



बिहार सरकार,

पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
कार्यालय, प्रधान मुख्य वन संरक्षक, बिहार, पटना।

(कैम्पा एवं वन संरक्षण संभाग)

तृतीय तल, अरण्य भवन, शहीद पीर अली खाँ मार्ग, पटना-800 014

संख्या व.सं/169/2020- 290

प्रेषक,

अरविन्दर सिंह, भा०व०से०,
अपर प्रधान मुख्य वन संरक्षक (कैम्पा)
—सह—नोडल पदाधिकारी (वन संरक्षण),
बिहार, पटना।

सेवा में,

उप वन महानिदेशक (केन्द्रीय),
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय,
एकीकृत क्षेत्रीय कार्यालय, राँची, द्वितीय तल,
झारखण्ड राज्य आवास बोर्ड मुख्यालय हरमू चौक,
राँची, (झारखण्ड) 834002

पटना 14, दिनांक—19/04/2023

विषय — बक्सर एवं रोहतास जिलान्तर्गत विक्रमगंज—झुमराँव (201.665—245.665 कि०मी०) पथांश के चौड़ीकरण एवं सुदृढ़ीकरण कार्य हेतु वन (संरक्षण) अधिनियम, 1980 के तहत 41.01 हेठले वन भूमि अपयोजन प्रस्ताव पर पृच्छा अनुपालन के संबंध में।

प्रसंग — भारत सरकार, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, क्षेत्रीय कार्यालय राँची द्वारा आयोजित REC की बैठक दिनांक 27.03.2023 की कार्यवाही का संदर्भ एवं कार्यपालक अभियन्ता, राष्ट्रीय उच्च पथ प्रमंडल, गया का पत्रांक 392 दिनांक 10.04.2023 (छायाप्रति संलग्न)।

महाशय,

उपर्युक्त विषय के संबंध में सूचित करना है कि भारत सरकार, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, क्षेत्रीय कार्यालय राँची द्वारा दिनांक 27.03.2023 को आयोजित REC की बैठक की कार्यवाही के माध्यम से मांगी गयी सूचनाओं का निराकरण प्रतिवेदन निम्नलिखित है—

क्रम सं.	पृच्छा	निराकरण
1	The committee's suggestion, provided in the 57th REC meeting has not been incorporated by the U/A in full and the ambiguity in respect of "competent authority certificate", 'employment generation' etc., still remains. As such, the online application needs to be corrected as per the suggestion given by the Committee. Observing the repeated defaults, the Chairperson opined/suggested SFD, Bihar that, if the suggested corrections are not incorporated, in full, in the proposal, IRO may reject the proposal altogether.	प्रयोक्ता एजेंसी के पत्रांक 392 अनु० दिनांक 10.04.2023 द्वारा प्रतिवेदित किया गया है कि परिवेश पोर्टल पर competent authority certificate, employment generation इत्यादि को अपलोड कर दिया गया है (छायाप्रति संलग्न)।

2	Cost Benefit Analysis (CBA) has been carried out and submitted as per the old rates of the NPV. The CBA needs to be carried out using latest NPV rates and Benefit-Cost (B/C) Ratio, recalculated.	प्रयोक्ता एजेंसी के पत्रांक 392 अनु० दिनांक 10.04.2023 द्वारा प्रतिवेदित किया गया है कि परिवेश पोर्टल पर संशोधित Cost Benefit analysis को अपलोड कर दिया गया है जो इस पत्र के साथ संलग्न है।
3	Detailed translocation plan has been submitted by the U/A, however, the cost of incurred on translocation has not been considered while computing B/C Ratio. The same should therefore be incorporated in the computation.	प्रयोक्ता एजेंसी के पत्रांक 392 अनु० दिनांक 10.04.2023 द्वारा प्रतिवेदित किया गया है कि Tree translocation cost को Cost Benefit analysis के Table B में समाहित कर दिया गया है।

उपर्युक्त तथ्यों के आलोक में अनुरोध है कि विषयगत परियोजना पर सैद्धान्तिक स्वीकृति प्रदान करने की कृपा की जाय।

अनु०—यथोक्त।

विश्वासभाजन,

(अरविन्दर सिंह)

अपर प्रधान मुख्य वन संरक्षक (कैम्पा)
—सह—नोडल पदाधिकारी (वन संरक्षण),
बिहार, पटना।

कार्यपालक अभियंता का कार्यालय
राष्ट्रीय उच्च पथ प्रमंडल, गया।

Mail ID- ee_nh_gaya@yahoo.com

पत्रांक:- २१२ अनु० गया, दिनांक :- १०।०४।२०२३

प्रेषक,

कार्यपालक अभियंता
राष्ट्रीय उच्च पथ प्रमंडल, गया।
सेवा में,

उप वन संरक्षक
पर्यावरण वन एवं जलवायु परिवर्तन विभाग,
कैम्पा, बिहार, पटना।

विषय:- बक्सर एवं रोहतास जिलान्तर्गत विकमगंज- डुमरौव (201.665— 245.665 कि०मी०) पथांश के चौड़ीकरण
एवं सुदृढिकरण कार्य हेतु वन संरक्षण अधिनियम 1980 के तहत 41.01 हेठले वन भूमि अपयोजन प्रस्ताव
पर किये गये पृच्छा के अनुपालन के संबंध में।

प्रसंग:- आपका पत्रांक - 239 दिनांक- 05.04.2023

महाशय,

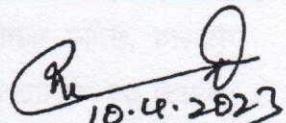
उपर्युक्त विषयक प्रासंगिक पत्र के संबंध में कहना है बक्सर एवं रोहतास जिलान्तर्गत विकमगंज-
डुमरौव (201.665— 245.665 कि०मी०) पथांश के चौड़ीकरण एवं सुदृढिकरण कार्य हेतु वन संरक्षण अधिनियम
1980 के तहत 41.01 हेठले वन भूमि अपयोजन प्रस्ताव पर भारत सरकार, पर्यावरण वन एवं जलवायु परिवर्तन
मंत्रालय, क्षेत्रीय कार्यालय रॉची द्वारा दिनांक 27.03.2023 को क्षेत्रीय सशक्त समिति की बैठक में किये गये
पृच्छाओं का अनुपालन प्रतिवेदन आवश्यक एवं अग्रेतर कार्रवाई हेतु समर्पित किया जाता है।

अनु०:- यथोक्त ।

विश्वासभाजन

10.4.2023
कार्यपालक अभियंता,
राष्ट्रीय उच्च पथ प्रमंडल, गया।

Sl.No	<u>Compliance Report</u>	
	Observation	Reply
1 (a)	Authority Certificate	Attached
(b)	Employment Generation	No. of Permanent Employees = 25 Nos. Temporary Employment (Man Days) = 76720
2	Cost Benefit Analysis (CBA) has been carried out and submitted as per the old rates of the NPV. The CBA needs to carried out using latest NPV rates and Benefit-Cost (B/C) Ratio, recalculated.	Attached
3	Detailed translocation plan has been submitted by the U/A, however, the cost of incurred on translocation has not been considered while computing B/C Ratio. The same should therefore be incorporated in the computation.	In B/C ratio analysis, The amount of Rs.5.35 crore for Forest Clearance ,Tree cutting, Tree translocation incorporated in project cost of Rs.178.63 crore in Table B.


 10.04.2023
 Executive Engineer
 N.H.Division,Gaya

OFFICE OF THE SUPERINTENDING ENGINEER,
NATIONAL HIGHWAY CIRCLE, DEHRI ON SONE

Phone No.- 9470001349

Mail Id- senhcircledehri@gmail.com

Letter No.- 174.....

Dated- 08.04.2023

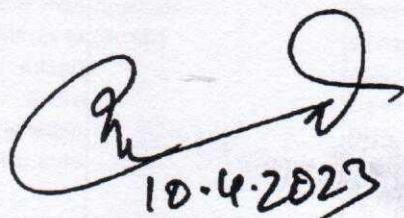
TO WHOM SO EVER IT MAY CONCERN
AUTHORIZATION LETTER

This is to certify that **Shri Raj Kishore Prasad, Executive Engineer**, N.H. Division, Dehri on sone at Gaya is hereby authorized to file application for proposed Forest Clearance for **Improvement of two laning with paved shoulder of stretch from Bikramganj- Dawath- Maliyabagh- Nawanganagar- Dumraon of NH- 120 (Ch.- 201.665 to Ch- 245.665), Dist- Rohtas and Buxer in the State of Bihar under EPC Mode** work for login on Parivesh Portal and to make all Correspondence related with the project to relevant Government Officer on behalf of this department

8.4.23
Superintending Engineer,
National Highway Circle,
Dehri on sone
08.4.2023

Employment Generation

No.of Permanent	25
Temporary (Man Days)	140 no.per day for 548 days=140x548 =76720



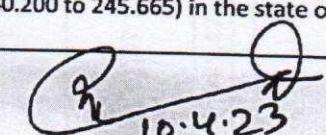
10.4.2023

Executive Engineer
N.H Division,Gaya

Cost Benefit Analysis as per Guidelines for forest land diversion -2017

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

Sl. No.	Nature of proposal	Applicable/not applicable	Remarks
1	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 judgement.
2	Proposal for defence installation purposes and oil prospecting (prospecting only).	Not applicable	In view of national Priority accorded to these sectors, the proposals would be critically assessed to help ascertain that the utmost minimum forest land is diverted for non-forest use.
3	Habitation, establishment of industrial units, tourist lodges complex and other building construction.	Not applicable	These activities being detrimental to protection and conservation of forest, as a matter of policy, such proposals would be rarely entertained.
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 like micro-wave stations, auto repeater centres, TV towers etc.	Applicable (Roads)	Diversion of 41.01 Ha PF land for Widening and strengthening work of existing Two Laning with paved shoulder of stretch from Bikramganj – Dawath – Maliyabagh – Nawanager – Dumraon of NH- 120 (Ch. 201.665 to Ch 245.665) excluding Dawath (Ch. 210.830 to Ch.212.400) & Dumraon bypass (Ch 240.200 to 245.665) in the state of Bihar.



10.4.23
Executive Engineer
N.H.Division,Gaya

Table-B : Estimation of Cost of forest Diversion					
S.No.	Parameters	Quantity (Hectare)	Rate	Amount (Rs. Lakh.)	Remarks
1	Eco-system Services Losses Due to proposed forest Diversion	41.01	1357110	556.55	APCCF(Campa)-cum-Nodal Officer (Forest Conservation) letter No. 454 dt. 30.05.2022
2	Loss of animal husbandry productivity, including loss of fodder			55.66	To be Quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum
3	Cost of human resettlement.			0.00	The cost of Human resettlement for diversion of
4	Loss of public facilities and administrative Infrastructure (Roads, building School, dispensaries, electric lines, Railways etc.) on forest land, or which would require forest land if these facilities were diverted due to the project.			1171.01	Electric lines & poles, Water pipe lines, Water Tank etc. public facilities which are being affected have been considered in the budget. Also the budgets for affected CPRs have been considered.
5	Possession Value of forest Land Diverted	41.01	407133	166.97	30% of Npv
6	Suffering to oustees			0.00	The Widening and strengthening of the project road is to be undertaken on the adjoining land of the existing road. So there are no sufferings to oustees
7	Habitat Fragmentation Cost			278.28	Taken as 50% of NPV
8	Compensatory Afforestation	83		137.29	As per letter of DFO Rohtas, letter No- 525 dated- 07.02.2023
9	Project Cost (Civil & Project Clearance)			17863.00	Cost of Project includes Forest clearance,Tree cutting,Translocation of tree etc.Provision of amount of Rs. 5.36 crore is out of project cost of Rs. 178.63 crore.
		Total	20229.00	Lakh	
		Say	202.29	crore	

10.4.2023
Executive Engineer
N.H.Division,Gaya

Table C:- Parameters for Evaluation of benefits notwithstanding loss of forests.

Sl.	Parameters	Quantity	Amount (Rs.Cr.)	Benefits	
				Remark	
1	Increase Productivity and Economics		136.58	Due to Upgradation of existing highway to two lane with paved shoulder configuration there will be overall development of the project area there would be easy and fast movement of the traffic, so that it will save time save fuel and maintenance cost of the vehicle. This will also result in reduction in congestion on road, saving in travel time and reduction in accident. Due to widening of road will result in improved traffic condition and saving in travel time will result in economic benefit. Increase in Productivity and Economics will be 30% of NPV calculated from EIRR at 12% interest rate i.e. $30\% \times \text{Rs. } 455.28 \text{ crore} = \text{Rs. } 136.58 \text{ crore}$	
2	Benefits to economy due to the specific project		318.70	The project usually contributes the growth of local economy by increased commercial, agricultural, Industrial and tourist activities due to improvement of highway Based on the economic analysis of the project benefits will be 70% of NPV calculated from EIRR at 12% interest rate i.e. $70\% \times \text{Rs. } 455.28 \text{ crore} = \text{Rs. } 318.70 \text{ crore}$	
3	No. of Population benefitted due to specific project	4666270		This road project directly benefits the people of Rohtas and Buxar District ie 4666270(as per census 2011).	
4	Economic Benefits due to direct and indirect employment due to the project		4.82	Permanent employment of 25 people and temporary employment of 140 people for project duration of 548 days. $(25 \times 548 \times \text{Rs. } 1000 \text{ per day}) + (140 \times 548 \times \text{Rs. } 450 \text{ per day}) = 4.82 \text{ crore}$	
5	Benefit from Compensatory Afforestation	83 Hectare	1.37	As per letter of DFO Rohtas, letter No- 525 dated- 07.02.2023	
			Total 461.47 Crore	Benefit/Cost =	2.281



10.4.2023

Executive Engineer

Project:

Length of Road (Mandatory Input)

Length of Bypass (Mandatory Input)

D Km

The Inflation rate and Various Base Cost for Corrigendum-2

Bharatmala Project [HII-120]

Length of Road (Mandatory Input)

Length of Bypass (Mandatory Input)

D Km

The Inflation rate and Various Base Cost for Corrigendum-2

Inflation Rate per Annum (%)

1.5%

Maintenance Head

Periodic Maintenance of Flexible Pavement for Single-Lane Highway with Paved Shoulders / Km (every 6 Years)

Routine Maintenance of Flexible Pavement for Single-Lane Highway with Paved Shoulders / Km (every Year)

Routine Maintenance of Concrete Pavement for 2-Lane Highway with Paved Shoulders / Km

Mandatory Input →

Mandatory Input →

Estimated Construction Cost (CASE-II) in Lacs Rs Including GST

Taxes

Construction Period (Years)

CASE-I (Existing Road Doing Nothing)

CASE-II (Existing Road Doing Nothing)

CASE-III (Existing Road Upgradation)

CASE-IV (Existing Road after Upgradation)

Cost Stream (B) Rs in Lacs

Benefit Stream (B) Rs in Lacs

Net Benefit (B-C) Rs in Lacs

Remarks

D1 + D2 + D3 - D4

D5 + D6 + D7 - D8

D9 + D10 + D11 - D12

D13 + D14 + D15 - D16

D17 + D18 + D19 - D20

D21 + D22 + D23 - D24

D25 + D26 + D27 - D28

Periodic Maintenance of Flexible Pavement for Single-Lane Highway with Paved Shoulders / Km (every 6 Years)	
Rs/Single-Lane Km	2417204
Rs/Single-Lane Km	51020
Rs/2-Lane Km	251279

Considering Escalation 5% for 10 Years
Considering Escalation 5% for 20 Years
Considering Escalation 5% for 30 Years

Maintenance Head	Unit	Cost for Year 2021-2022	Remarks
Periodic Maintenance of Flexible Pavement for Single-Lane Highway with Paved Shoulders / Km (every 6 Years)	Rs/Single-Lane Km	2417204	Considering Escalation 5% for 10 Yrs
Routine Maintenance of Flexible Pavement for Single-Lane Highway with Paved Shoulders / Km (every Year)	Rs/Single-Lane Km	51020	Considering Escalation 5% for 20 Years
Routine Maintenance of Concrete Pavement for 2-Lane Highway with Paved Shoulders / Km	Rs/2-Lane Km	251279	Considering Escalation 5% for 30 Years

Duration of Design, Tendering, Construction →	% Construction Cost (FY Year wise)	
	2021-22	2022-23
for 1 st Year of Design Period C1	0.00	0.00
for 2 nd Year of Design Period C2	0.00	0.00
for 3 rd Year of Design Period C3	0.00	0.00
for 4 th Year of Design Period C4	0.00	0.00
for 5 th Year of Design Period C5	0.00	0.00
for 6 th Year of Design Period C6	0.00	0.00
for 7 th Year of Design Period C7	0.00	0.00
for 8 th Year of Design Period C8	0.00	0.00
for 9 th Year of Design Period C9	0.00	0.00
for 10 th Year of Design Period C10	0.00	0.00
for 11 th Year of Design Period C11	0.00	0.00
for 12 th Year of Design Period C12	0.00	0.00
for 13 th Year of Design Period C13	0.00	0.00
for 14 th Year of Design Period C14	0.00	0.00
for 15 th Year of Design Period C15	0.00	0.00
for 16 th Year of Design Period C16	0.00	0.00



for 17 th Year of Design Period	C17	2040	16.41	57258.54			48.65	47459.98	32.24	14798.56	
for 18 th Year of Design Period	C18	2041	455.80	61121.24			48.65	44860.81	-07.15	16160.43	14766.37
for 19 th Year of Design Period	C19	2042	16.41	63279.54			48.65	47410.15	32.24	16667.58	
for 20 th Year of Design Period	C20	2043	16.41	63279.54			48.65	50118.32	32.24	17869.39	17837.15
for 16 th Year of Design Period	C16	2044	16.41	63758.75			48.65	51280.85	32.24	19649.37	19608.13
for 17 th Year of Design Period	C17	2045	16.41	74586.47			48.65	55482.88	32.24	21745.62	21713.38
for 18 th Year of Design Period	C18	2046	16.41	79792.91			48.65	58257.03	-07.15	24277.79	
for 19 th Year of Design Period	C19	2047	16.41	85411.07			48.65	61169.89	32.24	27154.04	27156.19
for 20 th Year of Design Period	C20	2048	16.41	91477.06			48.65	64228.37	32.24	30327.17	30274.93
for 16 th Year of Design Period	C16	2049	16.41	9820.37			48.65	67438.79	32.24	33227.00	33169.76
for 17 th Year of Design Period	C17	2050	16.41	105114.27			48.65	70818.77	32.24	37642.24	
for 18 th Year of Design Period	C18	2051	16.41	1122776.05			48.65	74353.37	-07.15	41964.28	41932.64
for 19 th Year of Design Period	C19	2052	16.41	121067.54			48.65	78059.99	32.24	51375.50	51933.26
for 20 th Year of Design Period	C20	2053	16.41	130045.49			48.65	81973.48	32.24	57753.64	57756.40

EIRR 34.41%
NPV @ 12% 45522.8 lakhs

R. J.
Executive Engineer
N. H. Division, Gaya