

No.ECF.240441/93

Dated Dispur, the 21st November, 2022

To : The Inspector General of Forest (Central),
Government of India,
Ministry of Environment, Forest & Climate Change,
Integrated Regional Office, 4th Floor, Housefed Building,
G.S Road, Rukminigaon, Guwahati-781022

Sub : Forest diversion proposal of 42.6 Ha. forest land for Widening/Up gradation of NH-29
From 2 lane to 4 lane divided National Highway from Daboka to Lahorijan in Doboka
Reserved Forest under Nagaon South Division, Hojai in favour of NHIDCL.

Ref : Government of India letter No. 3-AS A/147/2022/GHY/3217-3218 dated 15.11.2022

Sir,

With reference to the subject cited above, I am submitting herewith the additional information/documents as sought by the Government of India, MoEF&CC, Integrated Regional Office, Guwahati vide their letter No. 3-AS A/147/2022/GHY/3217-3218 dated 15.11.2022 as under-

Govt. of India letter No 3-AS A/147/2022/ GHY/3217-3218 dated 15.11.2022	Information Provided
Condition No. (1)	The User Agency (NHIDCL) has submitted the map showing 3 alternate route and justification for selecting this proposed are (Copy enclosed as Annexure-I & II).
Condition No. (2)	The Wildlife and Elephant Conservation Plan will be submitted to the Government of India before accordance of “Final Approval”.
Condition No. (3)	The DFO, Nagaon South Division, Hojai has issued letter to DC Hojai regarding the matter related to mutation and notification certificate vide their letter No. FNST/B/4 Lanning/NH-29/Doboka RF/2022/5305-07 dated 18.11.2022 (Copy enclosed as Annexure-III)
Condition No. (4)	The User Agency (NHIDCL) has stated that the avenue plantation is an inclusive part of the project of the road construction, which will be implemented by the EPC contractor, as per the provisions of the EPS Contract Agreement. At present, the EPC Contractor is yet to be appointed vide their letter NHIDCL/PMU-Diphu/D-K/Sec-1/14/2021-22/2103 dated 19.11.2022 (Copy enclosed as Annexure-IV).
Condition No. (5)	The ESZ of Marat Longit Wildlife Sanctuary has not been notified.
Condition No. (6)	The User Agency (NHIDCL) has stated that no muck dumping sites are required vide their letter No. NHIDCL/PMU-Diphu/D-K/Sec-1/14/2021-22/2103 dated 19.11.2022 (Copy enclosed as Annexure-IV)
Condition No. (7)	The User Agency (NHIDCL) has submitted the undertaking for payment of extraction charges of the trees to be removed from the proposed area. (Copy enclosed as Annexure-V).
Condition No. (8)	As the proposed road is surface infrastructure and does not involve exploitation of water, it may not have very deleterious effect on the Hydrological layer.
Condition No. (9)	The DFO, Nagaon South Division, Hojai uploaded the KML for Compensatory Afforestation area on Parivesh Portal.

Encl: As stated above.

Yours faithfully,
Signed by Indreswar Kalita
Date: 21-11-2022 16:18:54
(I. Kalita, ACS)

Addl. Secretary to the Govt. of Assam
Environment and Forest Department

I/75830/2022

Memo No.ECF.240441/93-A,
Copy to:

Dated Dispur, the 21st November, 2022

1. The Principal Chief Conservator of Forests & HoFF, Assam, Panjabari, Guwahati-37.

E-Signed

(I. Kalita, ACS)

Addl. Secretary to the Govt. of Assam
Environment and Forest Department

NHIDCL/PMU-Diphu/D-K/Sec-1/14/2021-22/2103

Date: 19.11.2022

To

The Chief Conservator of Forests &
Nodal Officer (FC Act), Assam
Aranya Bhawan, Panjabari,
Guwahati-37

Sub : Forest Clearance Proposal bearing No: FP/AS/ROAD/125122/2021 for diversion of 42.6 Ha land for the widening/up-gradation of NH-29 from 2 Lane to 4 lane divided NH from Daboka to Parokhowa in Daboka Reserved Forest.

Ref : MoEF&CC's letter no: 3-AS A/147/2022/GHY/3217-3218 dated 15.11.2022

Sir,

Please refer to MoEF&CC's letter under reference (i) above dated 15.11.2022 vide which certain observations have been raised by MoEF&CC IRO, Guwahati.

2. In this regard, the inputs pertaining by this office are being complied as below:-

Observation	Reply
SI No1: The Sol map indicating 3-alternate route examination with justification for selecting this proposed area as the submitted map is Google Earth Imagery	3 nos of Sol 1:50000 maps showing 3 alternate route on the 3 nos of map sheet of the same area is being enclosed herewith (Encl 1).
SI No 3: The mutation and notification certificate of the non-forest land identified as CA.	The DFO, Nagon South Division, by letter has requested Deputy Commissioner, Hojai to do the needful at the earliest (Encl 2).
SI No 4: The technically approved avenue plantation scheme.	Avenue plantation is an inclusive part of the project of the road construction, which will be implemented by the EPC Contractor, as per the provisions of the EPC Contract Agreement. At present, the EPC Contractor is yet to be appointed.
SI No 6: To clarify and muck dumping locations have been identified or not, and if muck dumping sites involved, the approved muck dumping plan is to be submitted.	Not Applicable as no muck dumping sites are required.
SI No 7: The undertaking certificate by the user agency for payment of extraction charges of the trees to be removed from the proposed area.	Undertaking is enclosed (Encl 3).
SI No 9: The KML/shape file of the CA is to be uploaded on Parivesh Portal as the same has not been uploaded.	The KML / Shape file of CA has been prepared by DFO and being uploaded.

-2-

3. In view of the above, the above compliances are being submitted in reply to the observations raised by MoEF&CC. It is requested to kindly instruct the DFO, Nagon South Division, Hojai to furnish the reply for the remaining points expeditiously.

Encl: As above



(Col R RKatyal)

General Manager (P)
NHIDCL, PMU-Diphu
Assam

Encl: As above.

Copy to:

1. The DFO, Nagon South Division, Hojai: for information and necessary action please.
2. The ED (P)-RO Guwahati: for kind information please.



End 2.

Government of Assam

E-mail ID: dfo.t.nagaonsouth@gmail.com

Department of Environment & Forest

Office of the Divisional Forest Officer, Nagaon South Division, Hojai

Letter No. FNST/B/4 Lanning/NH-29/Doboka RF/2022/

5305-07 Date: 18/11/2022

To,

The Deputy Commissioner,
Hojai District, Sankardev Nagar.

Sub.:- Proposal for diversion of 42.6 Hect. of forest land for widening/up-gradation of NH-29 from 2 lane to 4 lane National Highway from Doboka to Lahorijan under Bharatmal Pariyojana (Lot - 1 Package-II) in Doboka Reserve Forest under Nagaon South Division, Hojai in favour of NHIDCL.

Ref.:- 1) The Deputy Commissioner, Hojai letter No. HJC.55/2021-22/182 dtd. 16/08/2022,
2) I/C DIGF (C), IRO, Guwahati, Ministry of Environment and Forest & Climate Change office letter No. 3-AS A/147/2022/GHY/3217-3218 dtd. 15th Nov.'2022.

Sir,

With reference to the subject cited above, I have the honour to inform you that, from your good office vide letter under reference No. 1 has allotted 42.6 Hect. land in Nakhuti area for Compensatory Afforestation regarding diversion of forest land in Doboka RF.

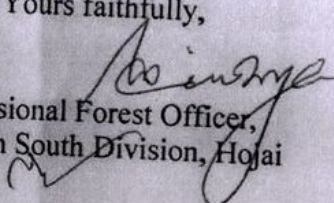
The I/C DIGF (C), IRO, Guwahati, Ministry of Environment and Forest & Climate Change vide letter under reference No. 2 has requested in point No. 3 (copy enclosed) to furnish the mutation and notification certificate of the Non RF land identified for compensatory afforestation in connection with diversion of 42.6 Hect. of forest land for widening/up-gradation of NH-29 from 2 lane to 4 lane.

Therefore I request you kindly to look into the matter and furnish the required mutation and notification certificate for onward necessary action from this end.

This for favour of your kind information and necessary action.

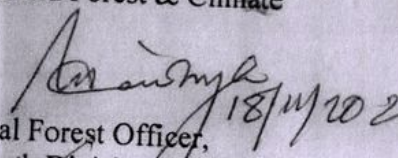
Encl.- As stated above.

Yours faithfully,


Divisional Forest Officer,
Nagaon South Division, Hojai

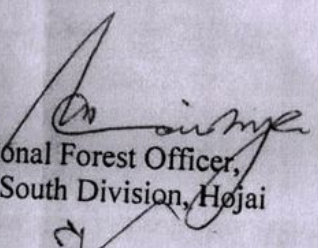
Copy to the General Manager (P), NHIDCL, PMU-Diphu, Assam for information and necessary action.

Copy to the I/C DIGF (C), IRO, Guwahati, Ministry of Environment and Forest & Climate Change, GS Road, Rukminigaon, Guwahati - 22.


Divisional Forest Officer,
Nagaon South Division, Hojai

FNST/A/4 Lanning/NH-29/Doboka RF/2022/ 2447-48 Date: 18/11/2022
Copy forwarded for favour of their kind information to -

1. The Addl. Principal Chief Conservator of Forests & Nodal Officer (F.C. Act), O/o the PCCF & Hoff, Assam, Panjabari, Guwahati - 37.
2. The Conservator of Forests, Northern Assam Circle, Tezpur.


Divisional Forest Officer,
Nagaon South Division, Hojai

o/c

**UNDERTAKING FOR PAYMENT OF EXTRACTION CHARGES OF TREES TO BE
REMOVED FROM THE PROPOSED AREA OF ROAD CONSTRUCTION**

This is to certify that, National Highway Infrastructure Development Corporation Limited (the User Agency) hereby undertake to bear the cost of extraction charges of trees to be removed from the proposed area of forest land to be diverted for widening / upgradation of NH-29 from 2-lane to 4-lane Divided National Highway from **Daboka to Parakhowa (under Hojai District)** under Bharatmala Pariyojana (**Lot-1-Package-II**) **Daboka to Lahorijan** as per prevailing wage & rates at the time.



Col. Rajeev Ratan Katyal

General Manager (P)

NHIDCL, PMU – Diphu

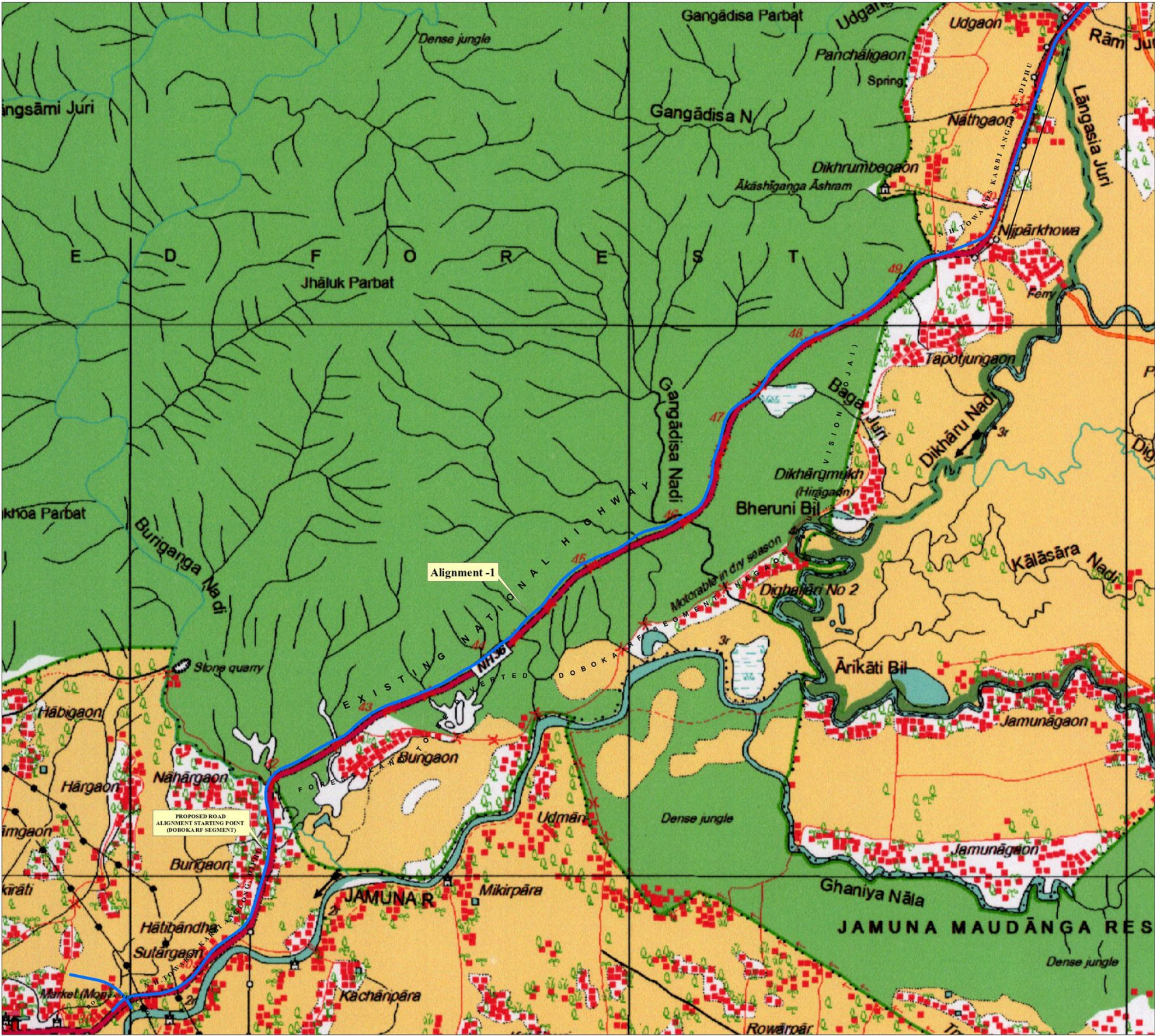
Assam

General Manager (Projects)

NHIDCL, PMU Diphu

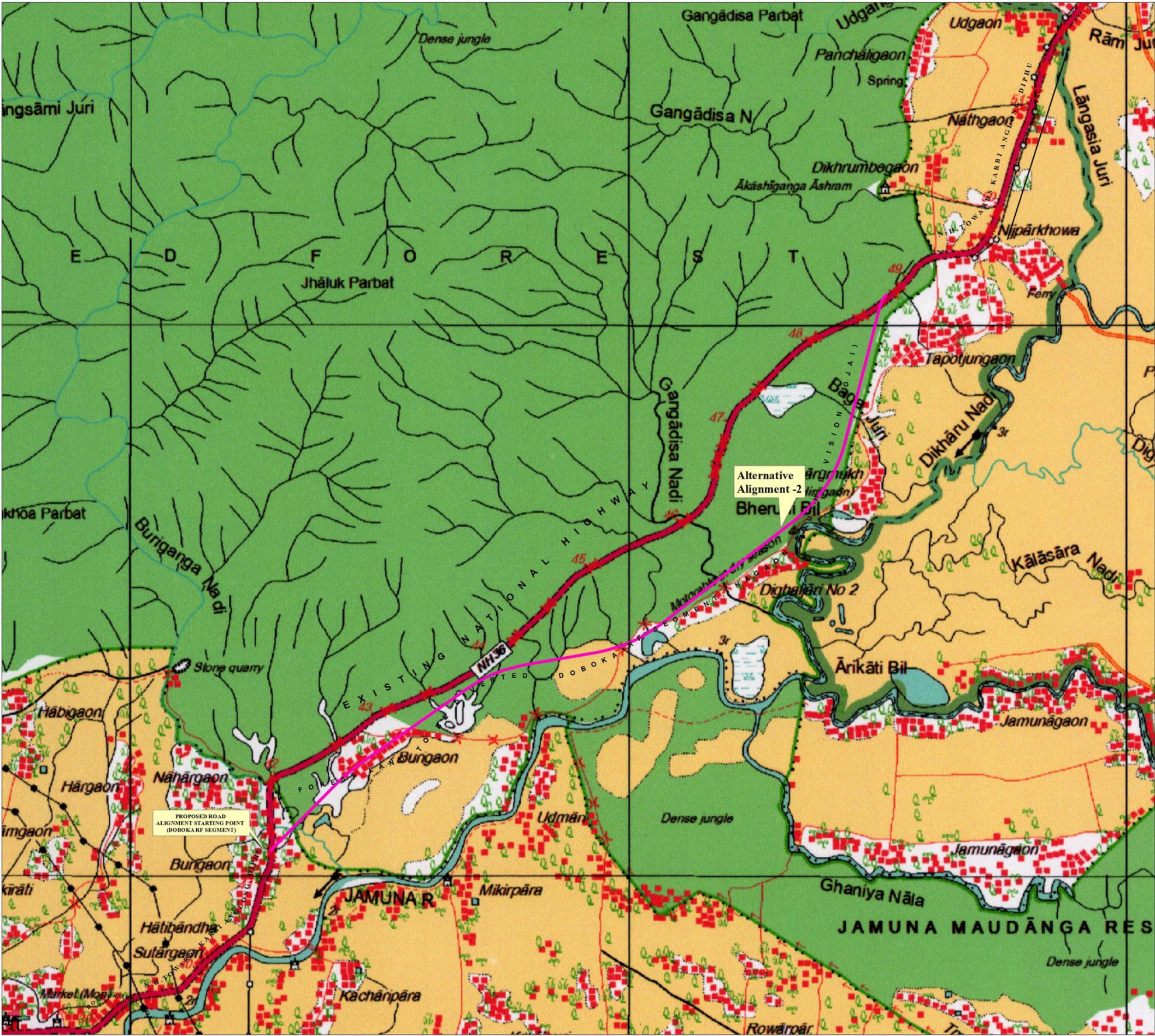
Karbi Anglong, Assam

Alternative Alignment Study for Daboka Reserve Forest Stretch under Section-1
km 38+500 to km 50+968



Legend
Alignment -1 (Following Existing NH-29 Total Length 7.4km)

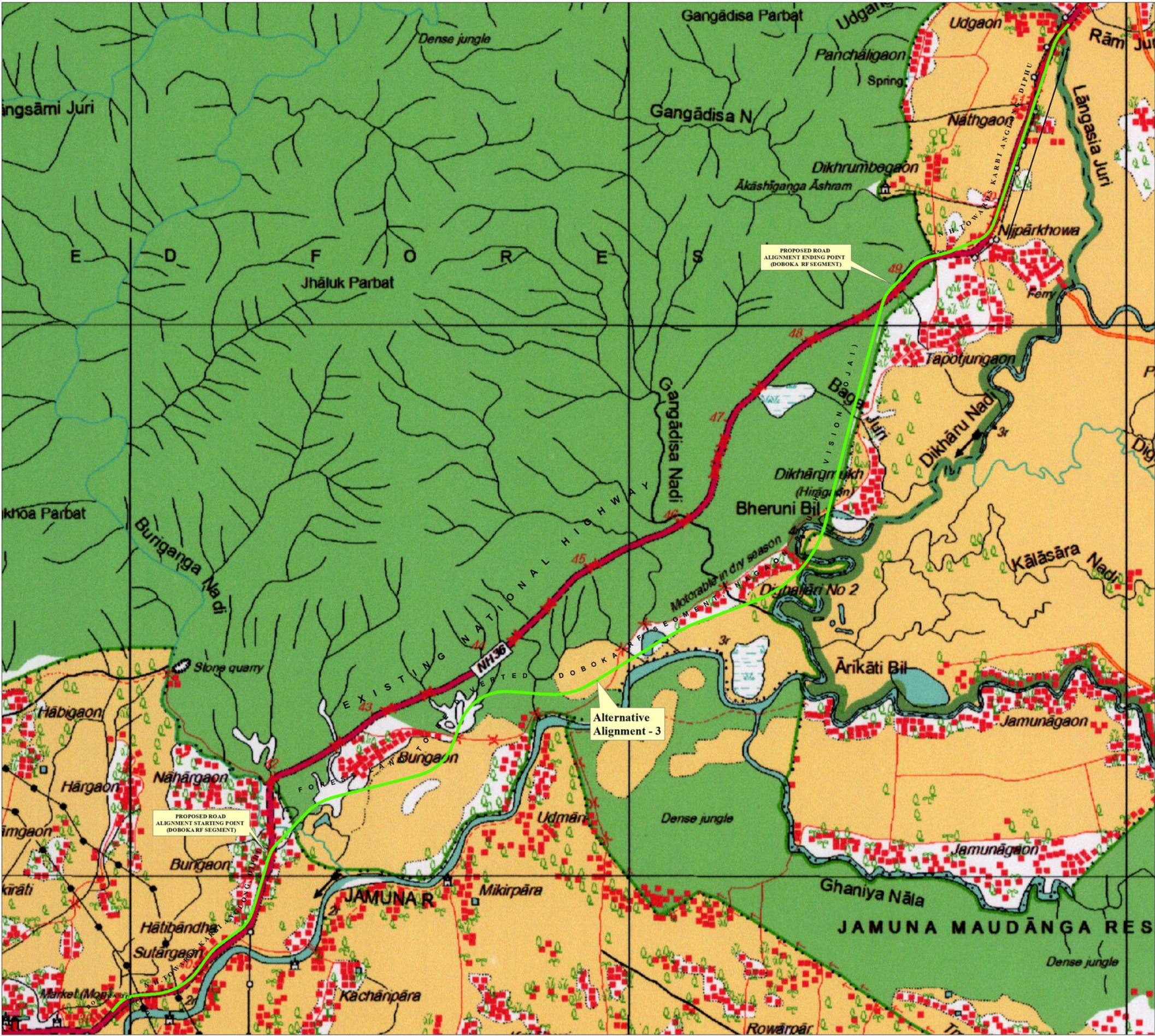
Alternative Alignment Study for Daboka Reserve Forest Stretch under Section-1
km 38+500 to km 50+968



Legend

Alternative Alignment -2 (Total Length 7.45 km)

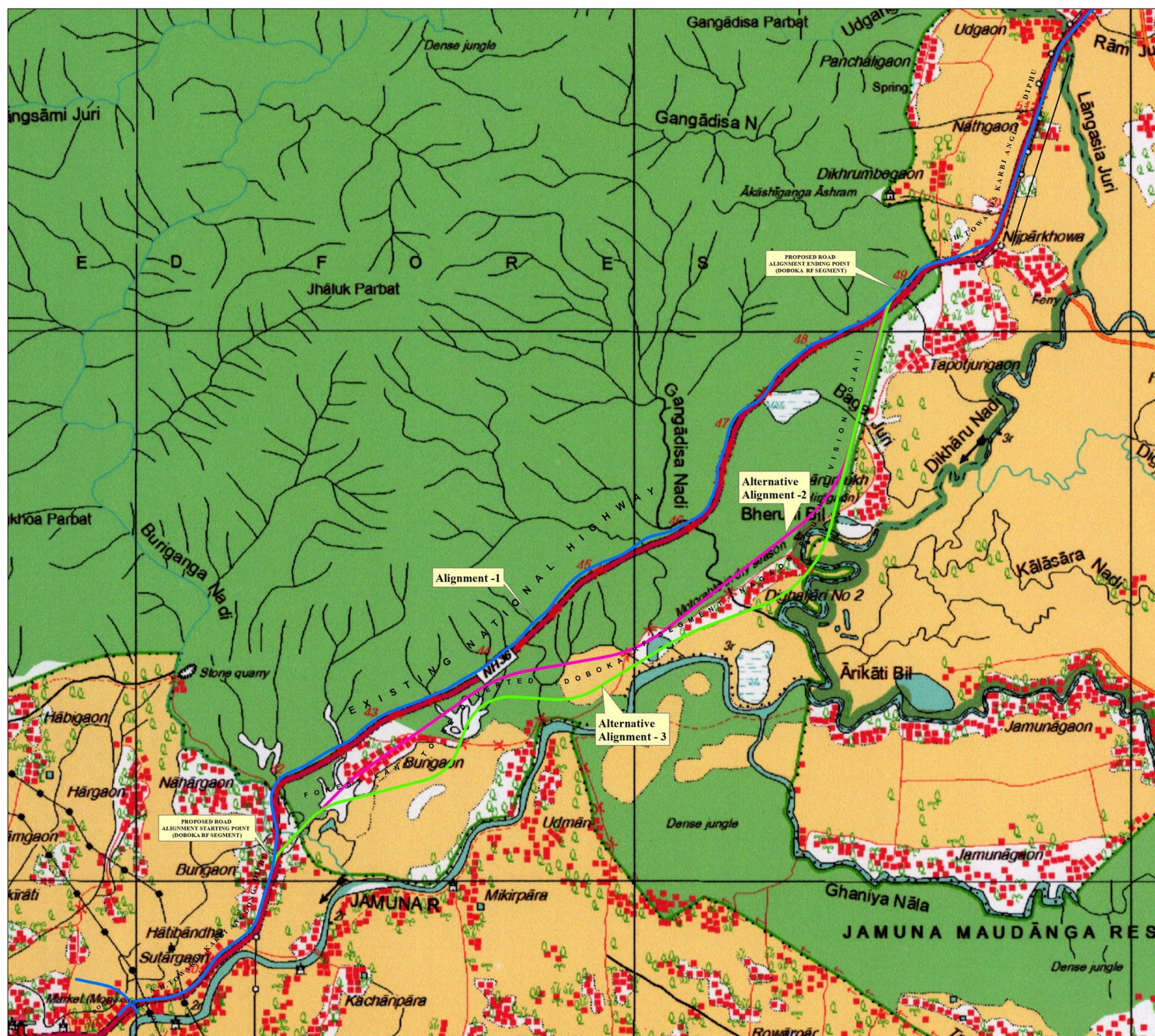
Alternative Alignment Study for Daboka Reserve Forest Stretch under Section-1
km 38+500 to km 50+968



Legend

Alternative Alignment - 3 (Suggested by Forest Dept Total Length 7.6 km)

Alternative Alignment Study for Daboka Reserve Forest Stretch under Section-1 km 38+500 to km 50+968



Legend	
—	Alignment -1 (Following Existing NH-29 Total Length 7.4 km)
—	Alternative Alignment -2 (Total Length 7.45 km)
—	Alternative Alignment -3 (Suggested by Forest Dept Total Length 7.6 km)

ALTERNATIVE ALIGNMENT STUDY REPORT

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1 BACKGROUND

Total length of **Section-1** of Daboka Lahorijan project stretch is 12.468 km. Section 1 alignment is passing through the Daboka Reserve forest for a length of 7.6 km.

The Consultant had already completed following activities with the forest department on the proposed alignment following the existing road.

- Joint Verification with forest officials to identify Elephant underpass location in Daboka RF was held on 6th August, 2021.
- Tree enumeration with forest officials for Daboka RF was held between 18th September, 2021 to 16th October, 2021.
- Already Forest Proposal of 20.5 Ha is uploaded in Parivesh Potal. nic.in. dated 27.05.2021. Stage-I Part-I already approved from Nodal. Stage-I Part-II is pending from DFO Hojai.

After completing all the above activities, DFO, Nagaon South division, Hojai has requested to NHIDCL to explore an alternative alignment to avoid the tree felling in Daboka RF stretch vide letter no. *FNST/A/4 laning / Daboka RF/2021/3269-70 Dated 03.10.21.*

The existing NH29 passes through the Daboka Reserve forest from km 40+350 to km 48+000. Widening to 4-laning through forest will impact forest land and 4706 trees will have to be felled in the Daboka RF area. As per the recommendation of forest department, a joint site visit was done where Forest Department proposed a new route where the alignment passes through 70% of forest land with the minor effects on forest trees and 30% within the revenue land. However, there was major agitations by locals regarding the alignment passing through revenue land.

Thereafter, the alignment was further studied with forest department and NHIDCL suggested modification in alignment as per technical and social requirements. A joint meeting was held with forest officials again, where the entire alignment was proposed through forest land and approx.200. trees are affected.

A meeting was held under chairmanship of DC Hojai, on 17/12/21 to finalise the alignment in presence of Forest officials, NHIDCL officials, social activists and local politicians. MOM was recorded for the preferred alignment entirely through forest land as suggested by NHIDCL

The salient features of the three alternatives are mentioned in the following table. **Figure 1** for alternative alignment study along with site photographs for all alignments is also presented.

2 SALIENT FEATURE OF ALTERNATIVE ALIGNMENTS

Sl. No	Description of Item	Alternative-I (Recommended Alignment)	Alternative-II	Alternative-III (Following existing NH-29)
1	Design Length (km)	7.64	7.45	7.4
2	Forest Stretch (km)	7.64	7.45	7.4
3	Revenue Stretch (km)	Nil	Nil	Nil
4	Forest Name	Daboka RF, Nagoan South Division Hojai	Daboka RF, Nagoan South Division Hojai	Daboka RF, Nagoan South Division Hojai
5	Existing Road Followed	Nil	Nil	7.6
6	Major Junction (nos.)	2	2	Nil
7	Minor Junction (nos.)	2	2	2
8	Bus bays (nos) including both sides	4	4	4
9	Major Bridge (nos.)	Nil	Nil	Nil
10	Minor Bridge (nos.)	5	3	4
11	VUP / VOP (nos.)	1	1	Nil
12	EUP (nos.)	4	4	6
13	Box Culvert (nos.)	22	24	24
14	Marshy Land (m)	100	1000	Nil
15	Retaining Wall	Nil	Nil	6000m (to accommodate the cross section with in 42.5m at EUP with vertical clearance 8m)
16	Structures affected (Approx.)	20-25 nos	25-30 nos Structures	5 nos
17	Trees affected (Approx.)	170 Nos	1500	4706 Nos
18	EROW (m)	Nil	Nil	12
19	Proposed ROW (m)	45-60 (first 5.415 km 60m PROW and last 2.225 kms 45m PROW)- 60m ROW taken due to EUP (Vertical Clearance- 8m)	45-60 (first 5.0 km 60m PROW and last 2.5 kms 45m PROW)	35.5-42.5
20	Tentative LA - Forest land (ha.)	42.6	43.2	20.5
21	Tentative LA- Revenue land (ha.)	1.65 (only for 275m length)	Nil	Nil

The Cost summary for all the three alternatives are mentioned in the following tables:

2.1 **Cost Summary For Alternative-I (Recommended Alignment):**

Alternative-I: Recommended (Node: 1-2-4-5)			
1	Cost Details:		
a.	NEW 4-Lane	Cr.	61.12
b.	Structures - MNB (5 nos)	Cr.	17.8
c.	EUP (4 nos)	Cr.	56.0
d.	VUP (1 no)	Cr.	2.16
e.	Miscellaneous Cost (Road Signages, Drainage, Project facilities Etc.)	Cr.	10.0
f.	Culvert	Cr.	6.6
g.	Ground Improvement	Cr.	1.5
2	Total Civil Cost	Cr.	155.20
3	Total Civil Cost Incl. GST & other charges	Cr.	187.79
4	Pre-Construction Activities:		
a.	Compensation for Encroachments in Forest land	Cr.	
b.	Forest Diversion Cost	Cr.	6.6
c.	Utility shifting cost	Cr.	0.75
	land cost for revenue portion	Cr.	2.22
5	Total Project cost	Cr.	197.32

3 ALTERNATIVE - II

3.1 Cost Summary For Alternative-II

Alternative-II: (Node 1-2-3-4-5)				
1	Cost Details:			
a.	NEW 4-Lane	Cr.	49.13	For 2m Embankment Height @ 6.55 crs per km
b.	Structures - MNB (3 nos)	Cr.	14.9	@ ' Rs 55000/Sqm
c.	EUP (4 nos)	Cr.	56.0	4 nos EUP @ 14 Crs Per EUP
d.	VUP (1 no)	Cr.	1.62	@ ' Rs 45000/Sqm
e.	Miscellaneous Cost (Road Signages, Drainage, Project facilities Etc.)	Cr.	10.0	Drainage, Road Signages, Markings, Busbays Junctions Etc.
f.	Culvert	Cr.	4.4	@ '20 Lakhs Per Culvert
g.	Ground Improvement	Cr.	15.0	Ground Treatment by Stone column / Prefabricated Vertical Drain (PVD) For 800m stretch
h.	Retaining wall at hill side	Cr.	10.0	Length of RCC retaining Wall =1000m (including Both Sides), @ Rs 50000 per Rm at marshy soil portion
2	Total Civil Cost	Cr.	161.00	
3	Total Civil Cost Incl. GST & other charges	Cr.	194.80	
4	Pre-Construction Activities:			
a.	Compensation for Encroachments in Forest land	Cr.		
b.	Land Acquisition Cost	Cr.		
c.	Forest Diversion Cost	Cr.	9.2	
d.	Utility shifting cost	Cr.	0.45	
5	Total Project cost	Cr.	204.50	

4 ALTERNATIVE – III

4.1 Cost Summary For Alternative-III (Following Existing NH-29):

Alternative-III (Following Existing NH-29, Node 1-5)				
1	Cost Details:			
a.	Widening of 2-lane to 4-lane	Cr.	55.40	For 2m Embankment Height @ 7.29 Crs per km
b.	Structures - MNB (3 nos)	Cr.	8.91	@ ' Rs 55000/Sqm
c.	EUP (6 nos)	Cr.	84.0	6 nos EUP @ 14 Crs Per EUP
d.	RCC Retaining Wall for Approach of EUP	Cr.	30	Length of RCC retaining Wall =6000m (including Both Sides), @ Rs 50000 per Rm
e.	Miscellaneous Cost (Road Signages, Drainage, Project facilities Etc.)	Cr.	8.5	Drainage, Road Signages, Markings, Busbays Junctions Etc.
f.	Culvert	Cr.	7.2	@ '30 Lakhs Per Culvert
2	Total Civil Cost	Cr.	194.01	
3	Total Civil Cost Incl. GST & other charges	Cr.	234.76	
4	Pre-Construction Activities:			
a.	Compensation for Encroachments in Forest land	Cr.		
b.	Forest Diversion Cost	Cr.	15.1	
c.	Utility shifting cost	Cr.	2.28	
5	Total Project cost	Cr.	252.11	

5 MERITS AND DE-MERITS FOR ALL THE ALTERNATIVE

The merits and de-merits for all the alternatives are mentioned in the following table.

Description	Merits	Demerits
Alternative-I (recommended)	<ul style="list-style-type: none"> • Less numbers of tree cutting. • Less social complications for acquisition for residential structures • Marshy area along the alignment is much less than alternative-II. <i>(i.e 100m for alternative -I as compared with 800m for Alternative-II.)</i> • Less numbers of structures affected than Alternative-II <i>(20-25 nos for Alternative-I as compared with 40-45nos for Alternative-II)</i> • Total project cost is less than Alternative-II and Alternative-III 	<ul style="list-style-type: none"> • Totally Green Field alignment in forest area
Alternative-II	<ul style="list-style-type: none"> • Total length of the alignment is 7.5 kms (Total land passing through forest land) • Number of minor bridge is less than the others alternative. 	<ul style="list-style-type: none"> • About 1500 numbers of tree cutting involved. More tree cutting will involve than Alternative-I. • Alignment is going through the dense forest which will affect more greenery. • Alignment runs through the marshy land of 1000m. • Alignment also passing near the residential areas.
Alternative-III (following Existing NH-29)	<ul style="list-style-type: none"> • Alignment follows the existing road. • Less acquisition of forest land as compared with Alternative-II and Alternative-II. • Utilization of Existing Road and Existing ROW 	<ul style="list-style-type: none"> • Major tree cutting involved. (i.e 4706 nos of trees to be felled) • Maximum nos of EUP to be proposed for Alternative-III (i.e 6 nos for ALT-III and 4 nos each for Alt-I and ALT-II).

6 RECOMMENDATION:

After comparative study of above three alternatives, **Alternative 1** is recommended as the preferred alternative route on the basis of various engineering aspects, cost, environmental and social aspects.

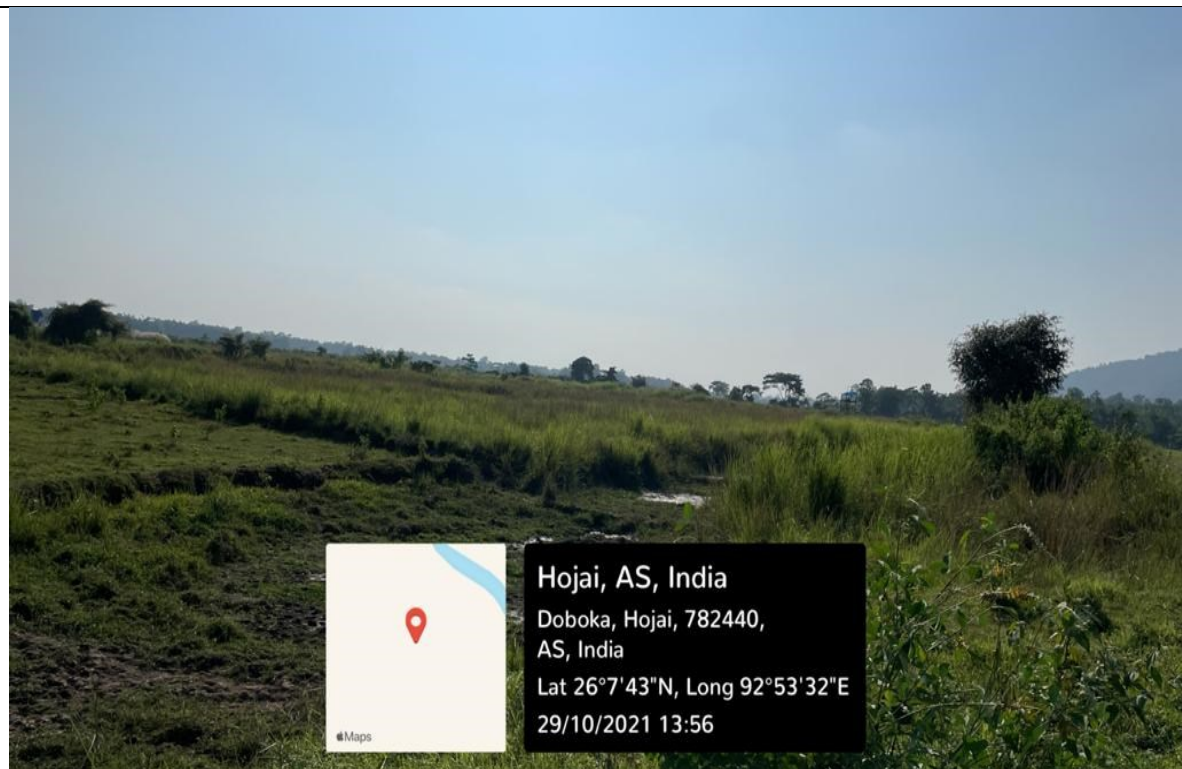
The alignment through the existing road was discarded as the same involved 4706 mo. of tree cutting and was not acceptable to the forest department. Preferred alternative 1 also passes entirely through forest land, however approximately 200 nos. of tree cutting will be involved.

The preferred alignment is also acceptable to all the stakeholders including Forest officials and a meeting was held at DC office on 17/12/21 and MOM has been recorded recommending the preferred alternative route.

7 SITE PHOTOGRAPHS:



Tree Enumeration with Forest officials (NH-29)



Marshy land along Alternate-II



Road condition of Existing NH-29