

(सडक परिवहन और राजमार्ग मंत्रालय, भारत सरकार) परियोजना कार्यान्वयन ईकाई : डी-81, गोविन्दपुरी, सचिन तेन्दुलकर मार्ग, ग्वालियर (म. प्र.)-474011

National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. of India) Project Implementation Unit: D-81, Govindpuri, Sachin Tendulkar Marg, Gwalior (M.P.)-474011 फोन/Fax/Phone: 0751-2231485, ई-मेल/E-mail: gwalior@nhai.org; nhaigwalior@gmail.com क्र. 20019/01/2018-वेस्टर्न बायपास/7-7-13



दिनांक: 12.09.2022

प्रति.

श्रीमान वन मण्डलाधिकारी. सामन्य वन मण्डल, ग्वालियर सेन्ट्रन नर्सरी, केप्टन रूप सिंह स्टेडियम के पास, सिटी सेन्टर, ग्वालियर (म.प्र.)

विषय:- ग्वालियर जिले के अन्तर्गत वेस्टर्न बायपास मार्ग से प्रभावित वन भूमि (सो.चि. अभ्यारण के अंतर्गत रकवा 38.025 हेक्टेयर एवं परिक्षेत्र ग्वालियर के अंतर्गत रकवा 4.8 हेक्टेयर) कुल रकवा 42.83 हेक्टेयर के वन (संरक्षण) अधिनियम, 1960 के तहत् भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, ग्वालियर को उपयोग में देने हेतु प्राप्त प्रस्ताव की पूर्ती कर भेजने के संबंध में।

संदर्भ:- (1) प्रधान मुख्य संरक्षक (भू-प्रबंध), भोपाल का पत्र क्र. 2215 दिनांक 26.06.2022

(2) आपका पत्र क्रमांक मा.चि../22/7921 ग्वालियर दिनांक 18.07.2022

(3) डी.पी.आर सलहाकार का पत्र क्र. 5645 दिनांक 12.09.2022

महोदय.

उपरोक्त विषयांतर्गत आपके द्वारा संदर्भित पत्र दिनांक 18.07.2022 के माध्यम से ग्वालियर जिले के अन्तर्गत वेस्टर्न बायपास मार्ग से प्रभावित वन भूमि (सो.चि. अभ्यारण के अंतर्गत रकवा 38.025 हेक्टेयर एवं परिक्षेत्र ग्वालियर के अंतर्गत रकवा 4.8 हेक्टेयर) कुल रकवा 42.83 हेक्टेयर के वन (संरक्षण) अधिनियम, 1960 के तहत् भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, ग्वालियर को उपयोग में देने हेत् प्राप्त प्रस्ताव पर पर्यावरण वन एवं जलवार्य मुरिवर्तन मंत्रालय, भारत सरकार द्वारा पत्र दिनांक 22.06.2022 के माध्यम से 13 बिन्दुओं पर चाही सर्द्धार्खा प्रस्तुत करने हेन् लेख किया गया था।

जिस्सूरे तारतम्य में पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार के पत्र दिनांक 🗝 🕉 माध्यम से चाही गई विन्दुबार (1–13) आख्या निम्नानुसार है:–

स.	बिन्दु	अनुपालन आख्या	
क्र.			
1	Alternative alignment with comparative statement alongwith KML file shall be submitted	Enclosed at Annexure-A	
2	The proposed road is part of Ghatigaon Wildlife Sanctuary. Thus, NBWL clearance is required. The proposal for wildlife clea already applied in Parivesh Pol FP/MP/ROAD/120435/2021.		
3	Out of 86 Ha of CA land 60s ha has MDF. The net suitable area for plantation only 80.42 Hac needs rectification	May kindly be replied at the level of Fores Department.	
4	As per covering letter and SIR, the CA land is 86.00 Ha but as per online Part-II the CA area is 85,66 ha shall be clarified.		
5	No objection certificates of concerned departments (Railway, Enclosed at Annexure-B WRD etc.) shall be be submitted.		
6	Component wise breakup of land required and component wise area calculation with the layout plan shall be submitted.	Enclosed at Annexure-C	
7	Detailed muck disposal scheme shall be submitted.	Enclosed at Annexure-D	
8	Justification for location of the project in forest land (countersigned by DFO) needs to be submitted and explanation needs to be provided that why RF cannot be avoided?	Enclosed At Annexure-E	

Head Office: Plot No. G-5/6, Sector-10, Dwarka, New Delhi-110075 Website: www.nhai.gov.in

Regional Office: E-2/167, Arera Colony, Near Habibganj Railway Station, Bhopal (M.P.) - 462016 E-mail: robhopal@nhai.org

Phone: 0755-2426638, 98

सडकें ही नहीं. राष्ट्र का निर्माण भी | Building a Nation, Not Just Roads

Phone: 011-25074100, 200

9	It is not clear from the proposal that what is before and what is after proposed alignment. Details are required with KML file shall be submitted & uploaded on webportal.	KML file of all alignment options is already in Parivesh Portal. Being re-submitted for read reference please.
10	In the letter of NHAI dated 29.12.2021, addressed to DPO, it is stated that project is of rehabilitation and up gradation while the title of the project states that the proposal is for construction of road This needs clarification,	Enclosed At Annexure-F
11	If the proposal is for rehabilitation and up-gradation then please indicate when the existing road was constructed? If after 1980 and permission was not taken under FCA, then the proposal should include the area of existing road as well and in this scenario, action needs to be initiated in accordance with cause 1.21 of RCA guidelines.	
12	Administrative approval/sanction letter of the project needs to be provided. 13. Cost Benefit ratio needs to be worked out and submitted.	Project is part of the Bharatmala Pariyojana and the approval of the NHAI, Land Acquisition Committee conveyed vide MOM dated 12.01.2021 is enclosed at Annexure-G
13	Cost Benefit ratio needs to be worked out and submitted.	Already enclosed in the Parivesh portal, being re-submitted for ready reference please.

सूचनार्थ एवं अग्रिम कार्यवाही हेतु प्रेषित।

(आर.सी.गुप्ता) परियोजना निदेशक

प्रतिलिपि:-

- (1) श्रीामन प्रधान मुख्य वन संरक्षक (भू—प्रबंध), प्रगति भवन, भोपाल विकास प्राधिकरण, तृतीय तल, एम.पी.नगर, भोपाल की ओर आपके पत्र क्र. 2215 दिनांक 23.06.2022 के क्रम में सूचनार्थ प्रेषित। (ई—मेल: pccfwl@mp.gov.in)
- (2) श्रीमान क्षेत्रीय अधिकारी, क्षेत्रीय कार्यालय-म.प्र., जबलपुर की ओर सादर सूचनार्थ प्रेषत।
- (3) दल प्रमुख, मै. लॉयन इंजीनियरिंग कन्सलटेन्ट प्रा. लि., भोपाल की की ओर सूचनार्थ प्रेषत।

Comparative Statement				
S.no.	Particulars	LAC Approved Alignment	Alternate Alignment 1	Alternative Alignment 2
1	Length	28.75	30.127	29.5
2	Proposed ROW	45	45	45
3_	Forest Length	1.13	3/18	8.85
4	Wildlife Length	8.50	5.73	5.05
5	Land to be Diverted in forest area	4.8 Ha.	4.8 Ha.	39.825 Ha.
6	Land to be Diverted in Wildlife Area	38.05 Ha.	25.785 Ha.	19.07 Ha.
7	Total area required for the diversion	42.85 Ha.	30.585 Ha.	58.895 Ha.
8	Cost of Projects	730.75 Cr.	796.09 Cr.	909.86 Cr.

प्रस्थिजना निर्देशक PROJECT DIRECTOR ग का.ई. (PIU)-भा.रा.रा.प्रा. (NHAI) ग्वालियर (म.प्र.)



(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार) परियोजना कार्यान्वयन ईकाई : डी-81, गोविन्दपुरी, सचिन तेन्दुलकर मार्ग, ग्वालियर (म. प्र.)-474011

National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. of India) Project Implementation Unit : D-81, Govindpuri, Sachin Tendulkar Marg, Gwalior (M.P.)-474011 फोन/Fax/Phone : 0751-2231485, ई-मेल/E-mail : gwalior@nhai.org; nhaigwalior@gmail.com



दिनांकः 12.09.2022

क्र. 20019/01/2018-वेस्टर्न बायपास/ 7714

वचन पत्र

में, परियोजना निदेशक, भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, परियोजना कार्यान्वयन इकाई, ग्वालियर की ओर से, वचन देता हूँ कि, उक्त प्रस्तावित परियोजना से प्रभावित वन क्षेत्र में किसी भी प्रकार की रेलवे लाईन या जल संरचना नहीं है। परियोजना का कि.मी. 27.320 (वन एवं अभ्यारण क्षेत्र के बाहर) पर प्रस्तावित आर.ओ.बी (Railway Over Bridge) की रवीकृती रेलवे विभाग के पत्र दिनांक 24.12.2021 (संलग्न) से प्राप्त हो चुकी है।

परियोजना निदेशक भा.रा.रा.प्रा., प.का.इ–ग्वालियर

Head Office: Plot No. G-5/6, Sector-10, Dwarka, New Delhi-110075 Website: www.nhai.gov.in

Regional Office: E-2/167, Arera Colony, Near Habibganj Railway Station, Bhopal (M.P.) - 462016 E-mail: robhopal@nhai.org

Phone: 011-25074100, 200 Phone: 0755-2426638, 98

सड़कें ही नहीं, राष्ट्र का निर्माण भी | Building a Nation, Not Just Roads

West Central Rallway

No. BPL /W /BR/ NHAI / ROB / Km. 1296,993

To,

Project Director
NHAI
Project Implementation Unit Gwallor
D-81, Govindpuri, Sachin Tendulkar Marg
Gwalior (M.P.) 474011

DRM (W)'s Office,

Date: 24.12.2021

Bhopal.

Sub: Construction of 4 Lane Road Over Bridge at proposed CH: 27+320, Span of 1x 21.00 + 1 x 19.00 + 1 x 37.20 + 1 x 30.50 m at Railway Km 1297/812.27 between Panihar-Gwallor station on Guna-Gwallor section

Ref:-Your office letter No. NHAI/PIU/GWL/20018/01/2018-Western Bypass dated 21.12.2021

----- XXX -----

In reference to the above, it is to inform that the Revised GAD for the proposed ROB at Km 1297/812.27 Instead of 1296.993 which was submitted vide letter cited under reference , has been approved by the competent authority i.e. CBE/WCR. A copy of the approved Revised GAD bearing No. GM/(W) 5609/2D DRM is sent herewith for further necessary action.

DA: As above (A copy of approved GAD)

(Rohit Raghuvanshi)

DEN (Wost)/ BPL

Copy to: CBE/WCR/JBP for kind information, please.

Copy to: ADEN (M) SVPI, for infrmation

DEN (West)/BPL

Amexica-8C)

Component wise Breakup of Land

S.no.	Component	Length in Km Width	Forest Land in Ha.
1	Road Work	9.518 45	41.38
2	Structure Work	9.310	1.45

परियोजना निदेशक PROJECT DIRECTOR PROJECT DIRECTOR (NHAL) प्रकाई. (PIU)-भाराराज्ञा, (NHAL) प्रकाई. (मप्र.)



(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार) परियोजना कार्यान्वयन ईकाई: डी-81, गोविन्दपुरी, सचिन तेन्द्रलकर मार्ग, ग्वालियर (म. प्र.)-474011

National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. of India) Project Implementation Unit: D-81, Govindpuri, Sachin Tendulkar Marg, Gwalior (M.P.)-474011

क्र. 20019 01 2018—वस्टर्न बायपास न्यान (gwalior@nhai.org; nhaigwalior@gmail.com



दिनांकः 12.09.2022

वचन पत्र

में, परियोजना निदेशक, भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, परियोजना कार्यान्वयन इकाई, ग्वालियर की ओर से, वचन देता हूँ कि, जो मटेरियल खोदा जायेगा वह सड़क निमार्ण में उपयोग किया जायेगा एवं परियोजना से प्रभावति वन क्षेत्र में कही भी नहीं छोड़ा जायेगा। साथ ही वन क्षेत्र में जो भी कार्य किया जायेगा उस हेतु मटेरियल बाहर से लाया जायेगा।

भा.रा.रा.प्रा., प.का.इ-ग्वालियर



(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार) परियोजना कार्यान्वयन ईकाई: डी-81, गोविन्दपुरी, मचिन तेन्दुलकर मार्ग, ग्वालियर (म. प्र.)-474011

National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. of India) Project Implementation Unit: D-81, Govindpuri, Sachin Tendulkar Marg, Gwalior (M.P.)-474011 फोन/Fax/Phone: 0751-2231485, ई-मेल/E-mail: gwalior@nhai.org; nhaigwalior@gmail.com



Amexure-17=1

दिनांकः 12.09.2022

क. 20019/01/2018-वेस्टर्न बायपास/ 77/1

परियोजना को वन क्षेत्र में रखने हेतु स्पष्टिकरण

- (क) प्रस्तावित / अनुमोदित संरेखण की स्वीकृती भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, मुख्यालय, नई दिल्ली की भू—अर्जन समिति की द्वारा 28th बैठक दिनांक 07.01.2021 को प्रदान की गई है।
- (ख) उक्त प्रस्तावित/अनुमोदित संरेखण की स्वीकृती की Geometry, तकनीकी पहलू, वृक्षों के पातन/प्रकार/धनत्व, प्रभावित संरचनाएं, निर्माण की लागत, भू—अर्जन की लागत, जमीन का क्रॉस स्लोप, निर्माण की सुगमता इत्यादि की जाँच उपरान्त अन्य विकल्पों से बेहतर होने के कारण समिति द्वारा प्रदान की गई है।
- (ग) प्रस्तावित / अनुमोदित संरेखण की लंबाई एवं लागत अन्य विकल्पों की तुलना में कम हाने के कारण, उक्त विकल्प पर जनप्रतिनिधियों, राज्य शासन एवं जिला प्रशासन की सहमति प्राप्त है।
- (घ) प्रस्तावित सरेखण के स्वीकृत होने से परियोजना क्षेत्र में आने वाले लगभग 14 ग्राम राष्ट्रीय राजमार्ग से जुड़ कर लाभान्वित होंगे एवं विकास की ओर अग्रसर हो सकेंगे साथ ही रोजगार के अवसर भी पैदा होगें।
- (ड़) प्रस्तावित परियोजना के पूर्व की ओर घना वनक्षेत्र एवं शहरी क्षेत्र है तथा पश्चिम की ओर तिघरा बांध है, जिसके कारण परियोजना के निमार्ण से संरक्षति वन क्षेत्र (Reserve Forest) को बचाया नहीं जा सकता है।
- (च) उक्त संरेखण रा.रा. क्र.—44 एवं रा.रा. क्र.—46 को जोड़ेगा साथ ही ग्वालियर में रिंग रोड़ पूर्ण हो जायेगी, जिससे ग्वालियर शहर के चारो ओर से शहर में प्रवेश करने वाले भारी वाहनों इत्यादि से शहरवासियों को निजात मिलेगी एवं आवगमन सुगम होगा।

(आर.सी.गुप्ता) परियोजना निदेशक

Head Office: Plot No. G-5/6, Sector-10, Dwarka, New Delhi-110075 Website: www.nhai.gov.in

Regional Office: E-2/167, Arera Colony, Near Habibganj Railway Station, Bhopal (M.P.) - 462016 E-mail: robhopal@nhai.org

Phone: 011-25074100, 200 Phone: 0755-2426638, 98

सडकें ही नहीं, राष्ट्र का निर्माण भी | Building a Nation, Not Just Roads

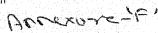


(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार) परियोजना कार्यान्वयन ईकाई : डी-81, गोबिन्दपुरी, सबिन तेन्दुलकर मार्ग, ग्वालियर (म. प्र.)-474011

National Highways Authority of India

(Ministry of Road Transport & Highways, Govt. of India)
Project Implementation Unit: D-81, Govindpuri, Sachin Tendulkar Marg, Gwalior (M.P.)-474011
फोन/Fax/Phone: 0751-2231485, ई-मेल/E-mail: gwalior@nhai.org; nhaigwalior@gmail.com

74011 NHAL



दिनांकः 12.09.2022

क्र. 20019/01/2018-वेस्टर्न बायपास/ 7717

वचन पत्र

पर्यावरण वन एवं जलवायु परिवर्तन मंत्रालय, भारत सरकार के पत्र दिनांक 22.06.2022 के बिन्दु क्र.—10 एवं बिन्दु क्र.—11 के क्रम में लेख है कि, प्रस्तवित परियोजना के कि.मी. 0 से कि.मी. 15.600 तक साडा, ग्वालियर द्वारा पूर्व में 7मी. चौड़ी सड़क का निर्माण कार्य किया गया था, जिसका बायपास की प्रस्तावित परियोजना में Upgradation का कार्य किया जायेगा। इसके अतिरिक्त कि.मी. 15.600 से कि.मी. 28.800 के माध्य चारलेन चौड़े नवीन राष्ट्रीय राजमार्ग का निर्माण कार्य किया जायेगा। यह स्पष्ट किया जाता है कि, कि.मी. 0. से कि.मी. 28.800 से प्रभावित पूर्ण 42.83 हेक्टर (वन भूमि 4.08 + वन्यजीव अभ्यारण 38.025 हेक्टर) प्रस्ताव में स्वीकृती हेतु सम्मलित है।

परियोजना निदेशक भा.रा.रा.प्रा., प.का.इ—ग्वालियर

Head Office: Plot No. G-5/6, Sector-10, Dwarka, New Delhi-110075 Website: www.nhai.gov.in

Regional Office: E-2/167, Arera Colony, Near Habibganj Railway Station, Bhopal (M.P.) - 462016 E-mail: robhopal@nhai.org

Phone: 011-25074100, 200 Phone: 0755-2426638, 98

सड़कें ही नहीं. राष्ट्र का निर्माण भी | Building a Nation, Not Just Roads



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण (सड़क परिवहन और राजमार्ग मंत्रालय)

National Highways Authority of India

(Ministry of Road Transport and Highways) जी-5 एवं 6, सेक्टर-10, द्वारका, नई दिल्ली-110075 G-5 & 6, Sector-10, Dwarka, New Delhi-110075

दूरभाष / Phone : 91-11-25074100/25074200 फेनस/ Fax :91-11-25093507 / 25093514

Arnexure " (h)

अति तत्काल दस्ती

No. LA/11013/LACMinutes/2020(computer no. 5369)

12.01.2021

विषय: भू अर्जन समिति की अट्ठाईसवीं बैठक दिनांक 07.01.2021 वादत।

भू अर्जन समिति की अट्ठाईसवीं बैठक दिनांक 07.01.2021 को भाराराप्रा मुख्यालय में आयोजित की गई थी।

- बैठक के कार्यवृत्त इस परिपत्र के साथ परिचालित किए जाते हैं। 2.
- यह कार्यवृत्त सक्षम अधिकारी के अनुमोदन से जारी किए गए हैं। 3.

11h georg

(एस एस झा) मुख्य महाप्रबंधक (भू-अर्जन)

सेवा में,

सभी संबन्धित अधिकारी

प्रतिलिपि:-

- अध्यक्ष महोदय के निजी सचिव 1.
- सदस्य (प्रशासन) के निजी सचिव 2.
- सदस्य (परियोजना) के निजी सचिव 3.

Minutes of meeting of LA committee held on 07.01.2021

Following were present:

- i. Shri S.S. Sandhu, Chairman
- ii. Shri Alok, Member (Admin)
- iii. Shri R.K. Pandey, Member (Project).
- iv. Shri Mahabir Singh, Member (Tech)
- v. Shri Manoj Kumar, Member (Project)
- 2. The Committee considered the proposals submitted by technical divisions and following decisions were taken:

Sr. No.	Project Name I Decision		
28.01	Construction of Western side Gwallor bypass in the State of Madhya Pradesh. Unique Project Code: N/04005/03001/M		
Decision The proposed revised alignment at Option – 01 is approved with the condit will provide ROW land from Km. 0.000 to Km. 15.560 and with 45m ROV to Km. 27.500. The LAC instructed that action for land acquisition shall be after 1st state forest / wildlife clearance, as applicable.			
28.02	Betul – Khandwa – Deshgaon in the state of Madhya Pradesh. Unique Project Code: N/14001/02001/MP		
Decision	The proposed alignment at Option -01 is approved with 45m ROW in General and 3 ROW in Forest Area, The LAC instructed that any further action for land acquisition sibe taken only after receipt of 1 st stage forest / wildlife clearance, as applicable.		
28.03	Access Road/Bridge connectivity from NH-09 in Uttarakhand and four lane Mahakali Bridge at Kanchanpur, Nepal i.e. from NH-09 at Km. 40 near Jagbuda Bridge (India) to road on Nepal side at Indo-Nepal Border (NH-109D) under Bharatmala Pariyojna in the State of Uttarakhand.		
A. C.	Unique Project Code: N/07091/01001/UK		
	The proposed alignment at Option-01 is approved with 60m ROW for 4 lane highway at an approximate land acquisition cost of Rs. 34 Crs. The LAC also approved to proposed LA Plan (State-II).		

28.04	Memmadpur (Ambala) - Banur (IT City Chowk) - Kharar (Chandigarh) Corridor: Package-I Ambala-Chandigarh Greenfield with supr to Larlu & to PR-7 road under Bharatmala Pariyojana in the State of Punjab.		
	Unique Project Code: N/06038/01002/PB		
	The LA Committee approved the LA plan with 60/45m ROW for 243 Ha additional land at approximate LA cost of Rs. 392 Crs.		

3. The Meeting ended with a vote of thanks to the Chair.

116:

Guidelines for concluding cost-benefit analysis for projects involving forest diversion

- (i) While considering proposal for diversion of forest land for non-forestry use, it is essential that ecological and environmental losses and eco-economic distress caused to the people who are displaced are weighted against economic and social gains.
- (ii) Whenever the forest land is involved in the development projects, the cost of ecosystem services and fragmentation of habitat of wildlife and economic distress caused to people dependent on forests and the cost of settlement of people dependent on forest should also be added as the cost of forest diversion in addition to the standard project cost which would have been incurred by the user agencies without involvement of forest land while conducting the cost benefit analysis of the project. Similarly the benefits from the project accruing due to diversion of forest land and used in the project should also be accounted for in the benefits component in addition to the standard benefits of the project which would have been accrued without involvement of forest land while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).
- (iii) the cost of compensatory afforestation and its maintenance in future and soil & moisture conservation at present discounted value and future benefits from such compensatory forestation accruing over next 50 years monetised and discounted to the present value should be included as cost- and benefits respectively of compensatory afforestation while conducting the cost benefit analysis and determining the benefit and cost ratio (BC ratio).
- (iv) Table-A lists the details the types of projects involving forest land for which costbenefit analysis will be required Table-B lists the parameters according to which the cost aspect of forest land diverted for the development projects will be determined, while Table-C lists the parameters for assessing the benefits accruing to the project using of forest land.
- (v) A cost-benefit analysis as above should accompany the proposals sent to the Central Government for forest clearance under the Forest Conservation Act.

Page 1 of 5

परियोजना निदेशक PROJECT DIRECTOR एका.ई. (PIU)-भा.रा.रा.प्रा. (NHAI) रवालियर (म.प्र.)

Table-A: Cases under which a cost-benefit analysis for forest diversion are required

No.	Nature of Proposal	Applicable/ Not Applicable	Remarks
	All categories of proposals involving forest land upto 20 hectares in plains and upto 5 hectare in hills	Not applicable	These proposals may be considered on a case to case basis and value judgment
2	Proposal for defence installation purposes and oil prospecting (prospecting only)	Not applicable	
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	
4	All other proposals involving forestland more than 20 hectares in plains and more than 5 hectares in hills including roads, transmission lines, minor, medium and major irrigation projects, hydro projects, mining activity, railway lines, location specific installations centers, TV towers etc.	Applicable	These are cases where a cost-benefit analysis is necessary to determine when diverting the forest land to non-forest use in the overall public interest.

परियोजना निदेशक PROJECT DIRECTOR "काई. (PIU)-भा.रा.रा.पा. (NHAI) गद्यालियर (म.प्र.)

Table-B: Estimation of cost of forest diversion

No.	Parameters	Remarks
	Ecosystem services losses due to proposed forest diversion	Economic value of loss of eco-system services due to diversion of forests shall be the net present value (NPV) of the forest land being diverted as prescribed by the Central Government (MoEF& CC). Note: In case of National Parks the NPV shall be ten (10) times the normal NPV and in case of Wildlife Sanctuary the NPV shall be five (5) times the normal NPV or otherwise prescribed by the ministry or any other competent authority.
2	Loss of animal husbandry productivity, including loss of folder.	, Nil
3	Cost of human resettlement	Nil Aller and Nil Aller and Aller an
4	Loss of public facilities and administrative infrastructure (Roads, Building, Schools, Dispensaries, Electric lines, Railways etc.) on forest land, which would require forest land if these facilities were diverted due to this project	No loss of public facilities is taking place and no administrative infrastructure (Roads, Building, Schools, Dispensaries, Electric lines, Railways etc.) will be destroyed.
5	Environment losses erosion effect on hydrological eycle, wildlife, habitation, micro climatic ratting of ecological balances.	42.83*957780= 41,021,717 (410.21 Lac.)
6	Suffering of austees	Nill
7	Habitat Fragmentation Cost	Nill
8	Compensatory afforestation and soil & moisture conservation cost	The actual cost of compensatory afforestation and soil & moisture conservation and its maintenance in future at present discounted value.

परियोजना निदेशक PROJECT DIRECTOR TENTÉ (PIU)-भा.रा.रा.प्रा. (NHAI) ग्वालियर (म.प्र.)

Table-C: Existing guidelines for estimating benefits of forest-diversion in CBA

No.	Parameters	Remarks
1	Increase in productively attribute to the specific project	Mobility is difficult and time taking in mountainous region. The productivity of the commercial and industrial activities for which transportation shall take place. Besides it will increase the tourism.
2	Benefits to economy due to the specific project	The project will yield significant economic benefit to the state. Construction o road will lead to much better connectivity, which will play significant role in improving the socio-economic condition of the people of the state in any folds.
3	No. of population benefited due to specific project	Entire population i.e. 410.21 Lakh (Gwalior + Ghatigaon) souls shall be benefited from the
4	Economic benefits due to of direct and indirect employment due to the Specific project.	Approximate 110000 man days of temporary employment will be generated for the construction Period of 24 months.
5	Economic benefits due to compensatory afforestation	The compensatory afforestation amount will be deposited to forest department. There will be various employment generated for execution as well as Maintenance of the CA work.

मस्योजना निर्वशक PROJECT DIRECTOR च.का.ई. (PIU)-भा.रा.रा.प्रा. (NHAI.) ग्वालियर (म.प्र.)

Note-1: Net Present value (NPV) of environment and ecosystem services loss:

The concept of Net Present value of the forest land diverted is a scientific method of calculating the environmental cost and other losses caused due to diversion of forest land for non-forestry purposes. The NPV represents the net value of various ecosystem services and other environmental services in monetary terms which the forest would have provided if the forest would not have been diverted.

Note-2: Possession value of forest land diverted:

The forest land diverted for the project such as irrigation, hydropower, railways, roads, wind, and transmission lines and mining e.t.c are unlikely to be returned and remains in possession of the user agencies. Therefore 30% of the net present value (NPV) of forest land diverted or market rate of adjoining area in the district should be added as a cost component as "possession value of forest land" in addition to the environmental costs due to loss of forests.

परियोजना निदेशक PROJECT DIRECTOR न का.ई. (PIU)-भा.रा.रा.प्रा. (NHAI) ग्वालियर (म.प्र.)

Page 5 of 5