

नॉर्थन कोलफील्ड्स लिमिटेड
(मिनिरत्न कंपनी)
(कोल इण्डिया लिमिटेड की अनुषंगी कंपनी)



Northern Coalfields Limited
(A Mini Ratna Company)
(A subsidiary of Coal India Limited)

Office of the General Manager,
Nigahi Project



CIN- U10102MP1985GOI003160

An ISO: 9001, ISO: 14001 & ISO: 45001 Certified Company

पोस्ट-परियोजना जिला- सिंगरौली, म.प्र., पिन 486884/ Post- Nigahi Project, Distt- Singrauli, M.P. PIN-486884

Phone: 07805- 276040, (FAX) 276306 email: egmnggh@ncl.gov.in website: www.nclcil.in

Ref No.: NGH/GM/SO(M)/ENV./23-24/1404

Dated: 14.07.2023

To,
The Executive Engineer
Water Resources Department,
Div. No.- 2, Singrauli (M.P.)

Sub: Regarding comments of the Water Resources Department sought by MoEF&CC on provisions of conservation and protection measures of two seasonal nallahs flowing through the proposed forest land of 229.348 Ha for diversion in compartment no. RF-272, 273 & 274 of Waidhan Range.

Ref: MoEF&CC's letter vide File No. 8-26/2015-FC Vol. 1/47834/2023 dated 05.07.2023

Dear Sir,

A fresh proposal of Diversion of 229.348 ha forest land in compartment No. RF-272, 273 & 274 of Waidhan Range for the extension of Nigahi Open-cast Coal Mining Project by M/s Northern Coalfields Limited under Singrauli Forest Division, Singrauli District of Madhya Pradesh State (Online Proposal No. FP/MP/MIN/140863/2021) – reg. was proposed seeking prior approval of the Central Government under section-2 of the Forest (Conservation) Act, 1980. A query has been received from MoEF&CC which states - *"As per the DSS analysis, two seasonal nallahs are flowing through the proposed forest land for diversion for which the provisions of conservation and protection measures have not been suggested by the State. Therefore, comments of the water resource department on the proposed measures and impact of the project on the hydrological regimes are required to be submitted."* A copy of the letter received from MoEF&CC is enclosed herewith as *Annexure-i*.

There are two seasonal Nallahs flowing through the proposed forest land of 229.348 Ha in compartment no. RF-272, 273 & 274 of Waidhan Range, a Toposheet (No. 63L/12) and detailed surface plan showing locations of these seasonal nallahs is enclosed herewith as *Annexure-ii*. In compliance of the observation made by MoEF&CC a detailed plan prepared by Nigahi OCP for conservation and protection of these seasonal nallahs is enclosed herewith as *Annexure-iii*. Project Feasibility Report (PFR) for Nigahi OCP is also enclosed herewith as *Annexure-iv*.

Keeping in view the nature and location of the seasonal nallahs and detailed plan submitted from Nigahi project for conservation of these nallahs, it is requested to kindly give your comment on the proposed measures and impact of the project on the hydrological regime.

Enclosures: As Above

Yours Faithfully

General Manager

Nigahi Project, NCL
General Manager
NCL NIGAH PROJECT

Copy to:

- GM (Env./IMS), NCL HQ

NORTHERN COALFIELDS LIMITED

NIGAH I AREA

Plan for Conservation and Protection of Two Seasonal Nallahs flowing through the proposed forest land of 229.348 Ha in Compartment no. RF-272, 273 & 274 of Waidhan Range.

Nallah-1:

Brief Details of Nallah-

S. No.	Parameter	Value	
1	Type of Nallah	Ephemeral Nallah (Seasonal)	
2	Location	Originating Point	Culmination point
	i) Latitude	24.178587 N	24.189451 N
	ii) Longitude	82.619277 E	82.620025 E
3	Length of Nallah	2.71 Km	
4	Average Width of Nallah	6.00 m	
	Average Depth of Nallah	3.50 - 4.50 m	
5	Direction of Flow	South to North	
6	Discharge	Dry throughout the year but it carries some discharge in the monsoon season.	

Plan for Conservation and Protection –

Conservation and Protection Measures for Nallah-1:

Nallah 1 flows from south to north, therefore when the mine will progress in North direction the seasonal Nallah-1 will be cut off part by part. Also the Nallah originates and ends inside the mine lease therefore no diversion of the same is required. A surface plan of the mine lease with existing Nallah is enclosed herewith as *Annexure-ii*. However, for the protection of the existing Nallah Gabion walls will be constructed. **Since it is a very small Nallah and ephemeral in nature, river training measures are not required.** Since the bed and side slopes of the Nallah-1 is made of Sandstone, the stone pitching work is not required to prevent erosion. A sectional plan of the Nallah is enclosed herewith as *Annexure-v*.

Waste Management Plan of the Nallah-1:

Nigahi OCP is an existing mine and in operation since 1985. The major waste generated from mining activities is Overburden. The overburden is completely backfilled in the mine voids created due to excavation of coal. Also the OB mine waste is dumped on the existing OB dumps present in the mine lease area and then these OB dumps are technically and biologically reclaimed. The OB mine waste is not being dumped in or around the existing seasonal Nallah-1.

Since the average elevation of seasonal Nallah is 200-250m more than the mine pit elevation, there is no scope of mine water/ effluent discharge in the Nallah. Therefore no contamination of the seasonal Nallah will take place. Also the hazardous waste generated from the mining activities such as burnt oil, cotton cloths soaked with oil, etc are disposed/ recycled as per the norms of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016). **Therefore there will be no Chemical contamination of seasonal Nallah-1.** A copy of the authorization order of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to Nigahi OCP is attached herewith as *Annexure-vi (a)* and a copy of the Hazardous Waste annual return in Form-4 showing quantities of Hazardous Wastes recycled to the authorized recyclers, is enclosed herewith as *Annexure-vi (b)*.

Nallah -2:

Brief Details of Nallah –

S. No.	Parameter	Value	
1	Type of Nallah	Ephemeral Nallah (Seasonal)	
2	Location	Originating Point	Culmination Point
	i) Latitude	24.181541 N	24.189023 N
	ii) Longitude	82.591715 E	82.616072 E
3	Length of Nallah	2.97 Km	
4	Average Width of Nallah	13.00 m	
	Average Depth of Nallah	4.00 – 6.00 m	
5	Direction of Flow	West to East	
6	Discharge	Dry throughout the year but it carries some discharge in the monsoon season.	

Plan for Protection and Conservation –

Protection Measures:

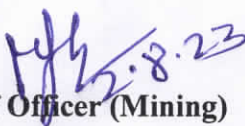
Nallah-2 flows from west to east, close to the extreme boundary in North direction of mine lease area, therefore **it requires diversion**. The natural seasonal Nallah will not be disturbed approximately upto 10-15 years. The Nallah-2 will be diverted to the extreme boundary of mine lease adjacent to the safety zone (7.5 m wide area from the mine lease boundary) 1 to 2 years before the mining operations begin in its vicinity. The natural gradient of the proposed Nallah after diversion will be maintained by cutting and filling so that the natural flow of water will not be hindered. Embankment will be constructed on the side slope of Nallah (which is adjacent to mine). Since the Nallah bed and side slopes are of sandstone, the embankments are not required for the sections where depth of the proposed Nallah will be more than 6.0m however embankments will be made for the sections where depth of proposed Nallah for diversion is less than 6.0 m to prevent flooding of adjacent areas in monsoon period. Stone pitching work will be carried out for the protection of Nallah bed and side slope (which is adjacent to mine). **Since it is a very small Nallah and ephemeral in nature, river training measures are not required.** However, embankment and stone pitching work will be done, wherever required, for protection and conservation of the

proposed Nallah after diversion. A sectional plan of the Nallah is enclosed herewith as *Annexure-v*.

Waste Management Plan of the Nallah-2:

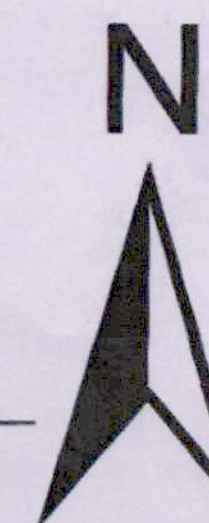
Nigahi OCP is an existing mine and in operation since 1985. The major waste generated from mining activities is Overburden. The overburden is completely backfilled in the mine voids created due to excavation of coal. Also the OB mine waste is dumped on the existing OB dumps present in the mine lease area and then these OB dumps are technically and biologically reclaimed. The OB mine waste is not being dumped in or around the existing seasonal Nallah-1.

Since the average elevation of seasonal Nallah is 200-250m more than the mine pit elevation, there is no scope of mine water/ effluent discharge in the Nallah. Therefore no contamination of the seasonal Nallah will take place. Also the hazardous waste generated from the mining activities such as burnt oil, cotton cloths soaked with oil, etc are disposed/ recycled as per the norms of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016). **Therefore there will be no Chemical contamination of seasonal Nallah-1.** A copy of the authorization order of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to Nigahi OCP is attached herewith as *Annexure-vi (a)* and a copy of the Hazardous Waste annual return in Form-4 showing quantities of Hazardous Wastes recycled to the authorized recyclers, is enclosed herewith as *Annexure-vi (b)*.


Staff Officer (Mining)
Nigahi Project




Staff Officer (Civil)
Nigahi Project



निर्यात के लिए नहीं NOT FOR EXPORT

OPEN SERIES
MAP

No. G44W12

Scale 1:50,000

District	Color	Genotype	Number
Surguja	Pink	G44W15	(63L15)
Raipur	Light Blue	G44W16	(63L16)
Bilaspur	Light Green	G44W17	(63L17)
Bastar	Light Orange	G44W18	(63L18)
Durg	Light Purple	G44W19	(63L19)
Kanker	Light Yellow	G44W20	(63L20)

भारतीय सर्वेक्षण विभाग

SURVEY OF INDIA

1st Edition 2011

Price : Rs. 70/-

CONVENTIONAL SYMBOLS

[illegible]

REFERENCE

AP-75 National Highway No. 75

NOTES :-

heights are in metres and above Indian mean sea level.
 Columns are approximate.
 A vertical height, e.g. 27, represents the approximate height, in metres, between the top and bottom of a stock shoot.
 The Kilmoryn stock numbers along roads, in piglets and cubs are shown in tinted type, e.g. 25 who was shot; no numbers are shown in piglets and cubs, e.g. 57.
 The Kilmoryn heights and contents in this sheet have not been adjusted to height of the corral level (see bench marks) and may not reliably be compared with those.
 Cows, heifers and untitled male in this sheet are generally quite colorable in dry season.
 Wattle are numerous throughout sheet and only the important ones have been shown.
 Tracks shown dry in this sheet are usually carried over from July to December.

COMPILED INDEX

A Median Survey 1969-70. Updated for major cities during 2008-07 and administrative boundaries updated during 2008-09.

Projection - UTM Datum - WGS 84

Magnetic Variation from True North about $\frac{1}{4}^{\circ}$ West in 2005.

1-50 000

CONTROLLER INTERNAL 20 METERS

For further details about this map, please contact:

Director

East Uttar Pradesh Geo-Spatial Data Centre
Survey of India





WEBSITE - www.surveyofindia.gov.in

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Legend

-  Forest Nigahi
 Lease Boundary
 Existing Nalas
 Proposed Nalas

Area Survey Officer,
Nigahi Area

Staff Officer (M)
Nigahi Area
Staff Officer (Mining)
Nigahi Project

General Manager
NCL NIGAHİ PROJECT

Recd
14/6/12

CUSTOMER :NORTHERN COALFIELD LIMITED

MAP No : 2

Subject :Toposheet showing demarcation of 229.348 Ha. Forest land of Nigahi OCP ,NCL
Singrauli Coalfield



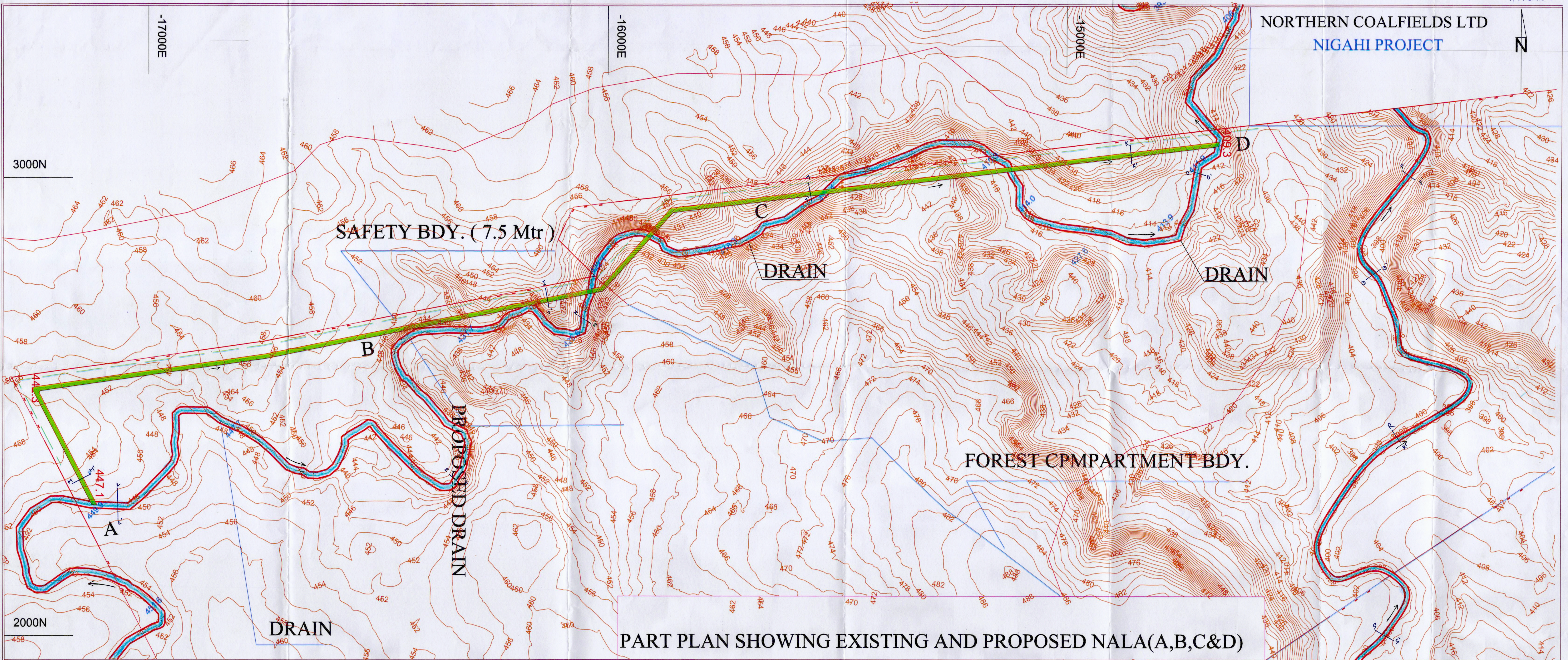
PREPARED : B Debnath (Head Surveyor, Civil) *B. Debnath* *16-08-22*

CHECKED : HOD (Geomatics) 4012 / 106 / 22

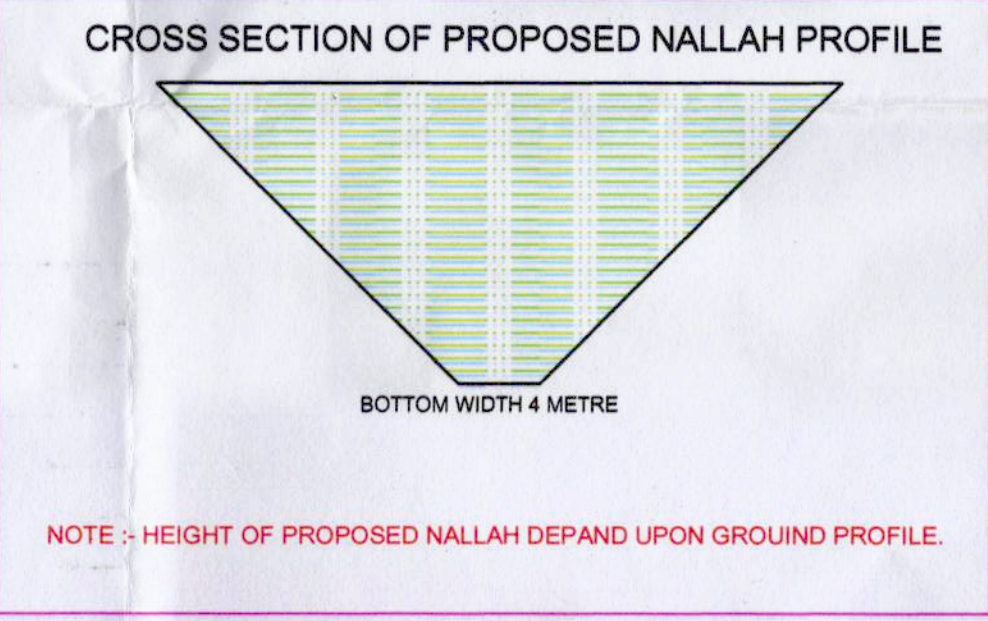
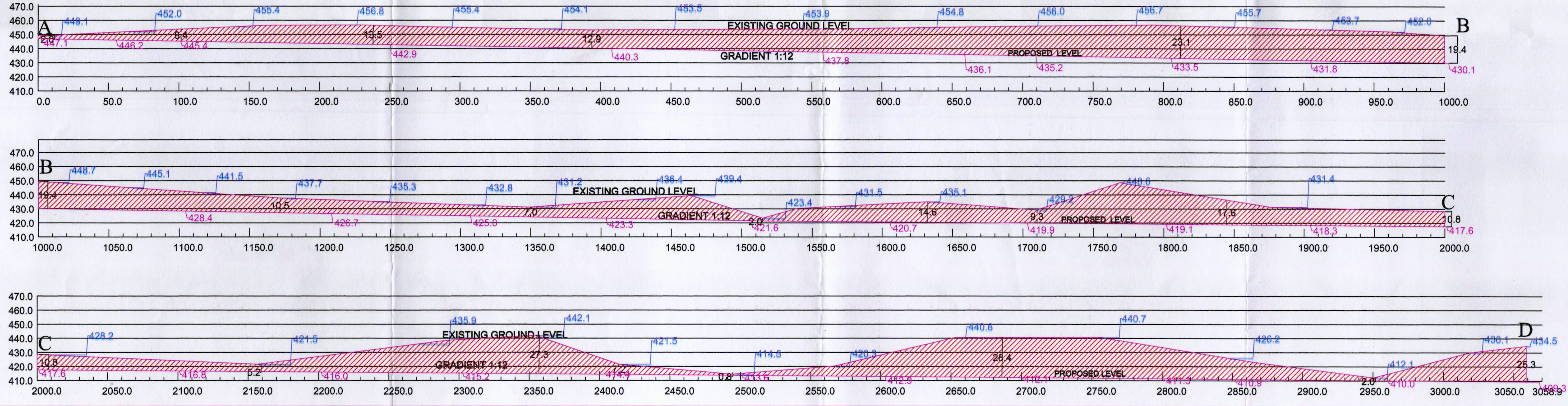
APPROVED : REGIONAL DIRECTOR (RI-VI) *Atul Bhat*

AN ISO -9001CERTIFIED COMPANY

APPROVED: RES
SCALE: 1:50000



LONGITUDINAL SECTION OF PROPOSED NALA DIVERSION SHOWING EXISTING AND PROPOSED GROUND PROFILE
Scale:1:1500



NORTHERN COALFIELDS LIMITED
NIGAHİ PROJECT

Chief Manager (Survey)
Nigahi Project

Colliery Manager
Nigahi Project

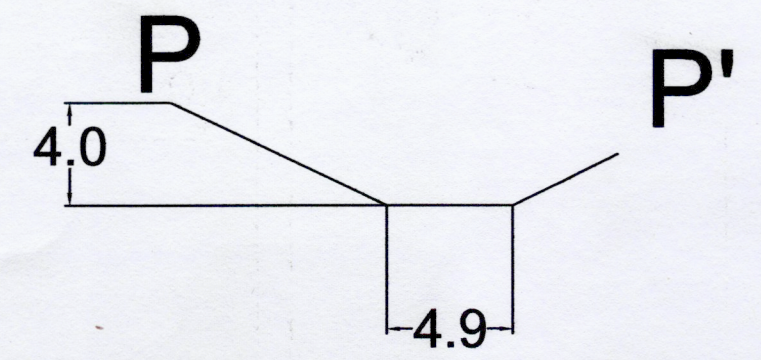
Project Officer
Nigahi Project

Staff Officer (M)
Nigahi Project

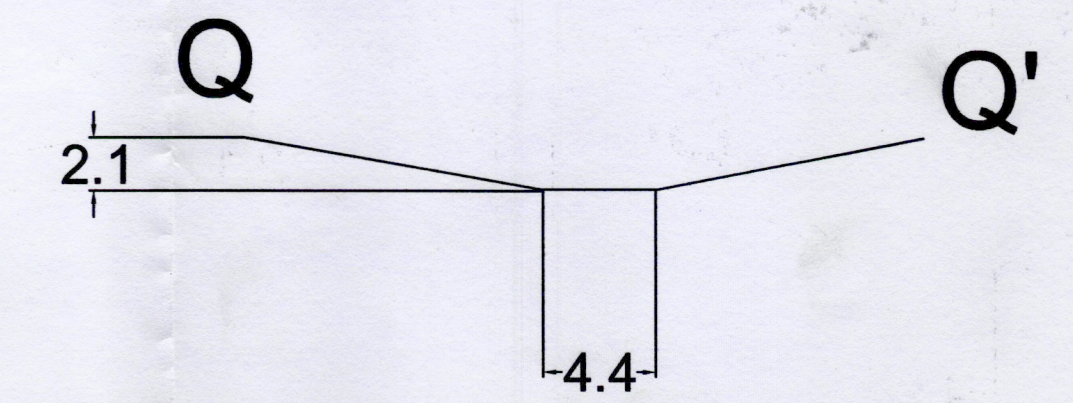
परिचालन अधिकारी
निगाही परियोजना

निगाही परियोजना

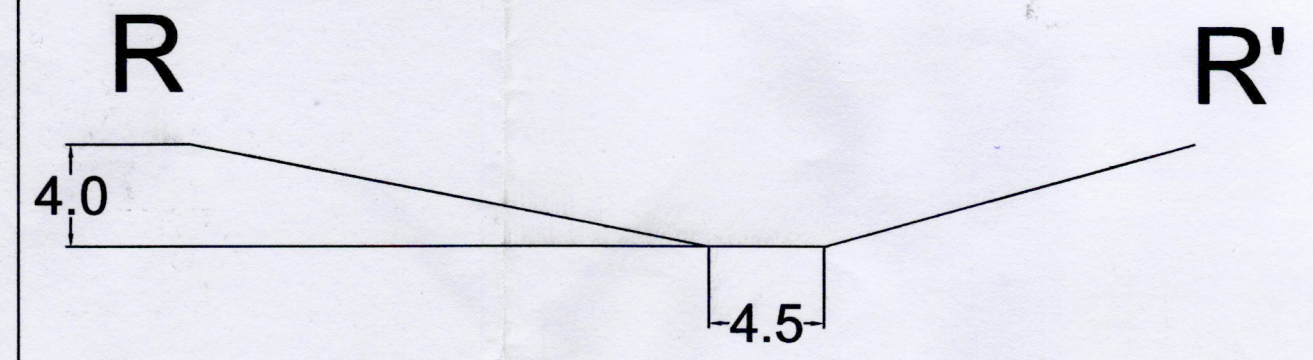
CROSS SECTION OF EXISTING NALLAH-1 PROFILE AT SECTION P-P'



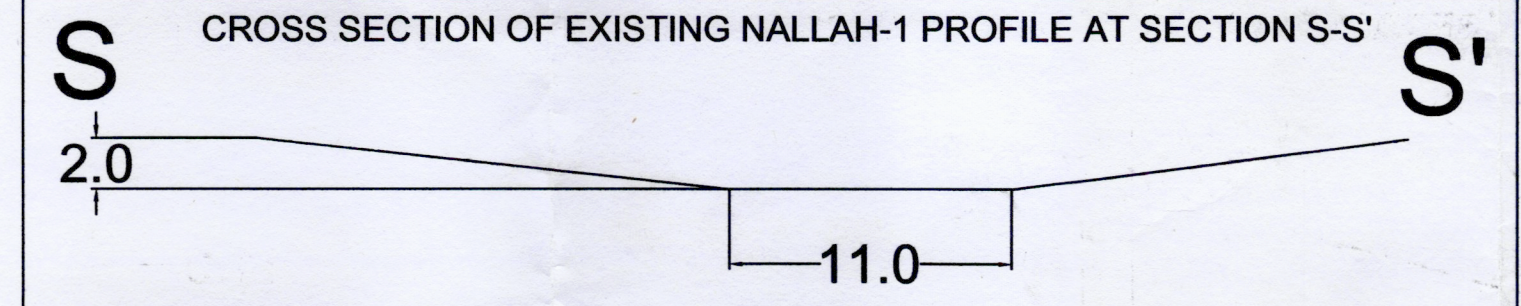
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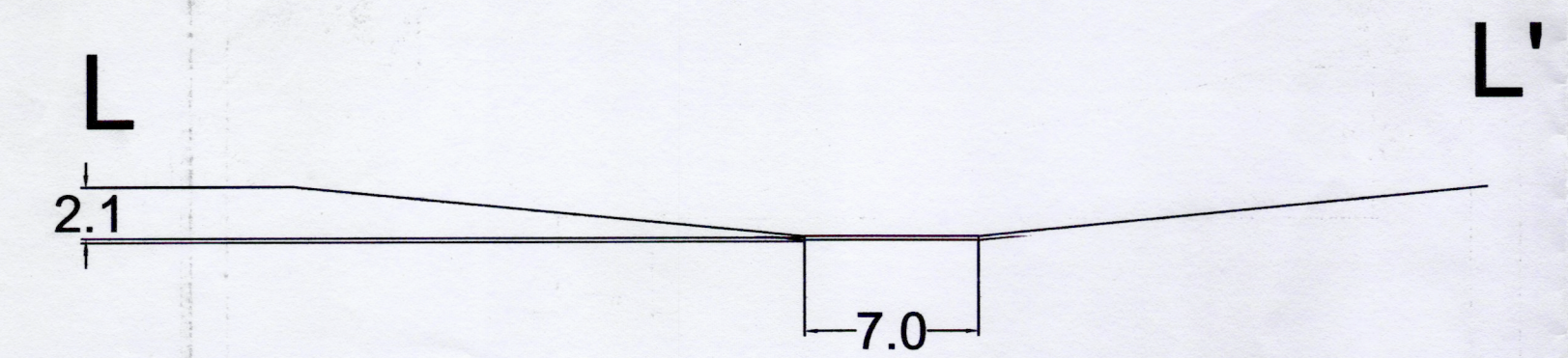
CROSS SECTION OF EXISTING NALLAH-1 PROFILE AT SECTION R-R'



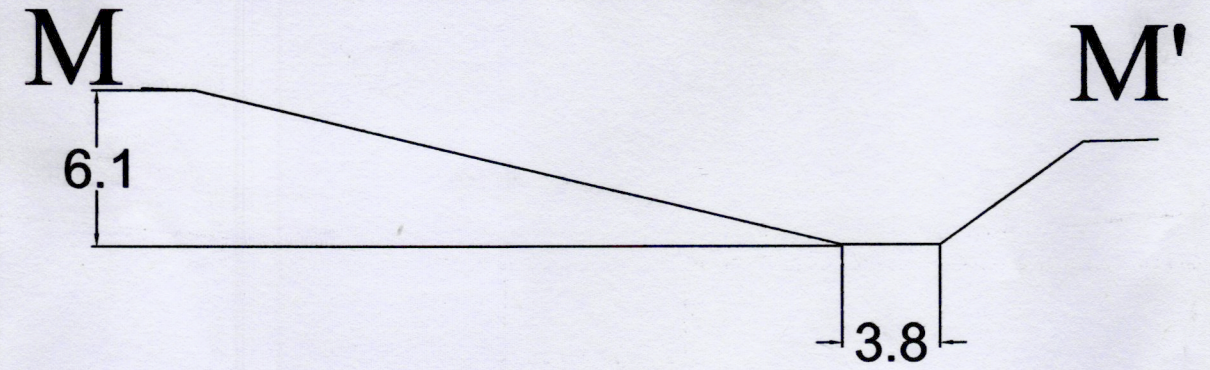
CROSS SECTION OF EXISTING NALLAH-1 PROFILE AT SECTION S-S'



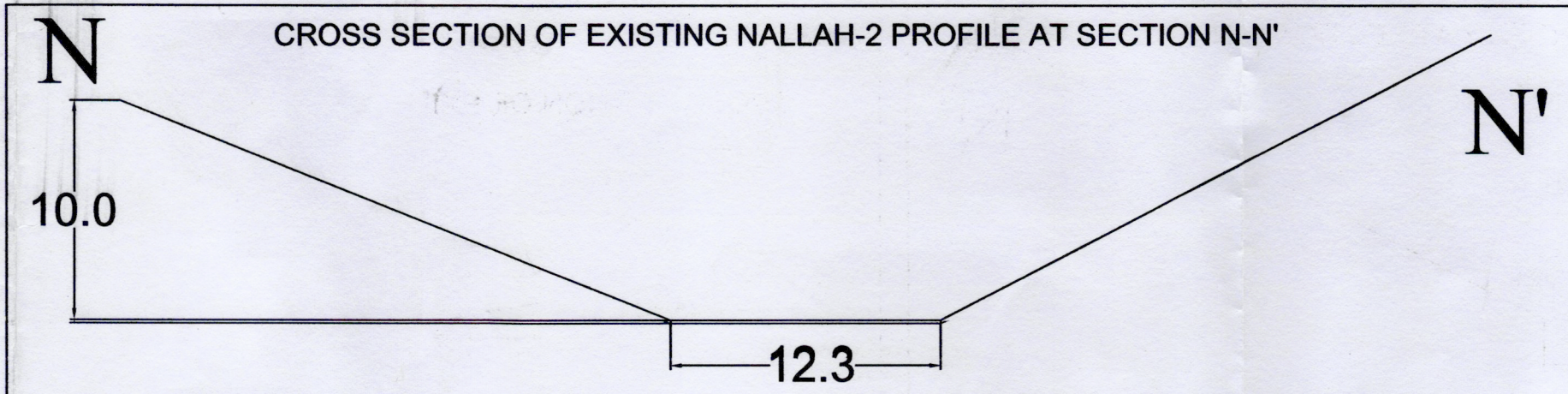
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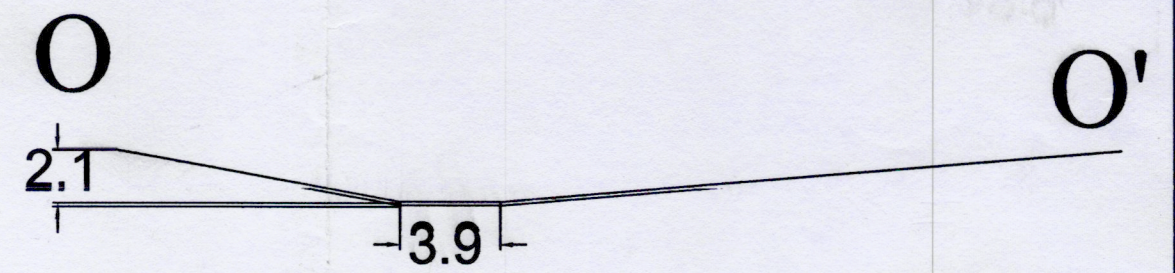
CROSS SECTION OF EXISTING NALLAH-2 PROFILE AT SECTION M-M'



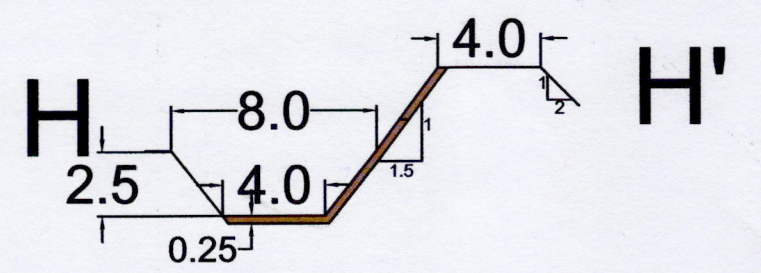
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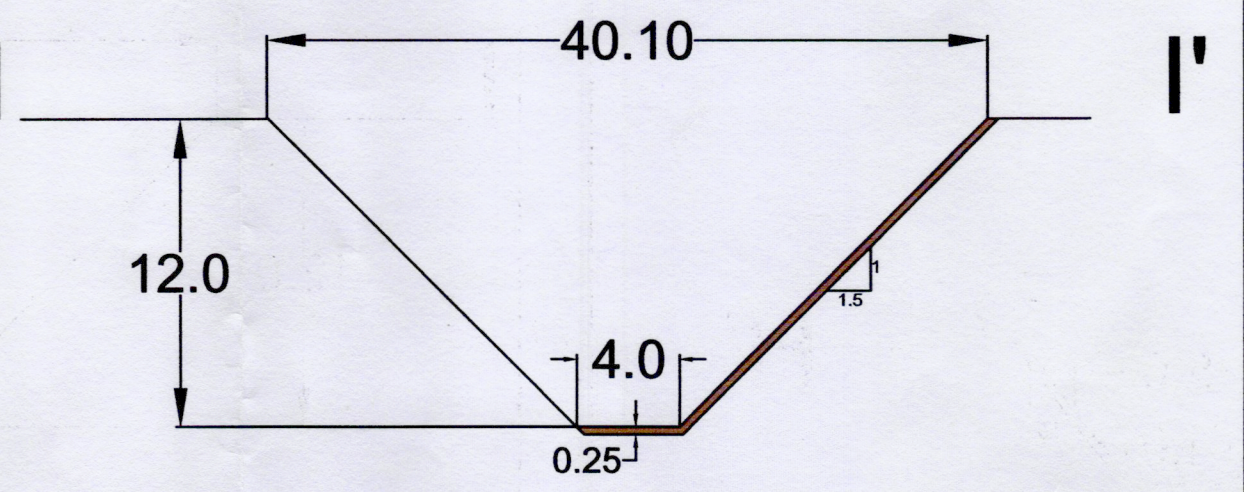
CROSS SECTION OF EXISTING NALLAH-2 PROFILE AT SECTION O-O'



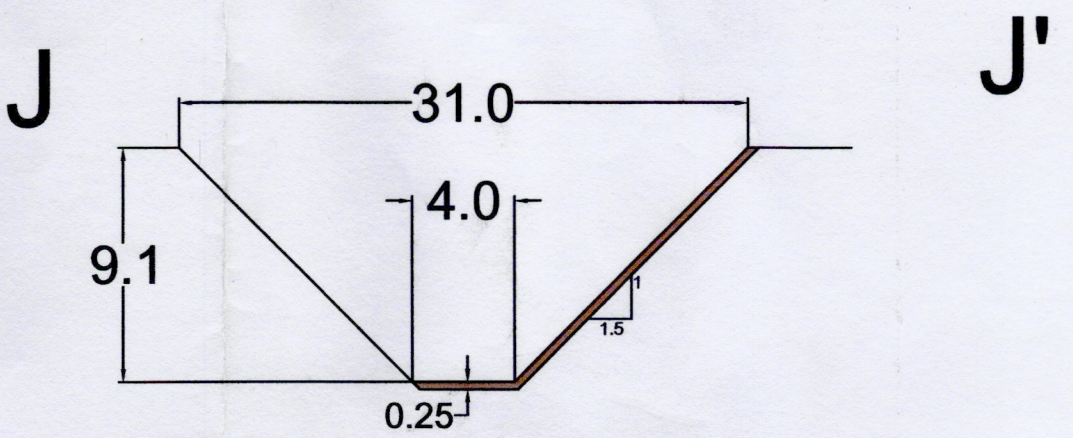
CROSS SECTION OF PROPOSED NALLAH PROFILE AT SECTION H-H'



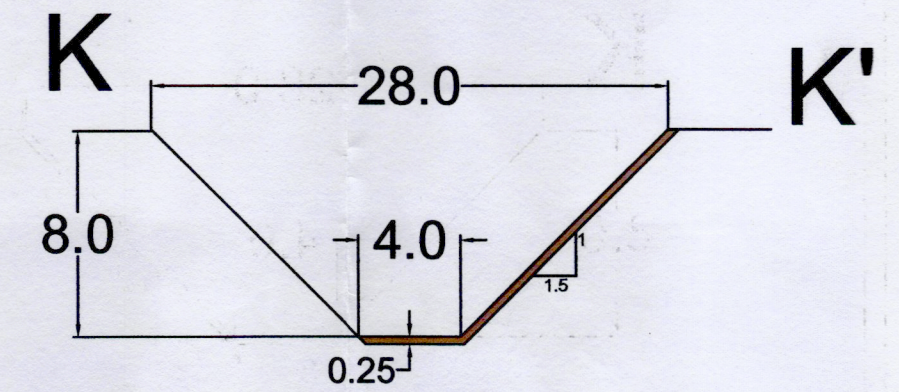
CROSS SECTION OF PROPOSED NALLAH PROFILE AT SECTION I-I'



CROSS SECTION OF PROPOSED NALLAH PROFILE AT SECTION J-J'



CROSS SECTION OF PROPOSED NALLAH PROFILE AT SECTION K-K'



NORTHERN COALFIELDS LIMITED
NIGAHİ PROJECT

Chief Manager (Survey)
Nigahi Project

Staff Officer (C)
Nigahi Project

Staff Officer (M)
Nigahi Project

20/8/23

20/8/23

20/8/23