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MEMORANDUM OF UNDERSTANDING

Between



National Highways Authority of India (NHAI)

&



Indian Institute of Technology Mandi (IIT Mandi)

for

Collaboration with Institute for Institutional Social Responsibility & Adoption

Of National Highway Stretches under Regional Office, NHAI, Shimla, Himachal Pradesh

10 September, 2020

Regional Offer. NHAI Himaciai Pradesr

Dean SRIC IIT Mandi Kamand - 175005, H.P., India

1. INTENT

National Highways Authority of India (NHAI) intends to associate Indian Institute of Technology Mandi (IIT Mandi) who shall voluntarily contribute its share of experience for betterment of the highway infrastructure.

2. SCOPE OF THE MOU

The primary scope of MOU inter alia includes the following:

- (i) NHAI shall facilitate the faculty, researchers and students of IIT Mandi to familiarize with the latesttrends in the highway/transportation sector with a common objective of sharing the knowledge in their respective domain. This will, in one hand, facilitate to bridge the industry-institution gap and familiarize students with the latest trends in industry and on the other hand the research output could be suitably adopted in practice by NHAI.
- (ii) IIT Mandi shall adopt nearby stretches of national highways (NHs) as specified in the Appendix-1 as a voluntaryinitiative under ambit of Institutional Social Responsibility (ISR). The list of stretches may be modified bydeletion/addition by mutual consent of NHAI and IIT Mandi. The adopted stretch may be used as a field of study for faculty, researchers and students.
- (iii) NHAI shall offer internship to 40 number of undergraduate/postgraduate students of IIT Mandiperiodically and also extend stipend.
- (iv) NHAI shall pay stipend @ `8000/- (Rupees Eight Thousand only) per month for undergraduatestudents and @ `15000/- (Rupees Fifteen Thousand only) per month to Postgraduate students. All otherarrangements shall be responsibility of IIT Mandi. NHAI will extend stay and transportation facility tothe interns within the project jurisdiction on best effort basis.

3. ROLES AND RESPONSIBILITIES

The scope of this MoU shall be carried out in a collaborative mode between NHAI and IIT Mandi. The Roles & Responsibilities of NHAI and the IIT Mandi in performing the defined objective shall be as follows:

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- (i) NHAI shall provide the list of potential candidate National Highway stretches for adopting by IIT Mandi.
- (ii) NHAI shall facilitate availability of relevant data required with specific reference to the abovestretches through its field office/consultant/concessionaire/contractor engaged in the project.

(iii) NHAI will nominate an officer as a point of contact for all correspondence in carrying out the defined objective.

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- (iv) NHAI shall facilitate the faculty, researchers and students of IIT Mandi to give access to thesite of the identified stretch being adopted by IIT Mandi, relevant documents forthepurpose of activities to be carried by these intellectuals of IIT Mandi.
- (v) NHAI through its field office/consultant/concessionaire/contractor engaged in the project, asper reasonable requirement, will disseminate and familiarize the latest trends and know how inhighway/transportation sector in general and the identified project in specific to the authorized faculty, researchers and students of IIT Mandi.
- (vi) NHAI may suitably adopt the research output and feedback received from IIT Mandi in practice for qualitative improvement as deemed fit at appropriate stage of implementation.
- (vii) NHAI may support creation of laboratory infrastructure in IIT Mandi and can sponsor relevantresearch project that helps in using alternative resource material and improving quality of roads.

(viii) The NH stretch adopted can be co-branded with IIT Mandi by NHAI

Indian Institute of Technology Mandi (IIT Mandi)

- A. IIT Mandi may adopt stretch(es) of NHs as specified in the Appendix-1 as a voluntaryinitiative.
- **B.** IIT Mandi through its authorized faculty, researchers and students may carry outinvestigations and give suitable suggestions for improving the efficiency of existinghighway asset inter alia covering one or several of the following aspects:
 - (i) Landslide risk mitigation and developing technologies for early warning systems.
 - (ii) Innovative solutions pertinent to slope stability, retaining structures and other highway-geotechnical issues.
 - (iii) Health monitoring and assessment of highway infrastructure considering local conditions.
 - (iv) Improvements in structural, nonstructural and traffic safety provisions.
 - (v) Studies on socio/environmental/technical aspects for developing new way side amenities and highway related other constructions.
 - (vi) Monitoring and maintenance of highway stretches for improved performance.
 - (vii) Cost effective and innovative solutions for enhancement of traffic flow speed and riding comfort.
 - (viii) Potential solutions to old recurring problems based on local experience etc.
- C. IIT Mandi may also associate with the consultants/NHAI during conceptualization, design and project preparation of new projects and suggest

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the relevant parameters and innovations based onexperience specific to the site climate, topography and resource potential for better socio-economicoutcome,

D. IIT Mandi will nominate a coordinator as a point of contact for all correspondence incarrying out the defined objective as well as inform, from time to time.

4. EFFECTIVE DATE AND PERIOD OF MoU

This MoU shall come into effect for all its intents and purposes from the immediate effect and shall remainvalid for a period of 5 years from the date of signing unless terminated earlier by mutual consent by eitherparty by giving 60 days' notice in writing to the other party.

For Indian Institute of Technology Mandi.

for NHAI

Dean, (SRIC)

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(RO, Himachal Pradesh)

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Witness:

Dr. Sandip Kumar Saha

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Andian Institute of Technology, --Mandi, Kamand (H.P) 175005

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IIT Mandi may adopt the following stretch(es) of NHs as a voluntary initiative under the ambit of Institutional Social Responsibility (ISR).

SI. No.	Details of the Stretch (From Chainage to Chainage)	NH No.	Length (km)	Stage of implementation (completed/under construction/under maintenance/project preparation)	Remarks
1	Balance Work Four for Laning of Kiratpur to Nerchowk section of NH-2I (from km 0+000 to 12+750&km 158+500 to km 182.215excluding Sunder Nagar Bypass)(Pkg-1) in the state of Punjab and Himachal Pradesh.	NH 21	30.66	Under construction	

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2	Balance work for four Laning of Kiratpur to Nerchowk section of NH-21 (from km 12+750 to km26+500, km126+500 to km158+500 including ACC link roadfrom km 0+00 to km 2+003) Greenfield Alignment excluding Sundernagar bypass (package-2)in the state of Himachal Pradesh,	NH 21	47.753	Project preparation
3	Four laning of Nerchowk to Pandoh including Pandoh Bypass Section of NH-21 (Package-1 km 190.000 to km, 221.305) under NHDP- IVBin the State of Himachal Pradeshon EPC basis.	NH 21	26.29	Under construction
4	Four laning of Pandoh Bypass to Takoli Section of NH-2I from km 221.305 to km 242.000 in the State of Himachal Pradesh under NHDP Phase IVB-Package-II to be executed on Hybrid Annuity Mode	NH 21	18.91	Under construction
5	Four Laning of Takoli- Kullu Section of NH-21 from km 242+000to km 272+000 (Total length28.690) in the State of HimachalPradesh under NHDP Phase-IVB on EPC mode.	NH 21	28.69	Under construction
6	Upgradation of Kullu to Manali Section of NH-21 (now NH-3) fromkm 272.000 to km. 309.345 (Designed Chainage) on EPC Mode in the State of Himachal Pradesh under NHDP Phase-IVB.	NH 21	37.345	Provisional completion Certificate issued on Dated 21.10.2019
7	HP/Punjab Border to Mandi sectionof NH-20 (New NH- 154) from km,11.000 to km 208.000 in the stateof Himachal Pradesh.	NH.20 (New NH- 03)	197.00	Under construction

Above list of stretches may be modified by deletion/addition by mutual consent of NHAI and the Technical Institute.

NHAI and the Technical Institute.

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