



भारतीय राष्ट्रीय राजमार्ग प्राधिकरण

(सड़क परिवहन और राजमार्ग मंत्रालय, भारत सरकार)

NATIONAL HIGHWAYS AUTHORITY OF INDIA

(Ministry of Road Transport & Highways, Govt. of India)

परियोजना क्रियान्वयन इकाई - एच.आई.जी.-5/ई-3, अरेरा कॉलोनी, गणेश मंदिर के पास, पुराना हबीबगंज नाका, भोपाल (म.प्र.) - 462016

Project Implementation Unit - HIG-5/E-3, Arera Colony, Near Ganesh Mandir, Old Habibganj Naka, Bhopal (M.P.) - 462016

दूरभाष/Phone : 0755-2465604 & 05, ई-मेल /E-mail: bhopal@nhai.org, वेबसाइट/Website: www.nhai.gov.in



भाराराप्रा / पक्रिइ / भोपाल / रारा-346 / फॉरेस्ट / 2023 / 22448

दिनांक 10 / 03 / 2023

प्रति

प्रधान मुख्य वन संरक्षक (भू-प्रबंध)

कार्यालय प्रधान मुख्य वन संरक्षक (कक्ष भू-प्रबंध)

सतपुड़ा भवन, मध्यप्रदेश

भोपाल

विषय:- विदिशा जिले में NH-346 (Old SH-19) के अंतर्गत Vidisha-Mehulwa-Talbehat Section में फोरलेन निर्माण हेतु 2.33 हेक्टेयर वनभूमि भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, सागर/भोपाल को उपयोग पर देने बाबत। (FP/MP/Road/149399/2021)

संदर्भ:-

1. आपके कार्यालय का पत्र क्रं. 1010 दिनांक 07 / 03 / 2023
2. इस कार्यालय का पत्र क्रं. 22398 दिनांक 02 / 03 / 2023
3. आपके कार्यालय का पत्र क्रं. 678 दिनांक 13 / 02 / 2023
4. भारत सरकार, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, क्षेत्रीय कार्यालय, भोपाल का पत्र क्रं./96-MPB 045/2022-BHO दिनांक 10 / 02 / 2023

महोदय,

उपरोक्त विषयान्तर्गत आपके कार्यालय के संदर्भित पत्र दिनांक 13 / 02 / 2023 का अवलोकन करने का कष्ट करें जिसके माध्यम से आपके द्वारा भारत सरकार, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय, क्षेत्रीय कार्यालय, भोपाल द्वारा प्रकरण में सैद्धांतिक स्वीकृति जारी करने के पूर्व 09 बिन्दुओं पर चाही गयी जानकारी हेतु लेख किया गया था। उक्त संबंध में इस कार्यालय के पत्र दिनांक 02 / 03 / 2023 द्वारा 09 बिन्दुओं पर चाही गयी जानकारी का बिन्दुवार अनुपालन प्रेषित किया गया था।

2. तत्पश्चात आपके कार्यालय के संदर्भित पत्र दिनांक 07 / 03 / 2023 के माध्यम से प्रकरण की पूर्ण KML File (वनभूमि एवं गैर वनभूमि की) एवं अन्य अभिलेखों के साथ आपके कार्यालय में उपस्थित होने हेतु लेख किया गया था। तदनुसार, इस कार्यालय से श्री अखिल प्रभू सोनी, प्रबंधक (तकनीकी) आपके कार्यालय में दिनांक 09 / 03 / 2023 को उपस्थित हुये एवं आपके साथ हुई चर्चा उपरांत 09 बिन्दुओं पर चाही गयी जानकारी का इस कार्यालय द्वारा संशोधित बिन्दुवार अनुपालन निम्नानुसार है:-

S. No.	Observation from Regional Office MoEF, Bhopal	Compliance	
1	Detailed muck disposal scheme is shall be submitted	Item	Quantity in Cum
		1. Earthwork excavation (As per DPR)	73,443
		2. Construction of road Embankment with suitable material obtained from road way, drainage excavation etc., with all leads and lifts (As per DPR)	51,410
		70% of excavated/cutting soil is reused on embankment construction by the Concessionaire. The balance 30 % shall be	

मुख्यालय : जी-5, एवं 6, सेक्टर-10, द्वारका नई दिल्ली-110075, दूरभाष : 91-11-25074100/25074200, वेबसाइट : www.nhai.gov.in

Corporate Office : G-5, & 6, Sector-10, Dwarka New Delhi-10075, Phone: 91-11-25074100/25074200, Website: www.nhai.gov.in

		reused on nearly construction of NH or will be disposed off as per direction of DFO.																
2	Justification for location of the project in forest land (counter signed by DFO) shall be submitted /uploaded.	Justification Countersign from DFO has been uploaded online and attached as <u>Annexure-I</u> .																
3	No objection certificates of concerned department (Railway, WRD etc) shall be submitted.	1. Approvals for Irrigation culverts received from State Irrigation department dated 16.11.2022 (Enclosed as <u>Annexure-II</u>). 2. As the alignment of Forest area is not going with RAILWAYS, so no NOC is required for this.																
4	Component wise breakup of land required and component wise area calculation with the layout plan shall be submitted.	Component wise area calculations and layout plan is again enclosed at <u>Annexure-III</u> for your reference. Summary of the same are as follows and the same has been uploaded on the portal on section B(iv) of Part C of Form 1 and in Additional documents. <table><tr><th>S.No</th><th>Description</th><th>Area (Ha.)</th><th>Remarks</th></tr><tr><td>1</td><td>Total Forest Area Required</td><td>2.33</td><td></td></tr><tr><td>2</td><td>Area Required for main carriageway</td><td>1.44</td><td></td></tr><tr><td>3</td><td>Additional area for Project Facilities</td><td>0.89</td><td>Bus Bay/landscaping and Tree plantation</td></tr></table>	S.No	Description	Area (Ha.)	Remarks	1	Total Forest Area Required	2.33		2	Area Required for main carriageway	1.44		3	Additional area for Project Facilities	0.89	Bus Bay/landscaping and Tree plantation
S.No	Description	Area (Ha.)	Remarks															
1	Total Forest Area Required	2.33																
2	Area Required for main carriageway	1.44																
3	Additional area for Project Facilities	0.89	Bus Bay/landscaping and Tree plantation															
5	Alternative alignment of road is submitted but KML file of alternative needs to be uploaded on web portal.	Since the option to upload the Alternative KML file is not available on old Parivesh Portal. Proposed alignment and its alternatives alignment has been uploaded on section (b) of Part C of Form- 1.																
6	Full KML file of layout plan of forest area and non-forest area shall be uploaded on web portal	Full KML has been uploaded on Parivesh Portal.																
7	Administrative approval/sanction letter of the project needs to be provided.	Administrative approval and financial sanction letter of the project is enclosed as <u>Annexure-IV</u> .																
8	Details of existing ROW proposed ROW and land width (ROW) availability for road side plantation needs to be submitted and accordingly plantation scheme for roadside plantation needs to be submitted.	- Detailed Typical Cross Section drawings showing the proposed plantation scheme in Median and ROW edges enclosed in Plan & Profile drawings enclosed as <u>Annexure-V</u>. - Kindly refer Clause no. 2(n) of Schedule-C contract agreement enclosed for Plantation scheme to be adopted by Concessionaire is enclosed as <u>Annexure-VI</u>.																



9	It is not clear from the proposal that what is the status of widening before and after the proposed alignment shall be clarified.	Detailed Plan & Profile drawings enclosed as <u>Annexure-VII</u> .
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अतः आपकी जानकारी एवं आवश्यक कार्यवाही हेतु प्रेषित है।

संलग्नक :- उपरोक्तानुसार।




(आर० के० गुप्ता)
परियोजना निदेशक
भाराराप्रा, पक्रिड़, भोपाल

प्रतिलिपि :-

1. मुख्य वन संरक्षक, (क्षेत्रीय) भोपाल वृत्त, भोपाल (म०प्र०) की ओर सादर सूचनार्थ प्रेषित।
2. वन मण्डलाधिकारी, सामान्य वन मण्डल, विदिशा (म०प्र०) की ओर सादर सूचनार्थ प्रेषित।

कार्यालय प्रधान मुख्य वन संरक्षक (कक्ष भू-प्रबंध), सतपुड़ा भवन, मध्यप्रदेश, भोपाल
क्रमांक/एफ-5/1189/2022/10-11/1010 भोपाल, दिनांक 07/03/2023
प्रति,

परियोजना निदेशक,
भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, परियोजना क्रियान्वयन इकाई,
भोपाल, मध्यप्रदेश।

विषय:- विदिशा जिले में NH-346 (Old SH-19) के अन्तर्गत Vidisha-Mahulwa-Talbehat Section में फोरलेन निर्माण हेतु 2.33 हेक्टेयर वनभूमि भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, सागर को उपयोग पर देने बाबत। (FP/MP/Road/149399/2021)

संदर्भ:- आपका पत्र क्रमांक/भाराराप्रा/पक्रिइ/रारा-346/22398 दिनांक 02.03.2023

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उपरोक्त संदर्भित पत्र का अवलोकन करें, जिसके द्वारा आपने विषयांकित प्रकरण में भारत सरकार के पत्र दिनांक 10.02.2023 द्वारा चाही गई 09 बिन्दुओं की जानकारी प्रस्तुत की है, जो कि संतोषप्रद नहीं है।

अतः लेख है कि आप अपने किसी सक्षम अधिकारी को प्रकरण की पूर्ण KML file (वनभूमि एवं गैर वनभूमि की) एवं अन्य अभिलेखों के साथ इस कार्यालय में उपस्थित होने हेतु निर्देशित करें, ताकि प्रकरण में स्वीकृति प्राप्त करने की कार्यवाही की जा सके।

07/03/2023
(सुनील अग्रवाल)
प्रधान मुख्य वन संरक्षक (भू-प्रबंध)
मध्य प्रदेश, भोपाल

पृ. क्रमांक/एफ-5/1189/2022/10-11/1011
प्रतिलिपि:-

1. मुख्य वन संरक्षक, (क्षेत्रीय) भोपाल वृत्त, भोपाल, मध्यप्रदेश।
2. वन मण्डलाधिकारी, सामान्य वन मण्डल, विदिशा, मध्यप्रदेश।
3. परियोजना निदेशक, भारतीय राष्ट्रीय राजमार्ग प्राधिकरण, परियोजना क्रियान्वयन इकाई, सागर, मध्यप्रदेश।

की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

07/03/2023
प्रधान मुख्य वन संरक्षक (भू-प्रबंध)
मध्यप्रदेश, भोपाल

Project Title: Four Laning of Vidisha-Mehulwa-Talbehat Section of NH-346 (old SH-19) from Design Chainage Km 0+000 to Km 26+500 (Package 1) near Deo Khajuri Village in the State of Madhya Pradesh.

File No. :

Date of Proposal:

JUSTIFICATION FOR LOCATING THE PROJECT IN FOREST LAND

I/we National Highway Authority of India, PIU- Sagar are proposing for 4 laning of Four Laning of Vidisha-Mehulwa-Talbehat Section of NH-346 (old SH-19) from Design Chainage Km 0+000 to Km 26+500 (Package 1) near Deo Khajuri Village in the State of Madhya Pradesh

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.

The subject project is a Major connectivity of Indore, Hoshangabad, Betul, Bhopal to Jhansi in UP. The Project Corridor linking major district headquarters and important towns within the state and connecting them with national highways of the neighboring states.

SH-19 connects major towns of Jaithpur (Uttar Pradesh)-Bhind- Mehgaon_ Mau_ Seondha-Datia- Pichhor-Mungaoli-Kuwai-Vidisha-Salamtpur-Bareli-Chhiindwara-Nagpur (Maharashtra) of approximate length of 743 Kms.

The earlier proposed alignment obstructs the State Government College at Km 8+900 near Jafarkhedi village. In order to avoid the State Government College the alignment was shifted to LHS side of Jafarkhedi Village which falls under protected forest, because of Jafarkhedi lake exists on the RHS side. The proposed alignment serves as Vidisha Bypass for future traffic and with a shortest distance and travel time.

वस
वन मण्डलाधिकारी
सामान्य वन मण्डल विदिशा (म.प्र.)

Project Director
NHAD PIU Sagar
Madhya Pradesh

Date: 11/11/2021

Place: Sagar

कार्यालय कार्यपालन यंत्री
सम्राट अशोक सागर संभाग क्र. 2 विदिशा (म.प्र.)

Email eesavidishadu2@gmail.com

फोन नं. 07592-250469

पत्र क्रमांक 120/टी.एस/जी-513(डी)/2022/ विदिशा

दिनांक 16-11-2022

प्रति,

संचालक,
परियोजना निदेशक,
भारतीय राजमार्ग प्राधिकरण,
परियोजना क्रियान्वयन इकाई, HIG-5/E-3,
अरेरा कोलोनी, गणेश मंदिर के पास,
पुराना हबीबगंज नाका, भोपाल (म.प्र.)

विषय- भारतमाला परियोजना के तहत राष्ट्रीय राजमार्ग क. 346 (विदिशा-मैंहलुआ खण्ड) के 2/4 लेन निर्माण/चौड़ीकरण हेतु नहरों के सत्यापन के संबंध में।

संदर्भ- आपका पत्र क. NHAI/PIU/BPL/DPR/NH-346/Vidisha-Mehlua/PKG-I/2022/20986 दि. 13.07.2022

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उपरोक्त विषय एवं संदर्भ में लेख है कि भारतमाला परियोजना के तहत राष्ट्रीय राजमार्ग क. 346 (विदिशा-मैंहलुआ खण्ड) के 2/4 लेन निर्माण/चौड़ीकरण हेतु तहसील विदिशा के अंतर्गत गुजरने वाले राजमार्ग हेतु अनापत्ति प्रमाण पत्र निम्न शर्तों पर प्रदाय किया जाता है :-

1. स्ट्रक्चरों के निर्माण कार्य के दौरान नहर व अन्य शासकीय संपत्ति को क्षति होती है तो क्षति सुधार के लिये भारतीय राजमार्ग प्राधिकरण, परियोजना क्रियान्वयन इकाई, भोपाल पूर्ण रूप से जिम्मेदार होगा व सभी क्षतिपूर्ति दावों के भुगतान हेतु आपके विभाग की जबाबदारी रहेगी।
2. स्ट्रक्चरों के निर्माण कार्य के दौरान सिंचाई कार्य में किसी प्रकार का व्यवधान नहीं होना चाहिये यदि होता है तो संपूर्ण जिम्मेदारी आपके विभाग की होगी।
3. नहर संचालन के दौरान किसी रूकावट की अनुमति नहीं होगी।
4. स्ट्रक्चरों के निर्माण एवं रखरखाव कार्य के दौरान सभी सुरक्षात्मक उपाय आपके विभाग के द्वारा किये जाने होंगे। किसी भी प्रकार की दुर्घटना आदि के लिये यह विभाग उत्तरदायी नहीं रहेगा।
5. स्ट्रक्चरों के निर्माण एवं सुधार के दौरान अनुविभागीय अधिकारी, सम्राट अशोक सागर उपसंभाग क. 5 व 8 विदिशा एवं 2 खोआ मु. सलामतपुर को निरीक्षण कराकर कार्य उनकी जानकारी में कराया जावे।
6. भविष्य में शासकीय हित में विभाग द्वारा लिया गया निर्णय विभाग के पक्ष में अंतिम होगा तथा जिसे मानने के लिये आपका विभाग बाध्य रहेगा।
7. आपके द्वारा निर्मित पक्के कार्य का संपूर्ण रखरखाव आदि कार्य का उत्तरदायित्व एवं इस पर होने वाला संपूर्ण व्यय आपके विभाग का रहेगा।

कार्य प्रारम्भ करने के पूर्व अद्योहस्ताक्षरकर्ता को सूचित करना सुनिश्चित करें।

सहपत्र : शून्य।

(राजीव कुमार जैन)

कार्यपालन यंत्री,

सम्राट अशोक सागर संभाग क्रमांक 2,

विदिशा (म.प्र.)

दिनांक

पृ. क्रमांक /टी.एस/जी-31(ए10)/2022/ विदिशा

प्रतिलिपि:- अनुविभागीय अधिकारी, सम्राट अशोक सागर उपसंभाग क. 5 व 8 विदिशा एवं 2 खोआ मु. सलामतपुर की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

(राजीव कुमार जैन)

कार्यपालन यंत्री,

सम्राट अशोक सागर संभाग क्रमांक 2,

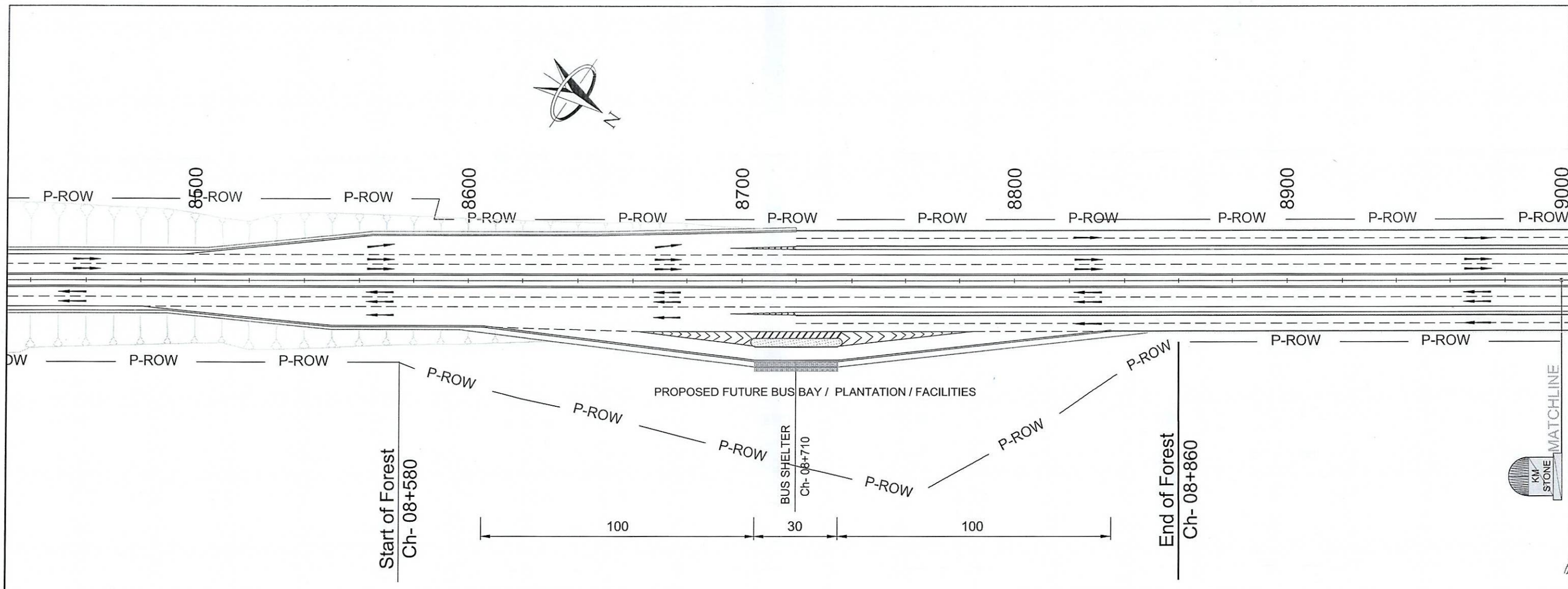
विदिशा (म.प्र.)

COMP. NO.	KHASRA NO.	PILLAR NO.	UTM		GEOGRAPHIC CORDINATES		AREA (SQM)	AREA (HACT.)
			EASTING (X)	NORTHING (Y)	LATITUDE	LONGITUDE		
552	189	A	780735.11	2606840.91	23° 32' 51.431"	77° 44' 59.535"	23268.47	2.33
		B	780815.35	2606803.01	23° 32' 50.15"	77° 45' 2.337"		
		C	780787.58	2606763.83	23° 32' 48.895"	77° 45' 1.332"		
		D	780849.14	2606753.37	23° 32' 48.516"	77° 45' 3.493"		
		E	780855.34	2606757.59	23° 32' 48.649"	77° 45' 3.715"		
		F	780916.28	2606754.51	23° 32' 48.511"	77° 45' 5.86"		
		G	780840.10	2606686.67	23° 32' 46.355"	77° 45' 3.13"		
		H	780928.52	2606650.08	23° 32' 45.112"	77° 45' 6.22"		
		I	780899.18	2606599.87	23° 32' 43.499"	77° 45' 5.153"		
		J	780924.30	2606549.65	23° 32' 41.852"	77° 45' 6.003"		
		K	780982.12	2606571.46	23° 32' 42.524"	77° 45' 8.056"		

प्रबंधक (तकनीकी)
Manager (Technical)
भा. रा. रा. प्रा. परि. क्रिया इकाई भोपाल
NHAI PIU-BHOPAL

परियोजना निदेशक
Project Director
आचारण परिक्रिया इकाई भोपाल
NHA/ PIU-Bhopal (M.P.)

				DESIGN CONSULTANT: LEA ASSOCIATES SOUTH ASIA PVT. LTD., B-1, E-27, IInd FLOOR, MOHAN COOPERATIVE INDUSTRIAL ESTATE, MATHURA ROAD, NEW DELHI-110044 INDIA				SCALE: NTS				CLIENT:  NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India				DRAWING TITLE: DGPS MAP				DRG. NO. 73580\LASAI\HIGHWAYS\DPRIDM-01				REV. 0			
R1 MAR-21 DETAILED PROJECT REPORT												DATE: FEBRUARY 2023 DRAWN : ASHISH															
MKD. DATE DESCRIPTION BY												DESIGNED CHECKED APPROVED Triptesh Das Sujoy Sinha J.K.Das															
REVISION												SHEET SIZE A2															



S.No.	Description	AREA (HACT.)	Remark
1	Total Forest Area to be Acquired	2.33	
2	Land Required for Main Carriageway	1.44	
3	Additional Area for Project Facilities	0.89	Bus Bay/Landscaping& Tree Plantation

प्रबंधक (तकनीकी)
Manager (Technical)
भा. रा. प्रा. परि. क्रिया इकाई भोपाल
NHAI PIU-BHOPAL

परियोजना निदेशक
Project Director
भा. रा. प्रा. परि. क्रिया इकाई भोपाल
NHAI PIU-Bhopal (M.P.)

DESIGN CONSULTANT:		SCALE:		CLIENT:		DRAWING TITLE:		DRG. NO.		REV.
LEA ASSOCIATES SOUTH ASIA PVT. LTD.,		NTS		NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India		DGPS MAP		73580\LASA\HIGHWAYS\DP\IDM-01		0
B-1, E-27, IInd FLOOR, MOHAN COOPERATIVE INDUSTRIAL ESTATE, MATHURA ROAD, NEW DELHI-110044				PROJECT:		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)		DATE: FEBRUARY 2023		ASHISH
INDIA								DESIGNED		CHECKED
								Triptesh Das		APPROVED
										J.K.Das
										SHEET SIZE A2

RW/NH-37011/57/2022-BP&SP

Government of India
Ministry of Road Transport & Highways
(BP & SP Cell)
Transport Bhawan, 1, Parliament Street, New Delhi-110001

Dated: 19.10.2022

To,
The Chairperson,
National Highways Authority of India,
G-5 & 6, Sector-10, Dwarka,
New Delhi 110075.

[Kind Attention: Sh. K. V. Singh, CGM (T)]

Sub: Administrative Approval and Financial Sanction for Construction of (i) 4-lane highway from Vidisha to Hinotiya from km 0+000 to Km 27+000 (Length = 27 Km) (Vidisha - Mehulwa-Talbehat Pkg-I) Section of NH-346 and (ii) 4-laning of Vidisha to Morikori from Km 39+000 to 59+476 (Length = 20.476 Km) section of NH-146 under Bharatmala Pariyojana in the State of Madhya Pradesh on HAM; recommended by Standing Finance Committee (SFC) under the Chairmanship of Secretary (RT&H) during the meeting held on 19.09.2022 in Transport Bhawan, New Delhi- reg.

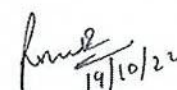
Madam/ Sir,

Please refer to the minutes of SFC Meeting held on 19.09.2022 under the Chairmanship of Secretary (RT&H) wherein the instant project proposal was recommended.

2. The approval of Competent Authority is hereby conveyed for implementation of following project proposal (as recommended by SFC in the meeting held on 19.09.2022) to be executed on Hybrid Annuity Mode under Bharatmala Pariyojana subject to the condition that NHAI would strictly comply with conditions/ decisions/ recommendations stipulated in the minutes of SFC meeting held on 19.09.2022:

Name	Length (in Km)	Civil Construction Cost including Utility Shifting and excluding GST (in Rs. crore)	Estimated Project Cost (Excl GST) (in Rs. crore)	Total Capital Cost (in Rs. crore)
Construction of (i) 4-lane highway from Vidisha to Hinotiya from km 0+000 to Km 27+000 (Length = 27 Km) (Vidisha - Mehulwa-Talbehat Pkg-I) Section of NH-346 and (ii) 4-laning of Vidisha to Morikori from Km 39+000 to 59+476 (Length = 20.476 Km) section of NH-146 under Bharatmala Pariyojana in the State of Madhya Pradesh on HAM.	47.476	755.47	787.86	1000.63

Yours sincerely,



(Rohit Kumar Rajpoot)
Assistant Executive Engineer (BP&SP)



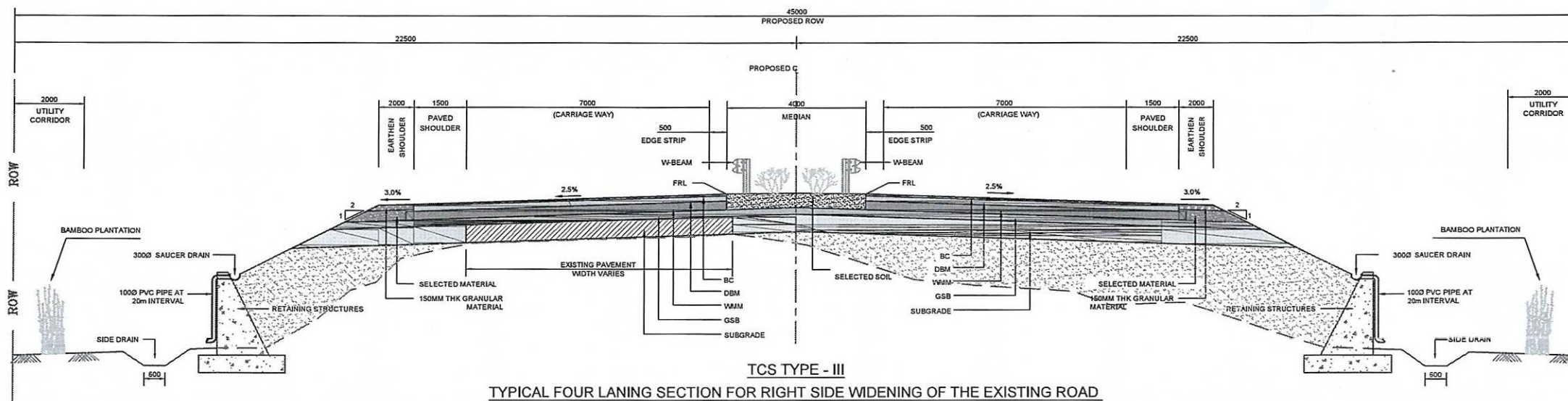
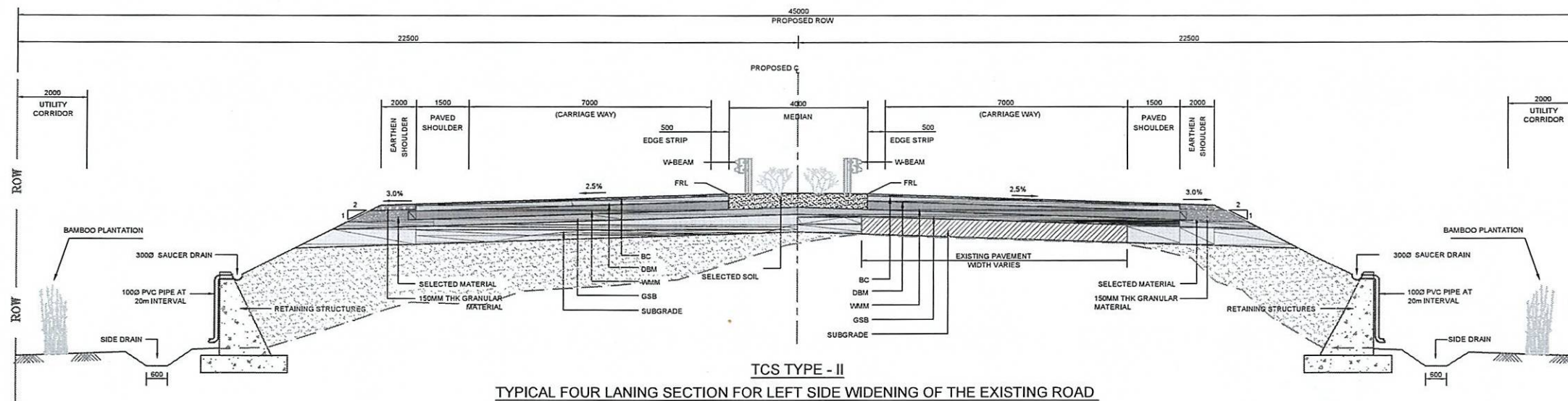
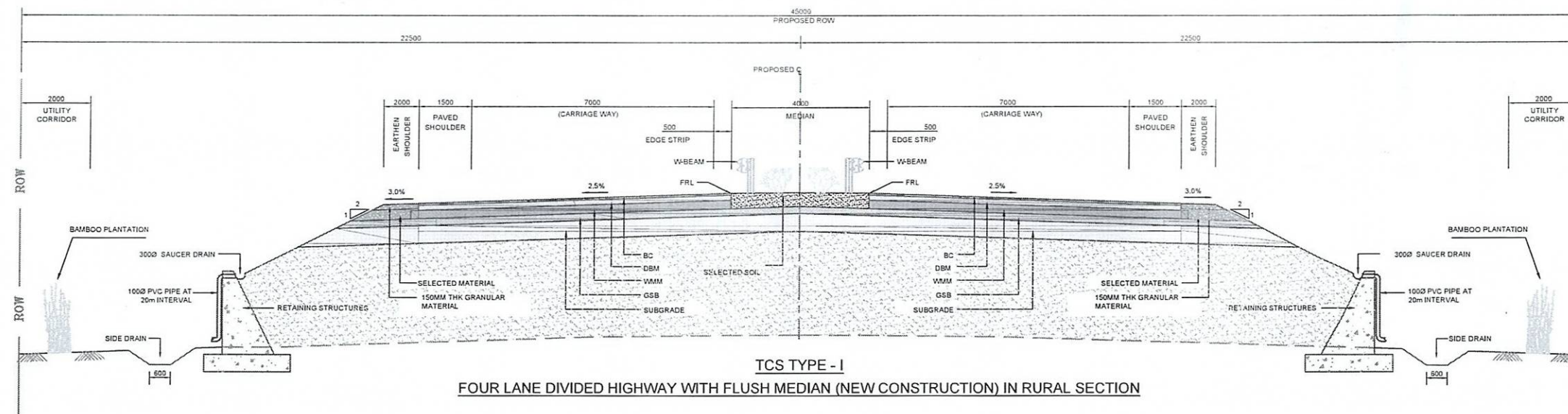
ij)Construction of 4-lane Greenfield & Brownfield Highway from km 0+000 to Km 27+000 Vidisha – Mehulwa (Vidisha to Hinotiya Package 1) under Bharatmala Pariyojana in the State of Madhya Pradesh on HAM Mode

Appendix B-VII

Details of Proposed ROW

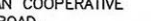
Sl. No	Design Chainage Km		Length (m)	PROW (m)		Total ROW	Remarks
	From	To		LHS	RHS		
1	0+000	0+583	583	35	60	95	Grade Separated Structure with Access
2	0+583	0+680	97	50	50	100	
3	0+680	1+160	480	45	45	90	
4	1+160	2+950	1790	22.5	22.5	45	
5	2+950	3+050	100	45	45	90	Major Junction
6	3+050	3+160	110	22.5	22.5	45	
7	3+160	3+230	70	45	45	90	Major Junction
8	3+230	8+000	4770	22.5	22.5	45	
9	8+000	8+800	800	30	30	60	Cut Section
10	8+800	11+720	2920	22.5	22.5	45	
11	11+720	11+800	80	45	45	90	Major Junction
12	11+800	15+110	3310	22.5	22.5	45	
13	15+110	15+190	80	45	45	90	Major Junction
14	15+190	18+560	3370	22.5	22.5	45	
15	18+560	18+800	240	30	30	60	Toll Plaza
16	18+800	27+000	8200	22.5	22.5	45	

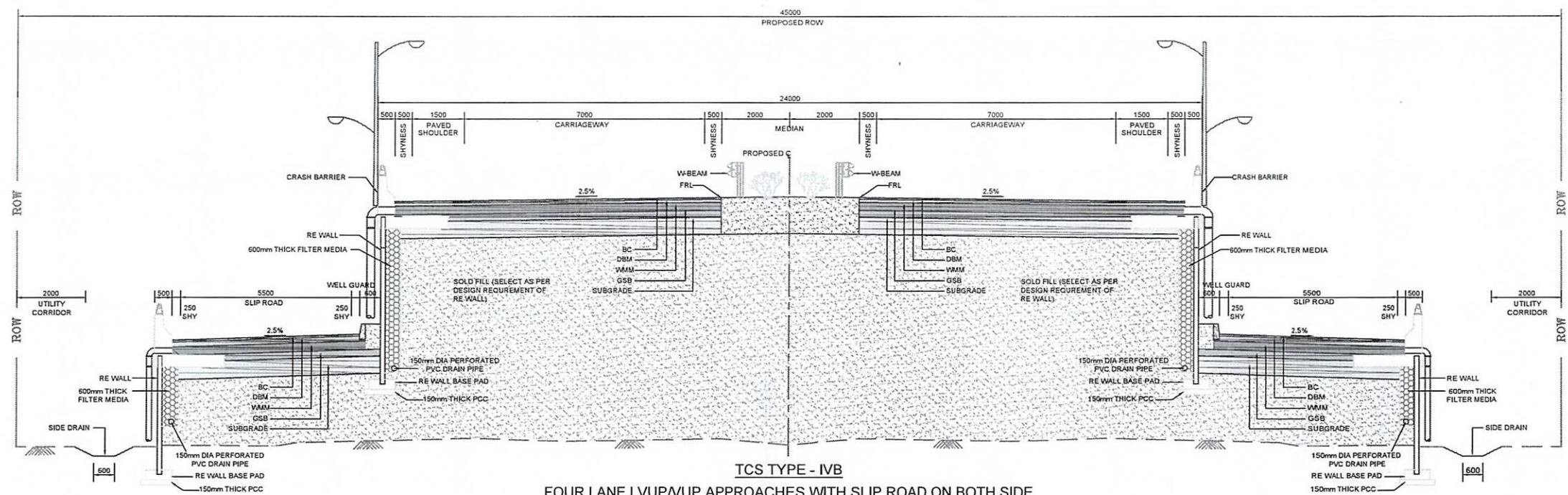
Note: At location of Bus bays, Truck lay-byes, Toll Plaza and Junctions extra land to be provided in addition to above-mentioned ROW.



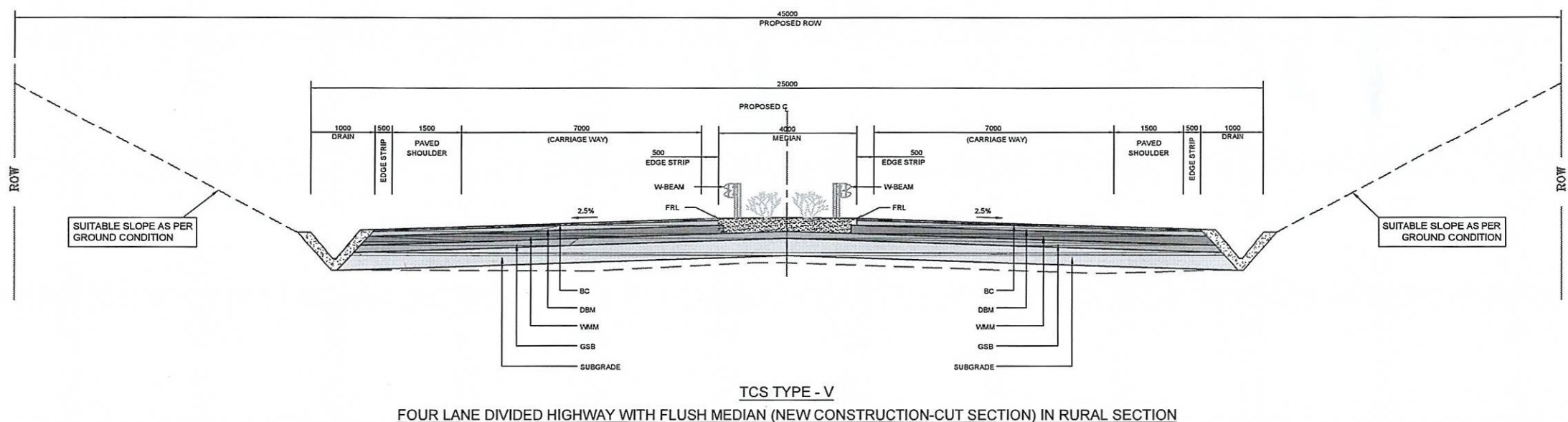
प्रबंधक (तकनीकी)
Manager (Technical)
मा. रा. रा. प्रा. परि. क्रिया इकाई भोपाल
NHAI PIU-BHOPAL

परियोजना निदेशक
Project Director
मा. रा. रा. प्रा. परि. क्रिया इकाई भोपाल
NHAI PIU-Bhopal (M.P.)

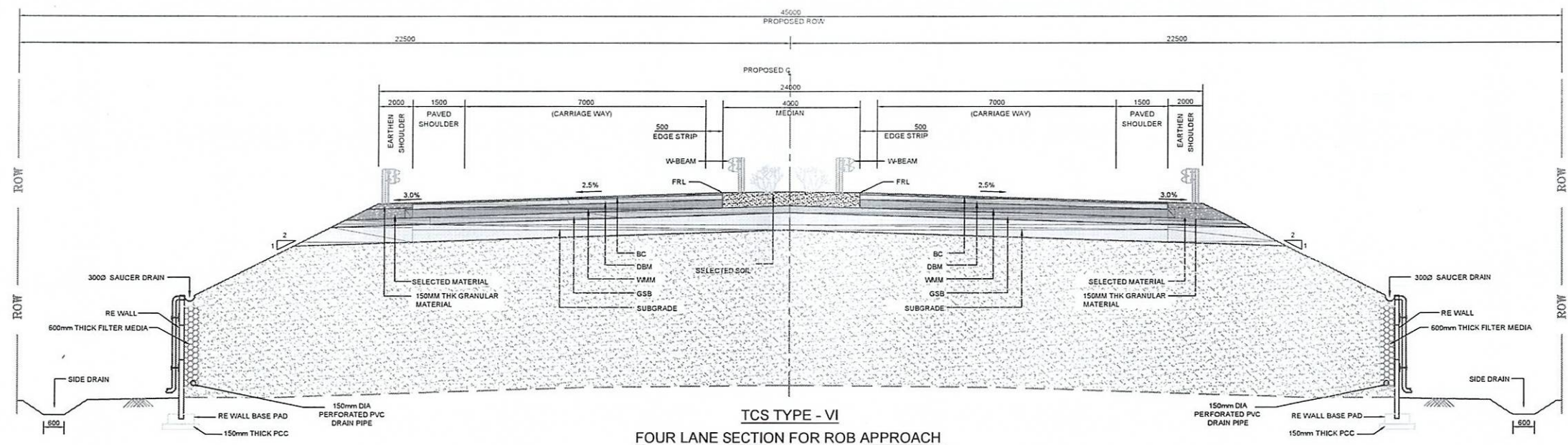
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				B-1, E-27, 11nd FLOOR, MOHAN COOPERATIVE INDUSTRIAL ESTATE, MATHURA ROAD, NEW DELHI-110044				DATE: October 2022		DRAWN : Ravindra Patwal
				INDIA		PROJECT:		DESIGNED	CHECKED	APPROVED
MKD.				DATE	DESCRIPTION	BY	"FOUR LANING OF VIDISHA TO HINOTIYA SECTION OF NH-346 IN THE STATE OF MADHYA PRADESH ON HAM MODE"	M Rakesh	Sujoy Sinha	J.K.Das
REVISION								SHEET SIZE A2		



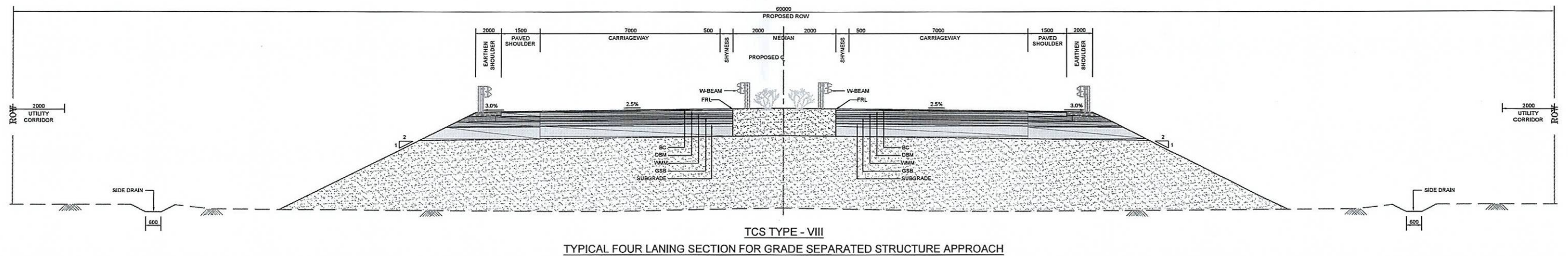
प्रबंधक (तकनीकी)
Manager (Technical)
भा. रा. रा. प्रा. परि. क्रिया इकाई भोपाल
NHAI PIU-BHOPAL

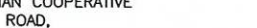


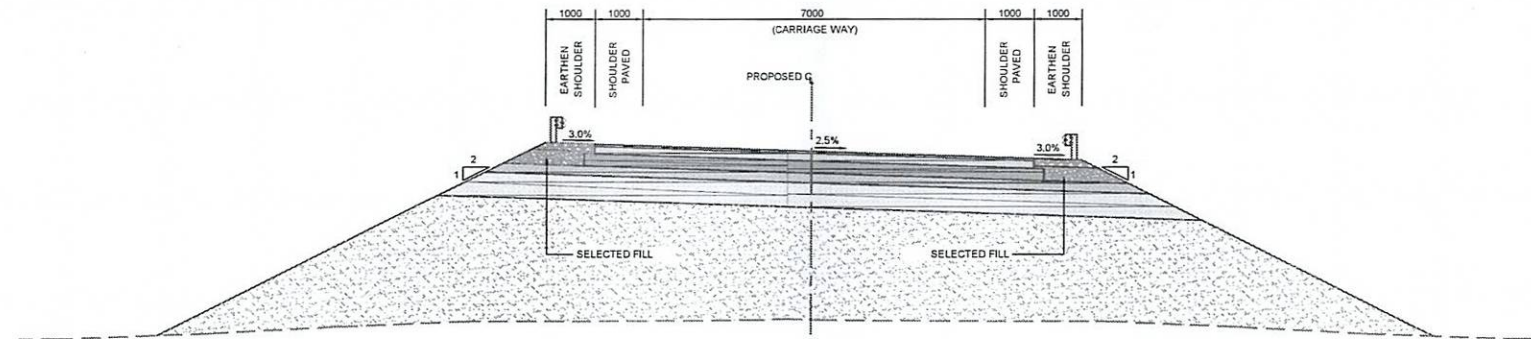
				DESIGN CONSULTANT:		SCALE:		CLIENT:		DRAWING TITLE:		DRG. NO.		REV.	
				LEA ASSOCIATES SOUTH ASIA PVT. LTD.,		NTS		 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India		TYPICAL CROSS SECTION		73580\LASAI\HIGHWAYS\DP\TCS-02		0	
				B-1, E-27, 11th FLOOR, MOHAN COOPERATIVE INDUSTRIAL ESTATE, MATHURA ROAD, NEW DELHI-110044											
				INDIA											
															
															



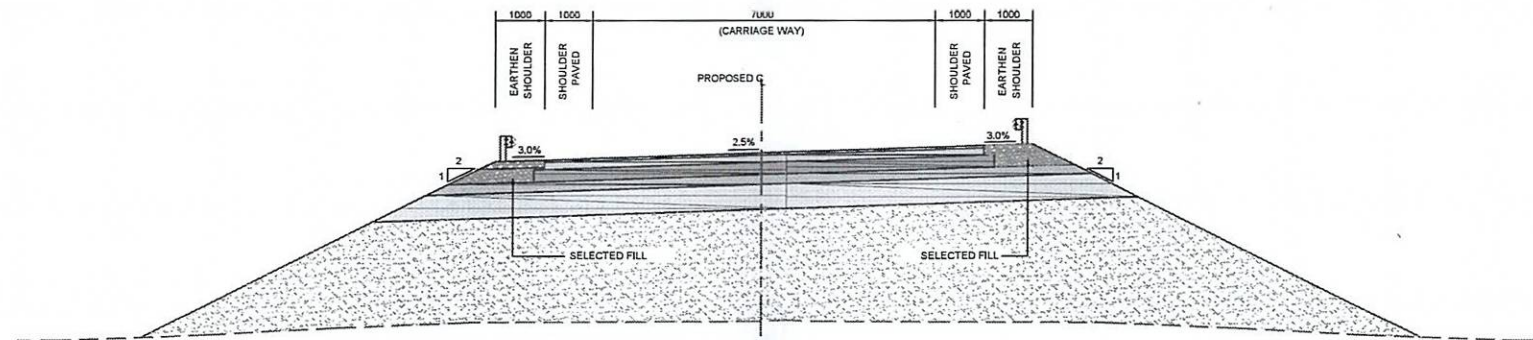
प्रबंधक (तकनीकी)
Manager (Technical)
मा. रा. रा. प्रा. परि. क्रिया इकाई भोपाल
NHAI PIU-BHOPAL



				DESIGN CONSULTANT:		SCALE:		CLIENT:		DRAWING TITLE:		DRG. NO.		REV.			
				LEA ASSOCIATES SOUTH ASIA PVT. LTD.,		NTS		 NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India		TYPICAL CROSS SECTION		73580\LASAI\HIGHWAYS\IDPRITCS-03		0			
				B-1, E-27, 11th FLOOR, MOHAN COOPERATIVE INDUSTRIAL ESTATE, MATHURA ROAD, NEW DELHI-110044				PROJECT:				DATE: October 2022		DRAWN : Ravindra Patwal			
				INDIA				"FOUR LANING OF VIDISHA TO HINOTIYA SECTION OF NH-346 IN THE STATE OF MADHYA PRADESH ON HAM MODE"				DESIGNED		CHECKED		APPROVED	
												M Rakesh		Sujoy Sinha		J.K.Das	
MKT. DATE DESCRIPTION BY																	
REVISION																SHEET SIZE A2	



TCS TYPE - IXA
TYPICAL CROSS SECTION SECTION OF RAMP



TCS TYPE - IXB
TYPICAL CROSS SECTION SECTION OF RAMP

[Signature]
प्रबंधक (तकनीकी)
Manager (Technical)
भा. रा. रा. प्रा. परि. क्रिया इकाई भोपाल
NHAI PIU-BHOPAL

[Signature]
परियोजना निदेशक
Project Director
भा. रा. रा. प्रा. परि. क्रिया इकाई भोपाल
NHAI PIU-Bhopal (M.P.)

DESIGN CONSULTANT:				SCALE:		CLIENT:		DRAWING TITLE:		DRG. NO.		REV.	
LEA ASSOCIATES SOUTH ASIA PVT. LTD.,				NTS		NATIONAL HIGHWAYS AUTHORITY OF INDIA (Ministry of Road Transport & Highways) Government of India		TYPICAL CROSS SECTION		73580/LASAI/HIGHWAYS/IDPR/TCS-04		0	
B-1, E-27, 11th FLOOR, MOHAN COOPERATIVE INDUSTRIAL ESTATE, MATHURA ROAD, NEW DELHI-110044						PROJECT:				DATE: October 2022		DRAWN: Ravindra Patwal	
INDIA										DESIGNED		CHECKED	
										M Rakesh		Sujoy Sinha	
												APPROVED	
												J.K.Das	
												SHEET SIZE A2	

i) Construction of 4-lane Greenfield highway from km 0+000 to Km 27+000 Vidisha – Mehulwa (Vidisha to Hinotiya Package 1) under Bharatmala Pariyojana in the State of Madhya Pradesh on HAM Mode

SCHEDULE - C (PART I)

(See Clause 2.1)

PROJECT FACILITIES

1. Project Facilities

The Concessionaire shall construct the Project Facilities in accordance with the provisions of this Agreement. Such Project Facilities shall include:

- (a) Toll Plazas;
- (b) Roadside Furniture;
- (c) Highway Lighting;
- (d) Pedestrian Facilities;
- (e) Truck lay-byes;
- (f) Bus-bays and bus shelters;
- (g) Cattle crossings;
- (h) Traffic aid posts;
- (i) Medical aid posts;
- (j) Vehicle rescue posts;
- (k) Highway patrol Unit;
- (l) Emergency Medical Services;
- (m) Crane services;
- (n) Operation & Maintenance Centre;
- (o) Landscaping and Tree Plantation;
- (p) Communication system; and

2. Project Facilities for Four-Laning

Project Facilities forming part of Four-Laning and to be completed on or before the Project Completion Date have been described in Annex-I of this Schedule-C.



Annex - I

(Schedule-C)

Project Facilities for Four-Laning

1. Project Facilities

The Concessionaire shall construct the Project Facilities described in this Annex-I to form part of the Four-Lane Project Highway. The Project Facilities shall include:

- (a) Toll Plazas;
- (b) Roadside Furniture;
- (c) Highway Lighting;
- (d) Pedestrian Facilities;
- (e) Truck lay-byes;
- (f) Bus-bays and bus shelters;
- (g) Cattle crossings;
- (h) Traffic aid posts;
- (i) Medical aid posts;
- (j) Vehicle rescue posts;
- (k) Highway patrol Unit;
- (l) Emergency Medical Services;
- (m) Crane services;
- (n) Operation & Maintenance Centre;
- (o) Landscaping and Tree Plantation;
- (p) Communication system; and



2. Description of Project Facilities

Each of the Project Facilities is briefly described below:

a) Toll Plazas

Except otherwise provided in this Schedule-C. Toll plaza shall be design as per Section 10 of the Manual (IRC: SP: 84:2019), Toll Plazas including all facilities shall be provided at the following locations:

Location of Toll Plaza:

S. No	Design Chainage	Direction	No. of toll lanes (Extra wide ETC + ETC+ Extra wide ETC)
1	18+600	Vidisha-Mehulwa	4+4

b) Road Side Furniture

Road side furniture comprising road signs, road markings, object markers, hazard marker, studs, delineators, attenuators, safety barriers, pedestrian guard rails, boundary stones, kilometer stone etc. shall be provided as per manual.

The roadside furniture shall also include the following minimum provisions:

- I. Crash Barrier: New Jersey crash barriers shall be provided as per TCS. W beam Metal Crash Barrier shall be provided at required locations as shown in TCS drawing and at all other locations as per the Manual. W beam crash barrier shall invariably be provided in median on both sides height minimum 3 M.
- II. Pedestrian Guard Rail (MS Railings) shall be provided as per Manual.
- III. Traffic Signs: Traffic Signs viz. roadside signs, overhead signs and kerb mounted signs shall be provided along the entire Project Highway as per Manual. 3 sets of Traverse bar marking on Main Carriageway with thickness 5mm 5mm & 15mm.
- IV. Pavement markings: The pavement markings shall cover the road markings for the entire Project Highway as per Manual.
- V. LED Traffic Beacons: These shall be provided on the entire project highway near pedestrian crossings, public gathering places (Educational Institutions, Hospitals, Worship places etc.) cross roads at Major and Minor Junctions and wherever required as per Manual.
- VI. Studs: Road Studs shall be provided at Horizontal Curve below 700m, median opening, intersections, Cross roads & Built-up areas (Excluding Toll Plaza location) and wherever required as per Manual, throughout the stretch @ 9m C/C
- VII. Delineators: Delineators for night time visibility shall be provided for the entire project Highway as per Manual throughout the stretch @ 18m C/C.
- VIII. Boundary stones shall be provided at the boundary on both sides of Right of Way as per IRC SP: 84 : 2019.
- IX. Hectometer/Kilometer Stones: Shall be provided for the entire Project Highway.

c) Highway Lighting/Street lighting:

Highway lighting (LED) shall be provided at the following locations with Solar lighting

- i. At Rest area, Truck lay bye, Bus bays, bus shelter, junctions, Interchanges and Grade separators including approaches & underneath of Underpasses/Overpasses, built up sections, Slip Road & junctions as location given in schedule - B, and wherever else required as per Manual.
- ii. High mast Lighting

High mast lighting shall be provided along the Project Highway at Toll Plazas, Rest-areas, Truck Laybys, at Grade Major Junctions and Bypass Start & End and wherever required as per Manual

Not to be limited to the above specified locations and it shall be finalized in consultation with Authority Engineer / Project Director, NHAI.

Concessionaire shall install, maintain and operate highway lighting/ street lighting and electrical connection in the name of authority during entire concession period including operation & maintenance period. The electricity bills for the highway lighting being used for purpose of illuminating the highway shall be borne by the Authority.

Tunnel lighting: Proper lighting arrangements at tunnel approach, portals and inside tunnel shall be made as per Schedule D and the location shall be finalized in consultation with IE. Tunnel lighting shall be provided as per CIE 88- 2004 and BS 5489 or any other latest specifications.

d) Pedestrian Facilities

Pedestrian facilities in the form of guard rails, footpath, lighting, etc. shall be provided as specified in Manual referred in Schedule D.

e) Truck Lay-byes Nil

f) Bus Bays and Bus Shelters

The concessionaire shall provide 14 nos. of Bus Shelters along the project highway at the locations given in Appendix C I. The locations of these bus bays shall be finalized by the concessionaire in consultation with the IE.

g) Pedestrian/Cattle Crossing:

Pedestrian facilities shall be provided in accordance with the Manual of Specifications and Standards as referred in Schedule "D".

h) Traffic Aid Posts

Traffic aid post shall be constructed at the location identified by the Authority as per manual.

i) Medical Aid Post



Medical aid post shall be constructed at the location identified by the Authority as per manual.

j) Vehicular Rescue Posts

Vehicular aid post shall be constructed at the location identified by the Authority as per manual.

k) Ambulance

One no ambulance including its operation along with required staff and maintenance units having facilities as per latest NHAI/ policy guide lines/ strengthening the incident management services/2018/policy no 12.19 dated 20-03-2018 shall be provided from construction completion up to end of concession period.

l) Cranes

One no crane fitted with GPS based vehicle tracking system with minimum capacity of 30T as per manual including its operation and required staff and maintenance units shall be provided from construction Completion up to end of concession period.

m) Highway Patrolling vehicle

One no highway patrol vehicle including its operation along with required staff and maintenance units having facilities as per latest NHAI/ policy guide lines/ strengthening the incident management services/2018/policy no 12.19 dated 20-03-2018 shall be provided from construction completion up to end of maintenance period.

n) Landscaping and Tree Plantation

Landscaping of the highway shall be done on, but not limited to the following

- i. Toll Plaza Area, Truck lay bye area and Interchange.
- ii. Road-side avenue tree plantation as per GreenHighwayPolicy2015.

Landscaping, Beautification, Median & Avenue Plantation and Tree Shifting.

I. Landscaping , Beautification and Median Plantation

Landscaping of the highway shall be done on Toll Plaza areas, Truck lay bye areas, Interchanges, below the viaducts and islands along with landscaping and beautification of Median of approaches of structures with hedges of 2m. thick Duranta of Red and Golden green colour, One row of shrubs like madhukamni, Chandni, Tabebuia rosea, Tecoma stens, Tabebuia argentia and Bouganvillas of different colours shall be planted. The pattern of hedge and colourful plants will be as follows:

- a) Medians of approaches of bridges/structures including continuous road upto 600m. each side and near habitation will be planted with 1 meter thick hedge of Red Duranta and 1m. thick hedge of Golden Duranta making 2m. thick hedge in staggered fashion. Thus, each side of 600m. length of hedge will have 75m. continuous hedge(2m. thick) at left of median alternate with 75m. continuous hedge (2m. thick) at right of median in staggered manner. Red colour hedge will be maintained at 60

cm height while golden green colour hedge will be maintained at 1m. height. There shall be one row of shrub and small tree like Madhukamni, Chandni, Tabebuia Rosia, Tecoma stens, Tabebuia argentic, Bouganvilla, Gulturra, Cassia biflora etc. One side of approach will have only one species to have a single colour scheme upto total approach length of one structure. The height of saplings shall have at least 1.5 m. height at the time of plantation.

- b) Approaches of grade separators be planted with small to middle size tree species like Tecoma, Cassia biflora, Gulturra, Amaltas, Tabebuia etc.
- c) The concessionaire shall be responsible for filling median with good plantable soil upto 70cm. depth. There shall be 4 rows of plants in median (excluding approaches of structures). Two rows each side after leaving 1m. distance from carriageway will have species like Tecoma, Cassia biflora, Tabebuia Rosea, Tabebuia argentic, Caesalpinia pulcherrima etc. at 3m. interval (Plant to Plant). Another 2 rows will be planted 6m. apart (Plant to Plant) in staggered manner leaving 1m. distance from centre of median to accommodate proper drainage of water. These two rows will have species like Kachnar, Kanak Champa, Amaltas, Tabebuia, Saoni, Bottle brush, Jacaranda etc. The height of saplings at the time of plantation should be at least 1.5m.
- d) The Species to be planted at Toll Plaza areas, Truck lay bye areas, Interchanges, below the viaducts and islands for beautification shall be approved by Authority Engineer and Authority.

II. Landscaping, Beautification and Avenue Plantation:-

The Concessionaire will be responsible to dig continuous trench of 75 cm. width and 50 cm. depth on the extreme edge of ROW leaving 1m. space outer side to heap the dug soil. This will demarcate the boundaries of ROW from that of private field. While making heap care should be taken to leave some space towards trench so that the trenches are not filled with such heaped soil by angle of repose.

The concessionaire shall be responsible to plant and maintain minimum 1400 nos. of saplings per km. length of highway in avenue i.e. on both sides of highway wherever space is required. The pit size would be 60cm x 60 cm x 60 cm and 1/3 of volume & pit should be filled with good plantable soil and 1/3 of volume with cow dung manure (CDM). Species of plants/ saplings to be planted on avenue shall be approved by the Independent Engineer and Authority. Cement Concrete Tree Guards shall be installed with all the Avenue tree plantations at the ROW Edge for protection of the same. Wired Fencing shall be used for protection of other Plantation.

In ROW, the first row to be planted with Kachnar, Amaltas, Tabebuia, Saoni, Tecoma, bottle brush, Kankchampa etc at 3m. interval (plant to plant).

The second row of ROW shall be planted with Neem, Bel, Kaith, Safed siris, Mahogany, Karanj, Jamun, sissoo, Arjun etc at 6m. interval. Black cotton soil to be planted with safed siris, water logged areas with Jamun and Arjun and Dry and stony areas to be planted with species like Chirol, Neem. Each km. should have at least one plant of Peepal, Bargad, Imli and Aam.

The edge of ROW should invariably be planted with Bamboo species preferably with Katang bamboo making a green curtain. The Bamboos will be planted on the soil heaped on the extreme edge of ROW at 4m. intervals. Seed of Ber, Sitafal etc. should be soon in gaps between bamboo plants just before monsoon.

The saplings of minimum 2m. height and more than 2 years of age are to be planted in ROW at the time of plantation. The root system of such saplings should not be coiled. This must be ensured by selecting saplings in bigger size poly pots. For bamboo species, the plant should be more than 1 year old and the rhizome of bamboo should be of male thumb thickness. The number of saplings to be planted in ROW shall be as per strip chart as prepared by Authority engineer. This will be in conformity to IRC:SP:21:2009 except the last row where the Bamboo species are planted at 4m. interval.



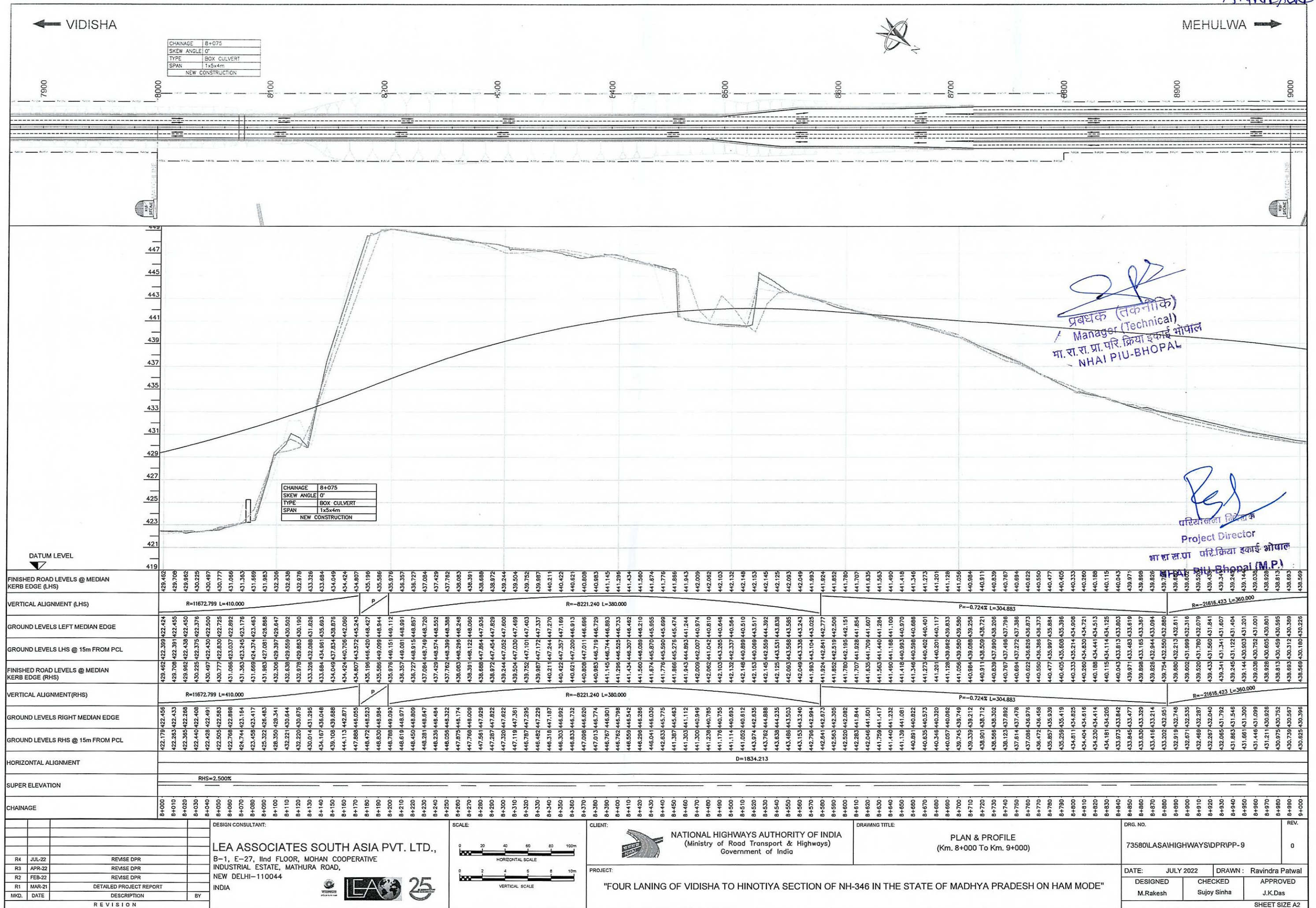
Appendix C I

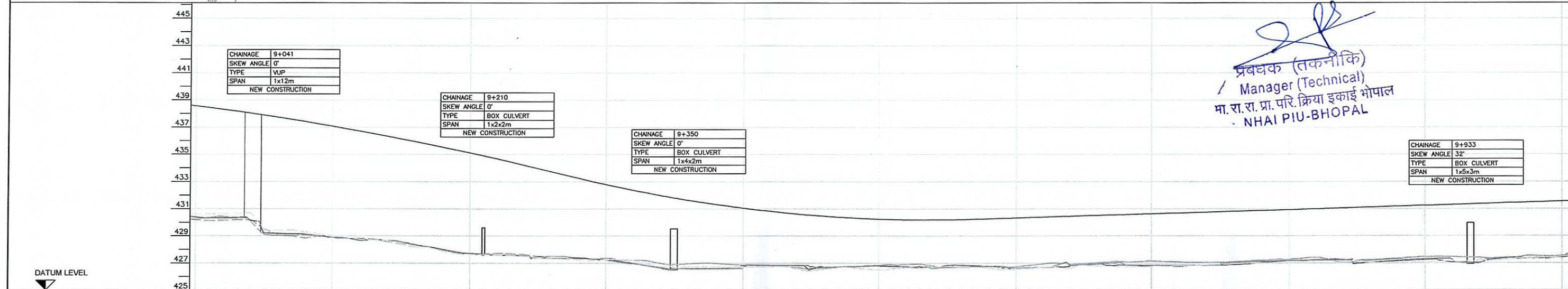
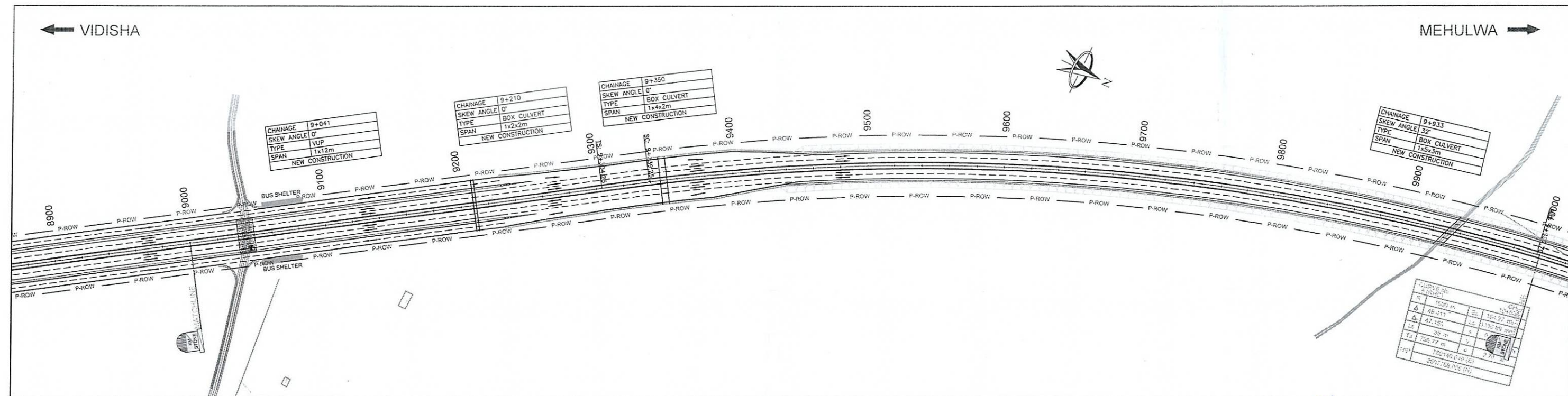
Locations of Bus Shelters

S.No	Design Chainage (Km)	Side	Remarks
1	3200	Both	
2	9050	Both	
3	11750	Both	
4	15150	Both	
5	17550	Both	
6	19500	Both	
7	23600	Both	
8	26250	LHS	

Note: The location shown above for Bus shelter is indicative and it may vary as per actual site condition and No CHANGE OF SCOPE shall be provided in case of change on location.







FINISHED ROAD LEVELS @ MEDIAN KERB EDGE (LHS)	438.569 438.440 438.307 438.169 438.026 437.879 437.727 437.571 437.409 437.244 437.073 436.898 436.719 436.534 436.345 436.152 435.954 435.751 435.543 435.331 435.115 434.893 434.668 434.437 434.202 433.963 433.724 433.485 433.247 433.013 432.774 432.537 432.298 432.059 431.820 431.581 431.342 431.103 430.864 430.625 430.386 430.147 429.908 429.669 429.430 429.191 428.952 428.713 428.474 428.235 427.996 427.757 427.518 427.279 427.040 426.801 426.562 426.323 426.084 425.845 425.606 425.367 425.128 424.889 424.650 424.411 424.172 423.933 423.694 423.455 423.216 422.977 422.738 422.499 422.260 422.021 421.782 421.543 421.304 421.065 420.826 420.587 420.348 420.109 419.870 419.631 419.392 419.153 418.914 418.675 418.436 418.197 417.958 417.719 417.480 417.241 417.002 416.763 416.524 416.285 416.046 415.807 415.568 415.329 415.090 414.851 414.612 414.373 414.134 413.895 413.656 413.417 413.178 412.939 412.700 412.461 412.222 411.983 411.744 411.505 411.266 411.027 410.788 410.549 410.310 410.071 409.832 409.593 409.354 409.115 408.876 408.637 408.398 408.159 407.920 407.681 407.442 407.203 406.964 406.725 406.486 406.247 406.008 405.769 405.530 405.291 405.052 404.813 404.574 404.335 404.096 403.857 403.618 403.379 403.140 402.901 402.662 402.423 402.184 401.945 401.706 401.467 401.228 400.989 400.750 400.511 400.272 400.033 399.794 399.555 399.316 399.077 398.838 398.599 398.360 398.121 397.882 397.643 397.404 397.165 396.926 396.687 396.448 396.209 395.970 395.731 395.492 395.253 395.014 394.775 394.536 394.297 394.058 393.819 393.580 393.341 393.102 392.863 392.624 392.385 392.146 391.907 391.668 391.429 391.190 390.951 390.712 390.473 390.234 390.000	VERTICAL ALIGNMENT (LHS)	R=21616.423 L=360.000	R=10775.292 L=290.000	P=0.302% L=649.005	GROUND LEVELS LEFT MEDIAN EDGE	430.625 430.486 430.347 430.208 430.069 429.930 429.791 429.652 429.513 429.374 429.235 429.096 428.957 428.818 428.679 428.540 428.401 428.262 428.123 427.984 427.845 427.706 427.567 427.428 427.289 427.150 427.011 426.872 426.733 426.594 426.455 426.316 426.177 426.038 425.899 425.760 425.621 425.482 425.343 425.204 425.065 424.926 424.787 424.648 424.509 424.370 424.231 424.092 423.953 423.814 423.675 423.536 423.397 423.258 423.119 422.980 422.841 422.702 422.563 422.424 422.285 422.146 422.007 421.868 421.729 421.590 421.451 421.312 421.173 421.034 420.895 420.756 420.617 420.478 420.339 420.200 420.061 419.922 419.783 419.644 419.505 419.366 419.227 419.088 418.949 418.810 418.671 418.532 418.393 418.254 418.115 417.976 417.837 417.698 417.559 417.420 417.281 417.142 417.003 416.864 416.725 416.586 416.447 416.308 416.169 416.030 415.891 415.752 415.613 415.474 415.335 415.196 415.057 414.918 414.779 414.640 414.501 414.362 414.223 414.084 413.945 413.806 413.667 413.528 413.389 413.250 413.111 412.972 412.833 412.694 412.555 412.416 412.277 412.138 411.999 411.860 411.721 411.582 411.443 411.304 411.165 411.026 410.887 410.748 410.609 410.470 410.331 410.192 410.053 409.914 409.775 409.636 409.497 409.358 409.219 409.080 408.941 408.802 408.663 408.524 408.385 408.246 408.107 407.968 407.829 407.690 407.551 407.412 407.273 407.134 406.995 406.856 406.717 406.578 406.439 406.300 406.161 406.022 405.883 405.744 405.605 405.466 405.327 405.188 405.049 404.910 404.771 404.632 404.493 404.354 404.215 404.076 403.937 403.798 403.659 403.520 403.381 403.242 403.103 402.964 402.825 402.686 402.547 402.408 402.269 402.130 401.991 401.852 401.713 401.574 401.435 401.296 401.157 401.018 400.879 400.740 400.601 400.462 400.323 400.184 400.045 399.906 399.767 399.628 399.489 399.350 399.211 399.072 398.933 398.794 398.655 398.516 398.377 398.238 398.099 397.960 397.821 397.682 397.543 397.404 397.265 397.126 396.987 396.848 396.709 396.570 396.431 396.292 396.153 396.014 395.875 395.736 395.597 395.458 395.319 395.180 395.041 394.902 394.763 394.624 394.485 394.346 394.207 394.068 393.929 393.790 393.651 393.512 393.373 393.234 393.095 392.956 392.817 392.678 392.539 392.400 392.261 392.122 391.983 391.844 391.705 391.566 391.427 391.288 391.149 391.010 390.871 390.732 390.593 390.454 390.315 390.176 390.037 389.898 389.759 389.620 389.481 389.342 389.203 389.064 388.925 388.786 388.647 388.508 388.369 388.230 388.091 387.952 387.813 387.674 387.535 387.396 387.257 387.118 386.979 386.840 386.701 386.562 386.423 386.284 386.145 386.006 385.867 385.728 385.589 385.450 385.311 385.172 385.033 384.894 384.755 384.616 384.477 384.338 384.199 384.060 383.921 383.782 383.643 383.504 383.365 383.226 383.087 382.948 382.809 382.670 382.531 382.392 382.253 382.114 381.975 381.836 381.697 381.558 381.419 381.280 381.141 381.002 380.863 380.724 380.585 380.446 380.307 380.168 380.029 379.890 379.751 379.612 379.473 379.334 379.195 379.056 378.917 378.778 378.639 378.500 378.361 378.222 378.083 377.944 377.805 377.666 377.527 377.388 377.249 377.110 376.971 376.832 376.693 376.554 376.415 376.276 376.137 375.998 375.859 375.720 375.581 375.442 375.303 375.164 375.025 374.886 374.747 374.608 374.469 374.330 374.191 374.052 373.913 373.774 373.635 373.496 373.357 373.218 373.079 372.940 372.801 372.662 372.523 372.384 372.245 372.106 371.967 371.828 371.689 371.550 371.411 371.272 371.133 370.994 370.855 370.716 370.577 370.438 370.299 370.160 370.021 369.882 369.743 369.604 369.465 369.326 369.187 369.048 368.909 368.770 368.631 368.492 368.353 368.214 368.075 367.936 367.797 367.658 367.519 367.380 367.241 367.102 366.963 366.824 366.685 366.546 366.407 366.268 366.129 365.990 365.851 365.712 365.573 365.434 365.295 365.156 365.017 364.878 364.739 364.600 364.461 364.322 364.183 364.044 363.905 363.766 363.627 363.488 363.349 363.210 363.071 362.932 362.793 362.654 362.515 362.376 362.237 362.098 361.959 361.820 361.681 361.542 361.403 361.264 361.125 360.986 360.847 360.708 360.569 360.430 360.291 360.152 360.013 359.874 359.735 359.596 359.457 359.318 359.179 359.040 358.901 358.762 358.623 358.484 358.345 358.206 358.067 357.928 357.789 357.650 357.511 357.372 357.233 357.094 356.955 356.816 356.677 356.538 356.399 356.260 356.121 355.982 355.843 355.704 355.565 355.426 355.287 355.148 355.009 354.870 354.731 354.592 354.453 354.314 354.175 354.036 353.897 353.758 353.619 353.480 353.341 353.202 353.063 352.924 352.785 352.646 352.507 352.368 352.229 352.090 351.951 351.812 351.673 351.534 351.395 351.256 351.117 350.978 350.839 350.700 350.561 350.422 350.283 350.144 350.005 349.866 349.727 349.588 349.449 349.310 349.171 349.032 348.893 348.754 348.615 348.476 348.337 348.198 348.059 347.920 347.781 347.642 347.503 347.364 347.225 347.086 346.947 346.808 346.669 346.530 346.391 346.252 346.113 345.974 345.835 345.696 345.557 345.418 345.279 345.140 345.001 344.862 344.723 344.584 344.445 344.306 344.167 344.028 343.889 343.750 343.611 343.472 343.333 343.194 343.055 342.916 342.777 342.638 342.499 342.360 342.221 342.082 341.943 341.804 341.665 341.526 341.387 341.248 341.109 340.970 340.831 340.692 340.553 340.414 340.275 340.136 340.000	VERTICAL ALIGNMENT (RHS)	R=21616.423 L=360.000	R=10775.292 L=290.000	P=0.302% L=649.005	GROUND LEVELS RIGHT MEDIAN EDGE	430.625 430.486 430.347 430.208 430.069 429.930 429.791 429.652 429.513 429.374 429.235 429.096 428.957 428.818 428.679 428.540 428.401 428.262 428.123 427.984 427.845 427.706 427.567 427.428 427.289 427.150 427.011 426.872 426.733 426.594 426.455 426.316 426.177 426.038 425.899 425.760 425.621 425.482 425.343 425.204 425.065 424.926 424.787 424.648 424.509 424.370 424.231 424.092 423.953 423.814 423.675 423.536 423.397 423.258 423.119 422.980 422.841 422.702 422.563 422.424 422.285 422.146 422.007 421.868 421.729 421.590 421.451 421.312 421.173 421.034 420.895 420.756 420.617 420.478 420.339 420.200 420.061 419.922 419.783 419.644 419.505 419.366 419.227 419.088 418.949 418.810 418.671 418.532 418.393 418.254 418.115 417.976 417.837 417.698 417.559 417.420 417.281 417.142 417.003 416.864 416.725 416.586 416.447 416.308 416.169 416.030 415.891 415.752 415.613 415.474 415.335 415.196 415.057 414.918 414.779 414.640 414.501 414.362 414.223 414.084 413.945 413.806 413.667 413.528 413.389 413.250 413.111 412.972 412.833 412.694 412.555 412.416 412.277 412.138 412.000 411.861 411.722 411.583 411.444 411.305 411.166 411.027 410.888 410.749 410.610 410.471 410.332 410.193 410.054 409.915 409.776 409.637 409.498 409.359 409.220 409.081 408.942 408.803 408.664 408.525 408.386 408.247 408.108 407.969 407.830 407.691 407.552 407.413 407.274 407.135 406.996 406.857 406.718 406.579 406.440 406.301 406.162 406.023 405.884 405.745 405.606 405.467 405.328 405.189 405.050 404.911 404.772 404.633 404.494 404.355 404.216 404.077 403.938 403.799 403.660 403.521 403.382 403.243 403.104 402.965 402.826 402.687 402.548 402.409 402.270 402.131 401.992 401.853 401.714 401.575 401.436 401.297 401.158 401.019 400.880 400.741 400.602 400.463 400.324 400.185 400.046 399.907 399.768 399.629 399.490 399.351 399.212 399.073 398.934 398.795 398.656 398.517 398.378 398.239 398.100 397.961 397.822 397.683 397.544 397.405 397.266 397.127 396.988 396.849 396.710 396.571 396.432 396.293 396.154 396.015 395.876 395.737 395.598 395.459 395.320 395.181 395.042 394.903 394.764 394.625 394.486 394.347 394.208 394.069 393.930 393.791 393.652 393.513 393.374 393.235 393.096 392.957 392.818 392.679 392.540 392.401 392.262 392.123 391.984 391.845 391.706 391.567 391.428 391.289 391.150 391.011 390.872 390.733 390.594 390.455 390.316 390.177 390.038 389.899 389.760 389.621 389.482 389.343 389.204 389.065 388.926 388.787 388.648 388.509 388.370 388.231 388.092 387.953 387.814 387.675 387.536 387.397 387.258 387.119 386.980 386.841 386.702 386.563 386.424 386.285 386.146 386.007 385.868 385.729 385.590 385.451 385.312 385.173 385.034 384.895 384.756 384.617 384.478 384.339 384.200 384.061 383.922 383.783 383.644 383.505 383.366 383.227 383.088 382.949 382.810 382.671 382.532 382.393 382.254 382.115 381.976 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