1	310	0.88	0.00	0.00	0.00	0.00	0.88
BIJAIN	15	311	0.16	0.00	0.00	0.00	0.00	0.16
BIJAIN	6	312	0.25	0.00	0.00	0.00	0.00	0.25
BIJAIN	10	313	0.51	0.00	0.00	0.00	0.00	0.51
BIJAIN	22	314	0.34	0.00	0.00	0.00	0.00	0.34
BIJAIN	8	315	0.28	0.00	0.00	0.00	0.00	0.28
BIJAIN	18	316	0.20	0.00	0.00	0.00	0.00	0.20
BIJAIN	13	317	0.47	0.00	0.00	0.00	0.00	0.47
BIJAIN	15	318	0.29	0.00	0.00	0.00	0.00	0.29
BIJAIN	12	319	0.14	0.00	0.00	0.00	0.00	0.14
BIJAIN	13	320	0.14	0.00	0.00	0.00	0.00	0.14
BIJAIN	22	321	0.21	0.00	0.00	0.00	0.00	0.21
BIJAIN	6	322	0.04	0.00	0.00	0.00	0.00	0.04
BIJAIN	23	323	0.00	0.01	0.00	0.00	0.00	0.01
BIJAIN	12	324	0.02	0.00	0.00	0.00	0.00	0.02
BIJAIN	13	325	0.16	0.00	0.00	0.00	0.00	0.16
BIJAIN	13	326	0.05	0.00	0.00	0.00	0.00	0.05
BIJAIN	17	327	0.28	0.00	0.00	0.00	0.00	0.28
BIJAIN	10	328	0.25	0.00	0.00	0.00	0.00	0.25
BIJAIN	2	329	0.13	0.00	0.00	0.00	0.00	0.13
BIJAIN	2	330	0.98	0.00	0.00	0.00	0.00	0.98

2-Jay
अंचल अधिकारी
इचागढ़

Village	Khata no.	Plot no.	Tenancy	GMK	Forest	Jangal Jhari	GMA	Total Land Required for PPR Phase 1 U/G in Ha.
BIJAIN	17	331	0.13	0.00	0.00	0.00	0.00	0.13
BIJAIN	9	332	0.40	0.00	0.00	0.00	0.00	0.40
BIJAIN	1	333	0.00	0.48	0.00	0.00	0.00	0.48
BIJAIN	9	334	0.13	0.00	0.00	0.00	0.00	0.13
BIJAIN	5	336	0.06	0.00	0.00	0.00	0.00	0.06
BIJAIN	2	163(P)	0.11	0.00	0.00	0.00	0.00	0.11
BIJAIN	2	165(P)	0.10	0.00	0.00	0.00	0.00	0.10
BIJAIN	2	178(P)	0.53	0.00	0.00	0.00	0.00	0.53
BIJAIN	6	203P	0.08	0.00	0.00	0.00	0.00	0.08
BIJAIN	2	208P	0.95	0.00	0.00	0.00	0.00	0.95
BIJAIN	2	208P	0.95	0.00	0.00	0.00	0.00	0.95
BIJAIN	23	210P	0.00	0.04	0.00	0.00	0.00	0.04
BIJAIN	2	225P	0.27	0.00	0.00	0.00	0.00	0.27
BIJAIN	2	226P	0.20	0.00	0.00	0.00	0.00	0.20
BIJAIN	6	229P	0.40	0.00	0.00	0.00	0.00	0.40
BIJAIN	6	229P	0.40	0.00	0.00	0.00	0.00	0.40
BIJAIN	2	230P	0.31	0.00	0.00	0.00	0.00	0.31
BIJAIN	2	230P	0.31	0.00	0.00	0.00	0.00	0.31
BIJAIN	13	231P	0.26	0.00	0.00	0.00	0.00	0.26
BIJAIN	15	267(P)	0.78	0.00	0.00	0.00	0.00	0.78
BIJAIN	6	269P	0.71	0.00	0.00	0.00	0.00	0.71
BIJAIN	2	270P	0.50	0.00	0.00	0.00	0.00	0.50
BIJAIN	2	272P	2.51	0.00	0.00	0.00	0.00	2.51
BIJAIN	1	279P	0.00	0.81	8.80	0.00	0.00	9.61
BIJAIN	1	284P	0.00	2.43	0.00	0.00	0.00	2.43
BIJAIN	2	285P	0.37	0.00	0.00	0.00	0.00	0.37
BIJAIN	4	286P	0.85	0.00	0.00	0.00	0.00	0.85
BIJAIN	1	294P	0.00	3.64	0.00	0.00	0.00	3.64
TOTAL			**32.90**	**30.65**	**24.80**	**0.00**	**0.03**	**88.38**

2-Jay
अंचल अधिकारी
इचागढ़

Annexure - II

Coal India Limited
कोल इंडिया लिमिटेड
Government of India Undertaking
A Navratna Company

Office of the Project Officer
Ashok Project
Piparwar Area, Central Coalfields Limited
At & P.O. : Bachra, Dist. : Chatra

To whom so ever it may concern

Undertaking regarding details of proposal seeking prior approval of Central Government under the Act for diversion of forest land for the Project already submitted in the past (Point 8.1)

The details of proposal seeking prior approval of Central Government under the Act for diversion of forest land for the Project submitted on behalf of CCL in past is reflected under Section 8.1 by the system and applicant cannot make any change in the list.

The details of proposals seeking prior approval of Central Government under the Act for diversion of forest land for Piparwar UG Phase I (37.81 Ha) along with other proposals of the project is given below: -

Proposal submitted in Past							
S. No	Proposal Name	Moef File No	Area proposed for diversion (Ha)	Area Diverted (Ha)	Date of In Principle Approval	Date of Final Approval	Remarks
1	Piparwar OCP	8-172/89 FC	13.11 Ha	13.11 Ha	....	02/12/1992	Already diverted
2	Piparwar OCP	8-46/98 FC	28.22 Ha	28.22	....	21/09/2001	Already diverted
3	Piparwar OCP	8-64/2003 FC	101.87 Ha	101.87 Ha	....	1/10/2003	Already diverted
4	Piparwar OCP	8-172/1989 FC PT-1	43.30 Ha	43.30 Ha	3rd jan 1995	7/01/2010	Already diverted

17/5/23

Project Officer
Piparwar UG Phase I

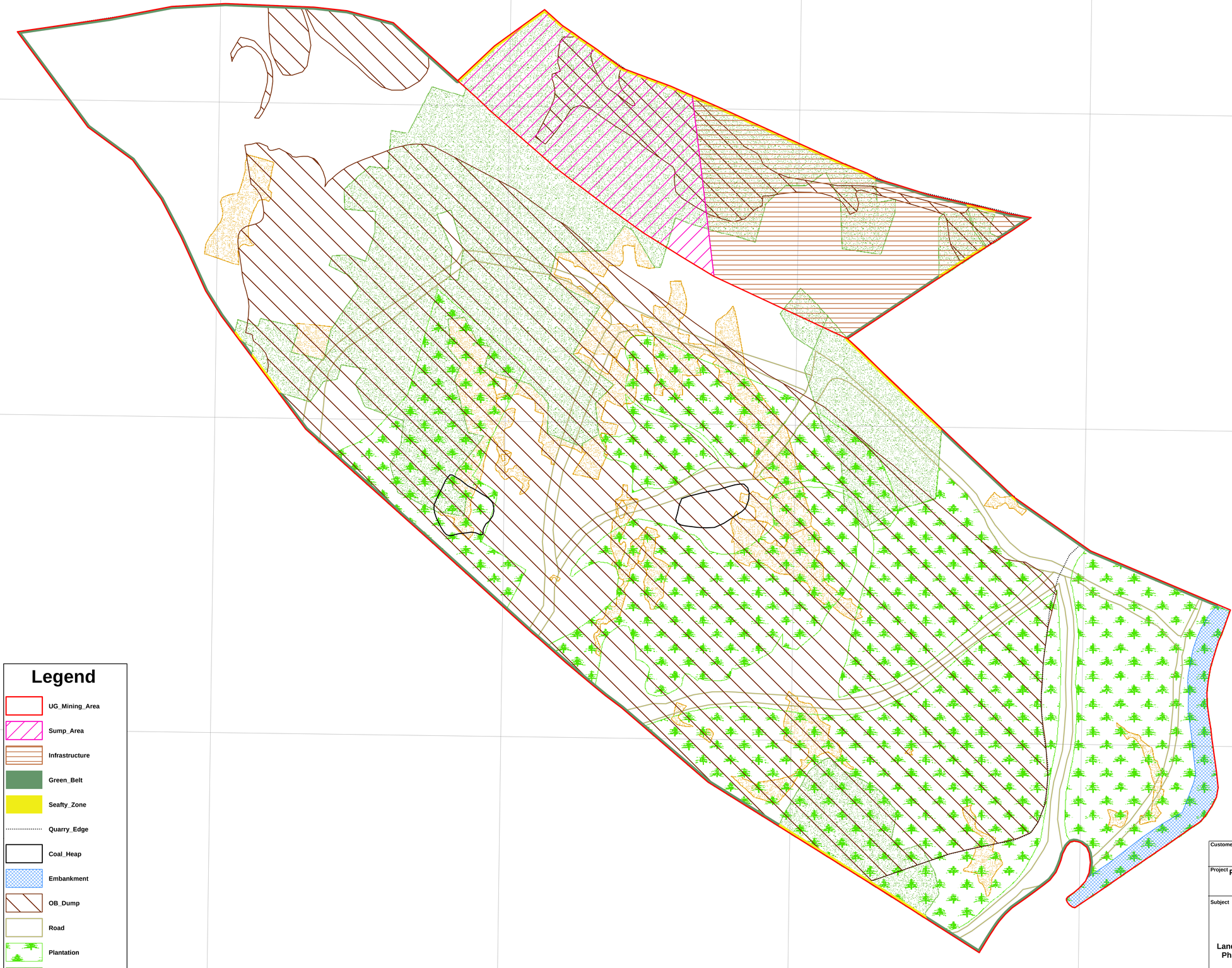
85°1'30"E 85°2'0"E 85°2'30"E 85°3'0"E 85°3'30"E

23°44'0"N

23°43'30"N

23°43'0"N

N W E S



Legend

- UG_Mining_Area
- Sump_Area
- Infrastructure
- Green_Belt
- Seafty_Zone
- Quarry_Edge
- Coal_Heap
- Embankment
- OB_Dump
- Road
- Plantation
- Notified_forest_Released
- Jungle_Jhari

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Customer: **Central Coalfields Limited**

Project: **Preparation of Geo-Referenced Boundary Map (in Shape File) of Jungle-Jhari Land of Piparwar UG Phase - I (37.81 Ha.) Piparwar Area ,CCL**

Job No. 064318104

Subject: **Land Use Plan of Piparwar UG Phase- I Piparwar Area,CCL**

Activity	Name	Designation	Signature	Date
Surveyed / Processed by	S.Dutta	Surveyor(C)		
	S.Prasad	Sr. Surveyor(C)		
	S.K.Dixit	Ch. Manager(M)		
Checked by	M.Rastogi	Ch.Manager(C)		
Approved by	R.Kumar	GM (Geomatics)		

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Scale - 1:4000 | Sheet 1 of 1

Drg No. HQS&DN2023 | REV. No. - 0


20 MW Solar
Power Plant Under
Construction
Proposed 10MW
Solar Power plant
CHP/CPP COMPLEX
SUMP
PLANTATION

सेन्ट्रल माईन प्लानिंग एण्ड डिजाईन इंस्टीच्यूट लिमिटेड
(कोल इण्डिया लिमिटेड की अनुषंगी कम्पनी / भारत सरकार का एक लोक उपक्रम)
गोन्दवाना प्लेस, कांके रोड, राँची - 834031, झारखण्ड (भारत)
Central Mine Planning & Design Institute Limited
(A Subsidiary of Coal India Limited / Public Sector Undertaking of Govt. of India)
Gondwana Place, Kanke Road, Ranchi – 834031, Jharkhand (India)
Corporate Identity Number – U14292JH1975GOI001223

cmpdi
A Mini Ratna Company

दिनांक: 18.02.2022

पत्रांक: सीएमपीडीआई/ मुख्या./E- 938269

सेवा में,

क्षेत्रीय निदेशक,
क्षेत्रीय संस्थान – III,
रांची।

विषय: 3D Subsidence Prediction for Piparwar UG (Phase-I), CCL (Job No.312178)

उपरोक्त खदान का त्रिआयामी भू धसान पूर्वानुमान अध्ययन संपन्न कर लिया गया हैं और इसकी चार प्रतियां आपके अवलोकनार्थ एवं आवश्यक कार्रवाई हेतु प्रेषित की जा रही हैं।

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भवदीय,

18/02/22

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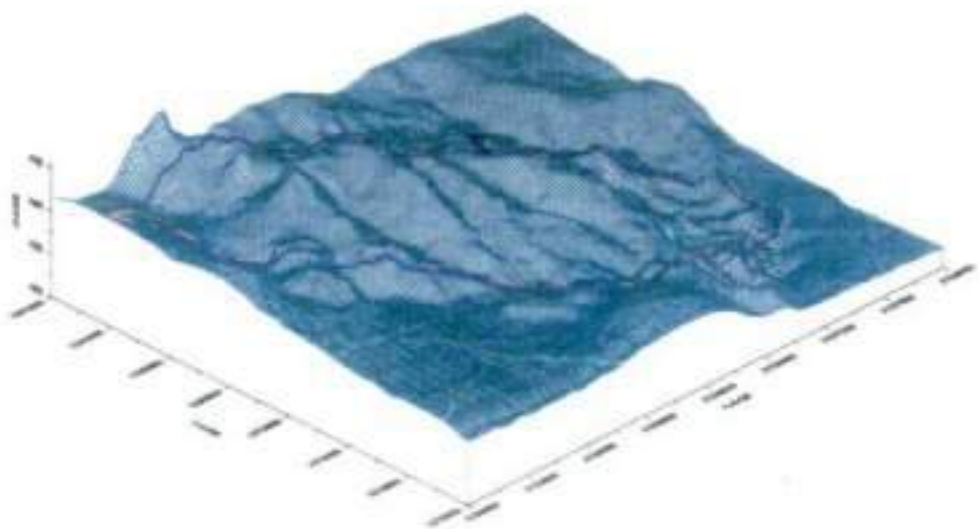
REPORT ON

3D-SUBSIDENCE PREDICTION AND MANAGEMENT

PIPARWAR UNDERGROUND (PHASE-I)

CENTRAL COALFIELDS LIMITED



FEBRUARY 2022

REPORT ON

3D SUBSIDENCE PREDICTION AND MANAGEMENT PIPARWAR UNDERGROUND (PHASE-I)

CENTRAL COALFIELDS LIMITED

FEBRUARY 2022

UNDERGROUND MINING DIVISION
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Report on 3D Subsidence Prediction and Management for Piparwar Underground (Phase-I), CCL.

Job No. : 312178

Customer : CCL, Through Regional Director, RI-III, CMPDI

Reference :File no. 08HENV/12/13/0023/2021-O/o HoD(Env) RI-III-CMPDI (Computer No. 544268),

Date of submission of report : February 2022

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1.0 INTRODUCTION:

An Abridged Project Report for Piparwar UG (Phase-I) mine, CCL has been prepared by CMPDI, Underground Mining Division envisaging an average targeted production of 0.87 MTY from Lower Bachra seam. In the proposed mining area the Lower Bachra seam will be worked by underground Bord & Pillar method of mining with caving using Continuous Miner. Considering the total extractable reserves of 8.83 MTe, the expected life of the underground mine is 14 years.

Almost all of the mining area falls below the land acquired for Piparwar Opencast Project. Piparwar opencast was in operation within the geological block. Practically, OC mining in Lower Dakra seam is already completed. The excavated area is backfilled with overburden material.

As per the requirement placed by CMPDI, RI-III, vide file no. 08HENV/12/13/0023/2021/-O/o HoD (Env) RI-III, CMPDI (Computer No. 544268), the Underground Mining Division of CMPDI (HQ) has carried out subsidence prediction study to forecast subsidence on 5th ,10th year of mining and after 14 years marking the end of mine life. Likely impact of subsidence on topography and surface features has been dealt with in this report. This subsidence prediction study is intended to constitute a part of EMP report.

The results of the study and subsidence management thereof are presented in the following sections.

2.0 DETAILS OF THE PROJECT :

2.1	Name of the Mine	:	Piparwar UG (Phase-I) Mine
2.2	Area	:	North Karanpura Area
2.3	Company	:	Central Coalfields Limited
2.4	Mining Area	:	4.04 sq. km.
2.5	Mineable Reserves	:	14.92 Mte
2.6	Extractable reserves:		8.83 Mte

2.7 Details of the coal seam proposed to be worked:

	Name of the Seam :	Lower Bachra Seam
	Depth :	117m to 203m
	Thickness :	0.74m to 8.42m.
	Gradient :	1 in 10 to 1 in 40
	Extraction Thickness	: 1.5 Upto 4.6m
2.8	Proposed Method of Extraction :	Development & Depillaring with caving by Bord & Pillar method using continuous miner
2.9	Anticipated Percentage of Extraction in Panels :	80%
2.10	Overlying Rock Mass :	Sandstone, shale/carbonaceous shale, thin coal bands and coal seams and OB dump.
2.11	Size of the Panels :	Sub-critical
2.12	Expected Life of the Mine :	14 years
2.13	Topography :	The topography in all the parts of the area have been affected by extracting the upper coal seams through opencast mines. The voids are backfilled with overburden materials. The original topography before opencast mining was undulating with occasional mounds and intervening depressions. Parts of the area are however, uneven, rugged and hilly. The ground elevation ranges from 404m to 464m above MSL. As per Abridged PR, it has been assumed that after reclamation the proposed mine will achieve the original surface relief.
2.14	Present Land Uuse :	Total mining area falls within Piparwar opencast boundary.
2.15	Surface Properties and Protection Measures :	Eco park, HT line, diverted Benti nala, CM sump, River and its tributaries. The surface features existing inside the opencast boundary is shifted and re-allocated and do not concern the study. Surface features outside the opencast boundary have been considered for protection against subsidence damages. Solid Coal pillars proposed to be left un-extracted vertically below and within

the subsidence influencing area from such surface features.

3.0 TOPOGRAPHY, DRAINAGE AND LAND USE:

The original topography of most of the area falling within opencast boundary has been altered due to opencast extraction of upper coal seams and backfilling thereof. It is assumed that on the completion of opencast mining the original topography will be restored by complete reclamation (As per abridged PR).

The original topography of the area was undulating with occasional mounds and intervening depressions. The parts of the area were however, uneven, rugged and hilly with elevation varying from 404m to 464m above MSL i.e. a difference of elevation of 60m.

Total 404 Ha of surface area falls inside the opencast boundary. A number of other surface construction features which mark the area and have been considered in the study include mine infrastructure, Damodar River, Eco park, HT line, CM sump & diverted Benti nala.

Damodar River passes through the eastern limit of the block. This river along with its tributaries form the most important drainage channel of the area.

4.0 GEOLOGY :

The borehole drilled in the mining area indicate that the coal bearing strata consists of sandstone, alternate shale & sand stone, shale, carboneous shale and backfilled overburden material. Parting of backfilled opencast floor and and Lower Bachra seam proposed for underground mining ranges from 98m to 118m. Upto Lower Dakra seam mining has been completed by Piparwar opencast. The final surface RL of the dump will be mostly as that of original surface RL (as indicated in Abridged Project Report). The only workable seam proposed to be mined by underground method is Lower Bachra seam which occurs at a depth range of 117m to 205m from the original surface profile. The thickness of this seam varies from 0.74 to 8.42m. The workable thickness, however for underground mining has been

considered from 1.5m to 4.6m. The geological structure of Piparwar block is that of homocline with super imposed rolling dips. The general strike of beds is NNW-SSE which swings to almost North-South in Sector-D around borehole NNKP-42 and 73.Generally the westerly Dip varies from 1 in 10 to 1 in 40.

5.0 LIMITATION

For depths upto 60m, formation of potholes over wide gallery junctions, as are formed during development cannot be eliminated. This would call for site specific roof support design. Pot holing is out of purview of this report. The actual subsidence already taken place may vary marginally due to difference in percentage of extraction within the panels and inbuilt safety factor in the programme used for the calculation. Further, it has been assumed that barriers between panels have factor of safety more than 2.0 and has long term stability.

6.0 METHOD OF MINING:

After extraction of upper seams upto Lower Dakra seam by opencast method and backfilling of decoaled area, Lower Bachra seam is proposed to be extracted by underground method of mining with caving. Method of work selected for the development and depillaring of Lower Bachra seam is Bord & Pillar with Continuous Miner. The extraction height would vary from 1.50 to 4.60m .The depth of the seam varies from 117m to 205m in the proposed mining area. The proposed layout of panels has been shown in Plate 1. The extraction phasing with the sequence of depillaring on 5th, 10th year of mining and at the end of mine life is shown in Plate 2.

The layout and the extraction phasing of panels as taken from Abridged Project Report prepared by CMPDI has been taken as the base in this predictive study. To protect the surface features within the subsidence influence zone development has been suggested as the final operation for panels underlying these structures. As entire proposed underground mine area is vertically below the backfilled opencast, there is no specific surface features/ construction within this area or which exist, are to be relocated. Hence, no protective measures are required while depillaring below surface features existing inside the opencast boundary. It is however proposed that in such areas before starting of depillaring operation, the overlying decoaled area must be kept dry.

7.0 SUBSIDENCE PREDICTION :

The subsidence prediction model based on Influence Function method, developed in CMPDI, has been used for estimation of likely subsidence over the mining area. Subsidence prediction has been done for the panels proposed to be extracted by caving method in mine projection plans. As per the Abridged project report, the minimum and maximum thicknesses of extraction have been considered to be 1.50m to 4.60m. Input data used for subsidence prediction, such as mining parameters, geology, panels' dimension, sequence of extraction of the panels and surface features have been collected from the Abridged project report and plans available at UMD, CMPDI (HQ).

The details of mine layout, surface contours, surface features, and other relevant features have been digitised from surface and underground working plans. The digitised data have been used as input parameters for the subsidence prediction model.

Since no measured data is not available regarding the subsidence parameters of the neighbouring mines, the values of subsidence factor and angle of draw have been taken considering the rock mass factor, geo-mining conditions and subsidence data observed in the neighbouring coalfields having similar geo-mining condition. In the proposed mining area, upper seams have been extracted by opencast method and the decoaled area backfilled with overburden material. Thus, for subsidence prediction, overlying rock mass has been considered to be disturbed due to previous mining. The parameters taken for subsidence prediction are as follows :

i)	Subsidence factor :	0.51.
ii)	Angle of draw :	35^0
iii)	Anticipated percentage of extraction in panels :	80%
iv)	Depth :	Average depth for each panel
vi)	Thickness of extraction :	Average thickness of the seam as indicated in Abridged Project Report by UMD,CMPDI (HQ). Minimum 1.50m to 4.60m thickness.

Before subsidence prediction, the numerical model was calibrated according to the above mentioned subsidence parameters. For subsidence calculation, underground extraction area was divided into 20m x 20m grid blocks as individual elements. The numerical procedure followed for prediction involves estimation of subsidence at the grid points of each element and subsequent integration to arrive at resultant values and the final area influenced by ground movement. Subsidence has been calculated over 30,300 grid points.

Subsidence prediction has been done for two stages of mining, i.e. at the end of 5th, 10th years of mining and 14 years (at the end of mine life) of mining. Stages of depillaring of panels are shown in Plate 2.

8.0 SUBSIDENCE PREDICTION RESULTS :

8.1 Maximum subsidence, subsidence contours and subsidence profiles :

The anticipated maximum possible subsidence likely to occur over the mining area after 5th and 10th years of mining is 1.940m over panel N1 and 1.940m over the same panel respectively. The estimated maximum possible subsidence likely to occur at the end of mine life (i.e. after 14 years of mining) is 2.06m, which is likely to take place over the panel N5. The estimated maximum possible strain and slope over the mining area are 12.13mm/m & 23.10mm/m over the panel N1 after 5th & 10th year of mining. The estimated maximum possible strain and slope likely to occur at the end of the mine life are 18.33mm/m and 34.92mm/m, respectively over the panel N5. From the estimated subsidence at each grid point, subsidence contours are shown after 5th & 10th years of mining and at the end of 14 years of mining (i.e. at the end of mine life) and shown in Plates 4, 6 and 8 respectively. In the plates, subsidence contours are shown alternately in violet and orange colours at 0.4m intervals. Final subsidence profiles along lines AA' and, BB' have also been drawn and shown in Plates 12 and 13, respectively. Intersection of section lines AA' and BB' mark the maximum subsidence point.

8.2 Effect of subsidence on surface topography and surface features along with mitigative measures :

Surface topography before mining, after 5th & 10th years of mining and at the end of mine life are shown in Plates 3, 5, 7 and 9, respectively. Change in topography due to subsidence can be seen by comparing the above mentioned plates. For a comparative assessment of ground condition before and after mining, 3D views of surface before and after mining are shown in Plates 10 and 11, respectively. By comparing the above two views, it is observed that there is moderate change in surface topography. Surface profiles before mining and after final subsidence (i.e after extraction of all the panels) have also been drawn along lines AA' and BB' and shown in Plates 12 and 13 respectively.

The exact surface topography of most of the area is not known, because the area is backfilled with over burden material after opencast workings. However, before opencast working the topography of the area was undulating with occasional mounds and intervening depression. Parts of the area were however, uneven, rugged and hilly. The elevation of the area varied from 404m to 464m above MSL i.e. a difference of 60m. It has been considered that after reclamation of opencast workings the surface would be contoured to the pre-mining topography. The main drainage system outside the mining block is still unchanged. Thus, for such terrain, maximum anticipated subsidence of 2.06m is unlikely to extensively affect the drainage pattern in the area. However, subsidence may result in the formation of depressions over the centre of the panels and cracks at the zones of high strain, such as along the boundary and barriers. Pools of water are likely to be formed in these depressions during rains, which may be retained wherever possible for the benefit of vegetation, or filled up/drained out by cutting drains depending on the requirement of the safe underground workings. The surface cracks, developed due to subsidence, need to be filled up properly and regularly with clay and stone chips to achieve the original drainage pattern of the area and to prevent ingress of air and water into the goaf. This will minimise the chances of underground inundation and spontaneous heating.

For estimating the effects of subsidence on surface features, panel wise anticipated maximum possible subsidence, slope and strain have been calculated

due to extraction of coal in Lower Bachra seam, which is shown in Table 1. Strain developed due to subsidence is the prime cause of damage to the surface features. Thus, values of strain likely to occur near important surface features have been estimated to envisage the extent of damages to the surface features. The impacts of subsidence on different surface features are outlined below.

Impact of subsidence on HT line:

HT line over the property are proposed to be diverted due to opencast working. Therefore no protective measure has been suggested for the existing HT line. It is likely to be affected by maximum amount of 2.01m of subsidence, 34.92mm/m of slope and 18.33mm/m of strain, which is likely to have damaging effect on the HT line. It is, therefore suggested to leave solid coal pillars unextracted vertically below and within 35^0 angle of draw from the HT line, if not shifted.

Impact of subsidence on Diverted Benti nala:

Diverted Benti nala which is passing over the underground mine boundary is likely to be affected by maximum amount of 0.41 m subsidence and 2.72mm/m strain over the barrier of panels L1 & L1A, this amount of subsidence and strain is unlikely to cause damaging effect, if the inter panel barriers remain stable. Therefore, it is suggested to further divert the nala outside the subsidence influence area or solid coal pillars may be left unextracted vertically below and within 35^0 angel of draw from the nala, if it is to be kept completely out of subsidence influence area.

Impact of subsidence on Embankment of Diverted Benti nala:

Embankment of Diverted Benti nala which is passing over the underground mine boundary is likely to be affected by maximum amount of 0.41 m subsidence over the barrier of panels L1 & L1A, this amount of subsidence is likely to cause damaging effect on the embankment. Therefore, it is suggested to further divert the nala outside the subsidence influence area or solid coal pillars may be left unextracted vertically below and within 35^0 angel of draw from the nala, if it is to be kept completely out of subsidence influence area.

Impact of subsidence on Mine infrastructure:

Mine infrastructure such as workshop, offices, quarters etc situated within the mining area are unlikely to be affected by marginal amount of subsidence. Therefore, no protective measure against these infrastructure has been proposed.

Impact of subsidence on Damodar River :

Damodar River flowing near the property is unlikely to be affected by subsidence as a barrier of 60m is proposed to be left against the Damodar River.

Impact of subsidence on embankment of Damodar River:

Embankment of Damodar River is likely to be affected by a maximum amount of 0.19m subsidence. To keep it outside subsidence influence area, solid coal pillars are to be left unextracted vertically below and within 35° angle of draw from the embankment of Damodar River.

Impact of subsidence on water logged workings of OCP:

Over the proposed mining area there are some water logged workings created by opencast workings. These are likely to be affected by subsidence which may cause danger to the mine. Thus, these water bodies need to be dried and filled up before underground workings are made in the area.

Impact of subsidence on CM sump:

CM sump is likely to be affected by a maximum amount of 0.02m subsidence; therefore, it is not likely to be considerable damaging effect.

Impact of subsidence on Eco Park:

Eco Park is likely to be affected by a maximum amount of 0.75m subsidence and 4.76mm/m strain. Such amount of subsidence and strain are likely to cause damaging effect on any structure in the Eco Park. Therefore, it is suggested to shift and relocate the park outside the subsidence influence area.

9.0 SUBSIDENCE MANAGEMENT :

Considering the impact of subsidence on surface topography, forest and surface features, as explained in earlier chapters, the following subsidence management aspects are required to be undertaken to overcome or to minimise adverse effects.

i) Due to subsidence, surface cracks likely to develop over the mining area need to be filled up properly and regularly by clay and stone chips and thereafter with about 0.3m high clay heap over the cracks. It will help in achieving the original drainage pattern over the mining area, improving the water retention capacity of the soil, minimising the soil erosion and avoiding chances of underground inundation and spontaneous heating.

ii) It is suggested that a team is formed by the mine management which will be responsible for the proper and regular filling of surface cracks developed due to subsidence. The team will also maintain records of the development and filling of surface cracks. Adequate supply of filling materials should be arranged by mine management at the site.

iii) Provision has to be made for compensatory afforestation and strengthening of forest cover to take care of losses, if any.

iv) Subsidence may result in depressions on the surface with accumulation of water during the rains. Such accumulation of water may be beneficial for vegetation in the forest. These water bodies may be retained wherever possible or drained out by cutting drains depending on safety requirements of the underground workings.

v) Surface drains should be made outside of the subsidence influence area to prevent the surface water of adjoining area from coming into active subsidence area.

vi) Stagnant water bodies created over the property by opencast workings need to be dried and filled up before commencement of underground workings below them.

vii) Coal pillars are to be left un-extracted vertically below and within subsidence influence area from the surface features which are required to be protected from subsidence damages.

viii) Considering the make of water in small seasonal streamlets existing over the mining area, due care has to be undertaken while extraction is made below these streamlets such as avoiding extraction during monsoon and filling of cracks developed in the bed of the streamlets, when dry. However, if it is required to keep the streamlets totally out of subsidence influence area, coal pillars should be left un-extracted vertically below and within 35^0 angle of draw from these streamlets.

ix) Over the proposed mining area there are some water logged workings created by opencast workings. These are likely to be affected by subsidence which may cause danger to the mine. Thus, these water bodies need to be dried and filled up before underground workings are made in the area.

The impact of subsidence on different surface features and forest land along with the degree of damage are provided in Annexure I for reference, i.e. the "Subsidence Impact Matrix". The Subsidence Impact Matrix (SIM) shown therein was developed under a Ministry of Coal funded S&T project.

10.0 CONCLUSION:

i) The anticipated maximum surface subsidence likely to occur from extraction of Lower Bachra seam at Piparwar UG (Phase-I), is 2.06m, which is likely to take place over panel N5. The estimated maximum possible slope and the strain likely to develop on subsidence are 34.92 mm/m and 18.33 mm/m respectively over the same panel.

ii) The existing HT line is likely to be affected by maximum amount of 2.01m subsidence, 34.92mm/m slope and 18.33mm/m strain, which is likely to have damaging effect on it. HT line over the property are therefore

suggested to be diverted due to opencast working, which has also been proposed in Abridged PR. Therefore no protective measure has been suggested for the existing HT line. It is suggested to leave solid coal pillars unextracted vertically below and within 35^0 angle of draw from the HT line, if not shifted.

iii) Diverted Benti nala which is passing over the underground mine boundary is likely to be affected by maximum amount of 0.41 m subsidence and 2.72mm/m strain over the barrier of panels L1 & L1A, this amount of subsidence and strain is unlikely to cause damaging effect, if the inter panel barriers remain stable. Therefore, it is suggested to further divert the nala outside the subsidence influence area or solid coal pillars may be left unextracted vertically below and within 35^0 angel of draw from the nala, if it is to be kept completely out of subsidence influence area.

iv) Embankment of Diverted Benti nala which is passing over the underground mine boundary is likely to be affected by maximum amount of 0.41 m subsidence over the barrier of panels L1 & L1A, this amount of subsidence is likely to cause damaging effect on the embankment. Therefore, it is suggested to further divert the nala outside the subsidence influence area or solid coal pillars may be left unextracted vertically below and within 35^0 angel of draw from the nala, if it is to be kept completely out of subsidence influence area.

v) Mine infrastructure such as workshop, offices, quarters etc situated within the mining area are unlikely to be affected by marginal amount of subsidence. Therefore, no protective measure against these infrastructure has been proposed.

vi) Damodar River flowing near the property is unlikely to be affected by subsidence as a barrier of 60m is proposed to be left against the Damodar River.

vii) Embankment of Damodar River is likely to be affected by a maximum amount of 0.19m subsidence. To keep it outside subsidence influence area, solid coal pillars are to be left unextracted vertically below and within 35^0 angle of draw from the embankment of Damodar River.

viii) Over the proposed mining area there are some water logged workings created by opencast workings. These are likely to be affected by

subsidence which may cause danger to the mine. Thus, these water bodies need to be dried and filled up before underground workings are made in the area.

ix) CM sump is likely to be affected by a maximum amount of 0.02m subsidence, therefore, it is not likely to cause considerable damaging effect.

x) A few stagnant water bodies in Opencast Project are likely to be created over the property and these are required to be dried and filled up suitably with overburden material before commencement of underground working below them .

xi) The exact surface topography of most of the area is not known, because the area is backfilled with over burden material after opencast workings. However, before opencast working the topography of the area was undulating with occasional mounds and intervening depression. Parts of the area were however, uneven, rugged and hilly. The elevation of the area varied from 404m to 464m above MSL i.e. a difference of 60m. It has been considered that after reclamation of opencast workings the surface would be contoured to the pre-mining topography. The main drainage system outside the mining block is still unchanged. Thus, for such terrain, maximum anticipated subsidence of 2.06m is unlikely to extensively affect the drainage pattern in the area. However, subsidence may result in the formation of depressions over the centre of the panels and cracks at the zones of high strain, such as along the boundary and barriers. Pools of water are likely to be formed in these depressions during rains, which may be retained wherever possible for the benefit of vegetation, or filled up/drained out by cutting drains depending on the requirement of the safe underground workings.

xii) Due to subsidence, surface cracks likely to develop over the mining area need to be filled up properly and regularly by clay and stone chips and thereafter with about 0.3m high clay heap over the cracks. It will help in achieving the original drainage pattern over the mining area, improving the water retention capacity of the soil, minimising the soil erosion and avoiding chances of underground inundation and spontaneous heating.

xiii) It is suggested that the mine management forms a team that will be responsible for the proper and regular filling of surface cracks developed due to subsidence. The team will also maintain a record of the development and filling of surface cracks. Adequate supply of filling material should be arranged by the mine management at the site.

xiv) Surface drains should be made outside of the subsidence influence area to prevent the surface water of adjoining area from coming into active subsidence area, which may result in risk of inundation of the workings.

xv) Considering the above suggested mitigative measures and recommendations Lower Bachra seam may be extracted in Parej Underground.

It is recommended that while carrying out extraction in the panels, close subsidence monitoring should be done over some initial panels. Based on observed data, necessary correction for subsidence may be done, if required.

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PIPARWAR UG (PHASE-I) MINE , CENTRAL COALFIELS LIMITED

Table 1: Anticipated maximum possible subsidence, slope and strain over mining area after extraction of Lower Bachra -Seam.

Panel No.	Av. Width	Av. Depth	Extraction Thickness	Max. Subsidence	Max. Slope	Max. Tensile Strain	Likely width of surface cracks
	(m)	(m)	(m)	(mm)	(mm/m)	(mm/m)	(mm)
N1A	135	161	4.50	1100	13.66	7.17	<50
N1	165	168	4.50	1940	23.10	12.13	<100
N2	135	156	4.50	1570	20.13	10.57	<100
N3	135	148	4.50	1690	22.84	11.99	<100
N4	135	140	4.50	1790	25.57	13.43	<150
L3	200	181	2.00	890	9.83	5.16	<50
L11	135	179	2.00	580	6.48	3.40	Fine Cracks
L10	135	169	2.30	740	8.76	4.60	Fine Cracks
L9	105	166	2.60	350	4.22	2.21	Fine Cracks
T5	135	188	2.00	510	5.43	2.85	Fine Cracks
T4	135	180	1.90	550	6.11	3.21	Fine Cracks
L1A	90	203	1.50	180	1.77	0.93	Nil
L1	135	189	1.80	490	5.35	2.72	Fine Cracks
L2	80	184	1.80	260	2.83	1.48	Nil
L5	65	191	1.70	140	1.47	0.77	Nil
L4	135	190	1.70	480	5.05	2.65	Fine Cracks
L6	135	185	1.70	490	5.30	2.78	Fine Cracks
L7	135	187	1.80	510	5.45	2.86	Fine Cracks
L8	160	174	1.80	650	7.47	3.92	Fine Cracks
T3F	135	172	1.80	560	6.51	3.42	Fine Cracks
L13	95	172	2.50	410	4.77	2.50	Fine Cracks
L14	135	172	2.50	780	9.07	4.76	Fine Cracks
L15	135	174	2.90	890	10.23	5.37	Fine Cracks
L16	135	171	2.90	900	10.53	5.53	<50
L17	55	153	3.00	130	1.70	0.89	Nil
T1	135	164	2.80	930	11.34	5.95	<50
T2	135	169	2.50	770	9.11	4.78	Fine Cracks
L12	160	163	2.50	1050	12.88	6.76	<50
N5A	135	154	2.60	1500	19.48	10.23	<100
N5B	135	118	4.50	2060	34.92	18.33	<300
N6A	135	136	3.00	1510	22.21	11.66	<100
N6B	135	121	4.50	2000	33.06	17.36	<200
N7A	135	131	3.00	1490	22.75	11.94	<100
N7B	135	117	4.50	2040	34.87	18.31	<300

Annexure-I

SUBSIDENCE IMPACTS MATRIX

The Subsidence Impact Matrix given below shows the degrees of damage for various surface features, including forest land, vis-a-vis subsidence, slope and strain values was developed as part of a Ministry of Coal funded S&T project and is extracted from the S&T Report titled "Subsidence in Mining Areas" by CMRI.

Sl. No.	Impact	Subsidence	Slope	Strain
		mm	mm/m	mm/m
1	2	3	4	5
	SURFACE TOPOGRAPHY			
1.	Practically no impact	<500	<3	<3
2.	Some fine cracks or one or two 50mm wide cracks with visible depression	<500 500-1000	3-5 5-10	3-5 3-5
3.	A large number of fine cracks or a few 100mm wide cracks with marked depression	500-2000	10-20	5-10
4.	A large number of 50-100mm wide cracks or a few 200mm wide cracks with stepping. Marked distortion in surface topography	500-2000	>20	10-20
5.	500mm wide cracks with stepping and prominent distortion in surface topography	>1000	>50	20-50
6.	Many 500mm wide cracks some upto 1000mm width, large stepping. Severe distortion in surface topography	>2000	>100	50-100
7.	Very severe distortion in surface topography. Stepped subsidence with very wide cracks.	>2000	>100	>100

1	2	3	4	5
		mm	mm/m	mm/m
	SURFACE WATER BODIES (Ponds, Rivers, Nallahs, Jores, HFL)			
1.	Practically no impact. No loss of water	<500	<3	<3
2.	Marginal impact in some cases only. Some loss of water and water logging	<1000	<5	<5
3.	Severe impacts. Major loss of water. Severe water logging	>1000	>5	>5
	SUB-SURFACE WATER TABLE			
1.	Marginal depletion in water retaining capacity	<500	<3	<3
2.	Severe depletion in water retaining capacity	-	-	>5
	AQUIFERS			
1.	Depletion in water retaining capacity	-	-	>3
	WATERLOGGING ON SURFACE			
1.	Very little waterlogging	<500	-	-
2.	Some (300-500mm deep depending on surface topography)	500-1000	-	-
3.	Marked waterlogging	>1000	-	-
	ROADS			
1.	Practically no impact	<500	<5	-
2.	Depressions with gentle slope	-	5-10	-
3.	Steeper slopes (speed restriction may be necessary)	-	20-50	-
4.	Marginal repairs necessary	-	20-50	>10
5.	Major repairs necessary	-	>50	>10

1	2	3	4	5
		mm	mm/m	mm/m
RAILWAY LINES - JOINTED CONSTRUCTION				
1.	Practically no impact	-	<10	<3
2.	Minor to severe impacts, repairs necessary due to bending twisting and breaking of rails and steeper gradients	-	>10	>3
RAILWAY LINES - WELDED CONSTRUCTION				
1.	No subsidence permitted. Even very small strain can cause twisting and breaking of rails,			
RAILWAY SIDINGS (Jointed Construction)				
1.	Practically no impacts	-	<10	<3
2.	Minor to severe impacts, repairs necessary	-	>10	>3
SINGLE STORY HUTMENTS (Kuccha)				
1.	Practically no impact. A few fine cracks in plastered walls	-	<5	<3
2.	Minor repairable impacts. Fine cracks. A few 10mm wide cracks.	-	<10	3-5
3.	Major/severe impacts. Wide cracks, stepping, tilting	-	>10	>5
SINGLE STORY BUILDINGS				
1.	Very little impact. A few fine cracks or one/two 5-10mm wide crack in plaster	-	<5	<3
2.	Minor impacts, repairable. 5-10mm wide cracks, doors and windows getting slight jamming, slight tilting.	-	5-10	3-5
3.	Severe impacts, major repairs necessary. Wider cracks, stepping, crushing and marked tilting.	-	>10	>5

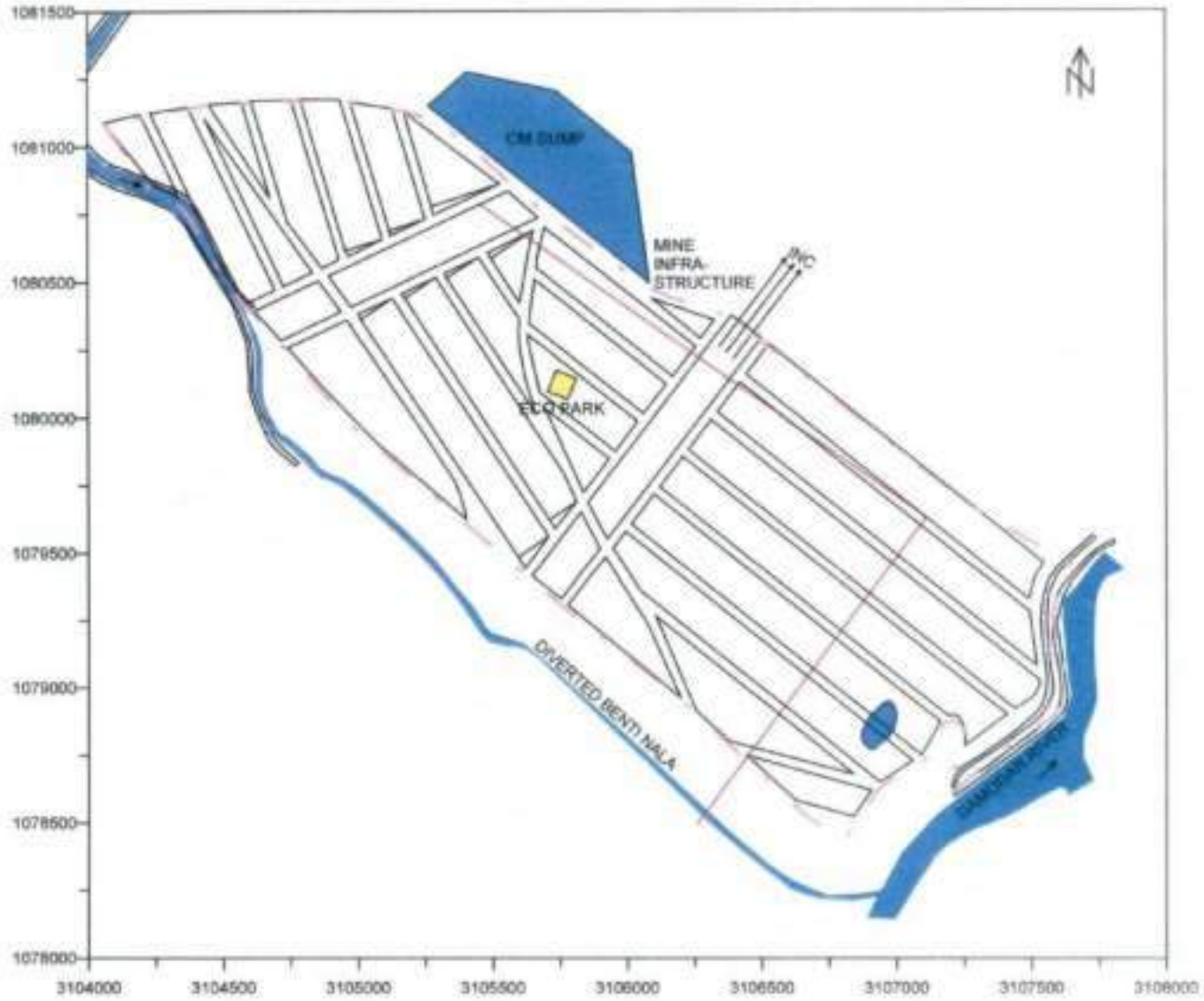
1	2	3	4	5
		mm	mm/m	mm/m
	DOUBLE STORY BUILDINGS			
1.	Very little impact. A few fine cracks or one/two 5-10mm wide cracks	-	<5	<3
2.	Little repairable impact, 5-10mm wide cracks, slight displacement of walls against roof, doors and windows getting slightly jammed.	-	5-10	3-5
3.	Severe impacts, major repair necessary. Wider cracks, stepping, crushing and tilting. Gaps between walls and roof.	-	>10	>5
	MULTI-STORY BUILDINGS			
1.	Little impacts, repairable 5-10mm wide cracks, doors and windows getting slight jamming, displacement of walls against roof.	-	<5	<3
2.	Severe impacts. Winder cracks, crushing, tilting, and stepping.	-	>5	>3
	LARGE BUILDINGS, MONUMENTS, HISTORICAL BUILDINGS, ETC.			
1.	Very little impact. A few fine cracks or one/two 5-10mm wide cracks	-	<3	<1.5
2.	Little impact, 5-10mm wide cracks, Damage to decorations; slight displacements; doors and windows getting jammed.	-	3-5	1.5-3
3.	Severe impacts. Wider cracks, tilting, crushing, etc. Major repairs necessary.	-	>5	>3
	AERII (A+B)L ROPEWAYS			
1.	Practically no impact	-	<5	<3
2.	Little repairable impacts	-	5-10	3-5
3.	Severe impacts. Ropes may leave pullies due to change in alignment. Tilting of pylons. Buckling of structure.	-	>10	>5
	HIGH TENSION PYLONS			

1.	Practically no impact	-	<5	<3
2.	Severe impacts. Tilting, buckling and may be collapse of pylons	-	>5	>3
1	2	3	4	5
		mm	mm/m	mm/m
	UNDERGROUND CABLES			
1.	Practically no impact	-	-	<3
2.	Severe impacts (cables may break due to tension).	-	-	>3
	UNDERGROUND PIPELINES			
1.	Practically no impact	-	-	<1.5
2.	Severe impacts. Breaking of pipes	-	-	>1.5
	OVERLYING VIRGIN SEAMS			
1.	Practically no impact. No visible signs of subsidence when the seams are developed.	-	<5	<3
2.	A little impact. A little crushing of coal, roof and floor rock. Fire risk when development is done in upper seam.	-	5-10	3-5
3.	Severe impacts. Crushing of coal, roof and floor rock. Stepping in tensile strain zone. Fire risk. Heaving, supports necessary during development.	-	10-20	5-10
4.	Very severe impacts. Severe crushing, large stepping, entry into subsided area rather difficult. High fire risk. Arching necessary.	-	>20	>10
	OVERLYING WORKINGS (Standing on developed pillars)			
1.	Practically no impact on galleries and pillars. Some spalling.	-	<5	<3
2.	Visible floor lifting, side spalling and roof falls. Supports required. Fire risk.	-	-	3-5
3.	Marked floor lifting, side spalling and roof falls. High fire risks. Workings unsafe.	-	-	5-10
4.	Severe floor lifting, large roof falls,	-	-	>10

	wide spread side spalling, stepping, very high fire risk, workings unsafe.			
	OVERLYING WORKINGS (Standing on reduced pillars)			
1.	Practically no impact.	-	<3	<1.5
1	2	3	4	5
		mm	mm/m	mm/m
2.	Marginal impact on stability of stooks. The stooks with marginal factor of safety may collapse increasing loading on adjoining stooks.	-	<5	<5
3.	Failure of a few stooks may lead to chain of failures causing partII (A+B)I or total collapse of area. Thus causing additional subsidence on overlying horizons.	-	>5	>3
	OVERLYING WORKINGS (Packed or stowed)			
1.	Practically no impact on stowed workings. Some loss of water.	-	-	<5
2.	Complete loss of water from stowed areas and also from adjoining rise side areas.	-	-	>5
	WATERLOGGED OVERLYING WORKINGS (Standing on developed pillars)			
1.	Practically no impact on pillars, galleries and water retaining capacity of the workings.	-	-	<3
2.	Marginal loss of water through fine cracks in strata around. Dewatered areas may have risk of fires, roof falls, side spalling, floor lifting.	-	-	<5
3.	Major loss of water. High fire risk in dewatered areas with roof falls, side spalling, floor lifting, etc.	-	-	5-10
4.	Total loss of water. Very high fire risk with severe floor lifting, roof falls and spalling.	-	-	>10
	WATERLOGGED OVERLYING WORKINGS (Standing on reduced pillars/stooks)			
1.	Stooks may collapse causing	-	-	<3

	additional subsidence on surface.			
2.	PartII (A+B)I loss of water. Collapse of stooks. Additional surface subsidence. Fire risk.	-	-	3-5
3.	Total loss of water. Collapse of workings. Additional surface subsidence; fire risk.	-	-	>5
1	2	3	4	5
		mm	mm/m	mm/m
	IN CURRENT WORKINGS FROM SUBSIDENCE AT THE LEVEL OF SURFACE			
1.	Practically no impact.	-	-	<5
2.	Leakage of air. Fire in goaves at shallow depth.	-	-	>5
	IN CURRENET WORKINGS FROM SUBSIDENCE AT THE LEVEL OF OVERLYING TATER BODIES			
1.	Practically no impact	-	-	<3
2.	Marginal increase in make of water.	-	-	3-5
3.	ApprecII (A+B)ble increase in make of water.	-	-	5-10
4.	Heavy increase in make of water, which may lead to inundation.	-	-	>10
	SURFACE ATMOSPHERE			
1.	Practically no impact.	-	-	<5
2.	Some air from underground workings at shallow depth may leak to surface.	-	-	5-10
3.	Air leakage from shallow depth workings. If the workings have fire, surface atmosphere is likely to be polluted by gases coming from the fire.	-	-	>10
	SUB-SOIL			
1.	Practically no impact.	-	-	<3
2.	Very little impact in the form of reduction of water retaining capacity.	-	-	3-5
3.	Temporary loss in water retaining capacity. Cracks filling may improve water retaining capacity.	-	-	5-10
4.	Long term loss of water retaining capacity. Suitable protective	-	-	>10

	measures necessary.			
	AGRICULTURE			
1.	Practically no impact.	-	-	<5
2.	Marginal impact, i.e. reduction in yield due to loss in water retaining capacity of sub-soil.	-	-	5-10
3.	Major impact, i.e. sizeable reduction in yield.	-	-	>10
1	2	3	4	5
		mm	mm/m	mm/m
	FOREST AND PLANTATION			
1.	Practically no impact.	-	<10	<5
2.	Temporary loss in water retaining capacity of top-soil may affect undergrowth slightly. Slight tilting of plants/trees.	-	10-20	5-10
3.	Short term impact on trees in zones having cracks. The cracks may get filled in due course. Tilting of trees.	-	20-50	10-20
4.	Wide cracks may severely affect undergrowth but may not have much impact on large trees except those in the tensile strain zone where wide cracks develop; high tilting may cause some trees to fall in the high slope zone.	-	>50	>20



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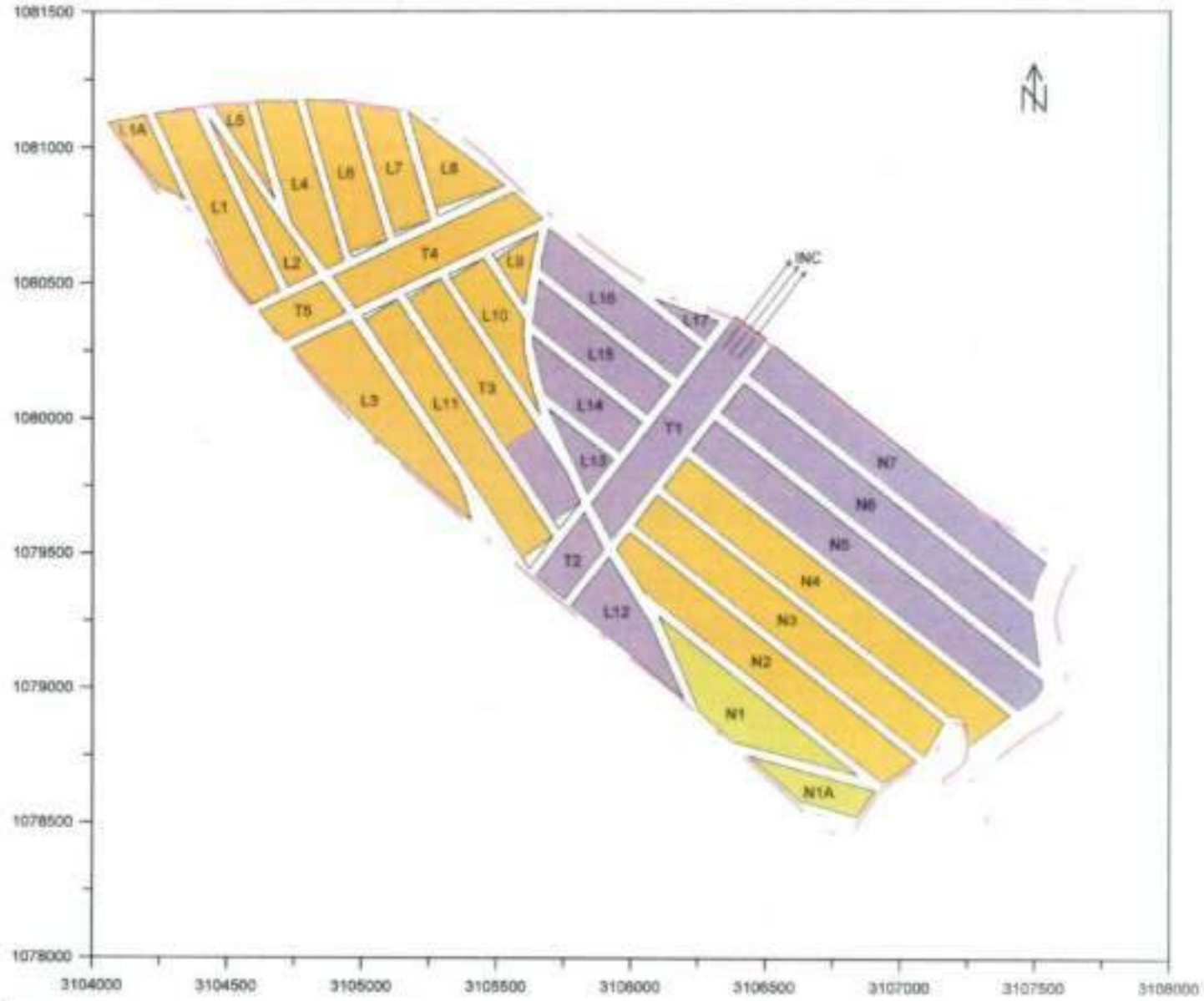
- LOWER BACHRA SEAM WORKINGS

PLATE1: PROPOSED LAYOUT OF UNDERGROUND WORKINGS OF LOWER BACHRA SEAM
SCALE 1:25000



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PANELS PRPOSED TO BE DEPILLARED FROM 0-5 YEARS

PANELS PROPOSED TO BE DEPILLARED FROM 5-10 YEARS

PANELS PROPOSED TO BE DEPILLARED FROM 11-14 YEARS

MINE BOUNDARY

PLATE 2: PROPOSED LAYOUT OF UNDERGROUND WORKINGS OF LOWER BACHRA SEAM WITH 5, 10 AND 14 YEAR STAGES OF DEPILLARING SCALE 1:25000

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PLATE 3: TOPOGRAPHY BEFORE UG MINING
SCALE 1:25000

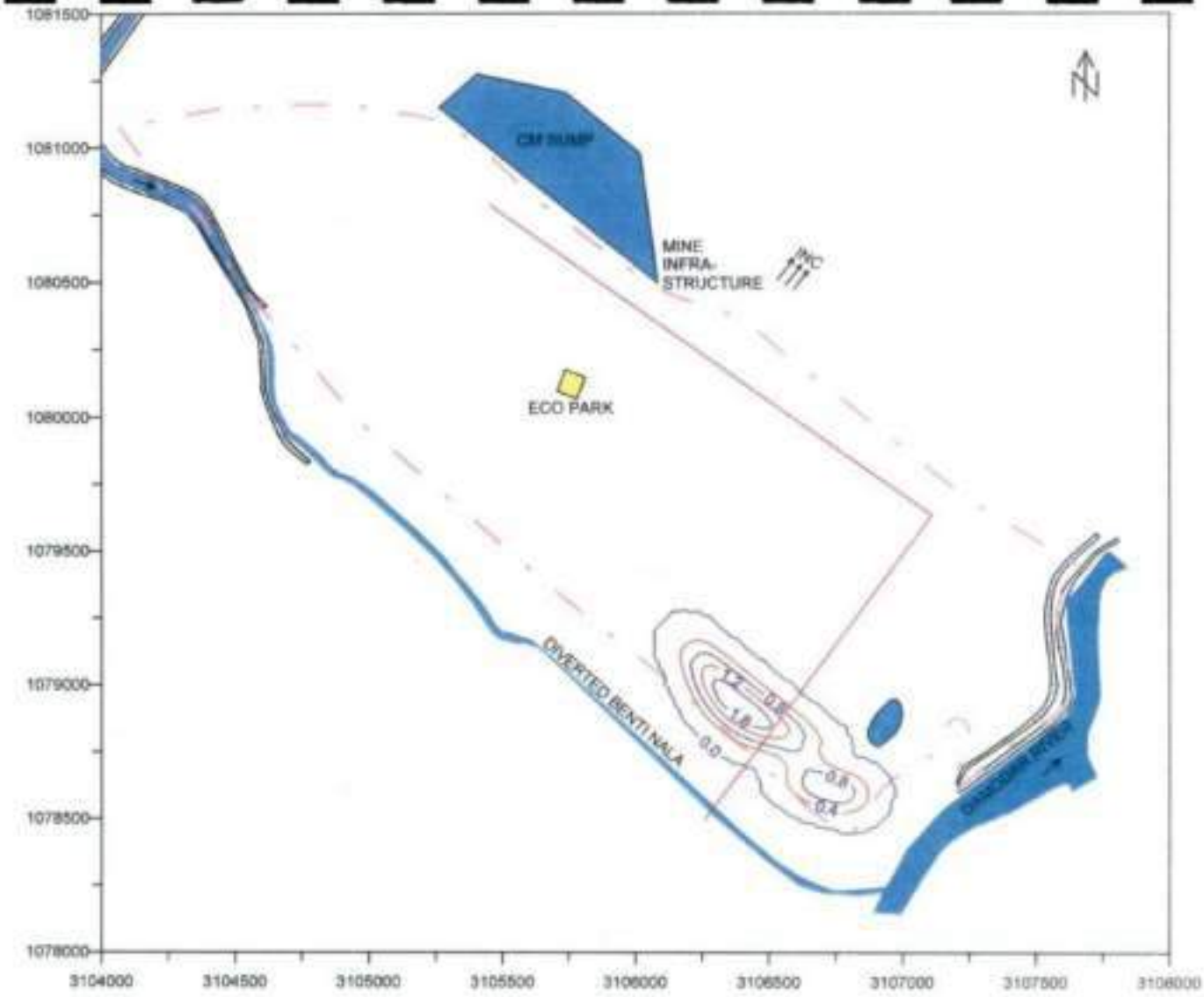

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PLATE 4: SUBSIDENCE CONTOURS AFTER 5 YEARS OF UG MINING
SCALE 1:25000

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PLATE 5: TOPOGRAPHY AFTER 5 YEARS OF UG MINING
SCALE 1:25000

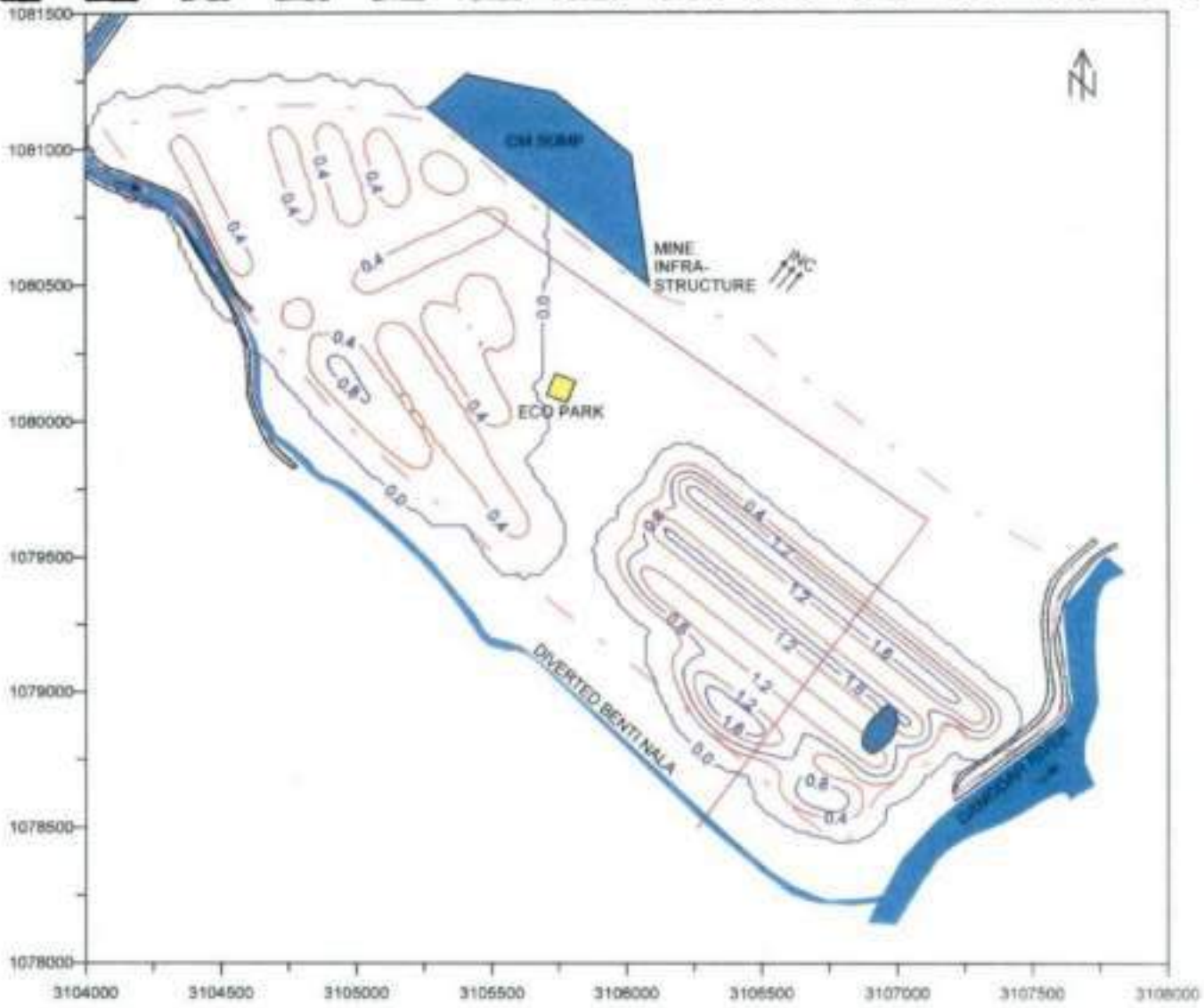

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PLATE 6: SUBSIDENCE CONTOURS AFTER 10 YEARS OF UG MINING
SCALE 1:25000

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- BUILT UP AREA
- HT LINE
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- EMBANKMENTS
- SUBSIDENCE INFLUENCE AREA

PLATE 7: TOPOGRAPHY AFTER 10 YEARS OF UG MINING
SCALE 1:25000

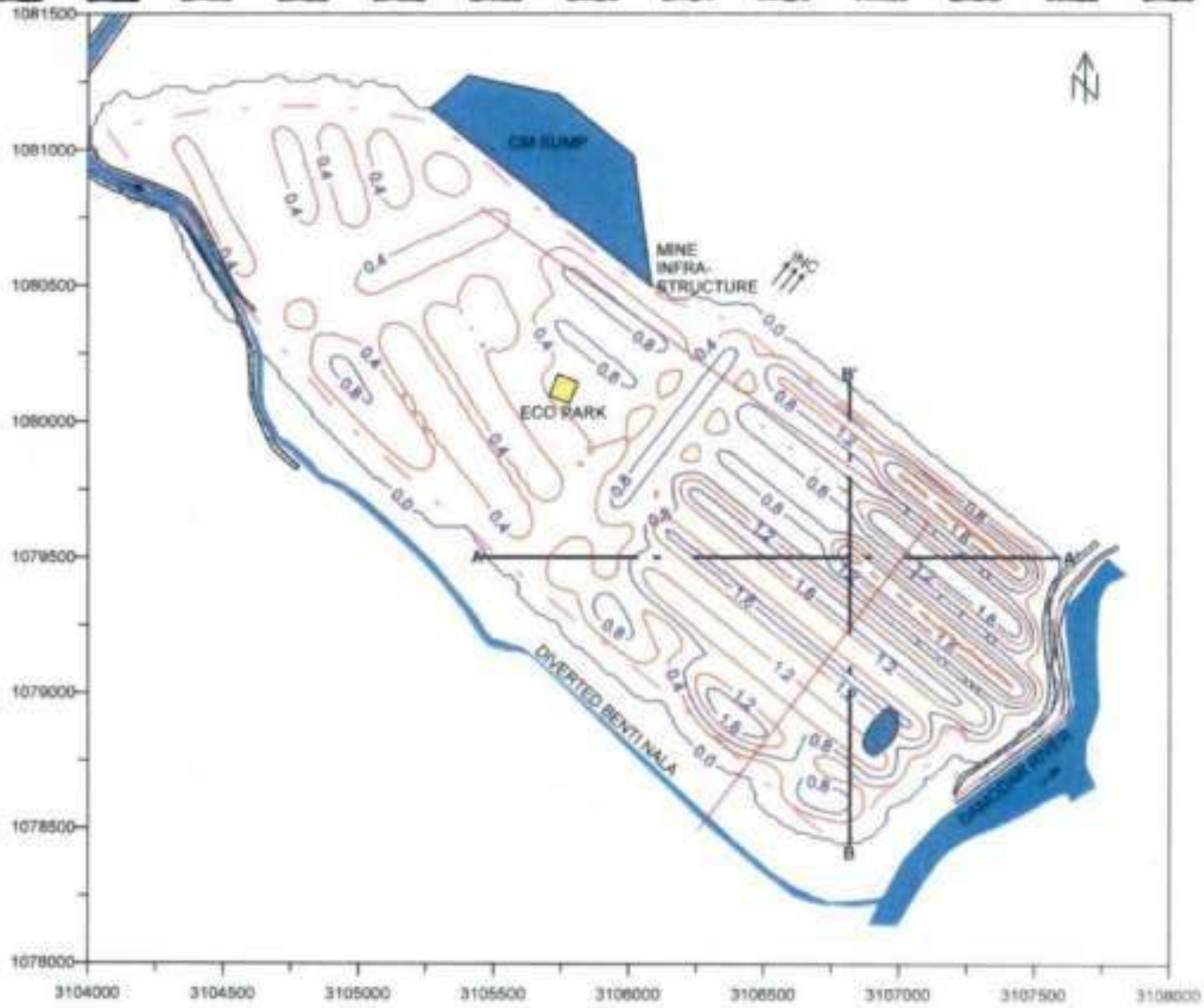

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PLATE 8: SUBSIDENCE CONTOURS AT THE END OF MINE LIFE
SCALE 1:25000

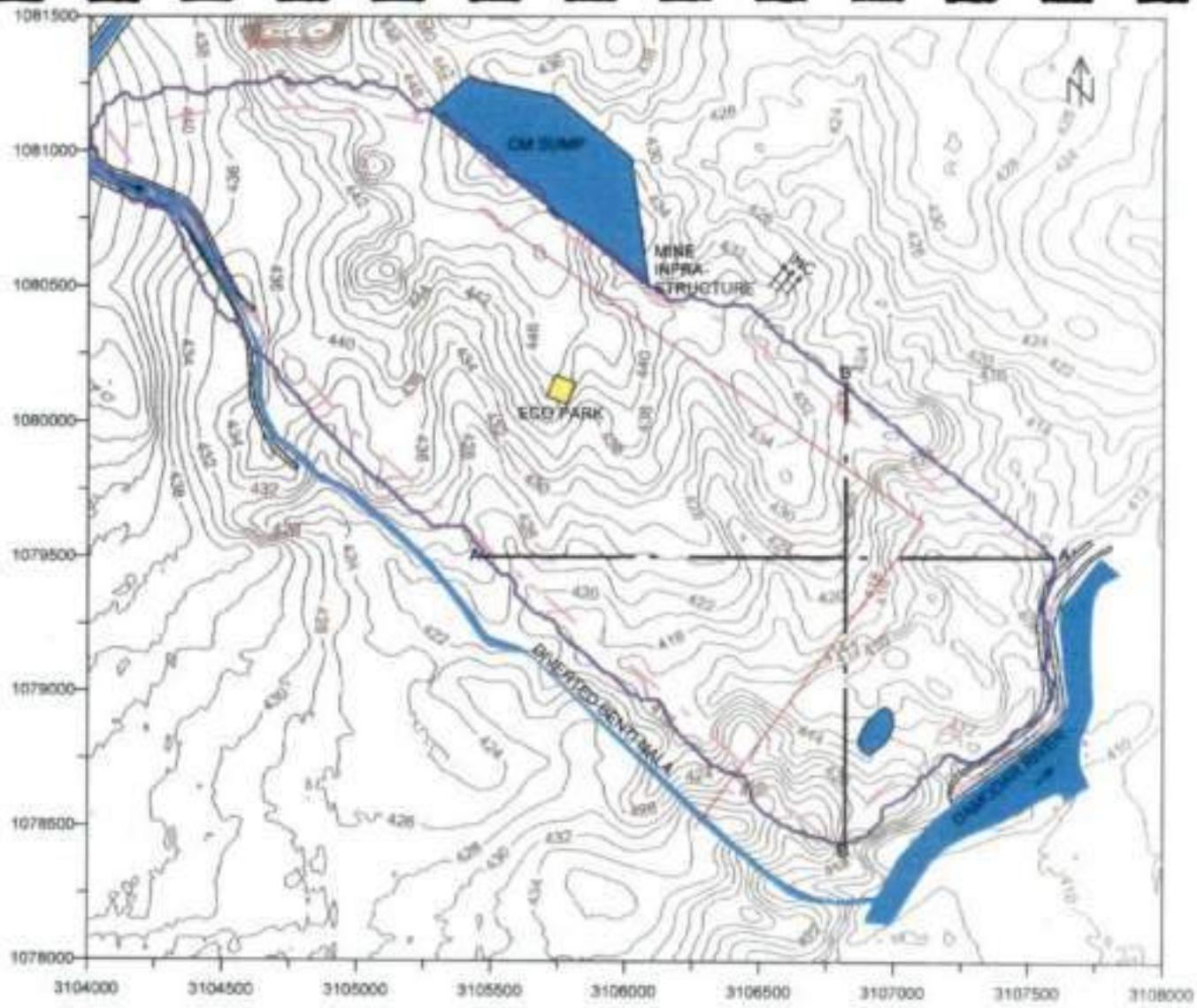

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PLATE 9: TOPOGRAPHY AFTER UG MINING (AT THE END OF MINE LIFE)
SCALE 1:25000

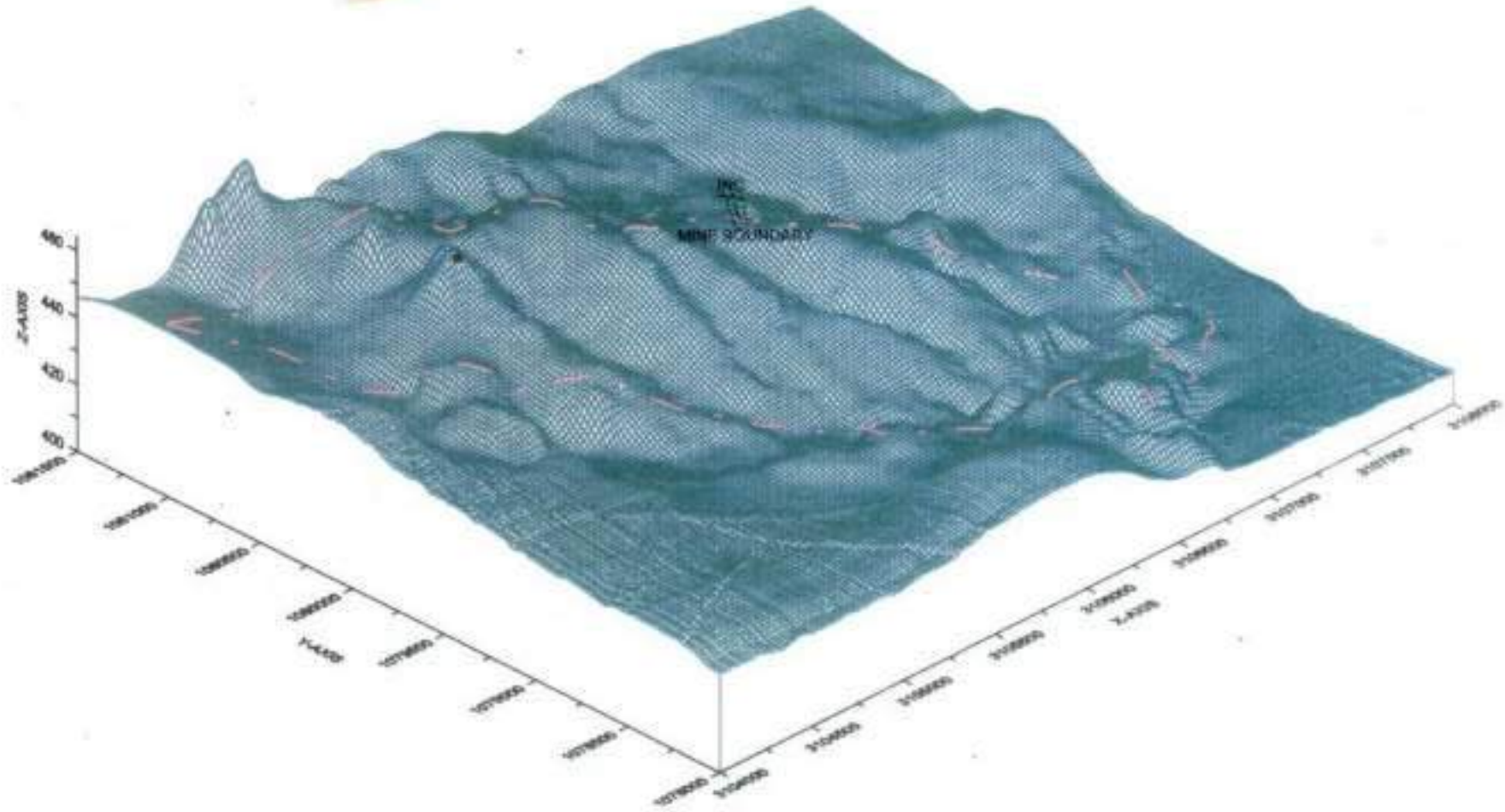


PLATE 10: 3D VIEW OF SURFACE BEFORE UG MINING
XY SCALE 1:25000

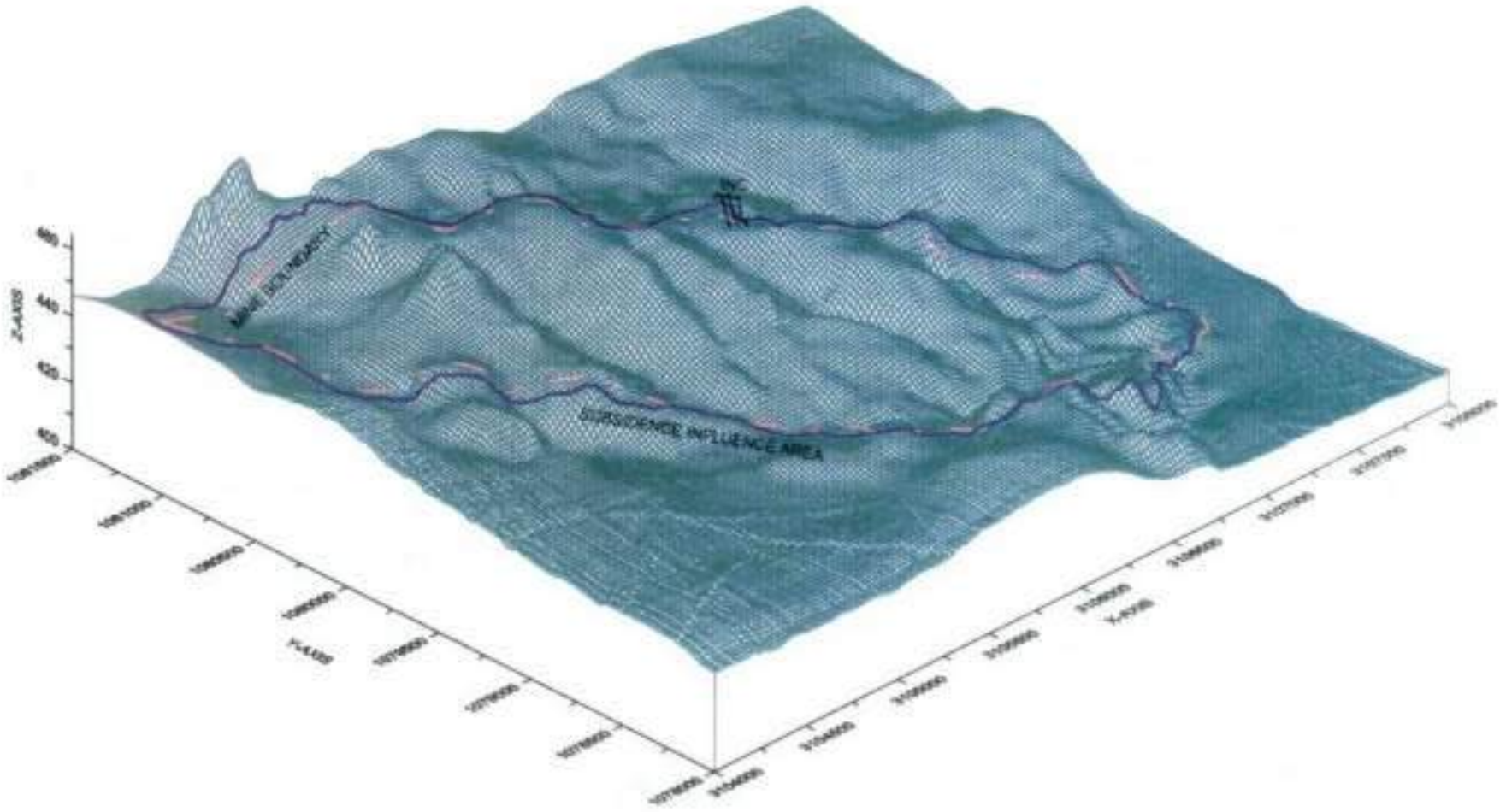
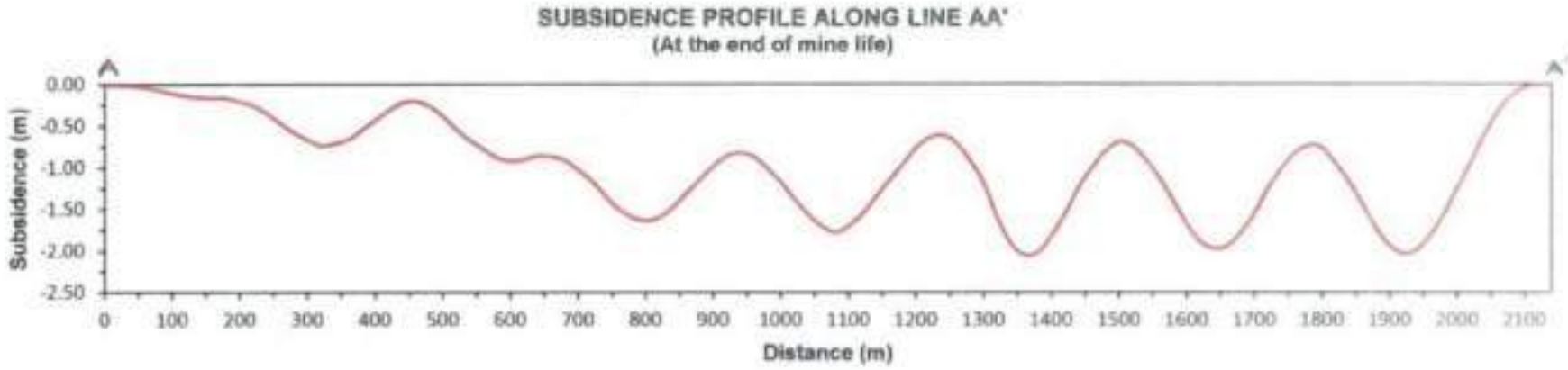


PLATE 11: 3D VIEW OF SURFACE AFTER UG MINING
XY SCALE 1:25000



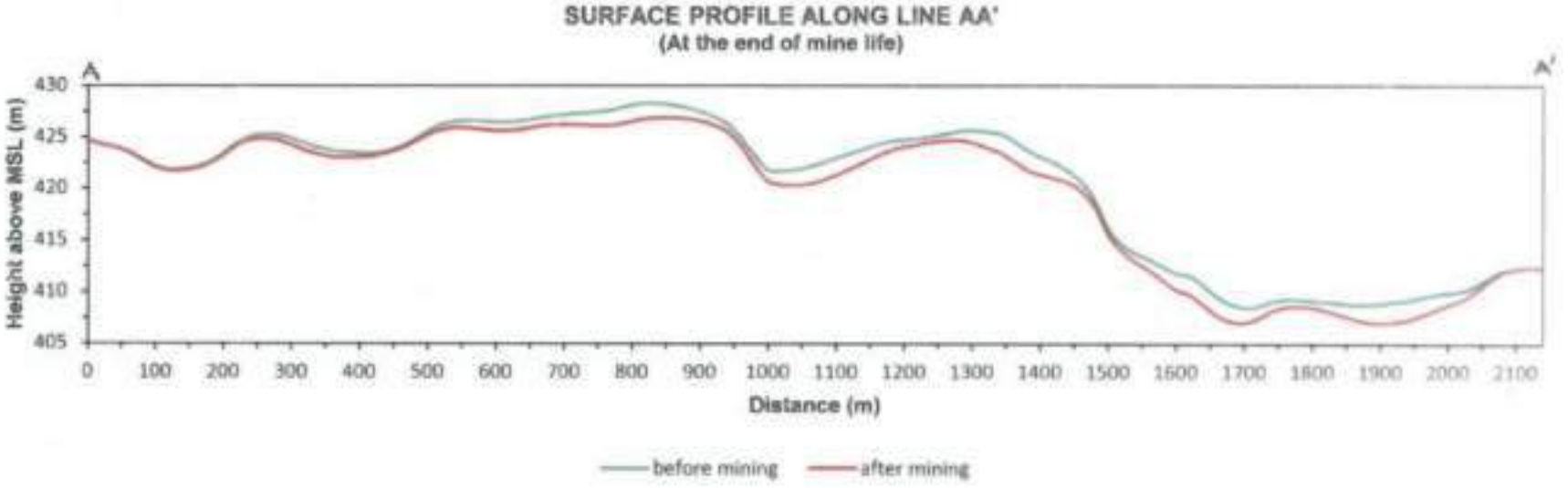
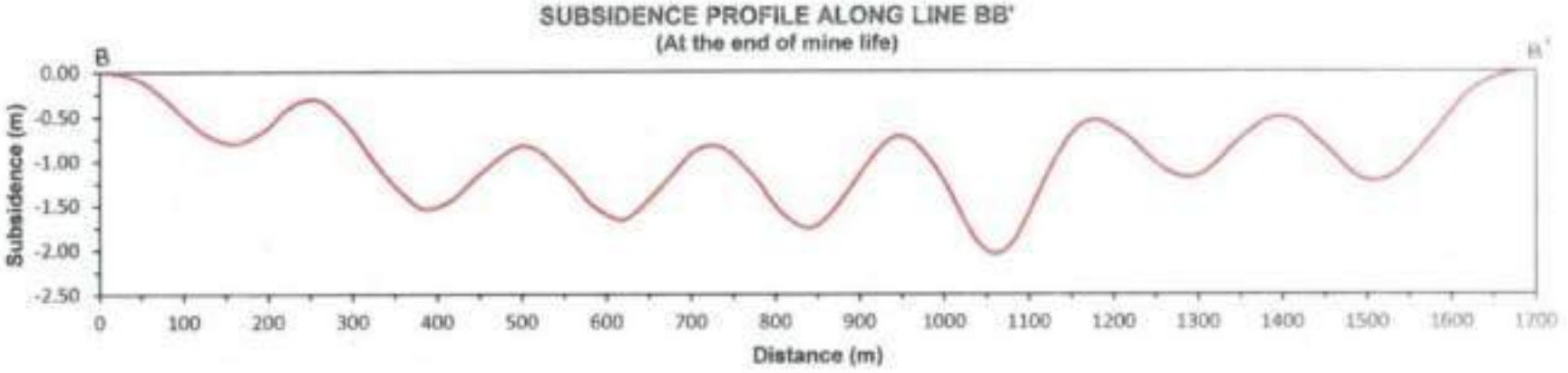


PLATE 12: SUBSIDENCE AND SURFACE PROFILES ALONG LINE AA' (AS SHOWN IN PLATES 3, 8 AND 9)

SCALE: NTS



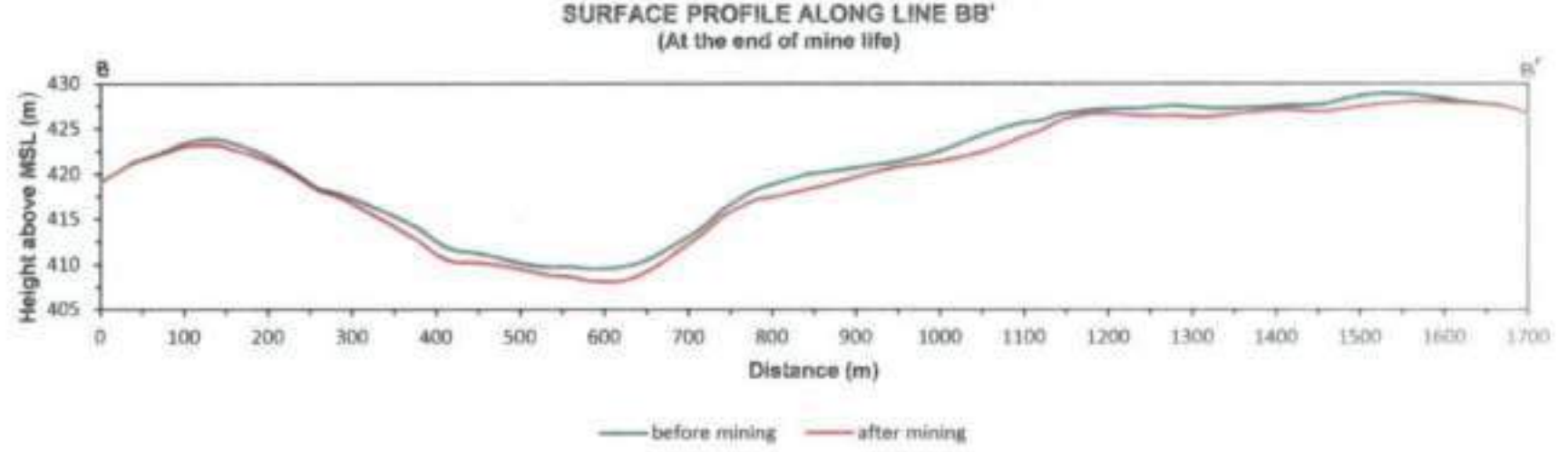


PLATE 13: SUBSIDENCE AND SURFACE PROFILES ALONG LINE BB' (AS SHOWN IN PLATES 3, 8 AND 9)

SCALE: NTS

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Nagpur - 440 014
(Maharashtra)

Regional Institute - V
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(Chattisgarh)

Regional Institute - VI
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Madhya Pradesh

Regional Institute - VII
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Sachivalaya Marg
Bhubneswar - 751 001
(Orissa)

सेन्ट्रल माईन प्लानिंग एंड डिजाइन इन्स्टीच्यूट लिमिटेड

(कोल इंडिया की अनुषंगी कम्पनी)
एक मिनी रत्न कम्पनी

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(A Subsidiary of Coal India Limited)
A Mini Ratna Company

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