BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO.523/2025

IN THE MATTER OF:

Bijli Mahadev Mandir Committee …Applicant

Versus

Union of India & Ors. …Respondents

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NDOH - 13.11.2025

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RESPONDENT NO.2

THROUGH

Singhania & Partners LLP
Solicitors & Advocates
P-24, Green Park Extension
New Delhi-110016

Dated: 08.11.2025
Place: New Delhi

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO.523/2025

IN THE MATTER OF:

Bijli Mahadev Mandir Committee ...Applicant

Versus

Union of India & Ors. ...Respondents

REPLY ON BEHALF OF RESPONDENT NO.2/ NATIONAL HIGHWAYS LOGISTICS MANAGEMENT LIMITED (NHLML)

MOST RESPECTFULLY SHOWETH:

1. The present reply is being filed by the Answering Respondent No.2/NHLML pertaining to O.A. No.523/2025 filed by the Applicant seeking urgent intervention of the Hon'ble Tribunal regarding the alleged unchecked felling of trees and ecological destruction due to the construction of the Bijli Mahadev Ropeway project under the Parvatmala National Ropeway Development Programme.

2. At the outset, the Answering Respondent denies each and every averment as stated in the OA as incorrect and false except specifically admitted herein. It is submitted that the present Original Application ("**OA**") has been filed based on the alleged assumption that the Answering Respondent has cut trees without there being any approval/permission and ecological destruction being caused by the ongoing construction of a 2.4 km long ropeway project at Bijli Mahadev, Kharal Valley, Himachal Pradesh, undertaken by the Respondents. The present OA is frivolous and has been filed only based on the assumptions of the Applicant. Thus, the present OA deserves to be dismissed outrightly.

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3. That for the ease of understanding and for the assistance of the Hon'ble Tribunal, the Answering Respondent submits the following:

3.1. In the year 2022, the Government of India introduced the Parvatmala National Ropeway Development Programme to enhance last mile connectivity and aimed to develop over ropeway projects in the country in order to provide an alternative to conventional road projects.

3.2. One of the ropeway projects under aforesaid scheme is the Bijli Mahadev Ropeway Project ("**present project**"). The proposed ropeway project aims to establish connectivity to the Bijli Mahadev Temple in Kullu, which is presently accessible solely by means of a trek of approximately 2.5 km.

3.3. Upon completion, the ropeway shall facilitate access for devotees who are presently unable to undertake the said trek. The implementation of this project shall not only promote inclusivity by enabling wider public access but shall also constitute an environmentally sustainable mode of infrastructure development, duly aligned with the need to preserve the fragile and ecologically sensitive ecosystem of the Western Himalayas.

3.4. On 26.04.2022, a Memorandum of Understanding ("**MoU**") was executed between the State Government ("**RTDC**") and the Answering Respondent for executing the work of the present project. As per the MoU, the RTDC is obligated to provide the land required for the finalized Ropeway Projects and address any Removal and Rehabilitation issues arising there from or related to the Project including payment of compensation; if any; for the finalise ropeway projects and support/facilitate for approvals of statutory clearances and permissions related to State/Central Government. The RTDC is also obligated to assist in physical hand over of land required for

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the development of Ropeway on as-is-where-is basis, to the SPV and facilitating land use conversion, wherever required including environmental and applicable forest clearance. True copy of the MoU dated 26.04.2022 is annexed and marked as **Annexure R-2/1**.

3.5. On 27.04.2022, the Ministry of Environment, Forest and Climate Change ("**MoEF&CC**") exempted the ropeway projects from the Environmental Clearance. True copy of the MoEF&CC's notification dated 27.04.2022 is annexed and marked as **Annexure R-2/2**.

3.6. The Airports Authority of India ("**AAI**") granted certificate/authorization for the revised Height Clearance Certificate vide letters dated 30.05.2023, 09.12.2024 and 16.12.2024. True copies of letters dated 30.05.2023, 09.12.2024 and 16.12.2024 issued by AAI are annexed and marked as **Annexure R-2/3 (Colly)**.

3.7. On 23.01.2024, the Answering Respondent issued Letter of Award to *"M/s Ravi Infrabuild Projects Limited"* for Development, Operation and Maintenance of Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in District Kullu, in the State of Himachal Pradesh. True copy of the Letter of Award dated 23.01.2024 issued by the Answering Respondent is annexed and marked as **Annexure R-2/4**.

3.8. In May 2024, the Answering Respondent entered into a Concession Agreement with M/s Bijli Mahadev Sky Ways Private Limited for executing the present project in District Kullu in the State of Himachal Pradesh on Hybrid Annuity Mode. True copy of the relevant clauses of the Concession Agreement is annexed and marked as **Annexure R-2/5**.

3.9. On 08.07.2024, the MoEF&CC granted in-principle approval ("**Stage-I**") for the diversion of 3.1102 ha of Forest Land in favour of the Answering

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Respondent for development of Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in district Kullu under the jurisdiction of Kullu Forest Division, Dist. Kullu, Himachal Pradesh. True copy of the MoEF&CC's letter dated 08.07.2024 is annexed and marked as **Annexure R-2/6**.

3.10. On 10.07.2024, the DFO Kullu requested the Answering Respondent to deposit the amount in the CAMPA account and the State Government treasury for cost of trees and Statutory Levies i.e. Net Present Value, cost of Compensatory Afforestation including 5% contingency on CA (excluding 17.5% departmental charges). True copy of DFO, Kullu letter dated 10.07.2024 is annexed and marked as **Annexure R-2/7**.

3.11. Pursuant to the in-principle approval granted by MoEF&CC, the following approval/compliances were obtained by the Answering Respondent:

i. On 23.01.2025, the Ropeway & Rapid Transport System Development Corporation ("**RTDC**"), Shimla requested the HDFC Bank for releasing a payment of Rs.51,32,110.00 in the CAMPA, Himachal Pradesh account on account of the cost of Compensatory Afforestation **("CA")**. True copy of the letter dated 23.01.2025 is annexed and marked as **Annexure R-2/8**.

ii. On the same day i.e. 23.01.2025, a cheque bearing no.001938 amounting to Rs.51,32,110 was deposited by the RTDC's bank. True copy of the cheque bearing no.001938 is annexed and marked as **Annexure R-2/9**.

iii. On 23.01.2025, the RTDC intimated the Divisional Forest Officer ("**DFO**"), Kullu a cheque bearing no.001937 has been submitted for Rs.4,24,03,981/- on account of cost of trees and departmental charges for the development of the present project. True copies of the letter

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dated 23.01.2025 along with cheque bearing no.001937 is annexed and marked as **Annexure R-2/10 (Colly)**.

3.12. The DFO, Kullu under FCA Proposal No.FP/HP/Others/418659/2023 notified the list of 203 trees coming under the proposed alignment for felling during the execution of the present project. True copy of the DFO, Kullu notification is annexed and marked as **Annexure R-2/11**.

3.13. The DFO, Kullu intimated the Schedule of Plantation programme for the present project. The DFO, Kullu intimated that a total cost of Rs.21,06,818/- will be necessitated towards CA plantation of 1100 plants/hectare with 10 year of maintenance, the same has been deposited by RTDC along with other statutory levies as mentioned in the preceding paras. True copy of intimation by DFO, Kullu is annexed and marked as **Annexure R-2/12.**

3.14. On 07.03.2025, the Himachal Pradesh Forest Department, Kullu granted permission for cutting of trees and commencement of work to the Answering Respondent for the present project. True copy of the letter dated 07.03.2025 is annexed and marked as **Annexure R-2/13**.

3.15. On 18.06.2025, the Concessionaire gave its consent for cutting/felling of 72 nos. enumerated trees (as per Stage-1 FCA) on self-execution basis in interest of project. True copy of the Concessionaire's letter dated 18.06.2025 is annexed and marked as **Annexure R-2/14.**

3.16. On 23.06.2025, the Himachal Pradesh State Forest Development Corporation allowed the Answering Respondent to start the work of felling of trees & extraction of forest produce, manual carriage and TT upto sale depots in respect of Lot No.1/2026-2027 Kais-III Ropeway from Nature Park Mohal to Bijli Mahadev Temple Kullu Forest Division. True copy of

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the letter dated 23.06.2025 issued by Himachal Pradesh State Forest Development Corporation is annexed and marked as **Annexure R-2/15**.

3.17. On the same day, i.e. 23.06.2025, the Answering Respondent requested the Concessionaire for its consent for self-execution of the felling of trees. The Answering Respondent categorically requested the Concessionaire to carry out the tree felling work as per the standard procedure and guidelines and under the supervision of the Forest Corporation, Kullu. True copy of the letter dated 23.06.2025 issued is annexed and marked as **Annexure R-2/16**.

3.18. On 15.07.2025, the Himachal Pradesh Forest Development Corporation stated that out of 72 trees, 67 trees have been felled, 9 trees are to be cleared and 5 trees are be felled. True copy of the Himachal Pradesh Forest Development Corporation's letter dated 15.07.2025 is annexed and marked as **Annexure R-2/17**.

3.19. On 04.09.2025, the MoEF&CC granted the final approval ("**Stage-II**") to the Answering Respondent for the diversion of 3.1102 ha of Forest Land. True copy of the MoEF&CC's letter dated 04.09.2025 is annexed and marked as **Annexure R-2/18**.

3.20. On 06.10.2025, the Applicant filed the present Original Application before the Hon'ble Tribunal and has alleged that:

a. There has been unchecked illegal felling of trees and ecological destruction by the ongoing construction of the present project.

b. The project has been granted clearances without proper environmental appraisal, carrying capacity studies, or slope stability assessments.

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c. Violation of Forest Rights by the Respondents and the panchayats did not grant no objection certificate.

4. It is submitted that present OA has been filed without there being any document on record and without even verifying the documents available on the public record. The Answering Respondent has duly complied with all the statutory requirements as necessitated for construction of the present project.

5. It is submitted that the averment of the Applicant is dealt hereunder:

5.1. **Felling of unchecked trees by the Respondents and felling of mature deodar trees**

a. The Applicant has alleged that the Respondents have felled unchecked trees for the present project.

b. It is submitted that the said averment is completely baseless, and without any substantiation. The Applicant has not verified the said averment and has only raised bald assertions before the Hon'ble Tribunal. The Answering Respondent has duly been permitted by the Himachal Pradesh Forest Department, Kullu for felling of approved trees. Reliance is placed upon the letter dated 07.03.2025 issued by Himachal Pradesh Forest Department, Kullu.

c. The RTDC has deposited an amount of Rs.4,24,03,981/- on account of cost of trees and departmental charges for the development of the present project and the same has also been intimated to the DFO, Kullu. Reliance is placed upon RTDC's letter dated 23.01.2025.

d. It is pertinent to note that as per the list provided by DFO, Kullu for 203 trees under the Project alignment, there is only one Cedras Deodara which is to be felled. However, as on today, only 67 trees

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have been felled by the Concessionaire. It is submitted that out of 67 trees which has been cut, no deodar tree has been felled by the Concessionaire as evident from the list of tree felling status submitted by the Concessionaire and Forest Corporation communications made to the Answering Respondent during the execution of the Tree Felling work. True copy of the Forest Corporation letter, tree list and tree cutting status as recorded by the Forest Corporation, Kullu as on September 2025 is annexed and marked as **Annexure R-2/19.**

5.2. **Ecological destruction by the ongoing construction of the present project and the clearances without proper environmental appraisal and carrying capacity studies, or slope stability assessments.**

a. In so far as the ecological destruction is concerned, it is submitted that Answering Respondent has given due consideration to the stabilization of rope structures at the stations, considering the prevailing soil conditions and geological parameters. In addition, the Answering Respondent has undertaken an extensive hydrological assessment to evaluate the percolation rate and groundwater modality within the project area.

b. The Answering Respondent through the consultant i.e. JV Bernard – Salzmann has carried out the Feasibility Study for the present project. True copy of the Final Feasibility Report dated 03.07.2023 is annexed and marked as **Annexure R-2/20.**

c. The Answering Respondent has duly obtained the relevant permissions from the Authorities such as MoEF&CC, DFO Kullu for the present project. Reliance is placed upon 30.05.2023, 08.07.2024, 16.12.2024, 09.12.2024, 04.09.2025 and 07.03.2025.

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d. A perusal of the aforementioned reports makes it clear that the Answering Respondent has duly conducted the study and the thereafter the reports were prepared by the Consultant. Thus, the contention of the Applicant is completely baseless and is liable to be rejected.

5.3. **Violation of Forest Rights by the Respondents and no consent or Gram Sabha Resolution/Public Consultation has been obtained prior to diversion of forest land.**

a. The contention of the Applicant is based on clear assumptions without any verification being done. As per the MoEF&CC's notification dated 27.04.2022, the ropeway project has been exempted from obtaining the Environmental Clearances.

b. That in order to complete the process of settlement of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006, various meetings were conducted under the Chairmanship of District Collector, Kullu, District Kullu, Himachal Pradesh for claiming the rights in the Gram Panchayat for the forest land proposed to be diverted in favour of the Answering Respondent. True copies of the proceedings of the meeting of District Level Committee constituted under Schedule Tribes & Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 is annexed and marked as **Annexure R-2/21 (Colly)**.

c. The Applicant has relied upon information obtained under the Right to Information Act, 2005 and has stated that neither did the panchayats granted any NOC for the ropeway project nor for the road to be constructed through the dense forest for construction of Towers. The NOCs of Gram Panchayats for present project have been obtained by

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the District Administration under Forest Rights Act during proceedings held before the District Level Committees.

d. Thus, in view of the aforementioned submissions the contention of the Applicant is liable to be rejected.

PARA-WISE REPLY TO BRIEF FACTS:-

1-4. Contents of paras 1-4 which are matter of record needs no reply.

5-11. Contents of paras 5-11 which are matter of record needs no reply.

12. Contents of para 12 which are matter of record needs no reply. The remaining averments are denied being wrong, misleading. It is submitted that the as on today, there is no road that connects the Temple with the Kullu Town directly. The commercial vehicles plying on the road does not connect the temple. The devotees who wish to travel or visit the temple has to trek from Karate Village. Thus, the averment raised by the Applicant is factually incorrect.

13-14. Contents of paras 13-14 are denied as the same is not related to the present project.

15-16. Contents of paras 15-16 which are matter of record needs no reply. The remaining averments are denied being wrong, misleading.

17. Contents of para 17 are completely false, misleading and hence denied. It is denied that the construction work was started and was being done in an unscientific manner and without taking into consideration the hazards it would cause to the ecology of the area. It is further denied that the Respondents have failed to provide any report on the strength of strata of the area where the pillars are to be constructed. It is submitted that the construction of the present project has started only after the permissions

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were granted by the various Authorities. In so far as the report is concerned, the Answering Respondent has duly obtained the said report from the appointed DPR Consultant i.e. JV Bernard – Salzmann.

18-21. Contents of paras 18-21 to the extent of matter of record needs no reply, the remaining contents are denied being untenable.

22. Contents of para 22 are denied due to it being false, misleading and untenable. It is denied that the work was started without obtaining the statutory requisite permissions including the FCA. It is reiterated that the Answering Respondent has obtained the statutory requisite permissions from the concerned Authorities. The Applicant has made bald submissions without verifying the correct facts.

23. Contents of para 23 are wholly false, misconceived and hence vehemently denied *in toto*. It is denied that the Respondent No.1 in order to circumvent the process of grant of forest clearances has exempted the project from the final forest clearance and deposition of the amount qua Compensatory Afforestation and Net Present Value. It is further denied that the very purpose of the Forest Conservation Act has been made redundant by an exclusive order issued by the Respondent No.1.It is submitted that MoEF&CC has accorded Stage-I Forest Clearance for diversion of Forest Land for the project on 08.07.2024 and after deposition of statutory levies by RTDC on 23.01.2025 and compliance to other conditions Stage-II approval was accorded by MoEF&CC on 04.09.2025. Thus, the averment made by the Applicant is completely misleading.

24. Contents of para 24 are denied as misplaced and misleading. It is denied in totality that the ropeway project will compromise the safety of the temple. The Answering Respondent has given due consideration to the

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stabilization of rope structures at the stations, considering the prevailing soil conditions and geological parameters.

25. Contents of para 25 are false, misconceived and hence denied.

26-27. Contents of paras 26-27 which are matter of record needs no reply, the remaining contents are denied being false and misconceived. It is denied that no help or emergency operational measures were deployed by the Respondents for prevention a catastrophic situation which might be caused due to unscientific felling of trees in order to facilitate the said ropeway project. It is submitted that the trees are being felled after the permission being granted by the Himachal Pradesh Forest Department, Kullu.

28. Contents of para 28 which are matter of record needs no reply, the remaining contents are denied being untenable. It is submitted that the purpose of ropeway projects is extremely useful for improving the connectivity and are an eco-friendly alternative as compared to construction of road which involves considerable forest land.

29. Contents of para 29 are denied as false and misleading. It is denied that due to felling of trees on large scale and developing of cracks in the area there is very likelihood of soil erosion of the land which may endanger not only the lives of the villagers but also become a potent threat to NH-3 from Chandigarh to Mohali. It is submitted that the contents in the para under reply are only bald assertions without there being any document or report on the record. The averment regarding the construction of base for Tower is also incorrect, as no construction work for base of Tower-15 has started as on date. Only Geo-Tech Testing work was carried out, however, due to the protests in July-2025, the work of felling of tree/ logging / transportation was halted by the villagers. In so far as alleged felling of

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NHIDCL

72 mature deodara trees are concerned, the said allegation is completely baseless and unsubstantiated. It is reiterated that as on today, no deodara tree has been felled by the Concessionaire and the list of 72 trees to be felled requires only one deodara tree to be felled.

30. Contents of para 30 are wholly false, misconceived, misleading and hence denied. It is denied that the Respondents have by-passed the provisions of the Forest Rights Act, 2006 and without there being no-objections have been granted by the panchayats the case for the Forest Rights Act were processed. It is denied that the information received under the Right to Information Act, 2005 makes it apparent that neither did the panchayats granted any NOC for the present project nor for the road to be constructed through the dense forest for construction of Towers. It is submitted that the NOCs of Gram Panchayats for present project has been obtained by the District Administration under Forest Rights Act during proceedings held before the District Level Committees.

It is submitted that in order to complete the process of settlement of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006, various meetings were conducted under the Chairmanship of District Collector, Kullu, District Kullu, Himach Pradesh for claiming the rights in the Gram Panchayat for the forest land proposed to be diverted in favour of the Answering Respondent.

31-32. Contents of paras 31-32 are denied as false, misleading and vague. It is denied that the financial viability of the ropeway projects has not been considered at the time of preparation of the Detailed Project Report of the project. The Answering Respondent has duly considered the financial

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viability of the present project and has also obtained the Detailed Project Report from the Consultant.

33. Contents of paras 33 are completely false, misleading and hence denied. It is vehemently denied that permissions and discussions with the Gram Panchayats have not been held as per the FRA. It is denied that the rights of the villagers would be adversely affected by the construction activity in the forest area and felling down of green deodar trees in the area. The contents in the para under reply are repetitive, the submissions made in the preceding paras are being relied upon and the same is not repeated herein for the sake of brevity. It is reiterated that as per the list notified by DFO, Kullu 72 trees were to be felled out of which only 1 deodara tree was required to be cut. Till date, the Concessionaire has cut 67 trees and no deodara trees has been felled.

34-36. Contents of paras 34-36 to the extent of matter of record needs no reply, the remaining contents are denied being untenable.

37. Contents of para 37 are wholly false, untenable and hence denied. It is denied the construction of the project is a potent threat to the lives of people of the area around the temple. It is denied that the statutory permissions have been obtained in a slip-shod manner by by-passing the provisions of the law and with an ulterior motive. It is further denied that the present project is nothing short of a stroll towards the ecological fragility and also undermines the religious beliefs of the people of Kullu Valley. It is submitted that present project is an eco-friendly alternative to the construction of road. That by executing the present project, the Answering Respondent would cut lesser trees as compared to while constructing a road.

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PARAWISE REPLY TO THE GROUNDS:-

A. Contents of para A are wrong, misleading and hence denied. It is reiterated that in order to complete the process of settlement of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006, various meetings were conducted under the Chairmanship of District Collector, Kullu, District Kullu, Himach Pradesh for claiming the rights in the Gram Panchayat for the forest land proposed to be diverted in favour of the Answering Respondent.

B. Contents of para B are completely false, untenable and hence denied. It is submitted that as per the recommendations of the Joint Committee Report, geological and geotechnical investigations for infrastructure projects were recommended, scientific study of different factors of soil/overburden parameters has to be assessed, slope stability and carry capacity study needs to be undertaken. It is reiterated that the Answering Respondent has given due consideration to the stabilization of rope structures at the stations, considering the prevailing soil conditions and geological parameters to ascertain the viability of the project. In addition, the Answering Respondent has also undertaken an extensive Hydrological assessment to evaluate the percolation rate and groundwater modality within the project area.

It is stated that the Geological Study for soil stability parameters have been carried out by the DPR Consultant during Feasibility Study. In addition, the Concessionaire is also carrying out the detailed Geological investigations for final Structural design as required under the Concession Agreement. The Initial Geological Investigation as part of the construction work were carried out by Concessionaire at all locations except Tower-16, 17, 18 locations which were stopped by the Locals

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repeatedly due to which the same is pending till date. The locals have even threatened the workers of dire consequences while the machinery were mobilized for investigations. The further detailed investigations were resumed as required for designing under supervision of the Independent Engineer which were again interrupted due to Locals at Tower locals near T-6-T-7. Reference is made to the Concessionaire's correspondences wherein it has been intimated that the locals are interrupting for execution of the present project. True copies of Concessionaire's letters dated 20.12.2024 and 23.12.2024 is annexed and marked as **Annexure R-2/22 (Colly).**

C. Contents of para C are wholly false, baseless and hence denied. It is reiterated that the trees are being felled after obtaining due permission from the Himachal Pradesh Forest Department, Kullu. Subsequently, the RTDC has deposited an amount of Rs. Rs.4,24,03,981/- on account of cost of trees and departmental charges for the development of the present project.

D-E. Contents of paras D-E are misplaced and hence denied. It is denied that the ropeway project, aimed at mass commercial tourism, violates the cultural rights of local communities. It is further denied that the ropeway project is not an essential facility but a purely commercial venture, whose environmental cost far overweighs any purported benefit. It is reiterated that the project is intended to enhance accessibility to the temple and serve as a means of promoting and preserving the temple's socio-cultural and religious values among devotees who are otherwise unable to undertake the 2.4 km trek to the temple.

6. The Answering Respondent further reserves its right to file additional reply/objection, if required, with the permission of the Hon'ble Tribunal.

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PRAYER

Under the aforesaid circumstances, it is most respectfully prayed that this Hon'ble Tribunal may graciously be pleased to:

a. Dismiss the present original application filed by the Applicant in favour of the Answering Respondent;

b. Direct exemplary costs against the Applicant holding the Original Application to be frivolous and vexatious; and/or

c. Pass such order or further order(s) as this Hon'ble Tribunal may be deemed fit, proper and just under the circumstances of the present case.

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PROJECT OFFICE, KULLU
NHLML

RESPONDENT NO.2

THROUGH

Singhania & Partners LLP
Solicitors & Advocates
P-24, Green Park Extension
New Delhi-110016

Dated: 08.11.2025
Place: New Delhi

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO.523/2025

IN THE MATTER OF:

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AFFIDAVIT

I, Reena Panwar D/o Sh. Hari Ram Panwar aged about 33 years, working as Project Director at NHLML, having office at Project office, Kullu, NHLML, do hereby on solemn affirmation state and submit as under:

1. I say that I am the authorized representative of the Respondent No.2 abovenamed and as such am conversant with the facts and circumstances of the present reply. I have been duly authorized by the Respondent No.2 to initiate and pursue the present proceedings for and on behalf of the Respondent No.2 and hence, I am competent to swear the present affidavit on the basis of the records being maintained by the Respondent No.2 in the ordinary course of its business.
2. I say that the accompanying reply has been drafted by my counsel on my instructions and I have read and understood the contents of the same. The contents of the reply are true and correct, which are reiterated herein and are not being repeated for the sake of brevity.
3. I say that the annexures filed along with the present reply are true copies of their respective originals.

GOPAL KRISHAN SHARMA
NOTARY PUBLIC DIST. KULLU (H.P.)

NOTARIAL GOPAL KRISHAN SHARMA NOTARIAL GOVT. OF INDIA

DEPONENT
PROJECT DIRECTOR
PROJECT OFFICE, KULLU
NHLML

VERIFICATION:

Verified at Kullu, H.P. on this 7th day of November, 2025 that the contents of the above affidavit are true and correct to the best of my knowledge. No part of it is wrong and nothing material has concealed there from.

DEPONENT
PROJECT DIRECTOR
PROJECT OFFICE, KULLU
NHLML

Attested
GOPAL KRISHAN SHARMA
NOTARY PUBLIC DISTT. KULLU (H.P.)

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...that the above ... 7 ... day of ... 2025
... firmation ... Reena Panwar
... Hari Ram Panwar
S/o Sh. ...
And identified by Sh. ...
Certified further that ...
... explained ... the contents to the same to be
and After admitting the contents ...
true and put his signature
Executant/Deponent

Gopal Krishan Sharma
NOTARY PUBLIC
Distt. Kullu (H.P.)

PROJECT DIRECTOR
PROJECT OFFICE, KULLU
NHLML

NOTARY
GOPAL KRISHAN SHARMA
No. 30942
Kullu (H.P.)
OF INDIA

सड़क परिवहन और राजमार्ग मंत्रालय
Ministry of Road Transport & Highways

RTDC
Ropeways and Rapid Transport System Development Corporation HP Ltd.

MEMORANDUM OF UNDERSTANDING

BETWEEN

NATIONAL HIGHWAYS LOGISTICS MANAGEMENT LIMITED

AND

ROPEWAYS & RAPID TRANSPORT SYSTEM DEVELOPMENT CORPORATION H.P. LTD.

(A GOVERNMENT OF HIMACHAL PRADESH UNDERTAKING)

FOR

Development of Ropeways as Innovative Transport Solution in Himachal Pradesh

April 2022

सड़क परिवहन और राजमार्ग मंत्रालय
Ministry of Road Transport & Highways

RTDC
Ropeways and Rapid Transport System Development Corporation HP Ltd.

हिमाचल प्रदेश सरकार

MEMORANDUM OF UNDERSTANDING (MOU)

This Memorandum of Understanding (hereinafter referred to as the **"MOU"**) is entered on 26th day, April, 2022 at New Delhi.

BETWEEN

National Highways Authority of India (NHAI), a statutory authority of the **Ministry of Road Transport and Highways (MoRTH),** having its registered office at G5&6, Sector-10, Dwarka, New Delhi – 110075 herein represented by **National Highways Logistics Management Limited (NHLML)**, a 100% owned SPV (Company) of NHAI and acting through its Chief Executive Officer (unless it be repugnant to the context or meaning thereof, shall mean and include its successors and assigns), of the **First Part.**

AND

Ropeways & Rapid Transport System Development Corporation H.P. Ltd. (RTDC); a Government of Himachal Pradesh ["**GoHP**"] undertaking, incorporated under the Companies Act, 2013 having its registered office at 1112, U.S. Club, Shimla, 171001, Himachal Pradesh, and representing GoHP herein (hereinafter referred to as "**RTDC**", which expression, unless repugnant to the context or meaning thereof, shall mean and include its successors and assigns), through Director RTDC, of the **Second Part**;

(**NHLML**, and **RTDC** shall collectively be referred to as "**Parties**" and individually be referred to as "**Party**" as the case may be)

WHEREAS, this MoU is signed between **NHLML** and **RTDC** to undertake development, implementation, construction, operations and maintenance of identified "**Ropeway Project(s)**" in the hilly State of Himachal Pradesh ("**State**"). The MoU is signed to ensure effective collaboration and co-operation amongst the Parties and to enable expedited implementation of the identified projects.

*For the purpose of this MoU the term "**Ropeway Project's**" or "the term "**Project**" shall mean a Cable Propelled Transit System (or any portion thereof), at the identified and selected location, for the public carriage of passengers, animals or goods and includes all ropes, posts, carriers, stations, office's, warehouse's, workshops, machinery and other*

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works as are used for the purpose of or in connection with all land appurtenant to such transit systems.

NOW, THEREFORE, in consideration of the foregoing, the Parties hereby agree to the following:

1. Purpose:

The purpose of this MoU is to evolve an institutional framework for cooperation between the Parties, wherein each Party shall bring in its expertise and competence with the primary objectives and advocacy on:

i. The passenger ropeway and other innovative transport system would play in decongesting the urban spaces and creating connectivity to tourist locations/remote areas on a stand-alone basis or in providing first/last mile connectivity.
ii. Sustainable and environment friendly development, thereby controlling pollution, minimal land acquisition issues, reducing carbon footprints, etc.
iii. Ensuring that the passenger ropeway and other innovative transport system projects are undertaken with learnings from the global technological advancement made and ensuring highest global safety standards.
iv. Explore various development and implementation models for the identified Project(s) including financing structures through study of different funding options to facilitate construction of new Ropeway Projects in the State of Himachal Pradesh.

NOW, THEREFORE in consideration of the above, the Parties hereto propose to enter into a general framework in the form of this MoU, under which the Parties would seek to co-operate and complement each other's capabilities which are witnessed as follows:

2. Areas of Co-operation:

i. The Parties hereby undertake to provide for the joint development, implementation and construction, operations, management and maintenance of identified Ropeway Project(s) in the hilly State of Himachal Pradesh ("**Project**");
ii The Parties in mutual consultation and co-operation shall plan and organize the development activities, undertake/ cause to be undertaken field studies and surveys, technical investigations, designing and engineering and detailing of the applicable regulatory framework.
iii The Parties shall also co-operate and collaborate using their respective expertise towards understanding, addressing and mitigating the existing challenges, affecting the extent transport system in the State, arising out of or related to geographical limitations, applicable regulations or limited resources etc;
iv It is further the intent of the Parties that this MOU is to ensure effective collaboration and cooperation amongst the Parties for expedited implementation of the Project and explore different funding structures from the options available to facilitate development and construction of new ropeway projects in the State of Himachal Pradesh.

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v It is also the intent of the Parties that the requirement of various statutory provisions under the applicable laws shall be fully complied with in connection with the matters set out in this MOU and towards the same the Parties shall, wherever required and to the extent feasible, provide and extent all possible assistance and co-operation to the other.

vi Special Purpose Vehicle (SPV) shall be formed between the Parties for effective implementation of the identified Ropeway Projects where in the equity capital of the said SPV's shall be contributed by both the Parties, as per the requirement of the project(s), and in such proportion as mutually agreed by the Parties

vii The preferred mode of implementation and the funding structure for the SPV, for example, Design-Build-Operate-Transfer (DBOT), with or without Viability Gap Funding (VGF) or PPP mode through Hybrid Annuity Model (HAM) or EPC etc., shall be evaluated and decided, on case-to-case basis, based on the financial and economic viability of the projects as per mutual agreement between the Parties. The State Government shall first assess the feasibility of implementation through PPP-DBOT. In case, it is not feasible, State Government may then propose other mode of implementation through PPP- HAM or EPC or any other mode.

viii The Parties intend that the planning, development, construction and maintenance of the Ropeway Project(s) identified in the State of Himachal Pradesh shall be a cooperative, mutual endeavor in which the Parties shall actively participate and work together in good faith;

ix The Parties shall jointly and individually, as the context may require provide all reasonable assistance and support to the investors / operators of the Projects in procuring the relevant and necessary approval, permits and licenses, as may be required, from the concerned authorities whether under the control of State Government or Central Government.

3. Implementation of Projects:

i Project wise separate detailed definitive agreements ("**Definitive Agreements**") will be signed between the Parties for development and implementation of the identified Projects. The Definitive Agreements shall, inter-alia, provide for the preferred modalities and options available for the development of the Project, the manner of implementation of the Project, the expected Project cost and its proposed means of financing and the suggested roles and responsibilities of each of the Party to the agreement.

ii Ropeway projects can be implemented on either EPC or PPP mode through Hybrid Annuity Model or Design-Build-Operate-Transfer Model. The State Government may propose the preferred model of implementation / execution depending on the technical, financial feasibility of the Project. The State Government shall in the following order of priority:

a. First assess the feasibility of implementation through PPP-DBOT mode.
b. In case, the said mode is not feasible, State Government may then evaluate

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feasibility of implementation through PPP-HAM.

c. Lastly, it may assess implementation feasibility on EPC.

In view of the above, the following implementation options emanate for the State Government consideration:

(A) PPP-DBOT Model:

1. The State Government may submit their proposal to MoRTH for appraisal & approval containing proposal details, including Pre-feasibility Study, Detailed Project Report and financial feasibility report as per the PPPAC guidelines. NHLML shall be responsible for project prioritization, review and appraisal and submit its report to MoRTH;
2. State Government shall be responsible for the implementation of the concerned Project. State Governments through its agencies shall be responsible to ensure adherence with the guidelines as developed by PPP Cell, Infrastructure division, Department of Economic Affairs (DEA), GOI (https:// www.pppinindia. gov. in/ appraisal – and - approval- mechanisms) ["**Guidelines**"] during Project formulation, seeking appraisal and approval of Central Sector PPP projects, and ensure compliance with the same during implementation of the Project.
3. MoRTH, subject to the eligibility requirements, may approve the Project along with VGF, as required for the PPP projects after due evaluation process as per the Guidelines for Financial Support to Public Private Partnerships in Infrastructure issued by the Department of Economic Affairs, GOI.

The key salient points, as mentioned hereunder, from the Guidelines are highlighted for the attention of the GoHP:

I. the scheme will apply to PPP Projects proposed by the Central Ministries, State Governments and Statutory Authorities, as the case may be, which own the underlying assets.

II. The guidelines also state that the private sector company or the Concessionaire shall be eligible for VGF only if it is selected on the basis of open competitive bidding and is responsible for financing, construction, maintenance and operation of the project during the concession period.

(B) Externally Aided Ropeway Projects (EAP)

1. The State Government wherever decides may propose the Project on EPC model for Externally Aided Project (EAP) funding to Department of Economic Affairs, Ministry of Finance, GoI as per existing guidelines.
2. In such case, the NHLML would get recommended such projects from MoRTH the line Ministry to DEA, MoF Govt of India for approval.
3. GoHP shall procure & implement the Project, (including award of contract to private party through a transparent competitive process) and undertake its implementation through most optimal mode of implementation.
4. For such projects, Tripartite Agreement will be signed between the State Government,

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Department of Economic Affairs and the funding agency.

(C) EPC or PPP-HAM Model with funding from MoRTH:

1. Where the Project is not viable to be taken up on PPP-DBOT basis, the State Government may propose the Project on PPP-HAM or EPC model. The concerned Project may be taken up on PPP-HAM or EPC model based on the Project requirement.
2. In such case, the SPV formed between NHLML and RTDC shall implement the Project and the equity capital shall be contributed by the Parties, based on the requirements of each individual Project and in proportion as mutually agreed between the Parties.
3. GoHP shall cause requisite grant of authorization to the SPV to implement the Project, (including award of concession to private party through a transparent competitive process) and undertake its implementation through most optimal mode of implementation.
4. The SPV shall adopt the MCA and RFP prepared by Ministry of Road Transport & Highways for setting up Passenger Ropeway projects, subject to required and necessary Project specific modifications on case-to-case basis as mutually agreed between the Parties. The MCA shall be required to be approved by the relevant competent authority.

However, there shall be no provision of Viability Gap Funding (VGF) by the Central Ministries/ Authorities for this option.

4. Roles and Responsibilities of NHLML:

I. In case of Option A, i.e., development of Ropeways on PPP-DBOT:

i. NHLML shall be responsible for the screening and prioritization of proposals sent by the GoHP for the development of Ropeway Projects;
ii. NHLML, on behalf of MoRTH, shall act as the appraisal / nodal agency for the development of Ropeway Projects identified by the GoHP;
iii. NHLML shall assist in acquiring Viability Gap Funding (VGF) from the MoRTH, wherever applicable and Project meeting eligibility requirements;
iv. NHLML shall support / facilitate approvals for all relevant clearances, approvals, and permissions related to Central Government

II. In case of Option B, i.e., development of Ropeways as EAP:

i. NHLML, shall act as the appraisal / nodal agency for recommendation of Ropeway Projects (prioritized by the GoHP) to DEA, MoF, Govt of India from MoRTH the line Ministry.
ii. NHLML shall support / facilitate approvals for all relevant clearances, approvals, and permissions related to Central Government

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III. In case of Option C, i.e., development of Ropeways on EPC or PPP-HAM funded by MoRTH:

i. NHLML shall be responsible for the screening and prioritization of proposals sent by the GoHP for the development of Ropeway Projects;
ii. NHLML, on behalf of MoRTH, shall act as the appraisal / nodal agency for the development of Ropeway Projects identified by the GoHP;
iii. NHLML shall act as the lead partner for development of Ropeway Project in the SPV;
iv. NHLML may provide financial support/assistance through, including but not limited to, equity, debt or any other form, in the Project specific SPV, as per individual project specific requirements and as per the mutual agreement between the Parties and prevailing policy guidelines;
v. NHLML shall, on best effort basis, extent required support / facilitate approvals for all relevant clearances, approvals, and permissions related to Central Government
vi. NHLML shall facilitate preparation of the Pre-Feasibility Studies and Detailed Project Reports (DPR) including oversite implementation and operations and maintenance of the Project(s)

5. Roles and Responsibilities of RTDC:

I. In case of Option A, i.e., development of Ropeways on PPP-DBOT:

i. RTDC shall identify and submit proposals including Pre-feasibility Study, Detailed Project Report and financial feasibility report as per the PPPAC guidelines for Ropeways Projects to be executed with financial assistance from Central Government through VGF.

ii. RTDC shall be responsible for procurement, complete, proper and timely implementation and development of the concerned Project(s) though the selected concessionaire, including but not limited to, facilitating site visits, procuring land, procuring necessary clearances/ approvals from the regulatory authorities (both at State and Central level) which are taken as RTDC as 'authority's obligation", conducting road shows and project marketing etc.

iii. RTDC shall follow the Guidelines for formulation, seeking appraisal and approval of Central Sector PPP projects, and ensure compliance to the same for implementation of the Project.

iv. RTDC shall be responsible for selection of concessionaire as per the approved documents by MoRTH through a transparent and competitive process;

v. RTDC shall oversite the implementation, operation and maintenance of the projects.

vi. Assist in physical hand over of land required for the development of Ropeway on as is where is basis, to the implementing concessionaire entity and facilitating land use conversion, wherever required including environmental and applicable forest clearance

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and address any Removal and Rehabilitation issues arising there from or related to the Project including payment of compensation; if any.

II. In case of Option B, i.e., development of Ropeways as Externally Aided Project (EAP):

i. RTDC shall identify and prioritize proposals for Ropeways Projects as EAP funding.
ii. RTDC shall be responsible for complete, proper and timely implementation and development of the concerned Project(s) though the selected concessionaire, including but not limited to, procuring land, procuring necessary clearances/ approvals from the regulatory authorities (both at State and Central level) which are taken over by RTDC as 'authority's obligation.
iii. RTDC shall follow the Guidelines for formulation, seeking appraisal and approval of DEA MoF Govt. of India for projects under bilateral funding and ensure compliance to the same for implementation of the Project. RTDC shall over site the implementation, operation and maintenance of the projects.

III. In case of Option C, i.e., development of Ropeways on EPC or PPP- HAM funded by MoRTH:

i. RTDC shall identify and submit proposals for Ropeways Projects to be executed.
ii. Notification of policy for development of Ropeway Projects in the State of Himachal Pradesh through the concerned department under the GoHP;
iii. Facilitate site visits at the identified locations
iv. Procure and provide the land required for the finalized Ropeway Projects and address any Removal and Rehabilitation issues arising there from or related to the Project including payment of compensation; if any;
v. Procure and provide appropriate land for commercial development to enhance the viability of the Project, wherever the Project is not viable;
vi. Support / facilitate approvals for all relevant clearances, approvals, and permissions related to State / Central Government; Provide financial support/assistance through, including but not limited to, equity (including in form of land), debt, etc. in the SPV, as per individual project specific requirement and as per mutual agreement between the Parties and as per prevailing policy guidelines , Endeavour to make provisions to provide subsidized power for development and operations of the concerned Projects, subject to applicable guidelines;
vii. Assist in physical hand over of land required for the development of Ropeway on as-is-where-is basis, to the SPV and facilitating land use conversion, wherever required including environmental and applicable forest clearance. It is agreed amongst the Parties that the cost of the Project land shall be eligible to be accounted as the State Government's contribution to the equity capital of the Project SPV
viii. Facilitate linking of the Ropeway Project with utility agencies of the State Government viz. electric supply, water supply, etc. It will further facilitate requisite approvals/ clearances from the concerned regulatory authorities in an expeditious manner, subject

to eligibility and approval conditions;

ix. RTDC shall, through the State Government take or cause to be taken such requisite approvals, decisions and actions, as may be required in this regard, to make available and provide, interalia, connections for water and electricity supply, commensurate to the requirements of the Project at concessional rates in terms of the Himachal Pradesh Ropeway Policy ,2021

6. Roles and Responsibilities of SPV:

In case of Option C, i.e., development of Ropeways on EPC or PPP-HAM:

i. The SPV shall carryout a transparent bidding process for the identified Ropeway Project's and conduct a fair review of the collected bids to award the Project

ii. The SPV shall oversee the implementation and operation and maintenance of the concerned Project(s) including but not limited to periodic review of the progress and update of Ropeway Project's

iii. The SPV shall conduct outreach events such as meetings, presentations, workshops, road shows and project marketing etc. with developers and other stakeholders

iv. The SPV will collect all the revenues accruing from the Project including from commercial and associated development and deposit the same in escrow account to be paid out for Project expenses. Any surplus, after meeting Project expenses including the financing cost, the balance shall be paid to shareholders of SPV in proportion to their equity share holding.

7. Costs:

Unless agreed otherwise, each party shall bear its own respective costs (including relating to or arising from any tax and legal advisory and the legal documentation) undertaken in connection with the preparation, execution and delivery, administration, waiver or modification, and enforcement of this MoU.

8. Indemnity:

Each Party shall indemnify, defend and hold the other Party and their directors' officers and duly authorized representatives harmless against any third-party claims, losses, damages and expenses howsoever caused and of whatever kind and nature arising out of any gross and negligent breach of this MoU or with respect to the negligent and willful failure to perform the obligations under this MoU. However, no Party shall be liable or responsible to the other Party for any and all consequential losses or damages, if any, suffered or claim to be suffered.

9. No Partnership:

i. This MOU shall not be construed as a partnership within the meaning of the Indian Partnership Act, 1932 or otherwise, nor shall either of the Parties be construed as an agent of the other.

ii. It is not the intention of the Parties to form a partnership firm or agency relations under this MOU.

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iii. Neither Party shall have any authority to represent or make any commitment on behalf of the other.

10. Confidentiality:

The Parties to the extent of their respective rights to do so, shall exchange such technical information and data as is reasonably required of each Party to perform its responsibilities under this MOU.

Each Party agrees to keep in confidence and to use the same degree of care as it uses with respect to its own proprietary data to prevent the disclosure to third parties of all technical information, data and confidential business information.

11. Arbitration Clause:

In case of any dispute for any provision of this MOU:

Either Party may call upon the Director and Heads of Departments to come together, discuss in arriving at an amicable settlement thereof. Failing mediation by the Director and Heads of Departments, either Party may require such Dispute to be jointly referred to the Chief Secretary, Government of Himachal Pradesh and Secretary, Ministry of Road Transport and Highways, Government of India for amicable settlement.

12. Validity of the MOU:

The validity of this MOU shall be initially for 60 months ("**Term**") from the date of signing of this MOU ("**Effective Date**") and may be further extended with mutual written confirmation.

Either Party may terminate this MoU after providing written notice of at least three (03) months along with reason for such termination to the other Party.

All Definitive Agreements, if any, which would have been signed as reference to this MoU, would need to be either terminated separately in accordance with the terms of the relevant Definitive Agreement's or be allowed to continue to operate independently on the same terms & conditions or subject to such modified terms and conditions as may be mutually agreed to by and between the Parties.

13. Modification/Amendment:

Any modification / amendment of the terms and conditions of this MOU, including any modification of the scope of the services, may only be made, and be effective, through written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification / amendment made by the other Party.

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14. Notice:

Where in this MOU any notice, request, direction or other communication is required to be given or made by any of the Parties, it shall be in writing and will be effective if sent by registered post, by email or delivered in person, as the case may be or at the address mentioned above or to such other addressee as a Party may designate by giving thirty (30) days prior written notice.

15. Operation of MOU:

i. The Parties undertake to act in good faith with respect to each other's rights under this MOU and to adopt all reasonable measures to ensure realization of the objectives of this MOU

ii. The Parties also recognize that it is impractical in this MOU to provide for every contingency which may arise during the life of the MOU, and the Parties hereby agree that it is their intention that this MOU shall operate fairly as between them, and without detriment to the interest of either of them, and that, if during the term of this MOU either Party believes that this MOU is operating unfairly, the Parties will use their best efforts to agree on such action as may be necessary to remove the cause or causes of such unfairness.

IN WITNESS WHERE OF parties hereto set hands, through their authorized representatives on the deed and affixed their seal on date, month and year first above written.

FOR NATIONAL HIGHWAYS LOGISTICS MANAGEMENT LIMITED	**FOR ROPEWAYS & RAPID TRANSPORT SYSTEM DEVELOPMENT CORPORATION H.P. LTD.**
National Highways Logistics Management Ltd. New Delhi **Name: Ravinder** **Title: Chief Operating Officer**	Director Ropeway & Rapid Transport System Development Corporation, Shimla-1 (H.P.) **Name: Ajay Sharma** **Title: Director**
Witness	**Witness**
1) Gaurang	1) MUNISH SAHNI
2)	2)

रजिस्ट्री सं. डी.एल.- 33004/99

REGD. No. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

सी.जी.-डी.एल.-अ.-27042022-235392
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असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 1860] नई दिल्ली, बुधवार, अप्रैल 27, 2022/वैशाख 7, 1944
No. 1860] NEW DELHI, WEDNESDAY, APRIL 27, 2022/VAISAKHA 7, 1944

पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय

अधिसूचना

नई दिल्ली, 27 अप्रैल, 2022

का.आ. 1953(अ).— भारत सरकार के तत्कालीन पर्यावरण और वन मंत्रालय की अधिसूचना सं. का.आ. 1533 (अ) तारीख 14 सितम्बर, 2006 जिसे इसकी अनुसूची (जिसे इसमें इसके पश्चात् उक्त अधिसूचना कहा गया है) के अतंगर्त आने वाली परियोजनाओं जिनमें अनुसूची की मद सं. 7(छ) के अंतर्गत आने वाले आकाशी रज्जू मार्ग भी हैं, के लिए पूर्व पर्यावरणीय अनापत्ति (ईसी) की अपेक्षा के संबंध में भारत के राजपत्र, असाधारण, भाग 2, खंड 3, उपखंड (ii) में प्रकाथित की गई थी;

और मंत्रालय को सड़क परिवहन और राजमार्ग मंत्रालय से अभ्यावेदन प्राप्त हुआ है जिसमें यह कथन किया गया है कि रज्जू मार्ग देश के परिवहन नेटवर्क का महत्वपूर्ण घटक हैं चूंकि पहाड़ी क्षेत्रों में इसका प्रयोग अन्तिम मील संयोजकता और साथ ही गतिशीलता प्रदान करने के लिए किया जा सकता है और इससे पहले इन परियोजनाओं को पर्यावरण अनापत्ति की आवश्यकता केवल वर्ष 2006 में उत्पन्न हुई थी और इससे पहले ये परियोजनाएं पर्यावरण अनापत्ति की अपेक्षा से अपवर्जित की गई थीं । इसके अतिरिक्त, मंत्रालय से अनुरोध किया गया था कि वह उक्त अधिसूचना का पुनर्विलोकन करें और पूर्व पर्यावण अनापत्ति (ईसी) की अपेक्षा करने वाली परियोजनाओं से रज्जू मार्गों को अपवर्जित करे;

और लोक उपयोगी रज्जू मार्गों को पत्र एफ.सं. 5-2/2017–एफसी तारीख 05.08.2019 के अनुसार कतिपय शर्तों के अधीन रहते हुए वन (संरक्षण) अधिनियम, 1980 (1980 का 69) की परिधि से अपवर्जित कर दिया गया है;

और मामला, विचारविमर्श के लिए इस मंत्रालय में अवसंरचना विशेषज्ञ मूल्याकंन समिति को निर्दिष्ट किया गया था। व्यापक विचारविमर्श के पश्चात्, उक्त विशेषज्ञ समिति ने यह सिफारिश की है कि आकाशीय रज्जू मार्ग पहाड़ी क्षेत्रों में परिवहन का पर्यावरण अनुकूल पद्धति है जिसमें सड़कों या राजमार्गों की तुलना में पर्यावरण पर कम से कम समाघात हो और यह सिफारिश की थी कि आकाशीय रज्जूमार्गों परियोजनाओं को समय-समय पर अधिकथित कतिपय पर्यावरण सुरक्षोपायों के अधीन रहते हुए ईआईए अधिसूचना, 2006 की परिधि से अपवर्जित किया जाए;

और पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के खंड (घ) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (1) और उपधारा (2) के खंड (v) के अधीन प्रदत्त शक्तियों का प्रयोग करते हुए पर्यावरण समाघात निर्धारण अधिसूचना 2006 में संशोधन करने के लिए प्रारूप अधिसूचना का.आ.सं. 491 (अ) तारीख 2 फरवरी, 2022 द्वारा प्रकाशित की गई थी जिसमें ऐसे उन सभी व्यक्तियों से जिनकी उससे प्रभावित होने की संभावना थी, उस तारीख से, जिसको उक्त अधिसूचना की राजपत्र की प्रतियां जनता को उपलब्ध करा दी जाती हैं, साठ दिन की अवधि के भीतर आक्षेप और सुझाव आमंत्रित किए गए थे;

और उक्त अधिसूचना की प्रतियां 7 फरवरी, 2022 को जनता को उपलब्ध करा दी गई थीं ;

और उपरोक्त पैरा 5 में उल्लिखित प्रारूप अधिसूचना के उत्तर में प्राप्त सभी आक्षेपों और सुझावों पर केन्द्रीय सरकार द्वारा सम्यक रूप से विचार कर लिया गया है;

अत: अब, केन्द्रीय सरकार, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के खंड (घ) के साथ पठित पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 की उपधारा (1) और उपधारा (2) के खंड (v) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए उक्त अधिसूचना में निम्नलिखित और संशोधन करती है, अर्थात्:--

उक्त अधिसूचना की अनुसूची में, शीर्ष ''पर्यावरण सेवाएं सहित भौतिक अवसंरचना'' के अधीन मद 7(छ) और उससे सबंधित प्रविष्टियों का लोप किया जाएगा।

[फा.सं. आईए-3-22/17/2021-आईए.III]

डॉ. सुजीत कुमार बाजपेयी, संयुक्त सचिव

टिप्पण : मूल अधिसूचना भारत के राजपत्र, संख्या का.आ. 1533(अ), तारीख 14 सितंबर, 2006 में प्रकाशित की गई थी और उसमें अधिसूचना संख्या का.आ. 1886(अ), तारीख 20 अप्रैल, 2022 द्वारा अंतिम बार संशोधन किया गया था।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 27th April, 2022

S.O. 1953(E).—Whereas the notification of the Government of India in the erstwhile Ministry of Environment and Forest number S.O. 1533 (E), dated the 14th September, 2006 was published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii), regarding requirement of prior Environmental Clearance (EC) for the projects covered in its Schedule (hereinafter referred to as the said notification) including aerial ropeways which are covered under item 7(g) of the Schedule;

And whereas, the Ministry is in receipt of representation from Ministry of Road Transport and Highways stating that ropeways are an important component of the transport network of the country as it can be used to provide last mile connectivity as well as mobility in hilly areas and the requirement of environmental clearance for these projects came only in 2006 and before that these projects were excluded from the requirement of Environmental Clearance. Further, the Ministry was requested to review the said notification and to exclude ropeways from the projects requiring prior Environmental Clearance (EC);

And whereas, Public utility ropeways have been excluded from the ambit of the Forest (Conservation) Act, 1980 (69 0f 1980) subject to certain conditions as per letter F. No. 5-2/2017-FC dated 05.08.2019;

And whereas, the matter was referred to the Expert Appraisal Committee of Infrastructure sector in this Ministry for deliberation. After detailed deliberation, the said Expert Committee recommended that aerial ropeway is an environment friendly mode of transport in hilly areas with least impact on environment compared to Roads or Highways and recommended that aerial ropeway projects may be excluded from the ambit of EIA Notification, 2006 subject to certain environmental safeguards laid down from time to time.

And whereas, a draft notification for making amendments in the Environment Impact Assessment Notification, 2006 in exercise of the powers conferred under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 was published, *vide* number S.O. 491(E) dated the 2nd February 2022, inviting objections and suggestions from all the persons likely to be affected thereby, within a period of sixty days from the date on which copies of Gazette containing the said notification were made available to the Public;

And whereas, copies of the said notification were made available to the public on 7th February, 2022;

And whereas, all objections and suggestions received in response to the draft notification mentioned in para 5 above have been duly considered by the Central Government;

Now, therefore, in exercise of powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986) read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendment in the said notification, namely,-

In the Schedule to the said notification, under heading, "Physical Infrastructure including Environmental Services", Item 7(g) and the entries relating thereto shall be omitted.

[F. No. IA3-22/17/2021-IA.III]

Dr. SUJIT KUMAR BAJPAYEE, Jt. Secy.

Note: The principal notification was published in the Gazette of India, *vide*, number S.O. 1533(E), dated the 14th September, 2006 and last amended *vide* the notification number S.O. 1886(E), dated the 20th April, 2022.

Uploaded by Dte. of Printing at Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

National Highways Logistics Management

Date: 30-05-2023

NHAI HQ, G-5 & 6, Sector -10, Dwarka, New Delhi-110075, India

System Generated Auto Assessment for Height Clearance

1. Airports Authority of India (AAI) in pursuance of responsibility conferred by and as per the provisions of Govt. of India (Ministry of Civil Aviation) order GSR 751 (E) dated 30th Sep. 2015 for Safe and Regular Aircraft Operations has assessed the site data filled by the applicant.

2. Assessment details for Height Clearance:

NOC ID :	**KULL/NORTH/B/052423/759698**
Applicant Name*	**Anil Sen**
Site Address*	**Khasra No.- 1 at village Peccha Kandi, Tehsil Kullu, and village Peccha Kandi, Tehsil Kullu, District Kullu, Himachal Pradesh**
Site Coordinates*	**31 55 09.40N 77 07 30.91E, 31 55 06.74N 77 07 32.02E, 31 55 10.03N 77 07 33.34E, 31 55 07.37N 77 07 34.47E**
Site Elevation in mtrs AMSL as submitted by Applicant*	**1133.36 M**
Type Of Structure*	**Building**

*As provided by applicant

Your site is located at a distance 5483 mts from ARP and lies in the grid I12 of the published CCZM of Kullu airport. The Permitted top elevation for this grid is 1169 mts.

Since the requested top elevation 1148.36 mts in AMSL is below CCZM permitted top elevation, the NOC for height clearance is not required from Airports Authority of India.

3. This assessment is subject to the terms and conditions as given below:

a. The site-elevation and site coordinates provided by the applicant are taken for calculation of the permissible top elevation for the proposed structure. If however, at any stage it is established that the actual data is different from the one provided by the applicant, this assessment will become invalid.

b. The Site coordinates as provided by the applicant in the NOC application has been plotted on the street view map and satellite map as shown in ANNEXURE. Applicant/Owner to ensure that the plotted coordinates corresponds to his/her site.In case of any discrepancy,this assessment shall be treated as null and void

c. Airport operator or his designated representative may visit the site (with prior coordination with applicant or owner) to ensure that assessment terms & conditions are complied with.

d. The assessment is further subject to the provisions of Section 9-A of the Indian Aircraft Act, 1934 and any notifications issued there under from time to time including the Aircraft(Demolition of Obstruction caused by Buildings and Trees etc.) Rules,1994.

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भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

e. The applicant is responsible to obtain all other statutory clearances from the concerned authorities including the approval of building plans. This assessment for height is to ensure the safe and regular aircraft operations and shall not be used as document for any other purpose/claim whatsoever, including ownership of land etc.

f. Use of oil, electric or any other fuel which does not create smoke hazard for flight operations is obligatory, within 8 KM of the Aerodrome Reference Point.

g. This assessment has been issued w.r.t. the Civil Airports as notified in GSR 751(E). Applicant needs to seek separate NOC for Defence, if the site lies within jurisdiction of Defence Airport. Applicants also need to seek clearance from state Govt. as applicable, for sites which lies in the jurisdiction of unlicensed civil aerodrome as outlined in Rule 13 of GSR751 (E).

This assessment is system auto generated and thus does not require any signature

Designated Officer

Region Name: NORTH

Address: General Manager Airports Authority of India, Regional Headquarter, Northern Region, Operational Offices, Gurgaon Road, New Delhi-110037

Email ID: noc_nr@aai.aero

Contact No: 011-25653551

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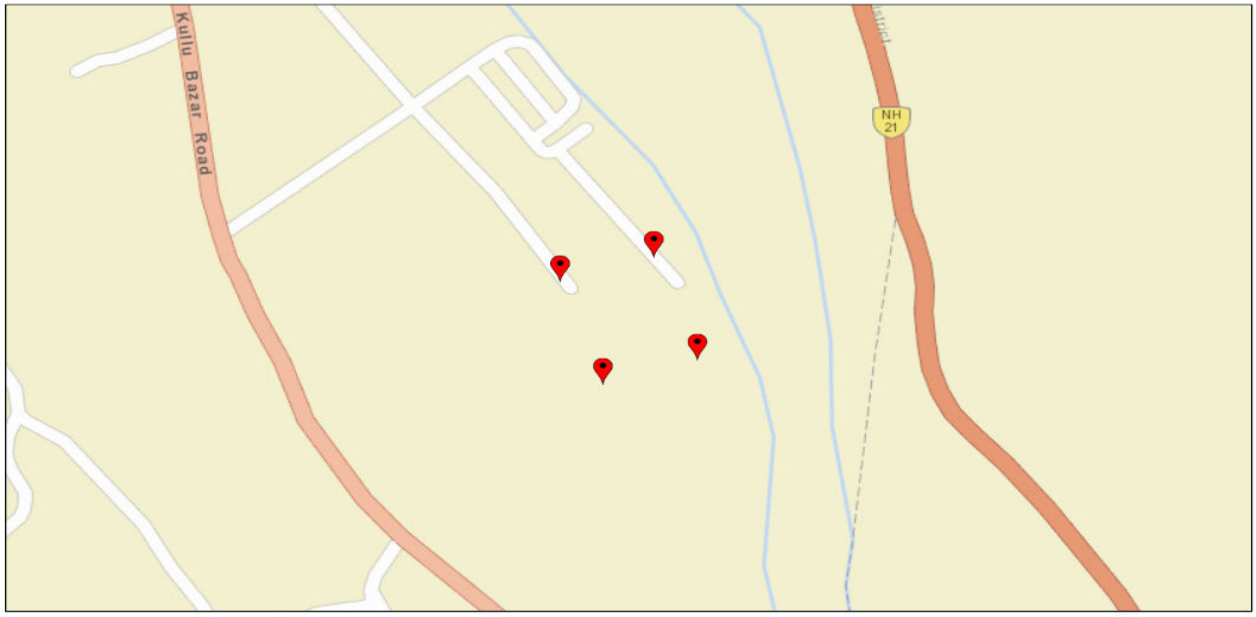
Street View



May 24, 2023

1:3,600
0 0.03 0.05 0.1 mi
0 0.04 0.08 0.16 km

Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI, Esri China (Hong Kong), Esri Korea, Esri (Thailand), NGCC, (c) OpenStreetMap contributors, and the GIS User Community

AAI

Satellite View

May 24, 2023

1:3,600
0 0.03 0.05 0.1 mi
0 0.04 0.08 0.16 km

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

AAI

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

By Speed-Post

File No. ATM-16019/170/2024-ATM-DoAS

Date: 09/12/2024

To,

Regional Executive Director (NR),
Airports Authority of India,
Regional Headquarter Northern Region,
NATS Complex New Delhi -110 037

भारतीय विमानपत्तन प्राधिकरण Airports Authority of India नई दिल्ली-110003 New Delhi-110003 Deptt. of Aerodrome Safeguarding, Corporate Hqrs. एरोड्रोम सेफ्गार्डिंग विभाग, निगमित मुख्यालय

NOCAS ID: KULL/NORTH/B/081623/776770

SUB: Authorization for issuance of revised height clearance

References:

(i) The NOC letter dated 26/10/2023 for **1235.19 M (Restricted) AMSL.**

(ii) Appellant's online appeal application dated 06/06/2024 , to the Appellate Committee constituted by Ministry of Civil Aviation, requesting for height clearance of **2427.47 m AMSL For Hill Station.**

Sir,

On the request of the appellant National Highways Logistics Management,and under the provisions of GSR751 (E), as amended by GSR770 (E), the case file was examined for Shielding Criteria Study. Based on the Shielding Criteria Study report, the Appellate Committee, in its meeting held on 20/11/2024, has authorized to issue the revised height clearance as per following details:

NOC ID	KULL/NORTH/B/081623/776770
Owner Name*	National Highways Logistics Management
Site Address*	Khasra No. 1 at village Peccha kandi, Tehsil Kullu, District Kullu, Himachal Pradesh,pechha Kandi,Kullu,Himachal Pradesh

Building Name*	Coordinates*	Permissible Top Elevation (P.T.E.) Above Mean Sea Level (AMSL)
Hill Station	31 55 35.43N 77 08 55.89E , 31 55 34.78N 77 08 56.18E , 31 55 35.08N 77 08 57.13E , 31 55 34.85N 77 08 57.23E , 31 55 35.09N 77 08 58.02E , 31 55 36.19N 77 08 57.55E , 31 55 35.93N 77 08 56.76E , 31 55 35.73N 77 08 56.84E	2427.47(Two Four Two Seven Decimal Four Seven) meter

*Details as provided by the appellant.

The following additional terms & conditions shall also be included in the NOC:

1. This authorization is issued as per the approval of the Appellate Committee of Ministry of Civil Aviation in its meeting held on 20/11/2024.
2. The permissible top elevation (P.T.E.) being authorized vide this letter is restricted to the coordinates mentioned above.
3. The permissible top elevation (P.T.E.) has been cleared through Shielding Criteria Study and therefore it shall not give shielding benefit to any other structure.
4. The mitigation measures as mentioned under sub Para (a), (b) & (c) shall be adopted to fulfill the requirements of,

   i. A pilot's need to be made aware of potentially hazardous condition; and
   ii. The responsibility of the state to publish deviations from standards that would otherwise be assumed under licensing status.

   a) The Airport Operator should publish the obstacle, to fulfill the above requirement, before its penetration of the Obstacle Limitation Surface. It is the responsibility of the appellant/owner to notify the Airport Operator/Airport

Director accordingly.
b) The day marking and night lighting shall be provided by the appellant/owner as per the guidelines specified in DGCA Civil Aviation Requirement Series B Part-1 Section 4, in co-ordination with and to the satisfaction of the Airport Operator/Airport Director.
c) Any temporary structure such as crane, being used for the purpose of construction, should not exceed the permissible top elevation without the written permission of the Airport Operator/Airport Director.

Please intimate the revised height clearance to the Local Municipal Bodies/Authorities for information and necessary compliance as per Gazette Notification GSR751 (E), as amended by GSR770 (E).

While issuing the revised NOC, reference of this CHQ authorization letter may also be included.

This issues with the approval of the Competent Authority.

"THIS IS NOT AN NOC"

भारतीय विमानपत्तन प्राधिकरण Airports Authority of India
नई दिल्ली-110003 New Delhi-110003
Dept. of Aerodrome Safeguarding, Corporate Hqrs. एयरोड्रोम सेफ्गार्डिंग विभाग, निगमित मुख्यालय

Yours faithfully,

11/12/2024

(Tanvirul Haque)
General Manager (ATM-DoAS)
For Executive Director(ATM)

Copy forwarded via e-mail for information to: -

1. **The General Manager (ATM), Airports Authority of India, Northern Region, Operational Offices, Gurugram Road, New Delhi – 110 037.**
2. **Airport Director, Airports Authority of India, Kullu - Manali Airport Bhuntar-175125 (HP).**
3. **National Highways Logistics Management Limited (NHLML), NHAI HQ, G-5 & 6, Sector -10, Dwarka, New Delhi-110075,**
4. **Guard file**

Prepared by: Ajay Singh, Senior Manager (ATM-DoAS) 11.12.2024

Verified by: V. C. Sinha, Jt.GM (ATM-DoAS) 11/12/2024

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

By Speed-Post

File No. ATM-16019/173/2024-ATM-DoAS

Date: 16/12/2024

To,
Regional Executive Director (NR),
Airports Authority of India,
Regional Headquarter - Northern Region,
NATS Complex New Delhi -110 037

भारतीय विमानपत्तन प्राधिकरण Airports Authority of India नई दिल्ली-110003 New Delhi-110003 Dept. of Aerodrome Safeguarding, Corporate Hqrs. एयरोड्रोम सेफ्गार्डिंग विभाग, निगमित मुख्यालय

NOCAS ID: KULL/NORTH/B/060723/762079

SUB: Authorization for issuance of revised height clearance

References:

1. The NOC letter dated 13/07/2023 for **1228.00 m (Restricted) AMSL.**
2. Appellant's online appeal application dated 06/06/2024, to the Appellate Committee constituted by Ministry of Civil Aviation, requesting for height clearance of **1792.67 m AMSL for Tower T3 to Tower T9.**

Sir,

On the request of the appellant National Highways Logistics Management, and under the provisions of GSR751 (E), as amended by GSR770 (E), the case file was examined for Shielding Criteria Study. Based on the Shielding Criteria Study report, the Appellate Committee, in its meeting held on 20/11/2024, has authorized to issue the revised height clearance as per following details:

NOC ID	KULL/NORTH/B/060723/762079	
Owner Name*	National Highways Logistics Management	
Site Address*	Khasra No.- Tukda no 1 (Part) at village Balah, Tukda no. 1, 2, 3, 4 at village Talogi, Tukda No. 484/203, 423, 478, 480 at village Peecha and Tukda No. 1 at village Peecha kandi, Tehsil Kullu, District Kullu, Himachal Pradesh,pechha Kandi,Kullu,Himachal Pradesh	
Building Name*	**Coordinates***	**Permissible Top Elevation (P.T.E.) Above Mean Sea Level (AMSL)**
Tower T3	31 55 12.10N 77 07 42.82E	1734 (One Seven Three Four) meter
Tower T4	31 55 14.41N 77 07 49.81E	1792.67(One Seven Nine Two Decimal Six Seven) meter
Tower T5	31 55 16.46N 77 07 56.48E	1792.67(One Seven Nine Two Decimal Six Seven) meter
Tower T6	31 55 17.97N 77 08 01.77E	1792.67(One Seven Nine Two Decimal Six Seven) meter
Tower T7	31 55 19.20N 77 08 05.67E	1792.67(One Seven Nine Two Decimal Six Seven) meter
Tower T8	31 55 19.26N 77 08 05.91E	1792.67(One Seven Nine Two Decimal Six Seven) meter
Tower T9	31 55 19.33N 77 08 06.21E	1792.67(One Seven Nine Two Decimal Six Seven) meter

*Details as provided by the appellant.

16/12/2024

राजीव गांधी भवन
Rajiv Gandhi Bhawan
सफदरजंग हवाई अड्डा नई दिल्ली-110003
Safdarjung Airport, New Delhi-110003
दूरभाष : 24632950
Phone : 24632950

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The following additional terms & conditions shall also be included in the NOC:

1. This authorization is issued as per the approval of the Appellate Committee of Ministry of Civil Aviation in its meeting held on 20/11/2024.
2. The permissible top elevation (P.T.E.) being authorized vide this letter is restricted to the coordinates mentioned above.
3. The permissible top elevation (P.T.E.) has been cleared through Shielding Criteria Study and therefore it shall not give shielding benefit to any other structure.
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a) The Airport Operator should publish the obstacle, to fulfill the above requirement, before its penetration of the Obstacle Limitation Surface. It is the responsibility of the appellant/owner to notify the Airport Operator/Airport Director accordingly.

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Please intimate the revised height clearance to the Local Municipal Bodies/Authorities for information and necessary compliance as per Gazette Notification GSR751 (E), as amended by GSR770 (E).

While issuing the revised NOC, reference of this CHQ authorization letter may also be included.

This issues with the approval of the Competent Authority.

"THIS IS NOT AN NOC"

भारतीय विमानपत्तन प्राधिकरण Airports Authority of India
नई दिल्ली-110003 New Delhi-110003
Deptt. of Aerodrome Safeguarding, Corporate Hqrs. एरोड्रोम सेफगार्डिंग विभाग, निगमित मुख्यालय

Yours faithfully,

16/12/2024

(Tanvirul Haque)
General Manager (ATM-DoAS)
For Executive Director (ATM)

Copy forwarded via e-mail for information to: -

1. General Manager (ATM), Airports Authority of India, Northern Region, Operational Offices, Gurugram Road, New Delhi – 110 037.
2. Airport Director, Airports Authority of India, Kullu - Manali Airport Bhuntar-175125 (HP).
3. National Highways Logistics Management Limited(NHLML), NHAI HQ, G-5&6, Sector-10,Dwarka,New Delhi-110075
4. Guard file.

Ajay Singh 16.12.2024

Prepared by: Ajay Singh, Senior Manager (ATM-DoAS)

V. C. Sinha 16/12/2024

Verified by: V. C. Sinha, Jt.GM (ATM-DoAS)

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

By Speed-Post

File No. ATM-16019/172/2024-ATM-DoAS

Date: 16/12/2024

To,
Regional Executive Director (NR),
Airports Authority of India,
Regional Headquarter - Northern Region,
NATS Complex New Delhi -110 037

भारतीय विमानपत्तन प्राधिकरण Airports Authority of India
नई दिल्ली-110003 New Delhi-110003
Dept. of Aerodrome Safeguarding, Corporate Hqrs. एयरोड्रोम सेफगार्डिंग विभाग, निगमित मुख्यालय

NOCAS ID: KULL/NORTH/B/060723/762080

SUB: Authorization for issuance of revised height clearance

References:

1. The NOC letter dated 13/07/2023 for **1228.51 m (Restricted) AMSL**.
2. Appellant's online appeal application dated 06/06/2024, to the Appellate Committee constituted by Ministry of Civil Aviation, requesting for height clearance of **2411.36 m AMSL for Tower T10 to Tower T18.**

Sir,
On the request of the appellant National Highways Logistics Management, and under the provisions of GSR751 (E), as amended by GSR770 (E), the case file was examined for Shielding Criteria Study. Based on the Shielding Criteria Study report, the Appellate Committee, in its meeting held on 20/11/2024, has authorized to issue the revised height clearance as per following details:

NOC ID	KULL/NORTH/B/060723/762080	
Owner Name*	National Highways Logistics Management	
Site Address*	Khasra No.- 423, 478, 480 at village Peccha and Khasra No. 1 at village Peccha kandi, Tehsil Kullu, District Kullu, Himachal Pradesh,pechha Kandi,Kullu,Himachal Pradesh	
Building Name*	**Coordinates***	**Permissible Top Elevation (P.T.E.) Above Mean Sea Level (AMSL)**
Tower T10	31 55 23.52N 77 08 19.27E	2259 (Two Two Five Nine) meter
Tower T11	31 55 25.43N 77 08 25.40E	2309 (Two Three Zero Nine) meter
Tower T12	31 55 27.60N 77 08 32.44E	2384 (Two Three Eight Four) meter
Tower T13	31 55 31.05N 77 08 43.18E	2411.36 (Two Four One One Decimal Three Six) meter
Tower T14	31 55 32.04N 77 08 46.32E	2411.36 (Two Four One One Decimal Three Six) meter
Tower T15	31 55 32.84N 77 08 48.84E	2411.36 (Two Four One One Decimal Three Six) meter
Tower T16	31 55 33.67N 77 08 51.47E	2411.36 (Two Four One One Decimal Three Six) meter
Tower T17	31 55 34.65N 77 08 54.58E	2411.36 (Two Four One One Decimal Three Six) meter
Tower T18	31 55 34.98N 77 08 55.45E	2411.36 (Two Four One One Decimal Three Six) meter

*Details as provided by the appellant.

Dhoot 16/12/2024

The following additional terms & conditions shall also be included in the NOC:

1. This authorization is issued as per the approval of the Appellate Committee of Ministry of Civil Aviation in its meeting held on 20/11/2024.
2. The permissible top elevation (P.T.E.) being authorized vide this letter is restricted to the coordinates mentioned above.

राजीव गांधी भवन
Rajiv Gandhi Bhawan
सफदरजंग हवाई अड्डा नई दिल्ली-110003
Safdarjung Airport, New Delhi-110003
दूरभाष : 24632950
Phone : 24632950

3. The permissible top elevation (P.T.E.) has been cleared through Shielding Criteria Study and therefore it shall not give shielding benefit to any other structure.
4. The mitigation measures as mentioned under sub Para (a), (b) & (c) shall be adopted to fulfill the requirements of,
   i. A pilot's need to be made aware of potentially hazardous condition; and
   ii. The responsibility of the state to publish deviations from standards that would otherwise be assumed under licensing status.

a) The Airport Operator should publish the obstacle, to fulfill the above requirement, before its penetration of the Obstacle Limitation Surface. It is the responsibility of the appellant/owner to notify the Airport Operator/Airport Director accordingly.
b) The day marking and night lighting shall be provided by the appellant/owner as per the guidelines specified in DGCA Civil Aviation Requirement Series B Part-1 Section 4, in co-ordination with and to the satisfaction of the Airport Operator/Airport Director.
c) Any temporary structure such as crane, being used for the purpose of construction, should not exceed the permissible top elevation without the written permission of the Airport Operator/Airport Director.

Please intimate the revised height clearance to the Local Municipal Bodies/Authorities for information and necessary compliance as per Gazette Notification GSR751 (E), as amended by GSR770 (E).

While issuing the revised NOC, reference of this CHQ authorization letter may also be included.

This issues with the approval of the Competent Authority.

"THIS IS NOT AN NOC"

भारतीय विमानपत्तन प्राधिकरण Airports Authority of India
नई दिल्ली-110003 New Delhi-110003
Deptt. of Aerodrome Safeguarding, Corporate Hqrs. एयरोड्रोम सेफगार्डिंग विभाग, निगमित मुख्यालय

Yours faithfully,

16/12/2024

(Tanvirul Haque)
General Manager (ATM-DoAS)
For Executive Director (ATM)

Copy forwarded via e-mail for information to: -

1. General Manager (ATM), Airports Authority of India, Northern Region, Operational Offices, Gurugram Road, New Delhi – 110 037.
2. Airport Director, Airports Authority of India, Kullu - Manali Airport Bhuntar-175125 (HP).
3. National Highways Logistics Management Limited(NHLML), NHAI HQ, G-5&6, Sector-10,Dwarka,New Delhi-110075
4. Guard file.

Ajay Singh 16.12.2024

Prepared by: Ajay Singh, Senior Manager (ATM-DoAS)

V. C. Sinha 16/12/2024

Verified by: V. C. Sinha, Jt.GM (ATM-DoAS)

नेशनल हाइवेज़ लोजिस्टिक्स मैनेजमेंट लिमिटेड
National Highways Logistics Management Limited
(100% owned by NHAI)
(Under Ministry of Road Transport and Highways)

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Duplicate

NHLML/Ropeway/Bijli Mahadev/(E-179510)/2492

Dated 23.01.2024

To,

M/s Ravi Infrabuild Projects Limited
95, Hiran Magri,
Sector 11, Udaipur (Raj.) - 313001
Email: info@raviinfra.com

Kind Attention: Mr. J.S Rathore (GM. Business Development)

Sub: Development Operation and Maintenance of Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in District Kullu in Himachal Pradesh on HAM - **Letter of Award - Reg.**

Ref: Your bid submitted on 13.04.2023 for subject project.

Sir,

This is to notify that based on your bid submitted for the subject project, your offer of Bid Project Cost as Rs.272 Crore (Rupees Two Hundred Seventy Two Crore Only) excluding GST, First Year Fixed O&M Cost as Rs.0.50 Crore (Rupees Fifty Lakh Only) excluding GST, First Year Variable O&M Cost as Rs.0.435 Crores (Rupees Forty Three Lakh Fifty Thousand Only) excluding GST @ 1000 passengers per day, Capacity Augmentation cost for 5th (fifth) year from COD of Rs.1.0 Crore (Rupees One Crore Only) excluding GST and Capacity Augmentation Cost for 10th (tenth) year from COD of Rs.1.0 Crore (Rupees One Crore Only) excluding GST is hereby accepted by NHLML and you are hereby declared as the "Selected Bidder" as per provision of Clause 3.8.1 of RFP Document. Accordingly, this letter of Award (LOA) is being issued, in duplicate, to you in terms of clause 3.8.4 of the RFP.

2. In this regard, you are requested to ensure the following within stipulated time:

(ix) To sign and return the duplicate copy of the LOA in acknowledgement thereof within 7 (seven) days of receipt of LOA pursuant to Clause 3.8.4 of the RFP.

(x) To execute the Concession Agreement within 45 days from issue of LOA pursuant to Clause 1.3 of RFP and Recital (D) of draft Concession Agreement.

(xi) To promote and incorporate the Concessionaire as a limited liability company under the Companies Act 2013 and as the entity which shall undertake and perform the obligations and exercise the rights of the selected Bidder under the LOA, including the obligation to enter into the Concession Agreement pursuant to the LOA for executing the Project pursuant to Recital (E) of draft Concession Agreement.

(xii) The Concessionaire shall, for the performance of its obligations under Concession Agreement, provide to the Authority no later than 30 (thirty) days from the date of the agreement, an irrevocable and unconditional guarantee from a Bank for a sum equivalent to 3 (three) percent of bid project cost quoted by you in the form set forth in Schedule-F (the "Performance Security") pursuant to Clause 9.1.1. of draft Concession Agreement.

For: RAVI INFRABUILD PROJECTS LIMITED

GM-Business Development

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Annexure R-2/5

National Highways Logistics Management Limited

100% owned SPV of NHAI

for

Development, Operation and Maintenance of Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in District Kullu in the State of Himachal Pradesh on Hybrid Annuity Mode.

between

National Highways Logistics Management Limited
G-5&6, Sector-10, Dwarka, New Delhi 110 075

and

M/s Bijli Mahadev Sky Ways Private Limited
95-Sector No. 11, Hiran Magri, Udaipur City,
Girwa, Udaipur- 313001, Rajasthan

VOLUME-I

CONCESSION AGREEMENT

May 2024

National Highways Logistics Management Ltd. New Delhi

BIJLI MAHADEV SKY WAYS PRIVATE LIMITED

ARTICLE 2

SCOPE OF THE PROJECT

2.1 Scope of the Project

The scope of the Project (the **"Scope of the Project"**) shall mean and include, during the Concession Period:

(a) construction of the Project (including the Capacity Augmentation, in terms of this Agreement) on the Site set forth in Schedule-A and as specified in Schedule-B together with provision of Project Facilities as specified in Schedule-C, and in conformity with the Specifications and Standards set forth in Schedule-D;

(b) operation and maintenance of the Project in accordance with the provisions of this Agreement;

(c) performance and fulfillment of all other obligations of the Concessionaire in accordance with the provisions of this Agreement and matters incidental thereto or necessary for the performance of any or all of the obligations of the Concessionaire under this Agreement;

ARTICLE 3

GRANT OF CONCESSION

3.1 The Concession

3.1.1 Subject to and in accordance with the provisions of this Agreement, Applicable Laws and Applicable Permits, the Authority hereby grants to the Concessionaire the concession set forth herein including the exclusive right, license and authority to construct, operate and maintain the Project (the "**Concession**") during period of:

(i) 730 days from the Appointed Date, i.e., Construction Period; and

(ii) Operation Period of 15 (Fifteen) years commencing from COD,

and the Concessionaire hereby accepts the Concession and agrees to implement the Project subject to and in accordance with the terms and conditions set forth herein (i) and (ii) collectively referred to as the "**Concession Period**")

3.1.2 Subject to and in accordance with the provisions of this Agreement, the Concession hereby granted shall oblige or entitle (as the case may be) the Concessionaire to:

(a) Right of Way, access and license to the Site for the purpose of and to the extent conferred by the provisions of this Agreement;

(b) finance and construct the Project;

(c) manage, operate and maintain the Project and regulate the use thereof by third parties, wherever applicable;

(d) perform and fulfill all of the Concessionaire's obligations under and in accordance with this Agreement;

(e) to let out on lease or license or on franchise basis any portion of the built up space at the Terminal Stations, subject to terms of this Agreement, for commercial use in consonance with the terms of this Agreement and for duration which shall always be conterminous with this Agreement;

(f) undertake and implement the augmentation of the Project in accordance with Schedule "B" and terms and conditions of this Agreement;

(g) save as otherwise expressly provided in this Agreement, bear and pay all costs, expenses and charges in connection with or incidental to the performance of the obligations of the Concessionaire under this Agreement; and

(h) neither assign, transfer or sublet or create any lien or encumbrance on this Agreement, or the Concession hereby granted or on the whole or any part of the Project nor transfer, lease or part possession thereof, save and except as expressly permitted by this Agreement or the Substitution Agreement.

(i) Appoint Sub-contractors on its behalf, to the extent permissible in terms hereof, to assist the Concessionaire in fulfilling its obligations in relation to the Project;

(j) Hand over the Project and the Project Assets, including the land, if any, owned by the Concessionaire and related to the operations and maintenance of the Project to the Authority or its nominated agency on the Transfer Date;

BULLI MAHADEV SKY WAYS PRIVATE LIMITED

3.2. Actions in Support of Concession

(a) The Authority accepts and agrees that the route alignment of the aerial Ropeway, fixed on the basis of topographical & engineering surveys at Lower Terminal Point (LTP), Intermediate stations and Upper Terminal Point (UTP) specified in Schedule - B, forms the basic core of the Project and agrees and undertakes not to change it in any manner whatsoever during the term of this Agreement, including extension thereof, if any, unless in exceptional scenarios wherein the alignment needs to be changed considering the safety aspect / statutory requirement

(b) The Authority acknowledges that the location of the total Project Area is of fundamental importance to the Project and agrees that that the same shall not be changed during the Concession Period.

(c) The Authority shall maintain / caused to be maintained the approach roads, as defined under the terms of this Agreement, to the Project Area and to keep the roads open throughout the year on a best effort basis

(d) The Authority shall render such assistance to the Concessionaire as may be reasonable and feasible for the Authority or the State Government, from time to time, for availing of formal permissions & approvals for completion of formalities relating to the Project, however the sole responsibility and obligation for obtaining and maintaining all required permissions and approvals shall be of the Concessionaire alone.

In consideration of the mutual covenants by the Authority and other good and valuable consideration expressed herein, the Concessionaire hereby accepts the Concession and agrees and undertakes to implement the Project / provide facilities and to perform/ discharge all of its obligations in accordance with the provisions hereof.

ARTICLE 4

CONDITIONS PRECEDENT

4.1 Conditions Precedent

4.1.1 Save and except as expressly provided in Articles 4, 5, 6, 7, 8, 9, 10, 22, 28,38 and 41, or unless the context otherwise requires, the respective rights and obligations of the Parties under this Agreement shall be subject to the satisfaction in full of the conditions precedent specified in this Clause 4.1 (the "**Conditions Precedent**").

4.1.2 The Concessionaire may, upon providing the Performance Security along with Additional Performance Security (if required in terms of this Agreement) to the Authority in accordance with Article 9, at any time after 30 (thirty) days from the date of this Agreement or on an earlier day acceptable to the Authority, by notice require the Authority to satisfy all of the Conditions Precedent set forth in this Clause 4.1.2 within a period of 150 (one hundred and fifty) days thereafter. The Conditions Precedent required to be satisfied by the Authority shall be deemed to have been fulfilled when the Authority shall have:

(a) procured for the Concessionaire the Right of Way to the Site in accordance with the provisions of Clauses 10.3.1 and 10.3.2;

(b) procured all Applicable Permits relating to environmental protection, and conservation in respect land forming part of the Right of Way under Clause 10.3.1 and 10.3.2;

(c) procured forest clearance for and in respect land forming part of the Right of Way under Clause 10.3.1 and 10.3.2, save and except permission for cutting trees; and

(d) procured wildlife clearances, wherever applicable;

Provided that the Authority shall be entitled to an additional period, not exceeding 90 (ninety) days beyond the period of 150 days without being liable for payment of any damages, for fulfillment of the Conditions Precedent set forth in this Clause.

4.1.3 The Conditions Precedent required to be satisfied by the Concessionaire within a period of 150 (one hundred and fifty) days from the date of this Agreement shall be deemed to have been fulfilled when the Concessionaire shall have:

(a) provided Performance Security to the Authority along with the Additional Performance Security, if required in terms of Clause 9.1 and Clause 9.6 of this Agreement. For the avoidance of doubt it is clarified and agreed that the Concessionaire is required to provide the Performance Security and the Additional Performance Security, if required, within 30 days of signing of this Agreement;

(b) executed and procured execution of the Escrow Agreement;

(c) executed and procured execution of the Substitution Agreement;

(d) procured all the Applicable Permits specified in Schedule-E unconditionally or if subject to conditions, then all such conditions required to be fulfilled by the date specified therein shall have been satisfied in full and such Applicable Permits are in full force and effect;

(e) executed the Financing Agreements and delivered to the Authority 3 (three) true copies thereof along with a soft copy, duly attested by a Director of the Concessionaire;

(f) delivered to the Authority 3 (three) true copies of the Financial Package and the Financial Model, duly attested by a Director of the Concessionaire, along with 3 (three) soft copies of the Financial Model in MS Excel version or any substitute thereof, which is acceptable to the Senior Lenders; and

(g) delivered to the Authority {from the Consortium Members, their respective} confirmation of the correctness of the representations and warranties set forth in Sub-clauses (k), (l) and (o) of Clause 7.1 of this Agreement;

(h) delivered to the Authority a legal opinion from the legal counsel of the Concessionaire with respect to the authority of the Concessionaire to enter into this Agreement and the enforceability of the provisions thereof;

Provided that upon request in writing by the Concessionaire along with detailed reasons, the Authority may, in its sole and absolute discretion, waive any of the Conditions Precedent set forth in this Clause 4.1.3. For the avoidance of doubt, the Authority may, in its sole discretion, grant any waiver hereunder with such conditions, restrictions and subject to such undertakings from Concessionaire as it may deem fit

4.1.4 Each Party shall make all reasonable endeavors to satisfy the Conditions Precedent within the time stipulated and shall provide the other Party with such reasonable cooperation as may be required to assist that Party in satisfying the Conditions Precedent for which that Party is responsible. Subject only to payment of Damages, it is agreed between the Parties that the obligation to fulfill each parties' Conditions Precedent is an independent obligation of the respective Party.

4.1.5 The Parties shall notify each other in writing at least once a month on the progress made in satisfying the Conditions Precedent. Each Party shall promptly inform the other Party when any Condition Precedent for which it is responsible has been satisfied.

4.2 Damages for delay by the Authority

In the event that (i) the Authority does not procure fulfillment of any or all of the Conditions Precedent set forth in Clause 4.1.2 within the period specified in respect thereof, and (ii) the delay has not occurred as a result of breach of this Agreement by the Concessionaire or due to Force Majeure, the Authority shall pay to the Concessionaire Damages in an amount calculated at the rate of 0.2% (zero point two per cent) of the Performance Security for each day's delay until the fulfillment of such Conditions Precedent, subject to the maximum limit equal to the amount of 1% of the Estimated Project Cost as mentioned in the RFP and upon reaching such limit, the Concessionaire may, in its sole discretion terminate the Agreement. The Damages payable hereunder shall be the sole remedy available to the Concessionaire for delay by the Authority.

Provided further that in the event of delay by the Concessionaire in procuring fulfillment of the Conditions Precedent specified in Clause 4.1.3, no Damages shall be due or payable by the Authority under this Clause 4.2 until the date on which the

BIJLI MAHADEV SKY WAYS PRIVATE LIMITED

Concessionaire shall have procured fulfillment of the Conditions Precedent specified in Clause 4.1.3.

4.3 Damages for delay by the Concessionaire

In the event that (i) the Concessionaire does not procure fulfillment of any or all of the Conditions Precedent set forth in Clause 4.1.3 within the period specified in respect thereof, and (ii) the delay has not occurred as a result of failure to fulfill the obligations under Clause 4.1.2 or other breach of this Agreement by the Authority, or due to Force Majeure, the Concessionaire shall pay to the Authority Damages in an amount calculated at the rate of 0.3% (zero point three per cent) of the Performance Security for each day's delay until the fulfillment of such Conditions Precedent. Provided, however, that the Damages payable hereunder shall be subject to the maximum limit equal to the amount of 1% of the Estimated Project Cost as mentioned in the RFP and upon reaching such limit, the Authority may, in its sole discretion and subject to the provisions of Clause 9.2, terminate the Agreement. Provided further that in the event of delay by the Authority in procuring fulfillment of the Conditions Precedent specified in Clause 4.1.2, no Damages shall be due or payable by the Concessionaire under this Clause 4.3 until the date on which the Authority shall have procured fulfillment of the Conditions Precedent specified in Clause 4.1.2.

4.4 Commencement of Concession Period

The date on which Financial Close is achieved and all the Conditions Precedent specified in Clause 4.1 are satisfied shall be the Appointed Date which shall be the date of commencement of the Concession Period. For the avoidance of doubt, the Parties agree that the Concessionaire may, upon occurrence of the Appointed Date hereunder, by notice convey the particulars thereof to the Authority, and shall thereupon be entitled to commence construction on the Project.

4.5 Deemed Termination upon delay

Without prejudice to the provisions of Clauses 4.2 and 4.3, and subject to the provisions of Clause 9.2, the Parties expressly agree that in the event the Appointed Date does not occur, for any reason whatsoever, before the 1st (first) anniversary of the date of this Agreement or the extended period provided in accordance with this Agreement, all rights, privileges, claims and entitlements of the Concessionaire under or arising out of this Agreement shall be deemed to have been waived by, and to have ceased with the concurrence of the Concessionaire, and the Concession Agreement shall be deemed to have been terminated by mutual agreement of the Parties.

Provided, however, that in the event the non-occurrence of the Appointed Date is for reasons attributable to the Concessionaire (including for reasons under clause 4.3 above), the Performance Security and the Additional Performance Security, if any, of the Concessionaire shall be encashed and appropriated by the Authority as Damages thereof.

ARTICLE 5

OBLIGATIONS OF THE CONCESSIONAIRE

5.1 Obligations of the Concessionaire

5.1.1 Subject to and on the terms and conditions of this Agreement, the Concessionaire shall, at its own cost and expense, procure finance for and undertake the design, engineering, procurement, construction, operation and maintenance of the Project and observe, fulfill, comply with and perform all its obligations set out in this Agreement or arising hereunder.

5.1.2 The Concessionaire shall comply with all Applicable Laws and Applicable Permits (including renewals as required) in the performance of its obligations under this Agreement.

5.1.3 Save and except as otherwise provided in this Agreement or Applicable Laws, as the case may be, the Concessionaire shall, in discharge of all its obligations under this Agreement, conform with and adhere to Good Industry Practice at all times.

5.1.4 The Concessionaire shall, at its own cost and expense, in addition to and not in derogation of its obligations elsewhere set out in this Agreement:

(a) make, or cause to be made, necessary applications to the relevant Government Instrumentalities with such particulars and details as may be required for obtaining Applicable Permits, other than those set forth in Clause 4.1.2, and obtain and keep in force and effect such Applicable Permits in conformity with Applicable Laws;

(b) submit a detailed Project construction completion schedule with clearly defined milestones, construction methodology and technology proposed to be deployed along with capacity augmentation details (in terms of this Agreement) to the Authority on or before the Appointed Date. However the Authority upon written request from the Concessionaire may allow the Concessionaire, subject to such terms and conditions as it specify, submission of detailed completion schedule later than the Appointed Date but not later than 60 days from the Appointed Date, in any case;

(c) procure, as required, the appropriate proprietary rights, licenses, agreements and permissions for materials, methods, processes, know-how and systems used or incorporated into the Project;

(d) perform and fulfill its obligations under the Financing Agreements;

(e) make reasonable efforts to maintain harmony and good industrial relations among the personnel employed by it or its Contractors in connection with the performance of its obligations under this Agreement;

(f) upon written request from the Authority, make reasonable efforts to facilitate the acquisition of land and procuring of environmental and forest clearances required for the purposes of the Agreement;

(g) ensure and procure that its Contractors comply with all Applicable Permits and Applicable Laws in the performance by them of any of the Concessionaire's obligations under this Agreement;

(h) In implementing the Project, the Concessionaire shall ensure compliance by itself and Persons claiming through or under it with all Applicable Laws, including environmental laws and laws relating to pollution, and the terms of Applicable Permits and the Concessionaire shall be entirely liable for any violations or breaches thereof and indemnify and keep indemnified the Authority from and against all liabilities and costs in this behalf

(i) always act in a manner consistent with the provisions of this Agreement and not cause or fail to do any act, deed or thing, whether intentionally or otherwise, which may in any manner be violative of any of the provisions of this Agreement;

(j) perform and fulfill its obligations under the Financing Agreements;

(k) procure that all facilities and amenities within the Project are operated and maintained in accordance with Good Industry Practice and the Users have non-discriminatory access for use of the same;

(l) design, construct, operate and maintain the Ropeway System considering operations for the entire year, unless the Authority explicitly directs the Concessionaire to design the Ropeway System considering a fixed operations period, i.e., months in which the Ropeway System shall remain functional and a fixed duration of operation, i.e., number of hours of operation per day;

(m) support, assist, cooperate with and facilitate the Authority in the implementation and operation of the Project in accordance with the provisions of this Agreement including securing full and complete compliance with directives & guidelines issued by the Authority / State Government of Himachal Pradesh or any other authority having jurisdiction in the matter relating to the directives & guidelines issued; and

(n) transfer the Project to the Authority upon Termination of this Agreement, in accordance with the provisions of this Agreement.

(o) propagate, advertise, publicize the Project in compliance with Clause 5.13

(p) facilitate for enabling of mobile connectivity along the Project to the Project Users including Wi-Fi at Terminal Stations, wherever deemed necessary by the Authority. For avoidance of doubt, the Concessionaire shall not undertake any revenue generation for facilities developed concerning mobile connectivity. In case of any revenue generation, the same shall be accrued to the Authority;

(q) conduct regular and timely audit of passenger convenience as detailed in Clause 19.6.1

(r) comply with the deployment of additional cable cars at any point of time, during the Concession Period as detailed in Clause 12.4

(s) The Concessionaire is required to keep provision a provision of minimum of 1 hr for storage of fuel at any point of time to cater peak and average hours. The actual fuel consumption shall be reimbursed by the authority to the developer; however, the developer shall ensure such that the operations of the ropeway system is not affected due to the shortage of supply of fuel.

5.1.5 The Concessionaire shall throughout the Concession Period, on a regular basis, carry out and undertake regular inspection of the Site to secure and prevent against any encroachment's or any deterioration of land condition and ensure safety of the Project by taking preventive measures. The scope, protocol and schedule of inspection, maintenance and the remedial measures, if any required to be undertaken, shall be discussed and finalized by the Concessionaire with the Authority each year in advance. The cost to be incurred by the Concessionaire in this regard shall be reimbursed by the Authority to the Concessionaire on quarterly basis, along with the O&M Payments, upon submission of actual bills duly verified by the Independent Engineer. For avoidance of doubt, the onus of regular inspection of the Site and undertaking preventive measures shall lie with the Concessionaire;

5.1.6 During the Concession Period, the Concessionaire shall ensure that the safety of the passengers shall not be compromised in any manner by taking all precautionary measures to prevent any breakdowns of the cable propelled system, effects from adverse climatic condition, protection from landslides, rock-sliding, snow-avalanche, floods, earthquakes, cyclones/ tornedos/storms, etc.

5.1.7 The Concessionaire shall, at least 30 days prior to the COD or Partial COD, wherever applicable of the Project in consultation with the Authority decide and finalize the operating schedule of the Ropeway Project and shall revise the same, as and when required, only in consultation with the Authority. The Concessionaire agrees and acknowledges that the recommendations of the Authority in this regard shall be binding on the Concessionaire.

5.2 Obligations relating to Project Agreements

5.2.1 It is expressly agreed, acknowledged and understood that the Concessionaire shall, at all times, be responsible and liable for all its obligations under this Agreement notwithstanding anything contained in the Project Agreements or any other agreement, and no default under any Project Agreement or agreement shall excuse the Concessionaire from its obligations or liability hereunder.

5.2.2 The Concessionaire shall submit to the Authority the drafts of all Project Agreements, or any amendments or replacements thereto, for its review and comments, and the Authority shall have the right but not the obligation to undertake such review and provide its comments, if any, to the Concessionaire within 30 (thirty) days of the receipt of such drafts. Within 7 (seven) days of execution of any Project Agreement or amendment thereto, the Concessionaire shall submit to the Authority a true copy thereof, duly attested by a Director of the Concessionaire, for its record. For the avoidance of doubt, it is agreed that the review and comments by the Authority hereunder shall be limited to ensuring compliance with the terms of this Agreement. It is further agreed that any failure or omission of the Authority to review and/ or comment hereunder shall not be construed or deemed as acceptance of any such agreement or document by the Authority. No review and/ or observation of the Authority and/ or its failure to review and/ or convey its observations on any document shall relieve the Concessionaire of its obligations and liabilities under this Agreement in any manner nor shall the Authority be liable for the same in any manner whatsoever.

5.2.3 The Concessionaire shall not make any addition, replacement or amendments to any of the Financing Agreements without the prior written consent of the Authority if such addition, replacement or amendment has, or may have, the effect of imposing or increasing any financial liability or obligation on the Authority, and in the event that

any replacement or amendment is made without such consent, the Concessionaire shall not enforce such replacement or amendment nor permit enforcement thereof against the Authority. For the avoidance of doubt, the Authority acknowledges and agrees that it shall not unreasonably withhold its consent for restructuring or rescheduling of the debt of the Concessionaire and shall respond to the request for consent no later than 30 days from the receipt of such request from the Concessionaire.

5.2.4 The Concessionaire shall procure that each of the Project Agreements contains provisions that entitle the Authority and / or Lenders Representative to step into such agreement, in its sole discretion, in substitution of the Concessionaire in the event of Termination or Suspension (hereinafter referred to as the "**Covenant**"). Further, it is clarified that in case both the Authority and Lenders' Representative decide to exercise their right to step-in, the Authority shall have the sole right to step into the Project Agreements. For the avoidance of doubt, it is expressly agreed that in the event the Authority does not exercise such rights of substitution within a period not exceeding 90 (ninety) days from the Transfer Date, the Project Agreements shall be deemed to cease to be in force and effect on the Transfer Date without any liability whatsoever on the Authority and the Covenant shall expressly provide for such eventuality. The Concessionaire expressly agrees to include the Covenant in all its Project Agreements and undertakes that it shall, in respect of each of the Project Agreements, procure and deliver to the Authority an acknowledgment and undertaking, in a form acceptable to the Authority, from the counter party(ies) of each of the Project Agreements, where under such counter party(ies) shall acknowledge and accept the Covenant and undertake to be bound by the same and not to seek any relief or remedy whatsoever from the Authority in the event of Termination or Suspension.

5.2.5 Notwithstanding anything to the contrary contained in this Agreement, the Concessionaire agrees and acknowledges that selection or replacement of the EPC Contractor and an O&M Contractor and execution of the EPC Contract and O&M Contract shall be subject to the prior approval of the Authority from national security and public interest perspective, the decision of the Authority in this behalf being final, conclusive and binding on the Concessionaire, and undertakes that it shall not give effect to any such selection or contract without prior approval of the Authority. For the avoidance of doubt, it is expressly agreed that approval of the Authority hereunder shall be limited to national security and public interest perspective, and the Authority shall endeavor to convey its decision thereon expeditiously and no later than 30 days from the date of receipt of the proposal along with the draft agreement by the Authority. It is also agreed that the Authority shall not be liable in any manner on account of grant or otherwise of such approval and that such approval or denial thereof shall not in any manner absolve the Concessionaire or its Contractors from any liability or obligation under this Agreement.

5.3 Obligations relating to Change in Ownership

5.3.1 The Concessionaire shall not undertake or permit any Change in Ownership, except with the prior written approval of the Authority.

5.3.2 Notwithstanding anything to the contrary contained in this Agreement, the Concessionaire agrees and acknowledges that:

(a) all acquisitions of Equity by an acquirer, either by himself or with any person acting in concert, directly or indirectly, including by transfer of the direct or

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indirect legal or beneficial ownership or control of any Equity, in aggregate of 25% (twenty-five per cent) or more of the total Equity of the Concessionaire; or

(b) acquisition of any control directly or indirectly of the Board of Directors of the Concessionaire by any person either by himself or together with any person or persons acting in concert with him,

shall constitute a Change in Ownership requiring prior approval of the Authority from national security and public interest perspective, the decision of the Authority in this behalf being final, conclusive and binding on the Concessionaire, and undertakes that it shall not give effect to any such acquisition of Equity or control of the Board of Directors of the Concessionaire without such prior approval of the Authority. For the avoidance of doubt, it is expressly agreed that approval of the Authority hereunder shall be limited to national security and public interest perspective, and the Authority shall endeavor to convey its decision thereon expeditiously. It is also agreed that the Authority shall not be liable in any manner on account of grant or otherwise of such approval and that such approval or denial thereof shall not in any manner absolve the Concessionaire from any liability or obligation under this Agreement.

For the purposes of this Clause 5.3.2:

(i) the expression "acquirer", "control" and "person acting in concert" shall have the meaning ascribed thereto in the Securities and Exchange Board of India (Substantial Acquisition of Shares and Takeover) Regulations, 2011 or any statutory re-enactment thereof as in force as on the date of acquisition of Equity, or the control of the Board of Directors, as the case may be, of the Concessionaire;

(ii) the indirect transfer or control of legal or beneficial ownership of Equity shall mean transfer of the direct or indirect beneficial ownership or control of any company or companies whether in India or abroad which results in the acquirer acquiring control over the shares or voting rights of shares of the Concessionaire; and

(iii) power to appoint, whether by contract or by virtue of control or acquisition of shares of any company holding directly or through one or more companies (whether situated in India or abroad) the Equity of the Concessionaire, not less than half of the directors on the Board of Directors of the Concessionaire or of any company, directly or indirectly whether situate in India or abroad, having ultimate control of 25% (twenty five per cent) or more of the Equity of the Concessionaire shall constitute acquisition of control, directly or indirectly, of the Board of Directors of the Concessionaire.

5.4 Obligations relating to employment of foreign nationals

The Concessionaire acknowledges, agrees and undertakes that employment of foreign personnel by the Concessionaire and/or its contractors and their subcontractors shall be subject to grant of requisite regulatory permits and approvals including employment/residential visas and work permits, if any required, and the obligation to apply for and obtain the same shall and will always be of the Concessionaire and, notwithstanding anything to the contrary contained in this Agreement, refusal of or inability to obtain any such permits and approvals by the Concessionaire or any of its contractors or sub-contractors shall not constitute Force Majeure Event, and shall not

in any manner excuse the Concessionaire from the performance and discharge of its obligations and liabilities under this Agreement.

5.5 Obligations relating to Employment and Training of Personnel

The Concessionaire shall be responsible for the employment of adequate number of all personnel / staff members required for the day-to-day operations and maintenance of the Project. For the avoidance of doubt, the Authority shall not provide any manpower / personnel to the Concessionaire.

The Concessionaire shall also ensure that the personnel engaged by it in the performance of its obligations under this Agreement are at all times properly trained for their respective function.

The Concessionaire shall ensure that the personnel's employed by it or through any contractor are trained and proficient in their respective areas of responsibilities and conversant with all the Standard Operating Procedures including the emergency response procedures and are deputed to attend refresher courses from time to time.

5.6 Obligations relating to operations of Stations & Ropeway:

The obligations relating to design, construction, operation and maintenance of the Stations shall be, including but not limited to, in compliance with Article 42:

(i) The Concessionaire shall provide adequate number of ticket vending machines and ticket counters to handle the traffic volumes as detailed in Schedule B, such that waiting time for the Users shall not exceed 5 (five) minutes and shall ensure usage of such design and modern technology which would enable efficient and comfortable boarding / de-boarding of passengers;

(ii) in case of Emergency, evacuation from any point on the platform of Station to a point of safety in an open space within or outside the Station shall not exceed 200 (two hundred) meters;

(iii) make arrangements for the public announcements system at the platforms and communication facility between the Station control room and ropeway cable cars for use including Emergency;

(iv) deploy trained marshals at the Project Facilities to guide and assist the Users and visitors to the Project Facility or any part of the Site

(v) The Concessionaire shall establish a cloak room at the terminal buildings station areas with adequate number of lockers for visitors and tourists who avail the ropeway facilities. The notification of locker fee shall be issued by the Concessionaire itself and fixed and modified by the Concessionaire according to market demand and the locker fee rate (including any revision therein) shall be intimated to Authority forthwith. Additionally, the Concessionaire may also provide mobile charging stations at the cloak rooms for usage visitors and tourists.

(vi) The Bidder shall itself carry out O&M by their own manpower, provided manpower is certified by OEM to carry out O&M activities or engage O&M contractor having experience of atleast 05 years in carrying out maintenance of Ropeway System of technology adopted in the project. The O&M shall be

carried out strictly in accordance with codal provisions throughout the Concession Period;

(vii) The Concessionaire shall deploy suitable instrumentations and equipment to measure the efficiency as detailed in Schedule - D and any fault in the entire cable propelled system round-the-clock during the operational and non-operational hours during the entire Concession Period;

(viii) Provide space for setting up and maintaining tourist information and assistance kiosks to be manned by certified tourist agencies of State and / or Central Government;

(ix) The Concessionaire shall ensure that the Project Facilities are primarily meant for the use of the public and their accompanying luggage permitted as detailed in Schedule - D, wherever applicable, for transit between the originating and destination station and shall not be allowed to be used for transportation of goods and materials on commercial basis (except where expressly provided and only in the manner specified), save and except for in the case of emergency situations requiring speedy transportation of relief materials, evacuation & rescue materials and equipment including medical aid supplies;

(x) The Concessionaire shall not make or permit any alterations or additions to the approved designs and drawings relating to the Project, without obtaining the previous consent, in writing, of the Authority.

(xi) make reasonable efforts to maintain harmony and good industrial relations among the personnel employed by it or its Contractors in connection with the performance of its obligations under this Agreement.

5.7 Obligations relating to medical aid

For providing medical aid to the Users, the Concessionaire shall, set up and operate a Medical Aid Post at the Site equipped to render first aid and to assist in accessing emergency medical aid from hospitals/ clinics in the vicinity.

5.8 Obligations relating to basic amenities

The Concessionaire shall install necessary fixtures, furnishing and equipment, through development of warm-shells for installation of basic amenities, in adequate numbers in accordance with Good Industry Practice for non-discriminatory use by the Users of the Project. These amenities shall include drinking water facilities, sanitation facilities, toilets, telephone and communication facilities, eateries and canteens as per Schedule - D.

5.9 Obligations relating to noise control

The Concessionaire shall take all such measures as may be necessary in accordance with Applicable Laws and Good Industry Practice to control and mitigate the noise arising from the Project and its impact on Users and the neighborhood.

5.10 Obligations relating to aesthetic quality of the Project

The Concessionaire shall maintain a high standard in the appearance and aesthetic quality of the ropeway and achieve integration of the Project with the character of the surrounding landscape through both appropriate design and sensitive management of all visible elements, including the design of facade. The Concessionaire shall engage professional architects and town planners of repute for ensuring that the design of the Project meets the aforesaid aesthetic standards.

5.11 Obligations relating to fulfilling Key Performance Indicators

The Concessionaire shall operate the Project such that it achieves or exceeds the performance indicators specified in this Article 42 (the "**Key Performance Indicators**") and the Project is always operated and maintained as per best industry standards and safety measures.

5.12 Facilities for differently abled and elderly persons

The Concessionaire shall, in conformity with the guidelines issued from time to time by the Ministry of Social Justice and Empowerment, or a substitute thereof, procure a barrier free environment for the differently abled and for elderly persons using the Project.

5.13 Branding of Project

The Project or any part thereof shall not be branded in any manner to advertise, display or reflect the name or identity of the Concessionaire or its shareholders. The Concessionaire undertakes that it shall not, in any manner, use the name or entity of the Project to advertise or display its own identity, brand equity or business interests, including those of its shareholders, save and except as expressively provided in the Agreement. For the avoidance of doubt, it is agreed that the Concessionaire may display its own name at a spot where other public notices are displayed for the Users. It is further agreed that the Project shall be known, promoted, displayed and advertised by the name of Bijli Mahadev Temple Ropeway project. Further, the Authority shall have the right to undertake any branding activity on the Site without any approval, consent or permission of the Concessionaire

5.14 Sole purpose of the Concessionaire

The Concessionaire having been set up for the sole purpose of exercising the rights and observing and performing its obligations and liabilities under this Agreement, the Concessionaire or any of its subsidiaries shall not, except with the previous written consent of the Authority, be or become directly or indirectly engaged, concerned or interested in any business other than as envisaged herein.

5.15 Obligation relating to environmental safety

The Concessionaire shall make provisions for proper, timely and efficient, handling, collection, segregation and scientific disposal of bio-degradable waste and other solid wastes in accordance with the Solid Waste Management Rules 2016 and such other local guidelines as may be issued from time to time.

5.16 Obligation relating to lighting and signages

The Concessionaire shall ensure that the lighting arrangement with adequate power back up facility is provided at the Site. The Concessionaire shall also ensure that the

lighting facility do not cause any inconvenience to any Users of the facility and / or neighboring facilities.

Additionally, the Concessionaire shall provide proper design branding material for signages/totem/Logo etc. as approved by the Authority. The signages used for display of User Fee shall also be legible and available in at-least 2 languages, i.e. English and Hindi.

5.17 Encumbrances and Encroachments

(a) Not place or create nor permit or suffer any Contractor or other Person claiming through or under the Concessionaire to create or place any Encumbrance over all or any part of the Project Assets or the Project area, or on any rights of the Concessionaire therein, save and except as expressly set forth in this Agreement.

(b) Ensure that the Project area remains free from all encroachments during the Concession Period and subject to Applicable Laws take all steps necessary to remove encroachments, if any.

5.18 Development of Commercial Space:

(i) The Concessionaire shall be entitled to, as a part of the development program, to plan, design, construct and operate or lease out or grant on license or franchise basis any portion of the built up space only within or at the Terminal Station for the purpose of undertaking commercial activity relating to or incidental to the Project activities or for the convenience of the Users (including for setting up of counters, vending machines and kiosks for sale of eatables, beverages, travel accessories, books and periodicals, tourist guidance desk etc.).

The total area proposed to be utilized for commercial activities shall not exceed 10% percent of the total floor area of the Terminal Station for which the Concessionaire shall procure prior written approval from the Authority.;

(ii) The commercial activities may be undertaken or performed by the Concessionaire itself or by any third party appointed for this purpose by the Concessionaire on lease or license or franchise basis and the Concessionaire shall at all times be liable and responsible for the conduct, operation, maintenance and adherence to the terms of this Agreement by the operator(s) of such commercial activities and the same shall be undertaken, performed and conducted in such manner that the operation and maintenance of the ropeway operations is not hindered or obstructed or the free movement of the Users is in any manner impaired. The Concessionaire further agrees and acknowledges that any and all arrangements with respect to the commercial activities shall be in compliance with this Agreement;

(iii) All contractual arrangements made or entered into by the Concessionaire for the operation, performance and maintenance of the commercial activities at the Project with any third party entities, a copy of the same duly authenticated by the authorized officer of the Concessionaire shall be provided to the Authority by the Concessionaire forthwith upon the execution thereof. The Concessionaire shall also ensure that no covenant of any such arrangement shall contain any condition or obligation which is, or can be, construed to be inconsistent with the terms of this Agreement or in any manner , by implication or otherwise , puts any responsibility, liability or obligation on the Authority;

In case where any utilities or facilities, for the Project, are procured and provided at no cost basis to the Concessionaire by the Authority or in respect of any utility or

facility the cost and charges in respect of the same are in any manner reimbursed or subsidized by the Authority then to the extent such utility or facility is utilized by the Concessionaire / third party operator for the performance of the commercial activity the same shall be duly metered and proportionate cost thereof , on actual consumption basis, or on fixed slab basis depending on the area covered by the commercial activity, as may be decided by the Authority in its sole discretion, shall be reimbursed by the Concessionaire to the Authority on periodical basis at such intervals as instructed by the Authority;

(iv) The entire pre-tax gross revenue (including any non-refundable deposits or advances or premiums etc.) earned by the Concessionaire from the commercial activities undertaken at the Project shall be properly accounted and audited and a statement in respect of the same shall be provided by the Concessionaire to the Authority on half yearly basis. The Concessionaire shall pay to the Authority NIL percentage of the total pre-tax gross revenue (including income accrued but not collected) in each quarter from all the commercial activities undertaken at the Project as defined in Clause 25.2 ("**Revenue Share**").

The Concessionaire should not charge more than the Maximum Retail Price (MRP) for any consumable product sold at any commercial facility operated by it, including but not limited to the Food and Beverage shops, canteens, etc. The Authority shall also have a right, by itself or through any person authorized by it is this regard, to inspect and audit the books of accounts of the Concessionaire to determine revenues earned from the commercial activities;

ARTICLE 6

OBLIGATIONS OF THE AUTHORITY

6.1 Obligations of the Authority

6.1.1 The Authority shall, at its own cost and expense undertake, comply with and perform all its obligations set out in this Agreement or arising hereunder.

6.1.2 The Authority agrees to provide support to the Concessionaire and undertakes to observe, comply with and perform, subject to and in accordance with the provisions of this Agreement and Applicable Laws, the following

(a) upon written request from the Concessionaire, and subject to the Concessionaire complying with Applicable Laws, making all required applications & submissions to the concerned authorities provide reasonable support and assistance to the Concessionaire in procuring Applicable Permits required from any Government Instrumentality for implementation and operation of the Project;

(b) upon written request from the Concessionaire, provide reasonable assistance to the Concessionaire in obtaining access to all necessary infrastructure facilities and utilities, including water and electricity at rates and on terms no less favorable to the Concessionaire than those generally available to commercial customers receiving substantially equivalent services;

(c) The Authority shall procure that during the Operation Period, no barriers are erected or placed by any Government Instrumentality on the Project except for reasons of Emergency, national security, law and order or collection of inter-state taxes. The Authority shall also make best endeavors to procure that no Government Instrumentality shall undertake or cause to be undertaken, except for reasons of Emergency, national security or law and order, any diversions of traffic from, or closing down of approach roads to the Project that may cause a material adverse effect on the flow of traffic to and from the Project.

(d) Subject to and in accordance with Applicable Laws, grant to the Concessionaire the authority to regulate use of the Project and related associated facilities and amenities provided by the Concessionaire;

(e) Assist the Concessionaire in procuring police assistance for regulation of Users, removal of trespassers and security on or at the Project;

(f) subject to and in accordance with the Applicable Laws, grant to the Concessionaire the authority to regulate traffic on the Project;

(g) Not do or omit to do any act, deed or thing which may in any manner is violating of any of the provisions of this Agreement;

(h) support, cooperate with and facilitate the Concessionaire in the implementation and operation of the Project in accordance with the provisions of this Agreement;

(i) upon written request from the Concessionaire and subject to the provisions of Clause 5.4, provide reasonable assistance to the Concessionaire and any expatriate personnel of the Concessionaire or its Contractors to obtain

applicable visas and work permits for discharging their respective obligations under this Agreement and the Project Agreements;

(j) undertake rehabilitation and resettlement of persons affected by construction of the Project and bear all costs and expense in respect thereof, save and except as otherwise provided in this Agreement; and

(k) subject to the Concessionaire complying with Applicable Laws, provide reasonable support and assistance to the Concessionaire in procuring approvals, other than approval of the General Approval Drawings of the Railway authorities for construction of ropeways over bridges.

(l) Subject to and in accordance with Applicable Laws, as defined in clause 5.1.5, grant to the Concessionaire the authority to carry out regular inspections of the land area beneath the aerial ropeway lines or land adjacent to the Station buildings and prevent, remove or cause to be removed any illegal obstruction or encroachment which may or has the potential to adversely affect the safe operations of the Project, however this shall not cover or deemed to cover any right, power or authority in favor of the Concessionaire to undertake cutting of any trees in the Project area.

6.2 Obligations relating to refinancing

Upon request made by the Concessionaire to this effect, the Authority shall, in conformity with any regulations or guidelines that may be notified by the Government or the Reserve Bank of India, as the case may be, permit and enable the Concessionaire to secure refinancing on such terms as may be agreed upon between the Concessionaire and the entity providing such refinancing; provided, however, that the refinancing hereunder shall always be subject to the prior consent of the Authority, which consent shall not be unreasonably withheld. The Authority shall endeavor to convey its decision on such request of the Concessionaire within 30 days of receipt of the proposal by the Authority. The tenure of debt refinanced shall be completed no later than 1 (one) year prior to the expiry of the Concession Period.

6.3 Maintenance obligations relating to Last Mile Connectivity

6.3.1 During the Concession Period, the Authority shall provide and maintain last mile connectivity by constructing an approach road, as detailed in Schedule – D, in such a manner so as to ensure that the quality of service and safety are maintained. For the avoidance of doubt, even in the event of any material deterioration or damage other than normal wear and tear, including damages due to unforeseen circumstances like extreme floods or landslides, etc., damaging the substantial road portion, as determined by the Independent Engineer, the Authority shall undertake repair thereof at its own cost and expense.

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ARTICLE 11
UTILITIES, ASSOCIATED ROADS AND TREES

11.1 Existing utilities and roads

Notwithstanding anything to the contrary contained herein, the Authority shall ensure that the respective entities owning the existing roads, right of way, walking trails, or utilities on, under or above the Site are enabled by it to keep such utilities in continuous satisfactory use, if necessary, by providing suitable temporary or permanent diversions with the authorities of the controlling body of that road, right of way, walking trails or utility. In case unidentified utilities, other than the utilities mentioned in the Technical Schedules are encountered by the concessionaire during the course of execution of project, the concessionaire shall remove the same and in such case change of scope (CoS) shall be allowed to the Concessionaire.

11.2 Shifting of obstructing utilities

11.2.1 . The Concessionaire shall, subject to Applicable Laws and with assistance of the Authority, undertake shifting of utilities mentioned under Schedule A (including electric lines, water pipes and telephone cables), to an appropriate location or alignment within or outside the Site, if such utility or obstruction cause a material adverse effect on the construction, operation or maintenance of the Project, as per the scope given in Schedule A and in accordance with applicable standards and specifications of concerned utility owning entity. The Authority will provide assistance to the Concessionaire for obtaining the estimates for shifting of such utilities from the entity owning such electric lines, water pipes or telephone cables, as the case may be. The Concessionaire shall execute such utility shifting works under the supervision of utility owning agency and Independent Engineer (IE) in accordance with the provision of Agreement. The supervision charges only shall be paid by the Authority to the Utility Owning Entity. In the event of any delay in shifting thereof, the Concessionaire shall be responsible for failure to perform any of its obligations hereunder if such failure is not as a direct consequence of delay on the part of the entity owning such electric lines, water pipes or telephone cables, as the case may be. The credit for dismantled material shall be taken into account while obtaining the estimate. The work of shifting of utilities can be taken up by the Concessionaire any time after signing of the Agreement, provided further and without prejudice to anything stated in this Article 11, all shifting of utilities prior to the Appointed Date shall be undertaken by the Concessionaire subject to prior written concurrence of the Authority and in accordance with conditions and directions, if any, specified by the Authority;

11.2.2 In case Appointed Date is not achieved and the Concession Agreement is terminated prior to achievement of Appointed Date, the Concessionaire shall be reimbursed the cost of utility shifting carried out during Development Period by the Authority after due certification by the Authorized Representative of the Authority. For the purpose of such reimbursement, the rates in the approved estimates by the concerned utility department shall be paid as per actual work carried out at site. For the avoidance of doubt, the Concessionaire would be reimbursed the cost of utility shifting only in case of termination prior to Appointed Date and only if it carries out the utility shifting as envisaged as per the terms of this Agreement (applicable only in case if existing utilities are to be shifted the concessionaire).

11.3 New utilities and roads

The Concessionaire shall allow, subject to such conditions as the Authority may specify, access to, and use of the Site for laying telephone lines, water pipes, electric cables, internet cables, mobile network towers, or other public utilities. However the erection and installation of all mobile service towers or any other similar structure shall be made in such manner that it shall not interfere with the operations, maintenance of the Ropeway Project (including the emergency situations). For the avoidance of doubt, it is agreed that use of the Site under this Clause 11.3 shall not in any manner relieve the Concessionaire of its obligation to maintain the Project in accordance with this Agreement and any damage caused by such use shall be restored forthwith.

In case where the Concessionaire has set up any new utilities after the Appointed Date for Projects captive consumption or for public use as a part of corporate social responsibility measure, it shall provide all details thereof, as may be reasonably required, to the relevant department / agency under the Government owning and maintain similar utilities in the vicinity.

11.4 Felling of trees

The Authority shall assist the Concessionaire in obtaining the Applicable Permits for felling of trees to be identified by the Authority for this purpose if and only if such trees cause a material adverse effect on the construction, operation or maintenance of the Project. The cost of such felling shall be borne by the Authority, and in the event of any delay in felling thereof for reasons beyond the control of the Concessionaire, it shall be excused for failure to perform any of its obligations hereunder if such failure is a direct consequence of delay in the felling of trees. For the avoidance of doubt, the Parties hereto agree that the felled trees shall be deemed to be owned by the Authority and shall be disposed in such manner and subject to such conditions as the Authority may in its sole discretion deem appropriate.

11.5 Installation of Material Ropeways

The Concessionaire shall, subject to Applicable Laws undertake installation of material ropeways, if required, in accordance with applicable standards and specifications. The erection of material ropeway shall be supervised by Independent Engineer (IE) in accordance with the provision of Agreement. The work of erection of material ropeways can be taken up by the Concessionaire any time after signing of the Agreement.

ARTICLE 12

CONSTRUCTION OF THE PROJECT

12.1 Obligations prior to commencement of construction

In addition to its obligations of maintaining the Site during the Development Period, prior to commencement of Construction Works, the Concessionaire shall:

(a) submit to the Authority and the Independent Engineer its detailed design, construction methodology, quality assurance procedures, and the procurement, engineering and construction time schedule for completion of the Project in accordance with the Project Completion Schedule as set forth in Schedule-G;

(b) Appoint its representative duly authorized to deal with the Authority in respect of all matters under or arising out of or relating to this Agreement;

(c) undertake, do and perform all such acts, deeds and things as may be necessary or required before commencement of construction under and in accordance with this Agreement, Applicable Laws and Applicable Permits; and

(d) Make its own arrangements for quarrying and procurement of materials needed for the Project under and in accordance with Applicable Laws and Applicable Permits.

12.2 Drawings

In respect of the Concessionaire's obligations relating to the Drawings of the Project as set forth in Schedule-H, the following shall apply:

(a) The Concessionaire shall prepare and submit, with reasonable promptness and in such sequence as is consistent with the Project Completion Schedule, 3 (three) copies, along with a soft copy, each of all Drawings to the Independent Engineer for review.

(b) By submitting the Drawings for review to the Independent Engineer, the Concessionaire shall be deemed to have represented that it has determined and verified that the design and engineering, including the field construction criteria related thereto, are in conformity with the Scope of the Project, Specifications and Standards, Applicable Laws and Good Industry Practice.

(c) Within 15 (fifteen) days of the receipt of the Drawings, the Independent Engineer shall review the same and convey its observations to the Concessionaire with particular reference to their conformity or otherwise with the Scope of the Project and the Specifications and Standards. The Concessionaire shall not be obliged to await the observations of the Independent Engineer on the Drawings submitted pursuant hereto beyond the said 15 (fifteen) days period and may begin or continue Construction Works at its own discretion and risk.

(d) If the aforesaid observations of the Independent Engineer indicate that the Drawings are not in conformity with the Scope of the Project or the Specifications and Standards, such Drawings shall be revised by the Concessionaire and resubmitted to the Independent Engineer for review. The Independent Engineer

shall give its observations, if any, within 7 (seven) days of receipt of the revised Drawings.

(e) No review and/or observation of the Independent Engineer and/or its failure to review and/or convey its observations on any Drawings shall relieve the Concessionaire of its obligations and liabilities under this Agreement in any manner nor shall the Independent Engineer or the Authority be liable for the same in any manner.

(f) Without prejudice to the foregoing provisions of this Clause 12.2, the Concessionaire shall submit to the Authority for review and comments, its Drawings relating to alignment of the Project the Authority shall have the right but not the obligation to undertake such review and provide its comments, if any, within 30 (thirty) days of the receipt of such Drawings. The provisions of this Clause 12.2 shall apply mutatis mutandis to the review and comments hereunder.

(g) Within 90 (ninety) days prior to COD, the Concessionaire shall furnish to the Authority and the Independent Engineer a complete set of as-built Drawings, in 2 (two) hard copies and in its editable digital format or in such other medium or manner as may be acceptable to the Authority, reflecting the Project as actually designed, engineered and constructed, including an as- built survey illustrating the layout of the Project and setback lines, if any, of the buildings and structures forming part of Project Facilities.

12.3 Construction of the Project

12.3.1 On or after the Appointed Date, the Concessionaire shall undertake construction of the Project as specified in **Schedule-B** and **Schedule-C**, and in conformity with the Specifications and Standards set forth in **Schedule-D**. The 730th (Seven Hundred and Thirtieth) day from the Appointed Date shall be the scheduled date for completion of the Project (the **"Scheduled Completion Date"**) and the Concessionaire agrees and undertakes that the Project shall be completed on or before the Scheduled Completion Date.

The Concessionaire shall design and construct the Ropeway System to handle the traffic volumes for 5th (fifth) year from COD, as defined by the Authority in Schedule – B. All equipment procured by the Concessionaire, including cable cars, etc. shall be deployed and maintained considering the traffic volumes for 5th (fifth) year from COD, as defined by the Authority in Schedule – B;

12.3.2 The Concessionaire shall construct the Project in accordance with the Project Completion Schedule set forth in Schedule-G. In the event that the Concessionaire fails to achieve any Project Milestone within a period of 90 (ninety) days from the date set forth for such Project Milestone in Schedule-G, unless such failure has occurred due to Force Majeure or for reasons attributable to the Authority, it shall pay Damages to the Authority in a sum calculated at the rate of 0.1% (zero point one per cent) of the amount of Performance Security for delay of each day until such Project Milestone is achieved; provided that if any or all Project Milestones or the Scheduled Completion Date are extended in accordance with the provisions of this Agreement, the dates set forth in Schedule-G shall be deemed to be modified accordingly and the provisions of this Agreement shall apply as if Schedule-G has been amended as above; provided further that in the event COD is achieved on or before the Scheduled Completion Date,

the Damages paid under this Clause 12.3.2 shall be refunded by the Authority to the Concessionaire, but without any interest thereon. For the avoidance of doubt, it is agreed that recovery of Damages under this Clause 12.3.2 shall be without prejudice to the rights of the Authority under this Agreement, including the right of Termination thereof.

12.3.3 In the event that the Project is not completed and COD does not occur within 270 (two hundred and seventy) days from the Scheduled Completion Date, unless the delay is on account of reasons attributable to the Authority or due to Force Majeure, the Authority shall be entitled to terminate this Agreement.

12.4 Capacity Augmentation

12.4.1 The Concessionaire shall, in consultation with Authority and the Independent Engineer, undertake the implementation of Capacity Augmentation, i.e., deployment of additional cable cars, together with all other essential operational capacity enhancement and safety requirements during the 5th (fifth) and 10th (tenth) year from COD depending on the schedule for deployment of cable cars for the 10th (tenth) and 15th (fifteenth) year of operations as detailed under Annexure-II, Schedule B (Capacity Augmentation Plan).

12.4.2 The Concessionaire shall quote the cost of deploying additional cable cars, for the period specified in Clause 12.4.1, separately for 5th (fifth) and 10th (tenth) year from COD, together referred to as **"Capacity Augmentation Cost"**, along with the other bid documents. For the avoidance of doubt, the Capacity Augmentation Cost shall not be a part of the Bid Project Cost and shall be quoted separately by the Concessionaire. The Parties further agree that the Capacity Augmentation Cost for payment to the Concessionaire shall be inclusive of the cost of expansion and construction works, interest on funds to be raised, working capital, physical contingencies and all other costs, expenses and charges for and in respect of Capacity Augmentation, save and except any additional costs arising on account of variation in Price Index, Change in Law, Force Majeure, which costs shall be due and payable to the Concessionaire in accordance with the provisions of the Agreement.

12.4.3 The Authority shall provide a notice no later than 6 (six) months prior to the planned capacity augmentation date for the Authority. The Concessionaire shall be compensated as per and on proportionate basis of quoted Capacity Augmentation Cost as a separate payment to the Concessionaire over and above the Annuity Payments & O&M Payments, within 60 (sixty) days of the satisfactory completion of testing and commissioning of the additional cable cars deployed, as verified by the Independent Engineer. For the avoidance of doubt, the quality of cable cars deployed during the Capacity Augmentation shall be at least equal to or better than the quality of cable cars deployed during the construction phase.

12.4.4 However, the Authority, under exceptional circumstances and considering user convenience, shall have the right to request the Concessionaire to deploy entire fleet of scheduled cable cars or partial fleet of the scheduled cable cars, as mentioned in Clause 12.4.1, either 2 (two) years before or 2 (two) years after the Capacity Augmentation Plan. For the avoidance of doubt, in this case, the Concessionaire shall be paid the same amount as quoted along with the bid documents as per Clause 12.4.1.

For avoidance of doubt, the formula for calculation of Capacity Augmentation Cost during the applicable time period as per Clause 12.4.4, i.e., from 3 (three) to 7 (seven) years and from 8 (eight) to 12 (twelve) years from COD, is given below:

*Capacity Augmentation Cost for 3rd (third) to 7th (seventh) year from COD = Capacity Augmentation Cost for 5th (fifth) year * ratio of actual number of cable cars deployed to scheduled number of cable cars planned for deployment in 5th (fifth) year from COD*

*Capacity Augmentation Cost for 8th (eighth) to 12th (twelfth) year from COD = Capacity Augmentation Cost for 10th (tenth) year * ratio of actual number of cable cars deployed to scheduled number of cable cars planned for deployment in 10th (tenth) year from COD*

12.4.5 In the event that the Concessionaire fails to complete and commission the Capacity Augmentation on or before 1 (one) months from the planned date, as specified by the Authority, it shall pay to the Authority, damages equal 1.25 times the per day revenue loss[3] incurred to the Authority on account of not undertaking the Capacity Augmentation for each day's delay until Capacity Augmentation completion and commissioning thereof. In case the Capacity Augmentation is not completed within 30 (thirty) days of planned capacity augmentation date, as specified by the Authority, the Authority may at its discretion seek the termination of the Agreement on account of Concessionaire Event of Default.

12.4.6 The Capacity Augmentation works shall be constructed by the Concessionaire as if they are Construction Works forming part of the Project and the provisions of this Agreement, shall apply, mutatis mutandis, to Capacity Augmentation phase also, save and except where express provisions to the contrary have been made for Capacity Augmentation phase.

[3] Revenue loss to be calculated as (Expected # of cable cars to be deployed - Actual # of cable cars deployed) * Max. capacity per cable car * Ticket fare / person

Annexure R-2/6

सत्यमेव जयते

Government of India

Ministry of Environment, Forest and Climate Change

Sub-Office, Shimla

Regional Office, Chandigarh

Online Proposal No.: **FP/HP/OTHERS/418659/2023**

Dated: **08/07/2024**

To,

Additional Chief Secretary (Forest)
Himachal Pradesh Government
Armsdale Building, Shimla
(Email:-forestsecy-hp@nic.in)

Subject: **Diversion of 3.1102 ha of Forest Land in favor of National Highways Logistics Management Limited for the Development of a Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in district Kullu, under the jurisdiction of Kullu Forest Division, Dist. Kullu, Himachal Pradesh-reg.**

Sir/Madam,

Please refer to the above-cited subject seeking prior approval under **Section 2 of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980**, for the diversion of 3.1102 ha of forest land for non-forestry purposes. After careful examination and consideration of the proposal, ***In-principle*** approval is hereby conveyed for the **Diversion of 3.1102 ha of Forest Land in** favor of **National Highways Logistics Management Limited for the Development of a Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in district Kullu, under the jurisdiction of Kullu Forest Division, Dist. Kullu, Himachal Pradesh.**, HP within the jurisdiction of Kullu Forest Division, subject to the following conditions

1. General Conditions

S. No	Conditions
1.1	1. Legal status of the diverted forest land shall remain unchanged. 2. Net Present Value (NPV) of the forest land **3.1102** hectares being diverted for non-forestry purpose may be realized from the user agency, as per Ministry's directions issued vide letters No. 5-3/2011- FC (Vol-I) dated 6th January 2022 and Hon'ble Supreme Court of India's Order WP(C)No. 202/1995, I.A.No. In 566, dated 30th October 2002, 28th March, 2008, 24th April, 2008 and 9th May 2008. 3. Cost of compensatory afforestation as per CA schemes may be realized from the user agency. 4. The Net Present Value (NPV) of the forest land and all other CA levies shall be deposited

S. No	Conditions
	through web portal of Ministry of Environment, Forest and Climate Change www.parivesh.nic.in. 5. User agency should ensure that the compensatory levies (CA cost, NPV, etc.) are deposited through challan generated online on web portal and deposited in appropriate bank only. Amount deposited through other mode will not be accepted as compliance of the Stage-I clearance. 6. The Divisional Forest Officer shall furnish undertaking that the approved CA site(s) will not be changed without the approval of competent authority. 7. The Complete compliance report will be uploaded in the e-portal (https://parivesh.nic.in/). 8. The State Government, by Hon'ble Supreme Court, New Delhi, vide WP (C) No. 202/1995, will ensure compliance with the orders issued on 08.02.2023. 9. The number of trees/plants to be cut shall not in any way exceed the number shown in the proposal, and no harm shall be done to wildlife during the felling of trees. If muck dumping site is included in the proposal, then no tree will be felled there. 10. Compensatory afforestation shall be taken up by the Forest Department over degraded forest land in **6.479 ha, Survey/compartment No.-52H/4, Kail Phat, Beat-Tandla, Tehsil-Kullu, Kullu Forest Divison, Dist-Kullu**, at the cost of the user agency. The Plantation shall be done within one year from the date of issue of approval. As far as possible, a mixture of local indigenous species shall be planted and monoculture of any species may be avoided. 11. **State Govt shall provide the documentary proof, If the proposed CA land is in the name of the State Forest Department. Otherwise, CA land shall be transferred and mutated in favor of State Forest Department before final approval and PF shall be notified under IFA, 1927, as per rules, and related documents shall be presented.** 12. The State Government shall upload the KML files of the degraded forest area accepted for raising compensatory afforestation in the E-Green watch portal of FSI, before handing over of forest land to the user agency. 13. The forest land shall not be used for any purpose other than that specified in the project proposal. 14. No damage will be done to the adjoining forest land. Simultaneously, all efforts will be made to save adjoining forest and forest land. 15. The user agency shall pay additional amount of NPV as and when increased on the order of Hon'ble Supreme Court and the UT government will ensure that the increased amount is deposited. 16. The forest land proposed to be diverted shall under no circumstances be transferred to any other agency, department, or person without approval of the Central Government. 17. The layout plan of the proposal shall not be changed without prior approval of Central Government. 18. Any other condition may be stipulated by this regional office from time to time, in the interest of conservation, protection and development of forests and wildlife. 19. User Agency shall obtain Environmental Clearance as per the provisions of the Environmental (Protection) Act, 1986, if applicable. 20. The boundaries of the transferred forest land will be marked by 4 feet high cement pillars with serial numbers written on the front and back. 21. No additional or new road will be made inside the forest area for transportation of construction material for execution of project work. 22. The user agency shall preferably provide alternative fuel to the workers and staff working at the site, so that the adjoining forest area can be saved from any kind of damage and pressure. 23. The muck generated from the construction of the project will be disposed of by the user agency only at the designated site and the muck will not be thrown anywhere else. 24. Violation of any of these conditions will amount to a violation of **Para 1.16** of **Consolidated Guidelines and Clarifications on Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 and Van (Sanrakshan Evam Samvardhan) Rules, 2023, MoEF&CC**. 25. It will be the responsibility of the State Government/User Agency to obtain all other prior approvals/clearances under all other relevant Acts/Rules/ Court's Rulings/instructions, etc. including environmental clearance, as applicable to this proposal.

S. No	Conditions
	26. The Permission will be given to this proposal for 99 years, after that permission shall be obtained from the Government of India. The period of diversion under this approval shall be co-terminus with the period of lease to be granted in favor of the user agency or the project life, whichever is less

2. Standard conditions

3. Specific Conditions

S. No	Conditions
3.1	1. The State Govt shall impose the maintenance cost for the unmetalled forest road leading to the forest nursery adjoining to the lower terminal point, ie Valley Station. 2. The felling of trees shall be kept to a minimum out of 72 tress

After receipt of the compliance report on the fulfillment of the conditions mentioned above, the proposal shall be considered for final approval under section 2 of the **Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980**. Transfer of forest land shall not be affected till final approval is granted by the Government in this regard

Copy To

1. Inspector General of Forests (ROHQ), Ministry of Environment, Forest and Climate Change, Indira Paryavaran Bhawan, Jorbagh Road, Aliganj, New Delhi. (E-mail: Ramesh.pandey@nic.in).
2. Nodal Officer-cum-Additional Principal Chief Conservator of Forests (FCA), Government of Himachal Pradesh, Forest Department, Talland, Shimla (E-mail: nodalfcahp@yahoo.com).
3. Divisional Forest Officer, Kullu Forest Division, District Mandi, Himachal Pradesh (E-mail: head-fordivkul-hp@hp.gov.in)
4. National Highways Logistics Management Limited, Bays No. 35-28, Sector-4, Panchkula, Chandigarh (Email: nhlmlzonr@gmail.com)

Your's faithfully

Sd/-
Raja Ram Singh
DIGF (C)

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Annexure R-2/7

No./ 1207
Kullu Forest Division, Kullu

Dated Kullu, the **10th July, 2024**

To: Zonal Officer (Norther Region)
National Highway Logistics Management Ltd.
Bays No.35-28 Sector-4
Panchkula, Haryana- 134112

Subject:- **Diversion of 3.1102 ha. of forest land in favour NHLML for the development of ropeway from Nature Park (Mohal) to Bijli Mahadev Temple within the jurisdiction of Kullu Forest Division, District Kullu, HP. (Proposal No.FP/HP/Others/418659/2023)**

Sir,

In-compliance to "in-principle" approval accorded by MoEF & CC, GoI on dated 08.07.2024 through Parivesh 2.0 portal, you are requested to deposit the below mentioned amount in respective head:-

Sr. No.	Details of proposal	Particulars
1.	Distt./ Forest Division to which the proposal relates	**Kullu/ Kullu**
2.	Name of User Agency	**NHLML**
3.	Name of Proposal	**Development of ropeway to Bijli Mahadev Temple**
4.	Extent of forest area proposed to be diverted	**3.1102 hectare**
5.	Whether new or for additional land or for renewal/ extension	**New**
6.	Date of Stage-I clearance	**08.07.2024**

2. The amount of compensatory levies in respect of the proposal mentioned above may be deposited in the following manner:-

I	Amount required to be deposited in Adhoc- CAMPA account	Amt (Rs.)
i)	Cost of CA including 5% contingency on CA (excluding 17.5% departmental charges)	1805844
ii)	Cost of additional CA (excluding 17.5% departmental charges)	0
iii)	Cost of Penal CA (excluding 17.5% departmental charges)	0
iv)	Cost of Catchment Area Treatment Plan	0
v)	Cost of Wildlife Management Plan (WLMP)	0
vi)	Net Present Value (NPV)	3326266
vii)	Cost for Safety Zone area in respect of mining cases	0
viii)	5% contingency on safety Zone	0
ix)	Cost of implementing phased Reclamation Plan of mining area	0
x)	Cost of reclamation plan including 5% contingency charges	0
xi)	Other charges, if any (*specify) (excluding 17.5% departmental charges) Reclamation Plan	0
	Total (I):-	**5132110**

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II	Amount required to be deposited in State Govt. Treasury	
i)	Cost of trees	41015182
ii)	Departmental Charges on CA @ 17.5% of CA cost	300974
iii)	Departmental Charges on Addl. CA @ 17.5% of Addl. CA cost	0
iv)	Departmental Charges on Penal CA @ 17.5% of Penal CA cost	0
v)	Other charges, if any (*specify) reclamation plan (17.5% departmental charges)	0
vi)	Income tax @ 2.575 % on price of tree	1056141
vii)	Surcharge @ 3% on income tax	31684
	Total (III):-	**42403981**
	Grand Total (I+II)	**47536091**
	Rupees Four Crore Seventy Five Lakh Thirty Six Thousand and Ninety One only	

3. The compensatory levies mentioned above may be deposited strictly in accordance with the following guidelines:-

A. For amount mentioned at 2(I) to be deposited in Adhoc CAMPA account:

i) To be deposited by your Department directly through e- **payment portal such as online through e-challan mode in Ad-hoc CAMPA** separately and not to be clubbed with other FCA diversion proposals.

ii) The detail of payment so deposited alongwith their transaction detail shall have to be submitted to this office.

B. For amount mentioned at 2 (II) to be deposited in State Govt. Treasury:

i) Amounts due towards Departmental charges on CA, Cost of trees etc. may be deposited in this office through cheque/ DD in favour of Divisional Forest Officer, Kullu Forest Division, Kullu payable at (Name of place).

You are, therefore, requested to release the funds at the earliest and submit the in-principle compliance along with payment details, so that case for Stage-II approval can be sent to higher authorities. Copies of bills are also attached herewith for ready reference. Further ensure that no construction work etc. be started on forestland till necessary approval from competent authority.

Encl: As above.

Divisional Forest Officer,
Kullu Forest Division, Kullu

Endst.No.FCA/ Dated- March, 2024

Copy alongwith enumeration list of trees for information & joint marking of the trees is forwarded to:

1. Divisional Manager, FWD, HPSFDC Ltd. Kullu
2. Range Forest Officer, Kullu.

Sd/-
Divisional Forest Officer,
Kullu Forest Division, Kullu

"SCHEME FOR COMPENSATORY AFFORESTATION"
(Norms-2023-24)

In lieu of diversion of 3.1102 hectare of forest land in favour of NHLML for the construction of ropeway from Nature Park Mohal to Bijli Mahadev Temple in District Kullu, HP within the jurisdiction of Kullu Forest Division, Distt. Kullu, HP.

1. Details of degraded forest land/ non forest land:-

Area: **Kail Phat** District:- **Kullu** Tehsil:- **Kullu**
Division: **Kullu** Range:- **Kullu** Block/Beat: **Kais/Tandla**
Compartment/Survey No: **52 H/4** Area to be afforested:- **6.479 hectare**

2. Description of area:-

xvi. Whether the site selected for compensatory afforestation is a land bank or not:- **Yes**
xvii. If the CA site is other than the land bank, reasons be given:- **No**
xviii. In case of non forest area identified in from-A, then what is the distance of CA site from the adjoining forest boundary :- **forest area**
xix. Soil type:- **Sandy-loamy/apparently deep**
xx. Topography :- a) **Hilly**
b) **Medium**
vi. Whether the area is bearing any root stock of vegetation:- **Yes**

Plantation Model:- **Departmental**

Copy of the approved compensatory afforestation scheme/ model showing component wise physical and financial break up is enclosed.

Schedule of Plantation programme:-

3. Detail of year wise break up of requirement of funds is as under :-

Compensatory Afforestation Bill							
S. N.	**Particulars**	**Area in ha.**	**Year**	**Rate per Hectare**	**Cost Escalation**	**Rate After applying cost escalation**	**Total Amount (Rs)**
1.	New Plantation	6.479	2023-24	120900	10%	132990	861642
2.	1st Year Maintenance	6.479	2024-25	19300	20%	23160	150054
3.	2nd Year Maintenance	6.479	2025-26	13000	30%	16900	109495
4.	3rd Year Maintenance	6.479	2026-27	6600	40%	9240	59866
5.	4th Year Maintenance	6.479	2027-28	6600	50%	9900	64142
6.	5th Year Maintenance	6.479	2028-29	6600	60%	10560	68418

7.	6th Year Maintenance	6.479	2029-30	6600	70%	11220	72694
8.	7th Year Maintenance	6.479	2030-31	6600	80%	11880	76971
9.	8th Year Maintenance	6.479	2031-32	6600	90%	12540	81247
10.	9th Year Maintenance	6.479	2032-33	6600	100%	13200	85523
11.	10th Year Maintenance	6.479	2033-34	6600	110%	13860	89799
	Total Plantation for 1100 plants/hectare with 10 Year Maintenance						**1719851**
	Departmental charges @ 17.5%						**300974**
	Contingency Charges @ 5%						**85993**
							2106818
	Rupees Twenty One Lakh Six Thousand Eight Hundred and Eighteen only						

4. **Technical details:-**

Technical details of compensatory afforestation scheme are as follows:-

q) **General Details** :- Conifer/ B/L species will be planted.

r) **Spacing**: 3 mtr x 3 mtr.

s) **Species**: Cedrus Deodara, pinus wallichiana, salix Spp. etc.

t) **Plantation Method**: Artificial plantation with RCC Fencing.

u) **Soil Moisture Conservation Works**:- Check walls are required to be constructed in gullies as per site requirement.

v) **Protection (Fencing , Watchman, People's Participation etc.)**

w) **Proposed Monitoring Mechanism** : - Department .

x) **Any other information** :- Nil

Divisional Forest Officer,
Kullu Forest Division, Kullu.

Proposal: Diversion of 3.1102 hectare of forest land in favour of NHLML for the construction of ropeway from Nature Park Mohal to Bijli Mahadev Temple in District Kullu, HP within the jurisdiction of Kullu Forest Division, Distt. Kullu, HP.

BILL OF NET PRESENT VALUE

In lieu of diversion of 3.1102 hectare of forest land in favour of NHLML for the construction of ropeway from Nature Park Mohal to Bijli Mahadev Temple in District Kullu, HP within the jurisdiction of Kullu Forest Division, Distt. Kullu, HP.

Name of Forest	Density of trees	Area proposed (ha.)	Category of NPV	Category rate for NPV	Rate of NPV/Ha.	NPV amount payable in Rs.
Maharaja-III	0.13	3.1102	Open Forest	Eco-Class VI	1069470	3326266
Total						**3326266**

(Rupees Thirty Three Lakh Twenty Six Thousand Two Hundred and Sixty Six only)

Divisional Forest Officer
Kullu Forest Division, Kullu.

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COST OF TREES BILL

Cost of trees coming in the diversion of 3.1102 hectare of forest land in favour of NHLML for development of ropeway from Nature Park (Mohal) to Bijli Mahadev Temple within the jurisdiction of Kullu Forest Division Distt. Kullu, H.P.

S. N.	Species	Scientific Name	Class	No.	Vol. (m3)	Rate (Rs) (2023-24)	Amt (Rs.)
1.	Kail	Pinus Wallichiana	IV	4	1.6		
			III	7	7.0		
			IIA	2	3.8		
			IIB	13	39.0		
			IA	25	97.5		
			IB	20	102.0		
			IC	13	81.9		
			ID	21	184.8		
				105	**517.6**	**73081**	**37826726**
2.	Chil	Pinu Roxburgii	V	15	1.5		
			IV	53	21.2		
			III	26	26.0		
			IIA	2	3.8		
			IA	1	3.9		
				97	**56.4**	**55596**	**3135614**
3.	Deodar	Cedrus Deodara	IV	1	0.4	84683	33873
	Cost of Trees			**203**	**574.4**		**40996213**
	Saplings						
4.	Deodar	Cedrus Deodara		8	0.224	84683	18969
		Total Cost					**41015182**
	Income Tax @2.575%						1056141
	Surcharge @3%						31684
	Grand Total						**42103007**
	Rupees Four Crore Twenty One Lakh Three Thousand Three and Seven only						

Divisional Forest Officer,
Kullu Forest Division, Kullu.

Ropeways and Rapid Transport System Development Corporation HP Limited
(A State Government Undertaking)
US Club Shimla - 01
Phone No. 0177-2811003, 2811004, 2811001

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Ropeways and Rapid Transport System Development Corporation HP Ltd.
प्रदूषण मुक्त यातायात के लिए हिमाचल की पहल

No. RTDC/Payment/2024-25/Vol-XIII/3496-3500 **Dated: -23/01/2025**

To,

The Manager,
HDFC Bank, The Mall Shimla
Distt. Shimla H.P.

Subject: ***RTGS Payment on a/c of Cost of CA including 5% contingency on CA (excluding 17.5% departmental charges) amounting to Rs. 18,05,844/- and Net Present Value (NPV) amounting to Rs. 33,26,266/- for "development of ropeway from Nature Park (Mohal) to Bijli Mahadev Temple"***

Ref. No. ***1207 dated 10-07-2024***

Sir,

Kindly make the payment through RTGS from the **account no. 50100297437422** to the following for an amount mentioned against each of them:

S. No	Beneficiary Name	Name of Bank	Account No.	IFSC Code	Amount
1	CAMPA HIMACHAL PRADESH	UNION BANK OF INDIA	150707275	UBIN0996335	51,32,110.00
(Rupees Fifty-One Lakh Thirty-Two Thousand One Hundred and Ten only)					**51,32,110.00**

You are requested to intimate this office the UTR number of above payments.

Yours faithfully,

Deputy General Manager
Ropeway & Rapid Transport System
Development Corporation, Shimla.
Email:-dgmrtchp@gmail.com

Copy Forwarded for information and further necessary action please to:

1. The Director, RTDC, Shimla-1
2. The Divisional Manager, FWD, HPSEDC Ltd. Kullu
3. The Range Forest Officer, Kullu
4. NHLML, Project Office-Kullu

Deputy General Manager
Ropeway & Rapid Transport System
Development Corporation, Shimla.
Email:-dgmrtchp@gmail.com

HDFC BANK

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LIC, THE MALL SHIMLA SHIMLA-171001 HIMACHAL PRADESH
RTGS / NEFT IFSC : HDFC0006405

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A/c No. खाता क्र. 50100297437422

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For ROPEWAYS & RAPID TPT SYS DEV CORP HP LTD

Authorised Signatories
Please sign above / कृपया यहाँ हस्ताक्षर करें

Deputy General Manager,
Ropeways & Rapid Transport System
Development Corporation HP Ltd., U.S. Club
Shimla-1, dgmrtdchp@gmail.com, PH. No. 28110

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Ropeways and Rapid Transport System Development Corporation HP Limited
(A State Government Undertaking)
US Club, Shimla - 01
Phone No. 0177-2811003, 2811004, 2811001

Ropeways and Rapid Transport System Development Corporation HP Ltd.
प्रदूषण मुक्त यातायात के लिए हिमाचल की पहल

No. RTDC/Payments/2024-25/Vol-XIII/3491-3495 **Dated: - 23 /01/2025**

To,

The Divisional Forest Officer,
Kullu, HP - 175101.

Subject: - ***Diversion of 3.1102 ha. of forest land in favour NHLML for the development of ropeway from Nature Park (Mohal) to Bijli Mahadev Temple within the jurisdiction of Kullu Forest Division, District Kullu, HP. (Proposal No. FP/HP/Others/418659/2023) (Payment of Cost of Trees and Departmental Charges thereof).***

Ref. No. - ***1207 dated 10-07-2024.***

Sir,

Please find enclosed herewith a **cheque No.001937 dated 23/01/2025** amounting to ***Rs. 4,24,03,981/- (Rs. Four Crore Twenty-Four Lakh Three Thousand Nine Hundred and Eighty-One)*** only on account of **Cost of Trees and Departmental Charges** for development of "ropeway from Nature Park (Mohal) to Bijli Mahadev Temple" as detail given under:

S. No.	Amount required to be deposited in State Govt. Treasury	Amount
i)	Cost of trees	4,10,15,182.00
ii)	Departmental Charges on CA @ 17.5% of CA cost	3,00,974.00
iii)	Income Tax @ 2.575% on price of tree	10,56,141.00
iv)	Surcharge @ 3% on income tax	31,684.00
	Total	**4,24,03,981.00**

Kindly acknowledge the receipt of the same.

Yours faithfully,

Deputy General Manager
Ropeway & Rapid Transport System
Development Corporation, Shimla.
Email: - dgmrtdchp@gmail.com

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Ropeways and Rapid Transport System Development Corporation HP Limited
(A State Government Undertaking)
US Club, Shimla - 01
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Ropeways and Rapid Transport System Development Corporation HP Ltd.
प्रदूषण मुक्त यातायात के लिए हिमाचल की पहल

Copy forwarded for information and further necessary action please to: -

1. The Director, RTDC, Shimla-1
2. Divisional Manager, FWD, HPSEDC Ltd. Kullu
3. Range Forest Officer, Kullu
4. NHLML, Project Office-Kullu

Deputy General Manager
Ropeway & Rapid Transport System Development Corporation, Shimla.
Email: - dgmrtdchp@gmail.com

HDFC BANK

HDFC BANK LTD, GROUND FLOOR, JEEVAN JYOTI BUILDING
LIC, THE MALL SHIMLA SHIMLA-171001 HIMACHAL PRADESH
RTGS / NEFT IFSC : HDFC0006405

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2	3	0	1	2	8	2	5
D	D	M	M	Y	Y	Y	Y

Valid for 3 months only

Pay Divisional Forest Officer Kullu **Or Bearer**
या धारक को

Rupees रुपये Four Crore Twenty-Four Lakh Three Thousand Nine Hundred and Eighty-One ——→ —अदा करें

₹ 4,24,03,981/—

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Deputy General Manager,
Ropeways & Rapid Transport System
Development Corporation HP Ltd., U.S. Club
Shimla-1, dgmrtdchp@gmail.com, PH. No. 2[illegible]

⑈001937⑈ ⑆171240020⑆ 000594⑈ 25

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Enumeration list of Trees coming under the proposed alignment of Bijli Mahadev Ropeway Project in 1/32 Kandi CIII-b Forest in Bijli Mahadev Beat in Kais Block Kullu Forest Range for the year 2023-24.

Sr. no	Species	Botanical Name	Dia	Class	No.	Volume	Remarks
Between Tower No. 12 & 13 :-							
1	Kail	*Pinus Wallichiana*	102-109	ID	1	8.80	Green Standing (To Be Retained)
2	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Retained)
3	Kail	*Pinus Wallichiana*	60-64	IA	1	3.90	Green Standing (To Be Retained)
4	Kail	*Pinus Wallichiana*	90-98	ID	1	8.80	Green Standing (To Be Retained)
5	Kail	*Pinus Wallichiana*	71-74	IB	1	5.10	Green Standing (To Be Retained)
6	Kail	*Pinus Wallichiana*	80-85	IC	1	6.30	Green Standing (To Be Retained)
7	Kail	*Pinus Wallichiana*	71-73	IB	1	5.10	Green Standing (To Be Retained)
8	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Retained)
9	Kail	*Pinus Wallichiana*	85-87	IC	1	6.30	Green Standing (To Be Retained)
10	Kail	*Pinus Wallichiana*	95-97	ID	1	8.80	Green Standing (To Be Retained)
11	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Retained)
12	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Retained)
13	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Retained)
14	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Retained)
15	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Retained)
16	Kail	*Pinus Wallichiana*	90-102	ID	1	8.80	Green Standing (To Be Retained)
17	Kail	*Pinus Wallichiana*	81-84	IC	1	6.30	Green Standing with hollow stump (To Be Retained)
18	Kail	*Pinus Wallichiana*	71-74	IB	1	5.10	Green Standing (To Be Retained)
19	Kail	*Pinus Wallichiana*	82-86	IC	1	6.30	Green Standing (To Be Retained)
20	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Retained)
21	Kail	*Pinus Wallichiana*	85-89	IC	1	6.30	Green Standing (To Be Retained)
Under Tower No. 13							
22	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Felled)
23	Kail	*Pinus Wallichiana*	35-39	III	1	1.00	Green Standing (To Be Felled)
Between Tower No. 13 & 14 :-							
24	Kail	*Pinus Wallichiana*	57-60	IIB	1	3.00	Green Standing (To Be Felled)
25	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Felled)
26	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Felled)
27	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Felled)
28	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Felled)
29	Kail	*Pinus Wallichiana*	66-70	IA	1	3.90	Green Standing (To Be Felled)
30	Kail	*Pinus Wallichiana*	68-70	IA	1	3.90	Green Standing (To Be Felled)

31	Kail	*Pinus Wallichiana*		IB	1	5.10	Green Standing (To Be Felled)
32	Kail	*Pinus Wallichiana*	61-64	IA	1	3.90	Green Standing (To Be Felled)
33	Kail	*Pinus Wallichiana*	71-76	IB	1	5.10	Green Standing (To Be Felled)
34	Kail	*Pinus Wallichiana*	51-54	IIB	1	3.00	Green Standing (To Be Felled)
35	Kail	*Pinus Wallichiana*	66-68	IA	1	3.90	Green Standing (To Be Felled)
36	Kail	*Pinus Wallichiana*	61-63	IA	1	3.90	Green Standing (To Be Felled)
37	Kail	*Pinus Wallichiana*	64-68	IA	1	3.90	Green Standing (To Be Felled)
38	Kail	*Pinus Wallichiana*	66-68	IA	1	3.90	Green Standing (To Be Felled)
39	Kail	*Pinus Wallichiana*	70-74	IB	1	5.10	Green Standing (To Be Felled)
40	Kail	*Pinus Wallichiana*	70-74	IB	1	5.10	Green Standing (To Be Felled)
41	Kail	*Pinus Wallichiana*	51-53	IIB	1	3.00	Green Standing (To Be Felled)
42	Kail	*Pinus Wallichiana*	64-68	IA	1	3.90	Green Standing (To Be Felled)
43	Kail	*Pinus Wallichiana*	55-57	IIB	1	3.00	Green Standing with top broken (To Be Felled)
44	Kail	*Pinus Wallichiana*	80-83	IC	1	6.30	Green Standing (To Be Felled)
45	Kail	*Pinus Wallichiana*	71-74	IB	1	5.10	Green Standing with top broken (To Be Felled)
46	Kail	*Pinus Wallichiana*	66-69	IA	1	3.90	Green Standing (To Be Retained)
47	Kail	*Pinus Wallichiana*	68-70	IA	1	3.90	Green Standing (To Be Felled)
Under Tower No. 14							
48	Kail	*Pinus Wallichiana*	66-68	IA	1	3.90	Green Standing (To Be Felled)
Between Tower No. 14 & 15 :-							
49	Kail	*Pinus Wallichiana*	81-84	IC	1	6.30	Green Standing (To Be Felled)
50	Kail	*Pinus Wallichiana*	86-89	IC	1	6.30	Green Standing (To Be Felled)
51	Kail	*Pinus Wallichiana*	31-34	III	1	1.00	Green Standing (To Be Felled)
52	Kail	*Pinus Wallichiana*	31-34	III	1	1.00	Green Standing (To Be Felled)
53	Kail	*Pinus Wallichiana*	56-59	IIB	1	3.00	Green Standing (To Be Felled)
Under Tower No. 15							
54	Kail	*Pinus Wallichiana*	56-58	IIB	1	3.00	Green Standing (To Be Felled)
55	Kail	*Pinus Wallichiana*	63-68	IA	1	3.90	Green Standing (To Be Felled)
56	Kail	*Pinus Wallichiana*	73-76	IB	1	5.10	Green Standing (To Be Felled)
Between Tower No. 15 & 16 :-							
57	Kail	*Pinus Wallichiana*	28-30	IV	1	0.40	Green Standing (To Be Felled)
58	Kail	*Pinus Wallichiana*	25-27	IV	1	0.40	Green Standing (To Be Felled)
59	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing (To Be Felled)
60	Kail	*Pinus Wallichiana*	26-29	IV	1	0.40	Green Standing (To Be Felled)
61	Kail	*Pinus Wallichiana*	68-70	IA	1	3.90	Green Standing (To Be Felled)
62	Kail	*Pinus Wallichiana*	65-69	IA	1	3.90	Green Standing (To Be Felled)

63	Kail	*Pinus Wallichiana*	[illegible]	IA	1	3.90	Green Standing (To Be Felled)
64	Kail	*Pinus Wallichiana*	36-39	III	1	1.00	Green Standing (To Be Felled)
65	Kail	*Pinus Wallichiana*	37-40	III	1	1.00	Green Standing (To Be Felled)
66	Kail	*Pinus Wallichiana*	34-38	III	1	1.00	Green Standing (To Be Felled)
67	Kail	*Pinus Wallichiana*	61-64	IA	1	3.90	Green Standing (To Be Felled)
68	Kail	*Pinus Wallichiana*	51-56	IIB	1	3.00	Green Standing (To Be Felled)
69	Kail	*Pinus Wallichiana*	52-56	IIB	1	3.00	Green Standing (To Be Felled)
70	Kail	*Pinus Wallichiana*	71-74	IB	1	5.10	Green Standing (To Be Felled)
71	Kail	*Pinus Wallichiana*	64-68	IA	1	3.90	Green Standing (To Be Felled)
72	Kail	*Pinus Wallichiana*	73-78	IB	1	5.10	Green Standing (To Be Felled)
73	Kail	*Pinus Wallichiana*	80-83	IC	1	6.30	Green Standing (To Be Felled)
74	Kail	*Pinus Wallichiana*	61-64	IA	1	3.90	Green Standing (To Be Felled)
75	Kail	*Pinus Wallichiana*	55-57	IIB	1	3.00	Green Standing (To Be Felled)
76	Kail	*Pinus Wallichiana*	61-63	IA	1	3.90	Green Standing (To Be Felled)
77	Kail	*Pinus Wallichiana*	64-68	IA	1	3.90	Green Standing (To Be Felled)
Between Tower No. 16 & 17:-							
78	Kail	*Pinus Wallichiana*	55-57	IIB	1	3.00	Green Standing (To Be Felled)
79	Kail	*Pinus Wallichiana*		ID over	1	8.80	Green Standing with burnt stump (To Be Felled)
80	Kail	*Pinus Wallichiana*	71-74	IB	1	5.10	Green Standing (To Be Felled)
81	Kail	*Pinus Wallichiana*	54-58	IIB	1	3.00	Green Standing (To Be Felled)
82	Kail	*Pinus Wallichiana*	58-60	IIB	1	3.00	Green Standing (To Be Felled)
83	Kail	*Pinus Wallichiana*	76-79	IB	1	5.10	Green Standing (To Be Felled)
84	Kail	*Pinus Wallichiana*	57-59	IIB	1	3.00	Green Standing (To Be Felled)
85	Kail	*Pinus Wallichiana*	78-80	IB	1	5.10	Green Standing (To Be Felled)
86	Kail	*Pinus Wallichiana*	74-78	IB	1	5.10	Green Standing (To Be Felled)

Enumeration list of Trees coming under the proposed alignment of Bijli Mahadev Ropeway Project in 1/32 Kais-III Forest in Bijli Mahadev Beat in Kais Block Kullu Forest Range for the year 2023-24.

Between Tower No. 2 & 3 :-							
87	Chil	*Pinus Roxburghii*	25-29	IV	1	0.40	Green Standing (To Be Retained)
88	Chil	*Pinus Roxburghii*	36-38	III	1	1.00	Green Standing (To Be Retained)
89	Chil	*Pinus Roxburghii*	65-69	IA	1	3.90	Green Standing (To Be Retained)
90	Chil	*Pinus Roxburghii*	35-38	III	1	1.00	Green Standing (To Be Retained)
91	Chil	*Pinus Roxburghii*	25-28	IV	1	0.40	Green Standing (To Be Retained)
92	Chil	*Pinus Roxburghii*	23-26	IV	1	0.40	Green Standing (To Be Retained)

93	Chil	*Pinus Roxburghii*	[illegible]	IIA	1	1.90	Green Standing (To Be Retained)
94	Chil	*Pinus Roxburghii*	22-27	IV	1	0.40	Green Standing (To Be Retained)
95	Chil	*Pinus Roxburghii*	33-38	III	1	1.00	Green Standing (To Be Retained)
96	Chil	*Pinus Roxburghii*	46-49	IIA	1	1.90	Green Standing (To Be Retained)
97	Chil	*Pinus Roxburghii*	31-35	III	1	1.00	Green Standing (To Be Retained)
98	Chil	*Pinus Roxburghii*	33-38	III	1	1.00	Green Standing (To Be Retained)
99	Chil	*Pinus Roxburghii*	31-34	III	1	1.00	Green Standing (To Be Retained)
100	Chil	*Pinus Roxburghii*	35-39	III	1	1.00	Green Standing (To Be Retained)
101	Chil	*Pinus Roxburghii*	23-27	IV	1	0.40	Green Standing (To Be Retained)
102	Chil	*Pinus Roxburghii*	25-29	IV	1	0.40	Green Standing (To Be Retained)
103	Chil	*Pinus Roxburghii*	24-26	IV	1	0.40	Green Standing (To Be Retained)
104	Chil	*Pinus Roxburghii*	22-28	IV	1	0.40	Green Standing (To Be Retained)
105	Chil	*Pinus Roxburghii*	21-26	IV	1	0.40	Green Standing (To Be Retained)
106	Chil	*Pinus Roxburghii*	23-27	IV	1	0.40	Green Standing (To Be Retained)
107	Chil	*Pinus Roxburghii*	26-29	IV	1	0.40	Green Standing (To Be Retained)
108	Chil	*Pinus Roxburghii*	15-19	V	1	0.10	Green Standing (To Be Retained)
109	Chil	*Pinus Roxburghii*	22-29	IV	1	0.40	Green Standing (To Be Retained)
110	Chil	*Pinus Roxburghii*	16-18	V	1	0.10	Green Standing (To Be Retained)
111	Chil	*Pinus Roxburghii*	32-37	III	1	1.00	Green Standing (To Be Retained)
112	Chil	*Pinus Roxburghii*	26-29	IV	1	0.40	Green Standing (To Be Retained)
113	Chil	*Pinus Roxburghii*	24-26	IV	1	0.40	Green Standing (To Be Retained)
114	Chil	*Pinus Roxburghii*	22-28	IV	1	0.40	Green Standing (To Be Retained)
115	Chil	*Pinus Roxburghii*	18-20	V	1	0.10	Green Standing (To Be Retained)
116	Chil	*Pinus Roxburghii*	23-27	IV	1	0.40	Green Standing (To Be Retained)
117	Chil	*Pinus Roxburghii*	25-29	IV	1	0.40	Green Standing (To Be Retained)
118	Chil	*Pinus Roxburghii*	33-38	III	1	1.00	Green Standing (To Be Retained)
119	Chil	*Pinus Roxburghii*	34-39	III	1	1.00	Green Standing (To Be Retained)
120	Chil	*Pinus Roxburghii*	26-28	IV	1	0.40	Green Standing (To Be Retained)
121	Chil	*Pinus Roxburghii*	24-29	IV	1	0.40	Green Standing (To Be Retained)
122	Chil	*Pinus Roxburghii*	37-39	III	1	1.00	Green Standing (To Be Retained)
123	Chil	*Pinus Roxburghii*	26-29	IV	1	0.40	Green Standing (To Be Retained)
124	Chil	*Pinus Roxburghii*	16-19	V	1	0.10	Green Standing (To Be Retained)
125	Chil	*Pinus Roxburghii*	15-18	V	1	0.10	Green Standing (To Be Retained)
126	Chil	*Pinus Roxburghii*	27-29	IV	1	0.40	Green Standing (To Be Retained)
127	Chil	*Pinus Roxburghii*	24-26	IV	1	0.40	Green Standing (To Be Retained)

128	Chil	*Pinus Roxburghii*	28-31	III	1	1.00	Green Standing (To Be Retained)
129	Chil	*Pinus Roxburghii*	21-25	IV	1	0.40	Green Standing (To Be Retained)
130	Chil	*Pinus Roxburghii*	15-20	V	1	0.10	Green Standing (To Be Retained)
131	Chil	*Pinus Roxburghii*	35-38	III	1	1.00	Green Standing (To Be Retained)
132	Chil	*Pinus Roxburghii*	22-27	IV	1	0.40	Green Standing (To Be Retained)
133	Chil	*Pinus Roxburghii*	26-29	IV	1	0.40	Green Standing (To Be Retained)
134	Chil	*Pinus Roxburghii*	27-30	IV	1	0.40	Green Standing (To Be Retained)
135	Chil	*Pinus Roxburghii*	34-39	III	1	1.00	Green Standing (To Be Retained)
Under Tower No. 3							
136	Chil	*Pinus Roxburghii*	25-27	IV	1	0.40	Green Standing (To Be Felled)
137	Chil	*Pinus Roxburghii*	26-29	IV	1	0.40	Green Standing (To Be Felled)
138	Chil	*Pinus Roxburghii*	22-28	IV	1	0.40	Green Standing (To Be Felled)
139	Chil	*Pinus Roxburghii*	32-37	III	1	1.00	Green Standing (To Be Felled)
Between Tower No. 3 & 4 :-							
140	Chil	*Pinus Roxburghii*	18-20	V	1	0.10	Green Standing (To Be Retained)
141	Chil	*Pinus Roxburghii*	24-28	IV	1	0.40	Green Standing (To Be Retained)
142	Chil	*Pinus Roxburghii*	23-29	IV	1	0.40	Green Standing (To Be Retained)
143	Chil	*Pinus Roxburghii*	25-27	IV	1	0.40	Green Standing (To Be Retained)
144	Chil	*Pinus Roxburghii*	21-25	IV	1	0.40	Green Standing (To Be Retained)
145	Chil	*Pinus Roxburghii*	34-37	III	1	1.00	Green Standing (To Be Retained)
146	Chil	*Pinus Roxburghii*	24-27	IV	1	0.40	Green Standing (To Be Retained)
147	Chil	*Pinus Roxburghii*	15-19	V	1	0.10	Green Standing (To Be Retained)
148	Chil	*Pinus Roxburghii*	17-19	V	1	0.10	Green Standing (To Be Retained)
149	Chil	*Pinus Roxburghii*	27-29	IV	1	0.40	Green Standing (To Be Retained)
150	Chil	*Pinus Roxburghii*	35-37	III	1	1.00	Green Standing (To Be Retained)
151	Chil	*Pinus Roxburghii*	31-35	III	1	1.00	Green Standing (To Be Retained)
152	Chil	*Pinus Roxburghii*	26-28	IV	1	0.40	Green Standing (To Be Retained)
153	Chil	*Pinus Roxburghii*	17-19	V	1	0.10	Green Standing (To Be Retained)
154	Chil	*Pinus Roxburghii*	15-18	V	1	0.10	Green Standing (To Be Retained)
155	Chil	*Pinus Roxburghii*	24-26	IV	1	0.40	Green Standing (To Be Retained)
156	Chil	*Pinus Roxburghii*	31-35	III	1	1.00	Green Standing (To Be Retained)
157	Chil	*Pinus Roxburghii*	35-39	III	1	1.00	Green Standing (To Be Retained)
158	Chil	*Pinus Roxburghii*	37-39	III	1	1.00	Green Standing (To Be Retained)
159	Chil	*Pinus Roxburghii*	21-26	IV	1	0.40	Green Standing (To Be Retained)

160	Chil	*Pinus Roxburghii*	23-26	IV	1	0.40	Green Standing (To Be Retained)
161	Chil	*Pinus Roxburghii*	23-28	IV	1	0.40	Green Standing (To Be Retained)
162	Chil	*Pinus Roxburghii*	34-37	III	1	1.00	Green Standing (To Be Retained)
163	Chil	*Pinus Roxburghii*	21-26	IV	1	0.40	Green Standing (To Be Retained)
164	Chil	*Pinus Roxburghii*	24-28	IV	1	0.40	Green Standing (To Be Retained)
165	Chil	*Pinus Roxburghii*	26-29	IV	1	0.40	Green Standing (To Be Retained)
166	Chil	*Pinus Roxburghii*	23-25	IV	1	0.40	Green Standing (To Be Retained)
167	Chil	*Pinus Roxburghii*	34-38	III	1	1.00	Green Standing (To Be Retained)
168	Chil	*Pinus Roxburghii*	16-20	V	1	0.10	Green Standing (To Be Retained)
169	Chil	*Pinus Roxburghii*	31-37	III	1	1.00	Green Standing (To Be Retained)
170	Chil	*Pinus Roxburghii*	24-26	IV	1	0.40	Green Standing (To Be Retained)
171	Chil	*Pinus Roxburghii*	18-20	V	1	0.10	Green Standing (To Be Retained)
172	Chil	*Pinus Roxburghii*	17-19	V	1	0.10	Green Standing (To Be Retained)
173	Chil	*Pinus Roxburghii*	34-37	III	1	1.00	Green Standing (To Be Retained)
174	Chil	*Pinus Roxburghii*	25-27	IV	1	0.40	Green Standing (To Be Retained)
175	Chil	*Pinus Roxburghii*	35-39	III	1	1.00	Green Standing (To Be Retained)
176	Chil	*Pinus Roxburghii*	25-27	IV	1	0.40	Green Standing (To Be Retained)
177	Chil	*Pinus Roxburghii*	25-27	IV	1	0.40	Green Standing (To Be Retained)
178	Chil	*Pinus Roxburghii*	21-28	IV	1	0.40	Green Standing (To Be Retained)
179	Chil	*Pinus Roxburghii*	21-26	IV	1	0.40	Green Standing (To Be Retained)
180	Chil	*Pinus Roxburghii*	24-29	IV	1	0.40	Green Standing (To Be Retained)
181	Chil	*Pinus Roxburghii*	25-28	IV	1	0.40	Green Standing (To Be Retained)
182	Chil	*Pinus Roxburghii*	16-18	V	1	0.10	Green Standing (To Be Retained)
183	Chil	*Pinus Roxburghii*	26-29	IV	1	0.40	Green Standing (To Be Retained)
184	Kail	*Pinus Wallichiana*	42-45	IIA	1	1.90	Green Standing (To Be Retained)
185	Kail	*Pinus Wallichiana*	47-50	IIA	1	1.90	Green Standing (To Be Retained)
186	Kail	*Pinus Wallichiana*	61-64	IA	1	3.90	Green Standing (To Be Retained)
Under Tower No. 12 :-							
187	Deo	*Cedras Deodara*	25-27	IV	1	0.40	Green Standing (To Be Felled)
188	Kail	*Pinus Wallichiana*	71-75	IB	1	5.10	Green Standing (To Be Felled)
Between Tower No. 12 & 13 :-							
189	Kail	*Pinus Wallichiana*	21-26	IV	1	0.40	Green Standing (To Be Retained)
190	Kail	*Pinus Wallichiana*	35-39	III	1	1.00	Green Standing (To Be Retained)

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191	Kail	*Pinus Wallichiana*	77-80	IB	1	5.10	Green Standing (To Be Retained)
192	Kail	*Pinus Wallichiana*	61-63	IA	1	3.90	Green Standing (To Be Retained)
193	Kail	*Pinus Wallichiana*	77-79	IB	1	5.10	Green Standing (To Be Retained)
194	Kail	*Pinus Wallichiana*	82-84	IC	1	6.30	Green Standing (To Be Retained)
195	Kail	*Pinus Wallichiana*	75-78	IB	1	5.10	Green Standing (To Be Retained)
196	Kail	*Pinus Wallichiana*	81-85	IC	1	6.30	Green Standing (To Be Retained)
197	Kail	*Pinus Wallichiana*	61-68	IA	1	3.90	Green Standing (To Be Retained)
198	Kail	*Pinus Wallichiana*	-	ID over	1	8.80	Green Standing (To Be Retained)
199	Kail	*Pinus Wallichiana*	88-90	IC	1	6.30	Green Standing (To Be Retained)
200	Kail	*Pinus Wallichiana*	74-78	IB	1	5.10	Green Standing (To Be Retained)
201	Kail	*Pinus Wallichiana*	62-65	IA	1	3.90	Green Standing (To Be Retained)
202	Kail	*Pinus Wallichiana*	93-95	ID	1	8.80	Green Standing (To Be Retained)
203	Kail	*Pinus Wallichiana*	81-84	IC	1	6.30	Green Standing (To Be Retained)
				Total =	**203**		

ABSTRACT (TO BE FELLED)

Sr. no	Species	V	IV	III	IIA	IIB	IA	IB	IC	ID & over	Total	
											No	Volume
1	Pinus Wallichiana	-	3/ 1.20	6/ 6.00	2/ 3.80	13/ 39.00	19/ 74.10	13/ 66.30	4/ 25.20	7/ 61.60	67	277.20
2	Pinus Roxburghii	-	3/ 1.20	1/ 1.00	-	-	-	-	-	-	4	2.20
3	Cedrus Deodara	-	1/ 0.40	-	-	-	-	-	-	-	1	0.40
										Total =	72	279.80

ABSTRACT (TO BE RETAINED)

Sr. no	Species	V	IV	III	IIA	IIB	IA	IB	IC	ID & over	Total	
											No	Volume
1	Pinus Wallichiana	-	1/ 0.40	1/ 1.00	-	-	6/ 23.40	7/ 35.70	9/ 56.70	14/ 123.20	38	240.40
2	Pinus Roxburghii	15/ 1.5	50/ 20.00	25/ 25.00	2/ 3.8	-	1/ 3.90	-	-	-	93	54.20
										Total =	131	294.60

Callipered by

Forest Guard
I/C Bijli Mahadev Beat

Recorded by

Block Officer
Kais Block

Verified by

Range Officer
Forest Range Kullu

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Cost of Trees coming in the alignment in Construction of Bijlimahadev ropeway project, Kullu Forest Division Kullu

Species	Botanical Name	Class	No	Vol	Rate	Amount
Kail	Pinus wallichiana	IV	4	1.60		
		III	7	7.00		
		IIA	2	3.80		
		IIB	13	39.00		
		IA	25	97.50		
		IB	20	102.00		
		IC	13	81.90		
		ID	21	184.80		
		Total	**105 No**	**517.60**	**@61,669/-**	**3,19,19,874-00**
Chil	Pinus Roxburgii	V	15	1.50		
		IV	53	21.20		
		III	26	26.00		
		IIA	2	3.80		
		IA	1	3.90		
		Total	**97 No**	**56.40**	**@41,976/-**	**23,67,446-00**
Deo	Cedrus Deodara	IV	1	0.40	**@84683/-**	**33,873-00**
Deo, Sappling	Cedrus Deodara		**8 No**	**0**	**@1000/- each**	**8,000-00**
					Total	**3,43,29,193-00**

RangeForest Officer,
Kullu Forest Range.

Divisional Forest Officer,
KulluForest Division Kullu.

Annexure R-2/12

"SCHEME FOR COMPENSATORY AFFORESTATION"
(Norms-2023-24)

In lieu of diversion of 3.1102 hectare of forest land in favour of NHLML for the construction of ropeway from Nature Park Mohal to Bijli Mahadev Temple in District Kullu, HP within the jurisdiction of Kullu Forest Division, Distt. Kullu, HP.

1. Details of degraded forest land/ non forest land:-

Area: **Kail Phat** District:- **Kullu** Tehsil:- **Kullu**
Division: **Kullu** Range:- **Kullu** Block/Beat: **Kais/Tandla**
Compartment/Survey No: **52 H/4** Area to be afforested:- **6.479 hectare**

2. Description of area:-

xvi. Whether the site selected for compensatory afforestation is a land bank or not:- **Yes**
xvii. If the CA site is other than the land bank, reasons be given:- **No**
xviii. In case of non forest area identified in from-A, then what is the distance of CA site from the adjoining forest boundary :- **forest area**
xix. Soil type:- **Sandy-loamy/apparently deep**
xx. Topography :- a) **Hilly**
b) **Medium**
vi. Whether the area is bearing any root stock of vegetation:- **Yes**

Plantation Model:- **Departmental**

Copy of the approved compensatory afforestation scheme/ model showing component wise physical and financial break up is enclosed.

Schedule of Plantation programme:-

3. Detail of year wise break up of requirement of funds is as under :-

Compensatory Afforestation Bill							
S. N.	**Particulars**	**Area in ha.**	**Year**	**Rate per Hectare**	**Cost Escalation**	**Rate After applying cost escalation**	**Total Amount (Rs)**
1.	New Plantation	6.479	2023-24	120900	10%	132990	861642
2.	1st Year Maintenance	6.479	2024-25	19300	20%	23160	150054
3.	2nd Year Maintenance	6.479	2025-26	13000	30%	16900	109495
4.	3rd Year Maintenance	6.479	2026-27	6600	40%	9240	59866
5.	4th Year Maintenance	6.479	2027-28	6600	50%	9900	64142
6.	5th Year Maintenance	6.479	2028-29	6600	60%	10560	68418

7.	6th Year Maintenance	6.479	2029-30	6600	70%	11220	72694
8.	7th Year Maintenance	6.479	2030-31	6600	80%	11880	76971
9.	8th Year Maintenance	6.479	2031-32	6600	90%	12540	81247
10.	9th Year Maintenance	6.479	2032-33	6600	100%	13200	85523
11.	10th Year Maintenance	6.479	2033-34	6600	110%	13860	89799
	Total Plantation for 1100 plants/hectare with 10 Year Maintenance						**1719851**
	Departmental charges @ 17.5%						**300974**
	Contingency Charges @ 5%						**85993**
							2106818
	Rupees Twenty One Lakh Six Thousand Eight Hundred and Eighteen only						

4. **Technical details:-**

Technical details of compensatory afforestation scheme are as follows:-

q) **General Details** :- Conifer/ B/L species will be planted.

r) **Spacing**: 3 mtr x 3 mtr.

s) **Species**: Cedrus Deodara, pinus wallichiana, salix Spp. etc.

t) **Plantation Method**: Artificial plantation with RCC Fencing.

u) **Soil Moisture Conservation Works**:- Check walls are required to be constructed in gullies as per site requirement.

v) **Protection (Fencing , Watchman, People's Participation etc.)**

w) **Proposed Monitoring Mechanism** : - Department .

x) **Any other information** :- Nil

Divisional Forest Officer,
Kullu Forest Division, Kullu.

HIMACHAL PRADESH FOREST DEPARTMENT
KULLU FOREST DIVISION KULLU, H.P.
Tel No.01902-222510
e-mail: kulluforestdivision@gmail.com; dfokul-hp@nic.in

No.FCA/**6163** Dated Kullu, the : **07th March, 2025**

To

The Project Manager
Project Office, Kullu NHLML
C/o NHAI H.Q. G- 5&6 Sec-10
Dwarka, New Delhi-10075

Subject: **Diversion of 3.1102 ha. of forest land in favour of NHLML for the development of Ropeway from Nature Park (Mohal) to Bijli Maha Dev Temple within the jurisdiction of Kullu Forest Division, Distt. Kullu, HP. (Proposal No. FP/HP/Others/418659/2023)**

Sir,

Please refer to your letter No.NHLM/SO-Kullu/Bijli Mahadev Ropeway/30 dated 11.02.2025 on the above cited subject.

In pursuance of guidelines issued by Ministry of Environment Forest and Climate Change, Govt of India vide letter No.11-306/2014-FC dated 07.05.2015 and even No. letter dated 27.09.2017, the permission for cutting of trees and commencement of work in subject cited linear project is hereby accorded on subject to the following terms and conditions:

1. Legal status of land shall not be changed.
2. The forest land will not be used for any other purpose than that as mentioned in the "in-principle" approval.
3. Diverted area shall be marked by way of erecting boundary pillars with serial numbers and forward/backward on them at the cost of user agency.
4. No work shall be carried over the area having trees until the felling of trees is done through HPSFDC Ltd after completion of due process.
5. Dumping of muck, if any, shall be allowed only over the approved dumping sites as per the approved plan.
6. The stipulations imposed vide in-principle approval accorded by MoEF & CC on dated 08.07.2024 shall not be violated in any way. An undertaking in this regard be shall be submitted by the user agency before start of work.

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7. For any other Act/Rule/Guidelines/Court orders applicable on this project, it will be the responsibility of the user agency to obtain necessary permission/NOC from the concerned Department/Authority.
8. No violation of IFA, 1927 and FCA, 1980 shall be done in any way for which the user agency shall be liable for penal provisions as contained in the said Act.
9. Forest Department reserves the right to add any other conditions and this permission may be cancelled at any time without prior notice to the user agency, if the above conditions area violated by the user agency.

Divisional Forest Officer
Kullu, Forest Division Kullu.

Endst. No.FCA/**6164-65** Dated Kullu, the **07th March, 2025**

Copy for information & necessary action to:

1. Divisional Manager, FWD, HPSFDC Ltd. Kullu.
2. Range Forest Officer, Kullu. She is directed to monitor the works regularly and ensure the compliance of above stipulations.

Divisional Forest Officer
Kullu, Forest Division Kullu.

Annexure R-2/14

BIJLI MAHADEV SKY WAYS PRIVATE LIMITED

BMSWPL

Registered Office : 95, Hiran Magri, Sector-11, Udaipur – 313001, Rajasthan
T. : 0294 2482238, 2482193 bijli.mahadev@raviinfra.com

Ref: BMSWPL/Ropeway/Site/2025-26/003

Date:18.06.2025

To
The Project Manager,
Site Office, Kullu,
NHLML

Sub: Development, Operation and Maintenance of Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in District Kullu in the State of Himachal Pradesh on Hybrid Annuity Mode: **Consent for 72 no enumerated Tree Cutting (as per stage-I FCA) by the Concessionaire on self-execution basis.**

Ref: 1. Your office letter no. NHLML/SO-Kullu/Bijali Mahadev Ropeway/43 dt. 05.05.2025
2. Your office letter no. NHLML/SO-Kullu/Bijali Mahadev Ropeway/38 dt. 20.08.2025
3. Your office letter no. NHLML/SO-Kullu/Bijali Mahadev Ropeway/43 dt. 27.02.2025

Dear Sir/Madam,

This is with reference to above cited subject and in response to your letter under reference dt. 05.05.2025 vide your office has sought consent for the Tree Cutting on self-execution basis.

In this regard, we hereby give our consent for cutting / felling of **72 nos enumerated** trees (as per stage-I FCA) on self-execution basis in the interest of project.

Thanking you and assuring you our best services and cooperation at all times.

Yours faithfully,
For **Bijli Mahadev Sky Ways Pvt. Ltd.**

Sumaya Saurabh

(Authorized Signatory)

CC: 1. Vice President (Ropeways), NHLML, New Delhi.
2. Authorized Signatory, Independent Engineer, Salzmann-Bernard-SECL JV

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Annexure R-2/15

Annexure-5

Registered

HIMACHAL PRADESH STATE FOREST DEVELOPMENT CORPORATION
FOREST WORKING DIVISION KULLU

No. HPSFC/FWDK/WKS/T-1317/ 1679-81 Dated/ 23/6/2025

M/s National Highways Logistics Management Limited
NHAI HQ. G-5 & 6, Sector -10,
Dwarka, New Delhi -110075

Subject: Allotment for felling of trees & extraction of forest produce, manual carriage to RSD and TT upto Sale Depots of Lot No. 1/2026-27 Kais -III Ropeway from Nature Park Mohal to Bijli Mahadev Temple of Kullu Forest Division.

Sir

Kindly refer to your office letter No. NHLML/PO-Kullu/Bijli Mahadev Ropeway/26 dated 13-05-2025 on the subject cited above.

In pursuance of your tender dated 13-05-2025 and execution of agreement thereof, you are hereby allowed to start the work for felling of trees & extraction of forest produce, manual carriage and TT upto sale depots in respect of Lot No. 1/2026-27 Kais -III Ropeway from Nature Park Mohal to Bijli Mahadev Temple of Kullu Forest Division, detail of which is as under:-

Name of Operations	Volume	Basic Rate as per economics	Amount as per economics
Felling of trees	279.800	65.00	**18187**
CONVERSION CHARGES (Conifer except Chil)			
St. Sawn Sizes 366x26x13, 305x26x13, 244fx26x13 Cm	50.087	2176.95	109037
Non Sawn Sizes 275x26x13, 366x21x13, 305x21x13, 244x21x13, 214x21x13, 183x26x13, except section 31x16	32.400	1523.75	49369
All other sizes not included in St. Sawn and Non st.	37.861	1089.05	41233
Axehewn	16.275	1323.65	21542
Dimdimas	7.426	460.00	3416
R/B above 35 Cm girth	3.873	945.00	3661
R/B upto 35 Cm girth	2.033	472.65	961
Hakries (up)	1.486	195.50	291
Hakries (Below)	1.480	80.50	119
Total Timber	**152.920**		**229628**
CONVERSION CHARGES (Conifer Chil)			
St. Sawn Sizes 366x26x13, 305x26x13, 244fx26x13 Cm	0.015	1840.00	29
Non Sawn Sizes 275x26x13, 366x21x13, 305x21x13, 244x21x13, 214x21x13, 183x26x13, except section 31x16	0.048	1288.00	61
All other sizes not included in St. Sawn and Non st.	0.188	920.00	173
Axehewn	0.200	1194.85	239
Dimdimas	0.000	397.90	0
R/B above 35 Cm girth	0.539	853.30	460
R/B upto 35 Cm girth	0.351	426.65	150
Total Timber	**1.340**		**1112**

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Manual Carriage of Forest Produce upto RSD Pechha			
Timber Conifer	154.260	359.80	55503
Total Expenditure upto RSD			**304430**
Transportation of Forest Produce RSD to HSD with loading			
TT of Timber To HSD Shamshi	154.260	484.24	74698
Grand Total up to HSD			**379128**

TARGET FIXED AND ACHIEVED

ABSTRACT{Out Turn to be obtained }

Spp.	St. Sawn Sizes 366x26x13, 305x26x13, 244fx26x13 Cm	Non Sawn Sizes 275x26x13, 366x21x13, 305x21x13, 244x21x13, 214x21x13, 183x26x13, except section 31x16	All other sizes not included in St. Sawn and Non standard	Axehewn all sizes	Dimdima	RB above 35 Cm girth	RB upto 35 Cm girth	Hakries (Up)	Hakries (Below)	Total
Deo	0.000	0.000	0.000	0.000	0.000	0.168	0.112	0.000	0.000	0.280
Kail	50.087	32.400	37.861	16.275	7.426	3.705	1.921	1.486	1.480	152.640
Chil	0.015	0.048	0.188	0.200	0.000	0.539	0.351	0.000	0.000	1.340
	50.102	**32.447**	**38.049**	**16.475**	**7.426**	**4.412**	**2.383**	**1.486**	**1.480**	**154.260**

The working period of all operations will be as per agreement deed. The labour supply mates shall procure identity card from the office of Distt. Employment Officer for all the labour being deployed in said lot works. The disbursement of wages to labour shall be made by the labour supply mate in the presence of forest guard or in absence of Forest Guard, wages be made in the presence of Assistant Manager. The labour supply mate shall get all such labour deployed on works medically checked of either through Health Department or by private medical practitioner and procure such document to the Divisional Manager or his authorized official on demand.

Divisional Manager,
Forest Working Division,
Kullu.

CC: Director Central Zone Mandi for information please.

Assistant Manager, Forest Working Unit Kullu for information and necessary action. He is directed that the extraction/passibng of fuelwood may not be done beyond the prescribed target without the permission of this office. In addition to this, the split/rotten forest produce may not be passed in the interest of HPSFDC.

Incahrge Accounts Branch for information.

नेशनल हाइवेज़ लोजिस्टिक्स मैनेजमेंट लिमिटेड
National Highways Logistics Management Limited
(A 100% owned SPV of NHAI)
(Under Ministry of Road Transport and Highways)

NHLML/SO-Kullu/Bijali Mahadev Ropeway/51 Dated: 23.06.2025

To,

The Authorized Signatory,
M/s Bijli Mahadev Sky Ways Pvt. Ltd.
95, Hiran Magri, Sector- 11,
Udaipur, Rajasthan- 313001.

Sub: Development, Operation and Maintenance of Ropeway from Nature's Park (Mohal) to Bijli Mahadev Temple in District Kullu in the State of Himachal Pradesh on Hybrid Annuity Mode- **Intimation Towards Allotment of Tree Cutting Work to the Concessionaire on Self-Execution Basis-Reg.**

Ref.:

1. **Your Office Letter No. BMSWPL/Ropeway/Site/2025-26/003 dated 18.06.2025.**
2. **HPSFDC Letter No. HPSFC/FWDK/WKS/T-1317/1679-81 dated 23.06.2025.**

Madam/Sir,

This is with reference to your office letter cited under Ref.(1), therewith submitting the consent for the Tree Cutting on self-execution basis, in this regard, allotment letter for the current tree lot has been received from Forest Corporation vide letter cited under Ref. (2) in this office and it is hereby informed that the said tree cutting work has been allotted to the Concessionaire for execution as per the terms and conditions stipulated by the Forest Corporation. It is to further emphasize that the tree felling work shall be carried out as per the standard procedure and the guidelines of the Forest Corporation enclosed herewith.

Further, the tree felling work shall be commenced in close coordination and supervision of the Forest Corporation.

Yours faithfully,

Project Director,
Project Office, Kullu, NHLML

Encl.: As Above

Copy to:

I. The Director, RTDC, 452G+7XR, Bemloi-Shimla, Himachal Pradesh -**For information please.**
II. The Regional Officer, (Bijli Mahadev Project), NHLML, New Delhi -**For information please.**
III. The Authorized Representative, M/s Salzmann-Bernard-SECL JV (Independent Engineer) - **For necessary coordination please.**

Received Kumar IE/P.C

Received Sanwar 30/06/2025

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पंजीकृत

हिमाचल प्रदेश स्टेट फोरेस्ट डवैल्पमेंट कॉरपोरेशन लिमिटिड
वन कार्य मण्डल कुल्लू

पत्र संख्या/वर्कस/टी–1317/ 2182–83 दिनांक/ 15/7/2025

नैशनल हाईवेज़ लॉजिस्टिक्स मैनेजमेंन्ट लिमिटिड,
परियोजना प्रबन्धक,
तहसील व ज़िला कुल्लू–175101.(हि0प्र0)

विषयः– लौट न0 1/2026–27 कुल्लू, काईस–तृतीय नज़दीक प्रकृति पार्क मोहल से बिजली महादेव मन्दिर तक संचालित होने वाले रोपवे के अर्न्तगत आने वाले वृक्षों के कार्य बारे नोटिस ।

महोदय्
जैसा कि लौट न0 1/2026–27 कुल्लू, काईस–तृतीय का गिरान, चिरान, मानवीय ढुलान व हिमकाष्ठ सेल डिपो के लिये परिवहन कार्य आपको इस कार्यालय के पत्र संख्या वर्कस/टी–1317/1564–65 दिनांक 19–6–2025 के द्वारा आपके अनुरोध पर आबंटित हुआ है । सहायक प्रबन्धक कुल्लू की रिर्पोट के अनुसार इस लौट में देवदार, काईल व चील प्रजाती के 72 वृक्ष चिन्हित हुये है तथा जिसमें से आपके द्वारा 58 वृक्षों का निस्सारण कार्य भी पूर्ण किया जा चुका है परन्तु 9 वृक्ष अभी भी निस्सारण कार्य हेतू शेष है तथा 5 वृक्ष गिरान हेतू शेष बचे हुये है । हालांकि लौट का कार्य काफी अच्छी गति से किया जा रहा है परन्तु इन शेष बचे वृक्षों का कार्य भी शीघ्र पूर्ण करें । अब जैसा कि बरसात का मौसम पड़ाव पर है तथा वर्षा आदि से वन सम्पदा की गुणवता में कमी आने का पूर्ण अंदेशा बना रहता है इसलिये इस समय वन सम्पदा का शीघ्र ढुलान करके हिमकाष्ठ सेल डिपो के लिये परिवहन करना आवश्यक है ।

यद्यपि इस लौट में आप स्वंय उपभोक्ता (यूज़र एजेन्सी) हैं तथा तदानुसार ही वृक्षों का कार्य भी आपके द्वारा ही किया जा रहा है । इसलिये सम्बंधित वृक्षों का निस्सारण कार्य पूर्ण करके वन सम्पदा का शीघ्र अति शीघ्र हिमकाष्ठ सेल डिपो शमशी को परिवहन करवायें ताकि भविष्य में किसी प्रकार की कोई कठिनाई उत्पन्न न हो अन्यथा कार्य में देरी के कारण भविष्य में उत्पन्न होने वाली कठिनाईयों के लिये आप स्वंय जिम्मेवार होंगे ।

मण्डलीय प्रवन्धक,
वन कार्य मण्डल,
कुल्लू –175101

प्रतिलिपिः सहायक प्रबन्धक कुल्लू को उनके कार्यालय के पत्र संख्या 123–24 दिनांक 11–7–2025 के सन्दर्भी में सूचनार्थ एवं आवश्यक कार्यावाही हेतू प्रेषित है। उन्हें निर्देश दिए जाते हैं कि लौट के कार्य को पूर्ण करवाने के सम्बंध में लेबर सप्लाई मेट से स्वंय व्यक्गित रूप से सम्पर्क करके अधिक से अधिक लेबर लगवाकर कार्य पूर्ण करवायें तथा निस्सारित वन सम्पदा का हिमकाष्ठ सेल डिपो तक शीघ्र अति शीघ्र परिवहन करवायें ताकि तदानुसार भविष्य में किसी प्रकार की कोई कठिनाई उत्पन्न न हो ।

Monthly of 09/2025 Lot No. 1/2026-27 Kais III Ropeway

(A) Trees marked.

Spp	IV	III	IIA	IIB	IA	IB	IC	ID U.S.	Total No	Total Vol.
Deo	1	—	—	—	—	—	—	—	1	0.40
Kail	3	6	2	13	19	13	4	7	67	277.20
Fir	3	1	—	—	—	—	—	—	4	2.20
Tcl	7	7	2	13	19	13	4	7	72	279.80

(A) Trees felled

Spp	Prev No	Prev Vol.	Current No	Current Vol.	Total No	Total Vol.	Balance for felling No	Balance for felling Vol.
Deo	—	—	—	—	—	—	1	0.40
Kail	63	252.20	—	—	63	252.20	4	25.20
Fir	4	2.20	—	—	4	2.20	—	—
Tcl	67	254.20	—	—	67	254.20	5	25.600

Trees Converted.

Spp	Prev No	Prev Vol.	Current No	Current Vol.	Total No	Total Vol.	Balance for Conversion No	Balance for Conversion Vol.
Kail	57	222.10	—	—	57	222.10	6	30.100
Fir	—	—	—	—	—	—	4	2.200
Tcl	57	222.10	—	—	57	222.10	10	32.300

Timber obtain after Conversion

Spp	Prev No	Prev Vol	Current No	Current Vol	Total No	Total Vol
Kail	1386	119.303	—	—	1386	119.303
Fir	—	—	—	—	—	—
Tcl	1386	119.303	—	—	1386	119.303

M/C of forest to R.W.Y

Spp	Prev No	Prev Vol	Current No	Current Vol	Total No	Total Vol	Balance for forest No	Balance for forest Vol.
Kail	70	6.072	—	—	70	6.072	1316	113.231

Timber dispatched from RSD to HSD

Spp	Prev No	Prev Vol	Current No	Current Vol	Total No	Total Vol.	Balance RSD No.	Balance RSD Vol.
Kail	70	6.072	—	—	70	6.072	—	—

Assistant Manager
Forest Working Unit
Kullu (H.P.)

Annexure R-2/18

सत्यमेव जयते

Government of India

Ministry of Environment, Forest and Climate Change, Sub-Office Shimla

Regional Office, Chandigarh

Online Proposal No.: **FP/HP/OTHERS/418659/2023**

Dated: **04/09/2025**

To,

Additional Chief Secretary (Forest)
Himachal Pradesh Government
Armsdale Building, Shimla
(Email:-forestsecy-hp@nic.in)

Subject: **Diversion of 3.1102 ha of Forest Land in favor of National Highways Logistics Management Limited for the Development of a Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in district Kullu, under the jurisdiction of Kullu Forest Division, Dist. Kullu, Himachal Pradeshreg.-reg.**

Sir/Madam,

Kindly refer to the subject cited above and letter under reference for seeking prior approval in accordance with section 2 of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 for diversion of **3.1102 ha** of forest land for non-forestry purpose. **In this proposal, *In-principle* approval was granted by this office's letter of even number dated 08.07.2024, whose compliance report was received through State Government's Stage-I Compliance report dated 12.06.2025 (on PARIVESH). Due to NON satsfacory compliance REPORT, EDS was raise by this office on 22.06.2025. State Govt submitted the Compliance of EDS on dated** 14.08.2025**. After careful examination of the received compliance, I am directed to convey *Final Approval* for the above-mentioned project, subject to the following conditions**:

1. General Conditions

S. No	Conditions
1.1	Legal status of the forest land shall remain unchanged.
1.2	The number of trees/plants to be felled shall not in any way exceed the number indicated in the proposal and no harm shall be done to the wildlife during felling of trees. The felling of trees/plants will be carried out under the strict supervision of the State Forest Department and the amount spent on felling of trees/plants will be deposited by the user agency to the State Forest Department.

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S. No	Conditions
1.3	The Divisional Forest Officer shall ensure that the approved CA will not be changed without the approval of Competent Authority.
1.4	The Nodal Officer (State CAMPA) Authority shall ensure that the funds under State CAMPA will be released to Divisional Forest Officer as per approved CA scheme.
1.5	The State Government shall upload the KML files of the degraded forest area accepted for raising compensatory afforestation in the *E-Green watch portal of FSI*, before handing over of forest land to the user agency.
1.6	The initial permission will be given to this proposal for **99** years. After that the permission shall again be obtained from the Government of India. The period of diversion under this approval shall be co-terminus with the period of lease to be granted in favor of the user agency or the project life, whichever is less.
1.7	The forest land shall not be used for any purpose other than that specified in the proposal.
1.8	The user agency shall pay additional amount of NPV as and when increased by the order of Hon'ble Supreme Court and the State Government will ensure that the increased amount is deposited.
1.9	No kind of damage will be done to the adjoining forest land. Simultaneously, all efforts will be made to save adjoining forest and forest land.
1.10	The forest land proposed to be diverted shall, under no circumstances, be transferred to any other agency, department, or person without approval of the Central Government.
1.11	The layout plan of the proposal shall not be changed without prior approval of Central Government.
1.12	The boundary of the diverted forest land shall be suitably demarcated on ground at the project cost, as per the directions of the concerned Divisional Forest Officer.
1.13	The user agency shall carry out muck disposal at pre-designated sites as per the scheme approved.
1.14	Any other condition may be stipulated by this regional office from time to time, in the interest of conservation, protection and development of forests & wildlife.
1.15	User Agency shall obtain Environmental Clearance as per the provisions of the Environmental (Protection) Act, 1986, if applicable.
1.16	Violation of any of these conditions will amount to violation of Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 and action would be taken as per para 1.16 of the consolidated guidelines and clarifications on Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 and Van (Sanrakshan Evam Samvardhan) Rules, 2023, MoEF&CC.
1.17	It will be the responsibility of the State Government/User Agency to obtain all other prior approvals/clearances under all other relevant Acts/Rules/ Court's Rulings/instructions, etc., including environmental clearance, as applicable to this proposal.

S. No	Conditions
1.18	The Ministry may suspend/cancel this approval if the implementation of any of the above conditions is not satisfactory. The State Government will ensure compliance of these conditions through the Forest Department.

2. Standard conditions

3. Specific Conditions

S. No	Conditions
3.1	**As per the proposed CA Scheme, Compensatory afforestation (CA) shall be taken up by the State Forest Department over degraded forest land in 6.479 ha, Survey/*Compartment No. 52H/4, Kail Phat, Kais/Tandla Block, Kullu Forest Range, Kullu Forest Division, Distt. Kullu, Himachal Pradesh* at the cost of the user agency. The Plantation shall be done within one year from the date of issue of approval. As far as possible, a mixture of local indigenous species shall be planted and monoculture of any species shall strictly be avoided.**
3.2	**This approval is subject to the final outcome wrt Hon'ble Supreme Court Orders in the CWP (C) No 1164/2023 dtd 03.02.2025 and 04.03.2025**

Copy To

1. Nodal Officer-cum-Additional Principal Chief Conservator of Forests (FCA), Government of Himachal Pradesh, Forest Department, Talland, Shimla (E-mail: nodalfcahp@yahoo.com).
2. Divisional Forest Officer, Kullu Forest Division, District Kullu, Himachal Pradesh (E-mail: head-fordivkul-hp@hp.gov.in)
3. National Highways Logistics Management Limited, NHLML Bays No. 35-28, Sector-4, Panchkula, Chandigarh (E-mail: nhlmlzonr@gmail.com)

Your's faithfully

Sd/-
Raja Ram Singh
DIGF (C)

Validity unknown
Digitally Signed by : Dr Raja Ram Singh
Deputy Inspector General of Forest, IRO
Date: 04/09/2025

Sr. No.	Location	Under 16m RoU	Remarks	Cutting
1	Between 2 &3	Chil-Cl:IV=7 Chil-Cl:III=6 Chil-Cl:IIA=1		
		Total Trees=14		
2	Between T3 &T4	Chil-Cl:V=3 Chil-Cl:IV=31 Chil-Cl:III=33 Chil-Cl:IIA=2		
		Total Trees=69		
3	Under T4	Chil-Cl:IV=3 Chil-Cl:III=1	Tree hammering done. Tree Cutting Pending	
		Total Trees=4		
4	Between T4 &T5	Chil-Cl:IV=1		
		Total Tree=1		
5	Between T6 & T7			
		0		
6	Under T7	Kail Sappling=3 Apple=2		
		Total Sapling=3 **Total Apple=2**		
7	Under T8	Apple=10		
		Total Apple=10		
8	Under T9	Apple=8 Pear=2		
		Total Apple/Pear=10		
9	Under T10	Apple=5 Pear=1		
		Total Apple/Pear=6		
10	Under T11	Apple=15 Pear=4		
		Total Apple/Pear=19		
11	T11 to T12	Kail-Cl:III=1 Kail-Cl:IB=1 Kail-Cl:IA=1		
		Total Trees=3		
12	Under T12	Kail-Cl:V=1 Apple=15 Pear=5	Tree Cutting done.	1
		Total Tree=1 **Total Apple/Pear=20**		
13	Between T12 &13	Kail-Cl:IV=2 Kail-Cl:ID=1 Kail-Cl:IC=4 Kail-Cl:IB=1 Kail-Cl:IA=4 Kail-Cl:IC=1 Kail Sappling=19	Tree Cutting done.	
		Total Trees=13 **Total Sapling=19**		13
14	Under T13	Kail-Cl:IA=1	Tree Cutting Pending.	
		Total Tree=1		

Sr. No.	Location	Under 16m RoU	Remarks	Cutting
15	Between T13 & 14	Kail-Cl:III=1 Kail-Cl:IIB=1 Kail-Cl:IIA=2 Kail-Cl:ID over=1 Kail-Cl:ID=2 Kail-Cl:IC=1 Kail-Cl:IB=1 Kail-Cl:ID=1	Tree Cutting done.	10
		Total Trees=10		
16	Under T14	Kail-Cl:IIB=1 Kail-Cl:IA=3 Kail-Cl:IC=1	Tree Cutting done.	5
		Total Trees=5		
17	Between T14 & 15	Kail-Cl:III=1 Kail-Cl:IIB=1 Kail-Cl:IC=1 Kail-Cl:IB=1 Kail-Cl:IA=1 Kail-Cl:IA=1 Kail-Cl:IB=2 Kail-Cl:IC=1	Tree Cutting done.	9
		Total Trees=9		
18	Under T15	Kail-Cl:V=1 Kail-Cl:IC=1 Kail-Cl:IB=1 Kail-Cl:IA=2 Kail-Cl:V=1 Kail-Cl:IC=1	Tree Cutting done.	7
		Total Trees=7		
19	Between T15 & 16	Kail-Cl:IV=1 Kail-Cl:III=1 Kail-Cl:IC=1 Kail-Cl:IB=3 Kail-Cl:IA=2 Kail-Cl:IC=2	Tree Cutting done.	10
		Total Trees=10		
20	Under T-16			
		0		
21	Between T16 &17	Kail-Cl:IIB=4 Kail-Cl:ID over=1 Kail-Cl:IB=4 Kail-Cl:IA=1 Kail-Cl:IC=1 Kail-Cl:IIB=1	Tree Cutting done.	12
		Total Trees=12		
	Total	**Total Trees=159** **Trees approved for felling in FCA=72**	Tree Cutting done. (67 trees).	**67**

Total 67 Nos trees Cutting done

Saunali

National Highway Logistics Management Limited
A 100% Subsidiary of National Highway Authority of India

BERNARD GRUPPE SALZMANN INGENIEURE

Project:

DEVELOPMENT OF ROPEWAY PROJECT FROM NATURE PARK (MOHAL) TO BIJLI MAHADEV TEMPLE KULLU IN HIMACHAL PRADESH

Content:

MS-05: FINAL FEASIBILITY REPORT

CLIENT	CONSULTANT
National Highways Logistics Management Limited G-5 & 6, Sector 10, Dwarka New Delhi - 110075 India	JV BERNARD – SALZMANN Corporate Regency, Office No.9, B-5, Ansal Tower-38, Nehru Place, New Delhi – 110019 India

DOCUMENT CONTROL

Version	Date	Content	Prepared	Checked	Approved
0	03.07.2023	Initial Version	GirNa SwaTa	ParMu/ TuM	TuM

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ACRONYMS AND ABBREVIATIONS

LAP	Land Acquisition plan
EIA	Environmental Impact Assessment
CGWB	Central Ground Water Board
O-D Survey	Origin- Destination Survey
PHPDT	Peak Hour Peak Direction Traffic
PPHPD (PPHD)	Persons Per Hour Per Direction (Persons Per Hour and Direction)
MGD	Monocable Detachable Gondola
2S	Bi-Cable Detachable Gondola
3S	Tri-Cable Detachable Gondola
FUNI	Funitel
CEN	European Standard
IS	Indian Standard
NSB	National Standards Bodies
ISO	International Organization for Standardization
UTM	Universal Transverse Mercator
GRIHA	Green Rating for Integrated Habitat Assessment
IGBC	Indian Green Building Council
ATM	Automated Teller Machine
NBC	National Building Code
mbgl	metres below ground level
kmh	Kilometer-hour
mm	milimeter
sqm	square-meter
amsl	Average Mean Sea Level

EXECUTIVE SUMMARY

The “Uttarakhand Project” comprises of eight (8) individual geographic locations. The project has seen multiple and varied project location changes from those initially identified and assigned to the contract. The revised and updated locations are now spread across different states in the country and are not limited to the state of Uttarakhand. To better manage the project delivery, these projects have been been divided into Phase 1 and Phase 2 projects. This report addresses the specific aspects of the Bijli Mahadev Temple ropeway which has been assigned as a Phase 01 project.

The various ropeway projects within the phase 01 and 02 works, have to fulfil a combination of tourism and in certain cases also urban transportation requirements whilst providing an economic and practical addition to the existing infrastructure network and ensuring that the development and operational cost drivers are met.

The Bijli Mahadev Temple, Kullu ropeway project has been identified and designed to fulfill predominantly as touristic and religious pilgrim transportation and improve accessibility over challenging topography.

Specific transportation capacity demands, land availability, development, capital costs, together with user experience have all been considered together with the use requirements and low operational and maintenance costs whilst acknowledging the need to design a system that can be safely operated and maintained to ensure the safety of persons traveling on and operating this ropeway as well as those affected by it. The aspect of safe operation and maintnance is a key consideration whilst noting the operational environment and historic safety record.

This report has assessed all these and a number of other factors and has determined that the appropriate ropeway system for the Bijli Mahadev ropeway project as Mono cable Detachable Gondola system with a transport capacity demand of 1800PPHD. Survey data and site reconnaissance surveys have supported the design and technology selection and these inspections have further considered the environment and existing land use together with existing infrastructure development.

Further and specific details are discussed within this report in consideration with the client’s requirements.

1. INTRODUCTION

1.1 Project Background

Tourism is one of the major contributors to the economy of Himachal Pradesh. Pilgrimage is the main contributor to tourism in the region. Many pilgrims visiting the famous Hadimba Devi temple in Manali tend to visit other tourist locations of the region as well.

Kullu city belonging to the state of Himachal Pradesh is situated at the banks of river Beas in the Kullu valley has a geographical area of 5,503 sq. km. Kullu Valley is sandwiched between the Pir Panjal, Lower Himalayan and Great Himalayan Ranges, located in Northern India, 497 km. away from the capital of India. On the east of Kullu lies a broad mountainous ridge having the village-temples of Bijli Mahadev, Mounty Nag and Pueed. To the north lies the town of Manali.

The average elevation of the land surface is about 1,278 m. The temperature in Kullu valley in summer season is about 20 to 30 °C. December and January during winter observe lowest temperatures ranging from −15 to 20 °C (5 to 68 °F), with heavy snowfall in the higher regions and very light snowfall in the main town. Annual highest temperature in summer ranges from 24 to 30 °C (75 to 86 °F) during May to August. Months of July and August are rainy because of monsoon, having around 150 mm (5.9 in) rainfall monthly. Climate is pleasant in October and November.

Bijli Mahadev temple, one of the ancient temple of India is located at an altitude of about 2,460m in the Kullu valley. Located 14km from Kullu city across the Beas river, the temple can be approached by a rewarding trek of 3km. Accessibility of tourists visiting Kullu to Bijli Mahadev temple is a big challenge Developing an efficient transport network is a big challenge, especially in the hilly terrains and inaccessible areas of Himachal Pradesh

The project location starts at Nature Park in Kullu city and ends near Bijli Mahadev temple at the hilltop. The total length of the ropeway is 2.336km. The proposed ropeway would support the access to the temple by reducing the travel time from approximately 90 minutes of hiking to 07 minutes and provide a comforatble journey free from the influence of the weather. The ropeway project facilitate an effortless movement of senior citizens and children who otherwise must walk 3km to reach the temple.

The realization of ropeway projects at the location can add significant value as tourist destination by offering easier access, providing scenic views and making the trip itself an additional adventure.

Figure 1: Bijli Mahadev temple.

1.2 Contractual Background

BERNARD Consultants Pvt. Ltd (BERNARD India) in Joint Venture with BERNARD Gruppe ZT GmbH (BERNARD Austria) and SALZMANN Ingenieure ZT GmbH (SALZMANN) have been awarded the contract by the National Highway Logistics Management Limited (NHLML) for **Carrying out Feasibility Study for development of Ropeway projects in Uttarakhand.** A recent change of scope has been issued by NHLML to provide consultancy services and assist the development of ropeway project between Nature park (Mohal) to Bijli Mahadev temple, Kullu, Himachal Pradesh.

1.3 Objectives of the Project

The overall aim of the project is to add further value to the pilgrim destinations and make them easier accessible to all the pilgrims, tourists and residents by developing an eco friendly transporation system that has minimal disturbance to the existing residents and to the forest.

The feasibilty report aims to provide a basis of decicion making in terms of variant studies, best practice review and financial feasibilty to achieve the overall project aims.

To prepare the feasibility report, the following steps are taken:

- Carryout benchmarking study of different ropeway systems across the world.
- Assess the various ropeway technologies and the standards available for development and operation.
- Carry out detailed demand assessment through primary surveys and secondary analysis.
- Carry out various engineering surveys for development of the project.
- Prepare detailed alignment plan for the ropeway and design key elements of the ropeway system.
- Prepare detailed cost estimate for developing the ropeway system.
- Carry out detailed financial analysis and sensitivity analysis on key parameters.
- Carry out economic analysis of the project and determine the EIRR.
- Carry out social and environmental impact assessment.
- Identify the land required for the project and prepare the Land Acquisition Plan (LAP) for the project.
- Procure environmental and forest clearance for the project.
- Suggest institutional mechanism and project structuring and policy for development of the project.
- Prepare bid documents including Draft Concession Agreement for selection of developer.
- Carry out project risk assessment and prepare an implementation plan for the project.
- Carry out stakeholder alignment and assist the authority in obtaining all the necessary approvals.

1.4 Content of Report

This report contains the feasibility study information for the Bijli Mahadev, Kullu project location.

It is to be noted that wherever detailed and specialized reports have been prepared for example, geology, demand assessments, environment reports etc, the approach has been taken within this report that only a brief executive summary is provided in the appropriate chapters. The detailed and specialized reports are attached within the appendices for ready reference and as such form an integral part of this feasibility study report.

It should be noted that the study was completed in a compressed timescale to meet the limited timelines. As a result of these compressed timescales some aspects of this study remain to be fully detailed and fully assesed. Implementation authorities, developers and contractors should be aware of this position and where possible areas of further assesment, investigation of due dilligence has been highlighted.

These aspects should be considered further and where appropriate experience, knowledge or further assessment should be undertaken to fully develop the design and design underpinning.

This report has assessed the safety requirements and acknowledges the development and operation environment. The Client and the appointed contractor are required to work collaboratively to ensure that project risks and quality issues in design, construction and operation are addressed and that system and operational safety remain a primary focus and risks are mitigated.

2. DATA COLLECTION AND GENERAL STUDY OF AREA PROFILE

2.1 Provided Documents

No specific document in relation to this project was received from the client.

2.2 Site reconnaissance survey

Prior to the site visits, the consultant has referred to the existing satellite imageries, maps and other available information of the proposed project area. Site visits were carried out by the consultant's national and international team from 04.08.2022 and 10.08.2022 and from 08.10.2022 to 10.10.2022 in consultation with the Authority. The team carried out initial assessment of the project area and evaluated several alternate possible ropeway alignments and probable station locations to the Bijli Mahadev temple. As a basis for initial considerations, the Authority has provided thoughts on the indicative alignment as well as a Google Earth file showing a preferrable alignment corridor.

A photographic survey and visual inspection were undertaken, which made note of the existing topography and geography together with an inspection of the existing infrastructure, access conditions to the hilltop and built environment.

Specific locations were inspected and assessed for tower and station locations, in addition a topographical survey was undertaken which later supported the development of the ropeway route and profile.

Figure 2: Site reconnaissance done by the Consultant and Authority in October 2022.

The locations of the existing utilities existing in the project area which required detailed survey for relocation was also surveyed during the visit. The details of land topography of the explored station locations and also of the ropeway alignments were collected and recorded which were surveyed in detail during the later stages of the feasibility study.

The data collected during the reconnaissance survey was used for planning and programming the survey investigations. The information is compiled and documented as an inception report and submitted to the Authority (**refer Appendix 01 – APP-01**).

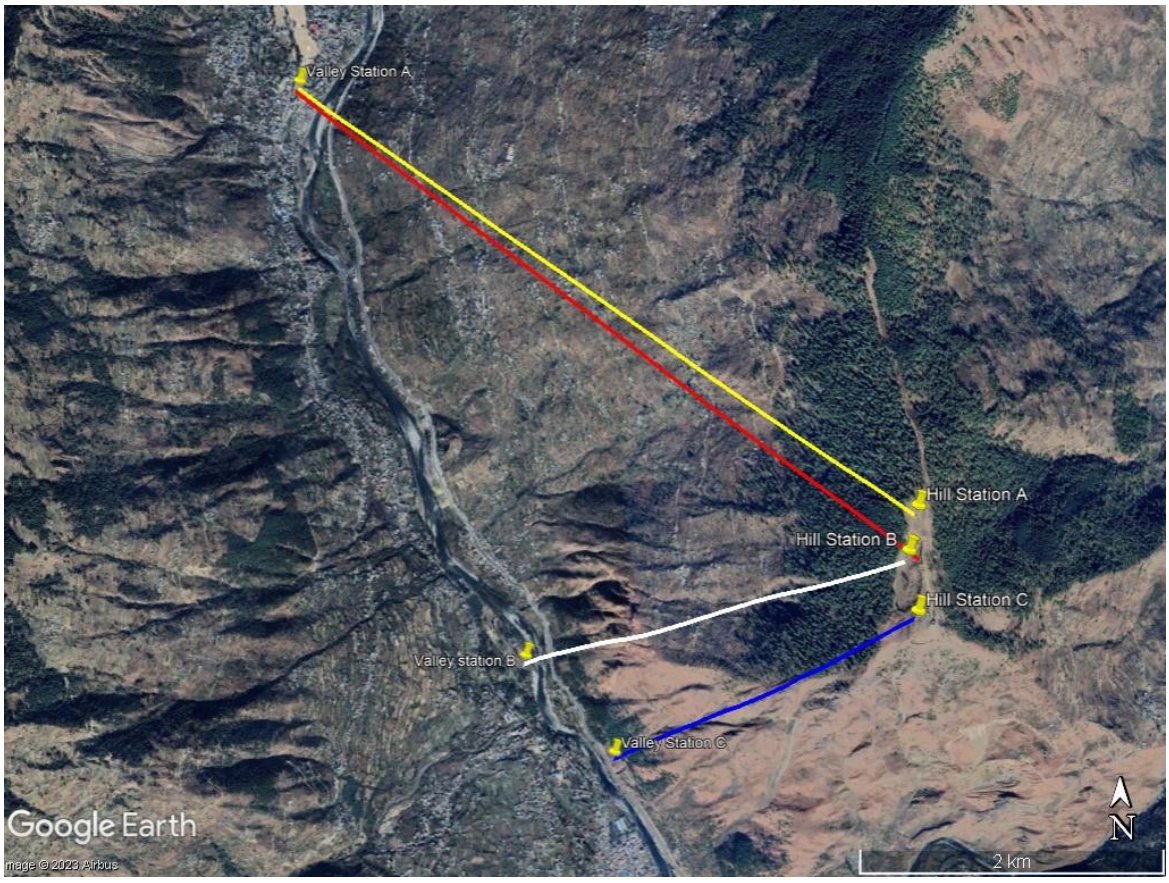


Figure 3: Alternate ropeway alignments explored during the site reconnaissance survey.

2.2.1 Physical and Connectivity Details

Bijli Mahadev is one of the ancient temples in India and dedicated to Lord Shiva (Mahadev). Located 14 km from Kullu across the Beas river, it can be approached by an existing road of approximately 28km from the Kullu town till the starting point of the trek. From this location, the temple can be approached by a rewarding trek of approximately 1.6 km. It is located at an altitude of about 2,460m in the Kullu valey.

Kullu is a municipal council town that serves as the administrative headquarters of the Kullu district of the Indian state of Himachal Pradesh. It is located on the banks of the Beas River in the Kullu Valley about 10 kilometres (6.2 mi) north of the airport at Bhuntar, Kullu. Kullu town has an average elevation of 1,278 m (4,193 ft).

The closest airport to Kullu is “Bhuntar airport” which is situated at a distance of around 10 km from the heart of the city, Kullu. Bhuntar is currently not operational therefore Chandigarh is the airport for Kullu Valley. Joginder nagar is the nearest railway station located near Kullu which is at a distance of around 125 km. This railway station is well linked to all the major cities and towns of the country through Chandigarh, which is 270 km away from Kullu. State owned bus facilities of Himachal Pradesh Road Transport Corporation are accessible from Kullu, connecting with the nearby cities. Kullu is linked to the national capital, New Delhi (570 km), Chandigarh (267 km), Pathankot (285 km) and Shimla (270 km) as well by tourist luxury buses of Himachal Pradesh Tourism Development Corporation. These deluxe buses solve much of the problems of the travellers worried about how to reach Kullu.

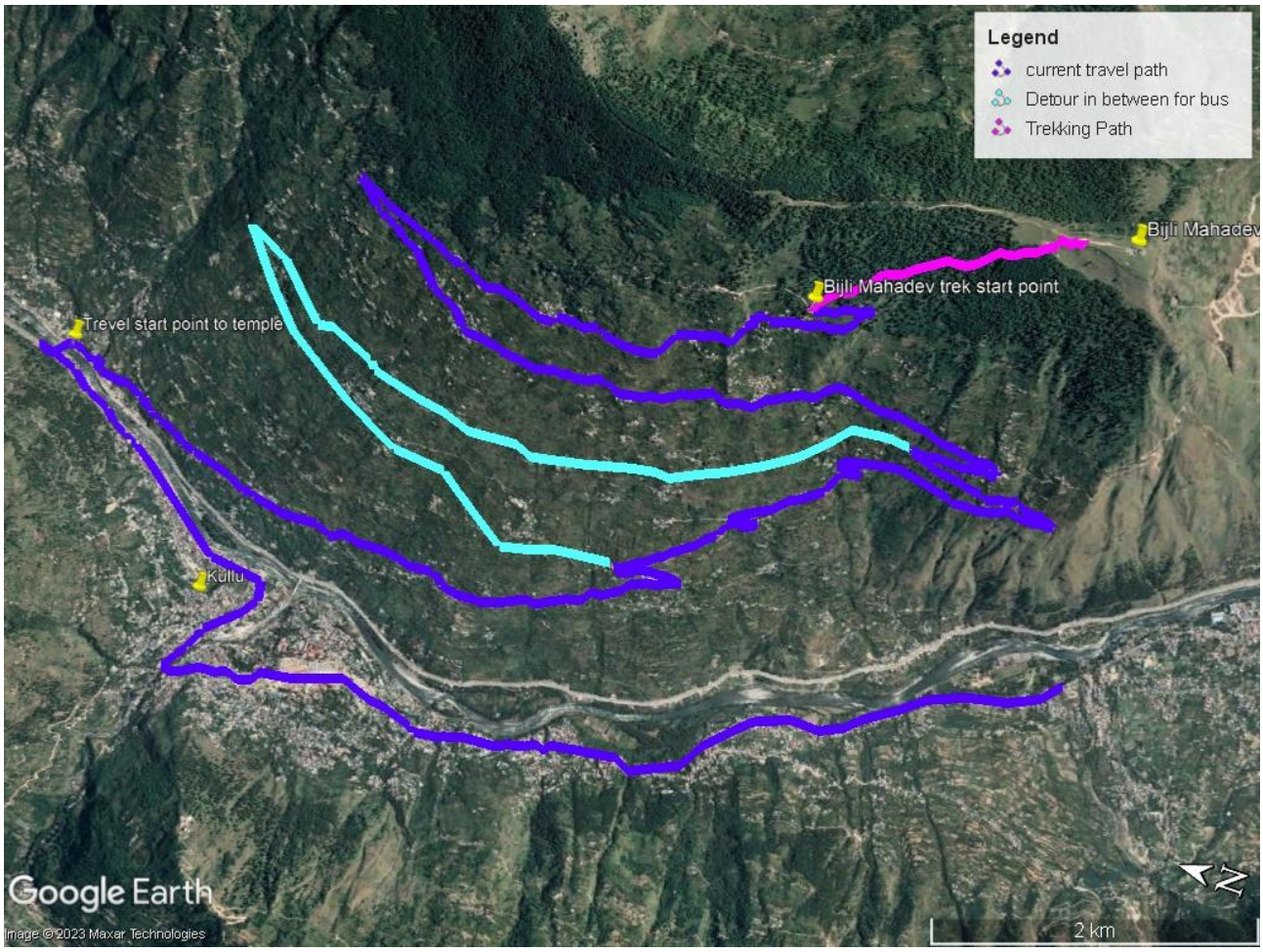


Figure 4: Connectivity details to Bijli Mahadev Temple.

Terrain

The project location is located at the foothills of the Himalayan mountain ridge in a hilly terrain. To the North and East there are high mountains and to the West and South the area gradually borders to flat plains.

General accessibility / Connection to other Cities

Air

Bijli Mahadev can be reached by air from various indian cities.

Table 1: Nearest airports from Bijli Mahadev

Type of Travel Port	Name of Port	Distance to Bijli Mahadev
Closest Airport	Kullu-Manali/ Bhuntar airport	Approx. 20 km
Closest Major International Airport	Delhi - Indira Gandhi International Airport	Approx. 525 km
Closest Other International Airport	Chandigarh International Airport	Approx. 275 km

Rail

There is no connectivity to the site by railways yet. The nearest railway station is located in Jogindernagar, which is approx. 125km away. The next closest railway station is in Una city, 220km away.

Road

The footpath leading to the Bijli Mahadev Temple is accessible via small mountainous roads from the North and West. The national highway (NH-21) leading to those roads is also curvy and hilly. Due to this travelling along these roads takes longer than usual.

Kullu can be reached from Delhi by national highway NH-1 up to Chandigarh and from there by national highway NH-21 that passes through Bilaspur, Sundernagar and Mandi towns. The road distance from Delhi to Chandigarh by bus is 260 km (160 mi) and from Chandigarh to Kullu is 252 km (157 mi); the total distance from Delhi to Kullu thus is about 512 km (318 mi) which is almost a 12 hours journey.

Waterway

There is no waterway connection within a few hundred kilometres.

Soil, Geology and Groundwater

General

In the chapters below, a brief summary of the geological conditions in the project area is provided. A more detailed geological report along with bore-log data is appended to this feasibility report (**refer Appendix 02 – APP-02**).

District Characterization

Kullu is mostly a hilly area region ranging up to 1278 m above mean sea level. In the North-Eastern part of the district, there are some plains and low-lying valleys. The climate condition can be separated geographically from sub-tropical to semi-temperate. The district of Kullu has a unique geography with a relief valley and almost 90% of its population lives in villages located in remote and inaccessible areas. It comprises four subdivisions Manali, Kullu, Banjar and Ani and five blocks of development Naggar, Banjar, Kullu, Ani and Nirmand. The ensemble of the district of Kullu forms part of the parliamentary constituency of Mandi. Natural calamities such as down-pours, flash floods, heavy rains, earthquakes, snow, hail, drought and accidents, etc. cause a lot of misery to people.

Kullu district comprises Various rock formations that are encountered such as Sail Series, Large Series and Barren Series. These formations are divided by two thrusts, the cell thrust and the sensor thrust. The district is bordered by the Pir-Panjal range in the north. Bara Bhangal in the northwest; The Great Himalayas are on the eastern boundary and the Dhauladhar mountain range on the southwest, while the Sutlej River marks the southern boundary of the district. The area has a very high altitude, ranging from 750 to 6,200 meters. Kullu's geomorphology is influenced by both glacial and fluvial processes (Sah & Mazari, 2007); The area is generally divided into glaciers, permanent snowfields, rocky/ barren slopes, cliffs, valley foothills, and the main valley floor. Glaciers and permanent snowfields are found in most of the eastern parts at an altitude of 4,500 meters. Arid/ rocky surfaces occupy the lower parts of glaciers and permanent ice fields, while valley slopes occupy a large part of the area and consist of very steep to moderately steep slopes, hills and narrow valleys where the slopes are usually 30°-40°. Lava fans, alluvial fans, and fluvial terraces dominate the floor of the main Beas River valley.

Table 2: Stratigraphic Sequence in Bijli Mahadev, Kullu District, H.P.

Formation	Lithological Description
Recent	River Terrace and alluvium, (unsorted boulder, pebble and cobble of granint, grainite gneiss, salified phyllite etc.)
Larji series	Predominantly Dolomite with thin band of quartzite and limestone
Banjar series	Massive quartzite, slate, phyllite interbedded with bands of quartzite and conglomeratic quartzite.

Formation	Lithological Description
Chail series	Slate phyllite with band of quartzite garnetiferous gneiss, and schist, calcareous quartzite and limestone associated with carbonaceous phyllite and schist

The geology of state is dominated by Precambrian rocks that were assembled and deformed during the India-Asia collision and the subsequent Himalayan orogeny. The Northern Indian State Himachal Pradesh is located in the Western Himalaya. It has a rugged terrain, with elevation ranging from 320m to 6975m. Rock materials in the region are largely from the Indian craton, and their ages range from the Paleoproterozoic to the present day. It is generally agreed that the Indian craton collided with Asia 50-60 million years ago (Ma). Rock sequences were thrust and folded immensely during the collision. The area has also been shaped by focused orographic precipitation, glaciation and rapid erosion.

Sub Surface Geology

Sub-surface geology of the area has been inferred on the basis of exploratory boreholes. Thick over-burden material encountered consist of the hard boulder with some amount of fine material. A more detailed geological report along with bore-log data is appended to this feasibility report **(refer Appendix 02 – APP-02).**

Ground Water Condition

In Kullu valley, ground water occurs under water-table to semi-confined conditions. Phreatic aquifers are tapped mainly by open wells and form the major source of domestic and irrigation water supply in the valley. The aquifer zone mainly comprises of sand in association with pebbles and boulders in low plains and predominantly boulders, cobbles, pebbles mixed with little clay in terraces. Depth to water level varies from 1.62m to 31.45 m below ground level.

Climate, Rainfall, Temperature and Average Wind Speed

Temperature: The temperature in Kullu valley in summer season is about 20 to 30 °C. December and January during winter observe lowest temperatures ranging from −15 to 20 °C (5 to 68 °F), with heavy snowfall in the higher regions and very light snowfall in the main town. Annual highest temperature in summer ranges from 24 to 30 °C (75 to 86 °F) during May to August. Months of July and August are rainy because of monsoon, having around 150 mm (5.9 in) rainfall monthly. Climate is pleasant in October and November.

Rainfall: The average annual rainfall is 800.00 mm. Climate is sub humid and is characterized by hot summer and pleasant monsoon and cold season. From December to February, this period is very chilly. Heavy frost occurs during this period. Snowfall generally occurs during December and January, or an early snowfall may occur in November also. During this period, most of the parts of the Kullu remain under cover of snow. About 90% of rainfall takes place from August to September. During monsoon surplus water flows into rivers and streams un-arrested due to hilly topographic features in the district. Monsoon rain can cause localised flooding and the final design of infrastructure must be checked for flood resilience and reliability.

Kullu has a temperate highland tropical climate with dry winters climate. The district's yearly temperature is 24.46ºC (76.03ºF) and it is -1.51% lower than India's averages. Kullu typically receives about 42.86 millimetres (1.69 inches) of precipitation and has 35.54 rainy days (9.74% of the time) annually.

Humidity: The average relative humidity is 46.8%.

Wind: The mean wind speed is generally low ranging from approximately 1 kmh to around 20 kmh. The windiest month is May with an average wind speed of 8.5 mph (13.6 kph), while the calmest month is October with an average wind speed of 6.4 mph (10.2 kph).

Land Use

Below, a brief summary of the Land Use / Land Requirement of the project is provided.

The project area of influence is predominantly populated land and belongs to private and forest ownership. A Total of 20 land areas are required for the project area. In which all land areas are under forest ownership. Based on the survey, it is estimated that less than three acres of land for project is acquired for ropeway construction.

2.2.2 Benchmarking of international ropeways

An initial assessment of the project to consider technical solutions which may be appropriate to specific locations were presented in the submitted Benchmarking report. Similar projects both international and national are presented with their key features for comparison to identify and justify the most appropriate ropeway system for the Bijli Mahadev ropeway project **(refer Appendix 03 – APP-03)**.

2.3 Traffic Survey

The objective of the primary survey is to understand the visitor's profile, behavior, willingness to use the ropeway, ticket price expectation and willingness to pay for the ticket and facilities expectation.

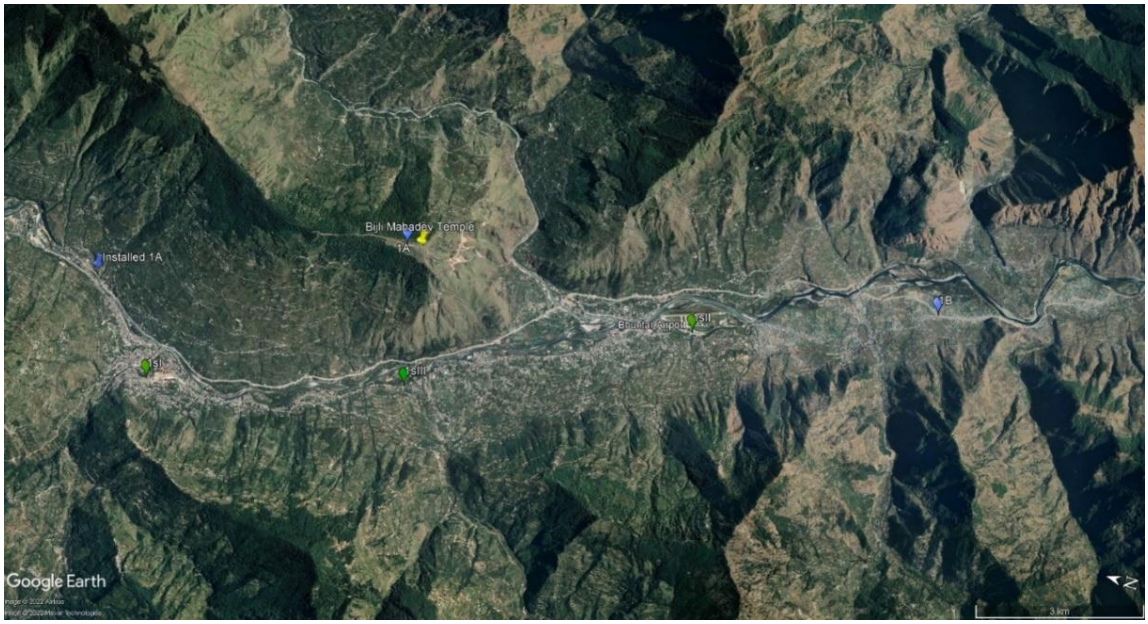


Figure 5: Traffic survey locations.

The table below provides the details of the primary surveys conducted and their objectives, coverage of survey/ sample size and method of survey.

Table 3: Primary surveys conducted in the study area.

S. No.	Survey	Objectives	Coverage	Method
1.	Classified Traffic Volume Count Survey	Obtain the average daily traffic in the city	Identified major junctions and segment of roads of the study area	13 hour turning movement count at a junction
		Study the hourly variation of traffic in the study area		Camera recording and counting method is adopted
2.	Travel Demand Surveys	Collect trip characteristics data from the in the study area	At major parking locations or frequented pedestrian ways in the area	Car owner/driver/pedestrian interview survey

3.	Pedestrian Count Survey	Get the pedestrian footfall at a specific location	Performed near the proposed station locations and its access routes	Manual count method adopted to calculate the footfall in the area

As described in the above section, OD survey was carried out at four locations, CVC was conducted at two locations. The table below presents the locations and duration of the primary surveys.

Table 4: Survey locations.

S. No.	Survey Locations	Symbol	Date of survey
1.	Path leading to Bijli Mahadev temple	1A	15 October to 16 October
2.	Intersection between Kullu - Ramshila road and main market road	1s-I	18 October to 24 October
3.	Entrance of Bhuntar airport	1s-II	17 October to 21 October
4.	Bhuntar – Ramshila road	1s-III	19 October to 20 October

Origin – Destination survey

In the questionnaire surveys, various details related to site and travel behavior were collected by inter-viewing the visitors. The following details were recorded by trained enumerators from visitors.

Table 5: Details recorded in the survey.

S. No.	Details	S. No.	Details
1.	Have you previously visited this site	8.	Residency
2.	How often do you visit yearly	9.	Age of the Visitor
3.	Mode of transport used to visit	10.	Gender
4.	Origin of Visitors	11.	Occupation of Visitor
5.	Willingness to use Ropeway	12.	Purpose of Visit
6.	Willingness to pay in INR for single Trip	13.	Priority ranking for travel time, cost and comfort
7.	Preferred time to visit	14.	No. of person visited

The locations of the OD survey are tabulated below.

Table 6: OD survey locations.

S. No.	Survey Locations	Symbol	Date of survey
1.	Path leading to Bijli Mahadev temple	1A	15 October to 16 October
2.	Intersection between Kullu - Ramshila road and main market road	1s-I	18 October to 24 October
3.	Entrance of Bhuntar airport	1s-II	17 October to 21 October
4.	Bhuntar – Ramshila road	1s-III	19 October to 20 October

Figure 6: Origin – Destination Survey conducted for the project

Classified traffic volume count and pedestrian count survey

Classified traffic volume count (CVC) was conducted using manual count at 2 location. These counts were conducted for 7 days between 14 – 21 October 2022, 24 hours a day. The volume of traffic flow at the above proposed locations was enumerated from the data collected.

Table 7: Classified Traffic volume count locations

S. No.	Survey Location	Symbol	Date of count
1.	Classified traffic count at the access road to Bijli Mahadev Temple	1A	14 October to 20 October
2.	Classified traffic count at the Kullu NH bypass	1B	14 October to 20 October

Table 8: Pedestrian count survey locations

S. No.	Survey Location	Date of count
1.	Pedestrian count at the access road to Bijli Mahadev Temple	14 October to 21 October
2.	Pedestrian count at the Temple access road at the hill bottom	14 October to 21 October

2.4 Topographic Survey

The basic objective of the topographic survey would be to capture the essential ground features along the alignment in order to consider most optimal and most economical cost on the basis of technology to be used depending on project requirement.

Since the project location is located in close proximity to the Bhuntar airport (approx 5.5 km), LiDAR and drone survey could not be conducted. Topographic survey has been conducted using a total station but special care was taken to meet the requirements of the Terms of Reference. Topographic survey was conducted between 16.10.22 to 20.10.22 along the proposed ropeway alignment from Nature Park (Mohal) to Bijli Mahadev temple. The details of existing structures, utilities, existing roads, rivers, places of worship, catchment areas, electric and telephonic installations, huts, buildings, fencing and trees, parks, etc were collected along the proposed

ropeway alignment.

Figure 7: Topographic survey conducted along the alignment.

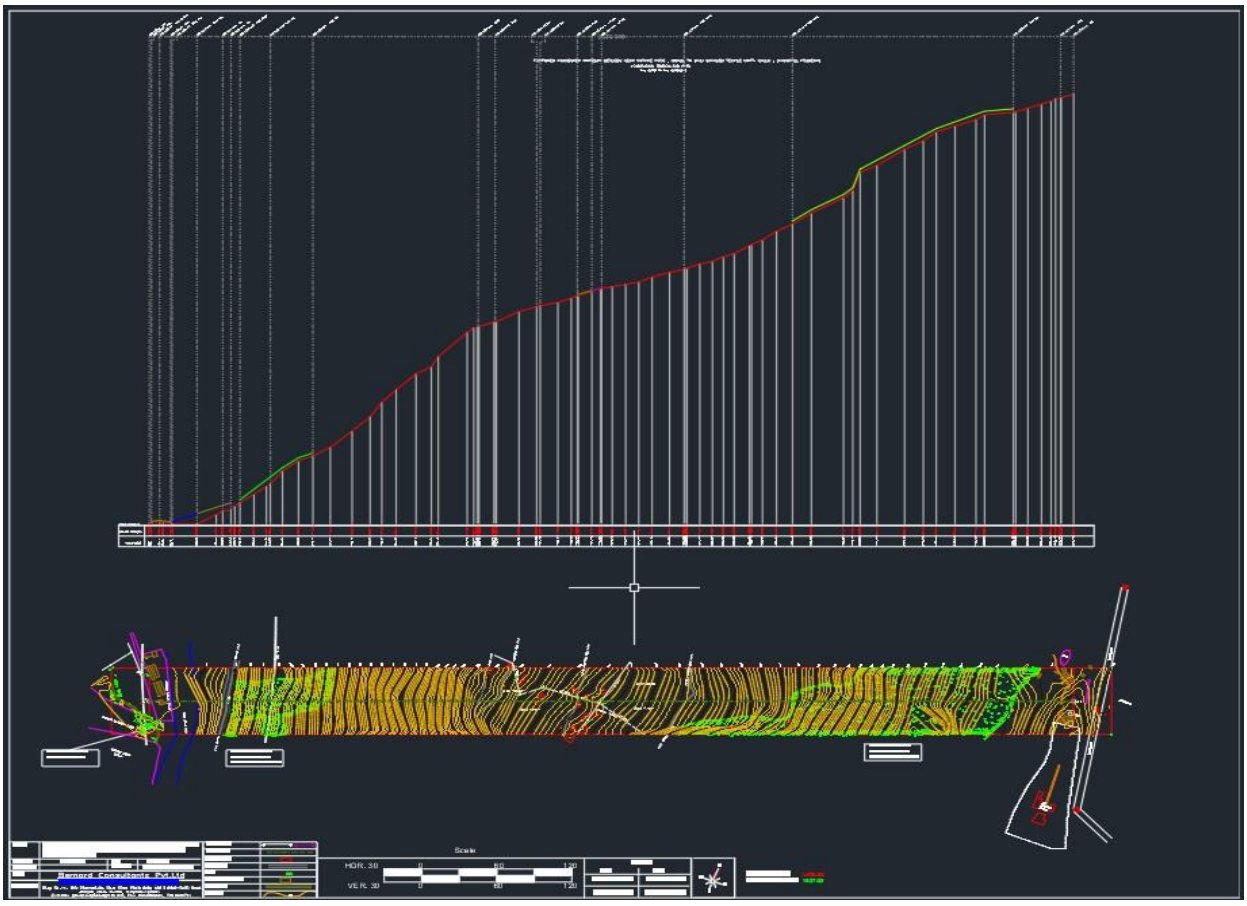


Figure 8: Output of Topographic Survey.

2.5 Geo-technical Investigation and Sub-Soil Exploration.

The geo-technical investigation and sub-soil exploration was carried out to determine the nature and properties of existing strata for the project at stations and tower locations. The required laboratory and field tests were conducted on the soil and rock samples collected during drilling. Due to adverse climatic conditions (snowfall) work was halted between January and March. The Geo-technical Investigation and Sub-Soil Exploration was conducted between January 2023 and March 2023 at the following locations:

S. No	Description	Depth of Hole (m)	Latitude	Longitude
1	Borehole No 01	15.00	43R 700735.33	3533717.83
2	Borehole No 02	15.00	43R 700950.79	3533454.74
3	Borehole No 03	15.00	43R 702039.21	3533728.05
4	Borehole No 04	15.00	43R 702284.68	3533867.78

The details of the geo-technical investigations are described in detail in the geology report which is appended to this report **(refer Appendix 02 – APP-02).**

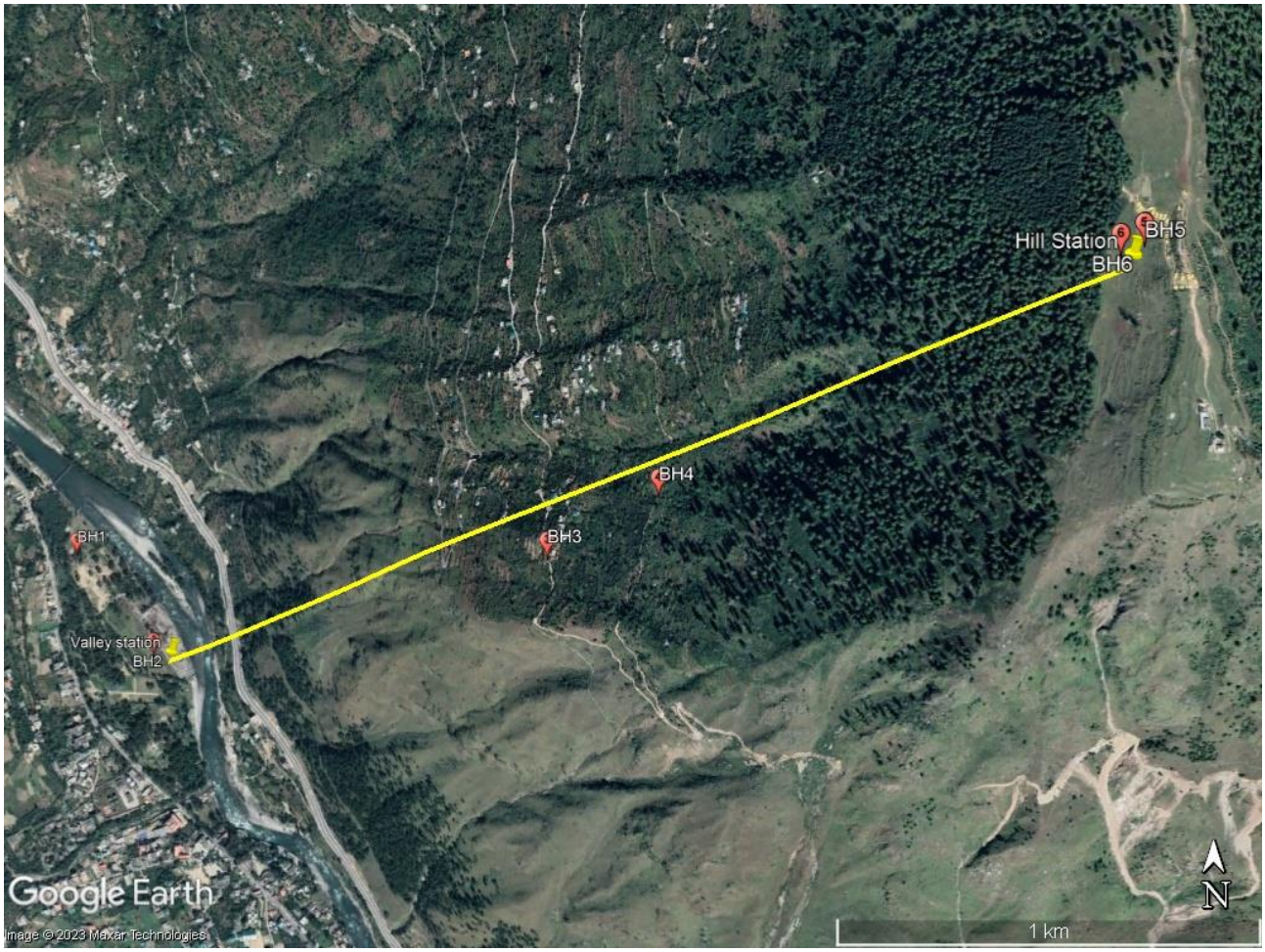


Figure 9: Locations of geotechnical drilling.

Figure 10: Geo-technical drilling conducted at station and tower locations.

3. DEMAND ASSESSMENT

Below, a brief summary of the demand assessment of the project is provided. More details are appended to this feasibility report (**refer Appendix 04 – APP-04**).

3.1 Base Data / Data Collection

As part of the data collection, tourist inflow in Kullu, including national and international visitors' data has been collected for the past 11 years from 2011 to 2022. This information contains annual visitor numbers as well as the annual tourist inflow into the Kullu district. The actual data has been used to calculate the annual growth rate of the number of visitors and forms the base to determine daily visitor numbers.

Origin – Destination (OD) survey was carried out at four locations in the project location. In addition, Classified Traffic Volume Count (CVC) was conducted using manual count at two locations for seven days. These traffic surveys were conducted in the month of October 2022.

The study of the data above has been carefully evaluated and reviewed and a demand assessment report has been produced **(refer Appendix 04 – APP-04).** It analyses the collected data and other relevant information, establishing a tentative pattern of the travel behaviour, and forecasting future traffic demand. For the Bijli Mahadev ropeway project, by determining the base year at 2025, the demand assessment was performed for next 30 years period.

3.2 Tourist information

Tourist inflow data to Bijli Mahadev temple has been collected from the Bijli Mahadev Trust Committee. This information contains monthly visitor numbers and has been used to calculate the annual growth rate of the number of visitors and to determine peak period of monthly and daily visitor numbers. The estimated future ridership calculation is also based on the actual visitor data.

Table 9: Bijli Mahadev temple pilgrim data

S. No.	Description	Numbers	Remarks
1	No. of Tourists visits Temple on the occasion of Shivratri	6000 – 7000	Temple Committee
2	No. of Tourists visits Temple in the month of August	4000 per day	Temple Committee
3	No. of Tourists visits in month of January and November	50 – 100 per day	Winter season
4	No. of Tourists visits in month from December to March	100 – 200 per day	Snowfall and Temple remain closed for 3 months
5	No. of Tourists visits on Saturday, Sunday and Monday	450 – 600 per day	Temple Committee
6	No. of Tourists visits daily	300 – 400 per day	Temple Committee
7	No. of Tourists visit monthly	12000 - 15000	Temple Committee
8	No. of tourists in 2021 in the Kullu district	1,65 lakhs	

3.3 Population details

The population growth of Kullu district and HImachal Pradesh State were collected to understand the population growth in the project influencing district and state. The population data of above states were collected from Census website for last 7 decades and forecast for next 3 decades and average yearly growth was arrived.

Table 10: Population statistics of influencing regions

S. No.	Census Year	Kullu city	Decennial growth of Kullu city in %	Kullu District	Decennial growth of Kullu District in %	Himachal Pradesh	Decennial growth of Himachal Pradesh in %
1	1951	-	-	145,688	-	2,385,981	-
2	1961	-	-	152,925	4.97	2,812,463	17.87
3	1971	109,027	-	192,371	25.79	3,460,434	23.04
4	1981	137,177	25.82	238,734	24.10	4,280,818	23.71
5	1991	171,158	24.77	302,432	26.68	5,170,877	20.79
6	2001	197,952	15.65	381,571	26.17	6,077,900	17.54
7	2011	206,716	4.43	437,903	14.76	6,864,602	12.94
8	2021	268,865	30.06	492,854	12.55	7,622,750	11.04
9	2031	323,042	20.15	556,679	12.95	8,572,545	12.46
10	2041	388,134	20.15	628,769	12.95	9,639,828	12.45
Average geometric growth of Decade			20.15%		19.29%		18.13%
Average annual growth 1951-2021			1.825%		1.759%		1.674%
Annual growth forecast 2021-2041			1.853%		1.225%		1.180%

3.4 Daily Trips along the corridor

Due to the location of the temple, the trips along the corridor of the ropeway is expected to be made by pilgrims visiting the holy temple and tourist hiking in the mountains. The temple is located on a mountain top in rural area and valley station in urban area; therefore, it is estimated that approximately 19% of the visitors come from Kullu and the surrounding urban area, 16.3% of them from the surrounding region, and 64.7% comes from a more distant area. According to the surveys 30.7% of the visitors makes a leisure trip and 69.3% has a religious purpose for visiting the mountaintop. The peak month is August, the number of daily trips is estimated from the daily visitor number currently is approximately 4000 visitor/day. During the Shivratri 6000-7000 people visit the temple according to the temple committee.

Table 11: Estimation of daily trips along the ropeway corridor

Year	Visit/day
2025	6674
2030	8665
2035	11520
2040	14606

3.5 Ropeway Trip Estimation

Based on the mode choice model result, the daily ropeway demand is calculated from 2025 till 2040. This daily ropeway demand was used to calculate the monthly (peak-season) and annual ropeway demand.

The peak-hour in the specified ropeway corridor is expected to be between 8 AM and 12 PM. Based on the survey data, the peak-hour traffic is estimated to be around 19.1% of daily traffic. The peak direction traffic is uphill and based on the survey data it is estimated to be 58.8% of all traffic. Based on the above-mentioned factors, the PHPDT (Peak Hour Peak Direction Traffic) value of the Kullu-Bijli Mahadev ropeway system in 2025 and 2040 is calculated to be 900 and 1800 respectively.

Following table shows the final PHPDT, peak-hour, daily, monthly and annual ropeway traffic demand:

Table 12: Ropeway ridership estimation

Ropeway ridership				
Year	PHPDT	Daily	Monthly (peak season)	Annual
2025	825	6,674	140,560	1,762,002
2026	869	7,032	148,094	1,856,445
2027	916	7,409	156,032	1,955,951
2028	965	7,806	164,395	2,060,790
2029	1,017	8,224	173,206	2,171,248
2030	1,071	8,665	182,490	2,287,627
2031	1,129	9,130	192,272	2,410,244
2032	1,189	9,619	202,577	2,539,433
2033	1,253	10,135	213,436	2,675,546
2034	1,320	10,678	224,876	2,818,956
2035	1,391	11,250	236,929	2,970,052
2036	1,465	11,853	249,629	3,129,247
2037	1,544	12,489	263,009	3,296,974
2038	1,626	13,158	277,106	3,473,692
2039	1,714	13,863	291,959	3,659,882
2040	1,805	14,606	307,608	3,856,052

3.6 Passenger Boarding and Alighting

There are no stations therefore the alighting traffic is equal to the whole traffic of the ropeway.

3.7 Conclusion of Demand Assessment

Bijli Mahadev Temple area can be accessed by car, taxi and bus, but the pilgrims have to travel an approx. 27 km long between the Kullu town and the Temple and travel 1.5km on a walkway from the Parking area for cars to temple. The proposed ropeway would support the access to the temple by reducing the travel time from approx. 2 Hours to 7 minutes between the two stations and provide a comfortable journey free from the influence of the weather. Bijli Mahadev temple at Kullu, Himachal Pradesh is expected to attract more footfalls in a year during events like Nagpanchami, Mahashivratri, Kullu – Dussehra, Akshay -Trtiya and other months because of the religious values and well known to public.

The ropeway is proposed to be designed for maximum 1800 PHPD to be able to handle variation in the actual demand. According to information from the client, the ropeway is intended to be built up to the full capacity of 1800 Peak Hour Peak Direction Demand by 2040, and from then on it will operate at this capacity.

The demand assessment was performed by following state-of-the-practice methodology used in the transportation planning field. However, some of the supplied critical data have uncertainties, the values of some of the relevant factors and parameters were assumed in accordance with the site conditions. The parameters used are indicative and based on obervations during site visits. It is therefore recommended that the demands be reassessed by the contractor/ concessionaire.

4. GENERAL CONSIDERATIONS FOR ROPEWAY SYSTEM

4.1 General

Below, a brief summary of general consideration with regard to the adaption of the most suitable ropeway system for Bijli Mahadev is provided. More details are appended to this feasibility report **(refer Appendix 03 – APP-03)**.

4.2 Key Considerations

The ropeways discussed in this section of the feasibility report will be mountainous areas with significant areas of vertical assent to be overcome. The selection of a suitable ropeway system for mountainous environments is therefore based on the following criteria:

- **Profile:** Terrain profile with respect to tower spacing. A spacing of 300m - 400m is generally adequate and adopted.
- **Capacity:** A capacity of 1800 PPHPD (persons per hour per direction) is deemed equivalent to the potential ridership for the project.
- **Cost:** Minimisation of cost is required, whilst maintaining quality and safety standards. The client has stipulated that the ropeway shall be operated 330 days per year and 10 hours per day. This places high demand on components and therefore special designs and specifications for longer operating life spans of mechanical parts has to be provided.
- **Land acquisition:** In this specific project environment, there is a need to minimise the land usage for stations, towers, and associated infrastructure: land take reduction remains a significant project objective in mountainous ropeway projects recognising preservation of forest and the natural habitat of the local flora and fauna. Access for construction, operation and maintenance as well as emergency access and way should also be considered within the acquisition plan.

Further important considerations for mountainous ropeway systems are:

- Clearance to existing trees (and flexibility for variable clearances)
- Tower type position, plan size and height
- Station position and platform height
- Fire hazards
- Constructability within the existing environment
- Ease of maintenance
- Means of evacuation

4.3 General Ropeway Systems

Ropeway systems commonly used internationally are:

- Monocable Detachable Gondola (MGD)
- Bi-Cable Detachable Gondola (2S)
- Tri-Cable Detachable Gondola (3S)
- Funitel (FUNI)
- Aerial Tram / Jig Back Ropeway

4.3.1 Monocable Detachable Gondola (MGD)

The detachable gondola lift system is a single cable car with a detachable grip system in which the cable car cabin is attached and detached to a moving drive cable. This system is widely used and ranks as one of the most successful ropeway systems in the world. Within this system the drive cable itself provides both the guide for the cable car cabins and the haul cable. Multiple cabins are spaced along the line and for equally spaced, cabins traditionally provide capacity for between 10 and 15 people. Detachable gondola lift systems are safe, comfortable and provide an efficient form of transport. This cable car system can provide simple and light

design which can add to the aesthetics of urban environments when designed to complement the existing urban environment and to support an integrated mobility concept.

The detachable gondola lift system and the single cable car are capable of achieving a travel speed of up to 7 m/s, although operational speeds are slightly less to provide a pleasant and comfortable passenger experience in which the customer can enjoy the panoramic view and travel experience.

Figure 11: Monocable Detachable Gondola System

4.3.2 Bi-Cable Detachable Gondola (2S)

Bi-Cable Detachable Gondola (2S Systems) combine the use of a gondola and reversable rope system, meaning that there are separate ropes that provide the track and drive or haul cable. The main advantage of this system allows longer spans to be achieved between supports which can provide alternative solutions in certain terrain conditions. The detachable gondola system provides improved and higher capacity and efficient operation at the terminals.

These systems have a capacity of around 5000 PPHPH and operate with a cabin capacity of around 4 to 15 passengers.

Figure 12: Bi-Cable Detachable Gondola System

4.3.3 Tri-Cable Detachable Gondola (3S) -Overview

Tri- cable detachable systems are sometimes referred to as 3S systems or technologies. In this system static cables provide the support ropes or track cables and a third cable provides the drive or haul cable from the cable car cabins detach themselves at embarkation stations. These systems differ from Bi cable detachable gondola systems in that they have two stationary track cables.

The Tri- cable detachable systems are often more expensive to develop, deploy and operate than Monocable detachable gondola (MGD) and Bi-cable detachable gondola (2S) systems, however they can often have a higher passenger capacity and operate at a higher speed. This higher speed and capacity can achieve a system capacity of around 6000 PPHPD. Other advantages of this system include the improved stability in high wind conditions together with the ability to utilise longer spans and lower energy consumption.

Figure 13: Tri-Cable Detachable Gondola (3S)

4.3.4 Funitel (FUNI) Cable Car System

Traditionally a Funitel cable car system consists of one or two loops of cable which span between two terminals and are supported over intermediate towers. To provide stability of the passenger cabins, the cables are arranged in two pairs moving in separate directions.

This type of cable car system is generally used to transport skiers as it provides a fast and efficient way to transport people to a higher altitudes. It differs from a standard gondola lift through the use of two arms attached to two parallel overhead cables, providing more stability in high winds.

Figure 14: Funitel (FUNI) Cable Car System

4.3.5 Aerial Tram / Jig Back Ropeway

The Aerial Tram / Jig Back Ropeway ways is a cable car system in which two cable car cabins are attached and suspended from one or more fixed cables, these cables form the track and the cable car unit is pulled by another cable known as the haul cable. The fixed cables provide support for the cable car cabin and the haulage rope is driven by an electric motor normally positioned at the valley station. The system effectively pulls one car down the line and uses the weight of the car moving downhill to pull the reciprocal car uphill, such that as one cable car rises the other descends.

These systems normally have large cabins between 20 and 200 people and travel at speeds around 12m/s and operate in such a way that cabins will pass each other at the mid span position of the line.

One such system in operation is in Mayrhofen in Austria and provides connection from the valley station to the main ski area. This cable car which operates on the Ahorn mountain is the largest cable car in Austria and has a capacity for 160 people, and operates at 10 m/s and has a capacity of 1200 people per hour.

Figure 15: Aerial Tram / Jig Back Ropeway System

Following the overview of each cable car system provided above, a comparison table of each system is provided below. This table identifies and compares high level specific criteria of each system.

Table 13: Comparison of applicable ropeway systems

Aerial Ropeway Systems		Max. Capacity (PPHD)	Cabin Capacity (P)	Max. Tower Spacing (m)	Land Use	Relative Capital Costs
Monocable Detachable Gondola	MGD	4,500	10	400	Low	Low
Bi-cable Detachable Gondola	2S	5,000	15	700	Medium	High
Tri-cable Detachable Gondola	3S	6,000	36	2,500	High	High
Funitel	FUNI	5,000	24	800	High	High
Aerial Tram / Jig Back Ropeway	ATW	1,500	200	2,500	High	High

The serviceability and functional needs of each cable car system are specific to the location, use and client's requirements and, as such, the selection of the appropriate technology and specific cable car system is driven by many factors. Overall performance will govern the final selection, and, in some cases, there may be a balance between selected factors which provide an overall performance as opposed to a complete adherence to a single performance criterion.

4.4 Adapted Ropeway System

Based on the comparison of systems in the above table, and considering Client's requirements and the relative benefits and advantages of the respective systems, together with economic and operational issues, it has been concluded that the Monocable Detachable Gondola system best meets the criteria for Bijli Mahadev Temple, since the capacity requirement is achieved, the maximum tower spacing is greater than the envisaged tower spacing, and the land use and investment cost is lower than other systems.

Figure 16: Monocable detachable gondola system

5. DESIGN, SPECIFICATION AND METHODOLOGY

5.1 Design Codes and Standards for Ropeway Design

The following standards are used worldwide for the design and construction of ropeways:

- European Standard (CEN)
- American National Standards Institute
- National Standard of the People's Republic of China
- Indian Standard (IS)

The ropeway system has to be designed and manufactured according to the latest standards, whereby the common standard for ropeway systems is the European CEN-Standard. Since this standard has acceptance in India, it is recommended that the design of the ropeway is based on these standards.

European Standards are based on a consensus which reflects the economic and social interests of 31 CEN Member countries channelled through their National Standards Bodies (NSBs).

Standards are either used by business associations for standardisation or developed to support European legislation. Reference to standards in a legal text is seen as an effective way of ensuring that products meet the essential health and safety requirements of the legislation, better than drafting detailed legislation.

European standards are developed with a global perspective. CEN has signed the 'Vienna Agreement' with the International Organization for Standardization (ISO) through which common European and international standards can be developed in parallel. More than 30% of the European Standards adopted by CEN are identical to international standards. These EN/ISO standards have the dual benefits of automatic and identical implementation in 31 CEN Member countries, and global applicability.

The ropeway safety is defined in the European Ropeway Regulation (EC) 2016/424. The following harmonized standards are defined in the regulations below:

Table 14: Ropeway Standards

Standard	Content of the standard	To be applied for
EN 1709:2019	Safety requirements for cableway installations designed to carry persons - Pre-commissioning inspection, maintenance, operational inspection and checks	All types of Aerial Ropeways,
EN 1907:2018	Safety requirements for cableway installations designed to carry persons - Terminology	All types of Aerial Ropeways,
EN 1908:2015	Safety requirements of cableway installations designed to carry persons - Tensioning devices	All types of Aerial Ropeways
EN 1909:2017	Safety requirements for cableway installations designed to carry persons - Recovery and evacuation	All types of Aerial Ropeways
EN 12385-8:2003	Steel wire ropes - Safety - Part 8: Stranded hauling and carrying- hauling ropes for cableway installations designed to carry persons	All types of Aerial Ropeways,
EN 12385-9:2003	Steel wire ropes - Safety - Part 9: Locked coil carrying ropes for cableway installations designed to carry persons	All types of Aerial Ropeways
EN 12397:2017	Safety requirements for cableway installations designed to carry persons - Operations	All types of Aerial Ropeways

Standard	Content of the standard	To be applied for
EN 12408:2005	Safety requirements for cableway installations designed to carry persons – Quality Control	All types of Aerial Ropeways
EN 12927:2019	Safety requirements for cableway installations designed to carry persons – Ropes	All types of Aerial Ropeways
EN 12929-1:2015	Safety requirements for cableway installations designed to carry persons - General requirements Part 1: Requirements for all installations	All types of Aerial Ropeways
EN 12929-2:2015	Safety requirements for cableway installations designed to carry persons - General requirements Part 2: Additional requirements for reversible bi-cable aerial ropeways without carrier truck brakes	reversible bi-cable aerial ropeways without carrier truck brakes
EN 12930:2015	Safety requirements for cableway installations designed to carry persons - Calculations	All types of Aerial Ropeways
EN 13107:2016	Safety requirements for cableway installations designed to carry persons – Civil engineering works	All types of Aerial Ropeways
EN 13223:2015	Safety requirements for cableway installations designed to carry persons – Drive systems and other mechanical equipment	All types of Aerial Ropeways
EN 13243:2015	Safety requirements for cableway installations designed to carry persons - Electrical equipment other than for drive systems	All types of Aerial Ropeways
EN 13796-1:2017	Safety requirements for cableway installations designed to carry persons - Carriers - Part 1: Grips, carrier trucks, on-board brakes, cabins, chairs, carriages, maintenance carriers, tow- hangers	All types of Aerial Ropeways, (as applicable for ropeway configuration)
EN 13796-2: 2017	Safety requirements for cableway installations designed to carry persons - Carriers - Part 2: Slipping resistance test for grips	All types of Aerial Ropeways
EN 13796-3: 2017	Safety requirements for cableway installations designed to carry persons - Carriers - Part 3: Fatigue tests	All types of Aerial Ropeways
EN ISO 12944	Paints & Varnishes: Corrosion Protection of Steel Structures by protective paint systems.	Cable Liners and all types of aerial systems where applicable
EN 17064:2019	Safety requirements for cableway installations designed to carry persons - Prevention and fight against fire	All types of Aerial Ropeways
EN 1090	Execution of Steel and Aluminum Structures	Cable Liners and all types of aerial systems where applicable
EN 1993	Design of Steel Structures	Cable Liners and all types of aerial systems where applicable

5.2 Basic Design Criteria

The design is based on the CEN-Standards. Based on these standards, the following assessments must be completed, with the most important highlighted in **bold**:

- Geological Investigation

- Danger of landslides or flood
- Wind forces
- **Fire hazard**
- Work safety
- **Evacuation**
- Safety analysis in mechanical and electrical systems, including verification of **clearance**

Particular challenges for mountainous ropeway systems to be considered in design are:

- Land use for stations, towers, corridor
- **Clearance** to existing trees, rural buildings (if any) and roadways
- Tower position and size
- Station position and platform height
- Fire danger
- Construction and maintenance Phase
- Options for evacuation

5.2.1 Fire Hazard

Fire below or near the rope can cause high temperatures at the rope, which loses strength at a temperature of 200°C. The main targets to manage fire hazards are therefore:

- to protect the rope against high temperatures, since the rupture of the rope would cause damage along the length of the ropeway line; and
- to protect passengers in the cabins, close to the fire.

The rope and cabins can both be protected from external sources of fire with sufficient vertical clearance to existing buildings or other combustible material such as trees and rural farm buildings. In accordance with the CEN-standard this should be 20 m. The clearance for a project is determined by preparation of a longitudinal section with marked clearance lines, as depicted below. The clearance can be optimised by means of a fire simulation. The input data into such a simulation are: Size and construction of the houses and the use. From this, the fire load is calculated, which is fundamental to the calculation of the temperature on the rope.

Fire safety and assessment must be appropriately considered and designed to ensure that the ropeway system provides a safe means of transport. Client cost and operational drivers sometimes challenge these safety and fire requirements, however the safe design, construction, installation and operation of such schemes remains a primary client objective and responsibility. Any reduction of the 20m clearance must be demonstrated by means of a fire simulation assessment underpinned with an independent report.

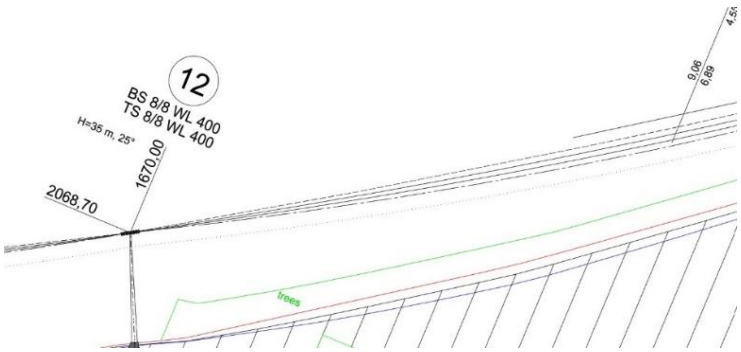


Figure 17: Example of a longitudinal section showing sufficient vertical clearance

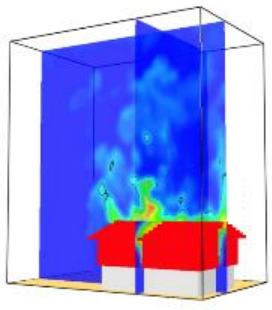


Figure 18: Example of a fire simulation, whereby blue is below 200°C, green and red above 200°C

5.2.2 Clearance

Vertical and horizontal clearances need to be considered as follows (concerning to EN12929-1):

Vertical clearance (areas not above buildings)	1.5 m in non-accessible areas 2.5 m in areas where people can stay 1.0 m to any clearance gauge (e.g. street, railway)
Horizontal clearance	1.5 m to any building related to the cabin deflected by the wind, as shown in the figure below

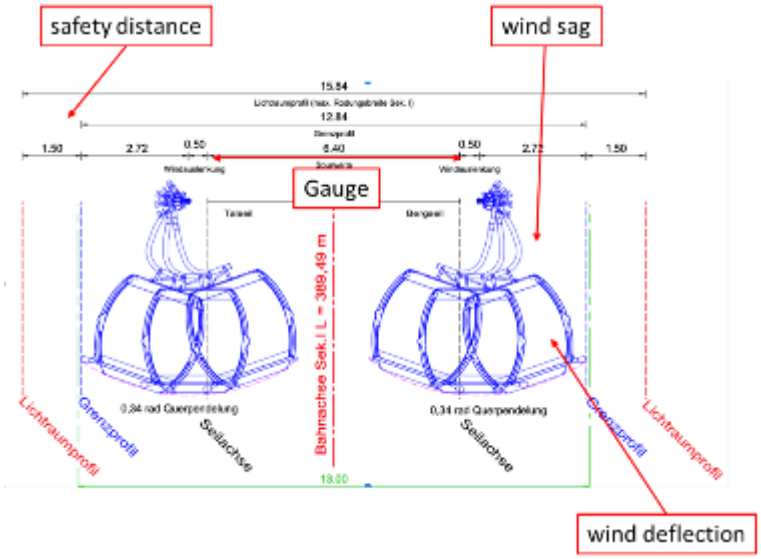


Figure 19: Safety distance and gauge with consideration of wind effects

5.2.3 Evacuation

If the ropeway is no longer operational due to a serious defect, the passengers must be brought to the ground using an evacuation device. According to the CEN standard (EN1909), the evacuation of cabins with 10 passengers each must be completed in 3.5 hours, which requires professional and numerous rescue teams, that must be professionally and regularly trained.

To avoid the evacuation, an integrated recovery concept is available to be intigrated within the design. The concept ensures redundancy is designed in the system, such that if components fail and the ropeway comes to a standstill, then recovery is possible. This system normally consists of:

- Additional diesel-hydraulic recovery drive in the return station;
- all bull-wheels are equipped with emergency bearings;
- tools on every tower for re-aligning of a derailed rope back into the sheaves.

In the unlikely event that the integrated evacuation concept fails, an emergency concept must be developed to ensure the evacuation of passengers by vertical recovery. Due to the geometry of the alignment, one drive must be provided for each recovery unit including preparation of recovery plan. Rescue teams must be professionally and regularly trained and experienced in working at height and be supervised and coordinated by a suitably qualified person in charge.

The approach to evaluation is to be discussed with the Client and developed to ensure that the CEN standard requirement can be met.

5.2.4 Other Design Criteria

Design criteria concerning construction, installation and maintenance of the ropeway

In the mountainous environment of Kullu valley, the construction, installation and maintenance of the ropeways are often challenged with issues associated with limited space and acess conditions. One speciic problem and safey risk arises from the installation and rope pulling activities and this must be assessed and analysed in detail to ensure that the risks are minimised. In addition, the client must consider that laydown areas and rope pulling equipment will be required at the initial installation, maintenance intervals and at the decommissioning stages.

There are similar challenges associated with the ongoing maintenance work, especially the replacement of the haul rope and other such major maintenance tasks.

5.3 Design Methodology

5.3.1 Design Components of a Ropeway system

The main components of a ropeway system are:

- Station equipment
  - Main drive and recovery drive (drive station)
  - 2 Independent brake systems
  - Hydraulic tensioning system
  - Bull-wheels
  - Steel structure
  - Launching and conveying system
- Line equipment
  - Towers
  - Sheaves
  - Rope lifting frame
  - Platforms and ladders
- Parking system
- Cabins/Carriers
  - Cabin capacity and loading
  - Hanger
  - Grip-system
- Haul rope
- Recovery system
- Electrical equipment
  - Power distribution
  - AC-Motor, frequency converter
  - Control system
  - Earthing system

5.3.2 Station Types

One type of station is foreseen on this project:

Figure 20: Head-on station type with platform on ground floor or 1st floor

5.3.3 Tower Types

The tower types and sizes are determined from their height and function/ location. With respect to height, this is dependent on the elevation of the ropeway and clearances required whereas function/ location is based on the terrain.

The tower foundation type and depth are to be calculated based on the preliminary geotechnical information and parameters contained within the site investigations and laboratory tests and the imposed loads calculated from the ropeway system.

Preliminary foundation sizes have been provided to indicate the approximate concrete volumes and reinforcement densities for pricing and cost estimation. All tower locations are to be further inspected by a competent geotechnical engineer and geologist and foundation formations are to be assured that they are formed on competent rock and that this formation adequate for the imposed and dynamic load factors. Further design work may be required to ensure that the foundation form is optimised for the terrain and topography.

Two types of towers i.e., lattice and tubular will be applicable, refer to section 7.2.7.

6. ALIGNMENT OPTIONS

A brief summary of the alignment options assessment of the project is provided below. More details are appended to this feasibility report **(refer Appendix 05 – APP-05)**.

Generally it is noted that alignment options were considered within the corridor from Kullu to Bijli Mahadev Temple. Given the dense forest area limiting the access route options to the temple, the hill station was was more or less fixed and not subject to options but only minor shifting. But, the valley station was subject to options due to factors like land availability, ease of access, etc.

6.1 Considerations Section 1

6.1.1 Overview of Options Section 1

In this chapter, the four potential valley and hill stations are examined in more detail and then one alignment is selected for further investigation. Below is a brief description of the four stations:

Table 15: Options for valley and summit stations

Option	Route Description
1	Valley station A – Hill station A (yellow) This potential option runs from the car park in the city center towards the top of the mountain and ends at a position just north of the existing tent city on the summit.
2	Valley station A – Hill station B(red) This potential alignment runs from the car park in the city center towards the top of the mountain and ends at a position just south of the city on the summit.
3	Valley station C – Hill station C (blue) The alignment runs from a site adjacent to the NH3 road and ends a little below the temple compound on the summit.
4	Valley station B– Hill station B(white) This option runs along the edge of the city center to the temple compound and ends at the tent city on the summit.

Option	Valley station Description
1	Valley station A Valley station A is proposed at the corner of a bus station in Kullu-Ramshila road.
2	Valley station B Valley station B is located in Nature Park (Mohal) area. Flood protection works are required.
3	Valley station C Valley station C is located across the Beas river from Kullu city beside the National Highway (NH3)
Option	**Hill station Description**
1	Hill station A The hill station A is proposed on hill top adjacent to the main access path to the Bijli Mahadev temple complex and is positioned behind an existing pond.
2	Hill station B The location for the hill station option B coincides with the existing building complex of shops, café, and temple entrance gate.
3	Hill station C Hill station C is located behind the temple towards Bhuntar.

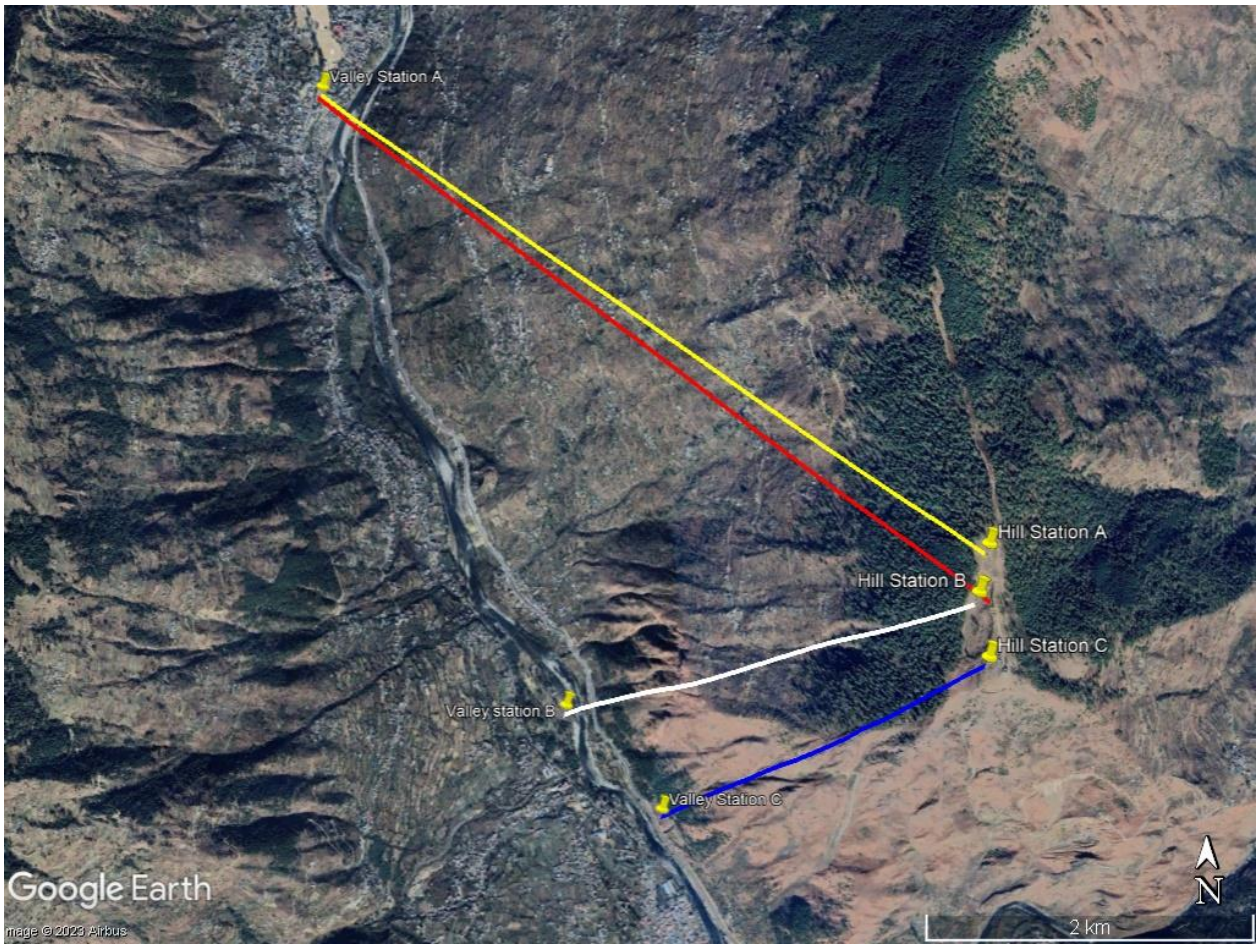


Figure 21: Layout Alignment Options

6.1.2 Critical Areas

For all four options, critical areas in terms of land availability, difficulties in construction, etc. have been assessed. Assessment and details can be obtained from the appended alignment options report.

6.1.3 Comparison of alignment options Section 1

Approach

The comparison of the three options is beeing carried out assessing the following key parameters / issues:

Parameter	Title	Assessment criteria
P1	Technical feasibility and technical difficulty level	What are the technical difficulties? What is the technical difficulty compared to the other options?
P2	Ropeway System	Which ropeway system is preferred?
P3	Implementation cost	What are the components involving high cost in comparison to the other options? What is the likely implementation cost compared with other options?
P4	Land Acquisition Requirements and Impact	Are there buildings or other structures/ services to be demolished or moved?

Parameter	Title	Assessment criteria
		What is the comparison of building requirements / demolishing compared to other options?
P5	Stakeholder Acceptance: Private Land Owners and Stakeholders	Based on parameter P3, what is the acceptance amongst private owners in comparison to other options?
P6	Acceptance: Passengers	What is the acceptance amongst passengers in comparison to other options?
P7	Necessary Infrastructure	What is required for the implementation of the construction project in terms of infrastructure (accessibility, roads, transport lines and routes, material ropeways, etc.)?

For each parameters, either 1, 2 or 3 points are awarded. The best option is to get 3 points, the second best 2 and the least 1 point. In case of options being assessed the same, same points are given. The option having the highest score is beeing assessed as preferable.

Points	Description
3	Best / most favourable option
2	Second best option
1	Most unfavourable option

Qualitative Comparison and Summary

Comparison details can be optained from the appended alignment optiones report. The summary result for all three options is as follows:

Parameter	Option 1	Option 2	Option 4	Option 4
P1	2	1	3	2
P2	3	3	3	3
P3	1	1	2	3
P4	1	1	3	3
P5	1	1	2	3
P6	3	3	2	2
P7	3	3	1	2
Total	**14**	**13**	**16**	**18**
Rank	**3**	**4**	**2**	**1**

The comparative assessment on key parameters clearly identifies Option 4 as the most feasible. It involves comparatively much less interference with private landowners and has the least cost. It is also the option with the least technical difficulties and will have the highest acceptance rate amongst passengers.

Lower floors of the ropeway valley station can be used for circulation, shops and restaurants and mobility hub, increasing the comfort to ropeway passenegers well and thus adding value to the station as a whole.

As such, option 4 is the most recommendable option.

7. DESCRIPTION OF THE DETERMINED ROPEWAY ALIGNMENT

7.1 Description of Alignment

The alignment of the ropeway line starts at Nature Park (Mohal) and ends at Bijli Mahadev temple, Kullu. The land alignment, carriageway and structures comprising the site are described below.

Table 16: Coordinate system is Universal Transverse Mercator (UTM).

S. No.	Location	Latitude	Longitude
1	Start at Nature Park Mohal.	43R 700990.9971	3533443.5875
2	End at Bijli Mahadev temple.	43R 703156.0847	3534294.4270

Total slope length of the ropeway is about 2336.27m.

The ropeway alignment is indicatively shown below. Detailed drawings of the site / alignment are provided in **Appendix-06-APP-06**.

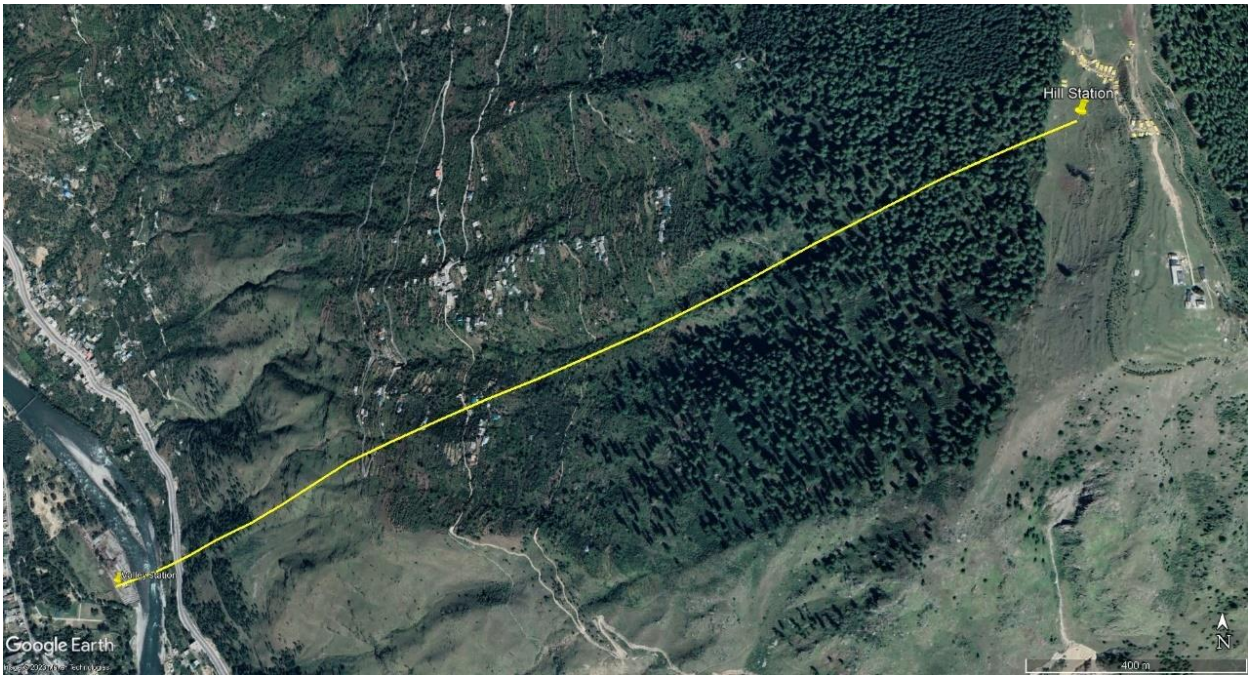


Figure 22: Indicative overview of the alignment

Centre-line coordinates are as follows

Table 17: Centre-line coordinates

S. No.	Chainage (in Km)	Proposed Centreline Coordinate	
		Easting	Northing
1	0+000	43R 700981.6900	3533439.9300
2	0+050	43R 701028.2256	3533458.2176
3	0+100	43R 701074.7612	3533476.5053
4	0+150	43R 701121.2968	3533494.7929
5	0+200	43R 701167.8324	3533513.0805
6	0+250	43R 701214.3680	3533531.3682
7	0+300	43R 701260.9036	3533549.6558

S. No.	Chainage (in Km)	Proposed Centreline Coordinate	
		Easting	Northing
8	0+350	43R 701307.4392	3533567.9434
9	0+400	43R 701353.9748	3533586.2311
10	0+450	43R 701400.5104	3533604.5187
11	0+500	43R 701447.0460	3533622.8063
12	0+550	43R 701493.5816	3533641.0940
13	0+600	43R 701540.1173	3533659.3816
14	0+650	43R 701586.6529	3533677.6692
15	0+700	43R 701633.1885	3533695.9569
16	0+750	43R 701679.7241	3533714.2445
17	0+800	43R 701726.2597	3533732.5321
18	0+850	43R 701772.7953	3533750.8198
19	0+900	43R 701819.3309	3533769.1074
20	0+950	43R 701865.8665	3533787.3950
21	1+000	43R 701912.4021	3533805.6827
22	1+050	43R 701958.9377	3533823.9703
23	1+100	43R 702005.4733	3533842.2579
24	1+150	43R 702052.0089	3533860.5456
25	1+200	43R 702098.5445	3533878.8332
26	1+250	43R 702145.0801	3533897.1208
27	1+300	43R 702191.6157	3533915.4085
28	1+350	43R 702238.1513	3533933.6961
29	1+400	43R 702284.6869	3533951.9837
30	1+450	43R 702331.2225	3533970.2714
31	1+500	43R 702377.7581	3533988.5590
32	1+550	43R 702424.2937	3534006.8466
33	1+600	43R 702470.8293	3534025.1343
34	1+650	43R 702517.3649	3534043.4219
35	1+700	43R 702563.9005	3534061.7095
36	1+750	43R 702610.4362	3534079.9972
37	1+800	43R 702656.9718	3534098.2848
38	1+850	43R 702703.5074	3534116.5724
39	1+900	43R 702750.0430	3534134.8601
40	1+950	43R 702796.5786	3534153.1477
41	2+000	43R 702843.1142	3534171.4353
42	2+050	43R 702889.6498	3534189.7230
43	2+100	43R 702936.1854	3534208.0106
44	2+150	43R 702982.7210	3534226.2982
45	2+200	43R 703029.2566	3534244.5859
46	2+250	43R 703075.7922	3534262.8735
47	2+300	43R 703122.3278	3534281.1611
48	2+336.27	43R 703156.0847	3534294.4270

7.2 Description of Station and Proposed Tower Locations

7.2.1 Nature Park, Mohal

Figure 23: Nature Park Mohal – Valley station location.

Nature Park is a tourist destination surrounded with lush greens vegetation, varieties of flora, structures and fountain adjacent to the river Beas in Kullu city. Amusement rides for children, play area for all age groups have been developed by the department of tourism. The location is provided with cafeteria/ food courts. A nursery is also situated in the location. One can enjoy the beauty of mountains, river, and greenery all together. Bijli Mahadev temple hill is visible from the park. For development of the station area, flood protection structures are required to be constructed as part of the station area development. Protection level shall be against HW100.

7.2.2 Bijli Mahadev temple

Figure 24: Bijli Mahadev temple hilltop – Hill station location

Bijli Mahadev Temple, situated in Kullu district, Himachal Pradesh, is a revered religious site perched at an altitude of around 2,438 meters. The temple is famous for its unique ritual involving lightning, where a Shiva Lingam gets shattered during thunderstorms, and the priest restores it using butter and sattoo. The best time to visit is during the pleasant summer months (April to June) and September to November when devotees and tourists flock to witness the breathtaking views and seek blessings. However, monsoons (July to September) and winters (December to March) are the lean seasons, as heavy rainfall and snowfall make the trek challenging and limit accessibility.

7.2.3 Alignment of ropeway – Nature Park Mohal to Bijli Mahadev Temple

As the ropeway departs from the Nature Park Mohal area, the ropeway will climb quickly to gain sufficient elevation to clear the river, roadway and the hill which passes in a North-East direction in front from the base station. It will then continue further stretching over Balah, Talogi, Peccha and Peccha Kandi villages towards Bijli Mahadev Temple. The hill station is intended to be located as close to the Bijli Mahadev temple as possible. There are no deflection/ intermediate stations in the ropeway alignment.

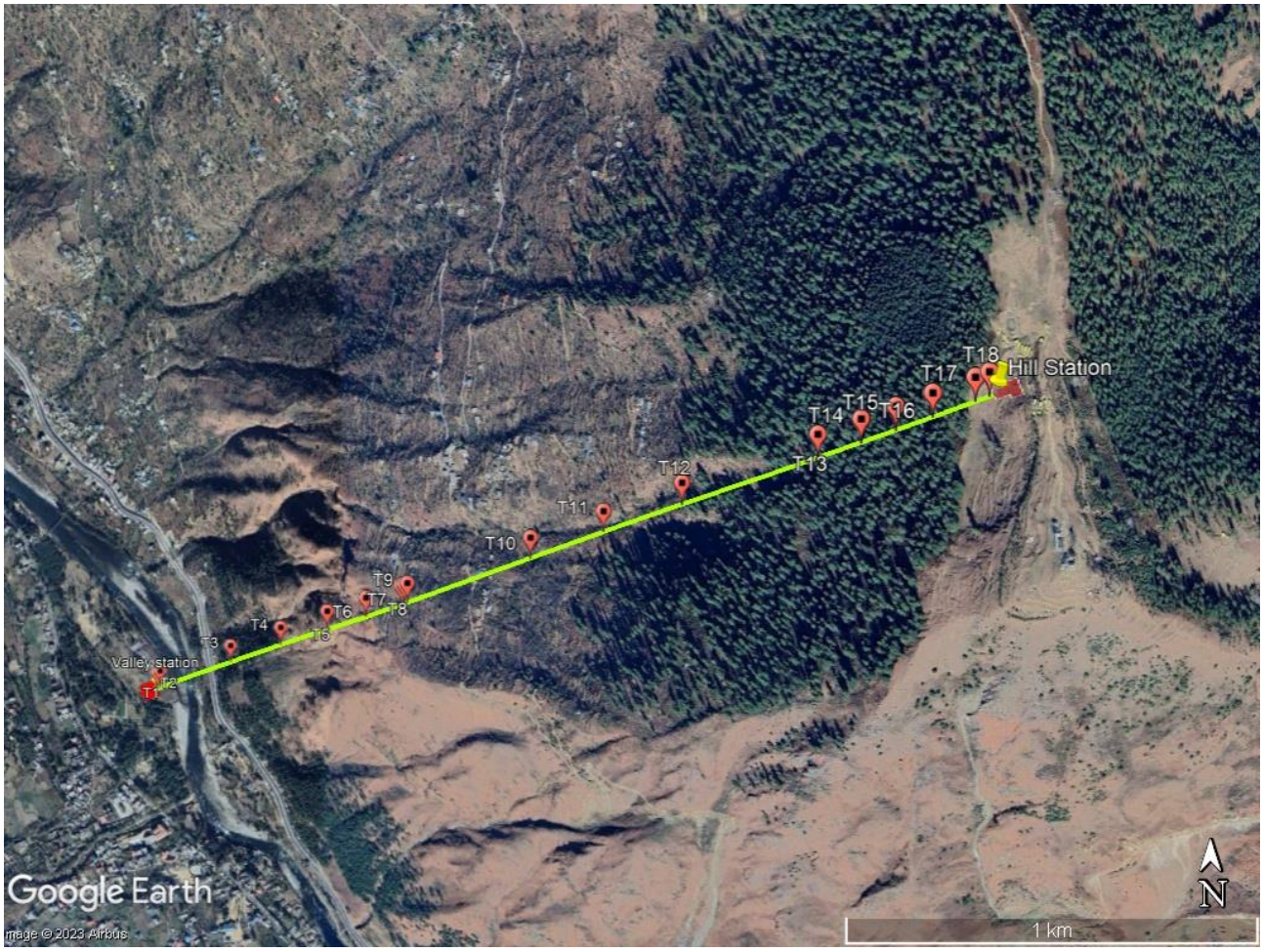


Figure 25: Final alignment of the ropeway.

Even though project location is in a hilly area, the valley station location in Nature Park, Mohal is easily accessible with wide roads suitable for the movement of construction machinery for the works. The Construction of valley station and towers T1 to T3 can be done without any major inconvenience as the locations are easily accessible. Also the construction of towers T6 to T10 can be executed with minor approaches from the existing roads. However, since the ropeway corridor is also in a forest, special care must be taken to ensure preservation of natural habitat of the local flora and fauna during the construction period.

A special material ropeway shall be built in the corridor where the tower locations are inaccessible for the transport of material and/or manpower. Safety of the manpower shall be the top priority while working in these areas. A detailed work methodology shall be prepared by the contractor to ensure the preservation of the natural forest and safety of the manpower involved in the construction works. The contractor should be allowed the opportunity to inspect the construction sites and prepare an outline method statement and risk register as part of his submission. The sequencing of enabling, construction and installation works will be vital to minimize the impact on the natural environment.

The towers are designed and placed in a way that no private land is necessary to be acquired for construction and no relocation of the existing families is required. The sequencing of enabling, construction and installation works will be vital to minimize the impact on the natural environment.

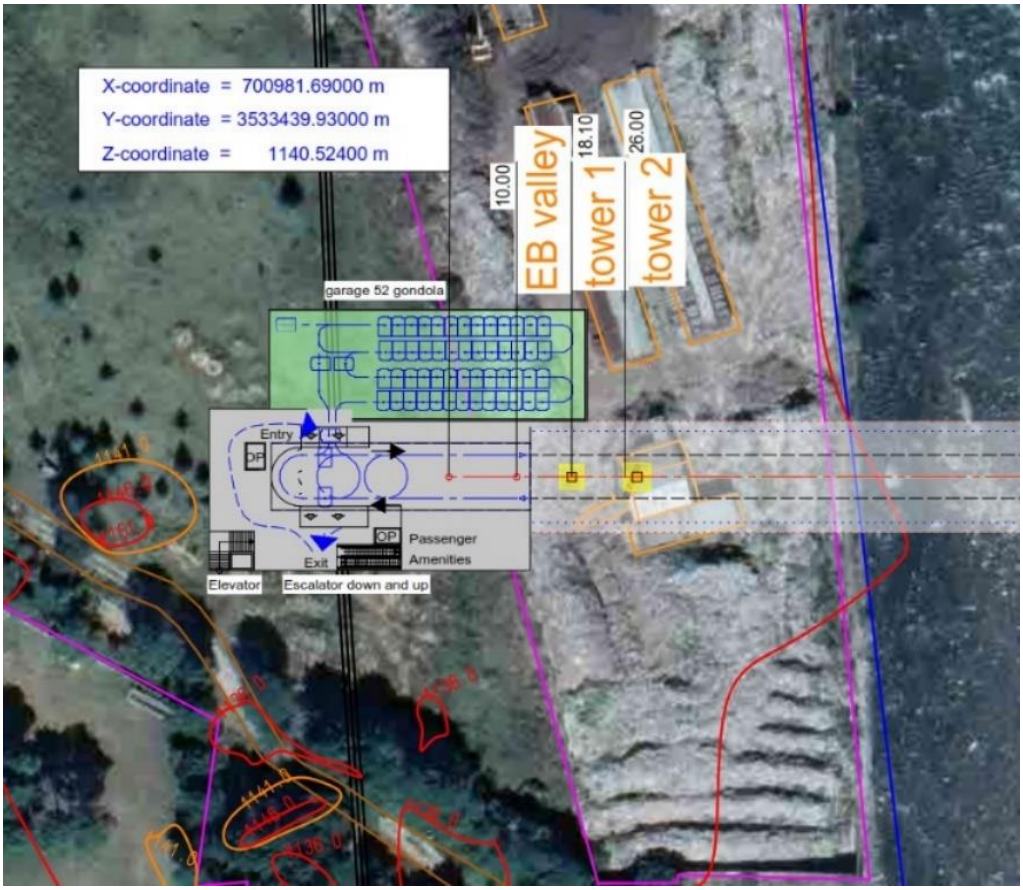
The maintenance of a safe public environment during the construction works is mandated and the potential contractor must consider how he will plan and manage his works and sequence his construction and installation works to ensure that public safety is maintained.

The project intrinsically contains significant work at height. Work at height carries significant risk and this is recognised as a major contributor to construction site accidents which affect both the public and work site operatives.

Storage of plant and construction material at tower locations and stations is very limited requiring transport of material from centralized locations to specific sites on a just in time basis.

7.2.4 Tower Details

Tower 01 & 02 (T1 & T2)



Description	T1	T2
Coordinates of Tower foundation centre	43R 700998.5359, 3533446.5501	43R 701007.4849, 3533450.0669
Coordinates of the rope point	43R 700998.5359 , 3533446.5501	43R 701005.8885 , 3533449.4396
Elevation at Rope point	1148.99 m	1150.47 m
Chainage at Tower Foundation (km)	0+018.10	0+027.74
Chainage at Rope point (km)	0+010.00	0+018.10
Type of Tower	Tubular	Tubular
Height of Tower (m)	8 m	10 m
Angle of Tower	0°	10°

Given the close vicinity to the riverbed, Towers 1 and 2 required flood and scour protection. These measures are to be considered as part of the good for construction design by the concessionaire.

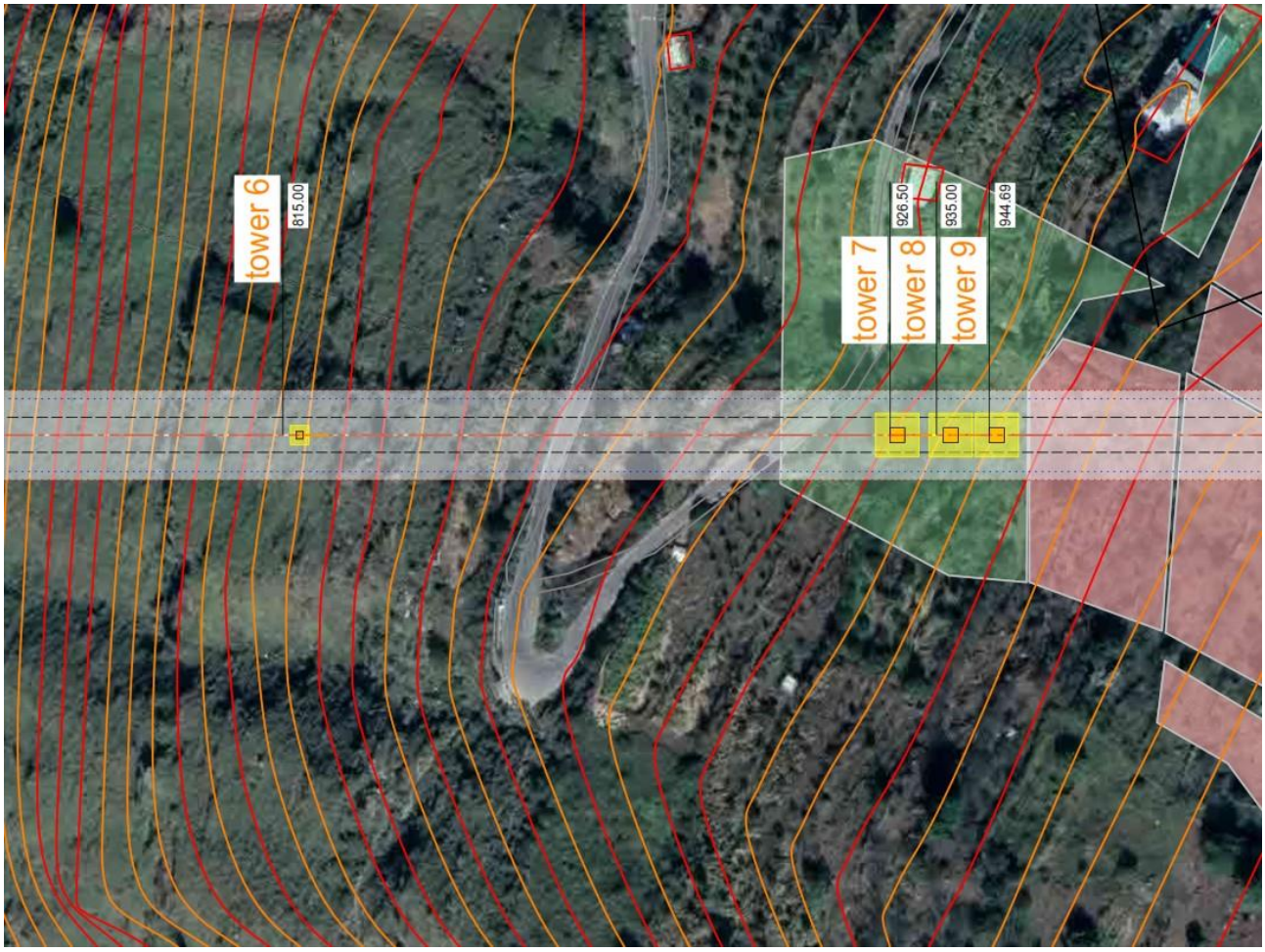
Tower 03 (T3)

Description	T3
Coordinates of Tower foundation centre	43R 701249.1059, 3533545.0194
Coordinates of the rope point	43R 701242.2894, 3533542.3407
Elevation at Rope point	1271.20 m
Chainage at Tower Foundation (km)	0+287.324
Chainage at Rope point (km)	0+280.00
Type of Tower	Lattice
Height of Tower (m)	42 m
Angle of Tower	10°

Tower 04 & 05 (T4 & T5)

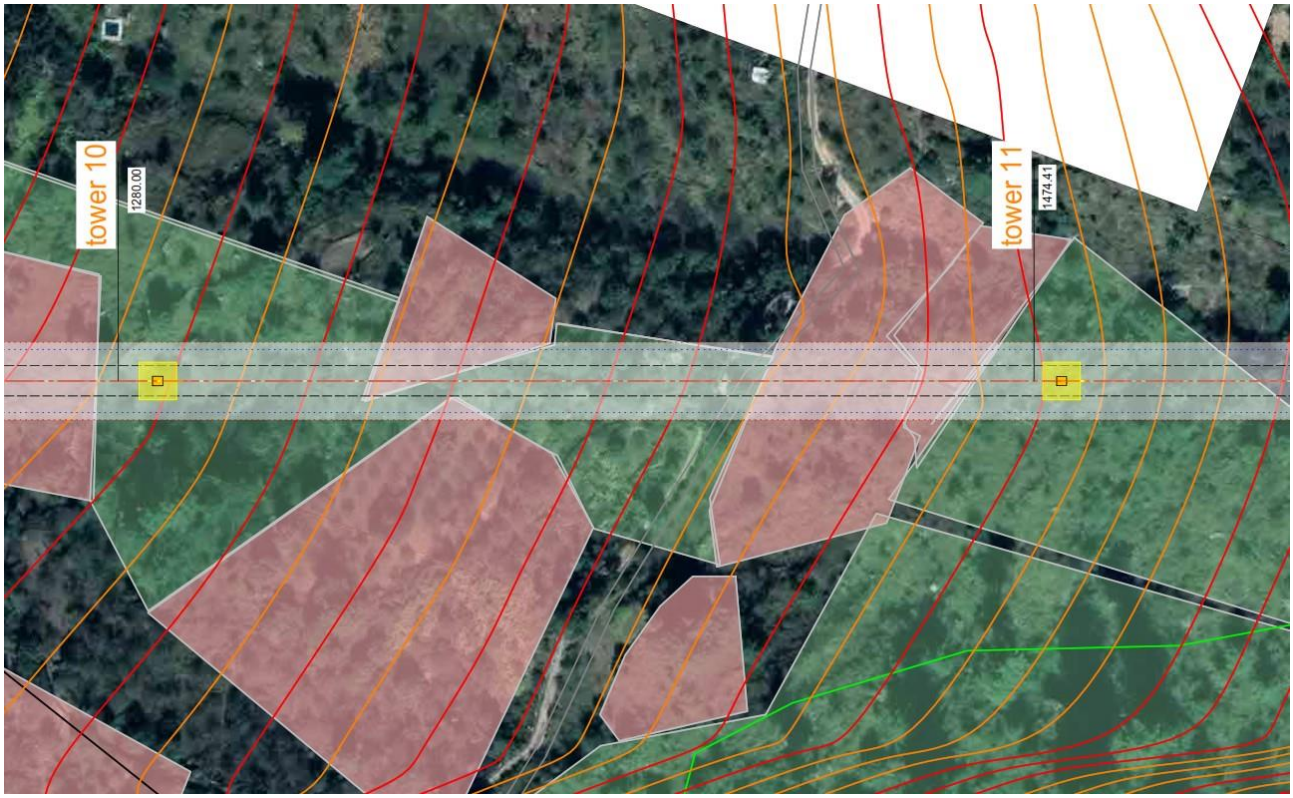
Description	T4	T5
Coordinates of Tower foundation centre	43R 701433.3507, 3533617.4243	43R 701606.3519, 3533685.4106
Coordinates of the rope point	43R 701422.8475, 3533613.2968	43R 701600.6135, 3533683.1555
Elevation at Rope point	1408.00 m	1573.65 m
Chainage at Tower Foundation (km)	0+485.286	0+671.166
Chainage at Rope point (km)	0+474.00	0+665.00
Type of Tower	Tubular	Tubular
Height of Tower (m)	33 m	18 m
Angle of Tower	20°	20°

Tower 06 – 09 (T6 – T9)



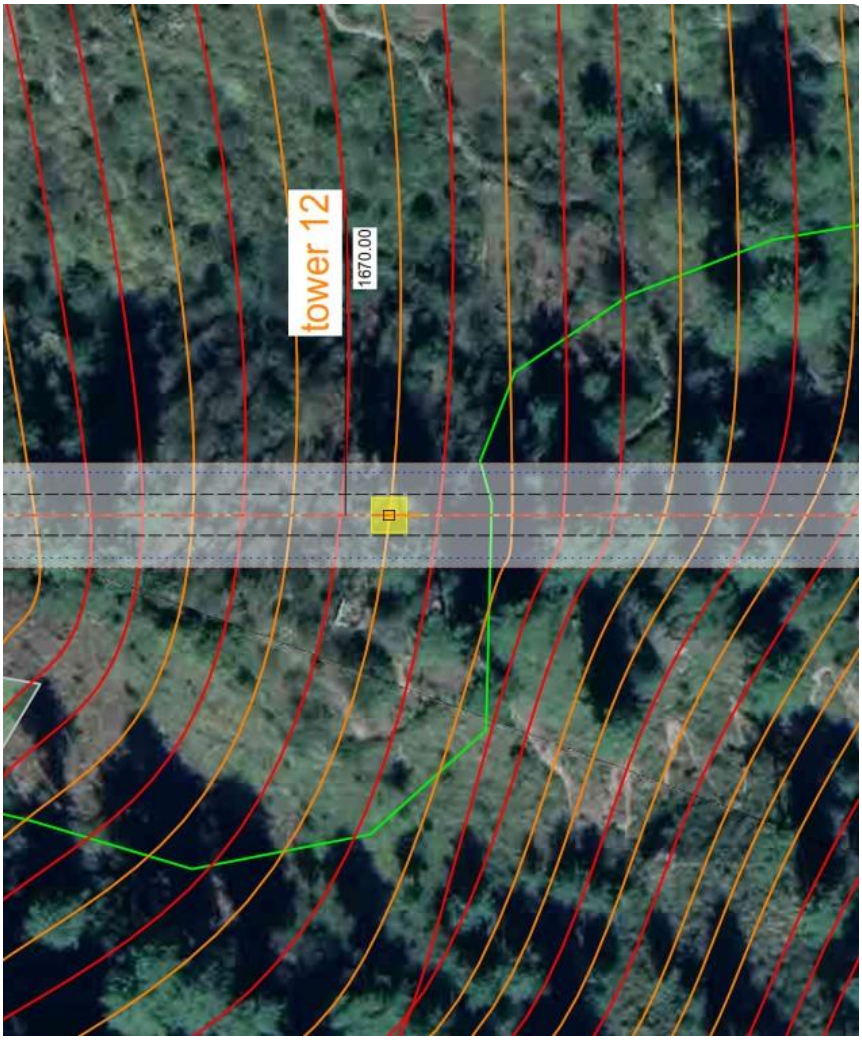
Description	T6	T7	T8	T9
Coordinates of Tower foundation centre	43R 701743.0853 3533739.1443	43R 701845.1937 3533779.2710	43R 701854.3147 3533782.8554	43R 701862.1886 3533785.9499
Coordinates of the rope point	43R 701740.2204 3533738.0184	43R 701843.9947 3533778.7998	43R 701851.9058 3533781.9087	43R 701860.9244 3533785.4529
Elevation at Rope point	1703.70 m	1787.50 m	1792.25 m	1796.15 m
Chainage at Tower Foundation (km)	0+818.078	0+927.788	0+937.588	0+946.048
Chainage at Rope point (km)	0+815.00	0+926.50	0+935.00	0+944.69
Type of Tower	Tubular	Tubular	Tubular	Tubular
Height of Tower (m)	9 m	30 m	31 m	31 m
Angle of Tower	20°	25°	20°	10°

Tower 10 & 11 (T10 & T11)



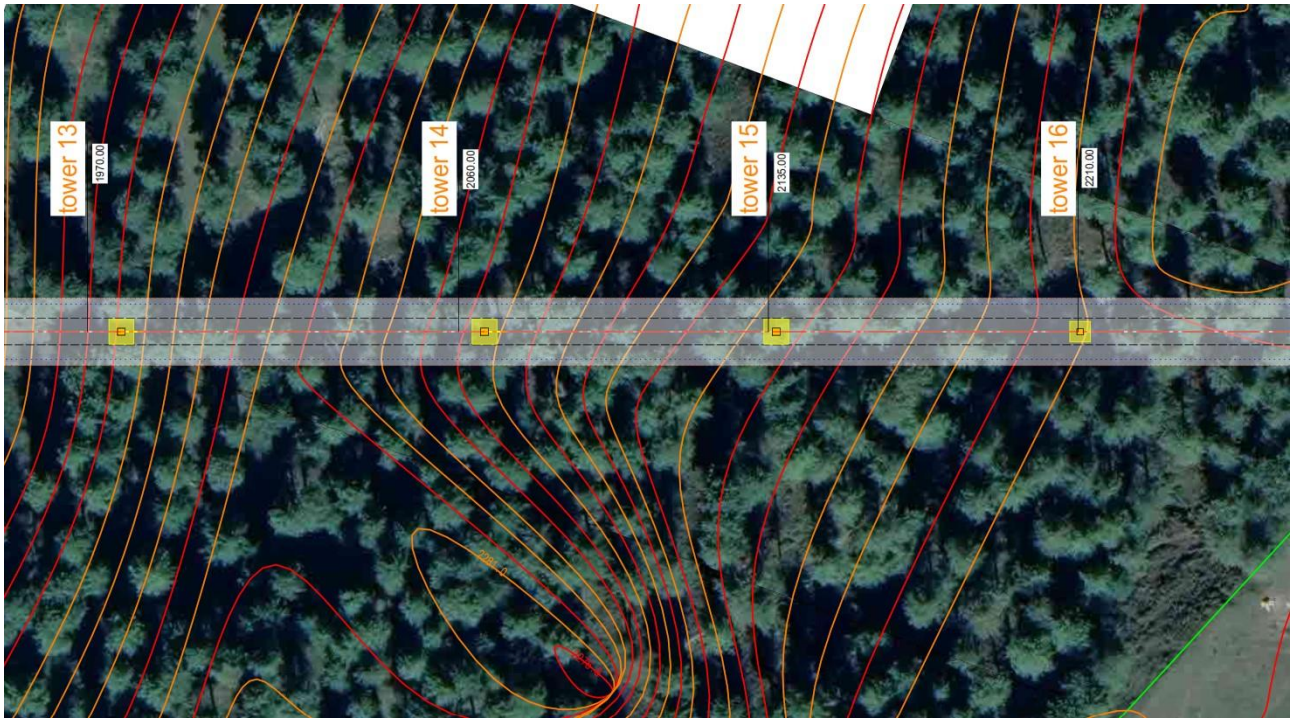
Description	T10	T11
Coordinates of Tower foundation centre	43R 702180.7882, 3533911.1534	43R 702359.4148, 3533981.3504
Coordinates of the rope point	43R 702173.0015, 3533908.0934	43R 702353.9412, 3533979.1994
Elevation at Rope point	1903.25 m	1964.85 m
Chainage at Tower Foundation (km)	1+288.357	1+480.291
Chainage at Rope point (km)	1+280.00	1+474.41
Type of Tower	Tubular	Tubular
Height of Tower (m)	38 m	36 m
Angle of Tower	10°	15°

Tower 12 (T12)



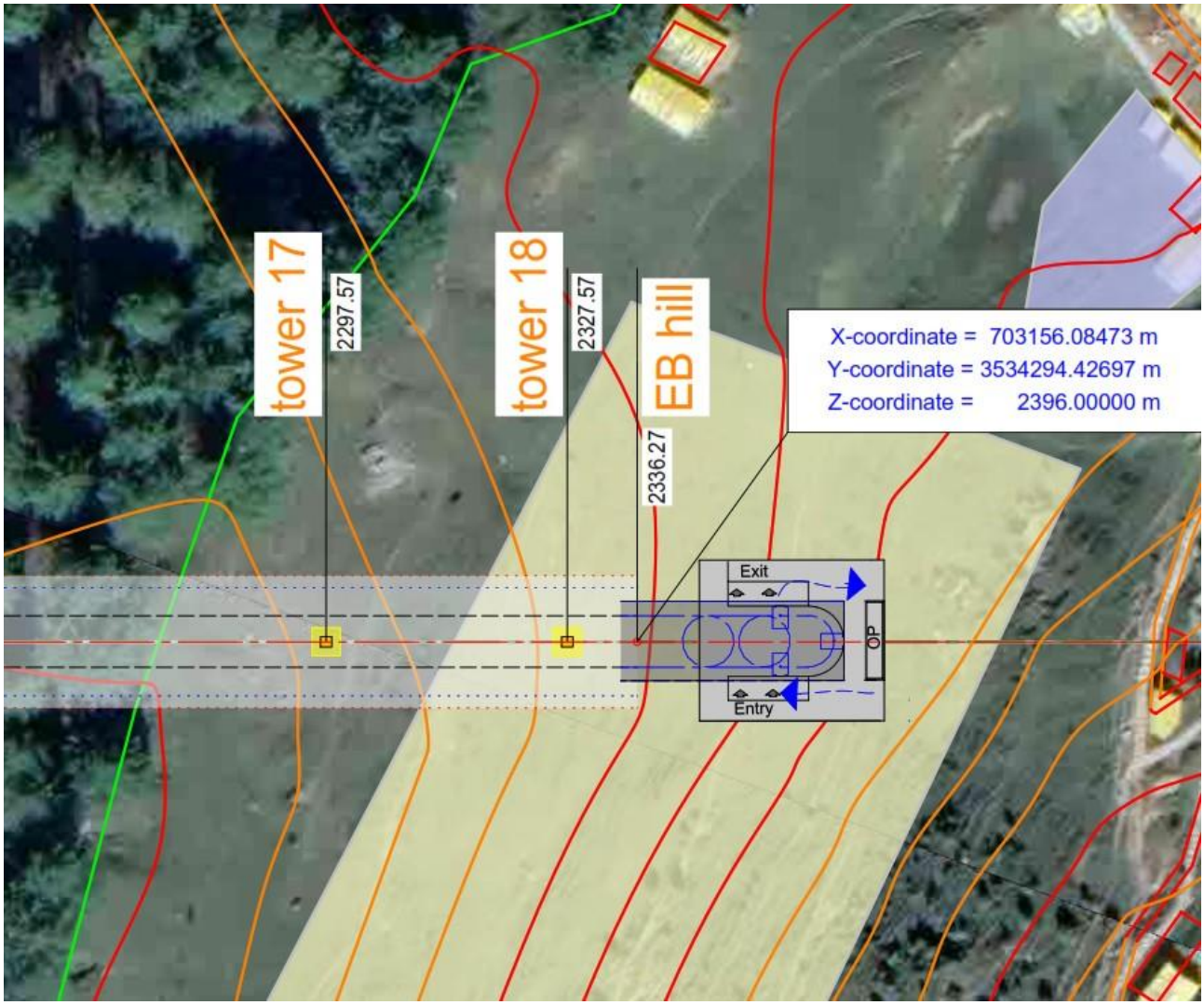
Description	T12
Coordinates of Tower foundation centre	43R 702542.3542, 3534053.2422
Coordinates of the rope point	43R 702535.9792, 3534050.7369
Elevation at Rope point	2068.70 m
Chainage at Tower Foundation (km)	1+676.85
Chainage at Rope point (km)	1+670.00
Type of Tower	Tubular
Height of Tower (m)	35 m
Angle of Tower	25°

Tower 13 - 16 (T13 – T16)



Description	T13	T14	T15	T16
Coordinates of Tower foundation centre	43R 702822.8411 3534163.4684	43R 702904.7472 3534195.6559	43R 702970.5443 3534221.5146	43R 703039.0564 3534248.4386
Coordinates of the rope point	43R 702815.1928 3534160.4627	43R 702898.9569 3534193.3805	43R 702968.7603 3534220.8119	43R 703038.5637 3534248.2434
Elevation at Rope point	2277.41 m	2331.45 m	2365.80 m	2390.38 m
Chainage at Tower Foundation (km)	1+978.218	2+066.221	2+136.918	2+210.53
Chainage at Rope point (km)	1+970.00	2+060.00	2+135.00	2+210.00
Type of Tower	Tubular	Tubular	Tubular	Tubular
Height of Tower (m)	21 m	22 m	21 m	19 m
Angle of Tower	20°	25°	15°	5°

Tower 17 & 18 (T17 & T18)



Description	T17	T18
Coordinates of Tower foundation centre	43R 703120.0656, 3534280.2737	43R 703147.9873, 3534291.2454
Coordinates of the rope point	43R 703120.0662, 3534280.2723	43R 703147.9875, 3534291.2449
Elevation at Rope point	2408.75 m	2411.94 m
Chainage at Tower Foundation (km)	2+297.57	2+327.57
Chainage at Rope point (km)	2+297.57	2+327.57
Type of Tower	Tubular	Tubular
Height of Tower (m)	25 m	19 m
Angle of Tower	0°	0°

7.2.5 Station and Tower Space requirement

7.2.6 Stations

Two ropeway stations are proposed on the ropeway alignment, the coordinates to these stations are tabulated below. Coordinate system used is UTM, Bijli Mahadev lies in zone 43R. The contractor will be required to

develop full and detailed setting out information as part of his detail and technical design phase. The contractor is reminded that the drawings and details provided as part of the tender are outline concept drawings that need to be developed through detail and technical design stages. These further design stages will afford the contractor the opportunity to identify and implement value engineering opportunities and crucially ensure that the system is fully designed and all loads including structural loads are accommodated and addressed.

Table 18: Location of the proposed stations

S. No.	Station	Chainage	Area (sqm)
1	Start station at Nature Park Mohal	0+010	2041.26
2	End station at Bijli Mahadev temple	2+336.27	1323.80

7.2.7 Towers

The tower types and sizes mentioned in the initial project assessment are determined from their height and function/location. With respect to height, this is dependent on the elevation of the ropeway and clearances; whereas function/location is based on the terrain.

The tower foundation type and depth are to be calculated based on the geotechnical parameters determined from on-site investigations and laboratory tests. Tower and foundation details provided as part of the tender information are indicative and provide a concept for tendering only- they are not construction details. Detailed calculations and design work is required by the contractor to assess and ensure that all loads from the ropeway system are accommodated within the structural systems and components, which include but are not limited to the foundations, towers and station structures. Particular care shall be taken for flood and scour protection of T1 and T2.

The typical designs depicted below illustrate two types of tower (tubular and lattice), their maximum height and maximum footprint.

TUBULAR TOWER	
Maximum Height:	33 m
Maximum Footprint:	13.0 m
Foundation Type:	Isolated

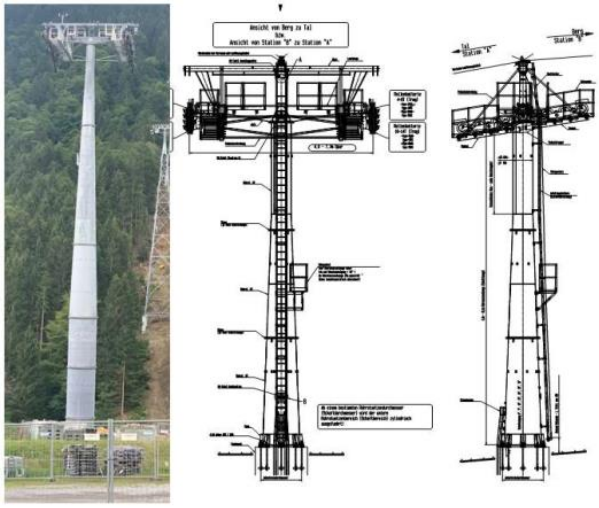


Figure 26: Tubular tower

LATTICE TOWER	
Maximum Height:	42 m
Maximum Footprint:	16.5 m
Foundation Type:	Combined

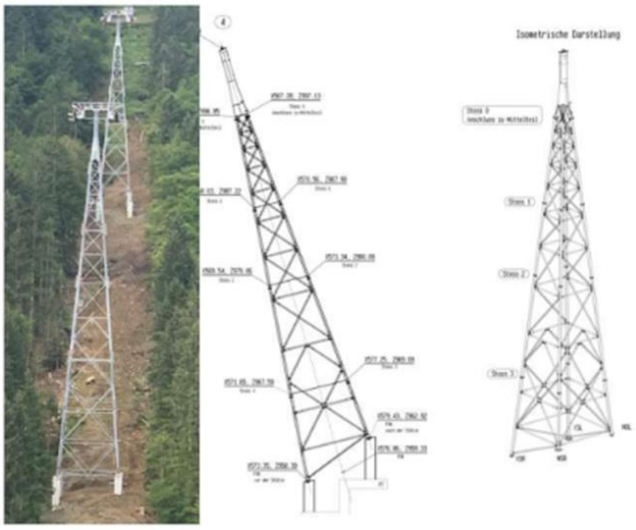


Figure 27: Lattice tower

There are eighteen number of towers proposed along the alignment and the table below presents the details of these towers which includes type of tower, its height and the area of its foundation. As noted in previous sections, the contractor will be required to check, validate, and develop the tower designs to a 'for construction' level of detail.

Table 19: Tower details

S. No.	Tower	Tower Height (m)	Type of Tower	Chainage	Latitude	Longitude
1	T1	8.0	Tubular	0+018.1	43R 700998.5359	3533446.5501
2	T2	10.0	Tubular	0+026.00	43R 701005.8885	3533449.4396
3	T3	42.0	Lattice	0+280.00	43R 701242.2894	3533542.3407
4	T4	33.0	Tubular	0+474.00	43R 701422.8475	3533613.2968
5	T5	18.0	Tubular	0+665.00	43R 701600.6135	3533683.1555
6	T6	9.0	Tubular	0+815.00	43R 701740.2204	3533738.0184
7	T7	30.0	Tubular	0+926.50	43R 701843.9947	3533778.7998
8	T8	31.0	Tubular	0+935.00	43R 701851.9058	3533781.9087
9	T9	31.0	Tubular	0+944.69	43R 701860.9244	3533785.4529
10	T10	38.0	Tubular	1+280.00	43R 702173.0015	3533908.0934
11	T11	36.0	Tubular	1+474.41	43R 702353.9412	3533979.1994
12	T12	35.0	Tubular	1+670.00	43R 702535.9792	3534050.7369
13	T13	21.0	Tubular	1+970.00	43R 702815.1928	3534160.4627
14	T14	22.0	Tubular	2+060.00	43R 702898.9569	3534193.3805
15	T15	21.0	Tubular	2+135.00	43R 702968.7603	3534220.8119
16	T16	19.0	Tubular	2+210.00	43R 703038.5637	3534248.2434
17	T17	25.0	Tubular	2+297.57	43R 703120.0662	3534280.2723

S. No.	Tower	Tower Height (m)	Type of Tower	Chainage	Latitude	Longitude
18	T18	19.0	Tubular	2+327.57	43R 703147.9875	3534291.2449

8. DESIGN OF ROPEWAY SYSTEM

Design of ropeway system depends on various parameters which are covered in detail in the **Appendix- 07-APP-07** attached with this report. The appendix includes structural calculations, foundation loads, list of ropeway system components.

8.1 Executive Summary Technical Parameters

Below, all relevant techncial parameters resulted from desing, client directions and discussions are summarized.

Table 20: Technical Parameters

S. No	Description	Sec – I/1
1	System	Mono Cable Detachable Grip Gondola
2	Initial Capacity Final Capacity	900 PPHPD @ max speed 1800 PPHPD @ max speed
3.	Line speed	6 m / sec
4.	Horizontal distance between drive & return sheave (m)	2326.27
5.	Vertical rise (m)	1262.94
6.	Slope length (m)	2646.99
7.	Alignment	As per Plan & Longitudinal section
8.	Cabin capacity	10-seater
9.	Number of Towers	18
10.	Type of cabin	Cabin with windows and window insulation and automatic door operation,
11.	Compressor	At least one in each station
12.	Location of Drive gears	Valley Station
13.	Location of Tension gears	Valley Station
14.	Deflection station	none
15.	Stand by D.G. set	To be provided at both stations to run at full speed
16.	Availability of Power at all Station Buildings	
17.	Ambient temperature	-15°C min and 30°C max
18.	Humidity	86 % (Monsoon conditions)
19.	Rainfall	Max. 600mm/ month
20.	Windspeed, direction	As per meteorological data
21.	Earthquake zone as per IS code	V
22.	Operating hours	10 h per day 330 day per year
23.	Operating modes	Standard Operation Mode: Max. capacity: 100 % of carriages Min. capacity: 25 % of carriages Operation by daylight and darkness Special Operation Mode: Return station unmanned at start of operation
24.	Recovery System	Integrated recovery system, due to the slope of the terrain, river and road crossing.

Drive and Return Terminal:

Description	Sec-1
Location of Drive terminal	Valley Station
Location of Return terminal	Hill Station

The complete drive station must consist of the followings:

- Operating Floor with Boarding, de-boarding facilities
- Main drive with AC motors with variable speed and Gear box or with option of Direct Drive
- Acceleration and deceleration arrangement
- Machinery frame for gearbox and electric motor
- Drive Bull wheel, Drive Shaft (with additional bearing) for emergency operation
- Return bull wheels
- Provision of bull wheel catcher for drive and return bull wheel
- Main electric cabinets with controls
- Emergency drive unit by an auxiliary motor, driven by generator, connected to the main bull wheel through a teeth crown
- Electrical, Service and emergency brake units
- Integrated Recovery system for rescue
- Placement of Tensioning arrangement equipment etc. (option can be near drive unit based upon the technical feasibility)
- A steel structure at station support level to accommodate the drive bull wheel including bearings, diameter according to date sheet and safety brakes
- Mast for station
- Cabin guide
- Operators' cabin / panel room which should be designed to provide unimpeded view of operations.
- Parking of cabins
- Office
- Store

The complete return station must consist of the followings:

- Operating Floor with Boarding, De-boarding facilities
- Return Bull wheel.
- Placement of Tensioning arrangement equipment etc. (option can be near drive unit based upon the technical feasibility)
- Operators' cabin / panel room which should be designed to provide unimpeded view of operations.
- Parking of cabins
- Mast for station
- Cabin guides
- A steel structure at station support level to accommodate the return bull wheel including bearings, diameter according to date sheet and safety brakes.

8.2 Common Requirement

Road, HT/LT line etc. crossings

Where the Ropeway crosses existing infrastructure such as roads, HT line, LT lines and buildings sufficient

clearance shall be provided, as required by the concerned authorities, relevant specifications and regional or national standards.

(Power lines diversion at line, if any, shall be carried out by Client.)

Safety clearances and fire safety clearances are a significant design factor and must be appropriately considered and designed into the scheme as part of the detail and technical design phases.

Design parameters

All the station structures, foundation and support structures including trestles, external works and retaining walls and avalanche protection structures shall be designed, supplied and constructed to withstand all imposed, super imposed and dead loads, to adequately consider the effects of wind, earthquake (SEISMIC), temperature variation (including high and low temperatures and humidity) together with snow loading and the prevailing geotechnical conditions.

In this regard, the relevant BIS Codes would be considered as guidelines. The contractor shall be responsible for ensuring that the loads and the design of structures complies with the appropriate regional, national and international standards. In addition, the contractor shall be responsible for the design of associated structures and facilities and the safe routes and transit corridors from this infrastructure to the ropeway stations. Such design considerations may be applied to ensure that the visiting public are protected from rock falls arising from existing hillside areas which boarder access paths, carparks and assembly areas. This same approach can also be applied to other such hazards, such as snow fall and areas liable to flooding.

Bolts & nuts

High tensile (HT) hot spun-galvanized bolts are to be used with washers and compatible fittings, bolts are to be a minimum of 10.9 unless specified otherwise by the design or design Engineer. Towers, base-plates and holding down bolts, together with welded and bolted connections are to be design and manufactured by specialist tower suppliers. Towers and tower components are to be designed, manufactured tested and inspected in accordance with the regional, national and international standards. Inspection testing and certification is a critical component in the quality management and setting to work approval process.

M.S. Black bolts may be specified by the Engineer. Bolts and Nuts shall conform to BS 4190 or IS: 1364, 3757, 6623 and 6649.

Specification of Steel Works

All steel structural materials shall conform to BS 5950:2000(1990) - Structural use of steelwork in buildings, design of structural steelwork with hot rolled steel sections, flats, plates and hollow sections in buildings and allied structures. In addition all structural steel used in buildings shall conform to the requirements and details contained in BS EN 1993:2006 - Eurocode 3, Design of steel structures. Equivalent international recognized standards may be used although these must be evaluated and approved in writing by the design Engineer.

Hot rolled sections must be used, fabricate sections from flat plate will not be permitted, all joints and connection must be designed and justified by calculation checking. All calculations must be independently checked and verified. Structural towers and structures subject to dynamic loads and those structures that provide primary support to the cable car and ropeway system are to be designed, manufactured and installed and tested by independent specialists.

The aspects of dynamic loading and system fatigue are to be considered in the design and proved by calculation.

- All fabricated steel structural work must be in accordance with BS 5950:2000(1990), BS EN 1993:2006 - Eurocode 3 or equivalent international recognized standard .
- Holes on structural members shall be drilled and back marks, edge distances and hole positions must be in compliance with the detailed requirements of BS5950 or an equivalent international recognized standard.
- On site welding and cutting is not permitted under any circumstances.

- Steel quality must be in accordance and compliance with EN 1090-1 (harmonised European standard structural metalwork).
- Steelwork must be shot blasted to SA2.5 and hot dipped galvanised and have a galvanising thickness of not less than 75 microns. The specialist mechanical parts of the ropeway system will be to the system manufactures details. Special attention must be applied to material interfaces where bi metallic action and corrosion can occur.
- Assembly and erection: Setting out checks must be undertaken during all stages of construction and errors and issues must be reported to the design Engineer as soon as they are known. It is the contractor's responsibility to ensure that the works are set out correctly. The consideration of access and temporary works including access wayleaves will remain the responsibility of the contractor. All temporary works must be designed and checked to ensure that the construction and imposed loads can be accommodated. Temporary works must be designed in accordance with BS 5975 and BS EN 12810 to 12813 or an equivalent international recognized standard. Temporary works designs must be produced by a competent and qualified person and all designs must be review and independently checked.
- The construction sequence must be supported by a construction management plan and a construction method statement which must be communicated and discussed with the workforce prior to the commencement of that day's work. At all times the construction work and site area must provide a safe place of work for those working there and those affected by the works. The contractor must ensure that all structures are set out correctly, level and constructed in line with the design and design drawings. Arrangement should be made to thoroughly brace and guy the structures in the temporary condition at all stages of erection, in line with the requirements of the temporary works designs and construction method statement.
- Where excavation or demolition is required, the contractor must ensure that existing and adjacent structures are supported and remain stable during the works. Excavations must be protected against collapse and protect those who work on and adjacent to them.

Specifications for civil works and codes

Whilst noting the key minimum standards and specific elements above, the design, construction, material and workmanship for civil, structural, sanitary and supply services fittings shall be specified by the Engineer within the detail and technical design package and information. These detailed and technical standards will be developed and will support the complete design pack and should the contractor wish to deviate from these standards and specifications he will be required to raise a formal technical query to the engineer.

8.3 Technical Specifications

The technical specifications for the ropeway line are provided in **Appendix 08 – APP-08**.

9. LAND REQUIREMENT FOR PROJECT

The proposed ropeway alignment is spanning over four existing villages in Kullu district. They are:

a) Balh
b) Talogi
c) Peccha
d) Peccha Kandi

The distribution of land areas proposed for acquisition and the ownership details for each of the aforementioned village are as follows:

Table 21: Distribution of Land type and area to be acquired in Balh village

S. No.	Khasra Number	Land Type	Area in Hectare	Description
1	Tukda No 01	Forest	0.3804	Valley Station, T1, T2
2	Tukda No 02	Forest	0.0970	RoU
3	**Total area to acquire in Balh village**		**0.4774**	

Table 22: Distribution of Land type and area to be acquired in Talogi village.

S. No.	Khasra Number	Land Type	Area in Hectare	Description
1	Tukda No 01	Forest	0.0216	T3
2	Tukda No 02	Forest	0.0200	T4
3	Tukda No 03	Forest	0.0099	T5
4	Tukda No 04	Forest	0.0073	T6
5	Tukda No 05	Forest	0.9324	RoU
6	Tukda No 06	Forest	0.0667	RoU
7	Tukda No 07	Forest	0.0556	RoU
8	**Total area to acquire in Talogi village**		**1.1135**	

Table 23: Distribution of Land type and area to be acquired in Peccha village.

S. No.	Khasra Number	Land Type	Area in Hectare	Description
1	201/1	Forest	0.0121	T7
2	484/203/1	Forest	0.0121	T8
3	484/203/2	Forest	0.0137	T9
4	423/1	Forest	0.0169	T10
5	478/1	Forest	0.0169	T11
6	480/1	Forest	0.0169	T12
7	201/2	Forest	0.0198	RoU
8	194/1	Forest	0.0090	RoU
9	484/203/3	Forest	0.0821	RoU
10	231/1	Forest	0.0921	RoU
11	231/2	Forest	0.0368	RoU
12	240/1	Forest	0.0054	RoU
13	423/2	Forest	0.0804	RoU
14	478/2	Forest	0.0864	RoU
15	480/2	Forest	0.2506	RoU
16	**Total area to acquire in Peccha village**		**0.7512**	

Table 24: Distribution of Land type and area to be acquired in Peccha Kandi village.

S. No.	Khasra Number	Land Type	Area in Hectare	Description
1	1/7	Forest	0.0100	T13
2	1/6	Forest	0.0121	T14
3	1/5	Forest	0.0121	T15
4	1/4	Forest	0.0121	T16
5	1/3	Forest	0.0100	T17
6	1/2	Forest	0.0100	T18
7	1/1/1	Forest	0.0360	Slope Protection
8	1/1	Forest	0.1509	Hill Station
9	1/8	Forest	0.5149	RoU
10	**Total area to acquire in Peccha Kandi village**		**0.7681**	

A Total of 33 land areas are required for the project area. In which all 33 land areas are under forest ownership. Based on the survey, it is estimated that 31.102 acres of land for project is acquired for ropeway construction. A summary of details of land area required for the development of ropeway project is tabulated below.

Table 25: Distribution of Land for ropeway project

S. No.	Village Name	Land Type	Area in Hectare	Description
1	Balh	Forest	0.4774	Valley Station, T1, T2 and RoU
2	Talogi	Forest	1.1135	T3 – T6 and RoU
3	Peccha	Forest	0.7512	T7 – T12 and RoU
4	Peccha Kandi	Forest	0.7681	T13 – T18 and RoU
5	**Total area to acquire**		**3.1102**	

10. PROJECT FACILITIES

In particular at the stations, several project facilities are foreseen.

10.1 General

[1] Ticketing

a. Ticket counters/booths;
b. By QR Code
c. Ticket vending machines;
d. Automatic ticket entry gates (standard and extra wide for wheel-chair), lane formation, Queue organizers

[2] Passenger facility

a. Stairways
b. Escalators
c. Elevators
d. Wheelchair ramps
e. Toilets (Male, Female and Differently abled)
f. Waiting Halls and Passenger Rest Areas
g. Spaces for ATM
h. Spaces for retail zone, refreshment facilities food kiosks, vending machines and tourism information desk
i. Cloak room
j. Medical booths
k. Space for display and sale of local handicrafts, art and produce

[3] Public information and address systems at Stations

a. Public address systems
b. Public information systems
c. Public access telephones / emergency telephones
d. Booth for safety staff

[4] Intermodal Transport Facilities

a. Circulation and stop / hop-on & hop-off area for other modes of transport (bus stop [public and private], taxi lane, bicycle lane and parking)
b. Space for public transport information desks

[5] External works

a. Plantation of trees, bushes and plants
b. Paving, signage

[6] Staff facilities

a. Staff room including facilities for having meals
b. Staff toilets
c. Medical aid for staff, staff office, housekeeping, managers office

[7] Facilities for Differently abled

[8] Lifts, Stairways and escalators at Stations

[9] Refreshment facilities at Stations

[10] Public access telephones

[11] All other facilities as indicated in the layout drawings (GAD)

10.2 Description of Project Facilities

S. No.	Facility	Description
1	**Ticketing**	

a	Ticket counters / booths	Ticket counters shall be provided at each station where boarding and deboarding takes place.
		Each ticket counter booth shall be equipped at minimum with:
		• Multiple queuing lane and one exit lane
		• Front desk with glass divider between staff and passengers
		• Ergonomically chairs for staff
		• Microphone and loudspeaker for exchange between staff and passenger, Power supply for IT system, light, microphone, loudspeaker etc.Adequate power backup, DG set etc.
		• IT system including
		  ○ Centralized server unit including back-up system
		  ○ PC unit connected to centralized server,
		  ○ ticketing software,
		  ○ ticket printing machine / ticket printer.
		
		A group of ticket counter booths (i.e. one group is e.g. ticket counter booths at one station as shown in layout drawings) shall be equipped with:
		• High Speed Internet connection
		• Storage space / and shelves (paper, blank tickets)
		• A4 paper size printer plus scanner (one per group of ticket booth)

b	Ticket vending machines	At each station for boarding and deboarding, self-service ticket vending machines shall be located which are connected to the centralized server and vending software / IT. Minimum functions available at self-service ticket vending machines shall be: • Buying of single ride and return tickets for single persons, multiple persons / group • Printing of tickets purchased in advance (e.g. online), identified through code (numeric code) • Payment via debit and credit cards, e-wallet, digital payment method and similar Operation via touch screen. • Scanning of pre-purchase code

c	Automatic ticket entry gates	At each station for boarding and deboarding, automatic entry gates shall be located which are connected to the centralized server and vending software / IT.
		Minimum functions of automatic entry gates shall be:
		• Ticket scanning function for (e.g.) QR code recognizing tickets printed at booths, ticket vending machines as well as pre-purchased tickets displayed on mobile phone
		• Turnstiles
		• Display showing status of turnstile
		  ○ Entrance accepted = turnstile open: Green Arrow
		  ○ Entrance not yet accepted = turnstile closed: Red Cross
		• Connection to display of station manager on duty for identification of problems, ticket category
		• One automatic gate per station shall be extra wide for wheel chair, extra-large luggage and baby-trolley access

2	**Passenger Facilities**	
a	Stairways	At each location, stairways shall be provided. Generally, staircases shall be as per detailed specification but having the following minimum functions. • Handrail on each side • Central handrail serving as divider for boarding and de-boarding passengers

S. No.	Facility	Description
		• Anti-slip flooring • Width sufficient for full hourly capacity plus 10% reserve • Rest-podium every 12 steps
b	Escalators	As per detailed specifications
c	Elevators	As per detailed specifications
d	Wheelchair ramps	At all locations with steps / stairs and elevator available, wheel chair ramps shall be provided. • Maximum gradient of 6% (in case of not-sufficient space, this maximum gradient can be increased subject to a detailed evaluation and justification respectively if additional support facilities are provided). • Every maximum 6m ramp length, a rest podium of minimum 1.50m length is to be provided • Ramp width shall be minimum 1.50m • Handrails are to be provided on both sides of the ramp
e	Waiting Halls and Passenger Rest Areas	At each station for boarding and deboarding, waiting halls and rest areas shall be provided. Minimum facilities -but not limited to -shall be: • Provisions for seating • General and emergency lighting • Dust-bins • Mobile re-charge points and power sockets • Public Wifi • Water dispenser • General and emergency signage • Clock • Public address system • Safety system (fire alarm, extinguishers) • Ventilators
f	Toilets (Female, Male and Differently abled)	Minimum equipment for toilets / washrooms shall be: • Closed cabins with flushing toilet plus flushing hose • Pissoirs (male) • Washing basins • Mirrors • Hand drying facilities • Cabin for cleaning equipment • Baby facilities • Power sockets For Differently abled separate special closed cabins shall be provided equipped in addition with • Extra space suitable for wheelchair and caring person • Handrail • Emergency communication system
g	Spaces for ATM	Spaces for ATM is to be provided. All spaces are to be equipped with • Internet connection / connection as required by ATM system providers • Power sockets

h	Spaces for retail zone, refreshment facilities and tourism information desk, food kiosks, vending machines	All areas for retail and refreshment zone shall be at minimum equipped with:
		• Power supply
		• Water supply
		• Connection to sewage system
		• Internet access points
		A tourist information desk shall be provided at Cantt. Railway Station. The tourist information desk shall be at minimum equipped with:
		• One queuing lane and one exit lane
		• Front desk with glass divider between staff and passengers
		• Ergonomically chairs for staff
		• Microphone and loudspeaker for exchange between staff and passenger
		• Power supply for IT system, light, microphone, loudspeaker etc.
		• IT system including
		  ○ Centralized server unit including back-up system
		  ○ PC unit connected to centralized server
		• High Speed Internet connection

S. No.	Facility	Description
		• Storage space / and shelves (paper, blank tickets) • A4 paper size printer plus scanner

i	Cloak room	At each station for boarding and deboarding, temporary baggage storage facilities shall be provided.
		Valley Station - Cloak Room with minimum 100 Lockers
		Hill Station – Minimum Provision of 25 lockers.
		
		Other facilities shall include:
		• One queuing lane and one exit lane
		• Front desk with glass divider between staff and passengers
		• Ergonomically chairs for staff
		• Microphone and loudspeaker for exchange between staff and passenger
		• Power supply for IT system, light, microphone, loudspeaker etc.
		• IT system including
		  ○ Centralized server unit including back-up system
		  ○ PC unit connected to centralized server
		  ○ ticketing software,
		  ○ ticket printing machine / ticket printer,

j	Medical booths	Medical aid booths shall be provided at each station
3	**Public information and address Facilities**	
a	Public address systems	A public address system is to be provided in each station and along the ropeway line
b	Public information systems	An information address system is to be provided in each station consisting of guidance signs, emergency rout signs, general information signs etc.
c	Public access telephones / emergency telephones	At each passenger waiting and address area / hall and elevators emergency address system for passengers shall be available which immediate connection to a safety control centre.
d	Booth for safety staff	For station safety and security staff, booths shall be provided at each passenger and staff entrance.
4	**Intermodal transport facilities**	
a	Circulation and stop / hop-on & hop-off area for other modes of transport (bus stop [public and private], taxi lane, bicycle lane and parking)	At the bottom station for boarding and deboarding, facilities for intermodal connection shall be provided as per the design.
5	**External Work**	
a	Plantation of trees, bushes and plants	Landscaping and beautification with trees, bushes and plants shall be done as per layouts.
b	General	Paving, Signage
6	**Staff Facilities**	
a	Rest room including facilities for having meals, manager room, BMS room, Central control room, Housekeeping etc.	At each station rest areas for staff shall be provided. Minimum facilities -but not limited too -shall be: • Provisions for seating along with tables • General and emergency lighting • Dust-bins • Power sockets • Water dispenser • General and emergency signage • Clock • Public address system • Safety system (fire alarm, extinguishers) • Ventilators and heating
b	Staff toilets	Minimum equipment for toilets / washrooms shall be: • Closed cabins with flushing toilet plus flushing hose • Pissoirs (male)

S. No.	Facility	Description
		• Washing basins • Mirrors • Hand drying facilities • Cabin for cleaning equipment • Power sockets
c	Medical aid for staff	Medical aid facility shall be provided at each station
7	Space for display and sale of local handicrafts, art and produce	Adequate display spaces-on counters/kiosks/wall vertical displays should be provided for local handicrafts, art, local produce, traditional weaving material like sarees and appropriate arrangement shall be made for their sale.
8	GRIHA/IGBC compliant facility at all stations	All provisions to be made to make each station GRIHA/IGBC compliant including solar generation, wastewater treatment, sewage disposal treatment and re-use, ground water recharge systems, rain water harvesting system and inclusion of making each station Net-Zero in all respects shall be made.
9	Architectural detailing	Each station is designed to represent a unique character and flavour to highlight Himachal Pradesh , it's culture and heritage. All provisions to be made to ensure detailing of materials, joinery and details in order to and may refer to the drawing concepts given by the architects
10	Station & tower Construction	The station and the tower structure have to be designed to take the load of the ropeway system. Necessary safety and protective measures of the entire ropeway system as and when required shall be the priority at all times
11	Make In India	Certain components are proposed under Make in India scheme such as the Steel for the Towers, steel Cladding at the Stations, station building with steel, DG sets, Diesel engine, electrical installation, earthing, all civil work etc.
12	Line Speed	Line speed shall be maintained at 6m/s. Post COD the Concessionaire may monitor a trend of the Peak Hours/Non-Peak Hours and accordingly plan to operate the Ropeway at a reduced speed for non-peak hours as mutually decided in consultation of Independent Engineer & Authority. The line speed shall not be reduced below 4 m/s during non peak hours. The non peak hours shall not be more than 50% of the total operating hours in a year. In the event of any conflict, the decision of the authority shall be final and binding.

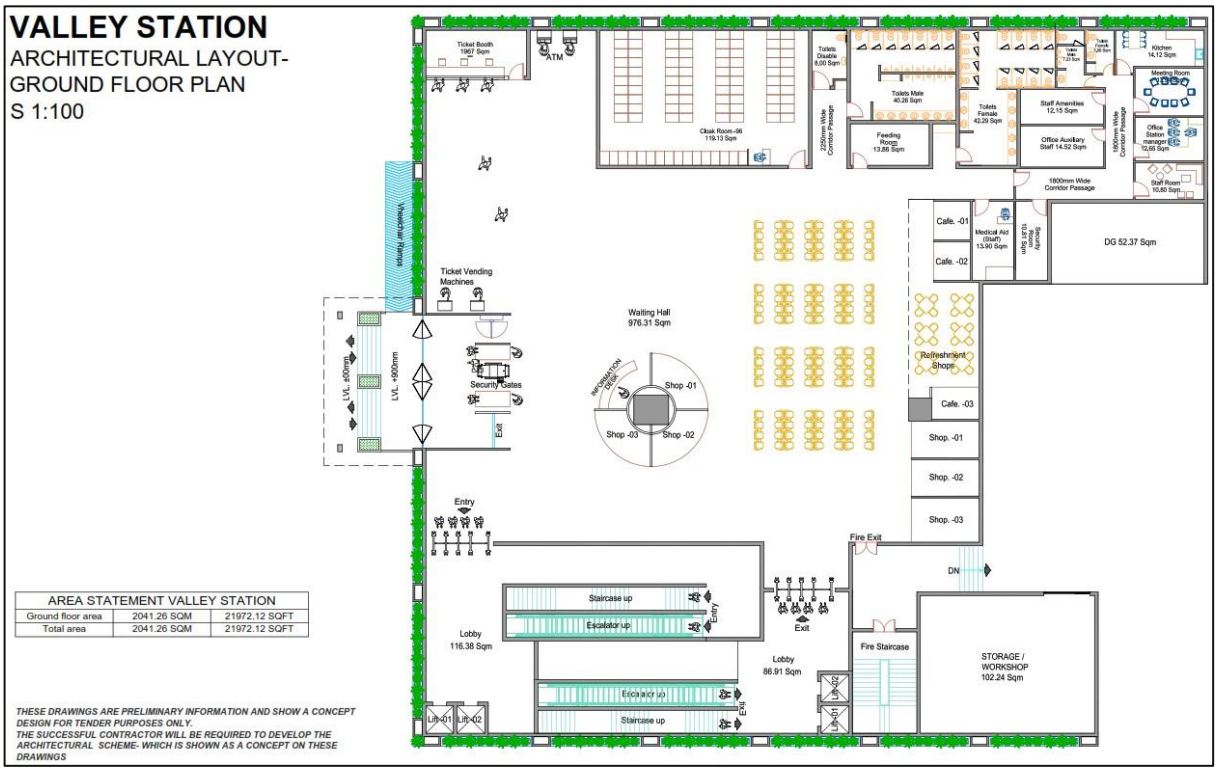


Figure 28: Architectural layout of valley station – Ground Level.

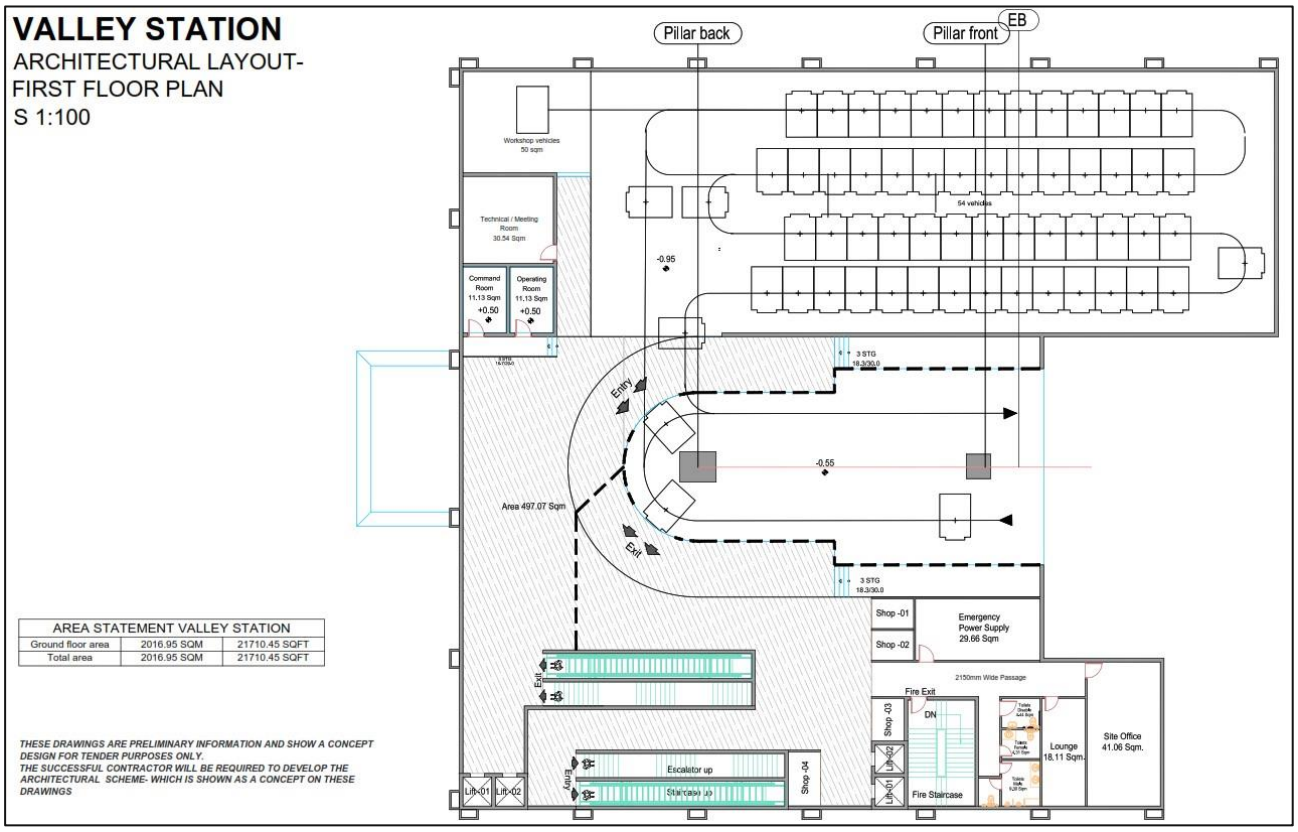


Figure 29: Architectural layout of valley station – Platform Level.

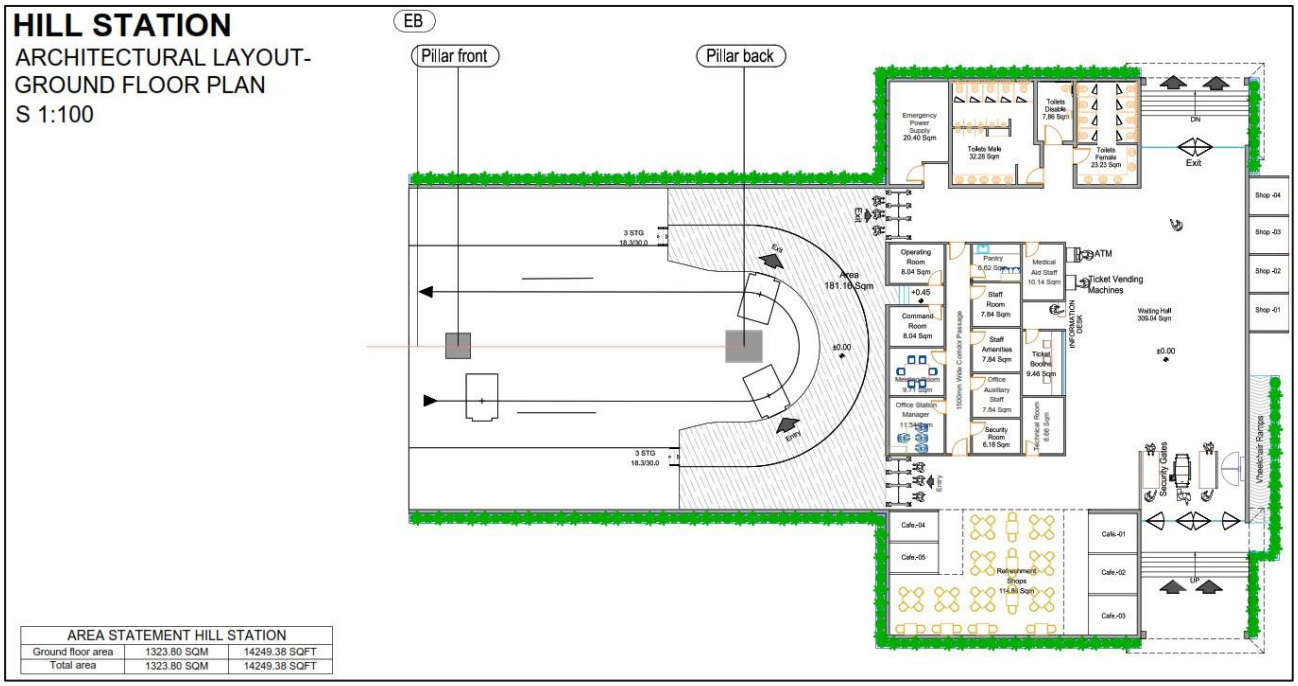


Figure 30: Architectural layout of hill station.

11. ENVIRONMENTAL AND SOCIAL IMPACT ASSESSMENT

11.1 Environmental Impact Assessment

An EIA/EMP report has been prepared based on the following:

- EIA Guidance Manual for Aerial Ropeway, Ministry of Environment & forests, 2010
- Form-I as per EIA notification, 2006 & amended
- Additional Terms of Reference issued by MoEF vide letter no. F. No. 10- 12/2014-IA.III dat-ed 17-12-2014.
- Observations made during visits to the study area and collection of primary and secondary environmental data.

The main components of the method are:

- Impact Identification
- Impact Assessment
- Impact Evaluation
- Mitigation Measures

The following legislations are applicable on the project. Therefore, it is the responsibility of developer to comply them

- The Forest (Conservation) Act 1980, With Amendments Made In 1988
- Forest (Conservation) Rules, 2022
- The Indian Wildlife (Protection) Act, 1972, Wild Life (Protection) Amendment Bill, 2022
- The Water (Prevention And Control Of Pollution) Act 1974, Amended 1978, 1988
- The Water (Prevention and Control of Pollution) Rules, 1975
- The Air (Prevention And Control Of Pollution) Act, 1981, amended 1987
- The Air (Prevention And Control Of Pollution) rules, 1982
- The Water (Prevention And Control Of Pollution) Cess Act, 1977, amended 2003
- Solid Waste Management Rules 2016 and its amendments 2018, 2020
- Hazardous and other Wastes (Management & Transboundary Movement) Rules, 2016 and its amendments
- The Noise Pollution (Regulation And Control) Rules, 2000, and amendment 2002.
- EIA Notification, 2006 and its amendments

11.1.1 Baseline Environmental Conditions

The baseline study pertaining to the present state of environment is essential for better developmental plans. In this context air, water, soil and noise monitoring was carried out in the month of October 2022, in the vicinity of the proposed Kullu to Bijli Mahadev Ropeway project which is located at a height of approx. 2400 meter from Mean Sea Level (MSL). The detailed results are presented below.

Air

The proposed ropeway crosses through a hilly area with thick canopy cover having no sign of house-hold near the project site. The air quality along the proposed project is mostly affected by household emission from villages located at lower heights. Road traffic is very thin. The ambient air quality monitoring was carried out at 2 different locations on two different days. The site has been selected depending upon land use characteristics and prevailing meteorological conditions. For different parameters samples of 4 hour duration were collected in a 24 hour sampling period. The PM2.5 samples were collected using WINS impactor high volume sampler as per USEPA design. PM10 samples were collected using Envirotech RSPM samplers.

Gaseous samples were collected using impingers filled with absorbent liquids at a flow rate of 500ml/minute. Other heavy metals and organic compounds were estimated from the collected dust samples.

Table 26: Air quality monitoring data

Description	Bijli Mahadev	Nature Park (Mohal)	Reference
$PM_{2.5}$ (µg/m³)	8.10	14.70	TM-AAQ/23-Gravimetric
PM_{10} (µg/m³)	21.00	24.30	IS-5182 P-23 Gravimetric
CO (mg/m³)	BDL (<1)	BDL(<1)	IS-5182 P-X GC
O_3 (µg/m³)	34 (Mostly Cloudy)	53	IS-5182 P-9 Chemical methods
NO_2 (µg/m³)	BDL (<5)	BDL(<5)	IS-5182 P-IV Jacob & Hieocher
SO_2 (µg/m³)	BDL(<5)	BDL(<5)	IS-5182 P-II West & Gaeke
NH_3 (µg/m³)	BDL(<10)	BDL (<10)	APHA -420 - Indophenol Blue
As (ng/m³)	BDL (<5)	BDL (<5)	APHA - AIR 320 – AAS
Ni (ng/m³)	BDL (<10)	BDL (<10)	APHA - AIR 420 - AAS
Pb (µg/m³)	BDL (<0.1)	BDL (<0.1)	AAS Method after sampling on EPM 2000
C_6H_6 (µg/m³)	BDL (<1)	BDL (<1)	IS-5182 P-11 - GC
Benzopyrene (BaP) (ng/m³)	BDL (<1)	BDL (<1)	IS-5182 P-12 - GC

Noise

Noise monitoring was carried out at 2 different locations along the proposed alignment. Noise pollution is known to cause psychological and physiological stresses in the human being. Table below presents the minimum and maximum L_{eq} values at both the locations as well as L_{eq} for day and night.

Table 27: Noise monitoring data.

S.No.	Location	Lmax	Lmin	Leq_day	Leq_night	Env. Settings
1	Bijli Mahadev	39.5	31.1	33.4	32.1	silence
2	Nature Park (Mohal)	41.3	32.4	37.4	33.2	silence

Water

Water quality is a genuine concern for surface water and the groundwater sources in construction activities. Near the proposed project, there is Beas River flowing parallel to old Kullu Highway. There are also public handpumps which are used for varied domestic purposes.

In order to establish baseline quality of groundwater, and surface water, two samples each of groundwater and surface water were collected from the vicinities of both ends of the proposed ropeway The collected samples were processed, preserved and analyzed following standard procedures and techniques. The samples were collected in a pre-sterilized Teflon bottle, pre-washed with deionized water. The basic parameters such as pH, EC, and TDS were measured in-situ and the rest of the parameters were analyzed in the laboratory.

Table 28: Water sampling and analysis.

Sl No.	Parameters	Sample Collection	Container Volume	Storage/ Preservation
1.	pH	Grab Sampling Polypropylene Container	50 ml	On site analysis
2.	Electrical Conductivity (EC)		50 ml	On site analysis

3.	Total Dissolved Solids (TDS)		50 ml	On site analysis
4.	Total Hardness (TH)		50 ml	-
5.	Anions		50 ml	Not required; 28 days Filtered unacidified
6.	Sodium (Na)		50 ml	Refrigeration; filtered acidified to pH~2
7.	Calcium (Ca)		50 ml	Refrigeration; filtered acidified to pH~2
8.	Magnesium (Mg)		50 ml	Refrigeration; filtered acidified to pH~2
9.	Iron (Fe)		50 ml	Refrigeration; filtered acidified to pH~2

Table 29: Analytical results of ground water quality

S.No	Parameter	Unit	Sampling Location	
			GW-1	GW-2
1	pH	pH unit	7.9	7.6
2	EC	µS/cm	615	538
3	Colour	Hazen	4	2
4	Odour	---	Unobjectionable	Unobjectionable
5	TDS	mg/l	387	349
6	TH	mg/l	330	302
7	SO_4^{2-}	mg/l	11.9	5.3
8	Cl-	mg/l	21.0	12.5
9	PO_4^{3-}	mg/l	0.62	0.45
10	NO_3^-	mg/l	13.5	2.8
11	F^-	mg/l	0.55	0.40
12	Na	mg/l	33.7	8.5
13	Ca	mg/l	72.5	69.0
14	Mg	mg/l	36.0	31.5
15	Fe	mg/l	0.22	0.35
	Bacteriological Parameters			
16	Faecal Coliform	MPN/100 ml.	ND	ND

Table 30: Analytical results of surface water quality

S.No.	Parameters	Units	Sampling Locations	
			Bijli Mahadev (SW-1)	Nature Park (Mohal) (SW-2)
	Physico-Chemical Parameters			
1	pH	pH unit	7.7	8.0
2	EC	µS/cm	212.0	276.5
3	DO	mg/L	5.85	5.29
4	BOD	mg/L	1.10	1.35
5	Total Kjeldahl Nitrogen (TKN)	mg/L	2.50	2.27
6	Sodium Absorption Ratio (SAR)		0.55	0.63

7	Boron	mg/L	0.35	0.28
	Bacteriological Parameters			
8	Faecal Coliform	MPN/100 ml.	67	55

Soil/ Sediment

Soil samples were collected from the areas near the proposed site at Keshawari village on Bijli Mahadev Temple site (S1) and from roadside near Beas River on Nature Park, Mohal (S2). The samples were analysed for various soil parameters to get baseline soil quality status of the area and further processed and analyzed for specified physico-chemical parameters following standard procedures and techniques.

The analytical results of measured physico-chemical parameters in the soil samples of the investigated area are given in the table below. The pH ranging from 7.2 to 7.5 indicates nearly neutral to mildly alkaline nature of the soils of the area under-investigation. The observed electrical conductivity varying between 165-177 µS/cm, reflects the moderate concentra-tions of major elements in the soil. The infiltration rates recorded in the samples vary between 39401.0-55076.5 mm/yr. The major elements such as Na, K, Ca & Mg present in the soil are in moderate concentrations which may be attributed to the natural geochemical processes in the area.

The low moisture retention capacity reflects the dominance of sand and hence characterizes the soils of the investigated area as sandy loamy and sandy for the samples S-1 and S-2, respectively.

Table 31: Analysis Result of Surface Soil Quality

Sl. No.	Parameters	Sampling location	
		S-1	S-2
1	pH	7.5	7.2
2	Electrical Conductivity at 25^0C (in µs/cm)	177	165
3	Infiltration rate (mm/yr)	39401.0	55076.5
4	Moisture in %	10.50	3.27
5	Organic matter in %	1.25	0.35
6	Sand in % (W/W)	62.5	88.9
7	Silt in % (W/W)	26.5	10.6
8	Clay in % (W/W)	10.7	<1
9	Texture	Sandy Loam	Sand
10	Moisture Retention Capacity in %	21.4	3.5
11	Sodium as Na (mg/kg)	52.6	65.3
12	Potassium as K (mg/kg)	13.1	17.7
13	Calcium as Ca (mg/kg)	75.5	62.0
14	Nitrogen in mg/kg	1.50	0.59
15	Phosphorus as P in mg/kg	0.52	0.35

11.1.2 Environmental Management Plan

Mitigation Measures During Construction Phase

- Solid waste management
- Waste Water management
- Noise management

- Occupational Health & Safety
- Environmental awareness campaign

Mitigation measures during operation phase

- Solid waste management
- Noise management
- Wastewater management
- Health & safety
- Green belt development
- Rain water harvesting
- Power requirement
- Fire and safety management
- Monitoring scheme
- Information dissemination and public relations
- Management review

A detailed Environment Impact Assessment (EIA) report and Environmental Management Plan (EMP) is appended to this report (refer **Appendix 09 – APP-09**).

11.2 Social Impact Assessment

Kullu is a district in Himachal Pradesh, India. It borders Rampur district to the south, Mandi and Kangra districts to the west, and the Lahaul and Spiti district to the north and east. The largest valley in this mountainous district is the Kullu Valley. The Kullu valley follows the course of the Beas River, and ranges from an elevation of 833m above sea level at Aut to 3330m above sea level at the Atal Tunnel South Portal, below the Rohtang Pass. The town of Kullu, or simply Kullu, located on the right side of the Beas River, serves as the administrative headquarters of the Kullu district. The Kullu district also incorporates several riverine tributary valleys of the Beas, including those of the Parvati, Sainj, and Tirthan rivers, and thus some regions somewhat distant from the Kullu valley. The economy of the district relies mainly on horticulture, agriculture, tourism, and traditional handicrafts.

11.2.1 Need for Social Impact Assessment

Social Impact Assessment (SIA) is a tool for anticipating and mitigating the potentially temporary and permanent adverse impacts of projects. It also helps in enhancing the positive outcomes of the project. SIA alerts project planners (public and private bodies) as to the likely social and economic costs and benefits of a proposed project. The knowledge of the potential costs, when weighed against the likely benefits of a project, helps decision-makers in deciding whether the project should be carried out, with or without modifications, or abandoned completely. The agency carrying out the SIA also develops a mitigation plan to overcome the potential negative impacts on individuals and communities.

The purpose of the SIA is to ascertain whether a project proposed by the developer is truly in the public purpose, and whether the project is located at a site which is least-displacing and requires the bare minimum amount of land.

The Social Impact Assessment study involves the identification of potential social issues in the project and trying to address them through design interventions. The SIA further carries out impact prediction and evaluation of social issues of the project and proposed mitigation measures in the form of Social Management Plan. The major objectives of the SIA are given below:

- To gather baseline data for assessment of impacts (both direct and indirect).
- To do the socio-economic profiling of the project.
- To identify all potential adverse and positive social issues /impacts of the project.

- To suggest mitigation measures to effectively manage potential adverse impacts.
- To involve local people in the SIA study and project activities.

11.2.2 Methodology

- Defining the Impact area
- Identifying the Information/Data Requirements and their Sources
- Public Consultation
- Conducting Screening
- Carry Out Scoping in the Field
- Developing a Mitigation Plan

A detailed Social Impact Assessment (SIA) report is appended to this report (refer **Appendix 09 – APP-09**).

12. RISK ASSESSMENT

12.1 Risk Management and Assessment

Risk managemnt is a vital part of any project. It is the process of planning, organising, directing and controlling resources of an organisation to improve project outcomes such that the project milestones and out-turn are improved through risk reduction or mitigation and, as such, the organisation and project is less exposed to negative factors. Proficient risk management requires foresight, planning, ongoing management and effort to manage both risks and hazards.

Within risk management, the risk is the likelyhood of an event occuring and the hazard is something that can potentially cause harm. Project planning and project delivery require the proactive and active management of risk for which a number of management tools and systems can be employed.

Risk Assessment is the qualitative and quantitative measurement of the potential loss, which can be measured in financial terms, human or reputational factors. These factors could affect life, personal injury, economic and financial factors.

Risk assessment involves the following:

- Development of a risk management system which actively manages risks through the project delivery cycle
- Hazard Identification
- Risk and Probability Analysis
- Risk Analysis and Mitigation/ Risk Reduction Planning

The main objective of this Risk Assessment (RA) study for the proposed ropeway, is to identifiy the main and significant natural and man made hazards and identifiy risk mitigating measures and options to reduce the risk and severity of hazards, such that risks can be managed and mitigated to as low as reasonably practical. It should be noted that whilst some risks can be managed and reduced, it may not be possible to eliminate these risks and, as such, risk modelling should make time and cost provision for potential project out-turn.

Statistical management modelling tools are available for such evaluation and assessment.

12.1.1 Hazard Identification

All infrastructure (bridges, railways, airports) brings significant advantages to users and in reality, these benefits off set the lesser potential disbenefits and hazards they create. The development and operation of the aerial ropeway at Bijli Mahadev will provide significant transport advantages, in terms of capacity, ease of travel, comfort etc., whilst recognizing that the ropeway system will be subject to the impact of natural and man-made hazards during its construction, implementation, operation and decommissioning all of which could affect the general public, construction, operation, maintenance and demolition. Ropeway systems and specifically the development at Bijli Mahadev will be subject to the following hazards.

Natural hazards

Natural hazards include earthquakes, landslides, rock falls, floods, storms, avalanche, lightning etc.

Man made hazards and occurrences

Man-made hazards include latent defects, operator error, malicious intent and maintenance failures. Man made hazards also include operation and management failures which can result in hazards and incidents. Operational training and system operation is vital for the safe operation of the system. Suitably qualified and trained professionals are required to operate the ropeway in line with the operational instructions and safe working loads. Over loading the system and operating an overloaded system is a significant hazard that must be managed.

Managing the operation and maintenance of the system is vital to minimise hazards such as rope and wires integrity, service intervals, drive / return sheave, shaft failure/ tension system failure, mount assembly parts failure, over speed operation of ropeway/ brake operation failure, rollback, slippage / disattachment of cabin, entanglement of cabin, swinging of cabins resulting in a fall of passengers outside cabin, cabin derailment at

station, etc. Station overcrowding would be considered a man made hazard.

As such the training, operation and maintenance staff and the management together with the system owners hold a duty of care and responsibility to provide adequate funding, staffing, training and certification/ inspection which is critical to public safety.

Other many made hazards can include, fire and malicious intent. Many of these risks can be identified and mitigated by management systems and controls together with physical systems and safeguards.

These items are to be considered in detail and assessed accordingly within the framework of a risk management process and system. This requirement is recommended to be taken forward.

The table below indicates some of the natural and man made hazards.

Table 32: Hazard risk ratings

Hazards	Severity (1-5)	Likelihood (1-5)	Severity x likelihood (1-25) *
Natural hazards			
Earthquakes	5	2	10
Landslides	5	4	20
Flood	2	1	2
Avalanches	3	3	9
Wind & Cyclones	2	2	4
Cloudburst	5	1	5
Drought	3	1	3
Man Made Hazards			
Fire & Explosion	5	2	10
Electrical	3	5	15
Technical/Accidental	4	5	20
Security	3	1	3

**Hazard Scoring: 1-12 are less serious hazards & 13-25 are very serious hazards & need prior attention*

12.1.2 Sensitivity Analysis

As shown in the hazards analysis table above, the station and ropeway infrastructure is vulnerable both during construction and during normal operation. Natural hazards such as earthquakes, landslides and floods can have a very high severity an impact on the ropeway. The vulnerability analysis during the operation phase is given for natural as well as man-made hazards and these are shown in the tables below.

Table 33: Vulnerable locations/ areas for natural hazards

Hazard	Vulnerability
Earthquake	Damage and potential collapse of towers, damage and potential collapse of terminal stations, cable cars detachment due to high dynamic loads,
Landslides	Impact damage, sliding and movement of towers resulting in damage to towers that can range from minor plastic deformation and member buckling to major impact damage or potential collapse of towers if slope stability is not maintained. Towers are lightweight structures and not designed for significant seismic load or ground acceleration.

Hazard	Vulnerability
Flooding	Topography and rainfall intensity can pose a significant hazard to ropeway infrastructure such as towers, tower foundations and station buildings as well as utility infrastructure such as power lines and communication networks. The hill station at Bijli Mahadev was identified and positioned following and subsequent to the international team visit. The valley station was positioned and designed in accordance with the High Flood Levels of river Beas, which lies next to it.
Avalanche	Avalanche risks are a significant issue with ropeway infrastructure and where appropriate avalanche risk assessments must be undertaken. This work involves specialist analysis and predictive modelling of terrain and associated topographic and geographic conditions together with assessing climate and prevailing weather patterns. The location and topographic factors of the proposed development at Bijli Mahadev is such that specific consideration should be applied to avalanche risk assessment and where required the repositioning of structures and towers to ensure that people and infrastructure are protected. This is of particular importance at the hill station location where the land adjacent to the station rises steeply and any localised or significant avalanche could significantly impact the station and people using it. The avalanche risk and the protection of life and the ropeway system is to be considered in more specific detail through the engagement of a specialist consultant.
Wind & cyclone	The ropeway system is designed to operate in specific wind conditions and has operational boundaries for normal climatic and weather conditions. The cable car must be operated within these limits at all times. The correct training and control of the system must be maintained, and management must not override the operation control of the system for economic or other reasons. Where specific climatic conditions exist or where the topography or geography drive specific climatic and wind conditions increase the wind speed, these must be considered by means of specialist modelling and predictive modelling prior to the ropeway system considering the effects on the system and adjusting the design accordingly. Wind and cyclone events can cause damage to the cable car and cable car system
Cloud Burst	Cloud burst can cause soil erosion, landslides, and flooding on project sites. It can cause significant damage to towers and ropeway stations as well as localised impacts on people and other infrastructure.

Table 34: Vulnerable locations of different man-made hazards

Hazard	Vulnerable Locations
Fire	Cable car, Terminal Stations, Control Room
Electrical	Cable Car, Transformer, Control Room
Mechanical/ Accident	Cable Car, Ropes, Terminal Stations, Ropeway Towers
Technical	Cable Car, Ropes, Terminal Stations, Ropeway Towers
Security	Terminal Stations, Parking, Population at Site

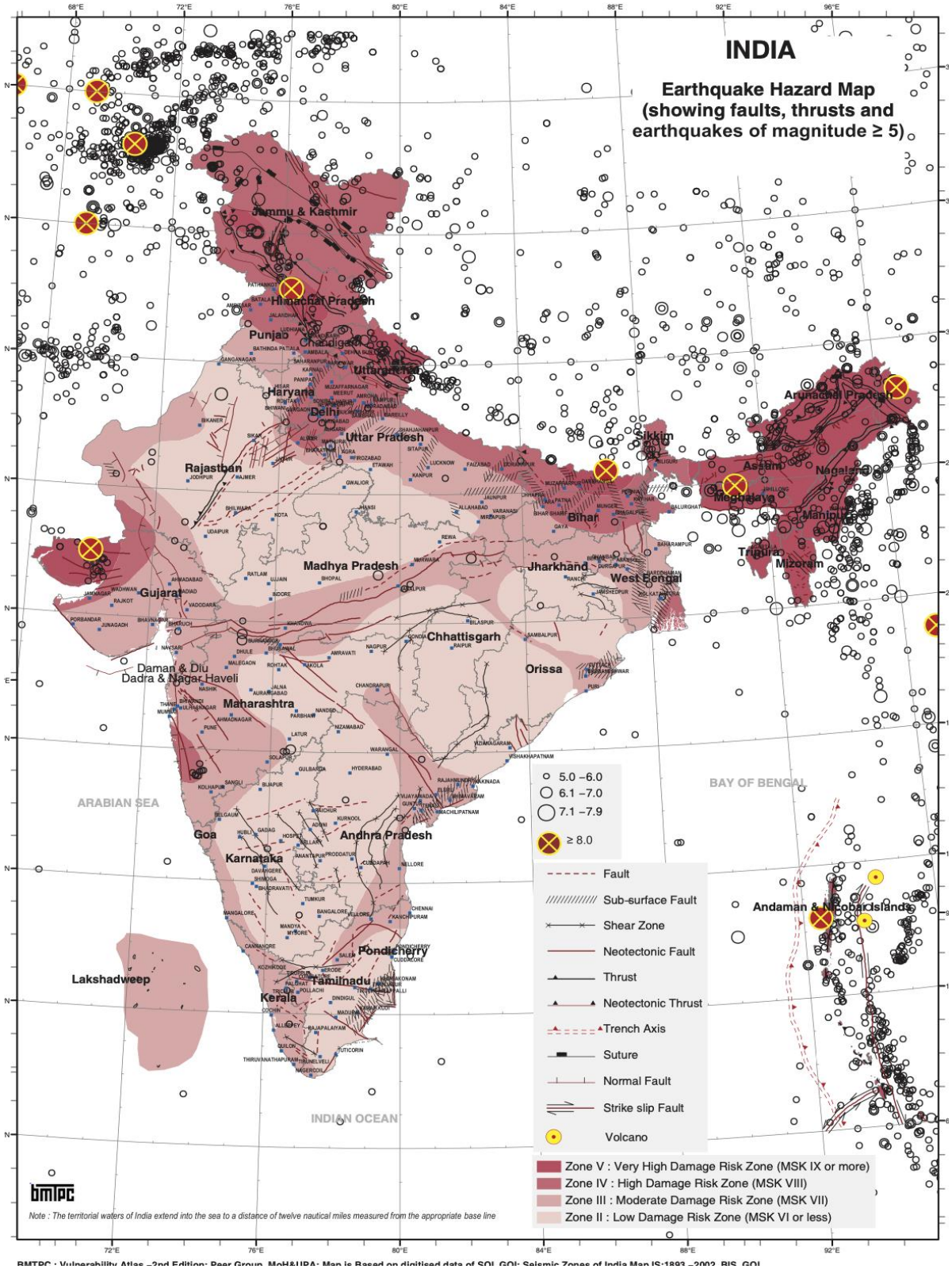


Figure 31: Flood hazard map of India

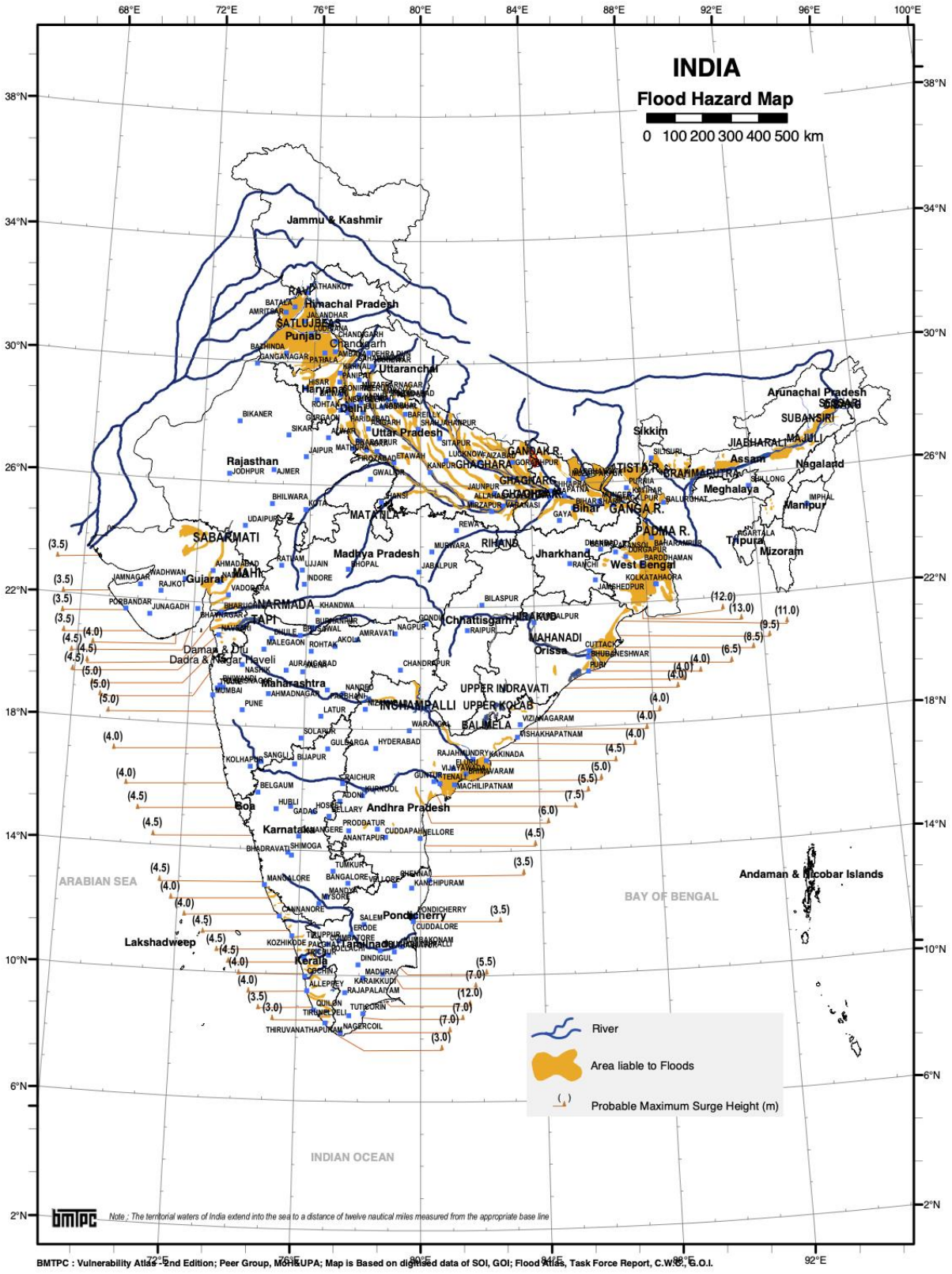


Figure 32: Flood hazard map of India

Natural Occurrences

Earthquake:

The project is situated in a Seismic zone-V area. Special attention shall be given to the structural design of foundation, and other elements such as the reinforced concrete foundations. All structures will need to be designed to accommodate ground accelleration as defined in the appropriate standard and codes of practice. The concept design information that has been provided for Bijli Mahadev acknowledges that the further assessment of siesmic loading is required within the detailed and technical design. Materials that have little or no latterial stability such as masonary walls should be excluded within the designs as such structures and their collapse mode only serve to increase the risk to people in the locality. All applicable guidelines will be followed in this regard to ensure building safety.

Siesmic loading and siesmic considerations must be considered further within the detail and technical design phases.

Landslides:

The area where the ropeway is proposed is highly prone to landslides. Structural stability and appropriate safety considerations must be considered further to prevent damage to the ropeway system due to landslides. Slope stability must be maintained and further work is required to assess what additional investigation, design and stability work is required.

Flooding:

The valley station of the ropeway lies next to river Beas. Due care was taken to position the station to lie well above the high flood levels of the river, however for achieving high protection from seldom high flood occurences (e.g. HW100), special flood protection measures are required to be considered / designed by the Concessionaire. All the surface water shall be disposed off via soak pits, where required attenuation facilities may be required. Structures shall be designed and constructed such that risks to infrastructre and people using it are minimised to as low as reasonably practical. Human life should not be negativly impacted by the ropeway.

Man-made Occurrences

Fire Safety:

- Smoking must be prohibited in the stations and cable cars. This includes e-cigarettes
- All electrical systems must be designed installed and operated in line with the manufacturers' requirments and instructions. All electrical works must be undertaken by trained and competent/ certified trades people.
- All electrical equipment and components must be tested, type approved and certified to meet the applicable international standard and national electrical code requirements (whichever is the highest).
- Station operational staff must be trained in all aspects of fire safety and station evacuation. Localised fire fighting equipment such as dry chemical extinguishers must be accessible, tested and certified for managing small and localised fires. An adequate supply of handheld and wheeled types should be available. Station staff must be trained and be able to maintain control of the station during an evaculation. Evacuation practice and other such training must be regulary undertaken and the station team must be able to lead the station users to a pre identified station refuge location.
- Hydrants should be strategically placed with adequate hoses. Training is required to understand and know which fires can be fought with such equipment.
- Small spills should be remediated with sand, earth, or other non-combustible absorbent material, and the area then flushed with water.
- There must be an established system of day to day operational management and command and control of the station. This must be established in order that appropriate decisions can be taken during emergency events and evacuations. In addition, it is important that day to day operations

keep constant control of the building fire loading which can be affected by station over crowding, increased combustible material being stored and operational factors such as the periods of diesel generator fuel deliveries. The station operation and comand and control arrangements must be able to manage these events and issues.

Technical Faults & Accidents:

- Accidents are a failure in management. Human factors, training and the empolyment of suitably qualifed motivated staff is vital to safe operation. Systems and procedures must be developed communicated and used by operational staff and safety protocols and procedures must not be overridden by management objectives driven by economic factors or other such issues. Correct operation and system maintenance is vital to the safe operation of the facility and system. The client and operator must ensure that sufficient time and resources (including financial budget) is made availble to maintain and certify the system.
- The system capacity must be clearly communicated to operational staff and processes must be implemented to ensure that the stations, station access areas and the ropeway system itself is not overcrowded and overloaded. Overloading the ropeway and cable car gondolas is a significant risk and must be managed by operational controls and trained staff who can maintain command and control especially during periods of peak demand and exceptional demand such as times when people want to seek refuge during bad weather. Gondolas will be designed and certified for a safe working load and specific maximum number of people. They will be provided with an automatic locking door system which must not be forced open by the passengers. Appropriate warning signage will be provided inside the gondolas to advise passengers of key safety requirments and responsibilities.
- Carriage of each cabin shall be provided with 2 number detachable rope grips.
- The ropeway system will be provided with a minimum of two breaking systems- Normal/ Emergency Brake and Service Brake. The emergency brake shall be a weight operated thruster released brake, which should be provided on the brake ring fitted on the drive sheave. The service brake shall be a weight operated thruster released brake provided on the high speed brake drum coupling.
- In event of main power supply failure, the system must have a fully rated diesel generator to supply power to run drive motors.
- Standby diesel engines must be provided for each station to run the ropeway at slow speed to rescue passengers from the line in case of failure or intermittent supply to the main DC motor.
- Line safety devices must be installed on each trestle such as holds down systems & pressure frames which immediately stop the ropeway in the unlikely event of rope derailment. This should comprise of electrical trip limit switch with attachment mounted on line sheave mount. In the case that the hauling rope acidentally comes out of the sheaves line it should automatically and immediately trip the the actuation of a limit switch through the attachment and system.
- A rope catcher will be provided on beams mounted on the trestle line. P.F. and station systems to arrest/ support the hauling rope in case of de-railment of the rope.
- Emergency stop “push buttons” will be provided at station control points to stop the system and ropeway when required. In addition there will be a system provided to vary (specifically reduce) the running speed of the ropeway and this will be controlled by the control system and operational team. This facility and requirment is employed to ensure that people have appropriate time to enter and exit gondolas and this is of particular importance where people with disabilities and families with push chairs etc. can safely access the system.
- The operational system shall be provided with anemometers to monitor the prevailing wind speed, and trip values will be predefined to manage the main drive in case wind speed and wind gusts exceeds the predetermined operational speed. This system will be designed and set out by the specialist ropeway designer and may have margin to ensure safety.

- Each station will have a first-aid medical facility and appropriately trained staff who can assist the public and staff where required prior to further assistance or evacuation.
- Technical faults can occour, however most accidents occur as a result of operator error, system override or operating the system outside of its design limits. Staff must be trained in all operational, fault finding and fault / emergency protocols.

12.1.3 Risk Assessment & Emergency Plan

Safety Measures for Design Stage:

- The contractor will collect and compile all drawings, manuals, data and design verification information, inspection test certificates, processes, procedures and operaton manuals will be provided by all manufacturers and suppliers and contractors will be collected and compiled into a system health and safety file which will support ongoing operation maintenance. These are necessary to demonstrate that the passenger ropeway has been designed, manufactured and installed and establishes the operational limitations and requiremnts in accordance with the relevant IS codes;
- Catalogues, drawings, manuals, specifications or other information obtained from the manufacturer, supplier or assembly contractor are required to ensure that all relevant in-service activities can be carried out safely and a clearly communicated.
- The operational copy of this data needs to be stored and available for use at the place of work where the passenger ropeway is situated such that it is secure and readily available to all persons in that place of work and to any other person requiring access including equipment inspectors and the local health and safety executive or police in the event of an operational incident. This data shall be kept available for reference until the ropeway is decommissioned and will be subject to periodic update if and when new components and equipment are installed. The operations manager will maintain configuration control and will be responsible for this document and its appropriate use and implementaion.
- The master copy of the health and safety file will be held at the clients head office under version control and updates communicated from the operations manager.

The ropeway operator will:

- Be formally appointed and personally responsible for the correct and safe supervision and operation (including maintenance) of the passenger ropeway and all associated activities. The ropeway operator may appoint a competent person to carry out this supervision and operation but this must be a formal apointment in writing and the person accepting the duty must satisfy themselves that they are competent, trained and fully aware of the implications of this appointment.

  The ropeway operator must ensure that the competent person is suitably qualified and experianced and that sufficient time and resourses are afforded to this person such that the ropeway can be operated safely.
- Ensure that persons appointed are competent to carry out duties allocated to them.
- Delegate to competent persons to supervise the passenger ropeway and delegate powers required to exercise supervision and safe operational control.
- Ensure that the names of persons appointed to supervise a passenger ropeway are made known to any persons who carry out a specified activity or any other significant activity associated with that passenger ropeway which could affect safety and safe operation in any way. All works on the operational ropeway must be carried out under the supervision of a competent engineer with full knowledge of system operation, maintenance requirments and version control such that only compatible and complementary works can be undertaken. The system operator will be required to develop a safe system of work which may include a permit office and a permit to work system.

Safety Measures for Erection and Commissioning Stage:

All contractors engaged in the design, construction, installation, commissioning and setting to work together with operational maintenance and decommissioning of this passenger ropeway will assure that it is constructed, erected, installed, commissioned, tested (factory acceptance and installation) and inspected in accordance with information which is complete and provided by the designer and suppliers such that appropriate safe construction, erection, installation, testing, inspection and commissioning can be assured. Assembly contractors of the ropeway will develop a test and inspection plan and quality plan which will (through its implementation) record all safety aspects and stages in the construction, erection, installation and commissioning (setting to work) of the passenger ropeway.

Inspection of Safety Related Components:

The ropeway designer must be made aware of the client's operational demands in terms of days of operation, working hours and loading factors. These and other factors will allow the ropeway designer to review these requirements and where possible design components for the planned utilisation. Where this is not posible the ropeway designer must indentifiy maintenance and operational limitations and share these issues with the client during the system detailed and technical design phase.

Where the failure of a component will directly result in a risk to passenger safety, such components will be given appropriate consideration by the supervision and operations manager with technical input from key experts. These decisions will be recorded and signed as a matter or record by the supervision and operations manager with comments and signatures provided by the technical experts. The lack of money to fund a safety related maintenance item or replacement can not be cited as a resonable reason for avoiding the maintenance work. When drawing up maintenance and inspection schedules, the manufacturer must consider the operational demands on the system and where possible specifiy products that have an appropriate quality and design life. Such components include wire ropes, fixed and detachable rope groups, pylon pullies and other systems and components.

In addition to the inspection details discussed above, thorough examination of the ropeway by a competent person, preferably an independent third party, is recommended on an annual basis.

The examination should be based on a scheme prepared by the competent person along with the ropeway controller and/or operator and consider in detail the manufacturer's requirments and knowledge from past experience and all relevant standards and guidance material. Examinations cover all components and systems as discussed above and inspection of all systems structures and components for signs of fatigue or premature wear which may resut in a failure. All defects need to be reported immediately to the operator and a decision will be made on what action to take with a full written report provided to support the safety imperative.

Static ropes need examination particularly where they may be subject to bending stresses, at rope terminations and where environmental conditions could cause deterioration. Haul ropes need to be examined for wear, lubrication, broken wires, corrosion and localised damage as well as contamination from elements that can increase wear over time.

Monitoring the internal condition of the haul rope is a specialist area and requires trained and competent people. Non-destructive (NDT) methods, such as magnetic induction should be used if and where possible. In addition, the competent person might consider it necessary to carry out an internal examination on some occasions. To monitor any deterioration in the rope and determine examination intervals, records of all examinations need to be kept.

It is not possible to have all safety related components examined each year, so a sampling strategy needs to be developed and implemented so that all components are thoroughly examined over a set period which is determined by the competent person and based on the clear minimum requirements that are set our by the ropeway designer and component manufacturer. Some components will require an annual inspection and others bi-annual however all components must be inspected at lease every five years (subject to the specific requirments of the supplier and manufacturer).

Safety of Employees:

- Systems structures and components will be designed in such a way that the risk to health is as low as reasonably practical. These components will be assessed and, where appropriate, safeguards such as (but not limited to), signage, screens, handrails, guards and lock outs will be provided to minimise and where possible mitigate risk. Part of this approach will employ the use of personal protective equipment and processes and procedures will be pre-defined and must be used. For example climbing safety harnesses that are tested, inspected and type approved must be worn by suitably qualified and experienced staff in all cases when working at height and on towers. These mitigation measures will reduce the risk of working at height but not mitigate it completely.
- Operating procedures should ensure the safety of staff involved in operation, inspection, examination, testing, maintenance and repair work and in emergency procedures. Safe access should be provided. Permit-to-work schemes and power isolators which can be locked in the off position should be provided when necessary. Staff need to be fully conversant with permit-to-work schemes or other similar systems.
- Operations involving the construction, structural alteration, demolition or repair of the structure of a ropeway may be subject to the Construction Regulations.

Safety Measures for Operation Stage:

The operator of the ropeway will ensure that:

- A display is placed in a conspicuous location for the operator at the main drive station stating the approved limiting conditions such as total number of cabins, capacity of each cabin, minimum spacing between cabins, maximum line speed and operating limiting wind velocities.
- The ropeway has a valid certificate of inspection.
- The ropeway is operated safely and within design limits.
- All safety devices are in working condition.
- The operation is in accordance with relevant operating manuals/ procedures.
- All operating procedures relating to the ropeway are kept under regular review, improved and updated whenever possible, and implemented by competent people.
- Security guard with a hand held scanner and metal detector will be proposed at the entry of the LTP.

Further, the ropeway project shall be thoroughly inspected by a Chief Ropeway Inspector before first operation and opening it for public use. After the clearance, the ropeway project shall commence.

Maintenance & Management of Ropeway

The ropeway operator will ensure that:

- Written procedures are developed for operating the equipment under all reasonably foreseeable conditions, and that all safety requirements are incorporated into these procedures.
- Records are kept of every critical safety stage in the operation of the ropeway.
- Operating procedures and all other relevant operating records are freely available to any person who operates the equipment.
- All operational data are available for inspection by any authorised person who is involved with the ropeway, including equipment inspectors.

Daily Operational Requirements:

Starting of ropeway: the ropeway will be started by the competent person authorised by the management.

Daily inspections: prior to transporting passengers, a daily inspection will be conducted by competent personnel. As a minimum, the inspection will consist of the following:

- Inspect visually each terminal, station, and the entire length of the ropeway, including grips, hangers and carriers:

- Note the position of tension carriages and counterweights and ensure that the tensioning system is free to move in both directions.
- Test the operation of all manual and automatic switches in terminals, stations, and loading and unloading areas, as per the manufacturer's specifications.
- Test the operation of the main drive and all braking systems.
- Test the operation of communication systems.
- Note the general condition of the hauling rope.

Termination of Daily Operations:

Procedures will be established for terminating daily operations to ensure that passengers shall not be left on the ropeway after it has been shut down.

Operation Log

- A daily operational log shall be maintained for each ropeway.
- The daily operational log shall include at least the following:
  - Date
  - Names and duty stations of operating personnel
  - Operating hours and purpose of operations
  - Temperature, wind, and weather conditions and changes, with times of changes noted
  - Record of compliance with daily operational inspection
  - Position and condition of the tensioning carriage and of the counterweight or other tensioning devices
  - Accidents, malfunctions, or abnormal occurrences during operation
  - Signature of the operator.

Maintenance of Ropeway

The maintenance program will consist of procedures for addressing all components subject to load, wear, corrosion or fatigue. This would include:

- The types of lubricants required and frequency of application.
- The types of testing required and frequency of testing.
- The definitions and measurements to determine excessive wear and replacement criteria.
- The recommended frequency of service to specific parts and details of the service required.
- Identification of other areas that might require specific attention.

Ropeway Management

The ropeway management shall ensure that:

- The ropeway including all safety devices is maintained in accordance with the maintenance and inspection schedules and is kept in safe working condition at all times.
- A procedure is in place which requires any faults found in the ropeway to be reported immediately by the person who finds the fault, investigated and, where necessary, maintained, adjusted, repaired or altered.
- Ropeways that have been subject to maintenance, whether routine maintenance or maintenance in response to a fault found, shall be appropriately tested before re-entering service, to ensure their design compliance.
- All maintenance procedures relating to the ropeway shall be kept in controlled status regularly updated and continually improved and shall be executed by competent persons.

The operator of the ropeway will ensure that:

- The date, time and full details of any maintenance work undertaken and the results of any maintenance procedure carried out.

- Ensure that maintenance records are available for examination by all persons concerned, including equipment inspectors.
- Keep record of running hours and/or number of loading cycles operated by a passenger ropeway and its condition, where a passenger ropeway, or any of its components, is subject to condition monitoring.

Inspection of Ropeway

The owner /operator of the ropeway shall ensure that:

- Commissioning inspection has been carried out by an equipment inspector, who shall also witness all relevant tests.
- Formal pre-season inspections are carried out
- The ropeway is inspected in-service at least annually for issue of certificate of inspection.
- Daily and periodic maintenance inspections are carried out.

Inspection Intervals: The operator will ensure that the ropeway is inspected in-service and is:

- Inspected at commissioning, after the first year of service and thereafter at least once in a year.
- Inspected after their re-erection or re-commissioning;
- Inspected after major repairs or alterations; and
- Inspected in the event that they are seriously damaged.

Records: A list of parts to be inspected will be maintained. The operator of the ropeway will maintain records of the date, time, time and results of any inspection carried out and the name of the inspection body engaged.

Tests of Ropeway Operation:

The ropeway operator will ensure that:

- All routine tests of emergency procedures, and of alarms, and safety devices, relating to the ropeway, are carried out at appropriate intervals.
- Every overload test is carried out under strict conditions, is monitored at all times and does not exceed the limits specified in the relevant design or operating standard; and
- The ropeway is not loaded above its safe working load, except for the purposes of an overload test.
- The records of the following will be maintained:
- The date, time, details and results of any tests carried out are recorded.
- Comments on the performance of ropeway in any test, and on any maintenance done
- or any adjustment, alteration, or repair made as a result of any test are recorded; and
- Any data arising from testing is readily available for inspection by authorised persons including equipment inspectors.

12.2 Security Threat Plan and Action Plan

ISO 27001 and 27002, which are the international best practice information security management standards, defining and guiding Information Security Management System (ISMS) development shall be adopted. These will provide the necessary benchmarking for individual users to know the type of cover and the responsibilities that are defined and provided by that institution for its guests. Most importantly, training for staff needs to be regularly imparted in dealing with such situations.

A four tier security plan will be designed for the project:

Securing building external perimeter and its periphery together with the security of the building from internal threats, should consider the following:

- Proper Surveillance System

- Training and Security Drills (including contingency plans)
- Security of Infrastructure Support Service System
- Making of Standard Operating Procedures
- Emergency Response Team

12.2.1 Description of the Tiers

Tier 1 – Protection against attack from Sky

The client/ owner and operator will collectively develop a system with the security services

Tier II – Securing Building Externally and its periphery

- Manual Checks: At all terminals the visitors shall be manually checked and asked for ID.
- CCTV: At all important locations with a remote viewing facility and record back up. With highest resolution and picture quality. DVR being the backbone, its recording and replaying capabilities must be considered.
- X-Ray Scanners: This may be installed and the bell desk may ensure that all the baggage while being shifted out or in goes through the machines. One scanner shall be installed at the terminal station's entry.
- RFID based access control and smart card applications can also control the movements of guests as well as staff.
- Zoning System: Apart from this equipment there are agencies providing Zoning systems. This system would be integrated with the BMS and in the event of a terrorist strike it would automatically close the fire exit door and stairs door thus limiting the movement of the terrorist in one place.

Tier III – Security of Building from Internal Threats

- Staff Profiling: All the staff shall be recruited after proper verification of identity and residential proof. Smart card identification shall be given.
- Metal Detectors: Every visitor will walk through metal detectors. There will be one metal detector at the staff entry gate.
- Bomb Blankets: This will reduce the impact of an explosion.
- Central Control Room: This will control the security system from inside.
- Safety of weapons: The weapons shall be kept in security.
- Communication Systems: Proper communication system to security staff shall help them to coordinate better during emergencies.

Tier IV – Proper Surveillance System

- Biometric Access: All the electronic locks may be replaced as biometric access control in the rooms. It is a suitable way to have fingerprints in the name of a high end technology.
- Wireless Mobile Devices: These can be installed at various locations to intercept people's communications.
- Glass protection System: This is a unique product combination of high security laminate films with chemicals which makes it blast resistant and thus protecting human life and property from the damage caused by splinters.
- Explosive detectors: With the help of this detector, the security personnel can check various zones for traces of explosives.

12.2.2 Training and Security Drills (including Surveillance System)

Disaster planning is the responsibility of all sections of the community. The police, fire brigade, civil defence, Home Guards, press, clergy, industrial groups, and community groups must participate in the pre-disaster planning. The community as a whole has the responsibility to teach first aid to groups in the community that

could be utilized in disaster situations. The disaster may involve the normal communication network itself. Therefore, two-way radio systems and messenger systems must be included as backups in the event of a communication-system failure.

Proper training, security drill and evacuation drill shall be conducted in a defined time period, so as to train the management people, security personnel, senior staff and all other working staff to take control of all odds whatsoever come in the way. These training shall be conducted for use of weapons and arms by some trained agencies for the said training. The training shall be done periodically.

12.3 Rescue arrangement

The Ropeway system would be provided with a rescue arrangement to enable the passengers being evacuated in case of an extreme emergency where cabins are stopped on line.

- Ladder rescue can generally be adopted for cabins which are stranded close to the ground. Here a light but strong aluminium ladder with a hook at the top is placed in position next to the cabin. An attendant stabilizes the ladder from below while another attendant goes up to open the door and help the passengers to come down.
- Vertical Rescue System involves a winch and lowering rope. A small hand winch is clamped to the nearest tower, uphill from the stranded cabin. One attendant climbs the tower and then he “rolls” down to the cabin by means of a carriage which is restrained by a rope attached to the hand winch. Once the attendant reaches the cabin, he views the restraining rope through a set of rollers pre-fitted to the cabin. A safety harness is now attached to the end of the rope and individual passengers are lowered to the ground by means of the harness, rope and winch.
- Diesel engine with independent drive, so that the ropeway system can be operated at reduced speed to bring stranded cabins to the terminal stations in case of failure of electrical power supply or main motor. A full capacity DG set to continue normal operation in case of main power supply disruption.
- As mentioned elsewhere the Auxiliary Drive with diesel engine enables the passengers to be evacuated in the event of power failure.
- Helicopter facility for evacuation shall be arranged with nearest helipads in the area.
- The ropeway operations staff and rescue staff will be trained for emergency rescues

12.4 Post Disaster Analysis and Evaluation

- The in-house and third party audit shall be carried out on regular basis;
- To review the requirements to ensure that original design and installation conditions have not been altered to violate the requirements of the prescribed standards and guidelines;
- To ensure that all required signs are in place; and
- To ensure that only persons authorized shall start a ropeway.
- The in-house safety team will also be responsible for monitoring of the ropeway.

13. UTILITY SHIFTING PROPOSAL AND ESTIMATES

13.1 Identification of existing utilities

Details of existing utilities which may impact the project along the proposed ropeway alignment have been collected and a strip plan presenting the utilities has been prepared. The strip plan consists of the following:

- Type and current location of the utility
- Alignment of the utility along the alignment

The utility drawings prepared for the project are appended to this report **(refer Appendix 10 – APP-10)**.

13.2 Shifting of existing utilities

For the Bijli Mahadev ropeway project, existing electrical transmission lines and water supply lines along and across the proposed ropeway alignment that will require shifting were identified. The relevant officials of the user departments were contacted and requested for site visit for their verification.

Figure 33: Joint site conducted by the authorities for verification of existing utilities.

The following officials (user departments) were involved in the identification, verification and providing cost estimates for shifting of existing utilities in the proposed ropeway corridor.

For shifting of electric transmission lines	Office of Executive Engineer, Himachal Pradesh State Electricity Board Ltd. (HPSEBL, Kullu)
For shifting of water supply lines	Office of Executive Engineer, Assistant Engineer, Jal Shakti Division, Kullu (Himachal Pradesh Jal Shakti Vibhag)

The cost estimates for the shifting of existing utilities along the ropeway alignment collected from the user departments are appended to this report (**refer Appendix 11 – APP-11**).

13.3 Supply of utilities for operation

Power and water supply lines are required during the operation phase of the proposed ropeway project. The requirements for the project are as follows:

Power requirement

Location	Description	Requirement (kW)

Valley Station	Ropeway	1350 kW
	Building	300 kW
	Sub-Total	**1650 kW**
Hill Station	Ropeway	30 kW
	Building	200 kW
	Sub-Total	**230 kW**
	TOTAL	**1880 kW**

Water requirement

Total water demand during the operation of the project will be about 20 KLD. Water requirement for the staff and security would be 0.4 KLD considering the water requirement @ 45 lpcd.

Cost estimates for supply of utilities (electricity and water) to the proposed ropeway station locations have been provided by the concerned Government officials after conducting joint site visits.

The cost estimates for the supply of utilities for the operation of the proposed ropeway projects are collected from the user departments and are appended to this report **(refer Appendix 11 – APP-11)**.

14. COST ESTIMATES OF THE PROJECT

14.1 Civil Cost

Civil costs comprises of the cost required for the development of two (valley and hill) stations, parking spaces and the foundation works for the proposed towers.

The civil costs for the development of stations includes the cost of the:

a) Foundation excavation and backfilling
b) Concrete and reinforcement steel for the frame of the building
c) Masonry work, partitions and finishing works
d) Plumbing, electrical and fire fighting works
e) Station amenities
f) Transportation of materials to the project site, etc.

14.2 Electromechanical Cost

The electromechanical cost comprises cost required for the development of mechanical facilities, electrotechnical equipment, preparation of design and drawings, importing, transporation and erection of the equipment at the project site.

The cost for the development of ropeway project from Nature Park Mohal to Bijli Mahadev Temple was assessed to be **INR 186.97 Crores**. The cost is exclusive of GST.

15. STAKEHOLDER ALIGNMENT

Consultation during project preparation is an integral part of the social assessment process. It not only minimizes the risks but involves the public as stakeholders in project preparation process, promotes public understanding of the project and leads to timely completion of the project. The views and suggestions received during stakeholder's consultations also helps in better identification of social impacts and incorporation of mitigation measures in SMP to address these impacts. The specific objectives of the consultation process were to:

- Provide clear and accurate information about the project to the beneficiary community.
- Obtain the main concerns and perceptions of the public and affected families and their representatives regarding the project.
- Improve project design and, thereby, minimize conflicts and delays in implementation.
- Increase long term project sustainability and ownership.

Public consultation/ meetings were conducted on project location number of times. Consultation has been done in accordance with MOEF&CC requirement which is the pre-requisite for the social and environmental safeguards. The purpose and objective of stakeholder's consultation is the identification and involvement of potential Project Affected people (PAP), nearby communities and other stakeholders in order to make them cognizant about the proposed ropeway project activities.

As presented in the earlier chapters of this feasibility report, the comparative assessment on key parameters clearly identifies the alignment spanning between Nature Park (Mohal) to Bijli Mahadev Temple at the hilltop as the most feasible alignment out of the explored alignment options. It involves comparatively much less interference with private landowners and has the least cost. It is also the option with the least technical difficulties and will have the highest acceptance rate amongst passengers.

Consultations were conducted with the (i) Local community (ii) Potential PAPs (iii) Roadside shop owners (iii) Road users (iv) Community Leaders (v) and officers of PIU.

During the consultation process of the proposed project, people have expressed keen interest in the proposed ropeway project. The local people are expecting alternate transport without disturbing nature, tourist visit and employment generation were apprised about the project details. After various discussions with the stakeholders, the alignment was confirmed. The exact location of the hill station on the hilltop was decided keeping in view the sentiments of the local public towards their deity. However, the following conditions shall be followed:

- Geometric correction/ alignment of approach road surface should be followed strictly as per design protocol.
- Construction materials should not be stored in the sacred worship places.
- Proper and timely disposal of construction wastes shall be ensured.
- Local people must be preferred for employment in the project activity. As enough labourers are available in the area which will be beneficial for the contractor.

Figure 34: Meeting with BDO, Panchayat secretary and FCA Committee.

Figure 35: Meeting conducted on 19.01.2023 participated by SDM, MLA, officers of NHLML Zonal office and representatives of the Consultant.

16. PROJECT TIMELINES

Number			Activity	Duration	From	To	Timeline
							Running Month
1			Tender Process				
1	1		Bidding Period				
1	1	1	Floating of Tender	1	0	0	KD
1	1	2	Bidding Period	3	0	2	
1	1	3	Bidding Deadline	1	2	2	KD
1	2		Evaluation & Contract Award				
1	2	1	Evaluation Period	3	3	5	
1	2	2	Contract Negotiation	1	6	6	
1	2	2	Contract Award	1	6	6	KD
2			Implementation				
2	1		Initial Tasks				
2	1	1	Hand Over of Ecumbrance Free Site	1	7	7	KD
2	1	2	Mobilization	1	8	8	
2	1	3	Site Installation	3	8	10	
2	2		Detailed Design			-1	
2	2	1	Additional Investigations by Contractor (Alignment, Survey, Soil)	2	8	9	
2	2	2	Detailed Design by Contractor	4	9	12	
2	2	3	Review of Detailed Design	4	10	13	
2	2	3	Approval of Design	1	13	13	KD
2	2	4	Submission of As-Built Design	1	28	28	KD
2	3		Construction Works			-1	
2	3	1	Erection of Material Ropeway	4	10	13	
2	3	2	Towers - Clearance Works	2	12	13	
2	3	3	Towers - Civil (Foundations)	3	13	15	
2	3	4	Towers - Steel Works	4	15	18	
2	3	5	Towers - Mechanical	4	17	20	
2	3	6	Stations - Clearance Works	3	11	13	
2	3	7	Stations - Civil	6	14	19	
2	3	8	Stations - Mechanical (Ropeway)	6	19	24	
2	3	9	Stations - Electrical, Furniture, Fittings etc.	5	23	27	
2	4		Taking Over			-1	
2	4	1	Tests before completion	10	18	27	
2	4	2	Tests on completion	3	28	30	
2	4	3	Commissioning	1	30	30	
2	5		Operation			-1	
2	5	1	Commercial Operation Date (COD)	1	31	31	KD

17. LEGAL AND INSTITUTIONAL FRAMEWORK

17.1 General Legal Framework

Various laws as applicable are as follows:

- The Himachal Pradesh Aerial Ropeways Act, 1968
- The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013
- The Himachal Pradesh Forest (Sale of Timber) Act, 1968
  The Himachal Pradesh Kutlehar Forest (Acquisition of Management) Act, 1992
- The Himachal Pradesh Private Forests Act, 1954
- The Himachal Pradesh Tourism Development And Registration Act, 2002

17.2 General Institutional Set Up

The Institutional Mechanism is a crucial component of a project implementation plan. It serves as a document that outlines the involvement of various stakeholders, their respective roles, and how their actions will work together to achieve project objectives. Additionally, the mechanism addresses how stakeholders will be compensated for their contributions.

The Implementation Mechanism incorporates the contractual structure between the involved parties, establishing checks and balances to ensure that project risks are appropriately allocated to the party best equipped to manage them. Moreover, it aligns the incentives of the parties to enc

ourage an optimal outcome from the project.

Table 35: Institutional Framework Agencies and their role

S. No	Name of Agency	Role in the project implementation
1.	National Highway Logistics Management Company Limited	Project Development and the selection of a Developer for project execution. Acquiring funds to offer initial financial backing to the project.
2.	Himachal Pradesh Tourism Development Corporation	Establishing connections to other tourist facilities Promotion of the project location/ project facility
3.	Government of Himachal Pradesh	Offering comprehensive support for project implementation, which includes, among other things, arranging for the required land for the project and obtaining state-specific approvals.
4.	Bijli Mahadev Temple Trust	Provide accurate data and forecast on footfall of pilgrims, coordinate with other agencies to optimize timings of the Darshan and other activities to ensure smoother management of devotees and their logistics.
5.	Private Developer for Ropeway	Enlist expert professionals to execute the project with a structurally sound approach and aesthetically pleasing designs. Ensure the provision of safe transportation options for the users. Design, construct, operate and maintain the project structure. As required, involve a special technology provider for construction of project structure.

S. No	Name of Agency	Role in the project implementation
		Prepare relevant reports / information for stakeholders. Liase with all relevant stakeholders Ensure implementation of relevanthealth, safety and security protocolls.
6.	P.W.D. / NHAI Kullu	Ensuring good road connectivity to the project location Provide assistance and guidance during relevant construction matters.
7.	SPV between NHLML and Government of Himachal Pradesh	Initiate the process of floating tenders to invite Ropeway Developers. Carefully evaluate and select the Developers for project implementation. Appoint independent engineers to oversee and monitor the construction progress. Engage in contract management activities to ensure the project is completed within the envisaged timeframe. Take appropriate decisions well in time to ensure smoothly implementation of the project.
8.	Independent engineer	Supervise and closely monitor the construction of ropeways, diligently reporting any exceptions or deviations that could potentially have adverse consequences on the project to the relevant authorities.
9.	Public Service / Emergency Organizations	Activly involve in setting up of a an emergency master plan and implemenation of project specific emergency measures Conduct regualr training sessions for rescue operations, fire drills, emergency response time
10	Technical third party inspections	Initial inpsection of mechanical system at taking over Inspections during oprations at regular intervals as specified in the maintenance and inspection plan

17.3 Assessed procedures and training

For the implementation of the project, a special purpose vehicle (SPV) needs to be established., Suitable staff with relevant expereince is required to be part of the project implementation unit. In this regard, the following likely risks and shortcomings as well as mitigation measures are identified:

No.	Risk	Description	Mitigation Measures
1	Procurement Experience	Key staff does not have the required experience in the project implementation process and related procedures	• Involvement of a project implementation consultant (PIC) to support the project implementation unit (PIU) eraly on in the project.

No.	Risk	Description	Mitigation Measures
			• Specific procurement trainings for the PIU. Such trainings should be conducted by specialized consultants (potentially PIC) and involve detailed interviews to perform a gap analysis amongst the staff of the PIU. Training should then specifically adress these gaps and make also make final recommendations for the institutional structure of the PIU. Continous support shall be provided by the PIC as required.
2	Technical Experience	Key staff of the SPV does not have the technical experience, in particualr in ropeway	• Specific technical trainings for the PIU • Hiring of key experts (e.g. in form of single experts) to strenghten the PIU on intermittent basis as required
3	Limited power to take decisions within the PIU	Members of the PIU / SPV do not have the authorized power to take fundamental project decisions which leads to partially heavy delays	• The PIU / SPV should be able to take independent decisions respectivly have short decision taking processes.
4	Fluctuation among the SPV / PIU key staff	Trained and expereinced staff leaves the company or are assigned to other posts with thr requirement of new staff with limited specific knowledge / experienec beeeing put in crucual positions	• In aprticualr when key-staff is relocated, an overlapping period of a few months should be provided to ensure knowledge transfer. • Every key-positions shall be staffed with a fully involved deputy who can take over tasks immediately without knowledge transfer • Continous internal training and knowledge transfer shall distribute knowldege and poewer among several key staff of the SPV / PIU

17.4 Required Contracts / Procurement Plan

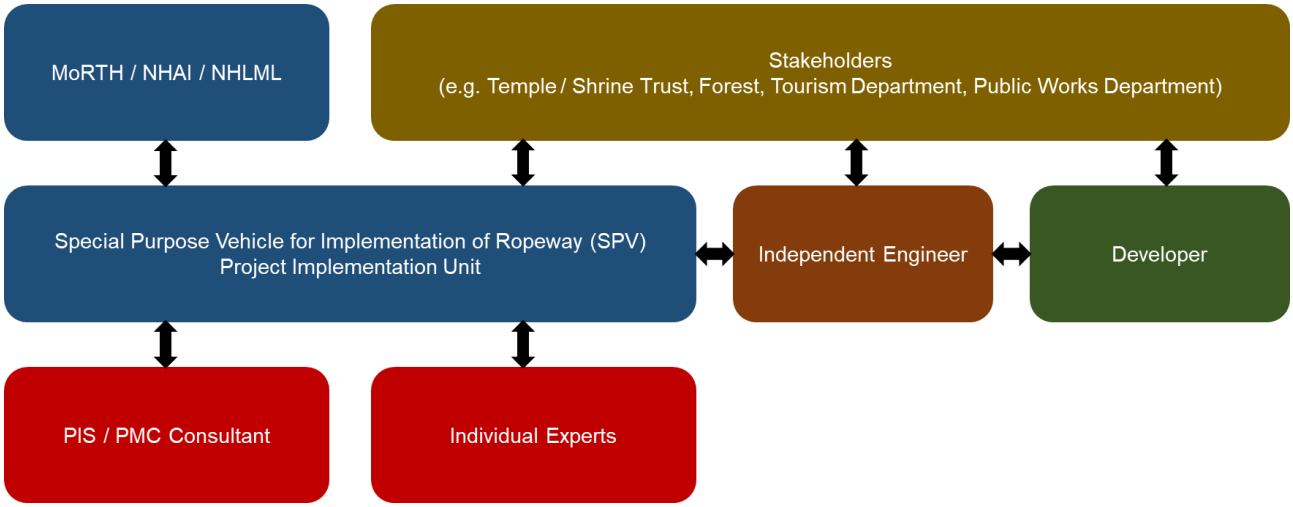
The description of contracts to be established at various levels for project implementation have been provided in the table below

No.	Description	Type of Contract	Method	Estimated Time Period	Outline Terms of Reference
A	**Goods and Works Contracts**				
A1	Contract for Developer (Concessionaire)	Hybrid Annuity	International Competitive Bidding QCBS	~ 30 months from Award to Commercial Operation Date plus Operation	Detailed Design including additional survey and investigation. Construction of civil and E& structures

				and Maintenance	Operation Maintenance Defects rectification
B	**Consultancy Contracts**				
B1	Independent Engineer	Time Based Consultancy Contract	International Competitive Bidding QCBS	~ 31 months from shortly before award of Construction contract to Commercial Operation Date plus Operation and Maintenance	Site Supervision Design Review
B2	Project Implementation Support Consultant	Time Based Consultancy Contract	International Competitive Bidding QCBS	~ 31 months from shortly before award of Construction contract to Commercial Operation Date plus Operation and Maintenance	Project Implementation support to the SPV / PIU for contract management, cost control / cost management Procurement support to the SPV / PIU Workshops (procurement, contractual, financial) and training for the SPV / PIU
B3	Individual Consultants and Resource Persons	Time Based Consultancy Contract	International Competitive Bidding ICS	Intermittent involvement as required	Specialized expertise to the SPV / PIU (e.g. ropeway)

17.5 Proposed Project Structure

The overall proposed project structure and plan is depicted in the organogram presented below.



18. APPROVALS FOR DEVELOPMENT

The following approvals are required for the construction and operation of a ropeway system.

- EIA clearance
- Forest clearance
- NOC for diversion of land
- NOC from Airport Authority
- No-Objection certificate from relevant panchayats
- No-Objection certificate from the State Government
- Consent for Right of Way under applicable law
- Compliance under the Building and Other Construction Workers (Regulation of Employment and Conditions of Service) Act, 1996.
- Approval under the Electricity Act 2003 for electrical installations and works form Chief Electrical Inspector.
- Permission of the State Government for drawing water from river/reservoir.
- Other clearances required as per guidance by the Authority.

18.1 Diversion of Forest Land under FCA.

The proposed project in Kullu district will require both forest land and non forest land to erect ropeway structures like towers, hill station and valley station. A total 3.1102 Ha of land has been proposed for the ropeway, including the Right of Use (RoU). The total forest land that would be diverted for this project is estimated as 3.1102 Ha. The rest 0.8635 Ha is the non forest land.

The ropeway project is 2.336km in length and is estimated to cost around INR 186.97 crores. The draft proposal (Form A) for prior approval of Central Governnment, under FCA (Forest Conservation Act) 1980 has been submittted by the authorised person of the user agency. The said land will be diverted for 99 years as per this proposal. The following table shows the villagewise and component wise break up of the forest and non forest land:

Table 36: Table showing village wise breakup of the Forest land

S.No.	District	Tehsil	Village Name	Total Area (Ha)	Forest Area (Ha)	Non Forest Area (Ha)
1	Kullu	Kullu	Balah	0.4774	0.4774	0.0000
2			Talogi	1.2082	1.1135	0.0947
3			Peccha	1.5200	0.7512	0.7688
4			Peccha Kandi	0.7681	0.7681	0.0000
Total				**3.937**	**3.1102**	**0.8635**

Table 37 : Table showing component wise breakup of the Forest land

Component wise breakup			
S.No.	Component	Forest Land (Ha)	Non Forest Land (Ha)
1	Valley station + T1 + T2	0.3804	0
2	RoU	0.0970	0
3	Tower 3 - 6	0.0588	0.0947
4	RoU	1.0547	0
5	Tower 7-12	0.0886	0.7688
6	RoU	0.6626	0
7	Tower 13-18	0.0663	0

8	RoU	0.5149	0
9	Hill Station + Slope protection	0.1869	0
	Total	**3.1102**	**0.8635**

It has been submitted in the proposal that due to the proposed project there would be no displacement of people as no structure is coming on any built up area. Cost Benefit Analysis is also not done because of non applicability on projects covering less than 5 Hectares land. The project is also exempted from environmental clearance vide a notification of MoEFCC. The project would not be disturbing any wildlife area or ecosensitive zone in the vicinity, so further no wildlife clearance is required. The process for approval under FRA (Forest Rights Act) 2006 is under process for submission in Stage 1 compliance. Since the area is also not located in Scheduled areas, no special provisions shall apply on the project.

It is further submitted that since the project is under Central Government, there would be no need to arrange revenue land or non forest land for compensatory afforestation and degraded land will be utilized as CA land. The user agency has given undertaking to provide cost of compensatory afforestation as per the prevailing labour rates ,cost of trees falling in the project and also provide NPV (Net Present Value) of the Forest area as per the revised rates and direction of Hon'ble Supreme Court of India.

The submitted proposal is appended to the report (refer **Appendix 12 – APP-12**).

Figure 36: Tree count, NPV assessment and FRA meeting conducted by the Forest Department.

Figure 37: Boundary of Forest and Non-Forest Land proposed for diversion.

18.2 NOC from Airports Authority of India (AAI)

The proposed project location is located approximately 5 km from Bhuntar airport. As per the Colour Coded Zoning Map (CCZM) developed by AAI, the top elevation of the proposed project structures is more than the permissible top elevation for the project zone. Therefore, an online application for acquiring height clearance for station buildings and towers is submitted to AAI website http://nocas2.aai.aero/nocas.

A survey has been conducted by the AAI empanelled surveyor on site to confirm and certify the coordinates of the project structures.

Figure 38: Survey conducted by AAI empanelled surveyor to certify coordinates.

The No Objection Certificates (NOC) obtained from the Airports Authority of India (AAI) is appended to the report (refer **Appendix 13 – APP-13**).

18.3 NOC from PWD and NHAI

The proposed ropeway alignment is spanning from Nature Park (Mohal) to Bijli Mahadev Temple. Around Ch 0+198.00, the ropeway is passing over a National Highway, new NH-3 (at km 258+450) and at Ch: 0+866.00, the ropeway is passing over PWD road (Peccha to Bharain). A No Objection Certificate (NOC) was obtained from both the departments for the development of the ropeway and has certified that the minimum vertical clearance height from the FRL is observed by the proposed ropeway.

The NOC obtained are appended to this report (refer **APPENDIX – 14 APP-14**).

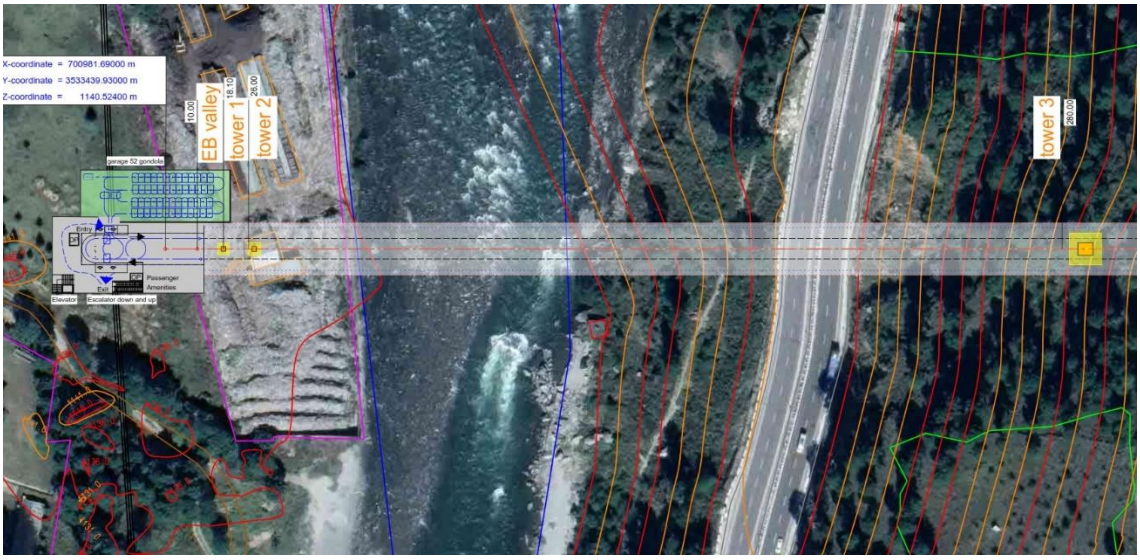


Figure 39: Proposed ropeway spanning over the existing National Highway (NH-3).

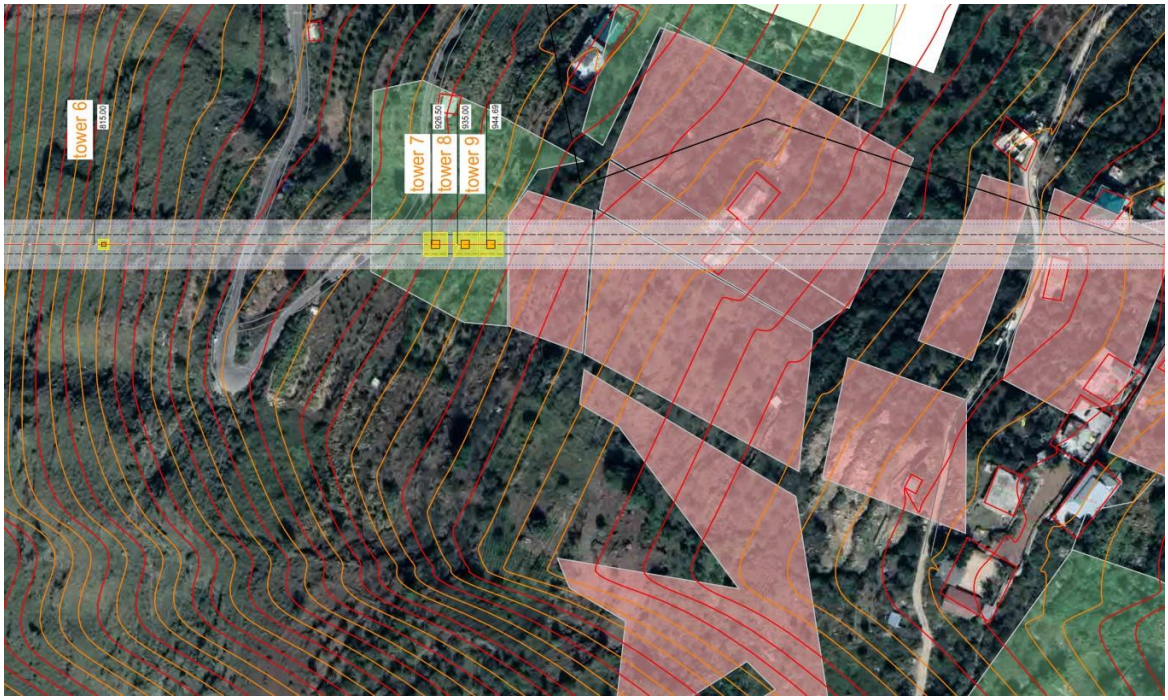


Figure 40: Proposed ropeway spanning over existing PWD roads.

APPENDIX APP-01: Inception Report

APPENDIX APP-02: Geology Report

APPENDIX APP-03: Benchmarking Report

APPENDIX APP-04 Demand Assessment Report

APPENDIX APP-05 Alignment Options Report

APPENDIX APP-06 Ropeway Drawings

APPENDIX APP-07 Design calculations

APPENDIX APP-08 Technical Specifications

APPENDIX APP-09 Environmental Impact Assessment Report

APPENDIX APP-10 Utility Survey Plans

APPENDIX APP-11 Cost Estimates for Utility Shifting and Supply of Utilities

APPENDIX APP-12 Forest Proposal Application

APPENDIX APP-13 NOC for Building Height Clearance Obtained from AAI

APPENDIX APP-14 NOC for Development of Ropeway Obtained from NHAI and PWD

Form-II
(for projects other than linear projects)
Government of Himachal Pradesh

Office of the District Collector, Kullu, Distt. Kullu, H.P.

No: 1184 /DRA Dated: 31-05-23

TO WHOM SO EVER IT MAY CONCERN

In compliance of the Ministry of Environment and Forest (MoEF), Government of India's letter No. 11-9/98-FC (pt.) dated 3rd August 2009 wherein the MoEF issued guidelines on submission of evidences for having initiated and completed the process of settlement of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 ('FRA' for short) on the forest land proposed to be diverted for non-forest purposes, it is certified that **0.7681 hectare** of the forest land proposed to be diverted in favour of **the Zonal Officer, Northern Region, National Highway Logistic Management Limited** for **Construction of Bijli Mahadev Ropeway Project,** in district Kullu falls within jurisdiction of **Gram Panchayat Chansari** in Tehsil, Kullu.
It is further certified that:

(a) The complete process for identification and settlement of rights under the FRA has been carried out for the entire forest area of **Pechha Kandi** (an uninhabited village). A copy of records of all consultations and meetings of the Forest Rights Committee(s), Gram Sabha(s), Sub Division Level Committee(s) and District Level Committee for all the neighbouring Muhals of Gram Panchayat Chansari which are inhabited are enclosed as annexure A to annexure D.
(b) The proposal for diversion of **0.7681 hectare** of forest area was placed for concurrence & approved by the Distt. Level Committee.
(c) Each of concerned Gram Sabha(s) has certified that all formalities/ processes under the FRA have been carried out and that they have given their consent to Nil claim at a particular area. A copy of certificate issued by the Gram Sabha of neighbouring inhabited Villages **Chansari & Pechha** enclosed as annexure A to Annexure B.
(d) The discussion and decision on such proposals had taken place only when there was a quorum of minimum 50% of the members of Gram Sabha present.
(e) The rights of Primitive Tribal Groups and Pre-Agriculture Communities, where applicable have been specifically safeguarded as per section 3(1)(e) of the FRA.

Encl: *As above.*

(Ashutosh Garg, IAS)
District Collector,
Kullu.

422

Proceedings of the meeting of the District Level Committee constituted under Schedule Tribes & Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA), 2006.

A meeting of the District Level Committee of Kullu District, constituted under FRA, 2006 was held under the Chairmanship of Ashutosh Garg, IAS, Deputy Commissioner, Kullu on **27-05-2023 at 11.00 AM** at Kullu in which the application(s) claiming rights in **Gram Panchayat Chansari** forest area under FRA, 2006 of the following applicant(s) was discussed to consider the same for admission by the District Level Committee.

After scrutiny of the documents and detailed discussions the following decisions were taken on each application:-

Name of Applicant	Purpose	Decision
The Zonal Officer, Northern Region, National Highways Logistic Limited.	Diversion of 0.7681 hectare uninhabited / unpopulated reserved forest land for the construction of Bijli Mahadev Ropeway Project, at Muhal Pechha Kandi, in Tehsil & Distt. Kullu (H.P.)	admitted

Place: Kullu

DC-cum Chairman
District Level Committee,
Kullu District HP.

Form-II
(for projects other than linear projects)
Government of Himachal Pradesh

Office of the District Collector, Kullu, Distt. Kullu, H.P.

No: ....1185...../DRA

Dated: 31-05-23.

TO WHOM SO EVER IT MAY CONCERN

In compliance of the Ministry of Environment and Forest (MoEF), Government of India's letter No. 11-9/98-FC (pt.) dated 3rd August 2009 wherein the MoEF issued guidelines on submission of evidences for having initiated and completed the process of settlement of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 ('FRA' for short) on the forest land proposed to be diverted for non-forest purposes, it is certified that **0.7512 hectare** of the forest land proposed to be diverted in favour of **the Zonal Officer, Northern Region, National Highway Logistic Management Limited** for **Construction of Bijli Mahadev Ropeway Project,** in district Kullu falls within jurisdiction of **Gram Panchayat Chansari** in Tehsil, Kullu.
It is further certified that:

(a) The complete process for identification and settlement of rights under the FRA has been carried out for the entire forest area of **Pechha** village. A copy of records of all consultations and meetings of the Forest Rights Committee(s), Gram Sabha(s), Sub Division Level Committee(s) and District Level Committee are enclosed as annexure A to annexure D.
(b) The proposal for diversion of **0.7512 hectare** of forest area was placed for concurrence & approved by the Distt. Level Committee.
(c) Each of concerned Gram Sabha(s) has certified that all formalities/ processes under the FRA have been carried out and that they have given their consent to Nil claim at a particular area. A copy of certificate issued by the Gram Sabha of **Pechha** villages (s) is enclosed as annexure A to annexure B.
(d) The discussion and decision on such proposals had taken place only when there was a quorum of minimum 50% of the members of Gram Sabha present.
(e) The rights of Primitive Tribal Groups and Pre-Agriculture Communities, where applicable have been specifically safeguarded as per section 3(1)(e) of the FRA.

Encl: *As above.*

(Ashutosh Garg, IAS)
District Collector,
Kullu.

424

Proceedings of the meeting of the District Level Committee constituted under Schedule Tribes & Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA), 2006.

A meeting of the District Level Committee of Kullu District, constituted under FRA, 2006 was held under the Chairmanship of Ashutosh Garg, IAS, Deputy Commissioner, Kullu on **27-05-2023 at 11.00 AM** at Kullu in which the application(s) claiming rights in **Gram Panchayat Chansari** forest area under FRA, 2006 of the following applicant(s) was discussed to consider the same for admission by the District Level Committee.

After scrutiny of the documents and detailed discussions the following decisions were taken on each application:-

Name of Applicant	Purpose	Decision
The Zonal Officer, Northern Region, National Highways Logistic Limited.	Diversion of 0.7512 hectare of forest land for the construction of Bijli Mahadev Ropeway Project, At Muhal Pechha, in Tehsil & Distt. Kullu (H.P.)	admitted

Place: Kullu

DC-cum Chairman
District Level Committee,
Kullu District HP.

425

Form-II
(for projects other than linear projects)
Government of Himachal Pradesh

Office of the District Collector, Kullu, Distt. Kullu, H.P.

No: ....11.86...../DRA Dated: ...31-05-23.....

TO WHOM SO EVER IT MAY CONCERN

In compliance of the Ministry of Environment and Forest (MoEF), Government of India's letter No. 11-9/98-FC (pt.) dated 3rd August 2009 wherein the MoEF issued guidelines on submission of evidences for having initiated and completed the process of settlement of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 ('FRA' for short) on the forest land proposed to be diverted for non-forest purposes, it is certified that **1.1135 hectare** of the forest land proposed to be diverted in favour of **the Zonal Officer, Northern Region, National Highway Logistic Management Limited** for **Construction of Bijli Mahadev Ropeway Project,** in district Kullu falls within jurisdiction of **Gram Panchayat Talogi** in Tehsil, Kullu.
It is further certified that:

(a) The complete process for identification and settlement of rights under the FRA has been carried out for the entire forest area of **Talogi** village. A copy of records of all consultations and meetings of the Forest Rights Committee(s), Gram Sabha(s), Sub Division Level Committee(s) and District Level Committee are enclosed as annexure A to annexure D.
(b) The proposal for diversion of **1.1135 hectare** of forest area was placed for concurrence & approved by the Distt. Level Committee.
(c) Each of concerned Gram Sabha(s) has certified that all formalities/ processes under the FRA have been carried out and that they have given their consent to Nil claim at a particular area. A copy of certificate issued by the Gram Sabha of **Talogi** villages (s) is enclosed as annexure A to annexure B.
(d) The discussion and decision on such proposals had taken place only when there was a quorum of minimum 50% of the members of Gram Sabha present.
(e) The rights of Primitive Tribal Groups and Pre-Agriculture Communities, where applicable have been specifically safeguarded as per section 3(1)(e) of the FRA.

Encl: *As above.*

(Ashutosh Garg, IAS)
District Collector,
Kullu.

426

Proceedings of the meeting of the District Level Committee constituted under Schedule Tribes & Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA), 2006.

A meeting of the District Level Committee of Kullu District, constituted under FRA, 2006 was held under the Chairmanship of Ashutosh Garg, IAS, Deputy Commissioner, Kullu on **27-05-2023 at 11.00 AM** at Kullu in which the application(s) claiming rights in **Gram Panchayat Talogi** forest area under FRA, 2006 of the following applicant(s) was discussed to consider the same for admission by the District Level Committee.

After scrutiny of the documents and detailed discussions the following decisions were taken on each application:-

Name of Applicant	Purpose	Decision
The Zonal Officer, Northern Region, National Highways Logistic Limited.	Diversion of 1.1135 hectare of forest land for the construction of Bijli Mahadev Ropeway Project, at Muhal Talogi, in Tehsil & Distt. Kullu (H.P.)	admitted

Place: Kullu

DC-cum Chairman
District Level Committee,
Kullu District HP.

427

Form-II
(For projects other than linear projects)
Government of Himachal Pradesh

Office of the District Collector, Kullu, Distt. Kullu, H.P.

No: ....1187...../DRA Dated: 31-05-23

TO WHOM SO EVER IT MAY CONCERN

In compliance of the Ministry of Environment and Forest (MoEF), Government of India's letter No. 11-9/98-FC (pt.) dated 3rd August 2009 wherein the MoEF issued guidelines on submission of evidences for having initiated and completed the process of settlement of rights under the Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 ('FRA' for short) on the forest land proposed to be diverted for non-forest purposes, it is certified that **0.4774 hectare** of the forest land proposed to be diverted in favour of **the Zonal Officer, Northern Region, National Highway Logistic Management Limited** for **Construction of Bijli Mahadev Ropeway Project,** in district Kullu which falls within jurisdiction of **Gram Panchayat Balh-II** in Tehsil, Kullu.
It is further certified that:

(a) The complete process for identification and settlement of rights under the FRA has been carried out for the entire **0.4774 hectare** of forest area proposed for diversion. A copy of records of all consultations and meetings of the Forest Rights Committee(s), Gram Sabha(s), Sub Division Level Committee(s) and District Level Committee are enclosed as annexure A to annexure D.

(b) The proposals for such diversion (with full details of the project and its implications, in vernacular/ local language) have been placed before each concerned Gram Sabha of forest dwellers, who are eligible under the FRA.

(c) The each of concerned Gram Sabha(s) has certified that all formalities/ processes under the FRA have been carried out and that they have given their consent to the proposed diversion and the compensation and ameliorative measures, if any having understood the purpose and detail of proposed diversion. A copy of certificate issued by the Gram Sabha of **Pirdi & Naraini** villages (s) is enclosed as annexure A to annexure B.

(d) The discussion and decision on such proposals had taken place only when there was a quorum of minimum 50% of the members of Gram Sabha present.

(e) The rights of Primitive Tribal Groups and Pre-Agriculture Communities, where applicable have been specifically safeguarded as per section 3(1)(e) of the FRA.

Encl: *As above.*

(Ashutosh Garg, IAS)
District Collector,
Kullu.

428

Proceedings of the meeting of the District Level Committee constituted under Schedule Tribes & Other Traditional Forest Dwellers (Recognition of Forest Rights) Act (FRA), 2006.

A meeting of the District Level Committee of Kullu District, constituted under FRA, 2006 was held under the Chairmanship of Ashutosh Garg, IAS, Deputy Commissioner, Kullu on **27-05-2023 at 11.00 AM** at Kullu in which the application(s) claiming rights in **Gram Panchayat Balh-II** forest area under FRA, 2006, of the following applicant(s), duly processed and recommended by the Sub Division Level Committee(s) of Kullu Sub Division(s), were discussed to consider the same for admission by the District Level Committee.

After scrutiny of the documents and detailed discussions the following decisions were taken on each application:-

Name of Applicant	Purpose	Decision
The Zonal Officer, Northern Region, National Logistics Management Limited.	Diversion of 0.4774 hectare of forest land for the Construction of Bijli Mahadev Ropeway Project, at Muhal Pirdi & Naraini, Tehsil & Distt. Kullu (H.P.)	admitted

Place: Kullu

DC-cum Chairman
District Level Committee,
Kullu District HP.

Annexure-VII

उपस्थित सदस्यों की संख्या 162 / 285

प्रस्ताव संख्या : 01 दिनांक 12-05-2023

विषय : बिजली महादेव रोपवे प्रोजेक्ट सम्बन्धी N.O.C बारे।

आज दिनांक 12-05-2023 को ग्राम / वार्ड सभा वार्ड नं० 3 नरैणी की बैठक श्री / श्रीमति गीता देवी की अध्यक्षता में सम्पन्न हुई। इस बैठक में यहां पर रहने वाले OTFD's और OTST's परिवारों को मूलभूत सुविधा बिजली महादेव रोपवे प्रोजेक्ट प्रदान करने हेतु चर्चा की गयी। ग्राम सभा में संर्वसम्मति से इस प्रस्ताव पर गहन चर्चा की गई और पाया गया कि गॉव नरैणी वार्ड नं०3 में रहने वाले OTFD's और OTST's परिवारों तथा अन्य परिवारों को ....सुविधा से जोडा जाना अति आवश्यक है। इस रोपवे प्रोजेक्ट के निर्माण से यहां पर रहने वाले OTFD's और OTST's परिवारों को मूलभूत सुविधा प्राप्त होगी। इस गांव में अन्य भूमि न होने के कारण ग्राम सभा सर्व सम्मति से वन भूमि खसरा न0/ टुकडा न0 1 व 2 मोहाल बल्ह मौजा फाटी में 0.4774 हैक्टेयर भूमि को बिजली महादेव रोपवे प्रोजेक्ट निर्माण हेतु अनुमोदित करती है, इस नरैणी वन भूमि पर बनने से यहां पर रहने वाले OTFD's और OTST's परिवारों के अधिकारों का हनन नहीं होता है।

अतः ग्राम/वार्ड सभा वार्ड नं० 3 नरैणी तहसील कुल्लू सर्वसम्मति से प्रस्तावित वन भूमि खसरा न0/ टुकडा न0 मोहाल 1 व 2 बल्ह मौजा ....जिसका क्षेत्रफल ....हैक्टेयर, गांव नरैणी तहसील कुल्लू उपरोक्त बिजली महादेव रोपवे प्रोजेक्ट निर्माण हेतु ....विभाग को प्रस्तावित रोपवे निर्माण के उपयोग के लिए अनुमोदित करती है।

Geeta
प्रधान

Geeta
प्रधान

[signature]
सचिव

[signature]
सचिव

वन अधिकार कमेटी, नरैणी
ग्राम पंचायत बल्ह-II
विकास खण्ड कुल्लू (हि0प्र0)

430

Annexure-VIII

No Objection Certificate (Forest Right Committee)

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वन अधिकार समिति, वार्ड न0 (3)/ग्राम नरैणी तहसील कुल्लू

सर्वसम्मति से पारित करती है कि गांव नरैणी तहसील कुल्लू में प्रस्तावित बिजली महादेव पावर प्रोजेक्ट के निर्माण हेतु वन भूमि खसरा न0/ टुकडा न0 1 व 2 मोहाल वलह

जिसका क्षेत्रफल 0.4774 हैक्टेयर, में पावर प्रोजेक्ट बनने से इस समिति को कोई आपत्ति नही है।

Geeta

प्रधान सचिव
वन अधिकार कमेटी, नरैणी
ग्राम पंचायत बल्ह-II
प्रधान वन अधिकार समिति विकास खण्ड कुल्लू (हि0प्र0)

सदस्य

1. श्री मति लक्ष्मी पत्नी श्री रणजीत
2. — सरिता पत्नी श्री अनिल कुमार Archana
3. — गंगा देवी — पुर्ण राम गंगा देवी
4. श्री कपिल देव पुत्र श्री दलीप शर्मा
5. श्री सुनील कुमार पुत्र श्री महेन्द्र सिंह
6. श्री मति पूजा पत्नी अशोक कुमार पूजा
7. श्री मति मीना पत्नी जगेश्वर ठाकुर Meena
8. श्री मति संध्या पौल पत्नी श्री योगेश संध्या पौल

431

Annexure-VII

उपस्थित सदस्यों की संख्या 162/285

प्रस्ताव संख्या : 01 दिनांक 12.05.2023

विषय : बिजली महादेव रोपवे प्रोजेक्ट के लिए वन भूमि NOC बारे ।

आज दिनांक 12/5/2023 को ग्राम / *वार्ड* सभा वार्ड नं0 3 नग्गर की बैठक श्री / श्रीमति गीता देवी की अध्यक्षता में सम्पन्न हुई। इस बैठक में यहां पर रहने वाले OTFD's और OTST's परिवारों को मूलभूत सुविधा बिजली महादेव रोपवे प्रोजेक्ट प्रदान करने हेतु चर्चा की गयी। ग्राम सभा में सर्वसम्मति से इस प्रस्ताव पर गहन चर्चा की गई और पाया गया कि गॉव नग्गर वार्ड नं0 3 में रहने वाले OTFD's और OTST's परिवारों तथा अन्य परिवारों को .....सुविधा से जोडा जाना अति आवश्यक है। इस रोपवे प्रोजेक्ट के निर्माण से यहां पर रहने वाले OTFD's और OTST's परिवारों को मूलभूत सुविधा प्राप्त होगी। इस गांव में अन्य भूमि न होने के कारण ग्राम सभा सर्व सम्मति से वन भूमि खसरा न0 / टुकडा न0 1 व 2 मोहाल वर्ल्ड मौजा .....में .....हैक्टेयर भूमि को बिजली महादेव रोपवे प्रोजेक्ट निर्माण हेतु अनुमोदित करती है, इस नग्गर वन भूमि पर बनने से यहां पर रहने वाले OTFD's और OTST's परिवारों के अधिकारों का हनन नहीं होता है।

अतः ग्राम/*वार्ड* सभा वार्ड नं0 3 नग्गर तहसील कुल्लू सर्वसम्मति से प्रस्तावित वन भूमि खसरा न0 / टुकडा न0 मोहाल 1 व 2 वर्ल्ड मौजा .....जिसका क्षेत्रफल .....हैक्टेयर, गांव नग्गर तहसील कुल्लू उपरोक्त बिजली महादेव निर्माण हेतु ....विभाग को प्रस्तावित रोपवे निर्माण के उपयोग के लिए अनुमोदित करती है।

Geeta
प्रधान
वन अधिकार कमेटी, नरैणी
ग्राम पंचायत बल्ह–II
विकास खण्ड कुल्लू (हि0प्र0)

Geeta
प्रधान

सचिव

सचिव

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Annexure-VIII

No Objection Certificate (Forest Right Committee)

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वन अधिकार समिति, वार्ड न0 (3)/ग्राम नरैणी तहसील कुल्लू

सर्वसम्मति से पारित करती है कि गांव नरैणी तहसील कुल्लू में प्रस्तावित खिरकी महादेव सेपटे प्रोजेक्ट के निर्माण हेतु वन भूमि खसरा न0/ टुकडा न0 1 व 2 मोहाल जलह

जिसका क्षेत्रफल .....हैक्टेयर, में सेपटे प्रोजेक्ट बनने से इस समिति को कोई आपत्ति नही है।

Geeta
प्रधान
वन अधिकार कमेटी, नरैणी
ग्राम पंचायत बल्ह–II
प्रधान वन अधिकार समिति (प्र0)

सदस्य

1. श्री भाई लद्दमी देवी पत्नी श्री रणजीत — लक्ष्मी ठाकुर
2. — अर्चना देवी पत्नी श्री अनिल — Archana
3. — गंगा दासी पत्नी श्री दुलेराम — गंगा दासी
4. — पूजा देवी पत्नी श्री अशोक कुमार — पूजा
5. — मीना पत्नी श्री जनेश ठाकुर — Meena
6. — संध्या पाल पत्नी श्री योगेश — संध्या पाल
7. — कपिल देव शर्मा पुत्र श्री दलीपु शर्मा — Kapil
8. — सुनील कुमार पुत्र श्री महेन्द्र सिंह — Sunil Kumar

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Annexure-II

[See Rule 8(h)]

TITLE FOR FOREST LAND UNDER OCCUPATION

1.	Name(s) of holder(s) of forest rights (including spouse):	NIL
2.	Name of the father/ mother:	NIL
3.	Name of dependents:	NIL
4.	Address:	NIL
5.	Village/ gram sabha:	NIL
6.	Gram Panchayat:	NIL
7	Tehsil/ Taluka:	NIL
8	District:	NIL
9.	Whether Scheduled Tribe of Other Traditional Forest Dweller:	NIL
10.	Area:	NIL
11.	Description of boundaries by prominent landmarks including khasra/ compartments No.	No individual claim has been received/ produced in Mahal "Pechha".

This title is heritable, but not alienable or transferable under sub-section (4) of Section 4 of the Act.

We, the undersigned hereby, for and on behalf of the Government of Himachal Pradesh affix our signatures to confirm the above forest right.

Divisional Forest Officer
Kullu

Additional District Magistrate-
Cum-Member Secretary, Kullu

Deputy Commissioner
Kullu

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Annexure-III
[See Rule 8(h)]

TITLE TO COMMUNITY FOREST RIGHTS

1.	Name(s) of holder(s) of Community forest rights:	All Permanent Residents of Revenue Estate Muhal "Pechha"
2	Village/ gram sabha.	Muhal "Pechha"
3	Gram Panchayat.	CHANSARI
4	Tehsil/ Taluka	KULLU
5.	District	Kullu
6	Scheduled Tribe/ Other Traditional Forest Dweller:	Scheduled Tribe/ Other Traditional Forest Dweller
7	Nature of community rights.	As no claims have been received at the Muhal level or the Sub-Division level, the community rights as recorded in the Wazib-Ul-Arz and Forest Settlement report are deemed to be settled.
8.	Conditions if any:	
9.	Description of boundaries including customary boundary and/ or by prominent landmarks including Kharsa/ compartment No.	Entire forest land of Muhal "Pechha".

Name(s) of the holder(s) of community forest right:

1 ALL PERMANENT RESIDENTS OF REVENUE ESTATE "Pechha"

We, the undersigned hereby, for and on behalf of the Government of Himachal Pradesh affix our signatures to confirm the forest right as mentioned in the Title to the above mentioned holders of community forest rights.

Divisional Forest Officer
Kullu

Additional District Magistrate-
Cum-Member Secretary, Kullu

Deputy Commissioner
Kullu

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अनुसूचित जनजाति और अन्य परम्परागत वन निवासी (वन अधिकारी की मान्यता) अधिनियम, 2006

कार्यालय ग्राम पंचायत
विकास खण्ड..... का जिला .....हि0प्र0

प्रतिलिपि प्रस्ताव

प्रधान श्री / श्रीमति ..... दिनांक 9-12-2019

गणपूर्ति 12 / 24 प्रस्ताव संख्या 01

मुहाल..... के जंगल / वन क्षेत्र में वन अधिकार हेतु प्रस्ताव ।

मुहाल सभा .....की बैठक आज दिनांक 9-12-2019...को प्रात / दोपहर.....बजे स्थान.....में की गई जिसमें प्राप्त दावों का ब्यौरा निम्न है :–

1) वन अधिकार अधिनियम के अन्तर्गत प्राप्त व्यक्तिगत दावेः–

कम संख्या	कुल प्राप्त दावे	स्वीकृत	अस्वीकृत	टिप्पणी
1	NIL	NIL	NIL	NIL

2) वन अधिकार अधिनियम के अन्तर्गत सामुदायिक दावेः–

कम संख्या	कुल प्राप्त दावे	स्वीकृत	अस्वीकृत	टिप्पणी
1	NIL	NIL	NIL	NIL

3) वन अधिकार अधिनियम के अन्तगर्त सामुदायिक वन संसाधन से सम्बन्धित दावे

कम संख्या	कुल प्राप्त दावे	स्वीकृत	अस्वीकृत	टिप्पणी
1	NIL	NIL	NIL	NIL

ग्राम सभा की इस बैठक में अनुसूचित जनजाति और अन्य परम्परागत वन निवासी वन अधिकारों की मान्यता अधिनियम,2006 के अन्तर्गत वन अधिकारों के दावों के निपटारे पर चर्चा की गई तथा सर्वसम्मति से यह पारित किया गया कि उपरोक्त अधिनियम के अंतर्गत वन अधिकारों के दावों के निपटारे सम्बन्धित सारी प्रकिया पूरी की जा चुकी है।

स्थान .....
दिनांक 9-12-2019.

सचिव / पंच

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अनुसूचित जनजाति और अन्य परम्परागत वन निवासी (वन अधिकारी की मान्यता) अधिनियम, 2006

वन अधिकार समिति
ग्राम सभा.

प्रस्ताव संख्या .....

दिनांक 7-12-2017

वन अधिकार समिति ग्राम सभा (मुहाल)..... तहसील.....
उपण्डल कुल्लू की बैठक आज दिनांक 7-12-17 को.....बजे स्थान .....
..... मे श्री /श्रीमति ..... की अध्यक्षता में की गई जिसमें .....
मुहाल के अनुसूचित जनजाति और अन्य परम्परागत वन निवासियों से अनुसूचित जनजाति और अन्य परम्परागत वन निवासी (वन अधिकारी की मान्यता) अधिनियम, 2006 के अन्तर्गत .....
.....जंगल/वन क्षेत्र से सम्बन्धित वन अधिकारी के दावे हेतु प्रात आवेदनों पर चर्चा की गई, जिसमें निम्नलिखित वन अधिकार हेतु दावे प्रस्तुत हुए :-

1. (फार्म–ए, वन अधिकार अधिनियम के अन्तार्गत व्यक्तिगत दावे)

Nil

2. (फार्म–बी, वन अधिकार अधिनियम के अन्तगर्त सामुदायिक दावे)

Nil

3. (फार्म–सी, वन अधिकार अधिनियम के अन्तगर्त सामुदायिक वन संसाधन से सम्बन्धित दावे)

Nil

ग्राम सभा

जगह सील

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Annexure-II

[See Rule 8(h)]

TITLE FOR FOREST LAND UNDER OCCUPATION

1.	Name(s) of holder(s) of forest rights (including spouse)	NIL
2.	Name of the father/ mother	NIL
3	Name of dependents	NIL
4.	Address	NIL
5	Village/ gram sabha	NIL
6	Gram Panchayat	NIL
7	Tehsil/ Taluka	NIL
8	District	NIL
9	Whether Scheduled Tribe of Other Traditional Forest Dweller	NIL
10	Area	NIL
11	Description of boundaries by prominent landmarks including khasra/ compartments No	No individual claim has been received/ produced in Mural "Talogi"

This title is heritable, but not alienable or transferable under sub section (4) of Section 4 of the Act.

We, the undersigned hereby, for and on behalf of the Government of Himachal Pradesh affix our signatures to confirm the above forest right.

Divisional Forest Officer
Kullu

Additional District Magistrate-
Cum-Member Secretary, Kullu

Deputy Commissioner
Kullu

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Annexure-III

[See Rule 8(h)]

TITLE TO COMMUNITY FOREST RIGHTS

1	Name(s) of holder(s) of Community forest rights	All Permanent Residents of Revenue Estate Muhal "Talogi"
2	Village/ gram sabha	Muhal "Talogi"
3	Gram Panchayat	TALOGI
4	Tehsil/ Taluka	KULLU
5	District	Kullu
6	Scheduled Tribe/ Other Traditional Forest Dweller	Scheduled Tribe/ Other Traditional Forest Dweller
7	Nature of community rights.	As no claims have been received at the Muhal level or the Sub-Division level, the community rights as recorded in the Wazib-Ul-Arz and Forest Settlement report are deemed to be settled
8	Conditions if any	
9	Description of boundaries including customary boundary and/ or by prominent landmarks including Kharsa/ compartment No.	Entire forest land of Muhal "Talogi".

Name(s) of the holder(s) of community forest right:

1. ALL PERMANENT RESIDENTS OF REVENUE ESTATE "Talogi"

We, the undersigned hereby, for and on behalf of the Government of Himachal Pradesh affix our signatures to confirm the forest right as mentioned in the Title to the above mentioned holders of community forest rights.

Divisional Forest Officer
Kullu

Additional District Magistrate-
Cum-Member Secretary, Kullu

Deputy Commissioner
Kullu

अनुसूचित जनजाति और अन्य परम्परागत वन निवासी (वन अधिकारी की मान्यता) अधिनियम, 2006

वन अधिकार समिति
ग्राम सभा........ तलोगी

प्रस्ताव संख्या ......01......

दिनांक 15-12-

वन अधिकार समिति ग्राम सभा (मुहाल)....तलोगी...., तहसील.....कुल्लू..... उपण्डल कुल्लू की बैठक आज दिनांक .... को.........11.........बजे स्थान ....तलोगी .... में श्री /श्रीमति .....लाभू राम........... की अध्यक्षता में की गई जिसमें ....तलोगी....... मुहाल के अनुसूचित जनजाति और अन्य परम्परागत वन निवासियों से अनुसूचित जनजाति और अन्य परम्परागत वन निवासी (वन अधिकारी की मान्यता) अधिनियम, 2006 के अन्तर्गत ....जंगल/वन क्षेत्र से सम्बन्धित वन अधिकारी के दावे हेतु प्रात आवेदनों पर चर्चा की गई, जिसमें निम्नलिखित वन अधिकार हेतु दावे प्रस्तुत हुए :–

1. (फार्म–ए, वन अधिकार अधिनियम के अन्तर्गत व्यक्तिगत दावे)

NIL

2. (फार्म–बी, वन अधिकार अधिनियम के अन्तर्गत सामुदायिक दावे)

NIL

3. (फार्म–सी, वन अधिकार अधिनियम के अन्तर्गत सामुदायिक वन संसाधन से सम्बन्धित दावे)

NIL

लाभू राम
प्रधान
वन कमेटी तलोगी

सचिव
वन कमेटी तलोगी

जाति और अन्य परम्परागत वन निवासी

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कार्यालय ग्राम पचायत तलोगी
विकास खण्ड ..... का जिला ..... हि0प्र0

प्रतिलिपि प्रस्ताव

दिनाक 17-12-2019

प्रधान श्री / श्रीमति ..... तलोगी

प्रस्ताव संख्या 01

गणपूर्ति .....

मुहाल ..... तलोगी ..... के जंगल / वन क्षेत्र में वन अधिकार हेतु प्रस्ताव ।

मुहाल सभा ..... तलोगी ..... की बैठक आज दिनाक ..... को

प्रातः / दोपहर ..... बजे स्थान ..... तलोगी ..... में की गई जिसमें

प्राप्त दावों का व्यौरा निम्न है :-

1) वन अधिकार अधिनियम के अन्तर्गत प्राप्त व्यक्तिगत दावे:-

क्रम संख्या	कुल प्राप्त दावे	स्वीकृत	अस्वीकृत	टिप्पणी
	NIL	NIL	NIL	NIL

2) वन अधिकार अधिनियम के अन्तर्गत सामुदायिक दावे:-

क्रम संख्या	कुल प्राप्त दावे	स्वीकृत	अस्वीकृत	टिप्पणी
	NIL	NIL	NIL	NIL

3) वन अधिकार अधिनियम के अन्तगर्त सामुदायिक वन संसाधन से सम्बन्धित दावे

क्रम संख्या	कुल प्राप्त दावे	स्वीकृत	अस्वीकृत	टिप्पणी
	NIL	NIL	NIL	NIL

ग्राम सभा की इस बैठक में अनुसूचित जनजाति और अन्य परम्परागत वन निवासी वन अधिकारों की मान्यता अधिनियम,2006 के अन्तर्गत वन अधिकारों के दावों के निपटारे पर चर्चा की गई तथा सर्वसम्मति से यह पारित किया गया कि उपरोक्त अधिनियम के अंतर्गत वन अधिकारों के दावों के निपटारे सम्बन्धित सारी प्रकिया पूरी की जा चुकी है।

स्थान तलोगी
दिनाक .....

ग्राम सभा तलोगी

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SDM-KLU-SDA/FRA/19/2019-vol-I - 211

(163)

OFFICE OF THE SUB DIVISIONAL OFFICER©, Kullu,
DISTT. KULLU, HIMACHAL PRADESH.

Dated:- 6-2-2020

To

The Chairman DLC-cum
Deputy Commissioner, Kullu.

Subject: - Regarding SDLC meeting.

Ma'am,

On the above noted subject, it is submitted that meeting of SDLC was held on 03.02.2020 under the chairmanship of undersigned. Total 146 matters of FRA were submitted before the SDLC and on perusal of it was found that all matters are in order. Therefore, 146 matters of FRA are being submitted herewith in original for taking further necessary action please.

Yours faithfully,

Chairman SDLC-cum
Divisional Officer©,
Kullu.

06/02/2020.

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OFFICE OF THE SUB DIVISIONAL OFFICER (CIVIL) KULLU, DISTRICT KULLU, H.P.

Proceeding of the meeting of the Sub Divisional Level Committee under Schedule Tribe &Other Traditional Forest Dwellers (Recognition of Rights) Act(FRA), 2006.

A meeting of the Sub Divisional Level Committee Kullu constituted under FRA, 2006 was held under the Chairmanship of Sh. Anurag Chander Sharma, IAS, Sub Divisional Officer© Kullu on dated 03.02.2020 at 11.00 AM in which application(s) of Individual Rights, Community Rights and Community Forest Resource Right have been received from 146 FRCs through Block Development Officer, Naggar. Each case was duly processed and recommended by the concerned Muhal Sabha and discussed to consider the same for recommendation to the District Level Committee.

After scrutiny of the documents and detailed discussions, the claim of the following applicants were found in order and recommended for admission to the District Level Committee.

Sr. No.	Name of Panchayat	Name of FRC	Quorum	No. of claims received from FRC
	Benchi			
1.		Raison	218/413	Nil
2.		Benchi	548/1088	-do-
	Seugi			
3.		Trambli	80/143	-do-
4.		Seugi	276/550	-do-
5.		Talaiti	170/300	-do-
	Kais			
6.		Malahar	63/120	-do-
7.		Kais	143/280	-do-
8.		Seubagh	186/360	-do-
	Gahar			
9.		Gahar	420/820	-do-
10.		Seubagh	148/290	-do-
11.		Fadmeha	94/180	-do-
	Malana			
12.		Malana	491/923	-do-
	Devgarh			

13.		Trisdi	105/205	-do-
14.		Himbri	98/182	-do-
15.		Grahan	54/93	-do-
16.		Dohlu Nalla	205/404	-do-
17.		Parvi	60/117	-do-
18.		Galchhet	93/100	-do-
19.		Karal	207/210	-do-
	Shirad			
20.		Shirad	124/218	-do-
21.		Shirad-I	125/240	-do-
22.		Shirad-II	94/180	-do-
23.		Shilihar	76/180	-do-
24.		Jalohra	77/150	-do-
25.		Kamahrda	18/35	-do-
26.		Mathishil	63/110	-do-
27.		Kufri	15/18	-do-
28.		Janehda	38/70	-do-
	Raison			
29.		Manjhlidhar	23/40	-do-
30.		Chhatenseri	109/215	-do-
31.		Kahudhar	29/56	-do-
32.		Khargan	76/136	-do-
33.		Lohdi	72/140	-do-
34.		Pangan	150/296	-do-
35.		Raison	313/622	-do-
36.		Sajooni	56/109	-do-
	Hallan-I			
37.		Sarsai	300/598	-do-
38.		Chhaki	202/388	-do-
39.		Ranghdi	251500	-do-
40.		Hallan-I	193/303	-do-
41.		Raaman	192/380	-do-
42.		Kumahrti	157/300	-do-
	Mandalgarh			
43.		Shim	134/268	-do-
44.		Salingcha	75/145	-do-
45.		Khadihar	125/236	-do-
46.		Sheldi	90/176	-do-
	Jana			
47.		Dhama	31/36	-do-
48.		Jana	104/200	-do-
49.		Barnot	37/55	-do-
50.		Deoghra-Muhal	30/80	-do-
51.		Kalmi	15/20	-do-
52.		Gohru	16/28	-do-
53.		Mehrabagh	10/12	-do-
	Naggar			
54.		Pulag	56/63	-do-

		Chachogi	84/134	-do-	
		Mashada	37/48	-do-	
		Rumsu	166/250	-do-	
		marhi	103/199	-do-	
		Naggar	225/300	-do-	
		Ghadopa	41/80	-do-	
	Karadsu				
		Tandla	87/173	-do-	
		Sour	120/224	-do-	
		Kotadhar	86/130	-do-	
		Soyal	217/433	-do-	
		Raugi	241/470	-do-	
		Kholtu	63/126	-do-	
		Katei	36/65	-do-	
		Chanjala	30/42	-do	
		Kais	168/334	-do-	
		Bhalogi	63/126	-do-	
		Karadsu	186/360	-do-	
	Archhandi				
		Archhandi-I	150/275	-do-	
		Archhandi-II	81/155	-do-	
		Baga-Mahili	79/154	-do-	
		Mahili	156/310	-do-	
		Parsha	111/213	-do-	
		Shadgran	110/213	-do-	
		Jhunkhradhama	36/68	-do-	
		Lady-Kanon-1	110/213	-do-	
		Sharni	43/84	-do-	
		Dhama	22/38	-do-	
		Sharangran	135/225	-do-	
		Fetavan	135/225	-do-	
		Lady Kanon-2	135/225	-do-	
	Hurang				
		Bhulng Jhakdi	131/259	-do-	
		Dhara	122/242	-do-	
		Dhalogi	26/51	-do-	
		Runga –I	66/128	-do-	
		Runga-II	65/128	-do-	
		Reserved Forest Kalon	32/32	-do-.	
	Chansari				
		Chansari	435/865	-do-	
		Pechha	124/247	-do-	
	Kais				
		NainaSeri	47/85	-do-	
	Neuli				
		Neuli	122/230	-do-	
		Neuli-Pande	72/135	-do-	

96.		Devdhar	177/350	-do-	
97.		Bradha	63/120	-do-	
	Fojjal				
98.		Fojjal	237/474	-do-	
	Pichhlihar				
99.		Jolang	19/27	Nil	
100.		Damcheen	51/54	-do-	
101.		kathi	31/35	-do-	
102.		Jigling	20/38	Nil	
	Talogi				
103.		Trambli	222/345	Nil	
104.		Talogi	282/535	-do-	
	Puid				
105.		Thegara Shoran	40/78	-do-	
106.		Thasibra	69/128	-do-	
107.		Kinja	161/308	-do	
108.		Puid	150/290	-do	
109.		Haleni	70/135	-do-	
110.		Banontar	78/150	-do-	
111.		Gharakad	127/240	-do-	
112.		Chohki-Dobhi	94/184	-do-	
	Neuli				
113.		Grahan	80/150	-do-	
114.		Reserved Forest Bodsu	45/85	-do-	
115.		Sheela	41/72	-do-	
116.		Therman	97/185	-do-	
117.		Chanaugi	114/220	-do-	
118.		Lugar Bhatti	53/100	-do-	
119.		Jamuthaach	28/52	-do-	
120.		Dehunidhar	145/280	-do-	
121.		Mahunt Rashi	51/95	-do-	
122.		Kot	97/190	-do-	
123.		Grahand Pende	45/85	-do-	
	Nathan				
124.		Thana Seri	45/50	-do-	
125.		Laran Kelo	204/360	-do-	
126.		Kaith Behar	72/80	-do-	
127.		Kharol	50/50	-do-	
128.		Ganesh nagar	180/340	-do-	
129.		Nashala	160/309	-do-	
130.		Nathan	140/268	-do-	
131.		Chheti	72/140	-do	
132.		Mahili	40/45	-do-	
133.		Shenshar	84/150	-do-	
134.		Nathanuseri	87/150	-do-	
135.		Paljot	71/120	-do	
136.		Thaach	155/268	-do-	

		Dalaran	125/240	-do-	
137.		Bihali	60/110	-do-	
138.		Hirni	119/220	-do-	
139.		Tilashani	20/38	-do-	
140.		Guddaur	65/120	-do-	
141.	**Mandalgarh**				
		Mandalgarh	66/120	-do-	
142.		Mahiliseri	88/175	-do	
143.		Dobhi	375/730	-do-	
144.	**Katrain**				
		Jatehad	665/1311	-do-	
145.		Katrain	735/1463	-do-	
146.					

SDO©-cum Chairman
SDLC, Kullu Distt.Kullu

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OFFICE OF THE SUB DIVISIONAL OFFICER (CIVIL) KULLU, DISTRICT KULLU, (H.P.)

Proceeding of the meeting of the Sub Divisional Level Committee under Schedule Tribe &Other Traditional Forest Dwellers (Recognition of Rights) Act (FRA), 2006.

A special meeting of the Sub Divisional Level Committee Kullu constituted under FRA, 2006 was held under the Chairmanship of Sh. Vikas Shukla, HAS, Sub Divisional Officer © Kullu on dated 24.05.2023 at 11.00 AM in respect of Bijlimahadev Rope Way Project. That patches of Forest land comprising under five Muhals, namely Pirdi, Naraini, Talogi, Pechha and Pechha Kandi were involved for abovesaid project. That, the proposed forest area for diversion as enumerated by user agency, i.e. National Highway Logistic Management Limited is herein contained:-

Sr.No.	Name of Muhals/Panchayat	Khasra No.	Present Status	Area in Hectare
1.	Pechha	201/1,201/2,194/1,484/203/1, 484/203/2,484/203/3,231/1,231/2,240/1,423/1,423/2,478/1,478/2,480/1,480/2	Community/Individual right settled.	0.7512
2.	Talogi	Tukda No.1,2,3,4,5,6,7	Community/Individual right settled.	1.1135
3.	Pechha Kandi	1	uninhabited /unpopulated reserved forest land	0.7681
4.	GP Balh-II Pirdi/Naraini	Tukda No. 2	NOC Issued by concerned Muhal Sabha/FRC(s)	0.4774

Sub Divisional Officer (C),
Kullu

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That it is matter of fact that Community/ Individual claims involving Forest Rights/claims etc. pertaining to Muhals(s) Talogi and Pechha have already stood settled and relevant documents depicting claim settlement have already been sent before your goodsefl. It is pertinent to mention here that besides aforesaid Muhal Sabhas, there involved one Revenue Muhal named Pechha Kandi through which the proposed Ropeway scheduled to make way across. That, as per the report of Patwari Halqua of dated 20.05.2023 this uninhabited and unpopulated patch categorized as Demarcated Protected Forest (DPF) situated in muhal Reserve Forest Pechha Kandi, Patwar Circle Kharahal, Tehsil Kullu, comprised in khasra No. 1 (Min), total measuring 104-77-74 Hect. That, the character of this very patch of Reserve Forest makes it not possible to constitute FRC/Gram Sabha & other paraphernalities as mandated under the FRA, 2006 for its being uninhabited . Further, as stated vide report ibid, there are no individual or community rights pertaining to aforesaid muhal find mention or exists within Wazib-Ul-Arz (Village Administration Paper) of the area and that no such claims pertaining to aforesaid Muhal has ever been received by any relevant authority under the FRA Act, 2006.

Today, this SDLC assembled to discuss FRC and Gram Panchayat's No Objection Certificate regarding establishment of base station for Bijli Mahadev Ropeway project which falls within the territorial jurisdiction of Muhal (s) Pridi and Naraini. That, both the Muhal Sabha's above & their parent Gram Sabha, namely Balh-II have provided their assent for laying of base station for the Project at designated place vide resolution No.1 of dated 12.05.2023

Sub Divisional Officer (C),
Kullu

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After scrutiny of the documents and detail discussion, above proposal for diversion of entire forest land to the tune of 3.1102 hectare comprised under 05 number of Muhals as aforesaid is recommended by the SDLC for such diversion as required for the aforesaid project and same is being recommended for the further assent of the District Level Committee.

Yours faithfully,

(Vikas Shukla)
Chairman SDLC-cum
SubDivisional Officer©,
Kullu.
Dated 25-05-2023

Endst.No94-99/SDA
Copy forwarded to:

1. The Deputy Commissioner Kullu with all aforesaid document in original for favour of further necessary action please.
2. All members of committee for information.

(Vikas Shukla)
Chairman SDLC-cum
SubDivisional Officer©,
Kullu.

CIN. U43299RJ2024PTC092668

BMSWPL

BIJLI MAHADEV SKY WAYS PRIVATE LIMITED

Registered Office : 95, Hiran Magri, Sector-11, Udaipur – 313001, Rajasthan
T. : 0294-2482238, 2482193 ✉ bijli.mahadev@raviinfra.com

Ref: BMSWPL/Ropeway/Bijli Mahadev/Tech/2024-25/83 Date: 20.12.2024

To,
The Project Manager,
Site Office, Kullu,
NHLML

Sub: Development, Operation and Maintenance of Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in District Kullu in the State of Himachal Pradesh on Hybrid Annuity Mode: **Stoppage of Geo - technical investigation of balance three tower location and Hill Station work by locals.**

Ref: **Concession Agreement dt. 15.05.2024.**

Dear Sir/Madam,

1. A team was mobilized today for carrying out geotechnical investigation of balance three towers and the hill station. Shri Virender Singh Jambal, Kardaar of Bijli Mahadev temple committee along with a few locals has stopped the party from carrying out preparatory work. They have objection regarding location of Hill Station of Bijli Mahadev and carrying any work during temple closure period i.e from**15 December 2024 to 15 March 2025**.

2. You are requested to approach DC Kullu to resolve the issue.

Thanking you and assuring you our best services and cooperation at all times.
Yours faithfully,

For **Bijli Mahadev Sky Ways Pvt. Ltd.**

BIJLI MAHADEV SKY WAYS PRIVATE LIMITED

(Authorized Signatory)

CC: (i) Zonal Officer, Northern Region, NHLML, Panchkula.
(ii) AVP (Ropeways), NHLML, New Delhi.

CIN. U43299RJ2021PTC092668

BMSWPL

BIJLI MAHADEV SKY WAYS PRIVATE LIMITED

Registered Office : 95, Hiran Magri, Sector-11, Udaipur – 313001, Rajasthan

T. : 0294-2482238, 2482193 bijli.mahadev@raviinfra.com

Ref: BMSWPL/Ropeway/Bijli Mahadev/Tech/2024-25/86 Date: 23.12.2024

To,
The Project Manager,
Site Office, Kullu,
NHLML

Sub: Development, Operation and Maintenance of Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in District Kullu in the State of Himachal Pradesh on Hybrid Annuity Mode: **Stoppage of Geo - technical investigation of balance three tower location and Hill Station work again by locals on 21/12/2024.**

Ref: **1. BMSWPL/Ropeway/Bijli Mahadev/Tech/2024-25/85 dt. 23.12.2024**
2. BMSWPL/Ropeway/Bijli Mahadev/Tech/2024-25/83 dt 20/12/2024.
3. Bijli Mahadev Mandir Committee petition for stoppage of soil testing (Copy enclosed)
4. Police Station Sadar Kullu General Dairy No 025(Copy enclosed).

Dear Sir/Madam,

1. With reference to above subject and in continuation to our letter under references, the issue of resistance of locals for carrying out geo technical investigation work at balance locations are still persisted at site despite of various attempts by team of our vendor. Due to above issue, all the manpower and machinery engaged in this work stood idle at site since last 3 days.

2. In view of the above unpredictable situation, the geo technical investigation team is being demobilized with immediate effect.

3. Submitted for your information and records, please.

Thanking you and assuring you our best services and cooperation at all times.

Yours faithfully,

For **Bijli Mahadev Sky Ways Pvt. Ltd.**

(Authorized Signatory)

CC: (i) Zonal Officer, Northern Region, NHLML, Panchkula.
(ii) AVP (Ropeways), NHLML, New Delhi.

CIN. U43299RJ2024PTC092668

BMSWPL

BIJLI MAHADEV SKY WAYS PRIVATE LIMITED

Registered Office : 95, Hiran Magri, Sector-11, Udaipur – 313001, Rajasthan

T. : 0294-2482238, 2482193 ✉ bijli.mahadev@raviinfra.com

Ref: BMSWPL/Ropeway/Bijli Mahadev/Tech/2024-25/85 Date: 23.12.2024

To,
The Project Manager,
Site Office, Kullu,
NHLML

Sub: Development, Operation and Maintenance of Ropeway from Nature Park (Mohal) to Bijli Mahadev Temple in District Kullu in the State of Himachal Pradesh on Hybrid Annuity Mode: **Stoppage of Geo - technical investigation of balance three tower location and Hill Station work again by locals on 21/12/2024.**

Ref: **1. BMSWPL/Ropeway/Bijli Mahadev/Tech/2024-25/83 dt 20/12/2024.**
2. Bijli Mahadev Mandir Committee petition for stoppage of soil testing (Copy enclosed)
3. Police Station Sadar Kullu General Dairy No 025(Copy enclosed).

Dear Sir/Madam,

1. A geo technical investigation team was again mobilized on **22/12/2024** along with two police escorts for carrying out geotechnical investigation of balance three towers and the hill station after taking into confidence Shri Virender Singh Jambal, Kardaar of Bijli Mahadev temple and Village Pecha Pradhan. This time **Shri Manish Sharma Bijli Mahadev mandir committee Secretary** along with a few locals has stopped the party from carrying out the preparatory work for geotechnical investigation. Please refer above mentioned Ref. 1, **Bijli Mahadev Mandir Committee petition** and Ref. 2, Police Station Sadar Kullu General Dairy No 025 (copy enclosed).

2. The stoppage of work by locals is adversely affecting design finalization work of the ropeway project. You are requested to approach DC Kullu to resolve the issue at the earliest.

Thanking you and assuring you our best services and cooperation at all times.

Yours faithfully,

For **Bijli Mahadev Sky Ways Pvt. Ltd.**

BIJLI MAHADEV SKY WAYS PRIVATE LIMITED

(Authorized Signatory)

Enclosures: As mentioned above

CC: (i) Zonal Officer, Northern Region, NHLML, Panchkula.
(ii) AVP (Ropeways), NHLML, New Delhi.

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N.H.A.I (NHLM) प्रबन्धन
बिजली महादेव रोपवे कुल्लु
हि॰ प्रदेश (175126)

विषय: कपाट बंद होने पर मिट्टी परीक्षण न होने
देव आज्ञा हेतु प्रार्थना पत्र।

प्रार्थी: बिजली महादेव मंदिर कमेटी एवं ग्रामवासी

महोदय

आपसे विनम्र प्रार्थना है कि 15 ~~March~~ Dec 2024 to 15 March 2025 तक मंदिर कपाट बंद होने से किसी भी प्रकार की कोई भी गतिविधि मंदिर परिसर व आसपास के क्षेत्र मे नही होती है, देवादेश के अनुसार प्रतिवर्ष ऐसा ही रहेगा। अतः आपसे अनुरोध है कि 15 मार्च तक आप कोई भी गतिविधि न करें।

(1) मनीष शर्मा (सचिव) Manish
(2) फतेह सिंह राणा (कोषाध्यक्ष) [signature]
(3) ~~[illegible]~~ विजय कुमार Vijay
(4) रविन्द्र ठाकुर [signature]
(5) संजु Sanjay
(6) कमलेश ठाकुर Kamlesh
7 डिम्पी ठाकुर Dimpi
8 चमन लाल चमन
9 मोहन ठाकुर Mohan
10 करतार सिंह गुलेरिया करतार सिंह
11 मेहर चंद (विद्दु) Mehar Chand
12 बालक नाथ Balak Nath

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General Diary Details
(रोजनामचा का विवरण)

State (राज्य): HIMACHAL PRADESH

District (जिला): KULLU

P.S. (थाना): SADAR KULLU

a) **G.D. No. (रोजनामचा सं.):**025

b) **G.D. Date (रोजनामचा दिनांक):** 21/12/2024 12:14:43 PM

c) **G.D. Type (रोजनामचा प्रकार):** Departure

d) **Name of Writer and Rank (लेखक का नाम और रैंक):** PC/ Puja Verma

e) **Entry (for Officer) प्रविष्टि (अधिकारी के लिए):** INSP./Nirmal Singh /NA/

f) **GD Subject (रोजनामचा विषय):** रवानगी मु0 आ0 रविन्द्र न0 75 मय गृ0र0 जोगिन्द्र न0 7/513

g) **G.D. Brief (रोजनामचा संक्षिप्त):**

इस समय दर्ज है कि SDM साहब कुल्लू ने बजरिया दूरभाष आदेश किये कि NHAI की टीम बिजली महादेव मिट्टी की जाचं के लिये के आई है इमदाद हेतू टीम के साथ दो पुलिस कर्मचारियों को भेजें। जो आमदा सूचना पर मु0 आ0 रविन्द्र न0 75 को मय गृ0र0 जोगिन्द्र न0 7/5-13 के रवाना किया जाकर हिदायत मुनासिब करी गई।

Signature (हस्ताक्षर):

Name (नाम): Nirmal Singh
Rank (पद): INSP.
No. (सं.): NA

BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI

ORIGINAL APPLICATION NO.523/2025

IN THE MATTER OF:

Bijli Mahadev Mandir Committee ...Applicant

Versus

Union of India & Ors. ...Respondents

KNOW ALL to whom these presents shall come that I, Reena Panwar, Respondent No.2 / National Highways Logistics Management Limited (NHLML) do hereby appoint

SINGHANIA & PARTNERS LLP.
ADVOCATES & SOLICITORS
P-24, Green Park Extension, New Delhi - 110016
Phone : 011-47471414, Fax : 011-47471415
Email : madhu@singhania.in

Hereinafter called the Advocates to be our Advocates in the above-noted case and authorize them:

To act, appear and plead in the above-noted case in this Court or in any other Court in which the same may be tried or heard and also in the appellate Courts.

To sign, file and represent pleadings, appeals, cross objections or petitions of execution review, revision, restoration, withdrawal, compromise or other petitions, replies, objections or affidavits or other documents as may be deemed necessary or proper for the prosecution of the said case in all its stages. To file and take back documents.

To withdraw or compromise the said case or submit of arbitration any differences or disputes that may arise touching or in any manner relating to the said cause. To take out execution proceedings.

To deposit, draw receive moneys and grant receipt therefore and to do all other acts and things which may be necessary to be done for the progress and in the course of the prosecution of the said cause.

To appoint and instruct any other legal Practitioner authorizing him to exercise the powers and authority hereby conferred upon the Advocates whenever they may think fit to do so.

AND We undertake that We or our duty authorized agent would appear in the Court on all hearings.

AND We, the undersigned do hereby agree to ratify and confirm all acts done by the Advocates or their substitute in the matter as our own acts, as if done by us to all intents and purposes.

AND We, the undersigned do hereby agree that in the event of the whole or any part of the fee agreed by us to be paid to the Advocates remaining unpaid they shall be entitled to withdraw from the prosecution of the said cause until the same is paid up. If any costs are allowed for an adjournment, the Advocates would be entitled to the same.

IN WITNESS WHEREOF, We do hereunto set our hand to these presents the contents of which have been understood by me/us on this 8th day of November, 2025.

ADVOCATES

CLIENT

PROJECT DIRECTOR
PROJECT OFFICE, KULLU
NHLML

PROOF OF SERVICE

Rajesh Kumar

From: Rajesh Kumar
Sent: 08 November 2025 21:34
To: swarmishra95@gmail.com
Cc: secy-moef@nic.in; info@nhidcl.com; ajayaggarwal.cpcb@nic.in; cs-hp@nic.in; pccf-hp@nic.in; hspcbms@gmail.com
Subject: RE: Advance service of replies in OA 481/2025, Nachiketa Sharma vs. Union of India and Ors, OA 523/2025, Bijli Mahadev Mandir Committee vs. Union of India and Ors., before the Hon'ble National Green Tribunal.

Dear Sir,

Please find attached the following Replies to the OA and IAs, being filed on behalf of Respondent No.2/NHLML, in the subject matter. The same can be accessed from the Dropbox link given below-

https://www.dropbox.com/scl/fo/feb42hc8x43u1lceufm9i/AEtsXgPODGaMhyFbUOQvJg0?rlkey=8mmm47gqvnx8yaqa6mizc85lr&dl=0

OA 481/2025, Nachiketa Sharma

- Reply to OA
- Reply to IA No.623/2025
- Reply to IA No.653/2025

OA 523/2025, Bijli Mahadev

- Reply to OA
- Reply to IA No.676/2025

Kindly accept the same as advance service.

Best Regards,

Rajesh | Executive Assistant

SINGHANIA & PARTNERS LLP
SOLICITORS AND ADVOCATES

T: +91 (11) 4747 1414 | D: +91 (11) 4747 1426

P – 24 Green Park Ext., New Delhi 110 016 INDIA

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