



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय)

National Highways Authority of India (Ministry of Road Transport & Highways)

पता - प्लॉट नं. 66-67, सिद्धि विनायक कॉलोनी, दादाजी कॉलेज के पास, इन्दौर रोड,
Add. - Plot No. 66-67, Siddhi Vinayak Colony, Near Dadaji College, Indore Road,

खण्डवा (म.प्र.) Khandwa (M.P.) 450001

e-mail : piukhandwa@nhai.org, nhaikhandwa@gmail.com



NHAI/PIU-KNW/1404/RU-DE/Forest/२५७३

Date: 25.01.2024

To,

Divisional Forest Officer
Khandwa, (M.P.)

Sub: 4 laning of Ashapur- Khandwa -Deshgaon Section of NH-347B From Ashapur Design Ch 114-000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul- Khandwa corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh. Compliance Report of EDS raised by forest department for Forest Diversion Proposal No:- (FP/MP/ ROAD/146981/2021) -reg.

Ref: (i) DPR Consultant Letter no.065 dated 15.01.2024
(ii) APCCF letter no. 174 dtd; 08.01.2024

This is in reference to the subject proposal, vide which APCCF (Land Management), Bhopal has forwarded the 14-points information sought by MoEF&CC before issuing in principle approval, which is to be furnished via your office.

2. Further, DPR consultant vide letter under ref. (i), submitted the compliance report of the observation which is tabulated hereunder: -

Sr. No.	Observations raised by MoEF&CC	Compliance/Reply
1	The proposal involves crossing of existing railway line and other infrastructures Therefore, this project will involve re-use of previously used forest land for which the requisite exercise also need to be looked out under the provision of Para 5.6 (Re-diversion) on of Handbook of FCA 1980. The necessary NOC and other required documents shall be submitted accordingly	Subject project involves 02 No. of ROB crossing for which GAD had already been approved by railway department (Annexure-I).
2	There is already an existing road network of Highways and railways in this area so justification for locating the project in Forest land is not clear from the brief provided/uploaded at D(i) in online Part I. The more technical brief is required to be provided to this office	The Justification has been attached in Annexure-II

25/1/24

3	This is seen from the proposed alignment that most of the part is along the existing road. Therefore, the State Govt shall be provided change wise details showing that how much area is already in use and how much area is proposed for diversion? Further, this is also need to clarify that is there any approval taken under the provision of FCA, 1980 for the area which is already which is already in use	The detail are attached as Annexure-III
4	The cost benefit analysis shall be provided as per the format prescribed in the handbook of FCA	Cost Benefit analysis has been attached in Annexure-IV
5	The detail Muck disposal plan shall be provided showing calculation of total muck generated, utilised and disposed considering the appropriate percentage of swelling factor in the area. The area designated for dumping the muck need to be marked on KML and the geo-referenced map.	Muck Disposal plan has been attached in Annexure-V
6	The revenue Forest details uploaded as an additional document in online portal for 1.113 ha area but in online Part II, the status of land for Revenue Forest is shown as 1.36 ha only while rest 8.75 ha is shown as unclassified Forest, this need to be clarified and collected is required	The revenue forest details uploaded in online portal is 10.113 ha which includes 8.75 ha of forest land which has been termed as unclassified by DFO.
7	The proposal involved enumeration of 778 trees i.e 48 trees per hectare which does not account for the density 0.7. the concerned DFO needs to review and correct the density accordingly in online Part II and subsequently the calculation of NPV is also need to review	Query Pertains to DFO Khandwa
8	The details provided in district profile at para 14 of online Part II indicates very poor progress of compensatory afforestation in the district. This needs to be justified with all reasons or corrections if required	Query Pertains to DFO Khandwa
9	KML file of alternative alignments shall be submitted/uploaded on web portal	Option to Upload alternative alignment is not available on old Parivesh. However, KML file has been uploaded on section-C, sub

28/1/24

		section b of (ii). Comparative Analysis of the Alignment has been attached as Annexure-VI
10	Component wise backup of land required and component wise area calculation with layout plan shall be submitted.	Component Wise-Break has been attached as Annexure-VII
11	No objection certificate, certificates of concerned departments (railway pipeline, TL etc.) shall be submitted	Subject project involves 02 No. of ROB crossing for which GAD had already been approved by railway department (Annexure-VIII).
12	Administrative approval/sanction letter of the project shall be submitted	attached as Annexure-IX
13	Roadside plantation scheme shall be submitted	Attached as Annexure-X
14	The certificate of Collector under FRA, 2006 needs to be submitted	The process for FRA is under process and will be submitted before Stage-II. Undertaking for FRA has been attached as Annexure- XI

3. In view of the above, it is requested for further needful action regarding submission of compliance letter by APCCF, so that in-principle approval can be obtained.

Accordingly, your co-operation is anticipated in timely completion of the subject work.

Encl: As above


 (Ashutosh Soni)
 Project Director

Copy to:

1. The Regional Officer, RO-MP, Bhopal (M.P.) for kind information.
2. APCCF, Land Management Bhopal for kind information.
3. CCF, Khandwa for kind information.
4. The Team Leader M/s Lion Engineering Pvt. Ltd. for follow up with concerning department and necessary action for obtaining the clearance



LEA Associates South Asia Pvt. Ltd.

B-1, E-27, Mohan Cooperative Industrial Estate

Mathura Road, New Delhi-110044, India

T | 91-11-2697 3950-52, 41678150 F | 91-11-41678659

Email: lasa@lasaindia.com, www.lea.ca

Corporate Identification Number: U74899DL1993PTC055750

Reference No. LASA/73579/HW/2023/065

Date: 15th January 2024

To,
Project Director,
National Highways Authority of India
PIU, Khandwa, Madhya Pradesh

Sub: Consultancy Services for preparation of Detailed Project Report for Development of Economic Corridors, Inter Corridors, Feeder Routes and Coastal Roads to improve efficiency of Freight Movement in India (Lot1/Madhya Pradesh/Package-3) – **Compliance to the EDS raised by IRO Bhopal.**

Ref Letter-1) Your Office Letter no NHAI/PIU-KNW/LASA/Forest /2023/2337 dated 19/12/2023

2) IRO Bhopal, MoEF&CC letter no Kramank-6MPR042/2023-BHO dated 18/12/2023

Dear Sir,

S.No	Observations	Compliance
1	The proposal involves crossing of existing railway line and other infrastructures Therefore, this project will involve re-use of previously used forest land for which the requisite exercise also need to be looked out under the provision of Para 5.6 (Re- diversion) on of Handbook of FCA 1980. The necessary NOC and other required documents shall be submitted accordingly	No Forest land is affected at the junction of ROB. NOC from Railway has been attached as Annexure- VIII. Undertaking Regarding this has been attached as Annexure-I
2	There is already an existing road network of Highways and railways in this area so justification for locating the project in Forest land is not clear from the brief provided/uploaded at D(i) in online Part I. The more technical brief is required to be provided to this office	New Justification has been attached as Annexure-II
3	This is seen from the proposed alignment that most of the part is along the existing road. Therefore, the State Govt shall be provided change wise details showing that how much area is already in use and how much area is proposed for diversion? Further, this is also need to clarify that is there any approval taken under the provision of FCA, 1980 for the area which is already which is already in use	The detail are attached as Annexure-III
4	The cost benefit analysis shall be provided as per the format prescribed in the handbook of FCA	Cost-Benefit Analysis has been attached as Annexure-IV
5	The detail Muck disposal plan shall be provided showing calculation of total muck generated, utilised and disposed considering the appropriate percentage of swelling factor in the area. The area designated for dumping the muck need to be marked on KML and the geo-referenced map.	Muck Disposal Plan has been attached as Annexure-V
6	The revenue Forest details uploaded as an additional document in online portal for 1.113 ha area but in online Part II, the status of land for Revenue Forest is shown as 1.36 ha only while rest 8.75 ha is shown as unclassified Forest, this need to be clarified and collected is required	The revenue forest details uploaded in online portal is 10.113 ha which includes 8.75 ha of forest land which has been termed as unclassified by DFO.
7	The proposal involved enumeration of 778 trees i.e 48 trees per hectare which does not account for the density 0.7. the concerned DFO needs to review and correct the density accordingly in online Part II and subsequently the calculation of NPV is also need to review	Query Pertains to DFO Khandwa



8	The details provided in district profile at para 14 of online Part II indicates very poor progress of compensatory afforestation in the district. This needs to be justified with all reasons or corrections if required	Query Pertains to DFO Khandwa
9	KML file of alternative alignments shall be submitted/uploaded on web portal	Option to Upload alternative alignment is not available on old Parivesh. However, KML file has been uploaded on section-C, sub section b of (ii). Comparative Analysis of the Alignment has been attached as Annexure-VI
10	Component wise backup of land required and component wise area calculation with layout plan shall be submitted.	Component Wise-Break has been attached as Annexure-VII
11	No objection certificate, certificates of concerned departments (railway pipeline, TL etc.) shall be submitted	No objection certificate for Railway has been attached as Annexure-VIII
12	Administrative approval/sanction letter of the project shall be submitted	Attached as Annexure-IX
13	Roadside plantation scheme shall be submitted	Attached as Annexure-X
14	The certificate of Collector under FRA, 2006 needs to be submitted	The process for FRA is under progress and will be submitted before Stage-II. Undertaking for FRA has been attached as Annexure- XI

Thanking you and assuring you of our best services at all times,

With best regards,

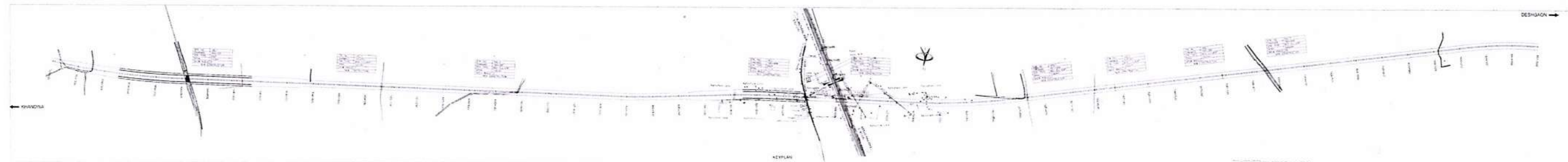
For LEA Associates South Asia Pvt. Ltd.,

Sujoy Sinha



Chief General Manager

Enc: As mentioned Above

[illegible]

THE NEW YORK STATE OFFICE OF GENERAL SERVICES (OGS) HAS ADOPTED A NEW POLICY REGARDING THE USE OF OPEN SOURCE SOFTWARE (OSS) IN ITS OPERATIONS. THE POLICY, WHICH IS EFFECTIVE AS OF JANUARY 1, 2010, STATES THAT ALL NEW SOFTWARE PURCHASES BY OGS MUST BE OPEN SOURCE. THE POLICY ALSO STATES THAT ALL EXISTING SOFTWARE PURCHASES BY OGS MUST BE OPEN SOURCE BY JANUARY 1, 2011. THE POLICY IS A RESPONSE TO THE STATE'S COMMITMENT TO TRANSPARENCY AND ACCOUNTABILITY IN ITS OPERATIONS. THE POLICY IS A RESPONSE TO THE STATE'S COMMITMENT TO TRANSPARENCY AND ACCOUNTABILITY IN ITS OPERATIONS. THE POLICY IS A RESPONSE TO THE STATE'S COMMITMENT TO TRANSPARENCY AND ACCOUNTABILITY IN ITS OPERATIONS.

WESTERN RAILWAY	
RATLAM DIVISION	SECTION: RTM-KNW
GENERAL ARRANGEMENT DRAWING OF PROPOSED ROB A Km. Ch. 166-821 ON RAILWAY Km. 619.075 (BETWEEN 619.02-619.03) BETWEEN STATIONS AJANTI & ATTAR (RATLAM RAILWAY DIVISION) IN THE STATE OF MADHYA PRADESH	

DRG NO. DRM-05/AJT-ATR/D-2023
PCE NO. R-30588-DRM/3-D

Project Director
NHAI
PIU Kharwa

Nulsh Gupta

[Handwritten signature]

Project Title: 4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh.

Proposal No.: FP/MP/ROAD/146981/2021

Date of Proposal:

JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST LAND

I/we National Highway Authority of India, PIU- Khandwa are proposing 4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh under BHARATMALA Pariyojana in the State of Madhya Pradesh.

The project is planned as an ambitious high-speed corridor which provides highspeed connectivity between states of West India and states of East & South India, and more importantly giving a reliable access to the country's prominent economic and social hubs like Ahmedabad, Vadodara, Indore, Khandwa, Betul and Nagpur etc.

The proposed highway will provide better connectivity to several towns and cities viz. Ahmedabad, Vadodara, Deshgaon, Khandwa, Ashapur, Betul and Nagpur etc. and give an infrastructure fillip to the states of Gujarat, Madhya Pradesh and Maharashtra. The highway will be Four lane and ensure high speed traffic movement from Vadodara to Nagpur. The proposed alignment is selected so as to cover one of the most important West -East & South arterial connectivity in the country, further interspersed with feeder highways on its either side.

We are implementing this project with an object to improve the existing road. This will strengthen the existing transportation service, economic development, agricultural facilities and facilitate better connectivity in the region.

We have finalized the proposed alignment taking into consideration the used (diversion) of minimum forest land and to safeguard the regional ecology.

It was not possible to completely avoid the protected and forest areas. However, every effort has been made to reduce the acquisition of forest area.

At Present, the connectivity between Vadodara and Nagpur is either via Indore, Harda through NH-47 which is 4/6lane. The new proposed highway shall bring down the travel distance by approximately 20-30 kms (as compared to alternative routes) and result in time savings of over 30 -45 minutes. Moreover, the new highway facility is 4lane and hence will provide good riding quality, better safety and a reliable infrastructure. All of these elements will result in cost savings and efficiency improvement.

It was not possible to completely avoid the protected and forest areas. However, every effort has been made to reduce the acquisition of forest area.

Forest Section:

- 1) At chainage 123+400 to 124+150 – The proposed alignment is following the existing road hence saving additional area. Also compartment no 475 & 476 can not be avoided.



Nitesh Gupta

A
"Project Director
NHAI
PIU Khandwa"



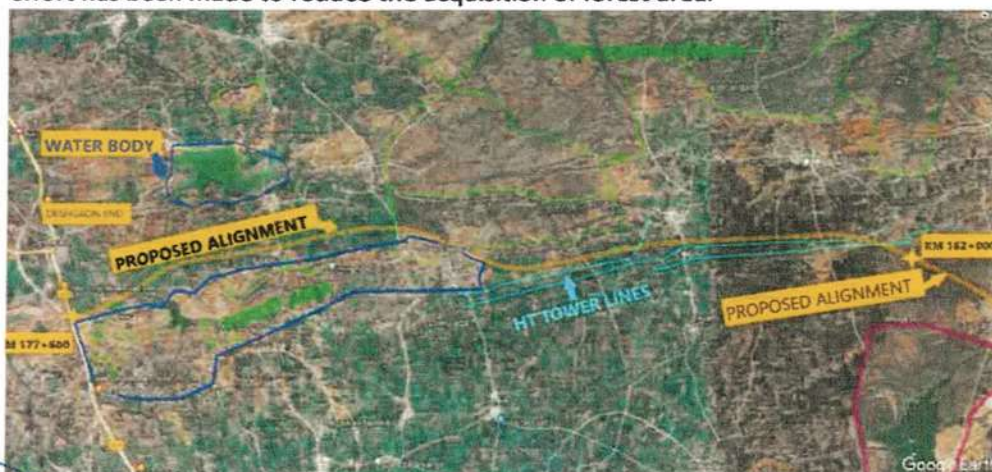
2) At Chainage 160+800 to 163+000

At this chainage there is a revenue forest in Surgaonlpail village which has been handed over to Forest department from Revenue for plantation.

This also can not be avoided as on left side there is revenue forest extending upto more than 2km also there is nagchon talab of the alignment and also this revenue forest extends upto more than 500 m on right side of the proposed alignment

3) At Compartment No-7(Chainage 170+600 to 171+800) :-

The proposed alignment passes parallel to the existing High Tension (HT) Lines along the LHS Side and Multiple Towers are to be shifted. The alignment has been fixed taking due consideration and importance of retaining the existing 3 water bodies along the alignment. Both sides forest area exists along the proposed alignment, duly considering the importance of forest area the alignment was finalized by acquiring minimum area in the forest sections. It was not possible to completely avoid the protected and forest areas. However, every effort has been made to reduce the acquisition of forest area.



Nedish Gupta

[Signature]
"Project Director
NHAI
PIU Khandwa"

Project Title: 4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh.

Existing Road Area already in use in the Project

Forest Compartment 475 and 476

Chainage		Area(sqm)	Area(in ha)
From	To		
123+400		67.5	0.00675
123+550	123+630	401.1	0.04011
123+960	124+150	1027.4	0.10274
Total		1496	0.1496

Area Proposed for Diversion near Existing Road Forest Area

Forest Compartment 475 and 476

Chainage		Area(sqm)	Area(in ha)
From	To		
123+400	124+150	23022	2.3

Note: Since the proposed project is crossing compartment No-475 and 476 in Existing Road Widening .Therefore the detials area provided for that Section only



Project Director
NHAI
PIU Khandwa
Nitesh Gupta

Annexure - IV

COST BENEFIT ANALYSIS AS PER GoI GUIDELINES 01-08-2017

Name of the Project: 4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh.


Table- A: Cases under which cost- Benefit Analysis for forest Diversion are required

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	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.

Table- B Estimation of cost of forest diversion

SN	Parameters	Remarks	Response
1.	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). <i>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</i>	Forest under Project site area are Tropical Dry Deciduous Forest (Eco Class III), and Forest canopy cover is moderately dense forest between 40% and 70% for Reserve Forest and open forest for Revenue Forest NPV- 12,28,590 X Reserve Forest area (6.04 Ha.) and 9,57,780 X Revenue and Unclassified = 1,71,06,713/- INR




 "Project Director
 NHAI
 PIU Khandwa"


 Neelish Gupta

2.	Loss of animal husbandry productivity, including loss of fodder -	To be quantified and expressed in monetary terms or 10% of NPV applicable whichever is maximum	Yes : 17,10,671- INR
3.	Cost of human resettlement	To be quantified and expressed in monetary terms as per approved R&R plan	No Human displacement involve
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 the project	To be quantified and expressed in monetary terms on actual cost basis at the time of diversion	Nil
5.	possession value of forest land diverted	30% of environmental costs (NPV) due to loss of forests or circle rate of adjoining area in the district should be added as a cost component as possession value of forestland whichever is maximum	Yes- INR 51,32,014/-
6.	Cost of suffering to oustees	The social cost of rehabilitation of oustees (in addition to the cost likely to be incurred in providing in-residence, occupation and social services as per R&R plan) be worked out as 1.5 times of what oustees should have earned in two years had he not been shifted.	To be Calculated
7.	Habitat Fragmentation Cost	While the relationship between fragmentation and forest goods and services is complex, for the sake of simplicity the cost due to fragmentation has been pegged at 50% of NPV applicable as a thumb rule.	Yes INR 85,53,356
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	Rs 2,34,40,460

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

SN	Parameters	Remarks	Response
1.	Increase in productively attribute to the specific project	To be quantified & expressed in monetary terms avoiding double counting	This project is desirable from society point of view. Found to be economic for NPV & Economic Internal Rate of return (EIRR)- 7.7%
2.	Benefits to economy due to the specific project	The incremental economic benefit in monetary terms due to the activities attributed to the specific project*	The Ashapur-Khandwa-Deshgaon Section on NH-347B. This road will provide uninterrupted free flow of traffic and shall result in: <ul style="list-style-type: none"> Saving in travel Time & Cost Saving in foreign exchange due to less consumption off fuel.



Nalish Gupta

[Signature]

"Project Director
NHAI
PIU Khandwa"

			<ul style="list-style-type: none"> • Increase in income of truck, bus, taxi, etc. Owner as they will be able to communicate maximum distance in short time. • Reduction in accidents as it will provide safe travel, • Will act as catalyst to the industrial development. • Will boost the local and national tourism industry.
3.	No. of population benefitted due to specific project	As per the Detailed project report.	<p>Entire Population of the project area will be benefitted Project road will aid accessibility directly to people of two districts like Betul and Khandwa. The road will traverse through numerous villages laying along both side of PROW. It is expected that proposed project will have direct positive impact on more than 28.84 lakhs people residing in two districts.</p> <p>Other population which will be benefitted will be tourists, industrialist, etc. .</p>
4.	Economic benefits due to of direct and indirect employment due to the project	As per the Detailed project report.	<p>A total of 468000-man days employment will be generated during construction phase for skilled/unskilled labour.</p> <p>Average wages inclusive of all cost of living is Rs 500/day</p> <p>Total financial implication will come out to be= $468000 \times 500 = \text{Rs } 2340 \text{ Lakhs}$</p>
5.	Economic benefits due. to Compensatory afforestation	<p>Benefits from such compensatory forestation accruing over next 50 years monetised and discounted to the present value should be included as benefits' of compensatory afforestation.</p> <p>*For benefits of CA the guideline of the Ministry for NPV estimation may be consulted.</p>	<p>In lieu of total trees to be removed from the proposed ROW in forest land along the project road, it is proposed to undertake at least twice of affected area as Compensatory afforestation as per Forest Conservation Act, 1980 to increase the net productivity.</p> <p>The Compensatory Afforestation will be done in $16.153 \times 2 = 33$ hectare of degraded forest land which is down the line would be having a density of minimum 0.7. The ecological value for a 50 years period for the density of 1.0 is Rs 126.74 Lakhs per hectare. By considering minimum 0.4 density the ecological gain for the project would be $\text{INR } 33 \times 0.4 \times 254.77 = 33,62,96,400 \text{ Lakhs (} 33.63 \text{ Crore)}$</p>

Summary of Cost –Benefit Analysis

S.No	Loss (in Lakhs)	Benefit(In Lakhs)
1	Ecosystem Service losses = Rs 171.06 Lakhs	Ecological gain for Compensatory= Rs 3363 Lakhs
2	Loss of Animal Husbandry productivity including loss of Fodder = Rs 17.10 Lakhs	468000-man days will be generated assuming 500 per day as wages total benefit = Rs 2340 Lakhs



Project Director
NHAI
PIU Khandwa

Nalish Gupta

3	Possession Value of Forest land Diverted = Rs 51.32 Lakhs	
4	Shifting of Public Utilities= Rs 0	
5	Habitat Fragmentation = Rs 85.53 Lakhs	
	Total Loss= Rs 325.01	Total benefit= Rs 5703

Benefit Cost Ratio = Total benefit/Total Loss

= Rs 5703 Lakhs / RS 325.01 Lakhs= 17.54 which is more than 1 hence project is Viable

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 etc 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



"Project Director
NHAI
PIU Khandwa"
Neelish Gupta

Annexure - I

Project Title: 4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh.

Muck Disposal Scheme

Generated Muck Volume

Construction of road required removal of blasted debris or soil/Rock materials (muck). The estimated volume of muck to be generated from the proposed road construction are detailed in **Table 1**. About 100% of the generated muck is to be reused in road construction for filling, construction of retaining/gabion wall and in approaches of viaducts as necessary. The total quantity of generated muck, reusable quantity and quantity of disposed are provided in **Table 2**

Excavation area of Road						
S.No	From	To	Length in M	Avg Width in M	Depth in M	Quantity in Cum
Khandwa Division						
1	123+385	124+154	769	30	0.25	5767.5
2	160+810	163+000	2190	45	0.25	24637.5
3	170+550	171+830	1280	37.5	0.25	12000
Total Excavated						42405

Abstract of Muck Generated and its Disposal								
Project Component	Quantity of muck generated (cum)		Quantity of muck due to swell factor(cum) (25% of Total quantity)		Estimated quantity of muck proposed to be utilized (cum)		Balance quantity of muck (cum)	
	Rock	Soil	Rock	Soil	Rock	Soil	Rock	Soil
Road	0	42405	0	53006.25	0	53006.25	0	0
Total	0	42405	0	53006.25	0	53006.25	0	0

Table 2: Volume of Muck to be disposed

Muck Volume(Cum)	Re-used Volume (m ³)	Disposal Volume (M ³)
53006.25	53006.25	Nil

Proposed Muck Disposal Sites

The quantity of muck is about 53006.25 cum. The generated muck is to be reused in construction for embankment as necessary in Project Highway. Hence there is no muck disposal site required.

Excavation area of Road						
S.No	From	To	Length in M	Avg Width in M	Depth in M	Quantity in Cum
Khandwa Division						
1	123+385	124+154	769	30	0.908	20947.56
2	160+810	163+000	2190	45	2	147825
3	170+550	171+830	1280	37.5	1.5	72000
Total Excavated						240772.6
Muck Disposal Quantity						53006.25
Balance Quantity						-187766.35

Hence, the excavated quantity is less than the required quantity i.e. muck quantity is 100% reused in the construction of road.



Project Director
NHAI
PIU Khandwa

Neelsh Gupta

Annexure - VI

4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh.



Alternative alignments Comparative Study

Sr. No.	Description	Option 1 (Yellow)	Option 2 (Red)	Option 3 (Green)
A	General Alignment Perspective			
1	Route Alignment	Existing and Green Field Alignment	Green Field Alignment	Green Field Alignment
2	Start Point	Chainage 114+000 near Ashapur	Chainage 114+000 near Ashapur	Chainage 114+000 near Ashapur
3	End Point	Chainage 177+680 near Deshgaon	Chainage 179+000 near Deshgaon	Chainage 175+000.
4	Total Greenfield Length (Km)	63.68	65	61
5	Proposed ROW	45 meter in non-forest area and 30 meter in Forest Area	45 meter in non-forest area and 30 meter in Forest Area	45 meter in non-forest area and 30 meter in Forest Area
B	Environmental Perspective			



Nabesh Gupta

Project Director
NHAI
PIU Khandwa

4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh.

1	Alignment Length in Forest	4.2 Km	6.8 Km	8.5 Km
2	Total Forest Land	16.153 Ha.	22 Ha.	26 Ha.
3	Alignment Length in Protected Area (WLS)-	Nil	Nil	Nil
5	Alignment Length in notified Eco sensitive zone in M. P (Madhya Pradesh).	Nil	Nil	Nil
11	Impacts on water bodies like as reservoir/Pond.	Nil	Sahejla Reservoir	Nil
12	Tentative total number of trees to be potentially affected	2855 (778 nos. trees in Forest land & 2100 nos. in Non-Forest Land)	3610 (1120 nos. trees in Forest land & 2490 Nos. trees in non-Forest land)	4142 (1530 nos. trees in Forest land & 2612 nos. trees in non-Forest land.)
13	Environmental impact	Significant less impact as proposed alignment is passing through Reserve Forest area of 6.04 ha and rest 10.113 ha is revenue forest having very low density	Major impact as project is passing through Sahejla natural water reservoir. Also most of the portion is passing through reserve forest having high density and area of about 15 ha and rest 7 ha is revenue forest.	Very High Significant impact as it is passing through high density reserve forest having an area of about 20 ha. Also, Number of trees are high in compare to option-1 & 2
14	Water bodies	04 river/stream is crossing the alignment.	6 river/stream is crossing the alignment	7 river/stream is crossing the alignment.
C	Socio-economic Perspective			
1	Social Impact	Moderate - As the alignment is following the existing alignment from 114+000 to 149+000 and greenfield from 149+000 till bypasses land and no. of structures affected are very less.	Moderate - As the alignment passes through Agricultural land and no. of structures affected are less.	Moderate - As the alignment passes through Agricultural land and no. of structures affected are less.
2	Predominant existing land use pattern	Predominantly Agriculture land	Agriculture land and Reserve Forest	Agriculture land and Reserve Forest



Project Director
NHAI
PIU Khandwa

Nalini Gupta

4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh.

3	Land Acquisition (in Hectare)	274.5	335.80	297.80
4	Government Land	36.84	45.56	41.64
5	Private Land	237.68	290.24	256.16
6	Tentative LA Cost (Cr.)	53.7	63.8	58.4
D	Design and Engineering perspective			
1	Geometrics	Smooth curves with standard geometrics	Smooth but frequent curves with standard geometrics	Relatively Sharp curves with geometrics standards.
2	No of structures Major bridges, Minor Bridges, ROB's, Flyover and Trumpet	Major bridges: 2 Minor Bridges: 12 ROBs: 2 VUP: 6 LVUP/SVUP: 16 Culverts: 111	Major bridges: 4 Minor Bridges: 13 ROBs: 2 VUP: 6 LVUP/SVUP: 18 Culverts: 118	Major bridges: 5 Minor Bridges: 13 ROBs: 2 VUP: 7 LVUP/SVUP: 15 Culverts: 106
4	Terrain	Plain & rolling	Plain & rolling	Plan & rolling except
5	Land Use	Partially Built-up & Agricultural area	Agriculture land and Reserve Forest	Agriculture land and Reserve Forest
6	Tentative Total Cost (Cr.)	2497.84	3326.71	2817.16
E	Merites and Demerits			
1	Merits	1.Forest Area Involved is less as compared to other options 2. Less no. of trees will be affected in this option compared to option 2 & 3. 3. No any natural water reservoir/pond involved in the project. 6. Less LA Cost compared to Option 2 & 3. 7. Less Construction Cost compared to Option 2 & 3.	Nil	Nil




Project Director
NHAI
PIU Khandwa


Nalish Gupta

4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh.

2	Demerits	<p>1. Less Environment Impact as 6.04 ha of Reserve Forest is being affected out of 16.153 ha.</p>	<p>1- Number of trees affected will be more as compared to Option-1.</p> <p>2. more than option-1.</p> <p>3. Forest land involved in the project is more compare to option-1 & 3.</p> <p>4. No. of trees involved in the project is more than option-1.</p> <p>5. Land Acquisition Cost will be High as compared to Option-1 & 2.</p> <p>6. Large number of structures will be affected.</p> <p>7. Construction's cost will be very high as 4 Major bridges are involved in the project.</p> <p>8. 1 Natural water reservoirs will be impacted due to the project.</p>	<p>1- Project length involved in Reserve is more than option-1 & 2.</p> <p>2. Total Forest area affected is more than option-1 & 2</p> <p>2. Number of trees affected will be more as compared to option-1 & 2.</p> <p>3. Land Acquisition Cost will be very High in compared to option-1 as it is a greenfield.</p> <p>5. Total Project cost is very high compared to option 1 as no. of structure involved in this option more than option 1.</p> <p>6. Construction's cost will be very high as 5 Major bridges are involved in the project</p>
F	Preference	Preferred	Not Preferred	Not Preferred



Neeleshgupta

[Signature]
 "Project Director"
 PIU Khandwa"

Project Name: 4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh.

COMPONENT WISE BREAKUP OF FOREST LAND

S.No	Component	Area (in ha)
1	Road (Main Carrieway, Median, Earthen Shoulder, Paved Shoulder and Service/Slip Road)	12.662
2	Structure (Box Culvert, SVUP, VUP)	0.198
3	Structure (Major Bridge, Minor Bridge)	0.283
3	Utility, Plantation, Drain, etc.	3.01
Total		16.153

Or

S.No	Component	Area (in ha)
1	Existing Road Widening	2.30
2	Realignment	13.853
Total		16.153



Neelsh Gupta

“Project Director
NHAI
PIU Khandwa”

Approved GAD for Proposal No.: WRRTM0013



Proposal ID WRRTM0013 Proposal Date 18/07/2022
Name of Work : Detailed Project Report for Development of Economic Corridors, Inter Corridors, Feeder Routes and Coastal Roads to improve efficiency of Freight Movement in India (Lot1/Madhya Pradesh/Package-1) 4-lan

Track Details ▶

Gauge	BG	Route	RTM MHW
No. of Tracks	1	Proposed Lines	1

Clearance Required With Respect to Rail Level ▶

Height Above Rail Level	mm		
Lateral Clearance (Left) From Centre of Nearest Track	mm	Lateral Clearance (Right) From Centre of Nearest Track	mm

Feasibility of Construction ▶

Road Over Bridge (ROB)	Feasible	Road Under Bridge (RUB)	Not Feasible
Limited Height Subway (LHS)	Not Feasible		

Proposed Road Over Bridge/Road Under Bridge/Limited Height Subway Location Details ▶

District/State	Khandwa (East Nimar) / Madhya Pradesh	Division/Railway	Ratnam / Western Railway
Proposal for	ROB		
Road	New	Category of Road	Class I- National Highways
Name of Road		Location/Chainage on the Road	
Villages/Towns on Either Side		Nearest City/Town	
Between Railway Stations	Ajanti & Attar	Major Railway Section	Omkaraeshwar Road-Khandwa
Location (on Railway Line) (km m /TP)	619 km 150 m /	No of lane(s)	4
Width of road	45	Skew angle (wrt. normal to track)	20

Existing LC data (If applicable) ▶

LC No.		Class of LC	
Location of LC	km m	Average no. of Trains per day	
TVU / Year of TVU	/	LC Will be closed or not	

Any Level Crossing to be closed in lieu of Road Over Bridge/Road Under Bridge/Limited Height Subway No**Road Traffic Diversion ▶**

Whether required or not	
Through Temporary Diversion	Through Temporary LC
Whether FOB is required to close LC	Whether additional RUB is required to close LC

Utility Shifting ▶

OHE	No	Cables (S&T, DOT, OFC)	No
Cables (Electricals)	No	Pipe Lines (Water, Severe)	No
Structures/Equipment	No	Any Other	

Note:- Utility shifting charges to be included in detailed estimate after approval of GAD.

Railway & Other Land Details ▶

Width of Railway land on Left Hand Side from centre of nearest track	m	Width of Railway land on Right Hand Side from centre of nearest track	m
Centre to Centre distances among tracks	m		
Availability of land outside railway on Left Hand Side	min m max m	Availability of land outside railway on Right Hand Side	min m max m
Details of Encroachment if any			
Approach Gradient Left Hand Side (1 in_)		Approach Gradient Right Hand Side (1 in_)	

Joint Site Inspection▶

Project Director
 NHAI
 PU Khandwa

Joint Site Inspection Date Proposed as 22/07/2022

Joint Site
Inspection Date
Confirm/Revised
as 28/07/2022

Actual Date of Joint Site Inspection Done 28/07/2022

Reason for
change in joint
site inspection
date NA**Name (Designation)**

Sponsoring Organization: NHAI ARUN KUMAR (MANAGER TECH.)

Railway Officials at Joint Site Inspection ↓

Engineering SD CHAWLA (AEN DADN)

Signing of Joint Feasibility Report ▶

Is Joint Feasibility Report signed by Sr.DEN/DEN?

Yes

Is Joint Feasibility Report signed by Road Authority?

Yes

Remark by Sr.DEN/DEN

joint report signed is attached and found feasible with 30m span.

Conceptual Plan/Sketch ▶Conceptual Plan/Sketch [Ajanti jointinspection.pdf](#)**Span Arrangement for ROB in Railway Portion By CBE ▶**

No. of Spans in Railway Portion

1

Span arrangement in Railway Land

36m(0-20 deg; COMPOSITE)

Note:- From left to right facing in the direction of increasing railway chainage.

Length of viaduct/span on Left Hand side outside railway

Length of
viaduct/span on
Right Hand side
outside railway

No. of GADs applicable for this proposal

1

Way-leave charges ▶

Road Authority to deposit way-leave charges to Railways as Rs. 12,000/- per annum for 10 years in advance i.e. Rs. 1,20,000/-

View GAD, Mou, Compliance of Checklist etc ▶Date of depositing hard copy of GAD, MoU, Compliance of Checklist etc in
CBE's office 27/09/2022Upload Overall GAD for Approval [GAD ROB 02 -166+821 New-Lavout1.pdf](#)**Signing of GAD, etc by Divisional Officers ▶**

Date of Examination of GAD by Drawing Office of DEN/North/RTM

12/01/2023

Date of Signing by Electrical/TRD

13/01/2023

Date of Signing by S&T

12/01/2023

Signed & Forwarded to CBE vide letter no. & date

on e-das 23/02/2023

Remark

Returned the drawing on
10/02/2023 from HQ and
after compliance sent to
HQ again on 23/02/2023**Approval of GAD By Chief Bridge Engineer/Western Railway ▶**Date of Examination of GAD by Drawing Office of Chief Bridge
Engineer/Western Railway 24/02/2023

Date of Approval 03/03/2023

View Uploaded Signed GAD [RTM-OLN-ROB-GAD-AJANTI-ATTAR -166+821 V6.pdf](#)

Remarks

1.GAD has been approved by Western Railway, with increase the length of Pier cap by 1200 mm from centre of end girders in place of 500 mm for any maintenance work to be carried out during service of ROB.2.Note regarding agreement to be invariably executed with railways for ROB crossing Railway Line, has been incorporated.



Project Director
NHAI
PIU Khandwa

National Highways Authority of India

SANCTION LETTER

Dated : 20/07/2023

N/04015/06002/MP

1. Name of the Project : 2L PS Ashapur to Rudhi (Pkg IV of Betul - Khandwa) of NH 347B

2. Sl. No. of the Sanction Letter (for this project) : 1

3. Current Status of then Project : Balance for Award

4. Details of the Project as per the Project Master File Circulated by PMD

Program Name	Component Name	Name of Corridor	Project Name	Lane	NH	Priority
Bharatmala Pariyojna	Economic Corridors	Vadodara - Kandwa - Betul	Betul - Deshgaon	2L PS	347B	

5. Length of the Project : 34.30 Km.

6. Name of RO / PIU : RO-BHOPAL / KHANDWA

7. Main Activity Code If Created Earlier in AFMS :

8. Mode of Execution : EPC

9. Details of Amount Sanction Sought

Sanction sought previously	Expenditure already incurred	Total Capital Cost sanctioned by the Competent Authority
0.00Cr	0.00Cr	381.43Cr


10. Head wise Approved Cost Details of the Total Amount Sanction Sought Presently

Rs.(in Crore)

E.No	Head of Expenditure	Approved Cost	Approving Authority	Date of Approval
A	Awarded Project Cost			
(i)	EPC Cost (For EPC/ Item Rate Proj.)			
(ii)	Bid Project Cost (For HAM)			
(iii)	Grant (VGF) Payment (For BOT Projects)			
(iv)	Semi-Annuity Payment (BOT-Annuity Projects)			
(v)	IE/Supervision Consultants Payment			
B	Pre-Award Cost			
(i)	Detailed Engineering Exp. (DPR)			
(ii)	Land Acquisition	24.29	Chairman	30/06/2023
(iii)	Utility Shifting			
(iv)	Other Pre-Construction Exp.	1.05	Chairman	30/06/2023
C	Post-Award Cost			
(i)	Change of Scope (CoS)			
(ii)	O&M Payment			
(iii)	Bonus			
(iv)	Arbitration/ Court Award			
TOTAL		25.34		

Printed By : PRASANT SINGH, ACCOUNTANT ON 26/07/2023 13:35:34




 Project Director
 NHAI
 PIU Khandwa

National Highways Authority of India
SANCTION LETTER

Dated : 28/07/2023

N/04015/06003/MP

1. Name of the Project : 4L Greenfield Rudhi to Deshgaon (Pkg V of Betul-Khandwa/Deshgaon)
2. Sl. No. of the Sanction Letter (for this project) : 3
3. Current Status of then Project : Awarded, Not Appointed

4. Details of the Project as per the Project Master File Circulated by PMD

Program Name	Component Name	Name of Corridor	Project Name	Lane	NH	Priority
Bharatmala Pariyojna	Economic Corridors	Vadodara - Khandwa - Betul	Betul - Deshgaon	4L	Greenfield	

5. Length of the Project : 28.68 Km.
- Name of RO / PIU : RO-BHOPAL / KHANDWA
7. Main Activity Code If Created Earlier in AFMS :
8. Mode of Execution : EPC
9. Details of Amount Sanction Sought

Sanction sought previously	Expenditure already incurred	Total Capital Cost sanctioned by the Competent Authority
33.78Cr	28.88Cr	521.21Cr

10. Head wise Approved Cost Details of the Total Amount Sanction Sought Presently Rs.(in Crore)

S.No	Head of Expenditure	Approved Cost	Approving Authority	Date of Approval
A Awarded Project Cost				
(i)	EPC Cost (For EPC/ Item Rate Project)	234.00	Member (I)	10/02/2023
(ii)	Rtd Project Cost (For HAM)			
(iii)	Grant (VGF) Payment (For BOT Projects)			
(iv)	Semi-Annuity Payment (BOT-Annuity Projects)			
(v)	IE/Supervision Consultants Payment			
B Pre-Award Cost				
(i)	Detailed Engineering Exp. (DPR)			
(ii)	Land Acquisition	30.46	Chairman	05/11/2022
(iii)	Utility Shifting			
(iv)	Other Pre-Construction Exp.	3.32	Chairman	05/11/2022
C Post-Award Cost				
(i)	Change of Scope (CoS)			
(ii)	O&M Payment			
(iii)	Bonus			
(iv)	Arbitration/ Court Award			
TOTAL		267.78		

Printed By : PRASHANT SHARMA ACCOUNTANT ON 25/10/2023 17:29:36



Project Director
NHAI
PIU Khandwa

Neelesh Gupta

LEGEND PLAN

PROPOSED ROAD :-

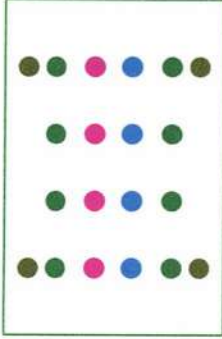
PROPOSED ROW :-

CULVERT/BRIDGE-DESIGNED :-

TREE PLANTATION ZONE :-

TREES :-

TOTAL NUMBER OF TREES TO BE PLANTED IN MEDIAN = 21544 NO.
TOTAL NUMBER OF TREES TO BE PLANTED IN LHS & RHS (AVENUE PLANTATION) = 34106 NO.



NOTE:-

1. SPECIES TO BE PLANTED IN AVENUE PLANTATION :- KACHNAR, AMALTAS, GULMOHAR, JACARANDA, PELTOPHORUM, JAMUN, ARJUN, SIRIS, KARANJ, ARJUN, NEEM TREE, PIPAL, PAKER, BANYAN TREE, DEVIL TREE, SHISHAM BAMBOO ETC SHALL BE PLANTED. (LOCAL AVAILABLE SPECIES TO BE PLANTED IN CONSULTATION WITH HORTICULTURE EXPERT).
2. SPECIES TO BE PLANTED IN MEDIAN; BOUGAINVILLEA, KANER, FIRE BUSH, ETC. (LOCAL AVAILABLE SPECIES TO BE PLANTED IN CONSULTATION WITH HORTICULTURE EXPERT.)
3. SOURCE OF SEEDS AND SEEDLING FOR PLANTATION:- SEEDLING WILL PURCHASE FROM FOREST DEPARTMENT OR AVAILABLE FROM NEARBY NURSERY/MARKET
4. SPACING AND PLANTING PATTERN:- SPACING WILL BE 3M. AND PLANTING PATTERN WILL BE RANDOM METHOD AND ZIGZAG PATTERN.(AS PER GREEN HIGHWAY POLICY)
5. TIME SCHEDULE FOR PLANTATION AND MAINTENANCE:- PLANTATION WILL BE DONE IN MONTH OF JULY AND MAINTENANCE WILL BE DONE IN MONTH OF AUG, OCT. FOR FIRST YEAR; JULY AUG, FOR 2ND YEAR AND IN JULY FOR 3RD YEAR WITH NPK 10:26:26.
6. TREE PLANTATION IN NON-FOREST AREA IS TO BE DONE BY CONCESSIONAIRE
7. PLANTATION SCHEME HAS BEEN PREPARED TAKING MAXIMUM AREA. HOWEVER ACTUAL NUMBER MAY VARY.

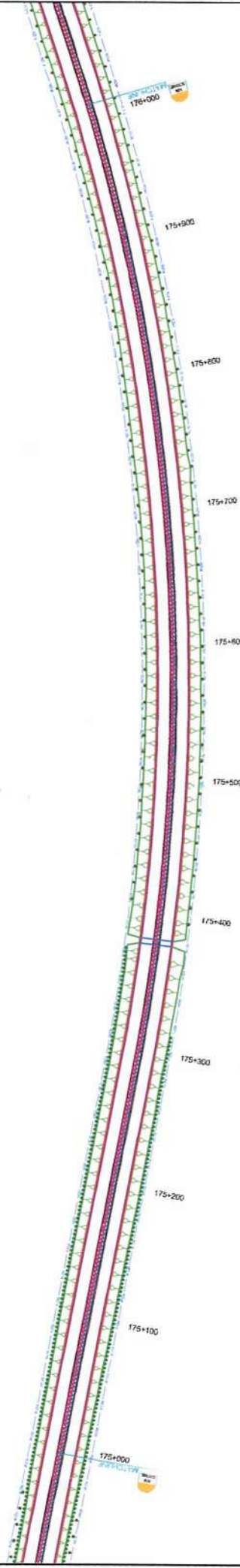
"Project Director
NHAI
PIU Khandwa"
Nehal Singh



LEGENDS:-		DEVELOPMENT		SCALE		PROJECT		DRAWING TITLE		DRAWING No.		REV.	
SIDE TREE		MEDIAN TREE		1:2000		NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India		TREE PLANTATION SCHEME		73579/LANHIGHWAYS/DRTPS-01		0	
DATE: DECEMBER 2023		DRAWN : ROXENDER		CHECKED : J.K.Das		APPROVED : J.K.Das		DATE: DECEMBER 2023		DRAWN : ROXENDER		CHECKED : J.K.Das	
APPROVED : J.K.Das		APPROVED : J.K.Das		APPROVED : J.K.Das		APPROVED : J.K.Das		APPROVED : J.K.Das		APPROVED : J.K.Das		APPROVED : J.K.Das	
*PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-JIMADHYA PRADESH PACKAGE-1)													

BETUL

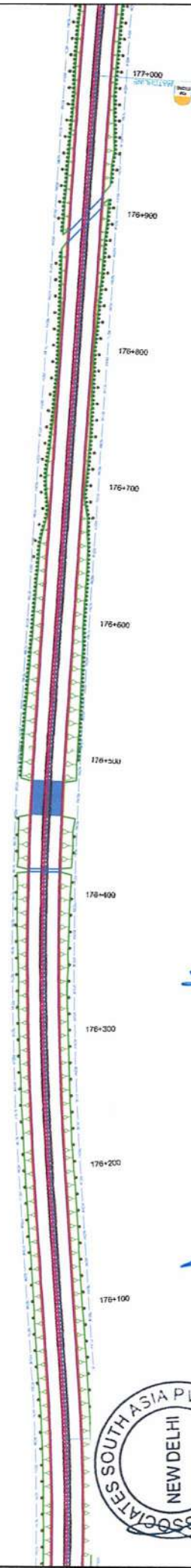
KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
27	175+000	176+000	173	157	996

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
28	176+000	177+000	234	226	1128

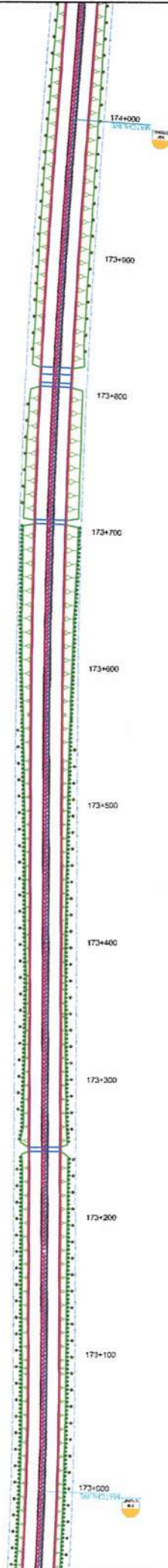


“Project Director”
NHA
“PILKHANDWA”

LEGENDS:-		SCALE: 1:2000		CLIENT: NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India		PROJECT: TREE PLANTATION SCHEME (Kms. 175+000 to Km. 177+000)		PROJ. NO.: 73578/LAS/HHWAYS/OPRT/PS-15		SHEET NO.: 0	
SIDE TREE	●	●	●	DATE: MAY 2023 DESIGNED: M. Balakrishna CHECKED: S. S. S. S. S. DRAWN: J. K. Das APPROVED: J. K. Das							
MEDIAN TREE	●	●	●	*SEPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT/MADHYA PRADESH PACKAGE-I)							

BETUL

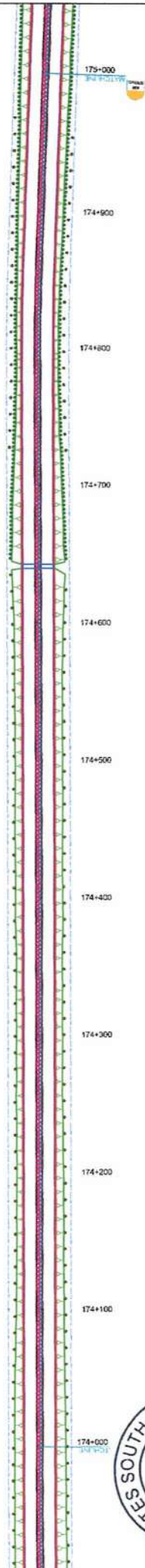
KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
25	173+000 174+000	668	297	291	1256

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
26	174+000 175+000	666	193	190	1049

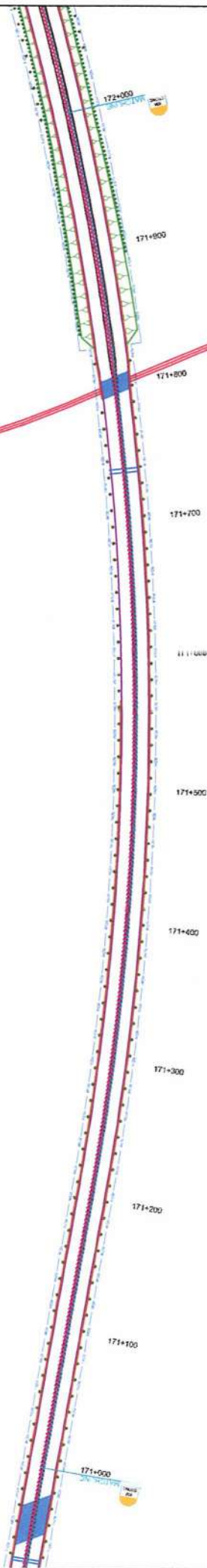


“Project Director”
NHA
Khandwa”

LEA ASSOCIATES SOUTH ASIA PVT. LTD., B-1, E-27, 1st FLOOR, MOHAN CO-OPERATIVE INDUSTRIAL ESTATE, MATRUHA ROAD, NEW DELHI-110044 INDIA		SCALE 1:2000	CUSTOMER NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	DRAWING TITLE TREE PLANTATION SCHEME (Km. 173+000 To Km. 175+000)	ENG. NO. 73879/LAN/HIGHWAYS/TPS-14	REV. 0
LEGENDS:- SIDE TREE MEDIAN TREE		PROJECT “PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT/MADHYA PRADESH/PACKAGE-I)”				
APPROVED J.K. Das		DATE: MAY 2023 DESIGNED: M. Balash CHECKED: Supply Saha DRAWN: ASHISH				

BETUL

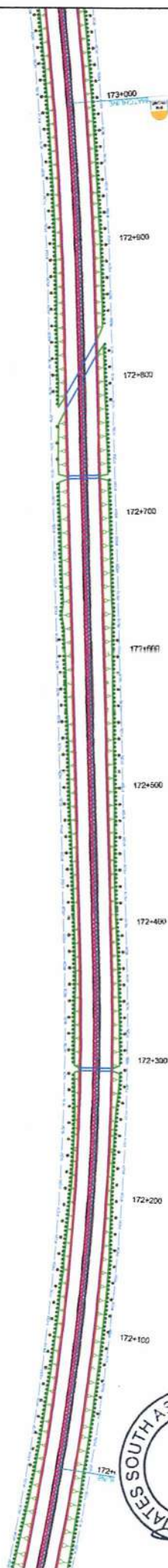
KHANDWA



S.No	Chainage	Median Tree	LHS	RHS	Total Tree
23	171+000	172+300	665	121	893

BETUL

KHANDWA



S.No	Chainage	Median Tree	LHS	RHS	Total Tree
24	172+000	173+000	666	383	1442



“Project Director”
NHA
“Project Khandwa”

LEGENDS:-

SIDE TREE



MEDIAN TREE



LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, B-27, 1st FLOOR, MOHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATIURA ROAD,
NEW DELHI-110044
INDIA



SCALE

1:2000

D.D.R.T.

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)



ESK/INDIA TITLE

TREE PLANTATION SCHEME
(Km. 171+000 TO Km. 173+000)

REVISION

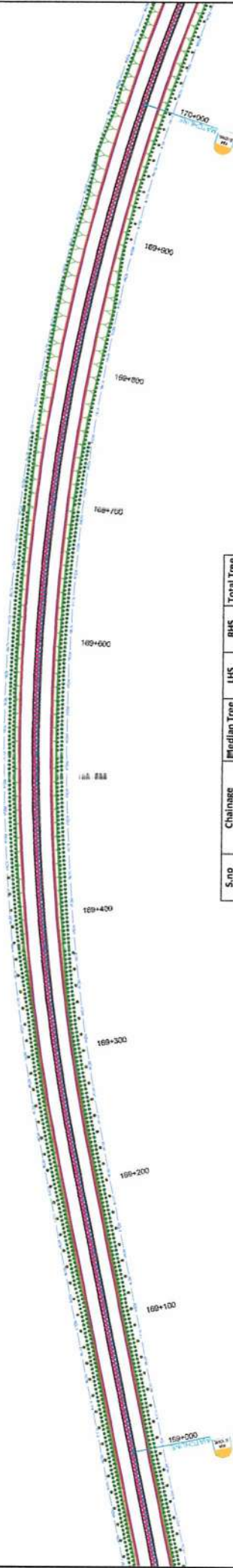
0

DATE: MAY 2023
DESIGNED: M. Kulkarni
CHECKED: Sujoy Sinha
DRAWN: ASHISH
APPROVED: J.K. Das

SHEET 82E/2

BETUL ←

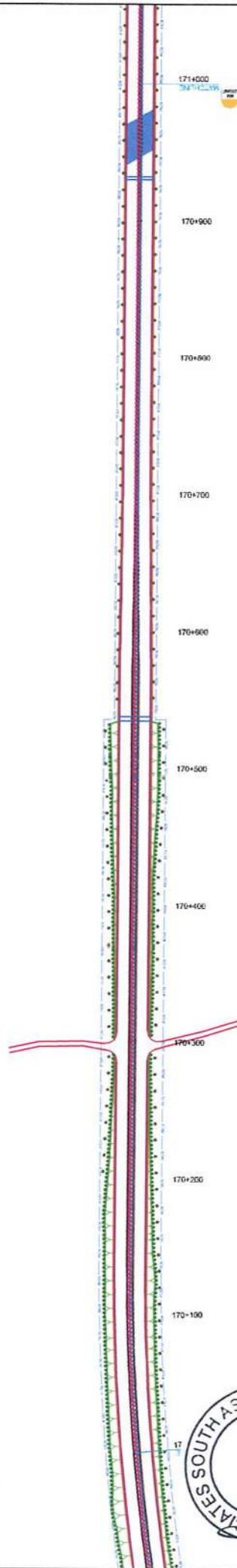
→ KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
21	159+000 170+000	667	624	619	1910

← BETUL

→ KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
22	170+000 171+000	666	240	255	1161



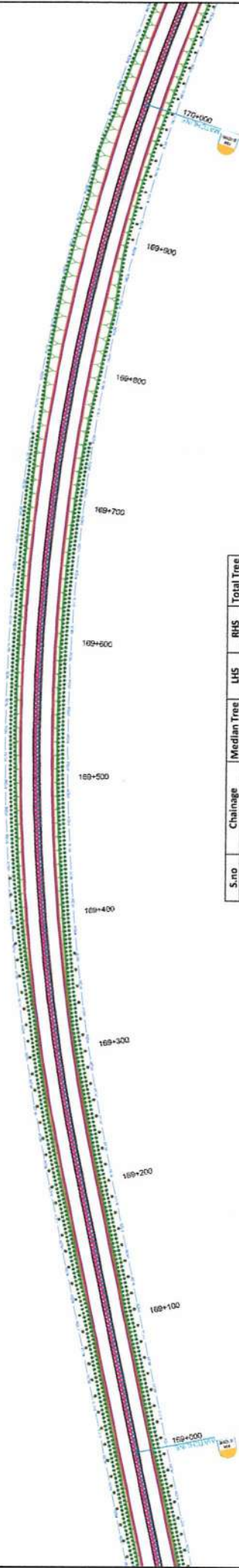
Project Director
NHA
PIU Khandwa

LEGENDS:-		SIDE TREE MEDIAN TREE	
DESIGN CONSULTANT LEA ASSOCIATES SOUTH ASIA PVT. LTD. B-1, 1st FLOOR, NON-HAN CO-OPERATIVE INDUSTRIAL ESTATE, MATHURA ROAD, NEW DELHI-110044 INDIA		SCALE 1:200	
PROJECT NATIONAL HIGHWAYS AUTHORITY OF INDIA Ministry of Road Transport & Highways Government of India		DRAWING TITLE TREE PLANTATION SCHEME (Km. 169+000 To Km. 171+000)	
PROJECT NO. 73579LASANHIGHWAYSDRTPS-12		DATE: MAY 2023 DESIGNED: M. Palash CHECKED: Suresh Sinha DRAWN: J.K. Das APPROVED: ASHISH J.K. Das	
SHEET NO. 0		SHEET SIZE A2	

BETUL



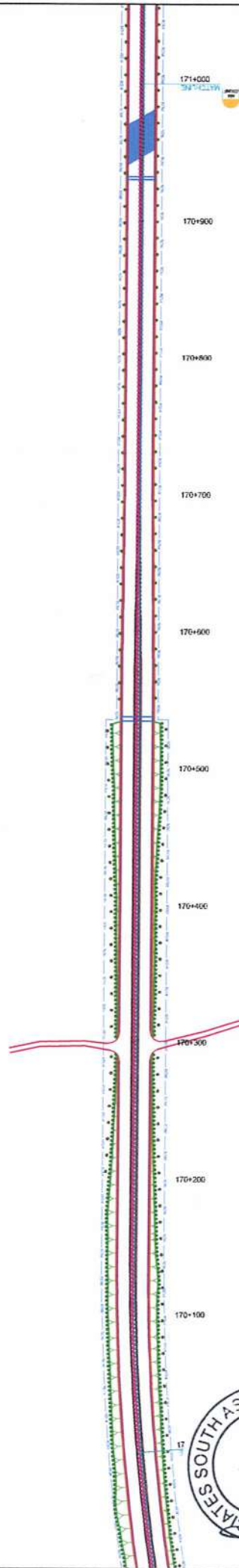
KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
21	169+000 170+000	667	624	619	1910

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
22	170+000 171+000	666	240	255	1161



"Project Director, NHAI"
Khandwa

LEGENDS:-

SIDE TREE



MEDIAN TREE



LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, 5-27, 1st FLOOR, MOHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATHURA ROAD,
NEW DELHI-110044
INDIA



SCALE

1:2000

C.B.R.T.



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India

DRAWING TITLE

TREE PLANTATION SCHEME
(Kiln. 169+000 To Kiln. 171+000)

DRW. NO.

7357PLASAHIGHWAYSDRTPS-12

REV.

0

PROJECT:
"PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS,
INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT
MOVEMENT IN THE COUNTRY (LOT-I/MDA/TA PHOESHIP/Package-I)"

DESIGNED
M. Balash

CHECKED
Surya Sinha

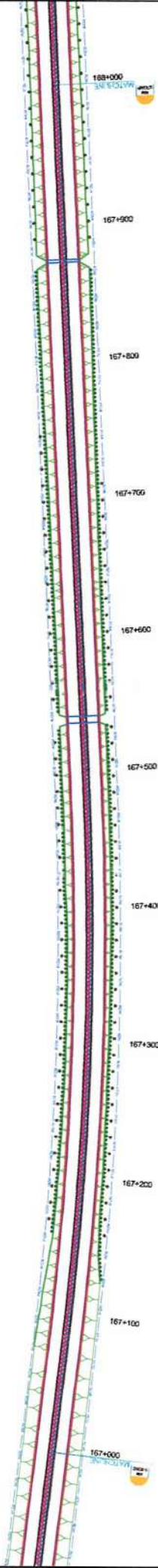
DRAWN
ASHISH

APPROVED
J.K. Das

SHEET SIZE A2

BETUL

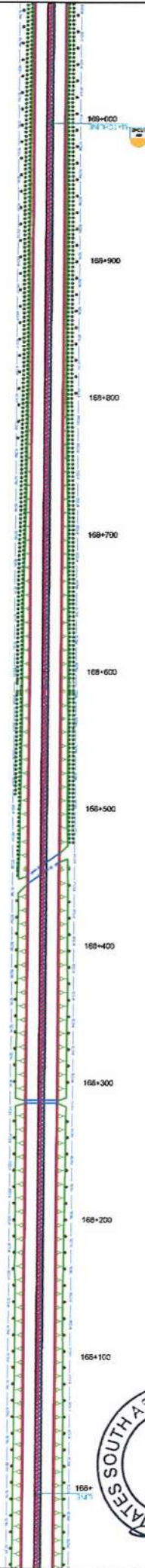
KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
19	167+000	168+000	288	330	1255

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
20	168+000	169+000	403	104	1473

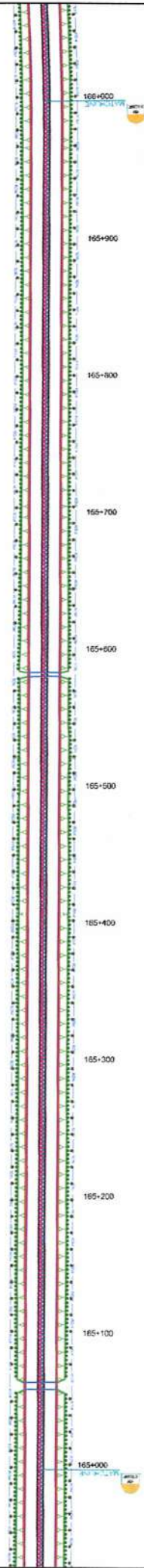


"Project Director" *Nand Lal*
NHA
PIU Khandwa

LEGENDS:-		PROJECT CONSULTANT: LEA ASSOCIATES SOUTH ASIA PVT. LTD., B-1, 1st Floor, Mohan Cooperative Industrial Estate, Mathura Road, NEW DELHI-110044 INDIA		SCALE: 1:2000	CLIENT: NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	DRAWING TITLE: TREE PLANTATION SCHEME (Km. 167+000 TO Km. 169+000)	PROJ. NO. 73579/LAS/HHW/SPR/TPS-11	REV. 0
SIDE TREE								
MEDIAN TREE								
			DESIGNED M. Rishabh	CHECKED Surya Sinha	DRAWN ASHISH	APPROVED J.K. Das		
PROJECT: "PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-IMADHYA PHASE-II/PACKAGE-I)"								
SHEET SIZE A2								

← BETUL

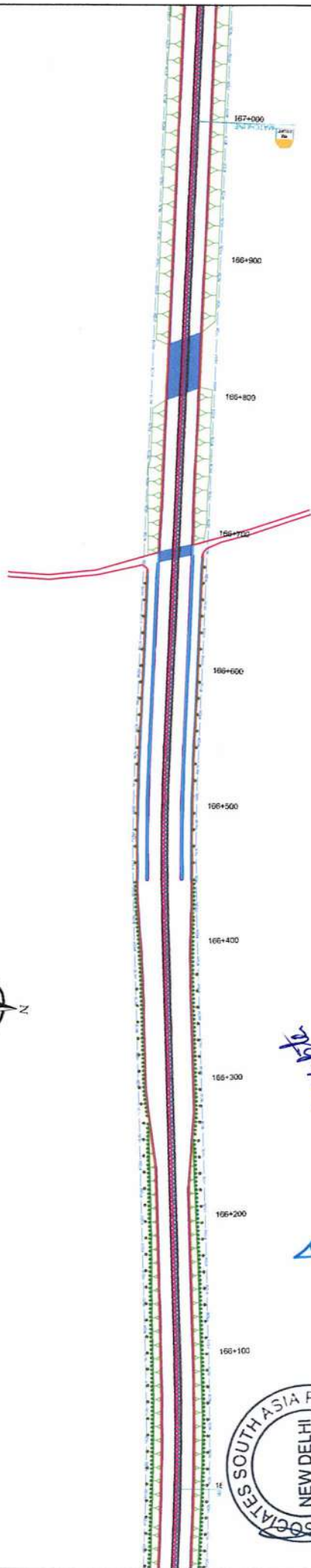
KHANDWA →



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
17	165+000 - 166+000	666	408	410	1484

← BETUL

KHANDWA →



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
18	166+000 - 167+000	667	496	499	1062



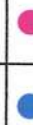
Project Director
"Project Director"
NHAI
PIU Khandwa

LEGENDS:-

SIDE TREE



MEDIAN TREE



LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, E-27, 1st FLOOR, MOHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATRUJA ROAD,
NEW DELHI-110044
INDIA



SCALE

1:2000

CLIENT



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India

DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 165+000 To Km. 167+000)

DESIGNED

DATE: MAY 2023
DESIGNED: M. Rajan

CHECKED

DATE: MAY 2023
CHECKED: Supriy Sinha

DRAWN

DATE: MAY 2023
DRAWN: ASHISH

REVISION

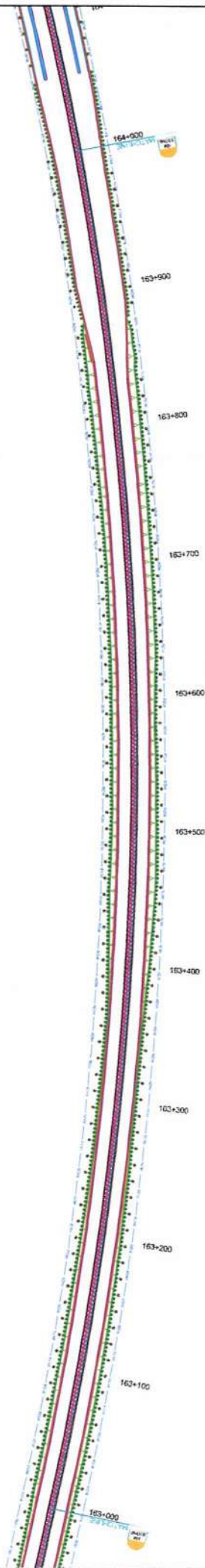
73579/LAS/HHWAYS/OPR/TPS-10

0

SHEET SIZE A2

BETUL

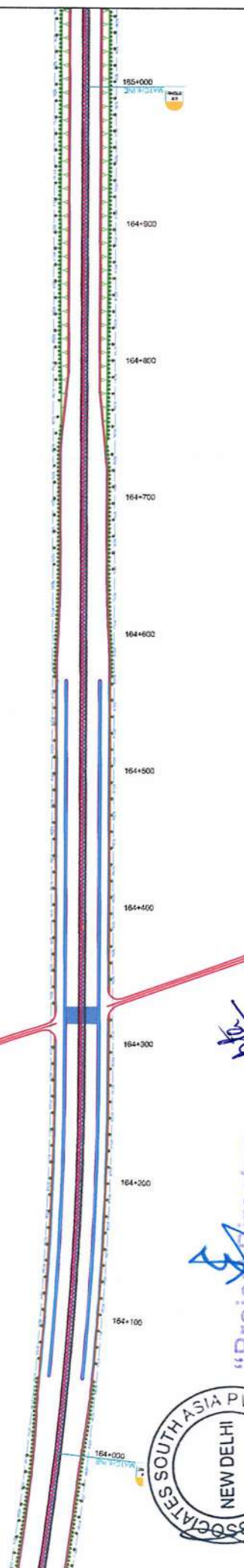
KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
15	163+000	164+000	666	412	1492

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
16	164+000	165+000	667	225	1124



"Project Director
NHAI
PIU Khandwa"

LEGENDS:-

SIDE TREE



MEDIAN TREE



DESIGN CONSULTANT

LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, B-27, Indirapuram, GHAZIABAD
INDIA

INDUSTRIAL ESTATE, MATIYARA ROAD,
NEW DELHI-110044
INDIA



SCALE

1:2000

C.B.M.T.

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India



DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 163+000 TO Km. 165+000)

DESIGN NO.

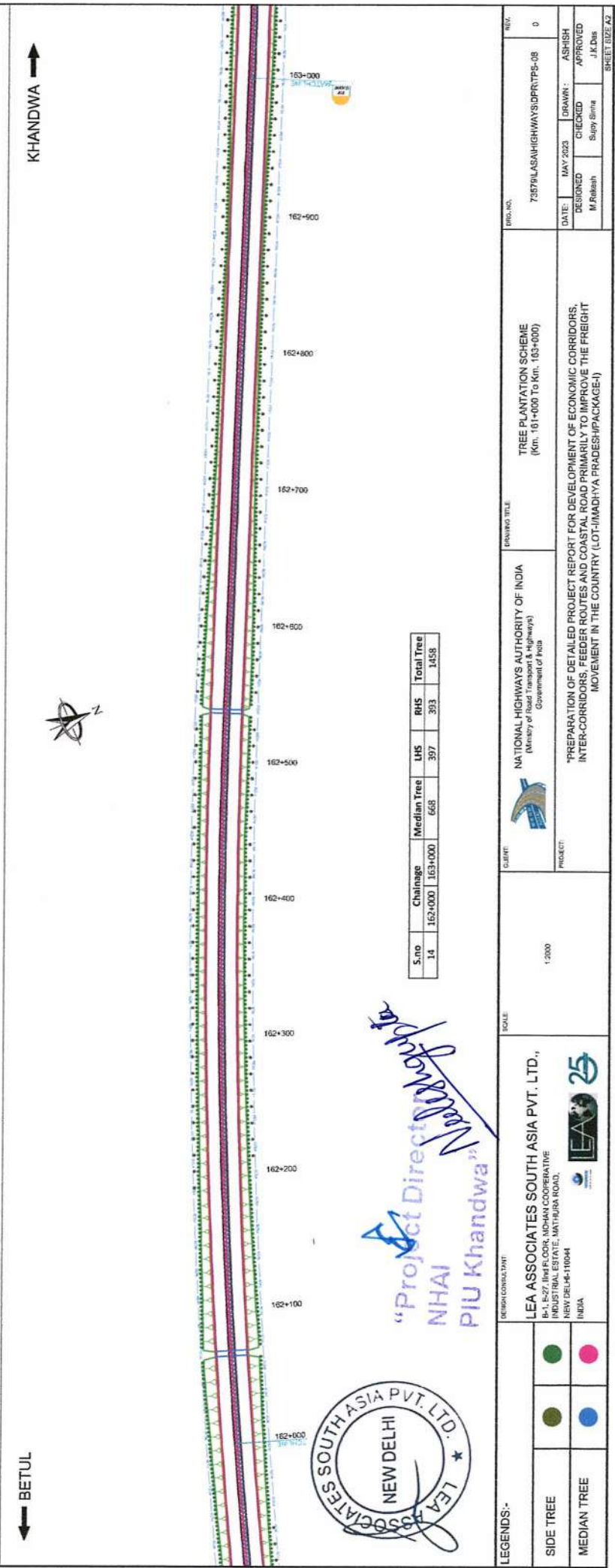
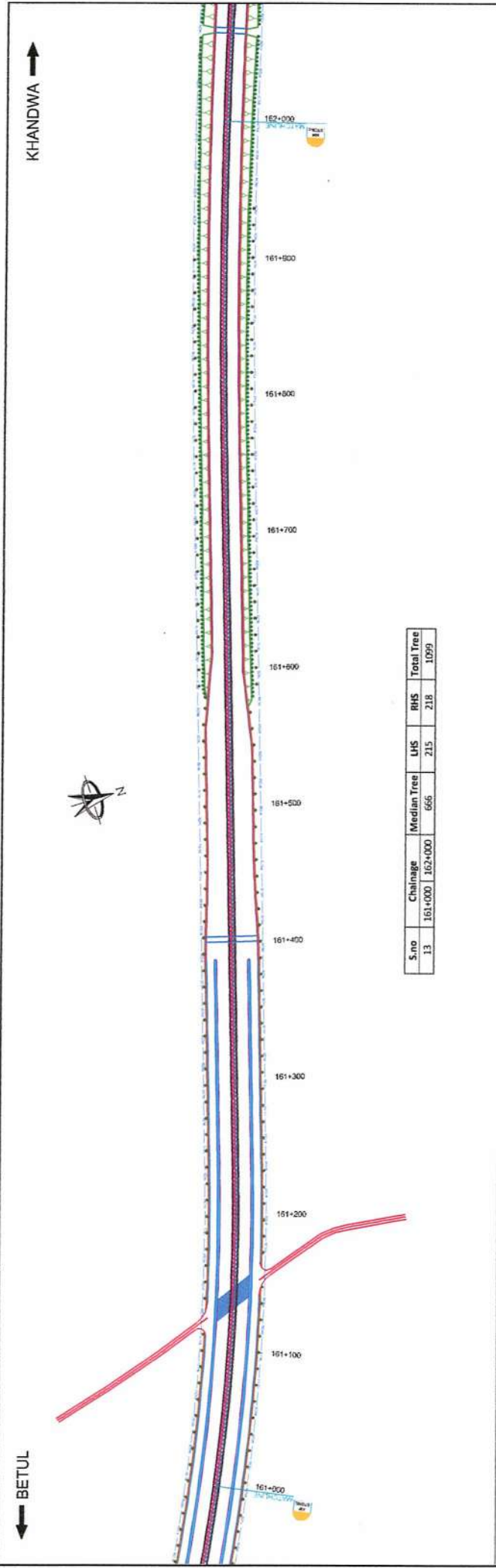
73579/LSA/HIGHWAYS/DP/TPS-08

REV.

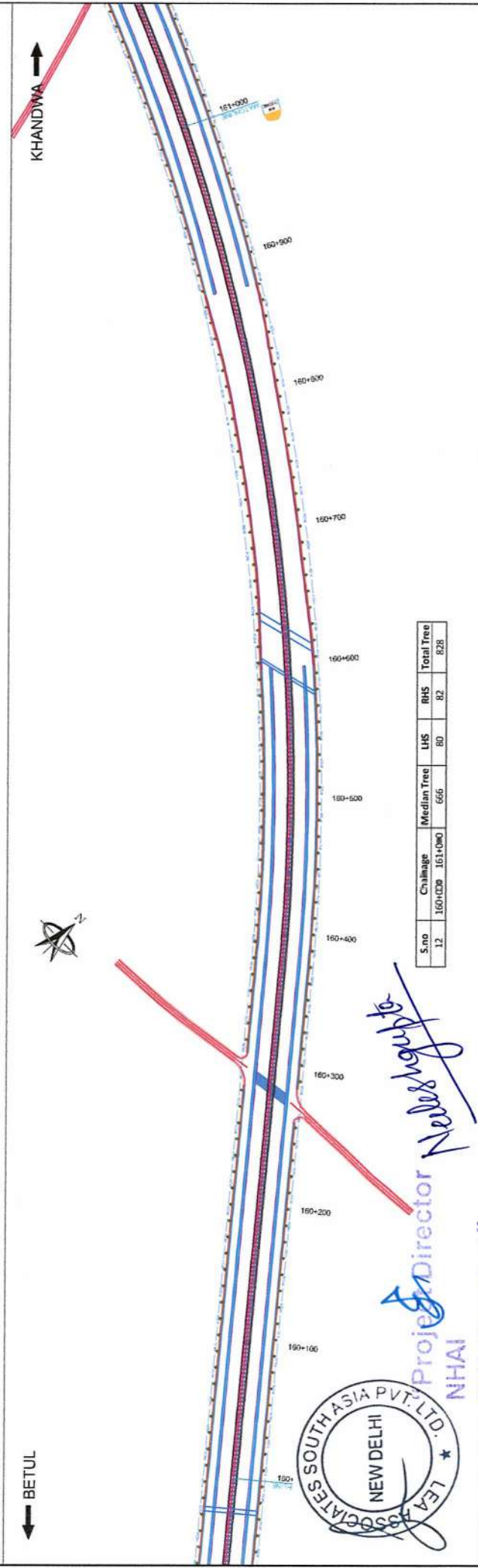
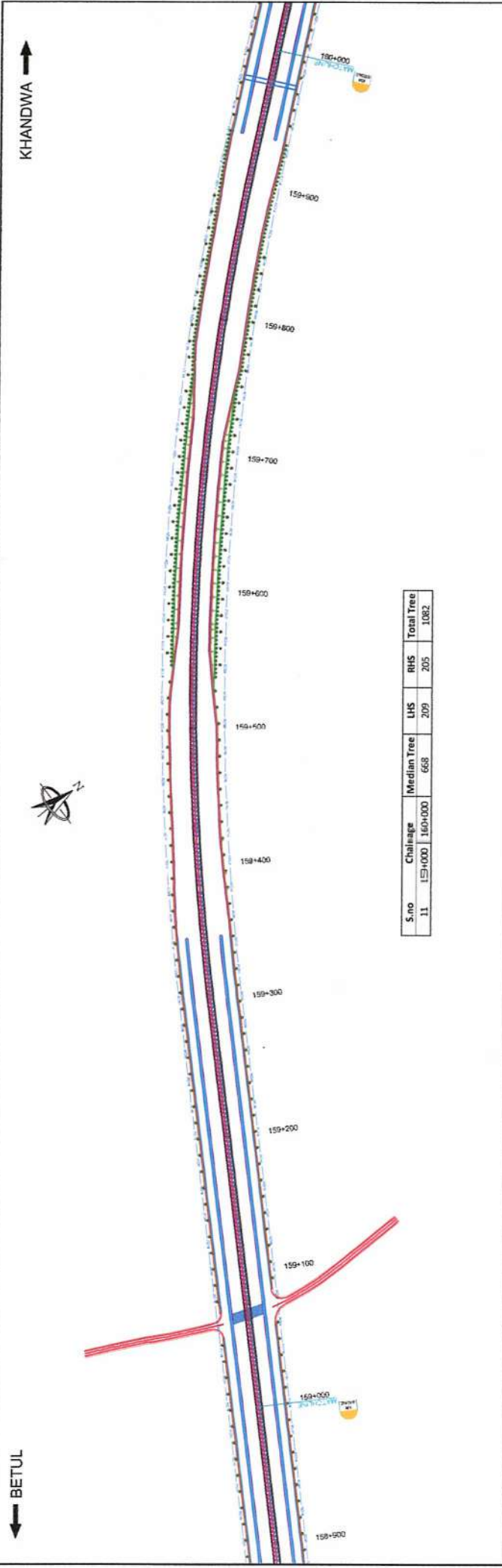
0

DATE: MAY 2023
DESIGNED: M. Kishore
CHECKED: Sushil Bhatia
DRAWN: ASHISH
APPROVED: J.K. Das

SHEET SIZE A2



LEGENDS:-		DESIGN CONSULTANT		SCALE	CURVE	DRAWING TITLE	UNIT NO.	REV.
SIDE TREE			LEA ASSOCIATES SOUTH ASIA PVT. LTD., P-1, B-27, 1ST FLOOR, MOHAN CO-OPERATIVE HOUSING SOCIETY, MAYAPUR ROAD, NEW DELHI-110044 INDIA	1:2000		NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	73579/LASAHIGHWAYS/DPRTPS-08	0
MEDIAN TREE								
							DATE: MAY 2023	DESIGNED: M. Kishore
							CHECKED: Suraj Singh	APPROVED: J. K. Das
								PROJECT: "PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-JIMADHYA PRADESH PACKAGE-I)"
								SHEET 102E A2



LEGENDS:-

SIDE TREE	●	●
MEDIAN TREE	●	●

CLIENT: LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, 8-27, 1st FLOOR, MOHAN CO-OPERATIVE INDUSTRIAL ESTATE, MATIYARA ROAD, NEW DELHI-110044, INDIA

SCALE: 1:2000

PROJECT TITLE: TREE PLANTATION SCHEME (Km. 159+000 To Km. 161+000)

CLIENT: NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India

PROJECT: "PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-IMADHYA TRADESHIP PACKAGE-I)"

DESIGNED: M. Rakesh

CHECKED: Suraj Singh

DRAWN: ASHISH

APPROVED: J.K. Das

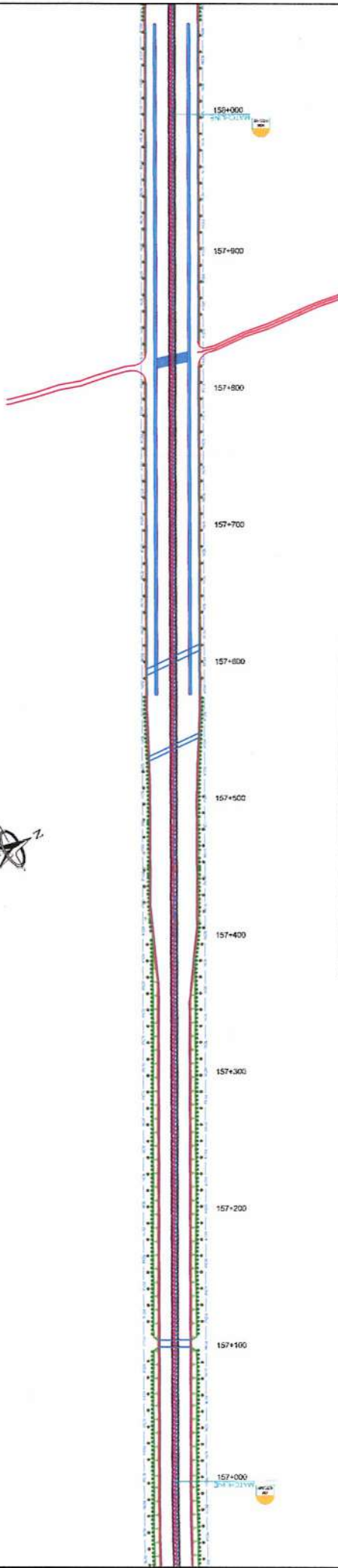
DATE: MAY 2023

FIG. NO.: 73576/LAS/HIGHWAYS/OPR/TPS-07

SHEET NO.: 02

BETUL ←

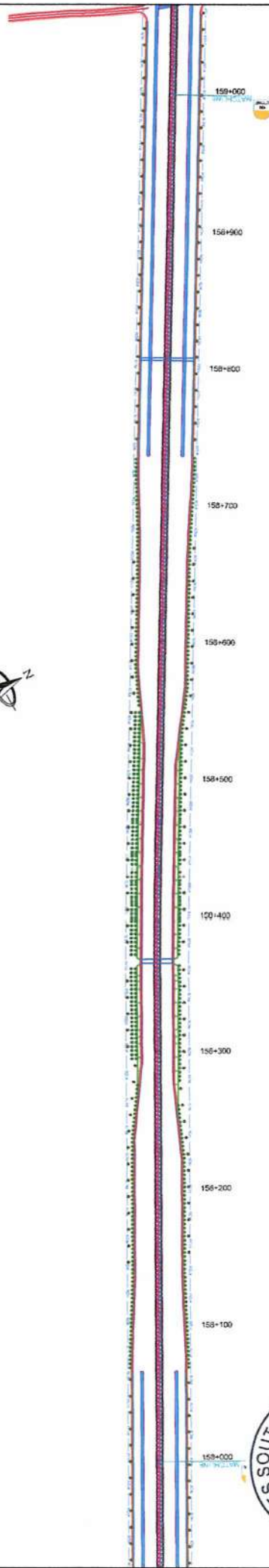
KHANDWA →



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
9	157+000	656	262	263	1191

BETUL ←

KHANDWA →



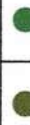
S.no	Chainage	Median Tree	LHS	RHS	Total Tree
10	158+000	656	336	286	1288



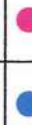
"Project Director
NHA
PILU Khandwa"

LEGENDS:-

SIDE TREE



MEDIAN TREE



SCALE

1:200

GENERAL CONTRACTOR

LEA ASSOCIATES SOUTH ASIA PVT. LTD.,

B-1, B-27, 1st FLOOR, ANHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATIURA ROAD,
NEW DELHI-110044

INDIA



SUBJECT

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Transport & Highways)
Government of India

DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 157+000 To Km. 159+000)

DESIGN NO.

73579LASA-HIGHWAYS/OPRTPS-06

REV.

0

DATE: MAY 2023

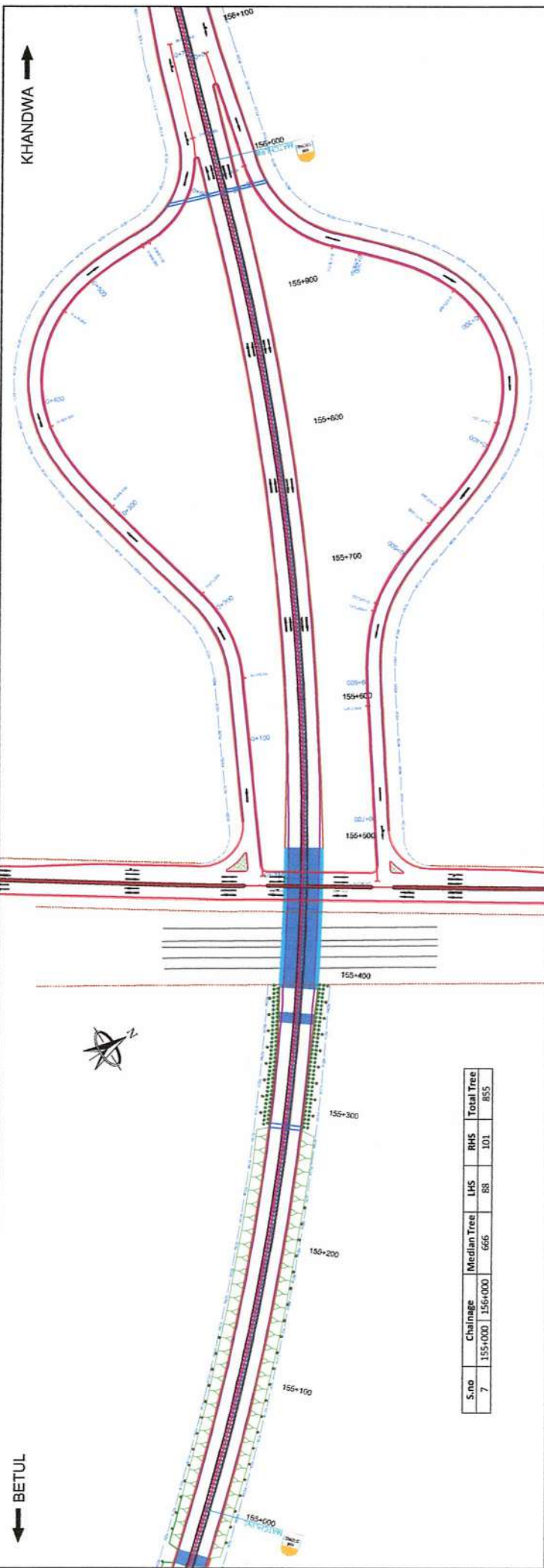
DESIGNED
M. Ramesh

CHECKED
Surya Singh

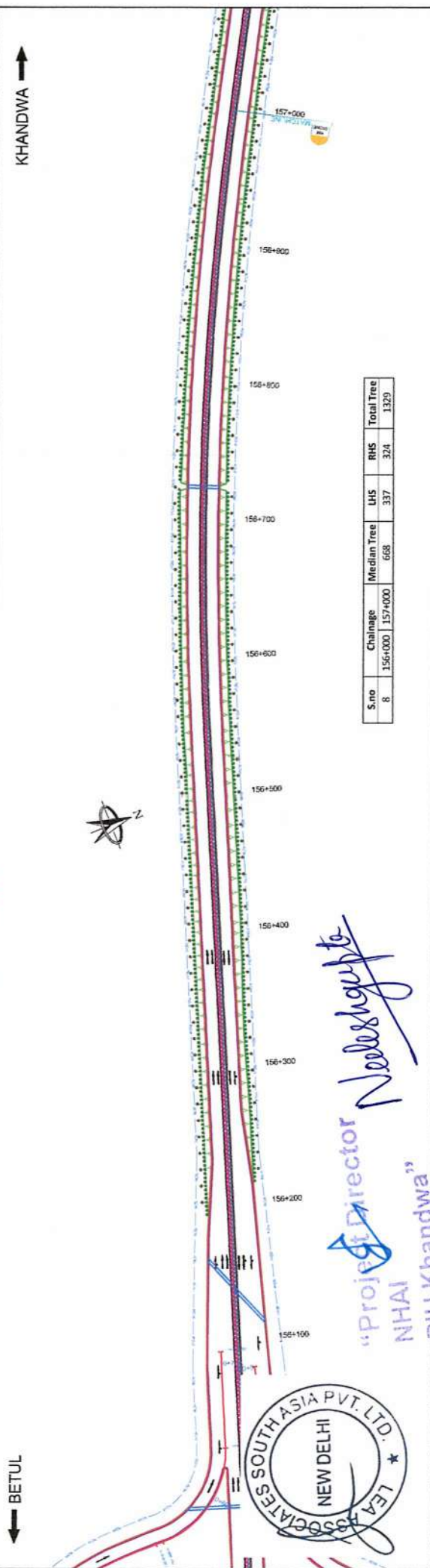
DRAWN BY
ASHISH

APPROVED
J.K. Das

SHEET SIZE A2



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
7	155+000 156+000	666	88	101	855



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
8	156+000 157+000	668	337	324	1329

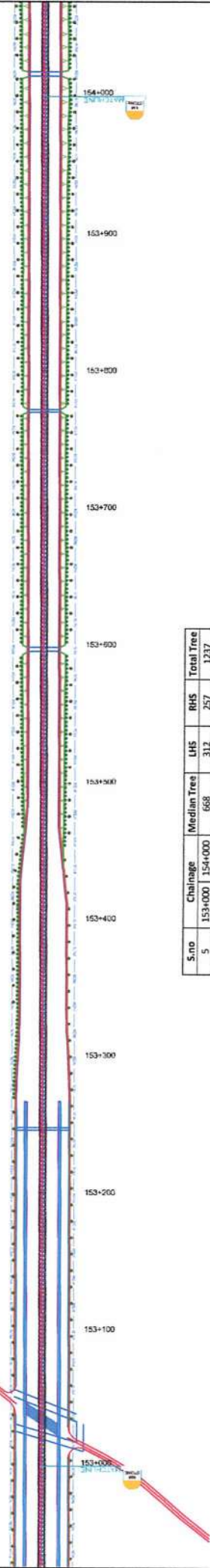


“Project Director Noida & Gupta”
 NHAI
 Piliukhandwa”

LEGENDS:- SIDE TREE MEDIAN TREE		SCALE 1:2000	CLIENT NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	ENCLAVING TITLE TREE PLANTATION SCHEME (Km. 155+000 To Km. 157+000)	PWD. NO. 7387PLASAHIGHWAYSOPRTPS-05	REV. 0
LEA ASSOCIATES SOUTH ASIA PVT. LTD., B-1, 8-27, 1st FLOOR, NOHAN CO-OPERATIVE INDUSTRIAL ESTATE, MAYAPUR ROAD, NEW DELHI-110044 INDIA		PROJECT "PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-IMACHYA PRADESH/PACKAGE-I)"	DATE: MAY 2023 DESIGNED: M. Rakesh CHECKED: B. S. Singh DRAWN: J.K. Das APPROVED: ASHISH			SHEET SIZE: A2

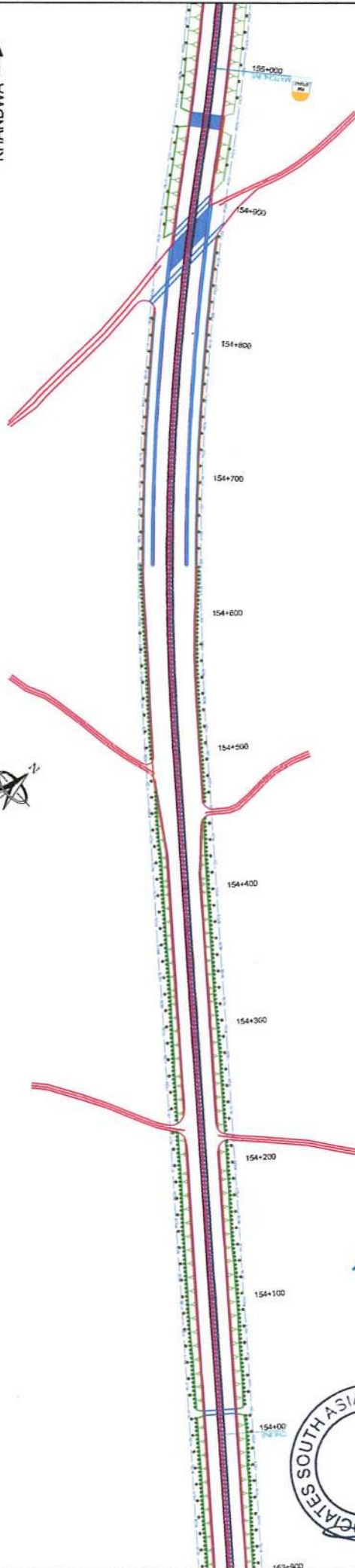
BETUL

KHANDWA



BETUL

KHANDWA

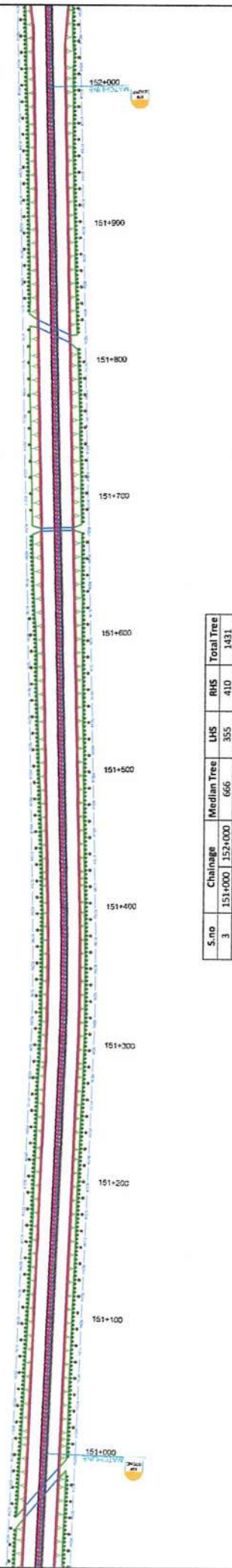


"Project Director
NHA
PIU Khandwa"

LEADS:-		LEGENDS:-		SCALE		CLIENT		DRAWING TITLE		DPO. NO.	
SIDE TREE		MEDIAN TREE		1:2000		NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Roadways) Government of India		TREE PLANTATION SCHEME (Km. 153+000 To Km. 155+000)		73579/LAS/HIGHWAYS/OPR/TPS-04	
●		●								REV. 0	
●		●								DATE: MAY 2023	
●		●								DESIGNED: M. Rakesh	
●		●								CHECKED: B. S. Sinha	
●		●								DRAWN: ASHISH	
●		●								APPROVED: J.K. Das	
●		●								BHEET SIZE A2	

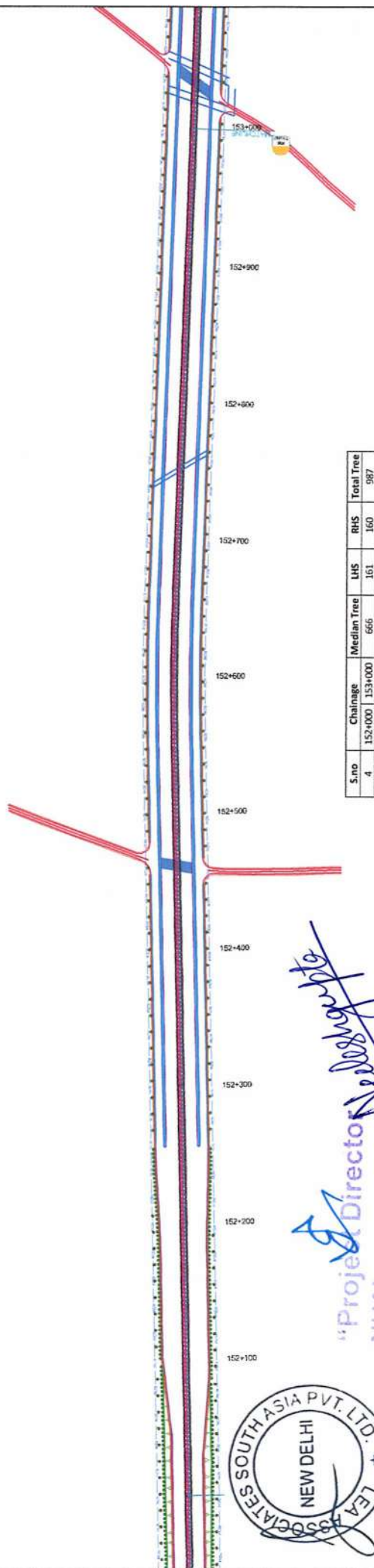
BETUL

KHANDWA



BETUL

KHANDWA



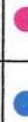
"Project Director" *Nedesh Gupta*
NHA
PILKHANDWA

LEGENDS:-

SIDE TREE



MEDIAN TREE



LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, E-27, 1st FLOOR, MOHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATHURA ROAD,
NEW DELHI-110044
INDIA



SCALE

1:2000

CLIENT

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India

DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 151+000 To Km. 153+000)

DESIGNED

M. Rakish

CHECKED

Satyu Sinha

DRAWN

ASHISH

DATE

MAY 2023

REV.

73579LSAHIGHWAYS/CPRTS-03

0

SHEET SIZE A2

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
1	149+000 150+000	646	631	596	1873

BETUL

KHANDWA

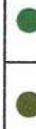


Project Director
NHA
PIU Khandwa

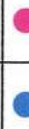
S.no	Chainage	Median Tree	LHS	RHS	Total Tree
2	150+000 151+000	668	502	396	1566

LEGENDS:-

SIDE TREE



MEDIAN TREE



DESIGN CONSULTANT

LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, 8-27, 1st FLOOR, MOHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATRUHA ROAD,
NEW DELHI-110044
INDIA



SCALE

1:2000

CUSTOMER

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India



DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 149+000 To Km. 151+000)

PROJ. NO.

73579/LASAHIGHWAYS/OPRTPS-02

REV.

0

DATE: MAY 2023

DESIGNED
M. Fakhri

CHECKED
Surya Sinha

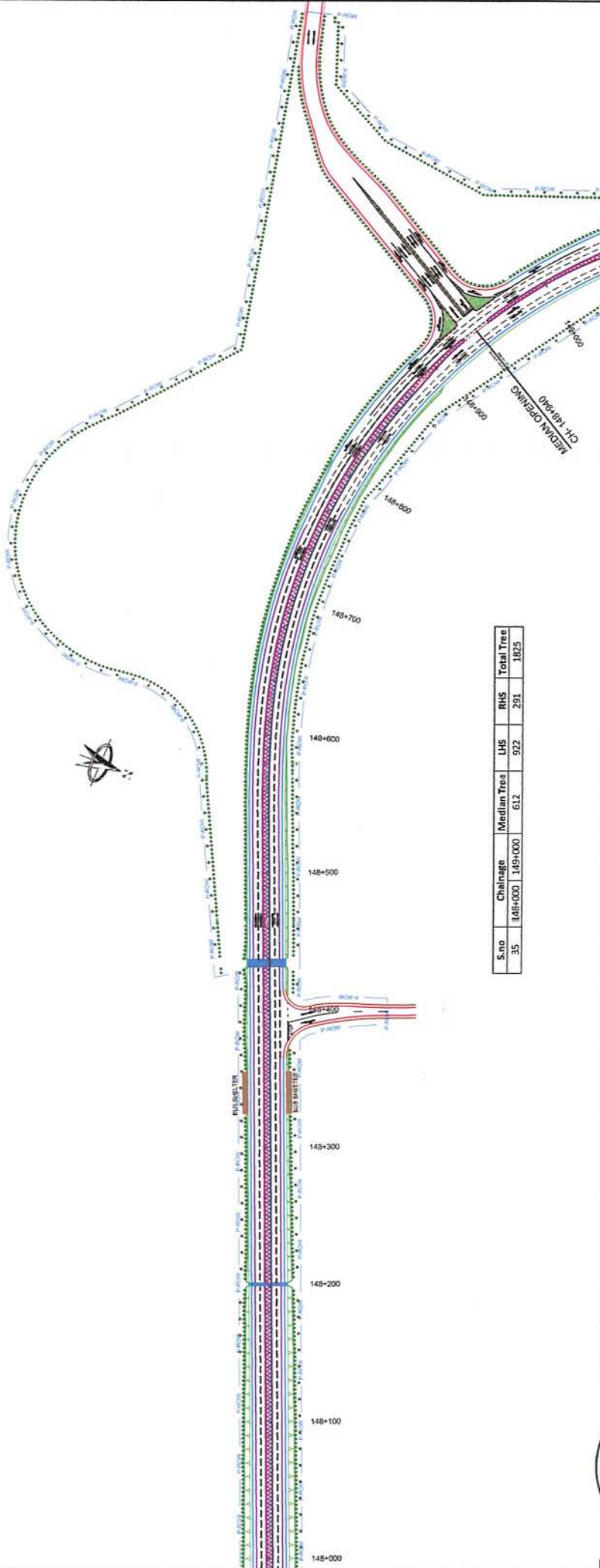
DRAWN:
J.K. Das

APPROVED
ASHISH

SHEET SIZE A2

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
35	148+000 149+000	612	922	291	1825



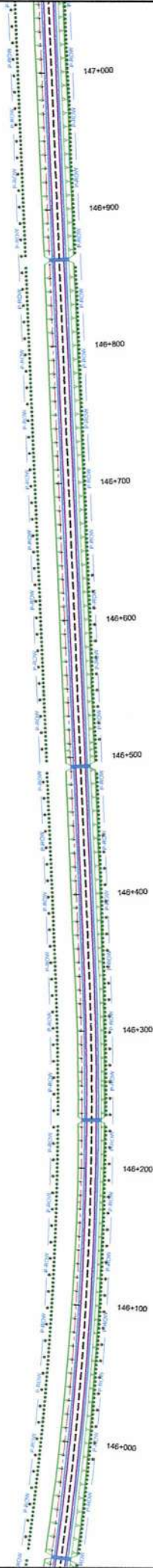
“Project Director
NHAI
PIU Khandwa”

Nabesh Gupta

LEGENDS:-		DESIGN CONSULTANT		SCALE	CLIENT	DRAWING TITLE	DWG. NO.	REV.
SIDE TREE			LEA ASSOCIATES SOUTH ASIA PVT. LTD., P-1, 1ST FLOOR, MOHAN CO-OPERATIVE HOUSING SOCIETY, MATYURA ROAD, NEW DELHI-110044 INDIA	1:2000	NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	TREE PLANTATION SCHEME (Km. 148+000 To Km. 149+000)	73579/LSAHIGHWAYS/DRPTS-18	0
MEDIAN TREE						"PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-IMADHYA PRADESHIPACKAGE-I)"	DATE: DECEMBER 2023 DESIGNED: MOVED: ANHMD	DRAWN: Sushy Sinha CHECKED: APPROVED: JK Das
SHEET SIZE A2								

BETUL

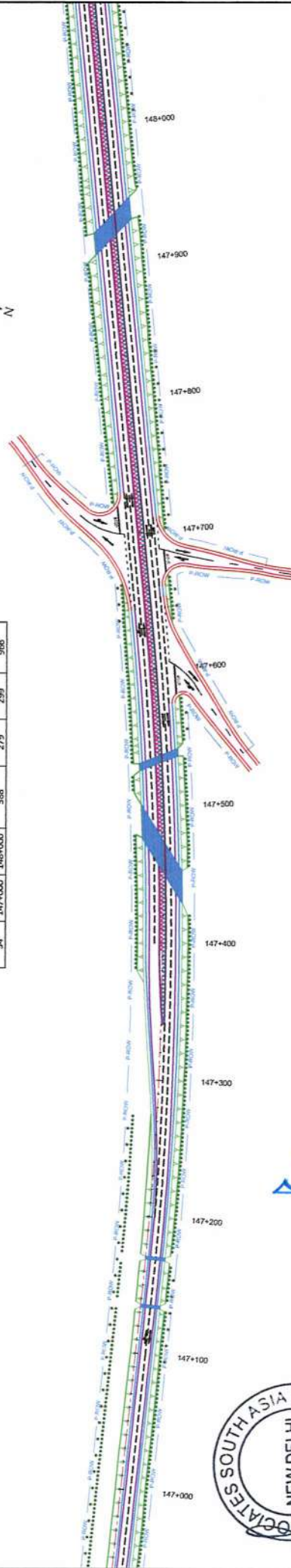
KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
33	146+000 147+000	0	409	377	786

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
34	147+000 148+000	388	279	299	966



“Project Director
NHAI
PIU Khandwa”
Nabesh Gupta

LEGENDS:-

SIDE TREE	MEDIAN TREE

LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, E27, 1st FLOOR, MOHAN CO-OPERATIVE
NEW DELHI-110048
INDIA



SCALE
1:2500

C.D.RVT



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India

DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 146+000 To Km. 148+000)

DRG. NO.

73579/LASA/HIGHWAYS/DRTPS-17

REV.

0

PROJECT

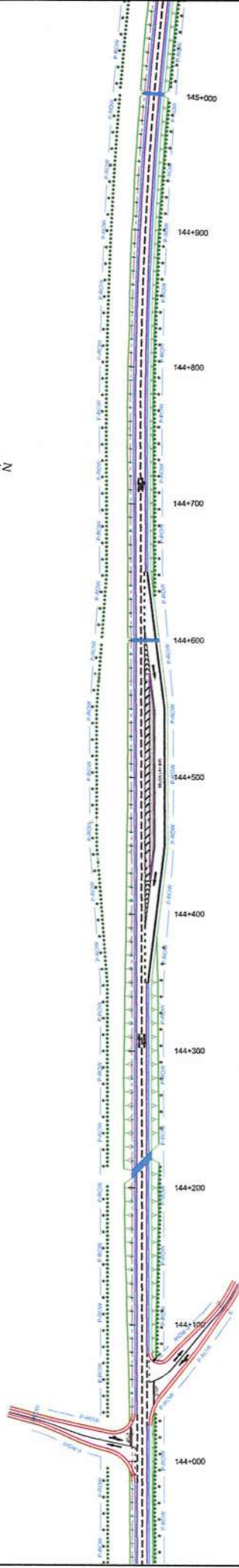
"PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS,
INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT
MOVEMENT IN THE COUNTRY (LOT-IMADHYA PRADESH PACKAGE-I)"

DATE	DESIGNED	CHECKED	DRAWN	ROKENDER
DECEMBER 2023	MOEED AHMED	Suday Shikha	APPROVED	J.A.Dha

SHEET SIZE A2

BETUL

KHANDWA



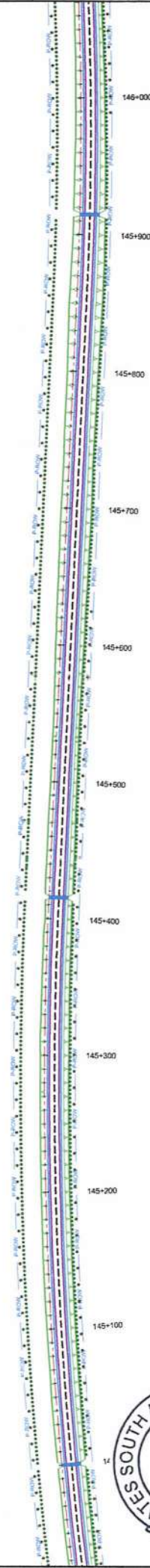
S.no	Chainage	Median Tree	LHS	RHS	Total Tree
31	144+000 145+000	0	397	216	613

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
32	145+000 146+000	0	412	380	792

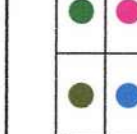


“Project Director
NHAI
PIU Khandwa”
Nitesh Gupta

LEGENDS:-

SIDE TREE

MEDIAN TREE



LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, E-27, 11th FLOOR, MOHAN COOPERATIVE
INDUSTRIAL ESTATE, MATHURA ROAD,
NEW DELHI-110044
INDIA



SCALE

1:2000

CURVE

NATIONAL HIGHWAY'S AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India

DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 144+000 To Km. 146+000)

SPD NO.

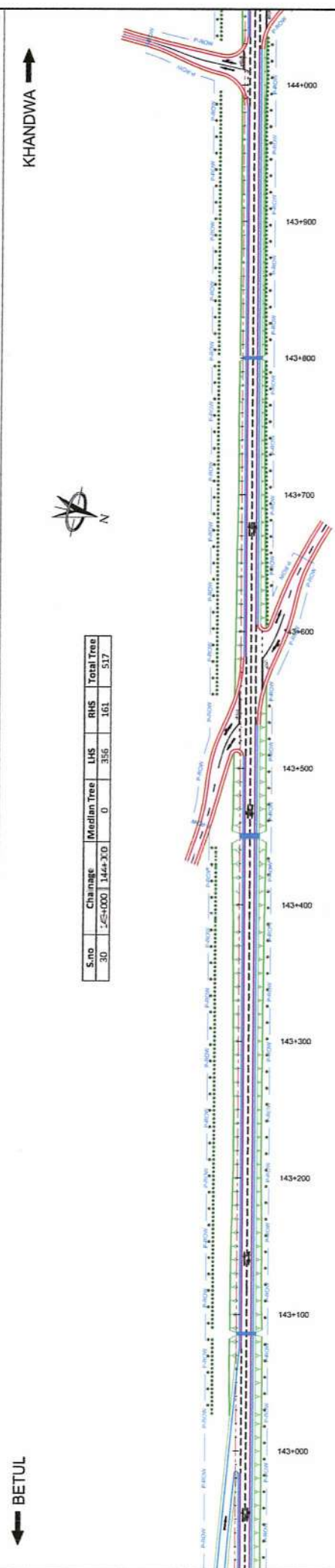
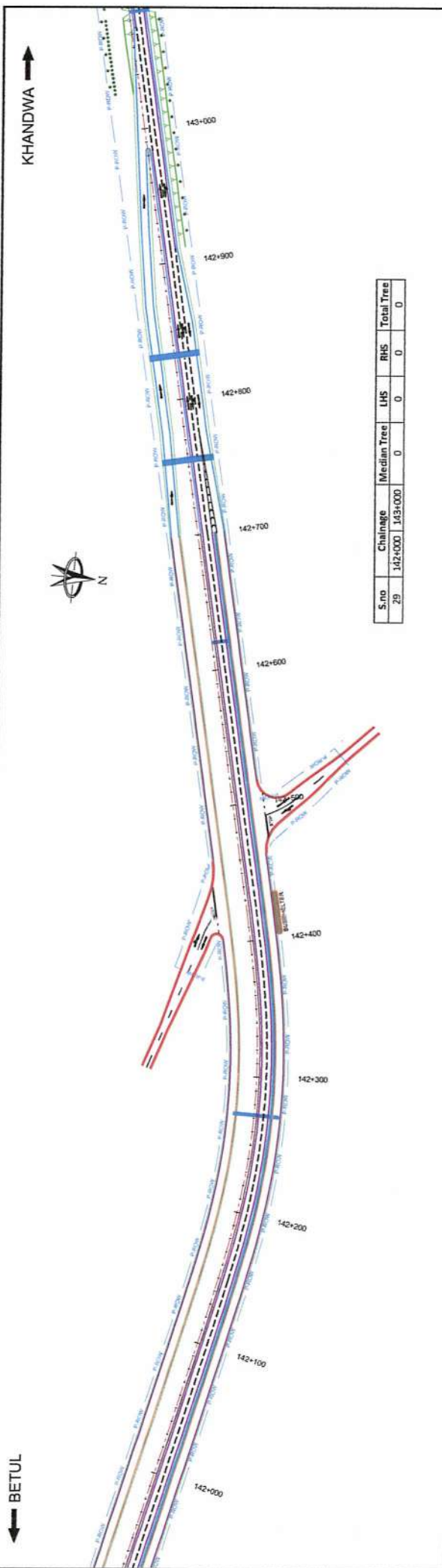
73579/LASA/HIGHWAYS/DRTPS-15

REV.

0

DATE: DECEMBER 2023
DESIGNED: MOREED AHMED
CHECKED: Sushy Singh
DRAWN: J.K.Das
APPROVED: J.K.Das
SHEET SIZE: A2

*PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS,
INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT
MOVEMENT IN THE COUNTRY (LOT-1/MADHYA PRADESH PACKAGE-I)

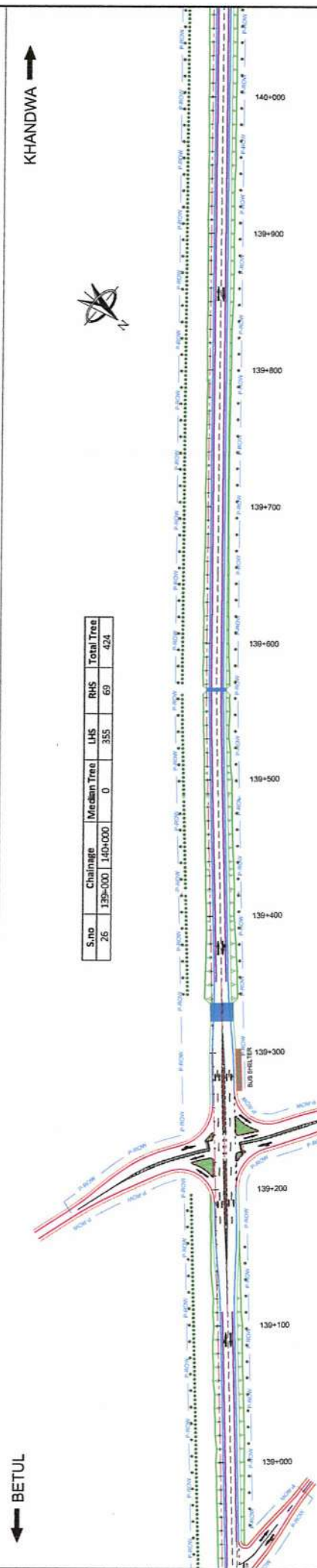
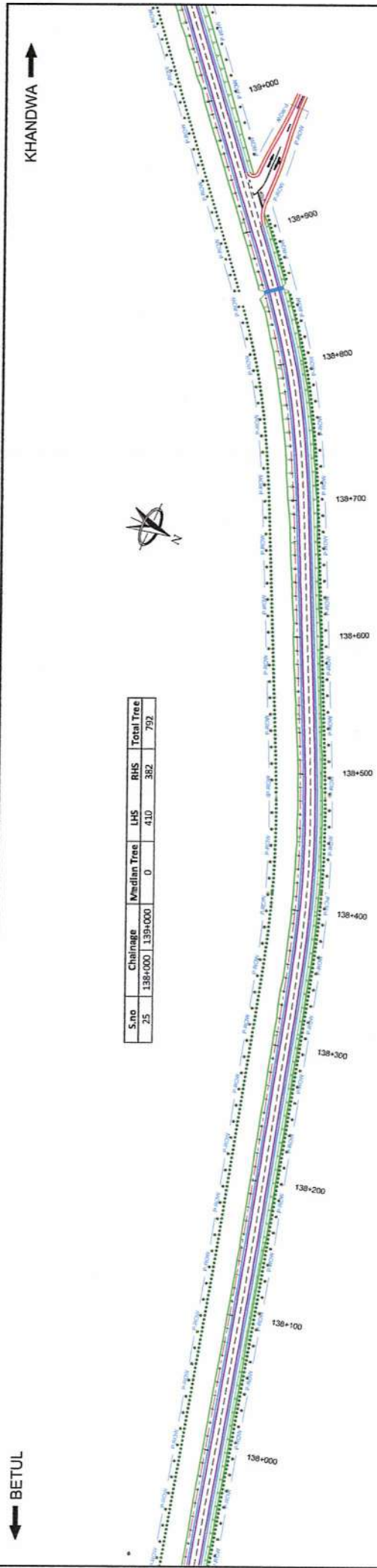


"Project Director
 NHAI
 PIU Khandwa"

Neha Gupta

LEGENDS:- SIDE TREE MEDIAN TREE		SCALE 1:2000	DESIGN CONSULTANT LEA ASSOCIATES SOUTH ASIA PVT. LTD., B-1, E-27, 1st FLOOR, MOHAN COOPERATIVE INDUSTRIAL ESTATE, MATRUHA ROAD, NEW DELHI-110044 INDIA	CURVE NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	DRAWING TITLE TREE PLANTATION SCHEME (Km. 142+000 To Km. 144+000)	DRG NO. 73579/LASHIGHWAYS/DRTPS-15	REV. 0
DATE: DECEMBER 2023 DESIGNED: MOEED AHMED CHECKED: Sujoy Saha DRAWN: ROKENDER APPROVED: J.K. Das		"PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-1/MADHYA PRADESHIP/Package-I)"					





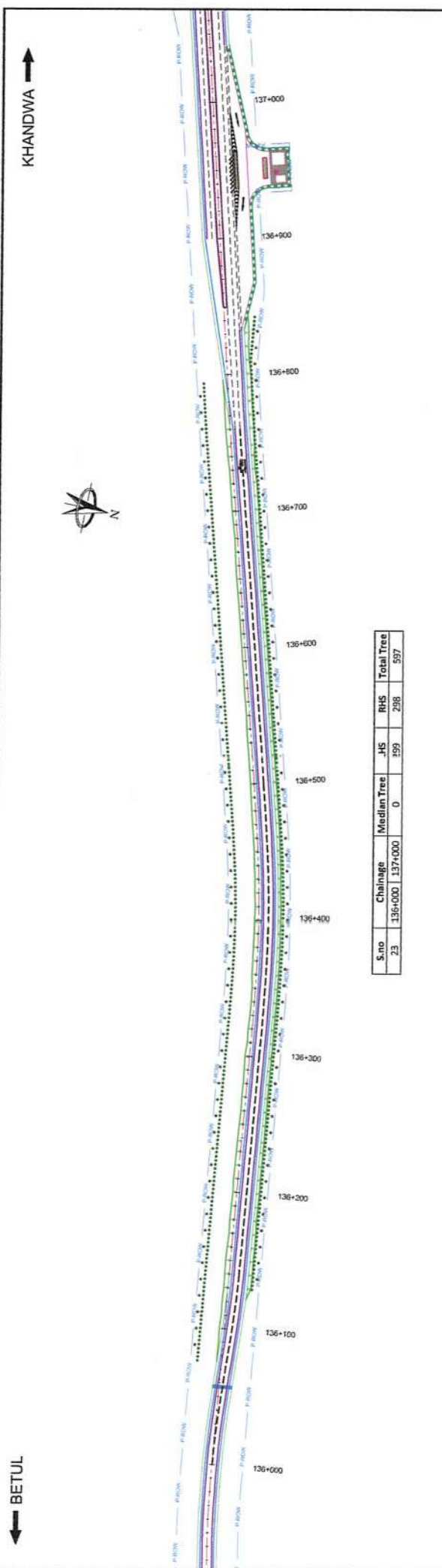
Project Director
NHA
PIU Khandwa

Neha Singh

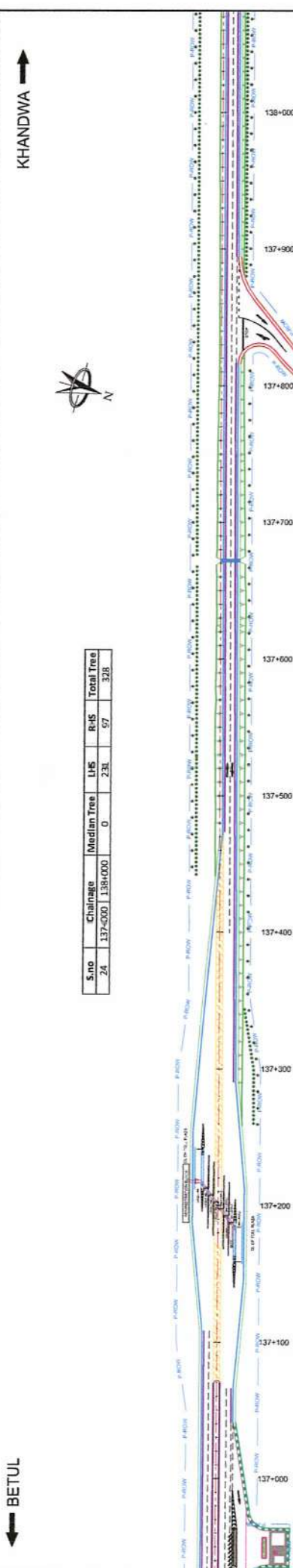
LEGENDS:-		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">● SIDE TREE</div> <div style="text-align: center;">● MEDIAN TREE</div> </div>		DRAWING TITLE TREE PLANTATION SCHEME (Km. 138+000 To Km. 140+000)	CLIENT NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	SCALE 1:2000	PROJECT "PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-IMAOHYA PRADESHIPACKAGE-I)"	DRG NO. 7357RILASA-HIGHWAYS/DRPTS-13	REV. 0
DATE: DECEMBER 2023 DESIGNED: MOEED AHMED CHECKED: Sujoy Bora APPROVED: J.K.Das				ROKENDER: J.K.Das					



LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, E-27, 1st FLOOR, MOHAN COOPERATIVE
INDUSTRIAL ESTATE, MATHURA ROAD,
NEW DELHI-110044
INDIA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
23	136+000 137+000	0	259	298	557



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
24	137+000 138+000	0	231	57	328

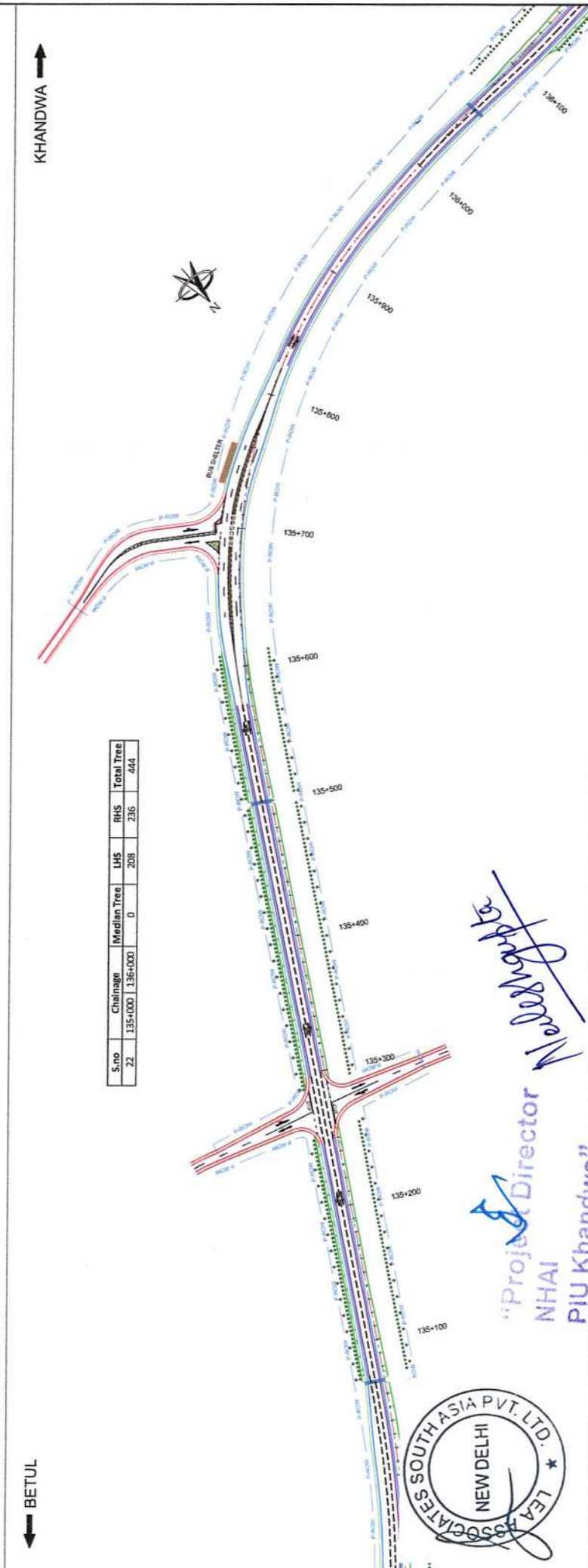
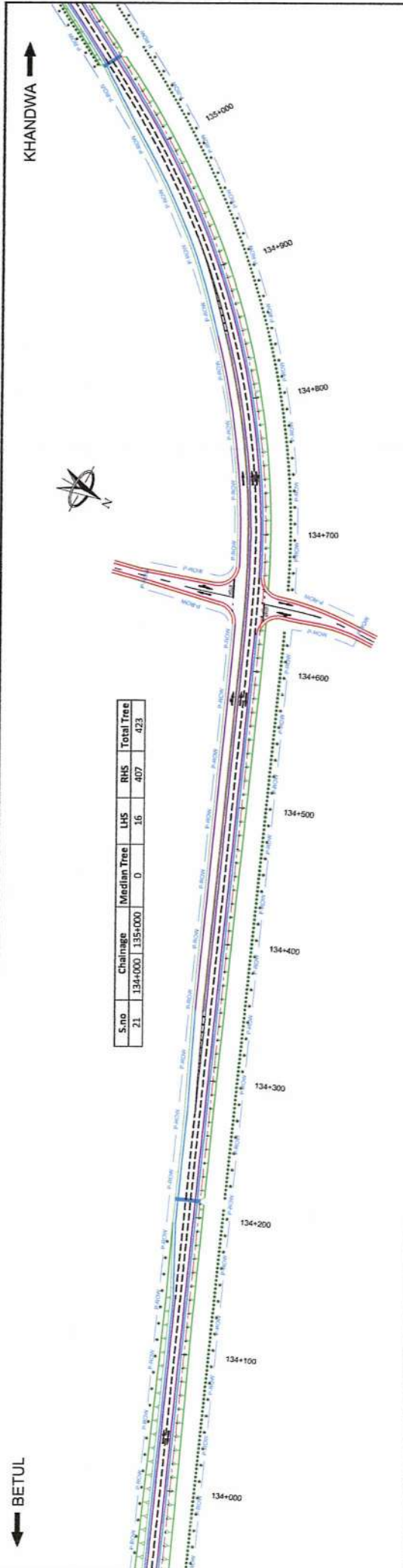


"Project Director"

 NHAI

 PIU Khandwa

LEGENDS:- SIDE TREE MEDIAN TREE		SCALE 1:2000	CLIENT NATIONAL - HIGHWAYS AUTHORITY OF INDIA Ministry of Road Transport & Highways Government of India	DRAWING TITLE TREE PLANTATION SCHEME (Km. 136+000 To Km. 138+000)	SUG. NO. 73579/LASA/HIGHWAYS/DRTPS-12	REV. 0
PROJECT "PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, IN ER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-JIMADHYA PRADESH/PACKAGE-I)"		DATE: DECEMBER 2023 DESIGNED: MOEED AHMED CHECKED: Sujay Ghosh DRAWN: J.K. Das APPROVED: J.K. Das SHEET SIZE: A2				



LEGENDS:-

SIDE TREE	
MEDIAN TREE	

DESIGN CONSULTANT

LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
 B-1, E-27, 1st FLOOR, MOHAN COOPERATIVE INDUSTRIAL ESTATE, MATHURA ROAD, NEW DELHI-110044
 INDIA

SCALE

1:2000

CLIENT

NATIONAL HIGHWAYS AUTHORITY OF INDIA
 (Ministry of Road Transport & Highways)
 Government of India

PROJECT

"PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-IMADHYA PRADESH/PACKAGE-1)"

DRAWING TITLE

TREE PLANTATION SCHEME
 (Km. 134+000 To Km. 136+000)

DRG NO

73579LSA/HIGHWAYS/DRPS-11

REV

0

DATE

DECEMBER 2023

DRAWN

Enjoy Sinha

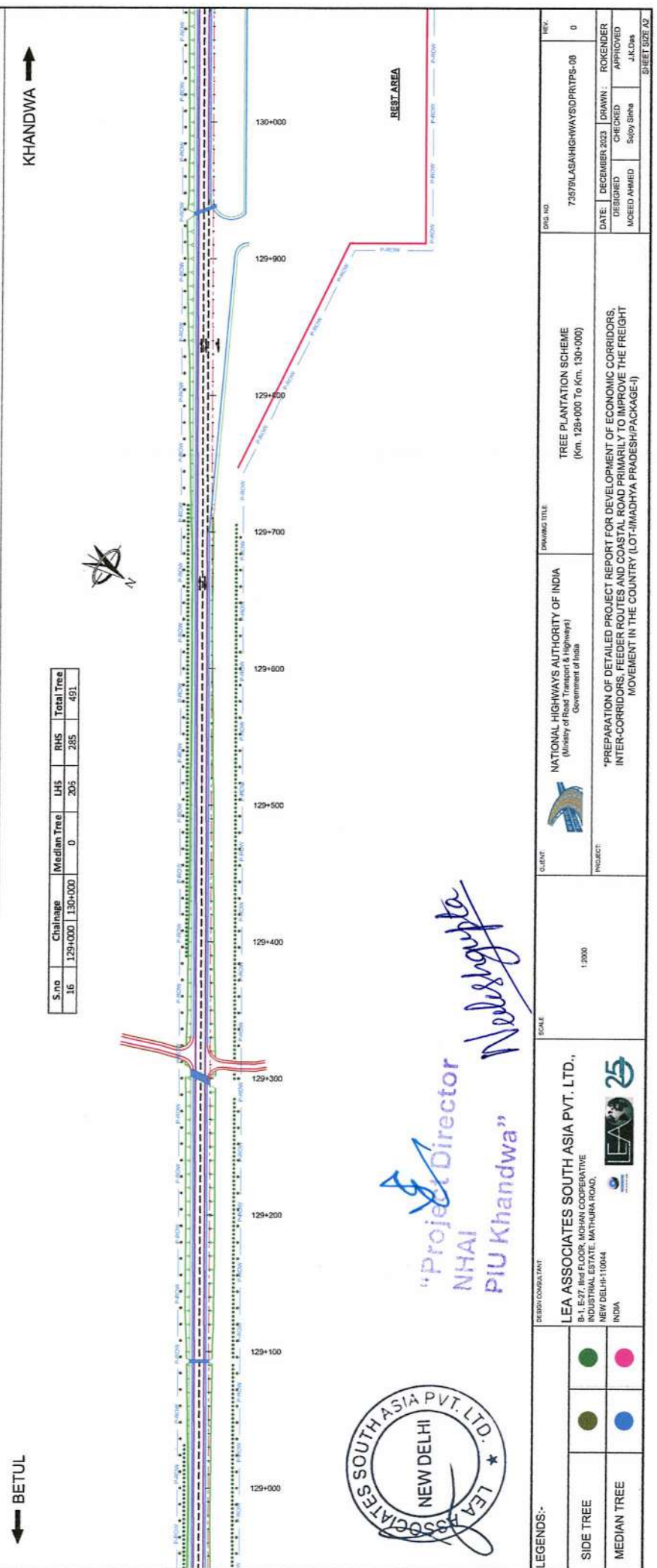
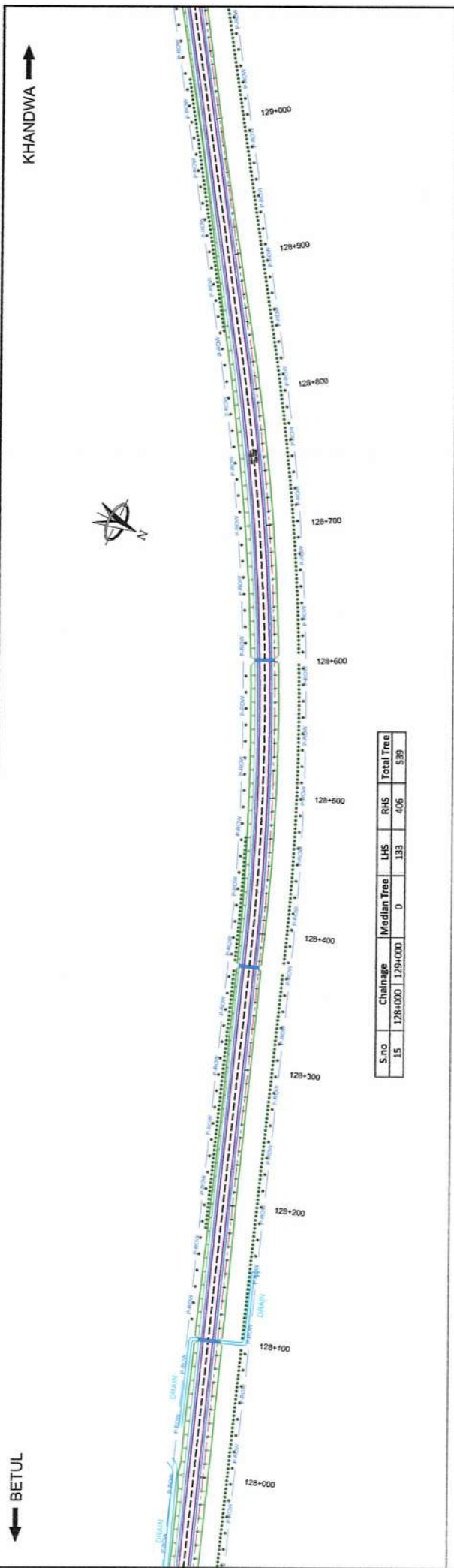
CHECKED

Enjoy Sinha

APPROVED

J.K.Das

SHEET SIZE A0

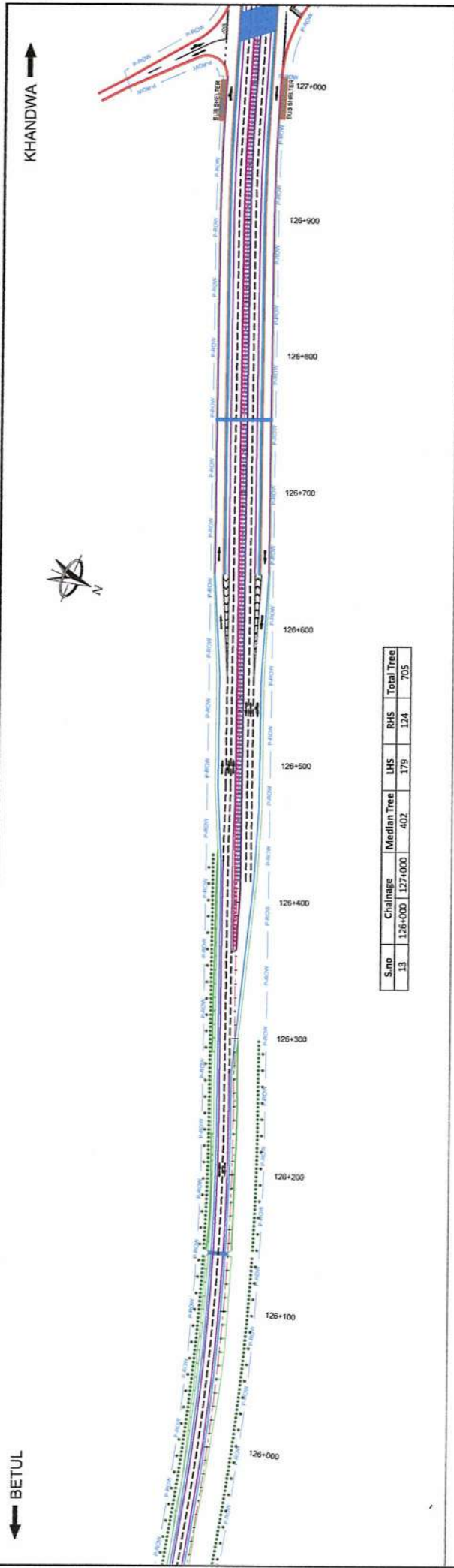


Project Director
NHAI
PIU Khandwa

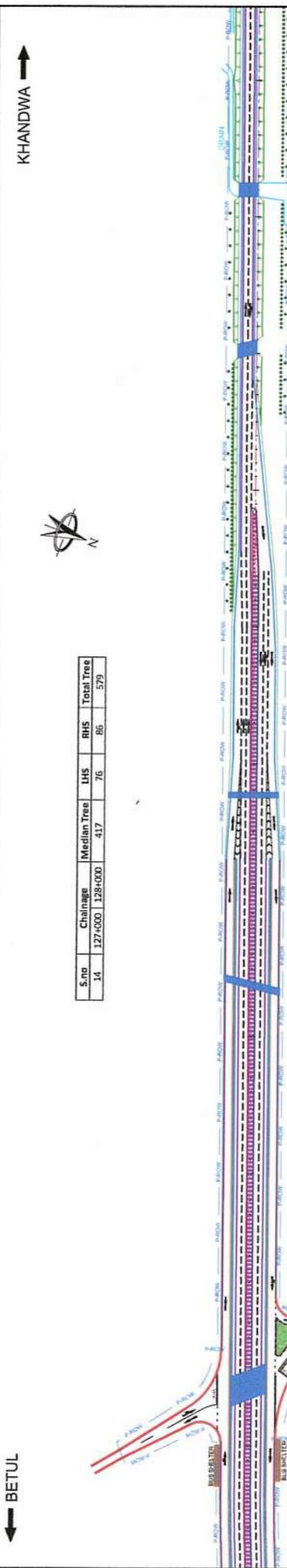
Ned Singh

LEGENDS:-		<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> SIDE TREE </div> <div style="text-align: center;"> MEDIAN TREE </div> </div>		DESIGN CONSULTANT LEA ASSOCIATES SOUTH ASIA PVT. LTD. B-1, E-27, 1st FLOOR, MOHAN CO-OPERATIVE INDUSTRIAL ESTATE, MATUHURA ROAD, NEW DELHI-110044 INDIA	SCALE 1:2000	SUBJECT NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	DRAWING TITLE TREE PLANTATION SCHEME (Km. 128+000 To Km. 130+000)	DES. NO. 73579/LASAHIGHWAYS/DRTPS-08	REV. 0
DATE: DECEMBER 2023 DESIGNED: MOEED AHMED CHECKED: Sujoy Sinha APPROVED: J.K.Das		DRAWN: Sujoy Sinha APPROVED: J.K.Das		ROKENDER: J.K.Das		SHEET SIZE: A2			

*PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-HIMADHYA PRADESHIPACKAGE-I)



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
13	126+000 127+000	402	179	124	705

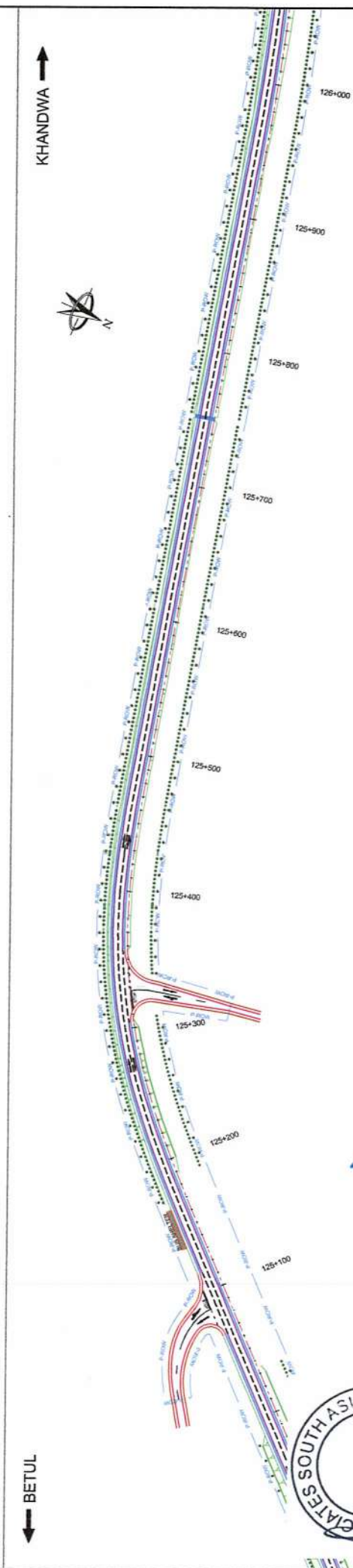
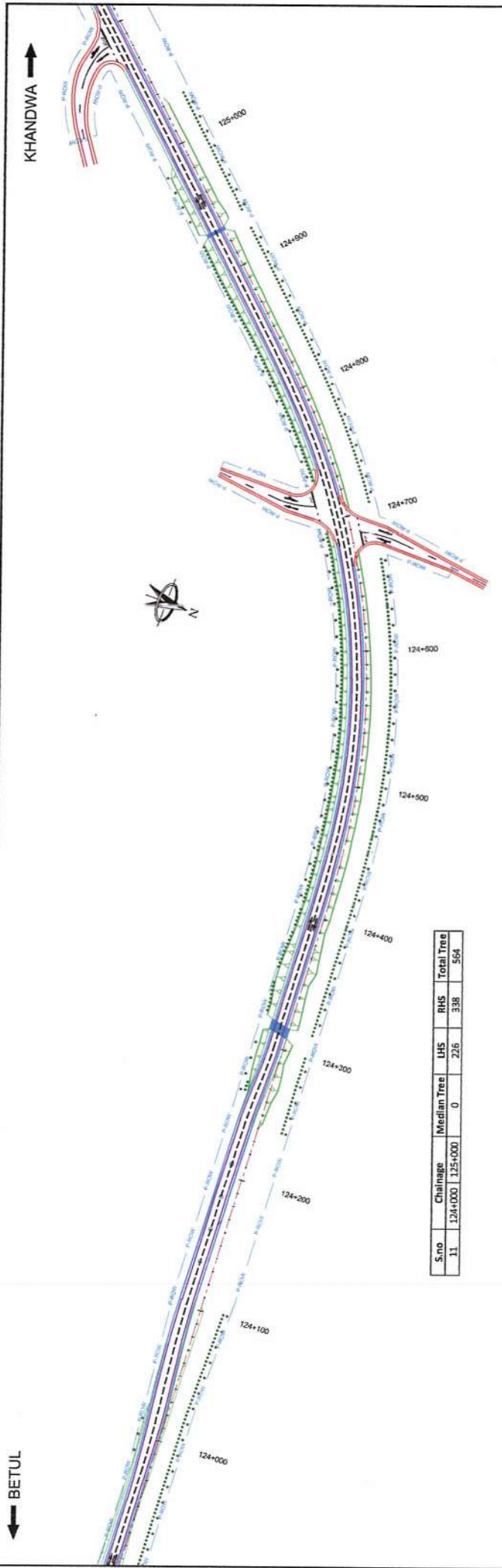


S.no	Chainage	Median Tree	LHS	RHS	Total Tree
14	127+000 128+000	417	76	85	579




 "Project Director
 NHAI
 PIU Khandwa"

LEGENDS:- SIDE TREE MEDIAN TREE		SERVO COMPANY LEA ASSOCIATES SOUTH ASIA PVT. LTD., B-1, E-27, 1st FLOOR, MOHAN COOPERATIVE INDUSTRIAL ESTATE, MATHURA ROAD, NEW DELHI-11004 INDIA	SCALE 1:3000	CLIENT NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	DRAWING TITLE TREE PLANTATION SCHEME (Km. 126+000 To Km. 128+000)	DMS NO. 735791ASA-HIGHWAYS-DTPS-07	REV 0
DATE: DECEMBER 2023 DESIGNED: MOJED AHMED CHECKED: Sujoy Bha		DRAWN: J.K.Das APPROVED: J.K.Das		PROJECT "PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-IMADHYA PRADESHIPACKAGE-I)"		SHEET SIZE A2	



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
11	124+000 - 125+000	0	226	338	564
12	125+000 - 126+000	0	348	334	682

"Project Director"

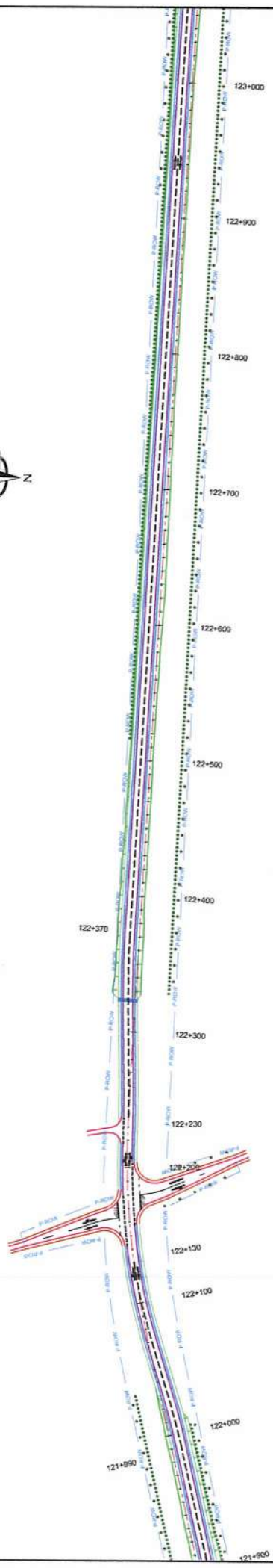
 NHAI

 PIU Khandwa

LEGENDS:-		SIDE TREE 	MEDIAN TREE
DESIGN CONSULTANT LEA ASSOCIATES SOUTH ASIA PVT. LTD., B-1, E-27, JIND FLOOR, MOHAN CO-OPERATIVE INDUSTRIAL ESTATE, MAYAPUR ROAD, NEW DELHI-110044 INDIA			
SCALE 1:2000		DRAWING TITLE TREE PLANTATION SCHEME (Km. 124+000 To Km. 126+000)	
CLIENT NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India		PROJECT "PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-IMADHYA PRADESH/PACKAGE-1)"	
DRG. NO. 73579/LAS/HIGHWAYS/DRTPS-06		REV. 0	
DATE: 12 DECEMBER 2021 DESIGNED: MOEED AHMED CHECKED: Sujoy Saha DRAWN: J.K.Das		ROKENDER: APPROVED SHEET SIZE A3	

BETUL

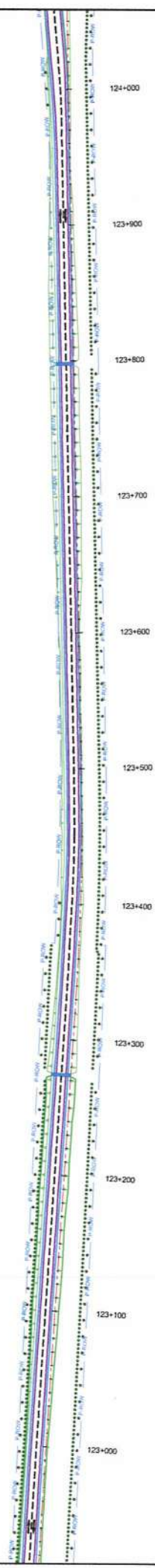
KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
9	122+000 123+000	0	184	283	467

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
10	123+000 124+000	0	154	410	564



"Project Director
NHAI
PIU Khandwa"

Nobish Gupta

LEGENDS:-

SIDE TREE		
MEDIAN TREE		

DESIGN CONSULTANT
LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, E-27, 1st FLOOR, MOHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATHURA ROAD,
NEW DELHI-110044
INDIA

SCALE
1:3000



CLIENT
NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India

DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 122+000 to Km. 124+000)

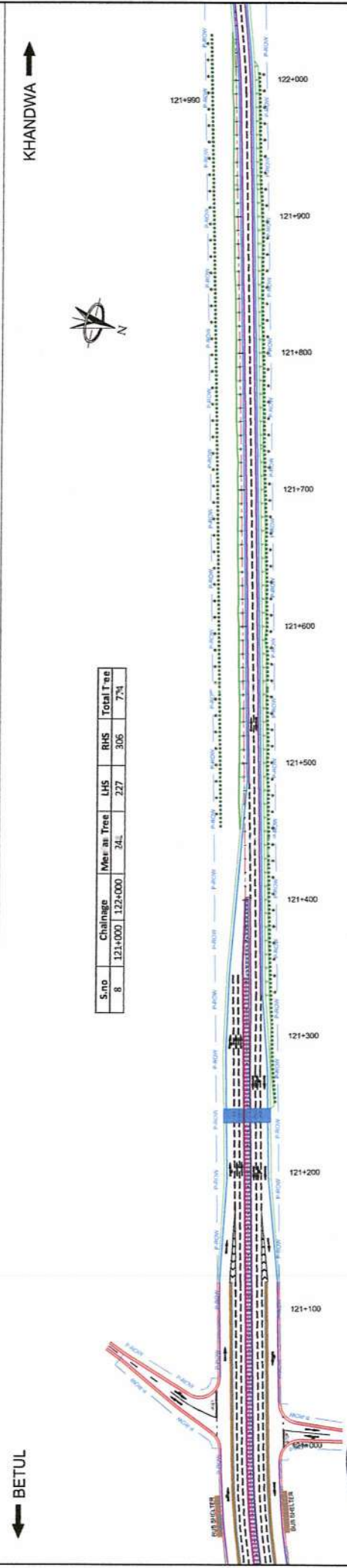
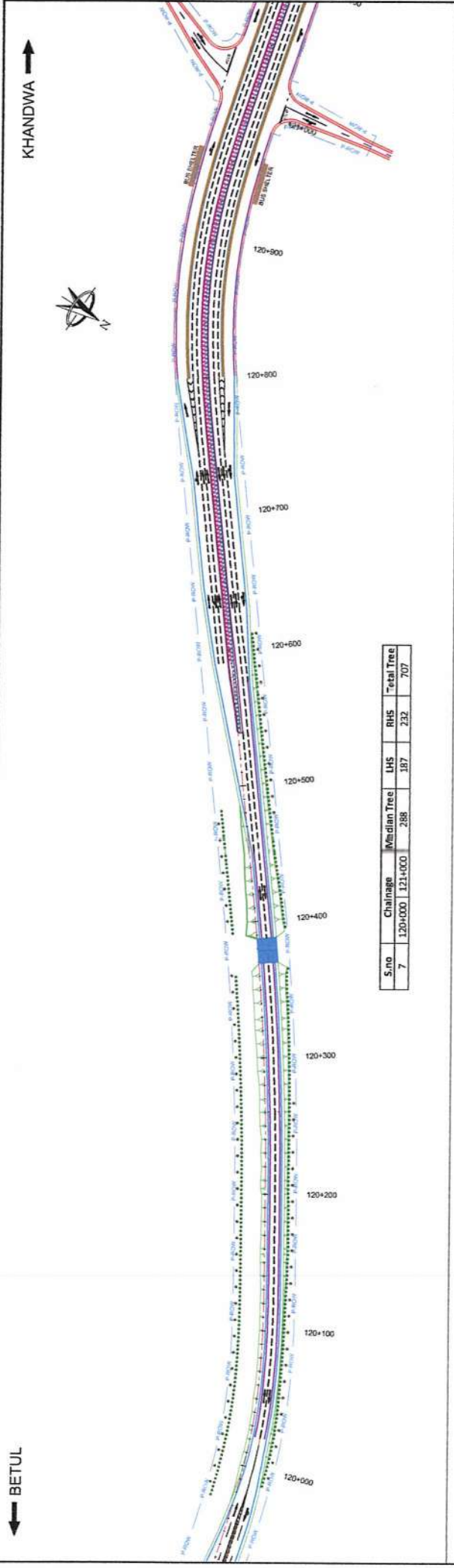
DWG. NO.
735791/ASA/HIGHWAYS/DIRTPS-05

REV.
0

PROJECT
"PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS,
INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT
MOVEMENT IN THE COUNTRY (LOT-JIMADHYA PRADESHIP PACKAGE-1)"

DATE	DECEMBER 2023	DRAWN	ROKENDER
DESIGNED		CHECKED	
NOTED	AMMID	SUDIP SINHA	J.K.DSA

SHEET SIZE A3



LEA ASSOCIATES SOUTH ASIA PVT. LTD.
NEW DELHI

"Project Director
NHAI
PIU Khandwa"

DESIGN CONSULTANT

LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, E-27, 1st FLOOR, MOHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATRUHA ROAD,
NEW DELHI-110044
INDIA

SCALE

1:200

DRAWING TITLE

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India

PROJECT

73579LSA HIGHWAYSOPRTPS-04

LEGENDS:-

SIDE TREE		
MEDIAN TREE		

DATE: DECEMBER 2023

DESIGNED: SUDIP SINGH

CHECKED: SUDIP SINGH

APPROVED: J.K.D99

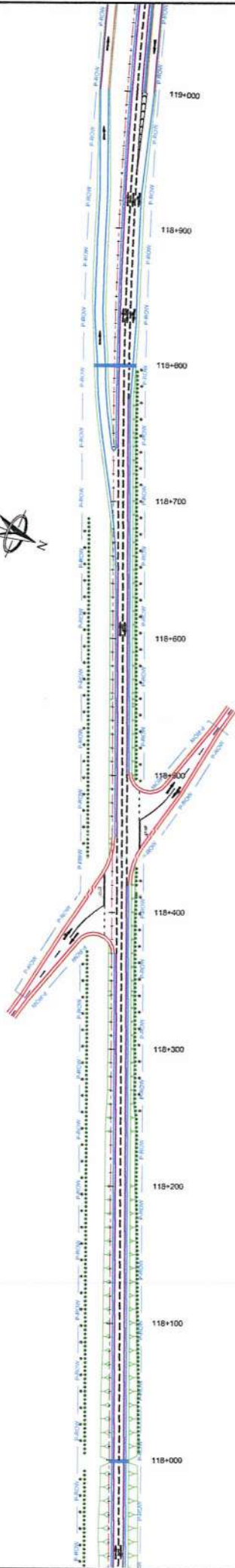
REVISION: 0

SHEET SIZE A3

BETUL

KHANDWA

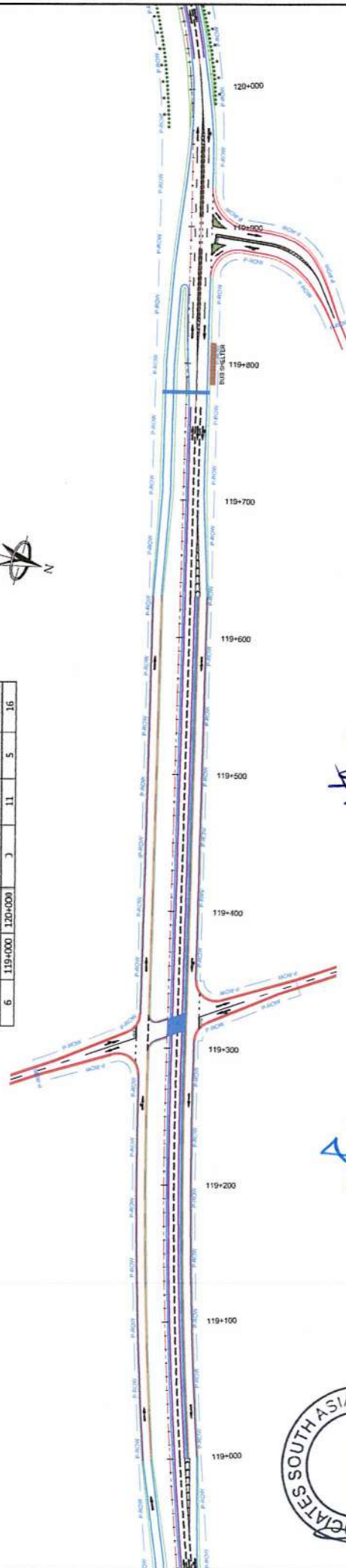
S.no	Chainage	Median Tree	LHS	RHS	Total Tree
5	118+000 119+000	C	256	284	540



BETUL

KHANDWA

S.no	Chainage	Median Tree	LHS	RHS	Total Tree
6	119+000 120+000	C	11	5	16



"Project Director
NHAI
PIU Khandwa"

Nandeshwar

LEGENDS:-

SIDE TREE		
MEDIAN TREE		

DESIGN CONSULTANT

LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, E-27, 1st FLOOR, MOHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATHURA ROAD,
NEW DELHI-110044
INDIA



SCALE

1:2000

CLIENT



NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India

DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 118+000 To Km. 120+000)

DWG NO.

73579/LASAI/HIGHWAYS/OTRPS-03

REV.

0

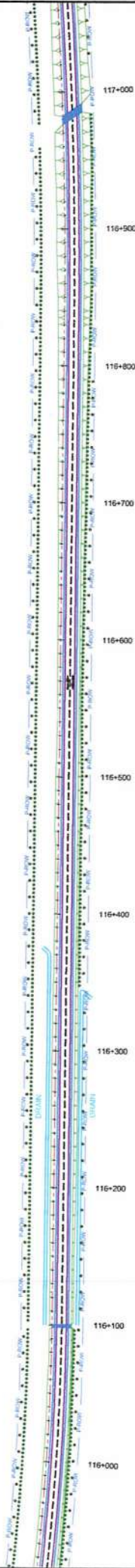
"PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS,
INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT
MOVEMENT IN THE COUNTRY (LOT-UMADHYA PRADESH/PACKAGE-1)

DATE	DECEMBER 2023	DRAWN	ROKENDER
DESIGNED	CHECKED	APPROVED	
MOVED AMEND	Supriy Shih	J.K.Das	

SHEET SIZE A3

BETUL

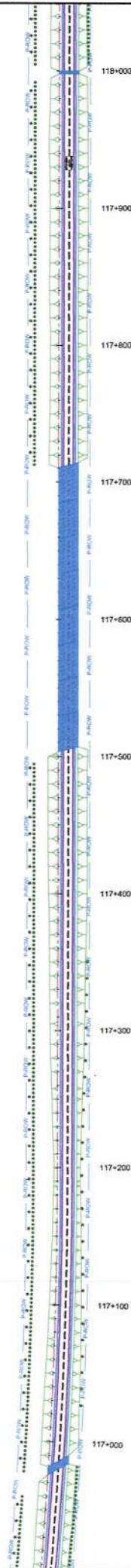
KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
3	116+000 117+000	0	407	311	718

BETUL

KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
4	117+000 118+000	0	323	28	351



“Project Director
NHAI
PIU Khandwa”
Nehar Singh

LEGENDS:-

SIDE TREE		
MEDIAN TREE		

DESIGN CONSULTANT

LEA ASSOCIATES SOUTH ASIA PVT. LTD.,
B-1, E-27, 1st FLOOR, MOHAN CO-OPERATIVE
INDUSTRIAL ESTATE, MATHURA ROAD,
NEW DELHI-110044
INDIA



SCALE

1:500

CLIENT

NATIONAL HIGHWAYS AUTHORITY OF INDIA
(Ministry of Road Transport & Highways)
Government of India.



DRAWING TITLE

TREE PLANTATION SCHEME
(Km. 116+000 To Km. 118+000)

DWG. NO.

73579JLASHIGHWAYS/DRTPS-02

REV.

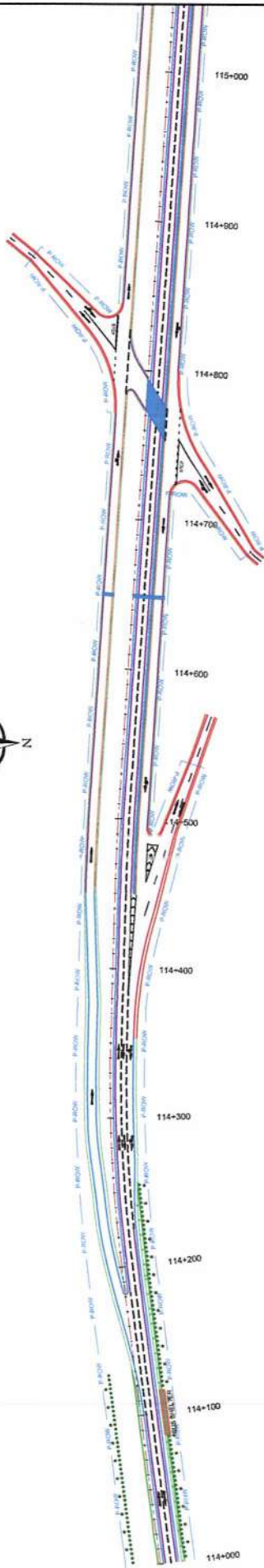
0

DATE: DECEMBER 2023
DESIGNED: J.K.Das
CHECKED: Sujoy Saha
APPROVED: J.K.Das
NO. OF SHEETS: 02
SHEET NO: 02

“PREPARATION OF DETAILED PROJECT REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS,
INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT
MOVEMENT IN THE COUNTRY (LOT-JIMADHYA PRADESH/PACKAGE-1)”

BETUL

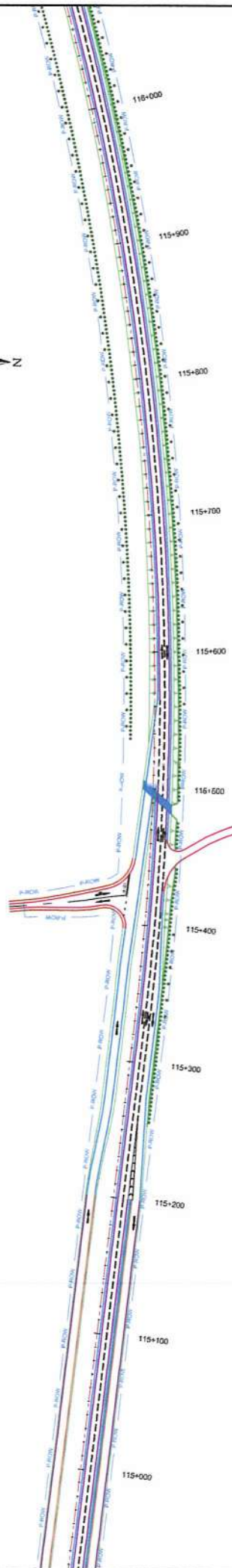
KHANDWA



S.no	Chainage	Medlar Tree	LHS	RHS	Total Tree
1	114+000	115+000	0	53	148

BETUL

KHANDWA



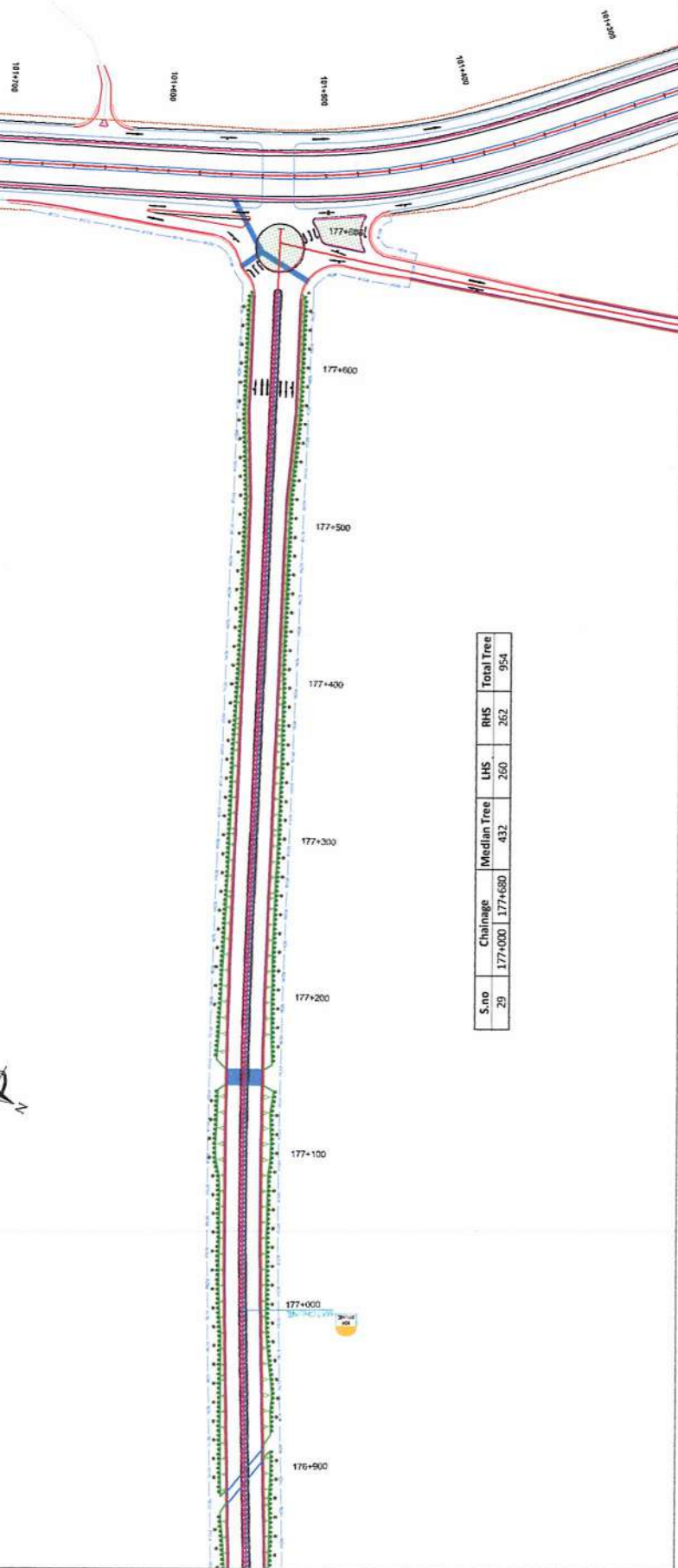
S.no	Chainage	Medlar Tree	LHS	RHS	Total Tree
2	115+000	116+000	0	192	284



Handwritten signature: Nandish Gupta

LEGENDS:-		SIDE TREE MEDIAN TREE	
REVISION CONSULTANT LEA ASSOCIATES SOUTH ASIA PVT. LTD., B-1, E-27, 1 st FLOOR, MOHAN CO-OPERATIVE INDUSTRIAL ESTATE, MATURA ROAD, NEW DELHI-110044 INDIA		SCALE 1:2000	
CLIENT NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India		DRAWING TITLE TREE PLANTATION SCHEME (Km. 114+000 To Km. 116+000)	
PROJECT PREPARATION OF DETAILED REPORT FOR DEVELOPMENT OF ECONOMIC CORRIDORS, INTER-CORRIDORS, FEEDER ROUTES AND COASTAL ROAD PRIMARILY TO IMPROVE THE FREIGHT MOVEMENT IN THE COUNTRY (LOT-JIMADHYA PRADESH/PACKAGE-I)		DWG. NO. 735791/ASA/HIGHWAYS/SDRTPS-01	
DATE: DECEMBER 2023 DESIGNED: MOEED AHMED CHECKED: Sagar Shaha DRAWN: J.K.Das APPROVED: ROKENDER		REV. 0	
SHEET SIZE A3			








KHANDWA



S.no	Chainage	Median Tree	LHS	RHS	Total Tree
29	177+000	177+680	260	262	954



 Project Director
NHAI
PIU, Khandwa

LEGENDS:-		 		DESIGN CONSULTANT LEA ASSOCIATES SOUTH ASIA PVT. LTD., B-1, E-27, 1 st FLOOR, MOHAN CO-OPERATIVE INDUSTRIAL ESTATE, MATIYURA ROAD, NEW DELHI-110044 INDIA	SCALE 1:2000	CLIENT  NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India	DRAWING TITLE TREE PLANTATION SCHEME (Kln. 177+000 To Kln. 177+680)	ENCL. NO. 73579/L/ASA/HIGHWAYS/DPR/TPS-16 0	REV.
SIDE TREE		 							
MEDIAN TREE		 							

Annexure - XI

Full Title of the Project: 4 laning of Ashapur-Khandwa-Deshgaon Section of NH-347B from Ashapur Design Ch 114+000 to Deshgaon (Khandwa) Design Ch 177+680 (length-63.680 km) on Betul Khandwa Corridor under BHARATMALA Pariyojana in the State of Madhya Pradesh

Proposal No.: FP/MP/ROAD/146981/2021

Date of Proposal:

Undertakings for FRA

This is to certify that I, Project Director, National Highway Authority of India, PIU- Khandwa, Madhya Pradesh, ensuring to submit FRA certificate issued from concerned District Collector (D.C) for seeking Prior Approval Under section – 2 of Forest (Conservation) Act.1980 for proposed road project.



Project Director
NHAI, PIU, Khandwa
Madhya Pradesh



Neeleshgupta