VALLEY WORLD
ENTERTAINMENTS PVT. LTD
where memories are made...

Dt. 16-02-2017

The Director (IA-III),
Ministry of Environment, Forests & Climate Change,
Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi-110003.

Ref. :- File No. 10-92/2016-IA-III & & Minutes of 13th meeting of EAC (Infra-2) held on 23-01-2016 at Agenda Item No. 13.2.11

Sub.:- Proposed Ropeway with Building Constructions (Amusement Park) At Village Konnathadi, Munnar, Taluk Idukki (Previously Udumbanchola), District Idduki, Kerala.

Respected Sir,

The above-said project was appraised in the 13th EAC meeting (Infra-II) held on 23-01-2016 (agenda item no. 13.2.5). The minutes of 13th EAC meeting are attached at Annexure-I.

Our project site is located in *Konnathady* Village which is in the list of ESA villages at Sr. No. 1770 as notified by MoEF&CC dated 17.04.2013, which prohibits certain activities to carry out. (The Appendix 3: List of Villages in ESA of the Western Ghats of Report submitted by High Level Working Group to the Ministry on the 15th April, 2013, is attached at Annexure-II.)

With reference to the Minutes of meeting & as suggested by the committee, we have again reviewed our proposal as per the ESZ notification on Western Ghats. The notification S.O.2435(E), GoI, dated 4th September, 2015, Point No. 3 states the projects and activities to be prohibited or regulated in the Eco-Sensitive Area. Under its Clause No. (d), all new and expansion projects of building and construction with built up area of 20,000 square metres and above and all new and expansion townships and area development projects with an area of 50 hectares and above or with built up area of 1,50,000 square metres and above shall be prohibited. (Notification is attached at Annexure-III)

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In lieu of above-said notification we have revised our proposal for project Proposed Ropeway with Building Constructions (amusement park) with built-up area revised to less than 20,000 sqm. The revised application for grant of Terms of Reference is attached herewith at Annexure-IV.

As per the minutes of meeting it was decided to obtain the comments of ESZ Division of the Ministry before finalizing the TOR for the proposed project. Thus, we request you to kindly forward the revised application (attached as Annexure-IV) to ESZ Division and if required raise the EDS for online uploading of revised Environment application for grant of Terms of Reference.

Thanking you,

Yours respectfully

,

For M/s Valley World Entertainments Pvt. Ltd.

Jenson Paul
(Director)

VALLEY WORLD ENTERTAINMENTS PVT. LTD.
37/2746, VAKKILS BUILDING, KALOOR
COCHIN-17

ANNEXURE-I

Minutes of the 13th meeting of Expert Appraisal Committee (Infra-2) for Projects related to All ship breaking yard including ship breaking unit, Airport, Common Hazardous Waste Treatment, Storage and Disposal Facilities, Ports and Harbours, Aerial Ropeways, CETPs, Common Municipal Solid Waste Management Facility, Building/Construction Project, Townships and Area Development projects held on 23-25 January, 2017.

Monday, 23rd January, 2017

13.1. Confirmation of Minutes of 12thEAC Meeting for Infra-2 held on 26-28 December, 2016.

Minutes of 12thEAC Meeting for Infra-2 held on 26-28 December, 2016 were confirmed

13.2. Consideration of Proposals

13.2.1.	**Deepening the Harbour Basin and Approach Channel to handle 14.5m draught vessels and Modification of Port Entrance at V.O. Chidambaranar Port Tuticorin, Tamilnadu by M/s V.O. Chidambaranar Port - TOR - [IA/TN/MIS/60857/2016][F.No.10-89/2016-IA-III]** The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to Ports and Harbour and dredging are listed at 7(e) of schedule of EIA Notification, 2006 covered under category 'A' and appraised at central level. M/s V.O. Chidambaranar Port has proposed for deepening the Harbour Basin and Approach Channel to handle 14.5 m draught vessels and Modification of Port Entrance at V.O. Chidambaranar Port Tuticorin, Tamilnadu. The project is located at Latitude: 8° 47' 30" N and Longitude: 78° 12' 15" E.The proposed site is located within the existing Harbour basin. Sufficient area within the existing harbour basin surrounded by breakwaters is available for these proposed developments.Presently, V.O.Chidambaranar Port is having capacity to handle vessels upto (-)12.80 m draught. The (-) 12.80 m draught is available in front of Coal Jetty I & II, Oil Jetty, Berth 8, Berth 9, North Cargo Berths (NCB) I & II. In view of improving the Port capacity, Port decided to increase the vessel draught from existing 12.80m to 14.50m to handle fully loaded Panamax vessels for inner harbour. The Port is also planning to modify (increase its width) the Port entrance to cater safe entry for the larger vessels. The proposed dredging covering the inner harbour basin and approach channel for a length of 10.80 km from Port Entrance to cater the fully loaded Panamax vessels having draught up to (-)14.5m. Total volume to be dredged is works out to 14.5 Million cu.m.(approx). The reclamation area for this dredging is proposed to be on the south of the existing south breakwater thus making an approach for providing road connectivity, rail connectivity and other utilities to the outer harbour in future. The approximate area to be reclaimed is 131 hectare.The proposed project site is one km away from the sea shore inside the existing harbour basin surrounded by breakwaters. Hence, no land area required for the proposed project.Cost of the project is Rs.3,178.00 Crores. It is reported that eco- sensitive area i.e. Gulf of Mannar Marine National park is located at a distance a distance of 8 km.There is a fishing harbour about 6 kms away from the project site. PP informed that MoEF&CC vide letter dated 1.10.2014 has issued TOR to them for

	Terms of Reference as specified by the Ministry as Standard ToR in April, 2015 for the said project/activity and the following TOR in addition to *Standard ToR*for preparation of EIA-EMP report: i. Importance and benefits of the project. ii. A sensitivity analysis of the site shall be carried out as per the MoEF criteria and form part of the EIA report. iii. Details of various waste management units with capacities for the proposed project. Details of utilities indicating size and capacity to be provided. iv. List of waste to be handled and their source along with mode of transportation. v. The project proponents should consult the Municipal solid waste Management manual of the Ministry of Urban Development, Government of India and draw up project plans accordingly. vi. Methodology for remediating the project site, which is presently being used for open dumping of garbage. vii. Layout maps of proposed solid waste management facilities indicating storage area, plant area, greenbelt area, utilities etc. viii. Details of air emission, effluents generation, solid waste generation and their management. ix. Requirement of water, power, with source of supply, status of approval, water balance diagram, man-power requirement (regular and contract) x. Process description along with major equipments and machineries, process flow sheet (quantative) from waste material to disposal to be provided xi. Hazard identification and details of proposed safety systems. xii. Details of Drainage of the project upto 5km radius of study area. If the site is within 1 km radius of any major river, peak and lean season river discharge as well as flood occurrence frequency based on peak rainfall data of the past 30 years. Details of Flood Level of the project site and maximum Flood Level of the river shall also be provided. xiii. Details of effluent treatment and recycling process. xiv. Action plan for measures to be taken for excessive leachate generation during monsoon period. xv. Detailed Environmental Monitoring Plan. xvi. Report on health and hygiene to be maintained by the sanitation worker at the work place. xvii. Public hearing to be conducted and issues raised and commitments made by the project proponent on the same should be included in EIA/EMP Report in the form of tabular chart with financial budget for complying with the commitments made. xviii. Any litigation pending against the project and/or any direction/order passed by any Court of Law against the project, if so, details thereof shall also be included. Has the unit received any notice under the Section 5 of Environment (Protection) Act, 1986 or relevant Sections of Air and Water Acts? If so, details thereof and compliance/ATR to the notice(s) and present status of the case. xix. A tabular chart with index for point wise compliance of above TORs. It was recommended that **'**TOR**'** along with Public Hearing prescribed by the Expert Appraisal Committee (Infrastructure- 2) should be considered for preparation of EIA / EMP report for the above mentioned project in addition to all the relevant information as per the 'Generic Structure of EIA' given in Appendix III and IIIA in the EIA Notification, 2006. The draft EIA/EMP report shall be submitted to the State Pollution Control Board for public hearing. The issues emerged and response to the issues shall be incorporated in the EIA report.
13.2.5.	**Proposed Ropeway with Building Constructions (Amusement Park With Mini Hill Station Township) At Munnar, Idduki District, Kerala by M/s Valley World Entertainments Private Ltd - TOR - [IA/KL/MIS/61394/2016] [F.No.10-92/2016-IA-III]**

During the meeting, the project proponent made a presentation and provided the following information to the Committee:-

(i) The project involves ropeway with building constructions (Amusement Park with Mini Hill Station Township) at Munnar, Idduki District, Kerala promoted by M/s Valley World Entertainments Private Ltd.

(ii) For proposed ropeway, the elevation of LTP is 874.33 m & UTP is 920.15 m above MSL and the project lies in Konnathadi village which falls in Eco-sensitive area of the Western Ghats thus it is Category A project. The Built-up area of the project will be 149600.00 sqm. Details of the Terminals are as follows:

Station	Latitude	Longitude
Terminal T1 (LTP)	77° 4'3.47"E	9°54'45.08"N
Terminal T2 (UTP)	77° 2'56.99"E	9°56'27.08"N

(iii) Land use of the site is as under:-

Particulars	Area in Sqm	Percentage
Ground Coverage	37424	10.97
Green Area	153972	45.12
Amusement park & Water show, Giant Wheel, Ropeway	95860	28.09
Surface Parking Area	18000	5.27
Internal Roads	36000	10.55
Total	341256	100.00

Area required (for Ropeway)	Total Area (In Sq. m.)
Lower Terminal Station-A	1000 sqm
Upper Terminal Station -B	600 sqm
Ropeway Length-C	3602 mtrs
Right of Way-D	10 m
Corridor of the alignment - E	36020 sqm
Total (A+B+E)	37620 sqm

(iv) The area required for the construction of the proposed Ropeway with Building Constructions (amusement park with mini hill station township) would be about 341256 sqm, out of which 37620 sqm shall be utilized for construction of Ropeway terminals and corridor. For proposed ropeway, the elevation of LTP is 874.33 m & UTP is 920.15 m above MSL.

(v) **Justification for selection of the site**: The project is to set up a world class Tourism infrastructure at Munnar, Kerala, India. The project proponent will develop Ropeway with Building Constructions (amusement park with mini hill station township). Visitors can also enjoy a panoramic view of Kerala from the observation deck “The Skywalk”, standing at about 3000 ft above sea level. From here, visitors can breathe in the cool fresh air enjoy the magnificent view. The project comprises of retractable roof at the lower station and elevated walkway. With a view to provide a sky-diving area for the tourists, this will be achieved by preserving the ecosystem, the natural surroundings, and the flora and fauna.With a view to provide a skydiving area for the tourist & residents that will visit the township and amusement park, the M/s Valley World Entertainments Private Ltd. has identified sites & thus required the ropeway facility for reaching at skydiving area. Three alternative routes were assessed. Out of the three

alternative routes the Alternative-II was found appropriate. The three-alternative alignment has been discussed below:

Alignment 1:

- There will be cutting of trees at UTP area & along the corridor also.
- No parking space will be available

Alignment 2 (Selected Alignment):

This alignment starts with its LTP near township area. The corridor traverses over a thin vegetation with very few trees upon land. The alignment finally ends its Upper Terminal Point at skydiving area.

- The alignment is clear of any urban habitat in its corridor
- Parking of township will carter the visitors of the ropeway, no extra parking land is required.
- Accessibility from township to lower LTP is good.

Alignment 3:

- Accessibility from township area is poor.
- Enough parking space is not available at LTP area.
- There will be major cutting of trees at UTP area

(vi) The Built-up area of the project will be 149600.00 sqm. The project is to set up a world class Tourism infrastructure at Munnar, Kerala, India. The project proponent will develop Ropeway with Building Constructions (amusement park with mini hill station township). Visitors can also enjoy a panoramic view of Kerala from the observation deck "The Skywalk", standing at about 3000 ft above sea level. From here, visitors can breathe in the cool fresh air enjoy the magnificent view. The project comprises of retractable roof at the lower station and elevated walkway. With a view to provide a sky-diving area for the tourists, this will be achieved by preserving the ecosystem, the natural surroundings, and the flora and fauna.With a view to provide a skydiving area for the tourist & residents that will visit the township and amusement park, the M/s Valley World Entertainments Private Ltd. has identified sites & thus required the ropeway facility for reaching at skydiving area.

(vii) For proposed ropeway, the elevation of LTP is 874.33 m & UTP is 920.15 m above MSL. The alignment will be 3602 metres in length with an elevation difference of 45.82 metres, covering an area of 37620 sq m (including Terminal Stations & ropeway corridor).

(viii) The proposed project will consist of three parts namely mini hill station Township area, Ropeway and Sky-Diving area. The ropeway will be built with its Upper Terminal Point at skydiving area and the Lower Terminal Point at mini hill station township. With a view to provide a sky-diving area for the tourists and the residents of Township, the ropeway facility will be provided for reaching at skydiving area. Thus, the ropeway facility shall inter-connect the mini hill station Township area and Sky-Diving area.

(ix) Activities in the proposed Township will be Amusement park & Water show, Giant Wheel, Residential Apartment, Studio Apt, Five Star Hotel, Villas, Convention Centre, Commercial Building, Clinic, Office and Restaurant. Area land use is as under:

(x) **Investment/Cost:**Estimated Cost of the project will be approximately Rs. 615 crores.

(xi) **Whether the project is in Critically Polluted Area**: The project does not fall under Critically Polluted Area.

(xii) **Diversion of the forest land:** There is no diversion of forest land hence not applicable. Bracknell forest is located at distance of 11.06 km NE.

(xiii) **Eco Sensitive Area**: The project lies in Konnathadi village which falls in Eco-sensitive

area of the Western Ghats thus it is Category A project. Idukki Wildlife Sanctuary is located at distance of 12.65 km SW.

(xiv) The project will have its own STP of 830 KLD for treatment of approx. 687 KLD wastewater.

(xv) Used Oil of approx. 84 L/month from DG sets & machinery will be given to authorized hazardous waste vendor**.** Details of wastes is as under:

Type of Waste	**Colour of Bin**	**Category**	**Disposal Method**	**Total Waste (kg/day)**
Organic Waste	Green	Bio-degradable	The waste will be treated in Organic Waste Convertor and converted into compost	2530
Recyclable Waste	Blue	Recyclable	Collected and given to approved recycler	1084
Total Waste				**3614 kg/ day**

(xvi) **Water Requirement**: Total peak water requirement will be 1283 KLD out of which 630 KLD is fresh water requirement. The water will be supplied by KWA.

(xvii) **Employment Potential**: During construction 250 no. of labour will be employed and during operation phase, there will be employment to 1374 staff along with large amount of indirect employment.

(xviii) **Benefits of the project**: It will increase Infrastructure of the area & will be a planned & managed development in the area. It will set a precedent for others to develop planned Ropeway with Building Constructions project which will cumulatively help the area to be much more managed in future. It will provide a planned housing society with convenient shopping, Convention Centre, amusement park to fulfil basic needs of the residents as well as the people of nearby areas, community facility and club for the residents of the colony. Visitors can also enjoy a panoramic view of Kerala from the observation deck "The Skywalk", standing at about 3000 ft above sea level. With a view to provide a skydiving area for the tourist & residents that will visit the township and amusement park, the ropeway facility will be provided for reaching at skydiving area. Aerial Ropeway is fast emerging technology of providing not only tourist experience but an urban transportation means especially for hilly and tough terrains. It is totally environment friendly with least generation of any type of pollutants.

The Committee noted that the project site is located in Konnathady Village which is in the list of ESA villages at S.N 1770 as notified by MoEF dated 17.04.2013, which prohibits certain activities to carry out.

In view of the above, it was decided to obtain the comments of ESZ Division of the Ministry before finalizing the TOR for the proposed project.

13.2.6. **Proposed construction of Himani Chamunda Passenger Ropeway at Himani Chamunda Devi Temple, District Kangra, Himachal Pradesh by M/s Usha Breco Chamunda Devi Ropeway Private Limited- TOR - [IA/HP/MIS/61402/2016] [F.No.10-93/2016-IA-III]**

The project authorities gave a detailed presentation on the salient features of the project and proposed environmental protection measures to be undertaken along with the draft Term of References for the preparation of EIA-EMP report. All the projects related to Aerial Ropeway (Elevation greater than 1000 m) are listed at 7(g) of schedule of EIA Notification, 2006 covered

ANNEXURE-II

Appendix 3: *List of Villages in ESA of the Western Ghats*

(307 polygons did not have an entry in the name field in the Survey of India layer. These polygons have been named as "—NoName—XXXX" and counted as a village. These names may be finalized in consultation with the State Governments and Survey of India)

Sl No	STATE	DIST	TALUK	Village Name
1	GOA	NORTH GOA	SATARI	Anjune
2	GOA	NORTH GOA	SATARI	Shiroli
3	GOA	NORTH GOA	SATARI	Gulle
4	GOA	NORTH GOA	SATARI	Bayalvada
5	GOA	NORTH GOA	SATARI	Pali
6	GOA	NORTH GOA	SATARI	Singna
7	GOA	NORTH GOA	SATARI	Salpi Budruk
8	GOA	NORTH GOA	SATARI	Jarma
9	GOA	NORTH GOA	SATARI	Naneli
10	GOA	NORTH GOA	SATARI	Maloli
11	GOA	NORTH GOA	SATARI	Koparde
12	GOA	NORTH GOA	SATARI	Karambali Bramha
13	GOA	NORTH GOA	SATARI	Hedode
14	GOA	NORTH GOA	SATARI	Uste
15	GOA	NORTH GOA	SATARI	Ambede
16	GOA	NORTH GOA	SATARI	Dongarvada
17	GOA	NORTH GOA	SATARI	Mausi
18	GOA	NORTH GOA	SATARI	Bhuipal
19	GOA	NORTH GOA	SATARI	Bombede
20	GOA	NORTH GOA	SATARI	Veluz
21	GOA	NORTH GOA	SATARI	Sonal
22	GOA	NORTH GOA	SATARI	Kumar Khand
23	GOA	NORTH GOA	SATARI	Valpoy
24	GOA	NORTH GOA	SATARI	Sanvarde
25	GOA	NORTH GOA	SATARI	VELGUE
26	GOA	NORTH GOA	SATARI	HASOLE
27	GOA	NORTH GOA	SATARI	Karambali Buzruk
28	GOA	NORTH GOA	SATARI	BARAJAN
29	GOA	NORTH GOA	SATARI	Panse
30	GOA	NORTH GOA	SATARI	SHELPI KHURD
31	GOA	NORTH GOA	SATARI	BHIRONDE
32	GOA	NORTH GOA	SATARI	KHOTODE
33	GOA	NORTH GOA	SATARI	SIRSODE
34	GOA	NORTH GOA	SATARI	KARANZOL
35	GOA	NORTH GOA	SATARI	AASSODE
36	GOA	NORTH GOA	SATARI	MELAVALI
37	GOA	NORTH GOA	SATARI	Gotiakhadilwada
38	GOA	NORTH GOA	SATARI	AMBELI
39	GOA	NORTH GOA	SATARI	Gavane
40	GOA	NORTH GOA	SATARI	MALPON
41	GOA	NORTH GOA	SATARI	SURLA
42	GOA	NORTH GOA	SATARI	Satre
43	GOA	NORTH GOA	SATARI	GOALI
44	GOA	NORTH GOA	SATARI	Charavade
45	GOA	NORTH GOA	SATARI	IVRE KHURD
46	GOA	NORTH GOA	SATARI	IVRE BUDRUK
47	GOA	NORTH GOA	SATARI	Kelavade
48	GOA	NORTH GOA	SATARI	Rive
49	GOA	NORTH GOA	SATARI	Kodal
50	GOA	NORTH GOA	SATARI	Dongurvada
51	GOA	NORTH GOA	SATARI	Derode
52	GOA	NORTH GOA	SATARI	Vayangani
53	GOA	NORTH GOA	SATARI	Nanode
54	GOA	NORTH GOA	SATARI	GoaNoname1
55	GOA	NORTH GOA	SATARI	Kodal
56	GOA	NORTH GOA	SATARI	Penral
57	GOA	SOUTH GOA	KANKON	Kola
58	GOA	SOUTH GOA	KANKON	Gaundongren
59	GOA	SOUTH GOA	KANKON	Cotigao
60	GOA	SOUTH GOA	KANKON	Poingunin
61	GOA	SOUTH GOA	KANKON	Lolen
62	GOA	SOUTH GOA	SANGUEM	SURLA
63	GOA	SOUTH GOA	SANGUEM	AALOT

Sl No	STATE	DIST	TALUK	Village Name
1674	Karnataka	SHIMOGA	THIRTHAHALLI	SHEDGAR
1675	Karnataka	SHIMOGA	THIRTHAHALLI	MANIKOPPA
1676	Karnataka	SHIMOGA	THIRTHAHALLI	KOLAGI
1677	Karnataka	SHIMOGA	THIRTHAHALLI	HONNEKERE
1678	Karnataka	SHIMOGA	THIRTHAHALLI	SHUNTIHAKLU
1679	Karnataka	SHIMOGA	THIRTHAHALLI	THUMBRAMANE
1680	Karnataka	SHIMOGA	THIRTHAHALLI	HURULI
1681	Karnataka	SHIMOGA	THIRTHAHALLI	--NoName--688
1682	Karnataka	SHIMOGA	THIRTHAHALLI	SHIVALLI
1683	Karnataka	SHIMOGA	THIRTHAHALLI	YADAMANE
1684	Karnataka	SHIMOGA	THIRTHAHALLI	HADAGINAMAKKI
1685	Karnataka	SHIMOGA	THIRTHAHALLI	HERAMBAPURA
1686	Karnataka	SHIMOGA	THIRTHAHALLI	BELLANGI
1687	Karnataka	SHIMOGA	THIRTHAHALLI	KOLIGE
1688	Karnataka	SHIMOGA	THIRTHAHALLI	HOLALURBETAGERE
1689	Karnataka	SHIMOGA	THIRTHAHALLI	KABASE
1690	Karnataka	SHIMOGA	THIRTHAHALLI	BEKKANUR
1691	Karnataka	SHIMOGA	THIRTHAHALLI	DASANAKODIGE
1692	Karnataka	SHIMOGA	THIRTHAHALLI	GURUVALLI
1693	Karnataka	SHIMOGA	THIRTHAHALLI	KEERANAKERE
1694	Karnataka	SHIMOGA	THIRTHAHALLI	SHIRURU
1695	Karnataka	SHIMOGA	THIRTHAHALLI	HOSURU
1696	Karnataka	SHIMOGA	THIRTHAHALLI	CHANGARU
1697	Karnataka	SHIMOGA	THIRTHAHALLI	HONNETALU
1698	Karnataka	SHIMOGA	THIRTHAHALLI	KUNDA
1699	Karnataka	SHIMOGA	THIRTHAHALLI	NANTUR
1700	Karnataka	SHIMOGA	THIRTHAHALLI	--NoName--712
1701	Karnataka	SHIMOGA	THIRTHAHALLI	TALLURU
1702	Karnataka	SHIMOGA	THIRTHAHALLI	BALEHALLI
1703	Karnataka	UDUPI	KARKAL	BELENJE
1704	Karnataka	UDUPI	KARKAL	NADPALU
1705	Karnataka	UDUPI	KARKAL	KUCHCHUR
1706	Karnataka	UDUPI	KARKAL	CHARA
1707	Karnataka	UDUPI	KARKAL	HEBRI
1708	Karnataka	UDUPI	KARKAL	KABBINALE
1709	Karnataka	UDUPI	KARKAL	ANDARU
1710	Karnataka	UDUPI	KARKAL	--NoName--754
1711	Karnataka	UDUPI	KARKAL	--NoName--758
1712	Karnataka	UDUPI	KARKAL	DURGA
1713	Karnataka	UDUPI	KARKAL	Mala
1714	Karnataka	UDUPI	KARKAL	--NoName--781
1715	Karnataka	UDUPI	KARKAL	NOORALBETTU
1716	Karnataka	UDUPI	KUNDAPURA	HOSOOR
1717	Karnataka	UDUPI	KUNDAPURA	--NoName--610
1718	Karnataka	UDUPI	KUNDAPURA	KOLLUR
1719	Karnataka	UDUPI	KUNDAPURA	--NoName--634
1720	Karnataka	UDUPI	KUNDAPURA	YELJITH
1721	Karnataka	UDUPI	KUNDAPURA	--NoName--638
1722	Karnataka	UDUPI	KUNDAPURA	MUDOOR
1723	Karnataka	UDUPI	KUNDAPURA	GOLIHOLE
1724	Karnataka	UDUPI	KUNDAPURA	JADKAL
1725	Karnataka	UDUPI	KUNDAPURA	IDURKUNHADI
1726	Karnataka	UDUPI	KUNDAPURA	KERADI
1727	Karnataka	UDUPI	KUNDAPURA	HALLIHOLE
1728	Karnataka	UDUPI	KUNDAPURA	ALOOR
1729	Karnataka	UDUPI	KUNDAPURA	CHITTOOR
1730	Karnataka	UDUPI	KUNDAPURA	--NoName--656
1731	Karnataka	UDUPI	KUNDAPURA	BELLAL
1732	Karnataka	UDUPI	KUNDAPURA	VANDSE
1733	Karnataka	UDUPI	KUNDAPURA	HOSANGADI
1734	Karnataka	UDUPI	KUNDAPURA	MACHATTU
1735	Karnataka	UDUPI	KUNDAPURA	AMASEBAILU
1736	Karnataka	UDUPI	KUNDAPURA	--NoName--690
1737	Karnataka	UDUPI	KUNDAPURA	SHEDIMANE
1738	Karnataka	UDUPI	KUNDAPURA	MADAMMAKKI
1739	Karnataka	UDUPI	KUNDAPURA	--NoName--719
1740	Kerala	Idukki	Devikulam	Marayoor
1741	Kerala	Idukki	Devikulam	Keezhanthoor
1742	Kerala	Idukki	Devikulam	Kannan Devan Hills
1743	Kerala	Idukki	Devikulam	Kuttampuzha

Sl No	STATE	DIST	TALUK	Village Name
1744	Kerala	Idukki	Devikulam	Kottakamboor
1745	Kerala	Idukki	Devikulam	Kanthalloor
1746	Kerala	Idukki	Devikulam	Vattavada
1747	Kerala	Idukki	Devikulam	Mankulam
1748	Kerala	Idukki	Devikulam	Mannamkandam
1749	Kerala	Idukki	Devikulam	Pallivasal
1750	Kerala	Idukki	Devikulam	Anaviratty
1751	Kerala	Idukki	Devikulam	Kunjithanny
1752	Kerala	Idukki	Devikulam	Vellathuval
1753	Kerala	Idukki	Peerumade	Upputhara
1754	Kerala	Idukki	Peerumade	Kumily
1755	Kerala	Idukki	Peerumade	Manjumala
1756	Kerala	Idukki	Peerumade	Periyar
1757	Kerala	Idukki	Peerumade	Kokkayar
1758	Kerala	Idukki	Peerumade	Peerumade
1759	Kerala	Idukki	Peerumade	Mlappara
1760	Kerala	Idukki	Peerumade	Peruvanthanam
1761	Kerala	Idukki	Thodupuzha	Kanjikuzhi
1762	Kerala	Idukki	Thodupuzha	Udumbannoor
1763	Kerala	Idukki	Thodupuzha	Idukki (Part)
1764	Kerala	Idukki	Thodupuzha	Arakkulam
1765	Kerala	Idukki	Udumbanchola	Chinnakanal
1766	Kerala	Idukki	Udumbanchola	Baisonvally
1767	Kerala	Idukki	Udumbanchola	Rajakumari
1768	Kerala	Idukki	Udumbanchola	Poopara
1769	Kerala	Idukki	Udumbanchola	Rajakkad
1770	Kerala	Idukki	Udumbanchola	Konnathady
1771	Kerala	Idukki	Udumbanchola	Santhanpara
1772	Kerala	Idukki	Udumbanchola	Kanthippara
1773	Kerala	Idukki	Udumbanchola	Vathikudy
1774	Kerala	Idukki	Udumbanchola	Chathurangapara
1775	Kerala	Idukki	Udumbanchola	Udumbanchola
1776	Kerala	Idukki	Udumbanchola	Upputhode
1777	Kerala	Idukki	Udumbanchola	Parathodu
1778	Kerala	Idukki	Udumbanchola	Kalkoonthal
1779	Kerala	Idukki	Udumbanchola	Thankamony (Part)
1780	Kerala	Idukki	Udumbanchola	Ayyappancoil
1781	Kerala	Idukki	Udumbanchola	Pampadumpara
1782	Kerala	Idukki	Udumbanchola	Kattappana
1783	Kerala	Idukki	Udumbanchola	Karunapuram
1784	Kerala	Idukki	Udumbanchola	Vandanmedu
1785	Kerala	Idukki	Udumbanchola	Anakkara
1786	Kerala	Idukki	Udumbanchola	Anavilasam
1787	Kerala	Idukki	Udumbanchola	Chakkupallam
1788	Kerala	Kannur	Thalassery	Aralam
1789	Kerala	Kannur	Thalassery	Kottiyoor
1790	Kerala	Kannur	Thalassery	Cheruvanchery
1791	Kerala	Kollam	Pathanapuram	Punnala
1792	Kerala	Kollam	Pathanapuram	Piravanthur
1793	Kerala	Kollam	Pathanapuram	Edamon
1794	Kerala	Kollam	Pathanapuram	Thenmala
1795	Kerala	Kollam	Pathanapuram	Arienkavu
1796	Kerala	Kollam	Pathanapuram	Thinkalkarikkakom
1797	Kerala	Kollam	Pathanapuram	Kulathupuzha
1798	Kerala	Kollam	Pathanapuram	Channappetta
1799	Kerala	Kottayam	Kanjirappally	Koottickal
1800	Kerala	Kottayam	Meenachil	Melukavu
1801	Kerala	Kottayam	Meenachil	Teekoy
1802	Kerala	Kottayam	Meenachil	Poonjar Thekkekara
1803	Kerala	Kozhikode	Kozhikode	Kedavur
1804	Kerala	Kozhikode	Kozhikode	Puthuppadi
1805	Kerala	Kozhikode	Kozhikode	Nellipoyil
1806	Kerala	Kozhikode	Kozhikode	Kodencheri
1807	Kerala	Kozhikode	Kozhikode	Thiruvambadi
1808	Kerala	Kozhikode	Quilandy	Chempanoda
1809	Kerala	Kozhikode	Quilandy	Rikkattapatta
1810	Kerala	Kozhikode	Vadakara	Thinoor
1811	Kerala	Kozhikode	Vadakara	Kavilumpara
1812	Kerala	Malappuram	Nilambur	Chungathara
1813	Kerala	Malappuram	Nilambur	Kurumbilangode

Sl No	STATE	DIST	TALUK	Village Name
1814	Kerala	Malappuram	Nilambur	Vazhikkadavu
1815	Kerala	Malappuram	Nilambur	Akampadam
1816	Kerala	Malappuram	Nilambur	Karulai
1817	Kerala	Malappuram	Nilambur	Amarambalam
1818	Kerala	Malappuram	Nilambur	Chekkode
1819	Kerala	Malappuram	Nilambur	Kalikavu
1820	Kerala	Malappuram	Nilambur	Kerala Estate
1821	Kerala	Malappuram	Nilambur	Karuvarakundu
1822	Kerala	Palakkad	Alathur	Kizhakkencheri-I
1823	Kerala	Palakkad	Chittur	Muthalamada-I
1824	Kerala	Palakkad	Chittur	Muthalamada-II
1825	Kerala	Palakkad	Chittur	Nelliyampathy
1826	Kerala	Palakkad	Mannarkad	Pudur
1827	Kerala	Palakkad	Mannarkad	Padavayal
1828	Kerala	Palakkad	Mannarkad	Agali
1829	Kerala	Palakkad	Mannarkad	Kottathara
1830	Kerala	Palakkad	Mannarkad	Kallamala
1831	Kerala	Palakkad	Mannarkad	Sholayur
1832	Kerala	Palakkad	Mannarkad	Palakkayam
1833	Kerala	Palakkad	Palakkad	Puthuppariyaram-I
1834	Kerala	Palakkad	Palakkad	Malampuzha-I
1835	Kerala	Palakkad	Palakkad	Pudussery East
1836	Kerala	Pathanamthitta	Kozhenchery	Thannithode
1837	Kerala	Pathanamthitta	Kozhenchery	Aruvappulam
1838	Kerala	Pathanamthitta	Ranni	Chittar-Seethathodu
1839	Kerala	Pathanamthitta	Ranni	Kollamula
1840	Kerala	Pathanamthitta	Ranni	Perunad
1841	Kerala	Pathanamthitta	Ranni	Vadasserikkara
1842	Kerala	Thiruvananthap*	Nedumangad	Peringamala
1843	Kerala	Thiruvananthap*	Nedumangad	Thennoor
1844	Kerala	Thiruvananthap*	Nedumangad	Vithura
1845	Kerala	Thiruvananthap*	Nedumangad	Mannoorkara
1846	Kerala	Thiruvananthap*	Neyyattinkara	Vazhichal
1847	Kerala	Thiruvananthap*	Neyyattinkara	Kallikkad
1848	Kerala	Thiruvananthap*	Neyyattinkara	Amboory
1849	Kerala	Thrissur	Mukundapuram	Pariyaram
1850	Kerala	Wayanad	Mananthavady	Thirunelly
1851	Kerala	Wayanad	Mananthavady	Thrissilery
1852	Kerala	Wayanad	Mananthavady	Periya
1853	Kerala	Wayanad	Mananthavady	Thondernad
1854	Kerala	Wayanad	Sulthanbathery	Kidanganad
1855	Kerala	Wayanad	Sulthanbathery	Noolpuzha
1856	Kerala	Wayanad	Vythiri	Thariyode
1857	Kerala	Wayanad	Vythiri	Achooranam
1858	Kerala	Wayanad	Vythiri	Pozhuthana
1859	Kerala	Wayanad	Vythiri	Kottappadi (Part)
1860	Kerala	Wayanad	Vythiri	Chundale
1861	Kerala	Wayanad	Vythiri	Kunnathidavaka
1862	Kerala	Wayanad	Vythiri	Vellarimala
1863	Maharashtra	AHMADNAGAR	AKOLA	Bitaka
1864	Maharashtra	AHMADNAGAR	AKOLA	Shenit
1865	Maharashtra	AHMADNAGAR	AKOLA	Waranghushi
1866	Maharashtra	AHMADNAGAR	AKOLA	Jahagirdarwadi
1867	Maharashtra	AHMADNAGAR	AKOLA	Ambevangan
1868	Maharashtra	AHMADNAGAR	AKOLA	Panjare
1869	Maharashtra	AHMADNAGAR	AKOLA	Ghatghar
1870	Maharashtra	AHMADNAGAR	AKOLA	Udadawane
1871	Maharashtra	AHMADNAGAR	AKOLA	Murshet
1872	Maharashtra	AHMADNAGAR	AKOLA	--NoName--33
1873	Maharashtra	AHMADNAGAR	AKOLA	Shinganwadi
1874	Maharashtra	AHMADNAGAR	AKOLA	Samrad
1875	Maharashtra	AHMADNAGAR	AKOLA	Ratanwadi
1876	Maharashtra	AHMADNAGAR	AKOLA	Shirpunje Bk.
1877	Maharashtra	AHMADNAGAR	AKOLA	Koltembhe
1878	Maharashtra	AHMADNAGAR	AKOLA	Dhamanvan
1879	Maharashtra	AHMADNAGAR	AKOLA	Kumshet
1880	Maharashtra	AHMADNAGAR	AKOLA	Shirpunje Kh.
1881	Maharashtra	AHMADNAGAR	AKOLA	Shelad
1882	Maharashtra	AHMADNAGAR	AKOLA	Shiswad
1883	Maharashtra	AHMADNAGAR	AKOLA	Ambit

ANNEXURE-III

रजिस्ट्री सं० डी० एल०-33004/99 REGD. NO. D. L.-33004/99

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अधिसूचना

नई दिल्ली,4 सितंबर, 2015

का.आ.2435(अ).--अधिसूचना का निम्नलिखित प्रारूप, जिसे केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, भारत सरकार के **पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (ii), अधिसूचना सं. का.आ. 733 (अ) तारीख 10 मार्च, 2014 की अधिसूचना की उन बातों के सिवाय अधिक्रांत करते हुए जिन्हें ऐसे अधिक्रमण से पहले किया गया है या करने का लोप किया गया है,** पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के द्वारा यथाअपेक्षित जनता की जानकारी के लिए, जिनके उससे प्रभावित होने की संभावना है, प्रकाशित करती है और यह सूचना दी जाती है कि उक्त प्रारूप अधिसूचना पर, उस तारीख से, जिसको इस अधिसूचना वाले भारत के राजपत्र की प्रतियां, जनता को उपलब्ध करा दी जाती है, साठ दिन की अवधि की समाप्ति पर या उसके पश्चात् विचार किया जाएगा ;

ऐसा व्यक्ति, जो प्रारूप अधिसूचना में विनिर्दिष्ट प्रस्तावों के संबंध में कोई आक्षेप या सुझाव देने में हितबद्ध है, वह लिखित रूप में, इस प्रकार विनिर्दिष्ट अवधि के भीतर केंद्रीय सरकार द्वारा विचार किए जाने के लिए सचिव, **पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय**, इंदिरा पर्यावरण भवन, ज़ोरबाग रोड, अलीगंज, नई दिल्ली-110003 या ई-मेल पते: esz-mef@nic.in पर भेज सकेगा।

प्रारूप अधिसूचना

पश्चिमी घाट, भारत के पश्चिमी तट के सीमांत पर एक महत्वपूर्ण भौगोलिक भूमि स्वरूप हैं और यह गोदावरी, कृष्णा, कावेरी और अनेक संख्या में अन्य नदियों का उद्गम है तथा यह कन्याकुमारी के उत्तर में ताप्ती नदी से लगभग 1500 किलोमीटर दूरी पर विस्तारित है, दक्षिण में औसतन 600 मीटर से अधिक उत्थान पर है और छह राज्यों अर्थात् गुजरात, महाराष्ट्र, गोवा, कर्नाटक, केरल और तमिलनाडु से होकर तिरछे फैला है।

और, पश्चिमी घाट वैश्विक जैव विविधता का महत्वपूर्ण स्थल और जैव विविधता का खजाना है और यह अनेक कुसुमित पादपों की स्थानिक प्रजातियों, स्थानिक मत्स्य, उभयचरी सरीसृप पछियों, स्तनपायी और अश्कशेरूकियों की आश्रयस्थली है और यह मिर्च, इलायची, दालचीनी, आम और कटहल जैसी किफायती महत्वपूर्ण वातावरण के अनुकूल वनस्पति के किस्मों के विकास का महत्वपूर्ण केंद्र भी है ;

MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 4th September, 2015

S.O.2435(E).– The following draft of the notification, which the Central Government proposes to issue in exercise of the powers conferred by section 3 of the Environment (Protection) Act, 1986 (29 of 1986) is hereby published, in supersession of the notification of the Government of India, Ministry of Environment and Forest published in Gazette of India, Extraordinary, Part II, Section 3, Sub-Section (ii) vide notification number S.O. 733(E), dated the 10th March, 2014, as except as respects things done or omitted to be done before such supersession, as required by sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, for the information of the public likely to be affected thereby; and notice is hereby given that the said draft notification shall be taken into consideration on or after the expiry of a period of sixty days from the date on which copies of the Gazette of India containing this notification are made available to the Public;

Any person interested in making any objections or suggestions on the proposals contained in the draft notification may forward the same in writing, for consideration of the Central Government within the period so specified to the Secretary, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhawan, CGO Complex, Jor bagh Road, Ali Ganj, New Delhi-110003, or at e-mail address: esz-mef@nic.in.

Draft notification

WHEREAS, Western Ghats is an important geological landform on the fringe of the west coast of India and it is the origin of Godavari, Krishna, Cauvery and a number of other rivers and extends over a distance of approximately 1500 kilometre from Tapti river in the north to Kanyakumari in the south with an average elevation of more than 600 metre and traverses through six States namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu;

AND WHEREAS, Western Ghats is a global biodiversity hotspot and a treasure trove of biological diversity and it harbours many endemic species of flowering plants, endemic fishes, amphibians, reptiles, birds, mammals and invertebrates and is also an important center of evolution of economically important domesticated plant species such as pepper, cardamom, cinnamom, mango and jackfruit;

AND WHEREAS, Western Ghats has many unique habitats which are home to a variety of endemic species of flora and fauna such as Myristica swamps, the flat-topped lateritic plateaus, the Sholas and wetland and riverine ecosystems;

AND WHEREAS, UNESCO has included certain identified parts of Western Ghats in the UNESCO World Natural Heritage List because Western Ghats is a Centre of origin of many species as also home for rich endemic biodiversity and hence a cradle for biological evolution;

AND WHEREAS, the Western Ghats not only harbour rich biodiversity, but also supports a population of approximately fifty million people and also include areas of high human population density and therefore, there is a need to conserve and protect the unique biodiversity of Western Ghats while allowing for sustainable and inclusive development of the region;

AND WHEREAS, the Ministry constituted a High Level Working Group to study the preservation of the ecology, environmental integrity and holistic development of the Western Ghats in view of their rich and unique biodiversity and it was also tasked with the mandate to take a holistic view of the issue and to bring synergy between protection of environment and biodiversity and needs and aspirations of the local and indigenous people, sustainable development and environmental integrity of the region and to suggest steps and the way forward to prevent further degradation of the fragile ecology of the Western Ghats;

AND WHEREAS, the High Level Working Group had since submitted its report to the Ministry on the 15th April, 2013 which was kept in the public domain seeking comments/views of concerned stakeholders and was also sent to the concerned six State Governments of the Western Ghats region namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu for their considered comments/views on the report;

AND WHEREAS, the High Level Working Group has identified approximately thirty-seven percent the Western Ghats as ecologically sensitive which covers an area of 59,940 square kilometre. of natural landscape of Western Ghats and represents a continuous band of natural vegetation extending over a horizontal distance of 1,500 kilometre and is spread across six states of Western Ghats region namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu and includes Protected Areas and World Heritage Sites of Western Ghats and the High Level Working Group has recommended prohibition or regulation of identified projects and activities in the Ecologically Sensitive Area which have maximum interventionist and destructive impacts on ecosystems;

AND WHEREAS, the Ministry vide OM No. 1-4/2012 – RE (Pt.), dated the 20th December 2013, had *inter alia* sought suggestions from the State Governments on modifications in the boundary of the Ecologically Sensitive Area as identified by the High Level Working Group on the basis of physical verification;

AND WHEREAS, the State Government of Kerala had earlier accordingly undertaken the exercise of demarcating Ecologically Sensitive Area in the State by physical verification the Ecologically Sensitive Area recommended by the Kerala State Government is spread over of an area of 9993.7 square kilometre, which includes 9107 square kilometre of forest area and 886.7 square kilometre of non-forest area and Ecologically Sensitive Area in that State works out to 9,993.7 square kilometre as compared to 13,108 square kilometre recommended by High Level Working Group;

AND WHEREAS, earlier the Ministry issued a draft notification vide S. O. No. 733 (E), dated the 10th March 2014, declaring Ecologically Sensitive Area in the Western Ghats taking into account the Ecologically Sensitive Area demarcated by Kerala Government for the State of Kerala instead of Ecologically Sensitive Area recommended by High Level Working Group for the State, while for other States of Western Ghats region the Ecologically sensitive Area recommended by the High Level Working Group was considered ;

AND WHEREAS, while responding to the said draft notification number S.O. 733 (E), on dated the 10th March, 2014 some of the States of Western Ghats region had sought an opportunity to undertake demarcation of Ecologically Sensitive Area by physical verification and the same was given by the Central Government vide letter dated the 9th June, 2014 except for the State of Kerala;

AND WHEREAS, the Central Government had convened meetings of the State Environment and Forest Ministers of the Western Ghat region on the 7th July, 2015 and Members of Parliament of Western Ghats region on the 3rd August, 2015 to review the progress of demarcation of Ecologically Sensitive Area by physical verification and also to address the apprehensions /concerns expressed by the State Governments and the various stakeholders of Western Ghats from time to time;

AND WHEREAS, the representatives of the State Governments of Western Ghats region had informed during the meeting held on the 7th July, 2015 that demarcation of Ecologically Sensitive Area by physical verification is in advanced stages of completeness;

AND WHEREAS, it was resolved in both the meetings to clarify that there will be no displacement or dislocation of the local people living in habitations within the Ecologically Sensitive Areas demarcated in the Western Ghats and practicing of agriculture and plantation activity shall also not be affected due to the provisions contained in the draft notification;

NOW, THEREFORE, in exercise of the powers conferred by section 3 of the Environment (Protection) Act, 1986 (29 of 1986) and sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby notifies the identified area of 56,825 square kilometre which is spread across six States, namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu, as the Western Ghats Ecologically Sensitive Area .

2. Boundary and Description of Western Ghats Eco-sensitive Area.- (1) The boundary and description of Eco-Sensitive Area as recommended by High Level Working Group excluding the State of Kerala is as under:-

(a) the extent of Eco-sensitive area falling in each state is as per ***Annexure A***;

(b) the State-wise map of the portion of the Eco-sensitive area in each state is as per ***Annexure – B1 to B5***;

(c) the state-wise list of villages falling within the Eco-sensitive Area along with respective Districts and Talukas is as per ***Annexure-C.***

(2) The Eco-Sensitive Area in the State of Kerala is spread over of an area of 9993.7 square kilometre which includes 9107 square kilometre of forest area and 886.7 square kilometre of non-forest area and the boundary and description of Eco-Sensitive Area and the village-wise details of Eco-sensitive area proposed by the State Government are available on the website of the Kerala State Biodiversity Board.

3. Projects and activities to be prohibited or regulated in the Eco-sensitive area.- (1) The following categories of projects and activities shall be prohibited in Eco-sensitive Area except those proposals which have been received by Expert Appraisal Committees or the Ministry of Environment, Forests and Climate Change or State Level Expert Appraisal Committees or the State Level Environment Impact Assessment Authorities before the 17 April, 2013, the date on which the High Level Working Group report was uploaded on the website of the Ministry and are pending consideration and such proposals shall be dealt in accordance with the guidelines and rules in existence at that time.

(a) Mining: There shall be a complete ban on mining, quarrying and sand mining in Ecologically Sensitive Area and all existing mines shall be phased out within five years from the date of issue of the final notification or on the expiry of the existing mining lease, whichever is earlier.

(b) Thermal power plants: No new thermal power projects and expansion of existing plants shall be allowed in the Ecologically Sensitive Area.

(c) Industry: All new 'Red' category of industries as specified by the Central Pollution Control Board or State Pollution Control Board and the expansion of such existing industries shall be banned. The list of 'Red' category of industries shall be as specified by the Central Pollution Control Board:

provided that all existing 'Red' category of industries including health care establishments shall continue in Eco-Sensitive Area under the applicable rules and regulations.

(d) Building, construction, township and area development projects: All new and expansion projects of building and construction with built up area of 20,000 square metres and above and all new and expansion townships and area development projects with an area of 50 hectares and above or with built up area of 1,50,000 square metres and above shall be prohibited. ***There shall be no restriction on repair or extension or renovation of existing residential houses in the Eco-Sensitive Area as per prevailing laws and regulations.***

Explanatory Note: (1) All existing health care establishments can continue in Eco-Sensitive Area and proposed Primary Health Centres established as per laws and regulations.* (2) *No restriction in change in ownership of property.

(2) The following categories of projects and activities shall be regulated as given below:-

(a) Hydropower projects: New Hydropower projects shall be allowed as per the Environment Impact Assessment notification, published vide number S.O. 1533 (E), dated the 14th September, 2006, subject to the following conditions, namely:-

(i) uninterrupted ecological flow of at least thirty per cent of the rivers flow in lean season, till a comprehensive study establishes individual baselines for each project;
(ii) a cumulative study which assesses the impact of each project on the flow pattern of the rivers and forest and biodiversity loss;
(iii) the minimum distance between one project and the other is maintained at three kilometre and not more than fifty per cent of the river basin is affected at any time,

(b) The 'Orange' category of Industries as specified by the Central Pollution Control Board or State Pollution Control Board shall be allowed with strict compliance of environmental regulations but all efforts shall be made to promote industries with low environmental impacts.

(c) in the case of activities that are covered in the schedule to the Environment Impact Assessment notification number S.O. 1533 (E), dated 14th September, 2006, published by theerstwhile Ministry of Environment and Forests and are falling in the Eco-Sensitive Area, except the projects and activities which are specifically prohibited under sub-para (1) shall be scrutinized and assessed for cumulative impacts and development needs before considering for prior environmental clearance by the Ministry under the provisions of the said notification.

(d) in particular and without prejudice to the provisions of the relevant Acts, in cases of diversion of forest land for non-forestry purposes in the Eco-sensitive area, all information of the project, from application stage to approval shall be placed in the public domain on the website of the Ministry of Environment, Forests and Climate Change and of the Forest Department of the respective States.

(e) the requirements of prior informed consent under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007) shall be complied with and the consent of Gram Sabha for undertaking projects and activities shall be mandatory.

4. Implementation and Monitoring mechanism.– (1) The responsibility for monitoring and enforcement of provisions of this notification shall be with the concerned State Governments of Western Ghats region and the State Governments shall ensure placing of required mechanisms for effective monitoring and enforcement of restrictions in the Eco-sensitive area and while placing such mechanisms, the State Governments shall inter-alia ensure strengthening of existing regulatory institutions and processes, and participation and involvement of local communities in decision making and the details of such mechanisms shall be shared by the concerned State Governments with the Ministry of Environment, Forests and Climate Change .

(2) A Decision Support and Monitoring Centre for Western Ghats shall be established by the Ministry of Environment, Forests and Climate Change in collaboration with the six State Governments of the Western Ghats region which shall assess and report on the status of ecology of Western Ghats on regular basis and provide decision support facility in the implementation of the provisions of this notification and shall also facilitate mechanisms for scientific decision making and strengthening enforcement.

(3) The post clearance monitoring of projects and activities allowed in the Eco-sensitive Area shall be carried out by the concerned State Government, State Pollution Control Board and the Regional Office of the Ministry and all projects in the Eco-sensitive Area which have been given Environmental Clearance or Forest Clearance shall be monitored at least once a year by the concerned Regional Office of the Ministry of Environment, Forests and Climate Change .

(4) All projects in the Eco-sensitive Area which have been given consent to establish or Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) shall be monitored at least once a year by the concerned State Pollution Control Board and the concerned State Governments shall prepare 'State of Health Report' in respect of Western Ghats region falling within

their jurisdiction on an annual basis giving inter-alia the details of steps taken in monitoring and enforcement of provisions of this notification and make the same available in public domain.

5. Action for contravention:- In case of any contravention of the provisions of this notification, action under the provisions of the Environment (Protection) Act, 1986 (29 of 1986) and other relevant statutes shall be taken accordingly.

6. The provisions in this notification shall be subject to the final orders of the court in pending litigation.

7. The provisions of this notification shall not affect the ownership of the property in the Eco-sensitive Area.

[F. No. 1-4/2012 – RE (Pt.)]

Dr. T. CHANDINI, Scientist 'G'

Annexure A

Table: State-wise area of Western Ghats Eco-sensitive Area except for State of Kerala

S. No	**State**	**Western Ghats Ecologically sensitive area (in square kilometre)**
1	Gujarat	449
2	Maharashtra	17340
3	Goa	1461
4	Karnataka	20668
5	Tamil Nadu	6914

रजिस्ट्री सं० डी० एल०-33004/99 REGD. NO. D. L.-33004/99

भारत का राजपत्र
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अधिसूचना

नई दिल्ली, 27 फरवरी, 2017

का.आ. 667(अ).—अधिसूचना का निम्नलिखित प्रारूप, जिसे केन्द्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, भारत सरकार के पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय की भारत के राजपत्र, असाधारण, भाग II, खंड 3, उपखंड (ii), अधिसूचना सं. का.आ. 2435(अ) तारीख 4 सितम्बर, 2015 की अधिसूचना को उन बातों के सिवाय अधिक्रांत करते हुए जिन्हें ऐसे अधिक्रमण से पहले किया गया है या करने का लोप किया गया है, पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) के द्वारा यथाअपेक्षित जनता की जानकारी के लिए, जिनके उससे प्रभावित होने की संभावना है, प्रकाशित करती है और यह सूचना दी जाती है कि उक्त प्रारूप अधिसूचना पर, उस तारीख से, जिसको इस अधिसूचना वाले भारत के राजपत्र की प्रतियां, जनता को उपलब्ध करा दी जाती है, साठ दिन की अवधि की समाप्ति पर या उसके पश्चात् विचार किया जाएगा ;

ऐसा व्यक्ति, जो प्रारूप अधिसूचना में विनिर्दिष्ट प्रस्तावों के संबंध में कोई आक्षेप या सुझाव देने में हितबद्ध है, वह लिखित रूप में, इस प्रकार विनिर्दिष्ट अवधि के भीतर केंद्रीय सरकार द्वारा विचार किए जाने के लिए सचिव, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय, इंदिरा पर्यावरण भवन, ज़ोरबाग रोड, अलीगंज, नई दिल्ली-110003 या ई-मेल पते: esz-mef@nic.in पर भेज सकेगा।

प्रारूप अधिसूचना

पश्चिमी घाट, भारत के पश्चिमी तट के सीमांत पर एक महत्वपूर्ण भौगोलिक भूमि स्वरूप है और यह गोदावरी, कृष्णा, कावेरी और अनेक संख्या में अन्य नदियों का उद्गम है तथा यह कन्याकुमारी के उत्तर में ताप्ती नदी से लगभग 1500 किलोमीटर दूरी पर विस्तारित है, दक्षिण में औसतन 600 मीटर से अधिक उत्थान पर है और छह राज्यों अर्थात् गुजरात, महाराष्ट्र, गोवा, कर्नाटक, केरल और तमिलनाडु से होकर तिरछे फैला है;

और, पश्चिमी घाट वैश्विक जैव विविधता का महत्वपूर्ण स्थल और जैव विविधता का खजाना है और यह अनेक कुसुमित पादपों की स्थानिक प्रजातियों, स्थानिक मत्स्य, उभयचरी, सरीसृपों, पक्षियों, स्तनपायी और अश्कशेरूकियों की आश्रयस्थली है और यह मिर्च, इलायची, दालचीनी, आम और कटहल जैसी किफायती महत्वपूर्ण वातावरण के अनुकूल वनस्पति के किस्मों के विकास का महत्वपूर्ण केंद्र भी है ;

और, पश्चिमी घाटों में अनेक अभूतपूर्व प्राकृतिक वास है जो मेरिस्टिका दलदल, सपाट शिखर परवर्ती पठार, शोला तथा नमभूमि और तटीय पर्यावरण प्रणाली जैसे वनस्पति और जीवजंतु की स्थानिक किस्मों की प्रजातियों के लिए गृह है ;

और, यूनेस्को ने पश्चिमी घाटों के पहचान किए गए कुछ भागों को यूनेस्को विश्व प्राकृतिक विरासत सूची में सम्मिलित किया है क्योंकि पश्चिमी घाट अनेक प्रजातियों की उत्पत्ति का केंद्र है, साथ ही यह समृद्ध स्थानिक जैव विविधता के लिए गृह भी है और इसलिए यह जैव विविधता के विकास के लिए अवलम्ब है ;

और, पश्चिमी घाट केवल समृद्ध जैव विविधता के लिए आश्रय ही नहीं है, बल्कि यह लगभग पचास मिलियन लोगों की जनसंख्या को सहारा भी देते है और इसमें अधिक मानवीय जनसंख्या घनत्व के क्षेत्र भी सम्मिलित हैं और अतः क्षेत्र के धारणीय और अंतर्वेशित विकास को अनुज्ञात करते समय पश्चिमी घाटों की अभूतपूर्व जैव विविधता को बनाए रखने और संरक्षित करने की आवश्यकता है ;

और, मंत्रालय ने पश्चिमी घाटों के पारिस्थितिक, वातावरणिक अक्षतता और साकल्यवादी विकास के परिरक्षण का उनकी समृद्धिशाली और अपूर्व जैव विविधता की दृष्टि से अध्ययन करने के लिए एक उच्च स्तरीय कार्यकरण समूह का गठन किया था और आज्ञापक रूप से मुद्दे पर साकल्यवादी दृष्टिकोण अपनाने का और पर्यावरण तथा जैव विविधता के संरक्षण के बीच सहक्रिया लाने तथा क्षेत्र के, धारणीय विकास और वातावरणिक अक्षतता के लिए स्थानीय तथा देशी लोगों की आवश्यकताओं और आकांक्षाओं के लिए तथा उपाय सुझाने और पश्चिमी घाटों की संवेदनशील पारिस्थितिक के और ह्रास को रोकने के लिए मार्ग दिखाने का कार्य दिया गया था ;

और, उच्च स्तरीय कार्यकरण समूह ने 15 अप्रैल, 2013 को मंत्रालय में अपनी रिपोर्ट प्रस्तुत की थी, जिसे संबंध पणधारियों की टीका-टिप्पणियां/विचार मांगने के लिए लोक क्षेत्र में रखा गया था और उसे पश्चिमी घाटों के क्षेत्र की संबद्ध छह राज्य सरकारों अर्थात् गुजरात, महाराष्ट्र, गोवा, कर्नाटक, केरल और तमिलनाडु को रिपोर्ट पर उनकी सुविचारित टीका-टिप्पणियां/विचारों के लिए भेजा गया था ;

और, उच्च स्तरीय कार्यकरण समूह ने पारिस्थितिकीय संवेदी क्षेत्र में लगभग सैंतीस प्रतिशत पश्चिमी घाटों की पहचान की है, जिसमें पश्चिमी घाटों के प्राकृतिक भूदृश्य का 59,940 वर्ग किलोमीटर का क्षेत्र आता है और यह 1,500 किलोमीटर की क्षैतिज दूरी पर प्राकृतिक वनस्पति के लगातार फैली पट्टी का प्रतिनिधित्व करता है और यह पश्चिमी घाटों क्षेत्र के छह राज्य अर्थात् गुजरात, महाराष्ट्र, गोवा, कर्नाटक, केरल और तमिलनाडु और जिसमें संरक्षित क्षेत्र और पश्चिमी घाटों के विश्व विरासत स्थल सम्मिलित हैं और उच्च स्तरीय कार्यकरण समूह ने पारिस्थितिक संवेदी क्षेत्र में पहचान की गई परियोजनाओं और क्रियाकलापों, जिससे पारिस्थितिक प्रणाली में अधिकतम दखल और विनाशकारी प्रभाव पड़ता है, के प्रतिषेध और विनियमन की सिफारिश की है ;

और, मंत्रालय ने कार्यालय ज्ञापन सं0 1-4/2012-आरई(भाग), तारीख 20 दिसंबर, 2013 द्वारा अन्य बातों के साथ-साथ, भौतिक सत्यापन के आधार उच्च स्तरीय कार्यकरण समूह द्वारा पहचान किए गए पारिस्थितिक संवेदी क्षेत्र की सीमाओं में उपांतरणों पर राज्य सरकार से सुझाव चाहे गए हैं ;

और, केरल सरकार सरकार ने पहले ही पारिस्थितिक संवेदी जोन के भौतिक सत्यापन द्वारा तदनुसार पारिस्थितिक संवेदी जोन के सीमांकन का कार्य राज्य में अपने जिम्मे लिया था और राज्य सरकार द्वारा सिफारिश किया गया पारिस्थितिक संवेदी क्षेत्र 9993.7 वर्ग किलोमीटर के क्षेत्र में फैला हुआ है, जिसमें वन क्षेत्र का 9107 वर्ग किलोमीटर क्षेत्र सम्मिलित है और 886.7 वर्ग किलोमीटर वन विहीन क्षेत्र है और उस राज्य में पारिस्थितिक संवेदी क्षेत्र ने उच्च स्तरीय कार्यकरण समूह द्वारा सिफारिश किए गए 13,108 वर्ग किलोमीटर की तुलना में 9993.7 वर्ग किलोमीटर की परिगणना की है ;

और, इससे पहले मंत्रालय ने एक प्रारुप अधिसूचना एस.ओ. नं. 733(अ) तारीख 10 मार्च, 2014 पारिस्थितिकी संवेदी क्षेत्र को ध्यान में रखते हुए राज्य द्वारा उच्च स्तरीय कार्य समूह में केरल राज्य के लिए केरल सरकार द्वारा सीमांकन पश्चिमी

घाट में घोषित करने की बजाय पारिस्थितिकी संवेदी क्षेत्र को जारी करने के लिए सिफारिश की, जबकि उच्च स्तरीय कार्य समूह द्वारा पारिस्थितिकी संवेदी क्षेत्र पश्चिमी घाट क्षेत्र के अन्य राज्यों के लिए सिफारिश की है;

और, प्रारूप अधिसूचना संख्या का.आ. 733(अ) तारीख 10 मार्च, 2014 का उत्तर देते हुए पश्चिमी घाट क्षेत्र की कुछ राज्यों ने भौतिक सत्यापन द्वारा पारिस्थितिक संवेदी जोन के सीमांकन का जिम्मा लेने का अवसर प्राप्त किया है और केंद्रीय सरकार द्वारा तारीख 9 जून, 2014 के पत्र द्वारा केरल राज्य के सिवाय अन्यों को ऐसा अवसर प्रदान किया गया था ;

और, केंद्रीय सरकार ने पश्चिमी घाट क्षेत्र के राज्य पर्यावरण और वन मंत्रियों की बैठक 7 जुलाई, 2015 तथा पश्चिमी घाट क्षेत्र के सांसदों की बैठक 3 अगस्त, 2015 को भौतिक सत्यापन द्वारा पारिस्थितिक संवेदी जोन के सीमांकन की प्रगति की संवीक्षा करने के लिए और पश्चिमी घाट के राज्य सरकारों तथा विभिन्न पणधारियों द्वारा समय-समय पर संदेहों/चिंताओं का समाधान करने के लिए आयोजित की गई थी ;

और, पश्चिमी घाट की राज्य सरकारों के प्रतिनिधियों ने 7 जुलाई, 2015 को आयोजित बैठक के दौरान सूचित किया था कि भौतिक सत्यापन द्वारा पारिस्थितिक संवेदी जोन का सीमांकन पूरा होने के उन्नत प्रक्रम में है ;

और, दोनों बैठकों में यह स्पष्ट करने का संकल्प किया गया था कि पश्चिमी घाटों में सीमांकित पारिस्थितिक संवेदी जोन के भीतर निवास करने वाले स्थानीय लोगों का विस्थापन नहीं होगा और कृषि तथा पौधा रोपण क्रियाकलापों का व्यवसाय करने वाले लोग भी प्ररूप अधिसूचना में अंतर्विष्ट उपबंधों के कारण प्रभावित नहीं होंगे ;

और, केन्द्रीय सरकार ने पश्चिमी घाट क्षेत्र के संसद सदस्यों की तारीख 11, अगस्त, 2016 को एक बैठक आहूत की और निर्णय लिया कि तारीख 4 सितम्बर, 2015 की प्रारुप अधिसूचना इसे अंतिम रुप देने के लिए आगे चर्चा का आधार होगी ।

अतः, केंद्रीय सरकार, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) की धारा 3 और पर्यावरण (संरक्षण) नियम, 1986 के नियम 5 के उपनियम (3) द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए, 56,825 वर्ग किलोमीटर के पहचान किए गए क्षेत्र, जो पश्चिमी घाट पारिस्थितिक संवेदी क्षेत्र के रूप में छह राज्यों अर्थात् गुजरात, महाराष्ट्र, गोवा, कर्नाटक, केरल और तमिलनाडु के आर-पार फैला है, को अधिसूचित करती है ।

2. **पश्चिमी घाट पारिस्थितिक संवेदी क्षेत्र की सीमा और वर्णन** -(1) केरल राज्य को अपवर्जित करते हुए उच्च स्तरीय कार्यकरण समूह द्वारा यथारूप से सिफारिश किए गए पारिस्थितिक संवेदी क्षेत्र की सीमा और वर्णन निम्नानुसार हैं :--

(क) प्रत्येक राज्य में आने वाले पारिस्थितिक संवेदी क्षेत्र का विस्तार **उपाबंध क** के अनुसार है ;

(ख) प्रत्येक राज्य में पारिस्थितिक संवेदी क्षेत्र के भाग का राज्यवार मानचित्र **उपाबंध ख1** से **उपाबंध ख5** के अनुसार है ;

(ग) अपने-अपने जिलों और तालुकों के साथ पारिस्थितिक संवेदी क्षेत्र के भीतर आने वाले ग्रामों की राज्यवार सूची **उपाबंध ग** के अनुसार है ।

(2) केरल राज्य में पारिस्थितिक संवेदी क्षेत्र 9993.7 वर्ग किलोमीटर के क्षेत्र में फैला हुआ है, जिसमें 9107 वर्ग किलोमीटर का वन क्षेत्र सम्मिलित है और 886.7 वर्ग किलोमीटर का वर्ग विहीन क्षेत्र है और पारिस्थितिक संवेदी क्षेत्र की सीमा और वर्णन तथा राज्य सरकार द्वारा प्रस्तावित पारिस्थितिक संवेदी क्षेत्र का ग्रामवार ब्यौरा केरल राज्य जैव विविधता बोर्ड की वेबसाइट पर उपलब्ध हैं ।

3. **पारिस्थितिक संवेदी क्षेत्र में परियोजनाओं और क्रियाकलापों का प्रतिषिद्ध या विनियमित होना--** (1) उन प्रस्तावों के सिवाय, जिसे 17 अप्रैल, 2013, वह तारीख, जिसको उच्च स्तरीय कार्यकरण समूह रिपोर्ट मंत्रालय की वेबसाइट पर अपलोड की गई थी, और विचार के लिए लंबित है, से पूर्व विशेषज्ञ आकलन समितियों या पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय या विशेषज्ञ आकलन समितियों या पर्यावरण समाघात समाधान निर्धारण प्राधिकारियों द्वारा प्राप्त किया गया है, पारिस्थितिक संवेदी क्षेत्र में परियोजनाओं और क्रियाकलापों के निम्नलिखित प्रवर्ग प्रतिषिद्ध होंगे और ऐसे प्रस्तावों पर उस समय विद्यमान मार्गदर्शक सिद्धांतों और नियमों के अनुसार विचार किया जाएगा।

(क) **खनन**: पारिस्थितिक संवेदी क्षेत्र में खनन, उत्खनन और रेत खनन पर पूर्ण प्रतिबंध होगा और सभी विद्यमान खानें इस अंतिम अधिसूचना के जारी किए जाने की तारीख से या विद्यमान खनन पट्टे की समाप्ति पर, इनमें जो भी पहले हो, पांच वर्ष के भीतर प्रावस्थाबद्ध रूप से समाप्त कर दी जाएंगी ।

(ख) **तापीय विद्युत संयत्र**: कोई नई तापीय विद्युत परियोजनाएं और विद्यमान संयंत्रों का विस्तार पारिस्थितिक संवेदी जोन में अनुज्ञात नहीं किया जाएगा ।

(ग) **उद्योग**: केंद्रीय प्रदूषण नियंत्रण बोर्ड या राज्य प्रदूषण नियंत्रण बोर्ड द्वारा यथा विनिर्दिष्ट सभी नए "लाल" प्रवर्ग और ऐसे विद्यमान उद्योगों के विस्तार को प्रतिबंधित किया जाएगा । उद्योगों की "लाल" प्रवर्ग की सूची केंद्रीय प्रदूषण नियंत्रण बोर्ड द्वारा यथा विनिर्दिष्ट होगी:

परंतु उद्योगों के सभी विद्यमान "लाल" प्रवर्ग, जिसके अंतर्गत स्वास्थ्य स्थापन है, लागू नियमों और विनियमों के अधीन पारिस्थितिक संवेदी जोन में बने रहेंगे:

(घ) **निर्माण, संनिर्माण, नगरीय और क्षेत्र विकास परियोजना**: 20,000 वर्ग मीटर तक और उससे अधिक निर्मित क्षेत्र वाले निर्माण एवं संनिर्माण की सभी नई और विस्तार परियोजनाएं और 50 हेक्टेयर और उससे अधिक वाले सभी नए और विस्तार नगरीय और क्षेत्र विकास परियोजनाएं या 1,50,000 वर्ग मीटर और उससे अधिक का निर्मित क्षेत्र प्रतिषिद्ध होंगे । **प्रचलित विधियों और विनियमों के अनुसार पारिस्थितिक संवेदी जोन में विद्यमान आवासीय गृहों की मरम्मत या विस्तार या नवीकरण पर कोई प्रतिबंध नहीं होगा ।**

व्याख्यात्मक नोट: (1) कानूनों और नियमों के अनुसार पारिस्थितिकी संवेदी क्षेत्र और प्रस्तावित प्राथमिक स्वास्थ्य केन्द्रों में सभी विद्यमान स्वास्थ्य देखभाल प्रतिष्ठानों के लिए स्थापित कर सकते हैं। (2) संपत्ति के स्वामित्व में परिवर्तन में कोई प्रतिबंध नहीं है।

(2) निम्नलिखित परियोजनाओं के प्रवर्ग और क्रियाकलापों को नीचे दिए गए अनुसार विनियमित किया जाएगा :-

(क) **जल विद्युत परियोजनाएं**: नई जल विद्युत परियोजनाएं निम्नलिखित शर्तों के अधीन रहते हुए का.आ. 1533(अ) तारीख 14 सितंबर, 2006 द्वारा प्रकाशित पर्यावरण समाघात निर्धारण अधिसूचना के अनुसार अनुज्ञात की जाएंगी, अर्थात् :-

(i) तब तक अकाल मौसम में कम से कम तीस प्रतिशत सरिता प्रवाह का अबाधित पारिस्थितिकीय प्रवाह जब तक प्रत्येक परियोजना के लिए व्यापक अध्ययन व्यष्टिक आधार रुपरेखाएं स्थापित न हो जाए ;

(ii) संचयी अध्ययन, जो सरिताओं और वन तथा जैव विविधता हानि के प्रवाह पैटर्न पर प्रत्येक परियोजना के समाघात का निर्धारण करता है ;

(iii) तीन किलोमीटर पर एक परियोजना और दूसरी परियोजना के बीच न्यूनतम दूरी बनाई रखी जाती है और किसी भी समय सरिता की द्रोणी का पचास प्रतिशत से अनधिक प्रभावित होता है,

(ख) केंद्रीय प्रदूषण नियंत्रण बोर्ड या राज्य प्रदूषण नियंत्रण बोर्ड द्वारा यथा विनिर्दिष्ट "नारंगी" प्रवर्ग उद्योग वातावरणीय विनियमों के कड़े अनुपालन के साथ अनुज्ञात किए जाएंगे किंतु निम्न वातावरणीय समाघात वाले उद्योग का संवर्धन करने के लिए सभी प्रयास किए जाएंगे ।

(ग) उन क्रियाकलापों के मामले में, जो पूर्व पर्यावरण और वन मंत्रालय द्वारा प्रकाशित पर्यावरण समाघात निर्धारण अधिसूचना सं.का.आ.1533(अ) तारीख 14 सितंबर, 2006 के अनुसूची के अंतर्गत आते हैं और ऐसी परियोजनाओं और क्रियाकलापों के सिवाय जो उपपैरा (1) के अधीन विनिर्दिष्ट रूप से प्रतिषिद्ध किए गए हैं, पारिस्थितिक संवेदी जोन के अंतर्गत आते हैं, उक्त अधिसूचना के उपबंधों के अधीन मंत्रालय द्वारा पूर्व पर्यावरणीय अनापत्ति के संबंध में विचार करने से पूर्व संचयी समाघातों तथा विकास संबंधी आवश्यकताओं के लिए संवीक्षित किए जाएंगे और निर्धारित किए जाएंगे ।

(घ) पारिस्थितिक संवेदी क्षेत्र में गैर वानिकी प्रयोजनों के लिए वन भूमि के अपवर्तन के मामलों में विशिष्टितया और सुसंगत अधिनियमों के उपबंधों पर प्रतिकूल प्रभाव डाले बिना, आवेदन प्रक्रम से लेकर अनुमोदन तक परियोजना की संपूर्ण जानकारी पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय तथा संबंधित राज्यों के वन विभाग की वेबसाइट पर लोक अधिकार क्षेत्र रखी जाएगी ।

(ङ) अनुसूचित जाति और अन्य परंपरागत वनवासी (वन अधिकारों की मान्यता) अधिनियम, 2006 (2007 का 2) के अधीन पूर्व सूचित सम्मति की अपेक्षाओं का अनुपालन किया जाएगा और परियोजनाएं तथा क्रियाकलाप आरंभ करने के लिए ग्राम सभा की सम्मति आज्ञापक होगी ।

4. **कार्यान्वयन तथा निगरानी तंत्र** - (1) इस अधिसूचना के उपबंधों की निगरानी और प्रवर्तन की जिम्मेदारी पश्चिमी घाट क्षेत्र के संबद्ध राज्य सरकारों के पास होगी और राज्य सरकारें पारिस्थितिक संवेदी क्षेत्र में निर्बंधनों के प्रभावी निगरानी और प्रवर्तन के लिए अपेक्षित तंत्र स्थापित करना सुनिश्चित करेंगी और ऐसे तंत्र स्थापित करते समय, अन्य बातों के साथ, राज्य सरकारें, विद्यमान विनियामक संस्थाओं और आदेशिकाओं को सुदृढ़ करना और विनिश्चय करने में स्थानीय समुदायों की भागीदारी तथा उनके सम्मिलित होने को सुनिश्चित करेगी और ऐसे तंत्रों के ब्यौरों का पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय के साथ संबद्ध राज्य सरकारों द्वारा हिस्सा बांटा जाएगा ।

(2) पश्चिमी घाट विनिश्चय सहायता और निगरानी केंद्र पश्चिमी घाटों की छह राज्य सरकारों के सहयोग से पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय द्वारा स्थापित किया जाएगा जो नियमित आधार पर पश्चिमी घाटों की पारिस्थितिक की प्रास्थिति का निर्धारण करेगा और रिपोर्ट करेगा और इस अधिसूचना के उपबंधों के कार्यान्वयन में विनिश्चय सुविधा प्रदान करेगा तथा वैज्ञानिक विनिश्चय करने एवं प्रवर्तन को सुदृढ़ करने के लिए तंत्रों को भी सुकर बनाएगा ।

(3) पारिस्थितिक संवेदी क्षेत्र में अनुज्ञात परियोजनाओं तथा क्रियाकलापों की पश्च अनापत्ति निगरानी संबद्ध राज्य सरकार, राज्य प्रदूषण नियंत्रण बोर्ड तथा मंत्रालय के प्रादेशिक कार्यालय द्वारा की जाएगी और पारिस्थितिक संवेदी क्षेत्र की सभी ऐसी परियोजनाओं की, जिन्हें पर्यावरणीय अनापत्ति या वन संबंधी अनापत्ति प्रदान की गई है, पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय के संबद्ध क्षेत्रीय कार्यालय द्वारा कम से कम वर्ष में एक बार निगरानी की जाएगी ।

(4) पारिस्थितिक संवेदी क्षेत्र में ऐसी सभी परियोजनाओं की, जिन्हें जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 (1974 का 6) या वायु (प्रदूषण निवारण और नियंत्रण) अधिनियम, 1981 (1981 का 14) के अधीन स्थापित करने के लिए या उन्हें प्रचालित करने के लिए सम्मति प्रदान की गई है, संबद्ध राज्य प्रदूषण नियंत्रण बोर्ड द्वारा वर्ष में कम से कम एक बार निगरानी की जाएगी और संबद्ध राज्य सरकार, इस अधिसूचना के उपबंधों की निगरानी करने तथा उनके प्रवर्तन में उठाए गए कदमों के, अन्य बातों के साथ, ब्यौरे देते हुए वार्षिक आधार पर उनकी अधिकारिता के अंतर्गत आने वाले पश्चिमी घाट क्षेत्र की बाबत "स्वास्थ्य रिपोर्ट की स्थिति" तैयार करेगी और उसे लोक अधिकार क्षेत्र में उपलब्ध कराएगी ।

5. **उल्लंघन के लिए कार्रवाई**:- इस अधिसूचना के उपबंधों के किसी उल्लंघन की दशा में, पर्यावरण (संरक्षण) अधिनियम, 1986 (1986 का 29) के उपबंधों और अन्य सुसंगत परिनियमों के अधीन तद्नुसार कार्रवाई की जाएगी ।

6. इस अधिसूचना के उपबंध, लंबित वाद में न्यायालय के अंतिम आदेशों के अधीन होंगे।

7. इस अधिसूचना के उपबंध पारिस्थितिक संवेदी क्षेत्र में संपत्ति के स्वामित्व को प्रभावित नहीं करेंगे ।

[फा. सं. 1-4/2012-आरई (भाग)]

ललित कपूर, वैज्ञानिक 'जी'

उपाबंध क

सारणी : केरल राज्य के अलावा पश्चिमी घाट पारिस्थितिक संवेदी क्षेत्र का राज्यवार क्षेत्र

क्रम सं.	राज्य	पश्चिमी घाट पारिस्थितिक संवेदनशील क्षेत्र (वर्ग किलोमीटर में)
1	गुजरात	449
2	महाराष्ट्र	17340
3	गोवा	1461
4	कर्नाटक	20668
5	तमिलनाडु	6914

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 27th, February, 2017

S.O. 667(E).–The following draft of the notification, which the Central Government proposes to issue in exercise of the powers conferred by section 3 of the Environment (Protection) Act, 1986 (29 of 1986) is hereby published, in supersession of the notification of the Government of India, Ministry of Environment, Forest and Climate Change published in Gazette of India, Extraordinary, Part II, Section 3, Sub-Section (ii) vide notification number S.O. 2435(E), dated the 4th September, 2015, as except as respects things done or omitted to be done before such supersession, as required by sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, for the information of the public likely to be affected thereby; and notice is hereby given that the said draft notification shall be taken into consideration on or after the expiry of a period of sixty days from the date on which copies of the Gazette of India containing this notification are made available to the Public;

Any person interested in making any objections or suggestions on the proposals contained in the draft notification may forward the same in writing, for consideration of the Central Government within the period so specified to the Secretary, Ministry of Environment, Forests and Climate Change, Indira Paryavaran Bhawan, CGO Complex, Jor bagh Road, Ali Ganj, New Delhi-110003, or at e-mail address: esz-mef@nic.in.

Draft notification

WHEREAS, Western Ghats is an important geological landform on the fringe of the west coast of India and it is the origin of Godavari, Krishna, Cauvery and a number of other rivers and extends over a distance of approximately 1500 kilometre from Tapti river in the north to Kanyakumari in the south with an average elevation of more than 600 metre and traverses through six States namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu;

AND WHEREAS, Western Ghats is a global biodiversity hotspot and a treasure trove of biological diversity and it harbours many endemic species of flowering plants, endemic fishes, amphibians, reptiles, birds, mammals and invertebrates and is also an important center of evolution of economically important domesticated plant species such as pepper, cardamom, cinnamom, mango and jackfruit;

AND WHEREAS, Western Ghats has many unique habitats which are home to a variety of endemic species of flora and fauna such as Myristica swamps, the flat-topped lateritic plateaus, the Sholas and wetland and riverine ecosystems;

AND WHEREAS, UNESCO has included certain identified parts of Western Ghats in the UNESCO World Natural Heritage List because Western Ghats is a Centre of origin of many species as also home for rich endemic biodiversity and hence a cradle for biological evolution;

AND WHEREAS, the Western Ghats not only harbour rich biodiversity, but also supports a population of approximately fifty million people and also include areas of high human population density and therefore, there is a need to conserve and protect the unique biodiversity of Western Ghats while allowing for sustainable and inclusive development of the region;

AND WHEREAS, the Ministry constituted a High Level Working Group to study the preservation of the ecology, environmental integrity and holistic development of the Western Ghats in view of their rich and unique biodiversity and it was also tasked with the mandate to take a holistic view of the issue and to bring synergy between protection of environment and biodiversity and needs and aspirations of the local and indigenous people, sustainable development and environmental integrity of the region and to suggest steps and the way forward to prevent further degradation of the fragile ecology of the Western Ghats;

AND WHEREAS, the High Level Working Group had since submitted its report to the Ministry on the 15th April, 2013 which was kept in the public domain seeking comments/views of concerned stakeholders and was also sent to the concerned six State Governments of the Western Ghats region namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu for their considered comments/views on the report;

AND WHEREAS, the High Level Working Group has identified approximately thirty-seven percent the Western Ghats as ecologically sensitive which covers an area of 59,940 square kilometre. of natural landscape of Western Ghats and represents a continuous band of natural vegetation extending over a horizontal distance of 1,500 kilometre and is spread across six states of Western Ghats region namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu and includes Protected Areas and World Heritage Sites of Western Ghats and the High Level Working Group has

recommended prohibition or regulation of identified projects and activities in the Ecologically Sensitive Area which have maximum interventionist and destructive impacts on ecosystems;

AND WHEREAS, the Ministry vide OM No. 1-4/2012 – RE (Pt.), dated the 20th December 2013, had *inter alia* sought suggestions from the State Governments on modifications in the boundary of the Ecologically Sensitive Area as identified by the High Level Working Group on the basis of physical verification;

AND WHEREAS, the State Government of Kerala had earlier accordingly undertaken the exercise of demarcating Ecologically Sensitive Area in the State by physical verification the Ecologically Sensitive Area recommended by the Kerala State Government is spread over of an area of 9993.7 square kilometre, which includes 9107 square kilometre of forest area and 886.7 square kilometre of non-forest area and Ecologically Sensitive Area in that State works out to 9,993.7 square kilometre as compared to 13,108 square kilometre recommended by High Level Working Group;

AND WHEREAS, earlier the Ministry issued a draft notification vide S. O. No. 733 (E), dated the 10th March 2014, declaring Ecologically Sensitive Area in the Western Ghats taking into account the Ecologically Sensitive Area demarcated by Kerala Government for the State of Kerala instead of Ecologically Sensitive Area recommended by High Level Working Group for the State, while for other States of Western Ghats region the Ecologically sensitive Area recommended by the High Level Working Group was considered ;

AND WHEREAS, while responding to the said draft notification number S.O. 733 (E), on dated the 10th March, 2014 some of the States of Western Ghats region had sought an opportunity to undertake demarcation of Ecologically Sensitive Area by physical verification and the same was given by the Central Government vide letter dated the 9th June, 2014 except for the State of Kerala;

AND WHEREAS, the Central Government had convened meetings of the State Environment and Forest Ministers of the Western Ghat region on the 7th July, 2015 and Members of Parliament of Western Ghats region on the 3rd August, 2015 to review the progress of demarcation of Ecologically Sensitive Area by physical verification and also to address the apprehensions /concerns expressed by the State Governments and the various stakeholders of Western Ghats from time to time;

AND WHEREAS, the representatives of the State Governments of Western Ghats region had informed during the meeting held on the 7th July, 2015 that demarcation of Ecologically Sensitive Area by physical verification is in advanced stages of completeness;

AND WHEREAS, it was resolved in both the meetings to clarify that there will be no displacement or dislocation of the local people living in habitations within the Ecologically Sensitive Areas demarcated in the Western Ghats and practicing of agriculture and plantation activity shall also not be affected due to the provisions contained in the draft notification;

And Whereas, the Central Government convened a meeting with the Members of Parliament of the Western Ghats region on 11th August, 2016 and decided that the Draft Notification dated 4th September, 2015 would be the basis for further discussion to finalize it.

NOW, THEREFORE, in exercise of the powers conferred by section 3 of the Environment (Protection) Act, 1986 (29 of 1986) and sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby notifies the identified area of 56,825 square kilometre which is spread across six States, namely, Gujarat, Maharashtra, Goa, Karnataka, Kerala and Tamil Nadu, as the Western Ghats Ecologically Sensitive Area .

2. Boundary and Description of Western Ghats Eco-sensitive Area.- (1) The boundary and description of Eco-Sensitive Area as recommended by High Level Working Group excluding the State of Kerala is as under:-

(a) the extent of Eco-sensitive area falling in each state is as per Annexure A;

(b) the State-wise map of the portion of the Eco-sensitive area in each State is as per Annexure – B1 to B5;

(c) the State-wise list of villages falling within the Eco-sensitive Area along with respective Districts and Talukas is as per Annexure-C**.**

(2) The Eco-sensitive Area in the State of Kerala is spread over of an area of 9993.7 square kilometre which includes 9107 square kilometre of forest area and 886.7 square kilometre of non-forest area and the boundary and description of Eco-sensitive Area and the village-wise details of Eco-sensitive area proposed by the State Government are available on the website of the Kerala State Biodiversity Board.

3. Projects and activities to be prohibited or regulated in the Eco-sensitive area.- (1) The following categories of projects and activities shall be prohibited in Eco-sensitive Area except those proposals which have been received by Expert

Appraisal Committees or the Ministry of Environment, Forest and Climate Change or State Level Expert Appraisal Committees or the State Level Environment Impact Assessment Authorities before the 17th April, 2013, the date on which the High Level Working Group report was uploaded on the website of the Ministry and are pending consideration and such proposals shall be dealt in accordance with the guidelines and rules in existence at that time.

(a) Mining.- There shall be a complete ban on mining, quarrying and sand mining in Ecologically Sensitive Area and all existing mines shall be phased out within five years from the date of issue of the final notification or on the expiry of the existing mining lease, whichever is earlier.

(b) Thermal power plants.- No new thermal power projects and expansion of existing plants shall be allowed in the Ecologically Sensitive Area.

(c) Industry.- All new 'Red' category of industries as specified by the Central Pollution Control Board or State Pollution Control Board and the expansion of such existing industries shall be banned and the list of 'Red' category of industries shall be as specified by the Central Pollution Control Board:

provided that all existing 'Red' category of industries including health care establishments shall unfold continue in Eco-sensitive Area under the applicable rules and regulations.

(d) Building, construction, township and area development projects.- All new and expansion projects of building and construction with built up area of 20,000 square metres and above and all new and expansion townships and area development projects with an area of 50 hectares and above or with built up area of 1,50,000 square metres and above shall be prohibited and there shall be no restriction on repair or extension or renovation of existing residential houses in the Eco-sensitive Area as per prevailing laws and regulations.

Note: (1) All existing health care establishments can continue in Eco-sensitive Area and proposed Primary Health Centres established as per laws and regulations. 2 No restriction in change in ownership of property.

(2) The following categories of projects and activities shall be regulated as given below:-

(a) Hydropower projects- New Hydropower projects shall be allowed as per the Environment Impact Assessment notification, published vide number S.O. 1533 (E), dated the 14th September, 2006, subject to the following conditions, namely:-

(i) uninterrupted ecological flow of at least thirty percent of the rivers flow in lean season, till a comprehensive study establishes individual baselines for each project;

(ii) a cumulative study which assesses the impact of each project on the flow pattern of the rivers and forest and biodiversity loss;

(iii) the minimum distance between one project and the other is maintained at three kilometre and not more than fifty per cent. of the river basin is affected at any time.

(b) The 'Orange' category of Industries as specified by the Central Pollution Control Board or State Pollution Control Board shall be allowed with strict compliance of environmental regulations but all efforts shall be made to promote industries with low environmental impacts.

(c) In the case of activities that are covered in the schedule to the Environment Impact Assessment notification number S.O. 1533 (E), dated 14th September, 2006, published by theerstwhile Ministry of Environment and Forests and are falling in the Eco-sensitive Area, except the projects and activities which are specifically prohibited under sub-para (1) shall be scrutinised and assessed for cumulative impacts and development needs before considering for prior environmental clearance by the Ministry under the provisions of the said notification.

(d) In particular and without prejudice to the provisions of the relevant Acts, in cases of diversion of forest land for non-forestry purposes in the Eco-sensitive Area, all information of the project, from application stage to approval shall be placed in the public domain on the website of the Ministry of Environment, Forest and Climate Change and of the Forest Department of the respective States.

(e) The requirements of prior informed consent under the Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (2 of 2007) shall be complied with and the consent of Gram Sabha for undertaking projects and activities shall be mandatory.

4. Implementation and Monitoring mechanism.– (1) The responsibility for monitoring and enforcement of provisions of this notification shall be with the concerned State Governments of Western Ghats region and the State Governments shall

ensure placing of required mechanisms for effective monitoring and enforcement of restrictions in the Eco-sensitive Area and while placing such mechanisms, the State Governments shall inter-alia ensure strengthening of existing regulatory institutions and processes, and participation and involvement of local communities in decision making and the details of such mechanisms shall be shared by the concerned State Governments with the Ministry of Environment, Forest and Climate Change .

(2) A Decision Support and Monitoring Centre for Western Ghats shall be established by the Ministry of Environment, Forest and Climate Change in collaboration with the six State Governments of the Western Ghats region which shall assess and report on the status of ecology of Western Ghats on regular basis and provide decision support facility in the implementation of the provisions of this notification and shall also facilitate mechanisms for scientific decision making and strengthening enforcement.

(3) The post clearance monitoring of projects and activities allowed in the Eco-sensitive Area shall be carried out by the concerned State Government, State Pollution Control Board and the Regional Office of the Ministry and all projects in the Eco-sensitive Area which have been given Environmental Clearance or Forest Clearance shall be monitored at least once a year by the concerned Regional Office of the Ministry of Environment, Forest and Climate Change .

(4) All projects in the Eco-sensitive Area which have been given consent to establish or Consent to Operate under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974) or the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) shall be monitored at least once a year by the concerned State Pollution Control Board and the concerned State Governments shall prepare 'State of Health Report' in respect of Western Ghats region falling within their jurisdiction on an annual basis giving inter-alia the details of steps taken in monitoring and enforcement of provisions of this notification and make the same available in public domain.

5. Action for contravention.- In case of any contravention of the provisions of this notification, action under the provisions of the Environment (Protection) Act, 1986 (29 of 1986) and other relevant statutes shall be taken accordingly.

6. The provisions in this notification shall be subject to the final orders of the court in pending litigation.

7. The provisions of this notification shall not affect the ownership of the property in the Eco-sensitive Area.

[F. No. 1-4/2012– RE (Pt.)]

LALIT KAPUR, Scientist 'G'

Annexure A

Table: State-wise area of Western Ghats Eco-sensitive Area except for State of Kerala

S. No	**State**	**Western Ghats Ecologically sensitive area (in square kilometre)**
1	Gujarat	449
2	Maharashtra	17340
3	Goa	1461
4	Karnataka	20668
5	Tamil Nadu	6914

केरल	इडुक्की	पीरूमडे	मलाप्पारा
केरल	इडुक्की	पीरूमडे	पेरूवंथनम
केरल	इडुक्की	थोडापुजा	कांजीकुजी
केरल	इडुक्की	थोडापुजा	उडमबन्नूर
केरल	इडुक्की	थोडापुजा	इडुकक्ी (पार्ट)
केरल	इडुक्की	थोडापुजा	एराकुलम
केरल	इडुक्की	उडम्बचोला	चिन्नकनाल
केरल	इडुक्की	उडम्बचोला	बेसनवेली
केरल	इडुक्की	उडम्बचोला	राजकुमारी
केरल	इडुक्की	उडम्बचोला	पोपारा
केरल	इडुक्की	उडम्बचोला	राजक्कड
केरल	इडुक्की	उडम्बचोला	कोन्नाथेडी
केरल	इडुक्की	उडम्बचोला	सनातनपारा
केरल	इडुक्की	उडम्बचोला	कांतीप्यारा
केरल	इडुक्की	उडम्बचोला	वाथीकुडी
केरल	इडुक्की	उडम्बचोला	चतुरंगपाड़ा
केरल	इडुक्की	उडम्बचोला	उडम्बंचोला
केरल	इडुक्की	उडम्बचोला	उप्पुथेडु
केरल	इडुक्की	उडम्बचोला	पाराथोडु
केरल	इडुक्की	उडम्बचोला	कलकूनतल
केरल	इडुक्की	उडम्बचोला	थेंकमनी (पार्ट)
केरल	इडुक्की	उडम्बचोला	अय्यप्पनचोली
केरल	इडुक्की	उडम्बचोला	पंपडुमपारा
केरल	इडुक्की	उडम्बचोला	कट्टाप्पाना
केरल	इडुक्की	उडम्बचोला	कर्णपुरम
केरल	इडुक्की	उडम्बचोला	वडनमेडु
केरल	इडुक्की	उडम्बचोला	अंकारा
केरल	इडुक्की	उडम्बचोला	अनाविलस
केरल	इडुक्की	उडम्बचोला	चक्कुपल्लम
केरल	कन्नूर	उडम्बचोला	अरालय
केरल	कन्नूर	उडम्बचोला	कोट्टयूर
केरल	कन्नूर	थलसेरी	चेरूवनचेरी
केरल	कोल्लम	थलसेरी	पुन्नाला
केरल	कोल्लम	थलसेरी	पिरवनथूर
केरल	कोल्लम	पठानपुरम	एडासन
केरल	कोल्लम	पठानपुरम	थेनमाला
केरल	कोल्लम	पठानपुरम	एरियनकाबू
केरल	कोल्लम	पठानपुरम	थिंकालकारिक्कोम
केरल	कोल्लम	पठानपुरम	कुलाथपुजा
केरल	कोल्लम	पठानपुरम	चन्नप्पेट्टा
केरल	कोट्टायम	पठानपुरम	कोट्टकल
केरल	कोट्टायम	पठानपुरम	मेलूकावू
केरल	कोट्टायम	कांजीरप्पली	टीकाउ
केरल	कोट्टायम	मीनाचिल	पुंजारथेक्केकारा
केरल	कोजीकोड	मीनाचिल	केडावूर

ANNEXURE-IV

APPLICATION FOR GRANT OF TOR
OF
Proposed Ropeway with Building Constructions (amusement park with mini hill station township)
at
Village Konnathadi, Munnar, Taluk Idukki (previously Udumbanchola), District Idduki, Kerala

Submitted to:

MINISTRY OF ENVIRONMENT, FORESTS & CLIMATE CHANGE, GOI

Submitted by:

M/s Valley World Entertainments Pvt. Ltd

(10 F, Parthinon Apartments, Marottichuvadu, Edapally, Cochin-682024)

Environmental Consultant

M/s PERFACT ENVIRO SOLUTIONS PVT. LTD.

(NABET Registered wide list of accredited consultants organizations/ Rev 48/ 16th December, 2016 at S. No-110)

5th Floor, NN Mall, Mangalam Palace

Sector 3, Rohini, New Delhi

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CONTENT

ENCLOSURE-I- FORM-I

APPENDIX – (I)

FORM – I

(I) Basic Information:

Sr. No.	Item	Details
1.	Name of the Project/s	Proposed Ropeway with Building Constructions (amusement park with mini hill station township)
2.	S. No. in the Schedule	7 (g)
3.	Proposed capacity/ area/ length/ tonnage to be handled/ command area/ lease area/ number of wells to be drilled	Plot Area : 202830 sqm (20.283 ha) Built-up Area: 19500.00 Ropeway capacity : 1000 PPH Alignment length-3602 m
4.	New/ Expansion/ Modernization	New
5.	Existing Capacity/Area etc.	Not Applicable
6.	Category of Project i.e. 'A' or 'B'	Category 'A'
7.	Does it attract the general condition? If yes, please specify	General condition shall apply because Konnathadi village is falling in list of villages in Eco Sensitive Area of the Western Ghats.
8.	Does it attract the specific condition? If yes, please specify	Not applicable
9.	Location	Village Konnathadi, Munnar, Taluk Idukki (previously Udumbanchola), District Idduki, Kerala
	Plot/Survey/Khasra No.	-
	Village	Konnathadi
	Tehsil	Idukki (previously Udumbanchola)
	District	Idukki
	State	Kerala
10.	Nearest railway station/airport with distance in kms	Nearest Railway Station Bodinayakanoor Rly Station -33.7 Km W Nearest Airport Cochin International- 74.7 Km NW
11.	Nearest Town, city, District Headquarters along with distance in kms	Town: Munnar District: Idukki
12.	Village Panchayats, Zilla Parishad, Municipal Corporation, Local body (complete postal addresses with telephone nos. to be given)	Gram Panchayat - Konnathadi
13.	Name of the applicant	Valley World Entertainments Private Ltd.
14.	Registered Address	10 F, Parthinon Apartments, Marottichuvadu, Edapally, Cochin-682024

Sr. No.	**Item**	**Details**
15.	Address For Correspondence	Vakkils Building, Opp. T.V.S, Kaloor, Cochin-682017
	Name	Mr. Jenson Paul
	Designation (Owner/Partner/CEO)	Director
	Address	Vakkils Building, Opp.T.V.S,Kaloor, Cochin
	Pin Code	682017
	Telephone no.	+91 9846844885, +91-484-2340099,2337611
	Fax No. / email id	0484-2331196, director@eurotechmaritime.org
16.	Details of Alternative sites examined if any location of these sites should be shown on a top sheet	Details of Alternative sites is given in Prefeasibility Report.
17.	Interlinked Projects	Not Applicable
18.	Whether separate application of interlinked project has been submitted?	Not Applicable
19.	If yes, date of submission	Not Applicable
20.	If no, reason	Not Applicable
21.	Whether the proposal involves approval/clearance under: if yes, details of the same and their status to be given. a. The Forest (Conservation) Act, 1980? b. The Wildlife (Protection) Act, 1972? c. The C.R.Z Notification, 1991?	Yes. a) Not required. b) Not required c) CRZ not applicable
22.	Whether there is any Government order / Policy relevant / relating to the site?	Not Applicable
23.	Forest land involved (hectares)	Not applicable
24.	Whether there is any litigation pending against the project and /or land in which the project is propose to be set up? a. Name of the court b. Case No. c. Orders/directions of the court, if any and its relevance with the proposed project.	No litigation pending against the project proponent

(II) **Activity**

1. Construction, operation or decommissioning of the Project involving actions, which will cause physical changes in the locality (topography, land use, changes in water bodies, etc.)

Sr. No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
1.1	**Permanent or temporary change in land use, land cover or topography including increase in intensity of land use (with respect to local land use plan)**	Yes	A total of 202830 sqm (20.2830 ha) vacant land will be involved for Ropeway with Building Constructions (amusement park with mini hill station township).
1.2	**Clearance of existing Land, vegetation and building?**	No	There are no building and distinct vegetation at site except few bushes; hence no clearance of existing land is required.
1.3	**Creation of new land uses?**	Yes	New land-use will be created. Vacant land would be changed to Ropeway with Building Constructions (amusement park with mini hill station township).
1.4	**Pre-construction investigation e.g. borehole, soil testing?**	Yes	Geotech investigation will be submitted.
1.5	**Construction works**	Yes	Construction will be done as per Master plan of Idduki District. Construction work for ropeway part will be done mainly during erection of two terminals. The laying of ropes does not require any excavation.
1.6	**Demolition work**	No	NA
1.7	**Temporary sites used for construction works or housing of construction workers?**	No	Around 250 labours shall be engaged, who will be from nearby villages. No housing shall be provided.
1.8	**Above ground buildings, structures or earthworks including linear structures, cut and fill or excavations**	Yes	Above ground, the building shall be elevated upto maximum height of 15 m and excavation will be done for foundation only. Total of two terminals will be constructed for Ropeway.
1.9	**Underground works including mining or tunneling?**	No	Not Applicable
1.10	**Reclamation works?**	No	Not Applicable
1.11	**Dredging?**	No	Not Applicable

Sr. No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
1.12	**Offshore structures?**	No	Not Applicable
1.13	**Production and manufacturing processes?**	No	Not Applicable
1.14	**Facilities for storage of goods or materials?**	Yes	Goods or materials shall be stored in respective units.
1.15	**Facilities for treatment or disposal of solid waste or liquid effluents?**	Yes	Treatment and disposal of solid waste and liquid effluents will be done at Lower terminal. 2 No. of STP of total capacity 200 KLD shall be installed, each at LTP & UTP. and solid waste shall be segregated and treated in OWC.
1.16	**Facilities for long term housing of operational workers?**	No	Not Applicable
1.17	**New road, rail or sea traffic during construction or operation?**	No	Not Applicable
1.18	**New road, rail, air waterborne or other transport infrastructure including new or altered routes and stations, ports, airports etc?**	No	Not Applicable
1.19	**Closure or diversion of existing transport routes or infrastructure leading to changes in traffic movements?**	Yes	The project is itself a creation of alternative mode of transportation to reach at hill top. The transportation measures already existing near site are as follows: <u>Nearest Railway Station</u> Bodinayakanoor Rly Station -33.75 Km W <u>Nearest Airport</u> Cochin International- 74.7 Km NW
1.20	**New or diverted transmission lines or pipelines?**	No	Not Applicable
1.21	**Impoundment, damming, culverting, realignment or other changes to the hydrology of watercourses or aquifers?**	No	Not Applicable
1.22	**Stream crossing?**	No	Not Applicable

Sr. No	Information/Checklist confirmation	Yes/No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
1.23	**Abstraction or transfers of water from ground or surface waters?**	No	Water will be sourced from KWA Supply.
1.24	**Changes in water bodies or the land surface affecting drainage or run-off?**	No	Not Applicable
1.25	**Transport of personnel or materials for construction, operation or decommissioning?**	Yes	Material will be transported using local facilities like truck, trolley etc. till UTP area and hereafter through material ropeway.
1.26	**Long-term dismantling or decommissioning or restoration works?**	No	Not Applicable
1.27	**Ongoing activity during decommissioning which could have an impact on the environment?**	No	None
1.28	**Influx of people to an area in either temporarily or permanently?**	Yes	**During Construction phase**: Maximum of 250 numbers of laborers will be deployed during peak construction phase. **During operation phase** As this is a Ropeway with Building Constructions (amusement park with mini hill station township), 1500 no. of staff working for 8-12 hours & visitors of approx. 6000 no. is envisaged.
1.29	**Introduction of alien species?**	No	None
1.30	**Loss of native species or genetic diversity?**	No	None
1.31	**Any other actions?**	No	Not Applicable

2. Use of Natural resources for construction or operation of the Project (such as land, water, materials or energy, especially any resources which are non-renewable or in short supply):

Sr. No.	Information/checklist confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
2.1	**Land especially undeveloped or agricultural land (ha)**	Yes	A total of 202830 sqm (20.2830 ha) vacant land will be involved for Ropeway with

Sr. No.	Information/checklist confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
			Building Constructions (amusement park with mini hill station township).
2.2	**Water (expected source & competing users) unit: KLD**	Yes	**During construction phase:** The water required during peak stage of construction will be about 50 KLD. The water will be provided by KWA supply. **During Operation phase:** The total water requirement will be 299 KLD out of which fresh water requirement is 156 KLD. The water will be provided by KWA supply.
2.3	**Minerals (MT)**	No	Not Applicable
2.4	**Construction material – stone, aggregates, sand / soil (expected source – MT)**	Yes	Expected Source would be local Market.
2.5	**Forests and timber (source – MT)**	No	Not Applicable
2.6	**Energy including electricity and fuels (source, competing users) Unit: fuel (MT), energy (MW)**	Yes	**During operation phase** 1300 KVA will be supplied Kerala State Electricity Board. DG Set of 2 X 500 KVA & 1 X 360 KVA will be installed for emergency as standby power backup.
2.7	**Any other natural resources (use appropriate standard units)**	No	Not Applicable

3. Use, storage, transport, handling or production of substances or materials, which could be harmful to human health or the environment or raise concerns about actual or perceived risks to human health.

Sr. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
3.1	**Use of substances or materials, which are hazardous (as per MSIHC rules) to human health or the environment (flora, fauna, and water supplies)**	Yes	No storage of hazardous substances (as per MSIHC rules) will be done however, 13 ltr/month used oil from DG sets will be generated. Proper management of Used oil shall be taken care of. Details are given in Pre-feasibility report.

Sr. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
3.2	**Changes in occurrence of disease or affect disease vectors (e.g. insect or water borne diseases)**	No	Suitable drainage and waste management measures will be adopted in both the construction and operational phase which will restrict stagnation of water or accumulation of water. This will effectively restrict the reproduction and growth of disease vectors.
3.3	**Affect the welfare of people e.g. by changing living conditions?**	Yes	Due to upcoming project, employment opportunities will increase, resulting in increase in earning of people. Therefore, the living conditions will improve in the area.
3.4	**Vulnerable groups of people who could be affected by the project e.g. hospital patients, children, the elderly etc.,**	No	No vulnerable group of people will be affected by the project.
3.5	**Any other causes**	No	Not Applicable

4. Production of solid wastes during Construction or Operation or Decommissioning (MT/month)

Sr. No.	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
4.1	**Spoil, overburden or mine wastes**	No	Not Applicable
4.2	**Municipal waste (domestic and or commercial wastes)**	Yes	**During Construction phase:** Solid waste during construction phase will be 38 kg/day which shall be disposed off at municipal solid waste site. **During Operation Phase:** Total organic waste generated from the operational phase shall be 788 kg/Day which would be treated in OWC and 337 Kg/day of recyclable waste shall be sent to approved vendor.
4.3	**Hazardous wastes (as per Hazardous Waste Management Rules)**	Yes	**During Construction phase:** Used oil whenever generated from the DG sets shall be kept in leak proof containers in an isolated area and shall be sent to approved recycler. **During Operation Phase:**

Sr. No.	Information/Checklist confirmation	Yes /No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
			13 Lt/month used oil generated from diesel generators will be carefully stored in HDPE drums in isolated covered facility. The used oil will be sold to vendors authorized by Central Pollution Control Board for the treatment of the same. Suitable care will be taken so that spills / leaks of used oil from storage could be avoided.
4.4	**Other industrial process wastes**	No	Not Applicable
4.5	**Surplus product**	No	Not Applicable
4.6	**Sewage sludge or other sludge from effluent treatment**	Yes	The sludge generated through will be passed through filter press where it will be dewatered/ dried to form a cake and then will be used as manure in green areas. The unused sludge shall be given to farmers or nursery.
4.7	**Construction or demolition wastes**	yes	The excavated material will be re-utilized, Construction waste shall be used for flooring & Back filling in roads etc.
4.8	**Redundant machinery or equipment**	No	Not Applicable
4.9	**Contaminated soils or other materials**	No	Not Applicable
4.10	**Agricultural wastes**	No	Not Applicable
4.11	**Other solid waste**	Yes	**During Construction phase:** No E-waste shall be generated. **During Operation Phase:** 1 Kg/month E-waste shall be generated. It shall be given to approved recycler of SPCB.

5. Release of pollutants or any hazardous, toxic or noxious substances to air (kg/hr)

Sr. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
5.1	**Emissions from combustion of fossil fuels from stationary or mobile sources**	Yes	**During Construction phase:** DG sets of capacity 62.5 KVA shall be installed acoustically enclosed with adequate stack height. **During Operation Phase:** DG Sets of 2 X 500 KVA & 1 X 360 KVA is proposed at lower terminal. To avoid the

Sr. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/ rates, wherever possible) with source of information data
			emissions, adequate stack height for the D.G. Set shall be provided.
5.2	**Emissions from production processes**	No	Not Applicable
5.3	**Emissions from materials handling including storage or transport**	Yes	Dust shall be generated during construction, from the movement of transport vehicles & other construction activities. The effect will be restricted to construction phase only. Water sprinklers shall be used for dust suppression. Material will be stored under Tarpaulin cover.
5.4	**Emissions from construction activities including plant and equipment**	Yes	RMC shall be used for the project. Dust & emissions are likely to be generated during construction activities which shall be reduced by sprinkling of water in a specific time interval & timely maintenance schedule for machinery. Also the machines shall be shut down during idle period.
5.5	**Dust or odors from handling of materials including construction materials, sewage and waste**	Yes	During loading & unloading of construction material dust is likely to be generated during construction phase. Water shall be sprinkled and tarpaulin cover shall be provided over stored raw material to reduce dust emission. Waste water shall be disposed off in septic tank followed by soak pits.
5.6	**Emissions from incineration of waste**	No	Not applicable.
5.7	**Emissions from burning of waste in open air (e.g. slash materials, construction debris)**	No	Open burning of biomass/ other material will be prohibited.
5.8	**Emissions from any other sources**	No	Not Applicable

6. Generation of Noise and Vibration, and Emissions of Light and Heat:

Sr. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
6.1	**From operation of equipment e.g. engines, ventilation plant, crushers**	Yes	**During Construction phase:** DG sets of capacity 62.5 KVA shall be installed acoustically enclosed. The equipment such as mixer machines, bulldozers, cranes, compactors & excavators shall be used which will be of highest standard of reputed make and adhere to international standards. Hence an insignificant impact due to construction machinery is envisaged. Apart from this, the construction activities shall be restricted to daytime only and timely maintenance of machinery will be ensured. **During Operation Phase:** Noise shall be generated during operation of DG sets (for backup only), these shall be kept in acoustically treated room & shall be installed with anti-vibration pads and will be used during Power failure only.
6.2	**From industrial or similar processes**	No	Not Applicable
6.3	**From construction or demolition**	Yes	Due to the various activities, there are short-term noise impacts in the immediate vicinity of the project site. These shall be restricted to day time only. It has been estimated that during the construction period the average noise level will be 80-100 dB (A) during peak construction hours. However, embankment shall be done to further prevent the noise pollution.
6.4	**From blasting or piling**	Yes	The project site is in hilly terrain with lot of rock formation, therefore, blasting will be there for construction of foundation of buildings. Further, in Kerala the foundation of the building is through pilling.
6.5	**From construction or operational traffic**	Yes	Some amount of noise (70 – 75 dB (A)) will be generated from vehicular movement in the construction and operational phase.

			Plantation around the boundary wall shall be done to reduce noise from traffic.
6.6	**From lighting or cooling systems**	No	Not Applicable
6.7	**From any other sources**	No	Not Applicable

7. Risks of contamination of land or water from releases of pollutants into the ground or into sewers, surface waters, groundwater, coastal waters or the sea:

Sr. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
7.1	**From handling, storage, use or spillage of hazardous materials**	Yes	The hazardous waste generated will be Used oil only and it will be stored in HDPE drums and kept in covered rooms under lock and key and will be sold to authorized vendors only. Special care will be taken to prevent leakages and spills.
7.2	**From discharge of sewage or other effluents to water or the land (expected mode and place of discharge)**	No	STP treated water will be reused in flushing & Gardening. It will be zero discharge complex.
7.3	**By deposition of pollutants emitted to air into the land or into water**	yes	The only source of emission in air will be DG Set of 2 X 500 KVA & 1 X 360 KVA. Adequate Stack height for both DG Sets shall be provided
7.4	**From any other sources**	No	Not Applicable
7.5	**Is there a risk of long term build up of pollutants in the environment from these sources?**	No	Not Applicable

8. Risk of accidents during construction or operation of the Project, which could affect human health or the environment

Sr. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
8.1	**From explosions, spillages, fires etc from storage, handling, use or production of hazardous substances**	Yes	**During Construction Phase:** All appropriate measures shall be taken to avoid accidents. **During Operational Phase:** Proper Disaster management & fire-fighting system will be installed at site.
8.2	**From any other causes**	Yes	All the labours shall be provided with suitable personal protective equipment (PPE) as required under the health & safety norms. Adequate safety measures shall be followed as per IS specification such as door locks, rescue equipment. Appropriate rescue equipment shall be provided to facilitate rescue operation of passengers from Cabins of line.
8.3	**Could the project be affected by natural disasters causing environmental damage (e.g. floods, earthquakes, landslides, cloudburst etc)?**	No	The Idukki district falls in Seismic Zone-II Necessary precautions during construction design of the project will be taken. Precautions shall be undertaken during designing of foundations of Pillars and LTP & UTP for earthquake.

9. Factors which should be considered (such as consequential development) which could lead to environmental effects or the potential for cumulative impacts with other existing or planned a activities in the locality:

Sr. No.	Information/Checklist confirmation	Yes/ No	Details thereof (with approximate quantities/rates, wherever possible) with source of information data
9.1	**Lead to development of supporting. facilities, ancillary development or development stimulated by the project which could have impact on the environment e.g.:** **-Supporting infrastructure (roads, power supply, waste or waste water treatment, etc.)** **- Housing development**	yes	2 No. of STP of total capacity 200 KLD shall be installed, each at LTP & UTP for the treatment of wastewater. Not Applicable

	- Extractive industries **- Supply industries** **- Other**		Not Applicable Not Applicable Not Applicable
9.2	**Lead to after-use of the site, which could have an impact on the environment**	Yes	There would be a social upliftment of the area due to increased tourism from the proposed project, positive impact due to reduction in use of fossil fuel vehicles and travelling time.
9.3	**Set a precedent for later developments**	yes	This rope-way will lay precedent for alternatives mode of transportation. It will also attract people to develop organized amusement park with mini hill station township.
9.4	**Have cumulative effects due to proximity to other existing or planned projects with similar effects**	No	Not Applicable

(III) Environmental Sensitivity:

Sr. No.	Areas	Name / Identity	Aerial distance (within 15 km.) Proposed project location boundary
1	**Areas protected under international conventions, national or local legislation for their ecological, landscape, cultural or other related value**	**Eco Sensitive Area** Konnathadi Village list in Western Ghats	Project falls in the village
2	**Areas which are important or sensitive for ecological reasons - Wetlands, watercourses or other water bodies, coastal zone, biospheres, mountains, forests**	**Water Bodies** Idukki Reservoir Ponmudi Dam **Forest** Bracknell Forest	 12.65 Km SW 2.2 Km NE 11.06 Km NE
3	**Areas used by protected, important or sensitive species of flora or fauna for breeding, nesting, foraging, resting, over wintering, migration**	Idukki Wild Life Sanctuary	12.65 Km SW
4	**Inland, coastal, marine or underground waters**	None	None

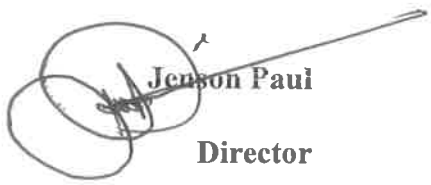
Sr. No.	Areas	Name / Identity	Aerial distance (within 15 km.) Proposed project location boundary
5	**State/ National boundaries**	Tamil Nadu Boundary	15.33 Km E
6	**Routes or facilities used by the public for access to recreation or other tourist, pilgrim areas**	SH-40 SH-41 SH-19 NH-49 Bodinayakanur Rly Station Cochin International Airport	3.67 Km SW 8.71 Km SW 10.02 Km SE 9.03 Km NW 33.7 Km W 74.7 Km NW
7	**Defense installations**	None	None
8	**Densely populated or built-up area**	Rajakkad	5.92 Km NE
9	**Areas occupied by sensitive man-made land uses (hospitals, schools, places of worship, community facilities)**	**Hospital** Subansiri hospital Nirmala Hospital Saint Alphonsa Hospital Devamatha Hospital **Post Office** Sub Post Office, Parathode Muniyara Post Office Vellathooval Post Office Rajakkad Post Office **Place of Worship** Kingdom Hall St Alphonsa Church Muthappan Palli Church Heavenly Worship Centre **School** Queen Mary Public School St. Jacob up School Govt Lower Primary School St Sebastian's High School **Bank** Service Co - operative Bank The Murickassery Service Cooperative Bank ICICI Bank	 1.85 Km W 4.11 Km NW 5.37 Km SW 11.15 Km E 2.00 Km SE 3.04 Km SE 4.65 Km NW 5.78 Km NE 0.74 Km SW 6.87 Km NE 3.16 Km SW 10.80 Km W 1.33 Km NE 4.71 Km SE 4.42 Km NW 9.60 Km E 1.94 Km W 1.42 Km SW 4.49 Km NW

Sr. No.	Areas	Name / Identity	Aerial distance (within 15 km.) Proposed project location boundary
10	**Areas containing important, high quality or scarce resources (ground water resources, surface resources, forestry, agriculture, fisheries, tourism, minerals)**	none	none
11	**Areas already subjected to pollution or environmental damage. (Those where existing legal environmental standards are exceeded)**	None	None
12	**Areas susceptible to natural hazard which could cause the project to present environmental problems (earthquakes, subsidence, landslides, erosion, flooding or extreme or adverse climatic conditions)**		The project area falls in seismic zone –II

"I hereby given undertaking that the data and information given in the application and enclosures are true to the best of my knowledge and belief and I am aware that if any part of the data and information submitted is found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost".

Date:03/09/2016

Place:Kochi



ENCLOSURE-II- BRIEF SUMMARY

BRIEF DESCRIPTION OF THE PROJECT PROPOSED ROPEWAY WITH BUILDING CONSTRUCTIONS (AMUSEMENT PARK WITH MINI HILL STATION TOWNSHIP) AT MUNNAR, IDDUKI DISTRICT, KERALA

Proposed project is a Ropeway with Building Constructions (amusement park with mini hill station township) at Village Konnathadi, Munnar, Taluk Idukki (previously Udumbanchola), District Idduki, Kerala. Proposed Project shall be developed by the M/s Valley World Entertainments Private Ltd. As the Konnathadi village is falling in list of villages of Eco Sensitive Area of the Western Ghats, hence, the project falls under Aerial Ropeway having schedule 7 (g), category 'A' of the EIA notification, 2006 and thus, General Conditions Apply. This project envisages setting up of Infrastructure facility which includes amusement Park with mini hill station township, Ropeway and various Entertainment rides. The plot area of proposed project will be 202830 sqm & Built-up area will be 19500.0 sqm. The proposed project will consist of three parts namely 1. Sky-Diving area at 920.15 m above MSL. (Entry point of Ropeway & Upper Station) 2. Amusement park area with mini hill station township at 874.33 m above MSL (Exit point of Ropeway & Lower Station) 3. Ropeway, which will inter-connect Amusement park area and Sky Diving area.

The Ropeway alignment will be 3602 metres in length with an elevation difference of 45.82 metres covering an area of 39920 sq m (including Terminal Stations & ropeway corridor). The proposed system to be installed will be Monocable Detachable Gondola. The capacity of the ropeway will be 1000 pph.

The latitude & longitude of the site are given below:

Station	**Latitude**	**Longitude**
Terminal T1 (LTP)	77° 4'3.47"E	9°54'45.08"N
Terminal T2 (UTP)	77° 2'56.99"E	9°56'27.08"N

Details of Proposed Ropeway

	Total
TECHNOLOGY OF ROPEWAY	Detachable Monocable Gondola
LENGTH	3602m
ELEVATION, LATITUDE & LONGITUDE of LTP	874.33 m
ELEVATION, LATITUDE & LONGITUDE of UTP	920.15 m
HAULAGE ROPE DIA	43 mm
PASSENGER CAPACITY OF ROPEWAY	1000 PPH

TRIP TIME	11.09 min
DRIVE SPEED	6 m/s
NO. OF TRIPS/DAY	60 trips per day
STATION SPEED	0.25 m/s
NUMBER OF CARRIERS	Initial 37, final 47 cabins.
NUMBER OF OTHER CARRIERS (SERVICE CARRIER)	5 no.
PASSENGERS PER CARRIER	8 no.
CARRIER SPACING	172.8 m
NUMBER OF TOWERS	16 no.

Other Project Details:

Particulars	Details
Plot Area	202830 sqm
G.C (Achieved)	9350 sqm (4.61%)
F.A.R (Achieved)	17600.0 sqm
Non F.A.R area	1900 sqm
Built-up Area	**19500.0 sqm**
Green Area	76597 sqm (37.76%)
Amusement park & Water show, Ropeway	94442 sqm (46.56%)
Surface Parking Area	5270 sqm (2.60%)
Internal Roads	17171 sqm (8.47%)
No. of Buildings	12 No.
Height of building	20.4 m
Staff	1500 No.
Visitors	6000 No.
Total Population	7500 No.
Water Requirement	299 KLD
Waste Water Discharge	151 KLD
STP Capacity	2 No. of STP of total capacity 200 KLD shall be installed, each at LTP & UTP
Municipal Solid Waste Generation	1125 kg/day
PARKING Provision	1200 ECS
Total Power load	1300 KVA
No. of DG sets	2 X 500 KVA & 1 X 360 KVA
Capacity of Rain Water collection tanks	1700 KL

Break up of Built-up area

	NO. OF FLOOR	PLINTH AREA (FAR) in sqm
MAIN ENTRYPLAZA	G+2	1500.00
ENTRY POINT BUILDING	G+2	1500.00
EXIT POINT BUILDING	G+1	900.00
COMMERCIAL BUILDING 1	G+2	2500.00
COMMERCIAL BUILDING 2	G+2	2500.00
COMMERCIAL BUILDING 3	G+1	2000.00
PRE-FABRICATED BUILDING		
AMUSEMENT 1	G	2500.00
AMUSEMENT 2	G	2500.00
ACCESSORY BUILDING	G	1000.00
CLINIC	G+1	300.00
TOILET BLOCK (3 No.)	G	300.00
STAFF ACCOMODATION (GENTS)	G+2	1000.00
STAFF ACCOMODATION (LADIES)	G+2	1000.00
GRAND TOTAL		**19500.00 sqm**

Maximum of 250 numbers of laborers will be deployed during peak construction phase. Proper arrangement of water supply and sewage disposal will be made at site.

During Operation Phase Power requirement, will be 1300 KVA. DG set of 2 X 500 KVA & 1 X 360 KVA are proposed for backup power supply located at LTP. These D.G. Sets will be provided with adequate stack height as per the CPCB norms & will be kept in acoustically treated room.

The total water requirement has been estimated as 299 KLD and the source will be KWA supply. Water shall be used mainly for domestic, flushing, gardening & misc. purposes. Total quantity of waste water generation has been estimated to be 151 KLD. The waste water generated will be treated in 2 No. of STP of total capacity 200 KLD, installed each at LTP & UTP.

Total 1125 Kg/day of waste will be generated due to the proposed development. The Organic Waste will be treated in Organic Waste Convertor and converted into compost & the Recyclable Waste Collected and given to approved recycler

There will be no displacement or immigration of the human population due to the proposed project. Risk assessment shall be done and proper safety and security measures shall be undertaken. Proper prevention and timely maintenance of ropes, machines etc will be

scheduled to prevent any accident. Maintenance team will be trained to handle any type of contingency in time of emergency. All safety guidelines shall be adhered to and followed during construction and operation phases. First aid facilities will be provided at site. Total cost of the project is Rs. 615 crore.

ENCLOSURE-III- PRE-FEASIBILITY REPORT

Project Description

Proposed project is a Ropeway with Building Constructions (amusement park with mini hill station township) at Village Konnathadi, Munnar, Taluk Idukki (previously Udumbanchola), District Idduki, Kerala. Proposed Project shall be developed by the M/s Valley World Entertainments Private Ltd. As the Konnathadi village is falling in list of villages of Eco Sensitive Area of the Western Ghats, hence, the project falls under Aerial Ropeway having schedule 7 (g), category 'A' of the EIA notification, 2006 and thus, General Conditions Apply. This project envisages setting up of Infrastructure facility which includes amusement Park with mini hill station township, Ropeway and various Entertainment rides. The plot area of proposed project will be 202830 sqm & Built-up area will be 19500.0 sqm. The proposed project will consist of three parts namely 1. Sky-Diving area at 920.15 m above MSL. (Entry point of Ropeway & Upper Station) 2. Amusement park area with mini hill station township at 874.33 m above MSL (Exit point of Ropeway & Lower Station) 3. Ropeway, which will inter-connect Amusement park area and Sky Diving area.

The Ropeway alignment will be 3602 metres in length with an elevation difference of 45.82 metres covering an area of 39920 sq m (including Terminal Stations & ropeway corridor). The proposed system to be installed will be Monocable Detachable Gondola. The capacity of the ropeway will be 1000 pph. The proposed project is to set up a world class Tourism infrastructure at Munnar, Kerala. The estimated project cost is of Rs. 615 Crore. Administrative Approval from Government of Kerala has been obtained. Topographical Survey and Investigations have been completed.

Type of Project

As the Konnathadi village is falling in list of villages of Eco Sensitive Area of the Western Ghats, hence, the project falls under Aerial Ropeway having schedule 7 (g), category 'A' of the EIA notification, 2006 and thus, General Conditions Apply.

Project Proponent

M/s Valley World Entertainments Private Ltd. has been incorporated under the Companies Act, 1956. They will design, build, finance, construct and operate & maintain the project for a specific concession period.

Tourism has been pivotal to social progress as well as an important vehicle for widening socio-economic and cultural contact throughout human history. Both cause and consequences of economic development, facilitates business contacts, widening of markets, broad-based employment and income generation. The tourism industry is a major contributor to the gross national products of many nations. It is one of the fastest growing industries in the world.

Description of Project Site:

Munnar is a town and hill station located in the Idukki district of the southwestern Indian state of Kerala. Munnar is situated at around 1,600 metres (5,200 ft) above sea level, in the Western Ghats range of mountains.

The name Munnar is believed to mean "three rivers", referring to its location at the confluence of the Mudhirapuzha, Nallathanni and Kundaly rivers. Munnar town is situated on the Kannan Devan Hills village in Devikulam taluk and is the largest panchayat in the Idukki district covering an area of nearly 557 square kilometres (215 sq mi).

The Nearest Functioning Railway station is at Bodinayakanoor Rly Station at 33.7 Km W. The nearest airport is Cochin International Airport, which is 74.7 Km NW from project site.

Munnar is also an ideal place for nature lovers, wildlife lovers and adventure enthusiasts alike. You can indulge in boating, trekking and paragliding. Munnar is the perfect place to hang your shoes and just soak in the calm and relaxing atmosphere.

The rolling hills around Munnar, South India's largest tea-growing region, are carpeted in emerald-green tea plantations, contoured, clipped and sculpted like ornamental hedges. The low mountain scenery is magnificent.

Idukki has an area of 4,479 km2 (1,729 sq mi) and is the second largest District of Kerala (the largest being Palakkad). Rugged mountains and forests cover about 97 percent of the total area of the District. The district borders the Kerala districts of Pathanamthitta to the south, Kottayam to the southwest, Ernakulam to the northwest and Thrissur to the north

and Coimbatore, Dindigul and Theni Districts in Tamil Nadu to the east. National Highway NH 49 and State highways 13 and 33 passes through the district.

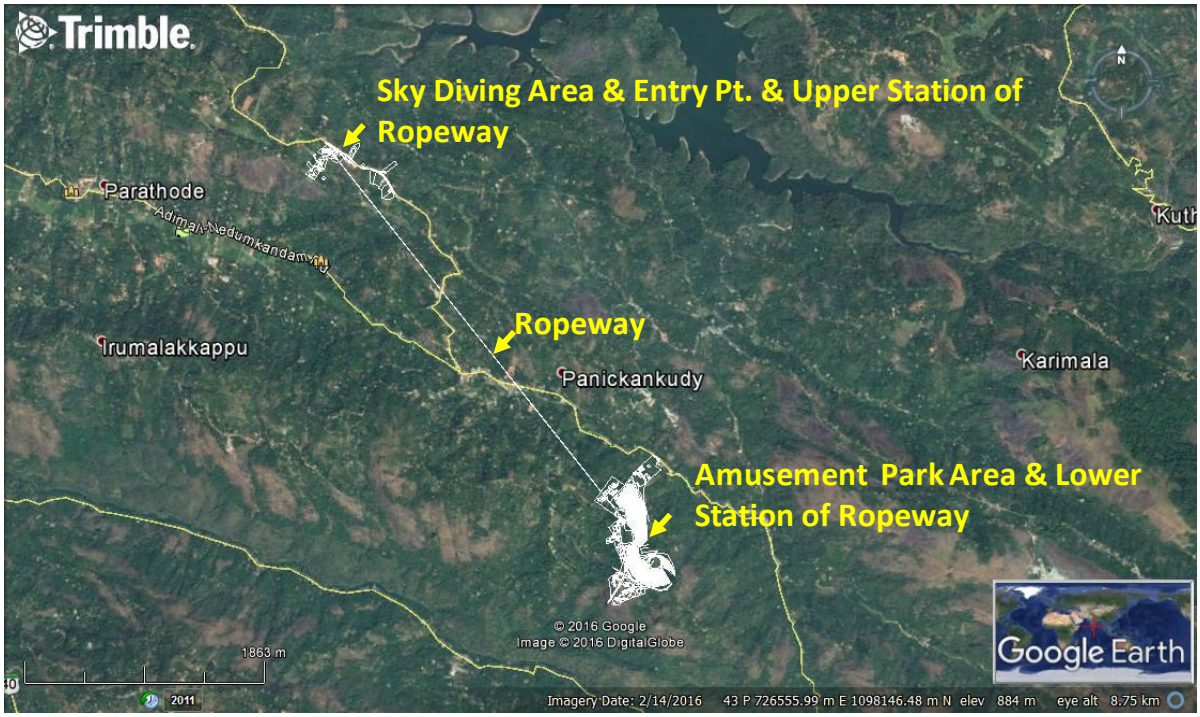
Need/Justification of the Project:

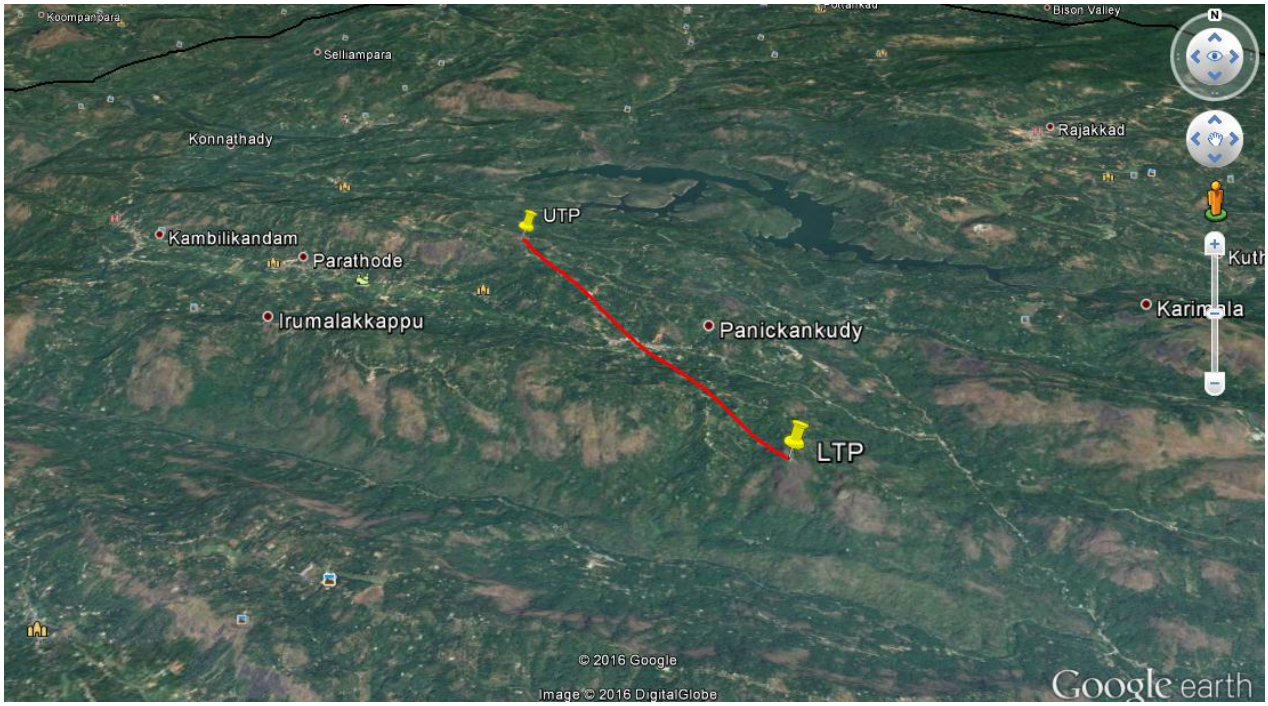
The project is to set up a world class Tourism infrastructure at Munnar, Kerala, India. The project proponent will develop Ropeway with Building Constructions (amusement park with mini hill station township). The proposed project is to set up a world class Tourism infrastructure at Munnar, Kerala.

With a view to provide a sky-diving area and amusement park facility with mini hill station township for the tourists, the project has been proposed. Ropeway, will inter-connect Amusement park area and Sky Diving area.

Location of the Project Alignment

The ropeway will be built in one phase with its Upper Terminal Point at skydiving area and the Lower Terminal Point at amusement park area. The location map of the Project alignment is shown below:





The lat long of the site are given below:

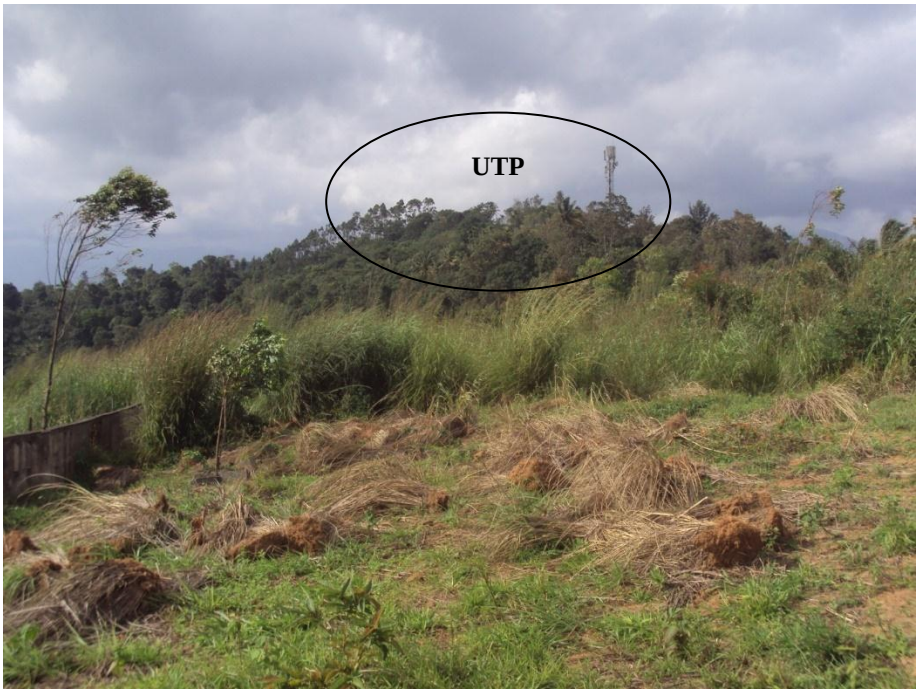
Station	Latitude	Longitude
Terminal T1 (LTP)	77° 4'3.47"E	9°54'45.08"N
Terminal T2 (UTP)	77° 2'56.99"E	9°56'27.08"N

Connectivity:

Nearest Railway Station : Bodinayakanoor Rly Station -33.75 Km W
Nearest Airport : Cochin International- 74.73 Km NW
Nearest Highway : SH-40– 3.67 Km SW

Site Photographs:

UTP Area



LTP Area

Approach road to LTP - 3-meter wide

Details of Proposed Ropeway

	Total
TECHNOLOGY OF ROPEWAY	Detachable Monocable Gondola
LENGTH	3602m
ELEVATION, LATITUDE & LONGITUDE of LTP	874.33 m
ELEVATION, LATITUDE & LONGITUDE of UTP	920.15 m
HAULAGE ROPE DIA	43 mm
PASSENGER CAPACITY OF ROPEWAY	1000 PPH
TRIP TIME	11.09 min
DRIVE SPEED	6 m/s
NO. OF TRIPS/DAY	60 trips per day
STATION SPEED	0.25 m/s
NUMBER OF CARRIERS	Initial 37, final 47 cabins.
NUMBER OF OTHER CARRIERS (SERVICE CARRIER)	5 no.
PASSENGERS PER CARRIER	8 no.
CARRIER SPACING	172.8 m
NUMBER OF TOWERS	16 no.

Other Project Details:

Particulars	Details
Plot Area	202830 sqm
G.C (Achieved)	9350 sqm (4.61%)
F.A.R (Achieved)	17600.0 sqm
Non F.A.R area	1900 sqm
Built-up Area	**19500.0 sqm**
Green Area	76597 sqm (37.76%)
Amusement park & Water show, Ropeway	94442 sqm (46.56%)
Surface Parking Area	5270 sqm (2.60%)
Internal Roads	17171 sqm (8.47%)
No. of Buildings	12 No.
Height of building	20.4 m
Staff	1500 No.
Visitors	6000 No.

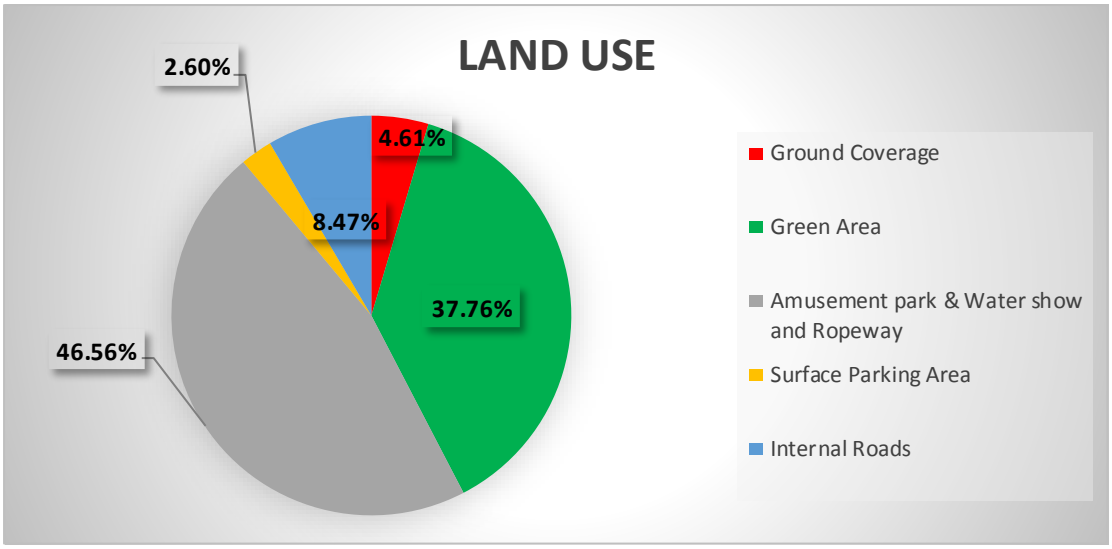
Total Population	7500 No.
Water Requirement	299 KLD
Waste Water Discharge	151 KLD
STP Capacity	2 No. of STP of total capacity 200 KLD shall be installed, each at LTP & UTP
Municipal Solid Waste Generation	1125 kg/day
PARKING Provision	1200 ECS
Total Power load	1300 KVA
No. of DG sets	2 X 500 KVA & 1 X 360 KVA
Capacity of Rain Water collection tanks	1700 KL

Break up of Built-up area

	NO. OF FLOOR	PLINTH AREA (FAR) in sqm
MAIN ENTRYPLAZA	G+2	1500.00
ENTRY POINT BUILDING	G+2	1500.00
EXIT POINT BUILDING	G+1	900.00
COMMERCIAL BUILDING 1	G+2	2500.00
COMMERCIAL BUILDING 2	G+2	2500.00
COMMERCIAL BUILDING 3	G+1	2000.00
PRE-FABRICATED BUILDING		
AMUSEMENT 1	G	2500.00
AMUSEMENT 2	G	2500.00
ACCESSORY BUILDING	G	1000.00
CLINIC	G+1	300.00
TOILET BLOCK (3 No.)	G	300.00
STAFF ACCOMODATION (GENTS)	G+2	1000.00
STAFF ACCOMODATION (LADIES)	G+2	1000.00
GRAND TOTAL		**19500.00 sqm**

Land-Use

Particulars	**Area in Sqm**	**Percentage**
Ground Coverage	9350	4.61%
Green Area	76597	37.76%
Amusement park & Water show, Giant Wheel, Ropeway	94442	46.56%
Surface Parking Area	5270	2.60%
Internal Roads	17171	8.47%
Total	202830 sqm	100



Land Distribution of Ropeway Site

The area required for the construction of the proposed Ropeway with Building Constructions (amusement park with mini hill station township) would be about 202830 sqm, out of which 39920 sqm shall be utilized for construction of Ropeway terminals and corridor. The break-up of the area requirement for ropeway is given below:

Area required for	Total Area (In Sq. m.)
Lower Terminal Station-A	3000 sqm
Upper Terminal Station -B	900 sqm
Ropeway Length-C	3602 mtrs
Right of Way-D	10 m
Corridor of the alignment - E	36020 sqm
Total (A+B+E)	39920 sqm

Alignment Options for Ropeway System

To develop the ropeway, three sites were chosen. Selection of a specific ropeway alignment depends upon several different factors like terrain type, length of the project and impact on the built environment. The approach to the lower terminal should also be easy for the prospective riders. Hence, several site visits were undertaken along with surveys to assess the best possible alignment of the ropeway.

While considering the alignment, following approach & methodology has been adopted for selecting the most favourable alignment.

1. Reduce traffic congestion
2. Easy connectivity with the traffic nodes.
3. Availability of adequate space for proposed terminals.
4. Minimum Possible infringement.
5. Minimum rehabilitation and minimum tree cutting.
6. Feasibility in realm of construction and technical requirements.
7. Feasible for ropeway system able to handle projected traffic.
8. Comfort to tourists and locals.
9. Ease in Crowd Management.

Three alternative routes were assessed. Out of the three alternative routes the Alternative-II was found appropriate. The three-alternative alignment has been discussed below:

Alignment 1:

- There will be cutting of trees at UTP area & along the corridor also.
- No parking space will be available

Alignment 3:

- Accessibility from amusement park is poor.
- Enough parking space is not available at LTP area.
- There will be major cutting of trees at UTP area.

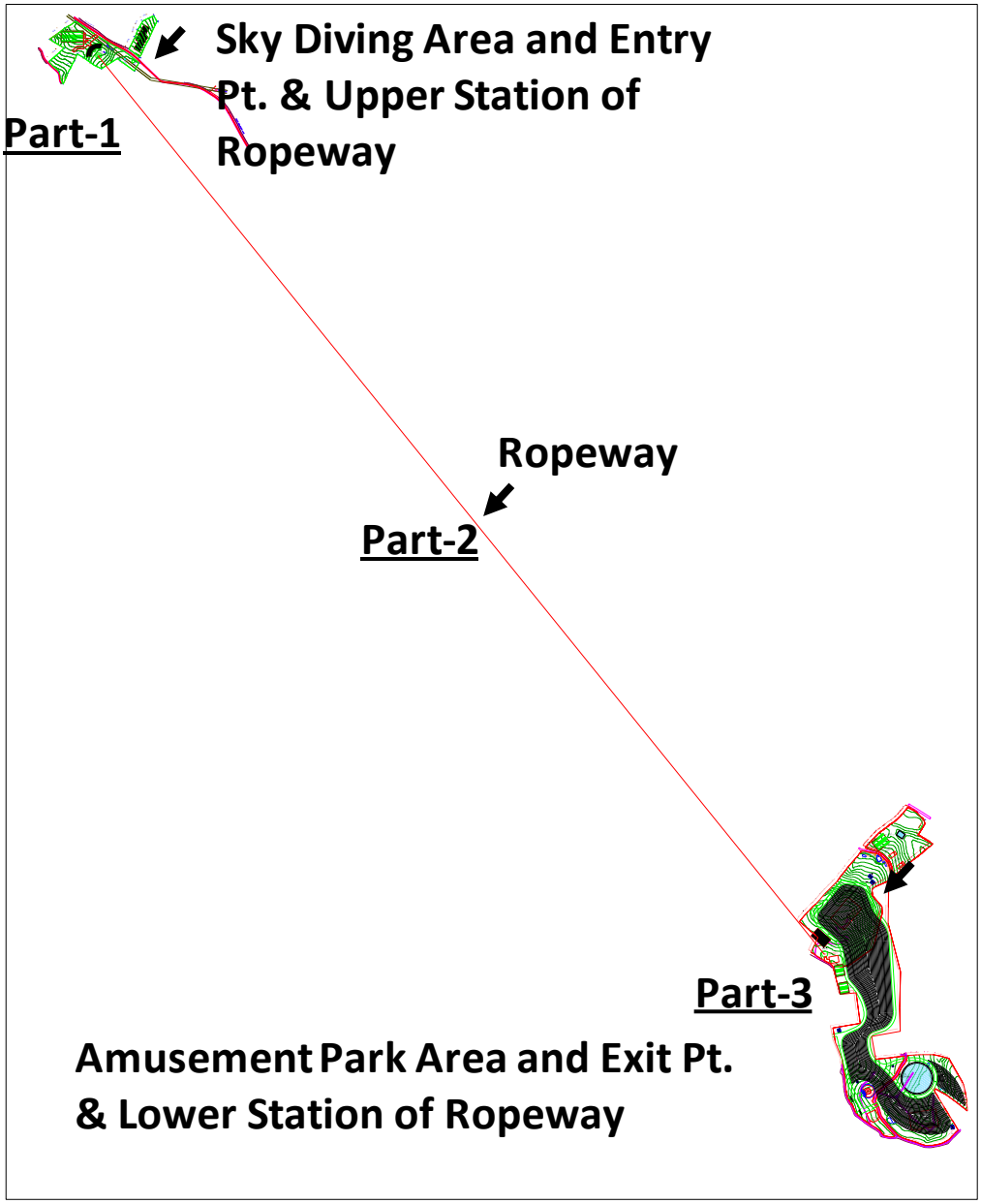
Alignment 2 (Selected Alignment):

This alignment starts with its LTP near amusement park area. The corridor traverses over a thin vegetation with very few trees upon land. The alignment finally ends its Upper Terminal Point at skydiving area.

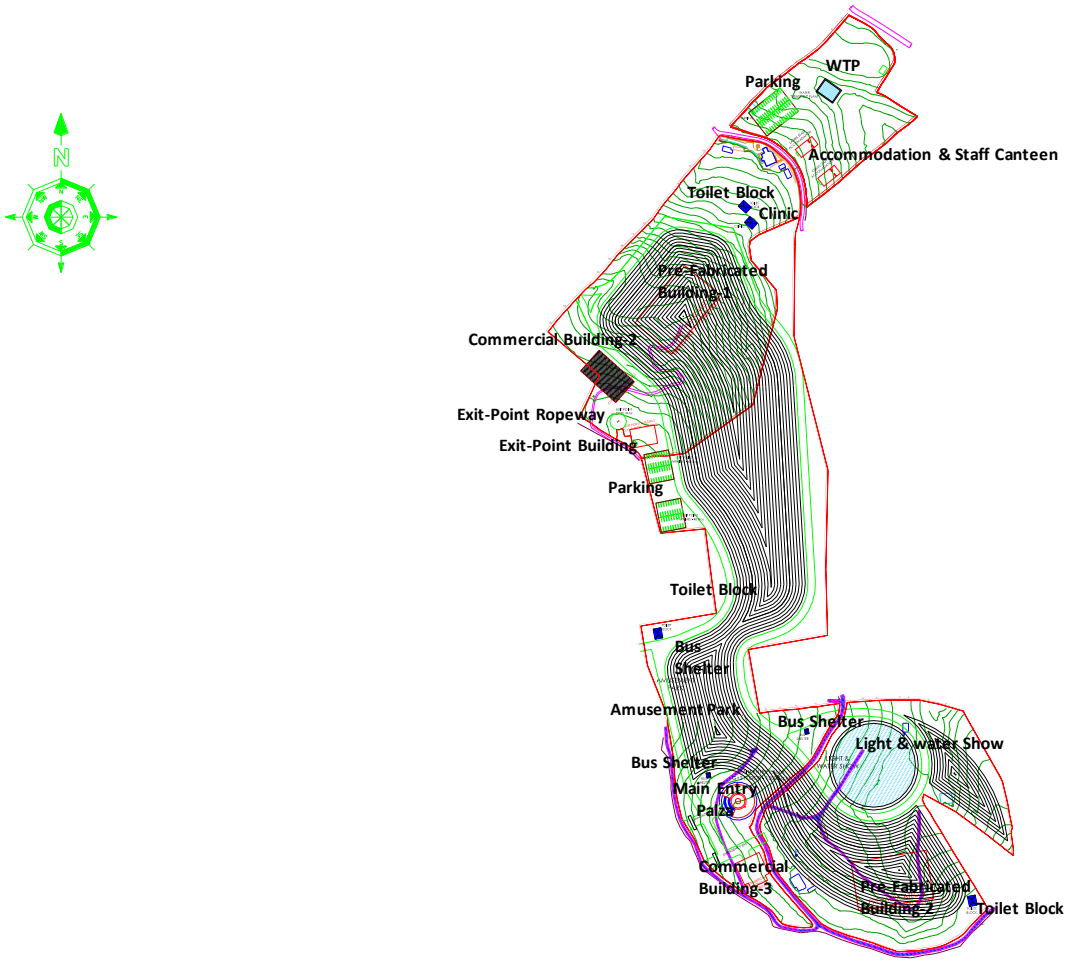
- The alignment is clear of any urban habitat in its corridor
- Parking at amusement park area will carter the visitors of the ropeway, no extra parking land is required.

- Accessibility to UTP area is good.

Proposed Ropeway Layout Section



LTP Area



UTP Area

The proposed project components at Lower Station and Upper Station of Ropeway are given as under.

- Lower Terminal Station (LTP): The lower terminal station shall be a structural shed constructed within the amusement park area, which will house all ropeway drive machinery. Under-part of the shed will provide the foundation for ropeway structure.
- Upper Terminal Station (UTP): Upper Terminal Station will be minimal structural shed constructed on sky diving area and shall house the necessary tension device and just enough place to accommodate the boarding and de-boarding platform. The entire station will be enclosed in chain link fencing for safety, security and passenger management. The equipment foundation shall be the floor area of the station.
- Control Room: It will house the control panel for operation of the ropeway. This shall be located inside the terminal station building.
- Spares Stock Room: Ropeways use special parts and some parts are specific to the plant. The plant therefore houses sufficient quantity of such spares and other off-the-shelf spares as inventory to undertake any repair. These spares are stored in a fully closed room.
- Guard Room: The plant has to be protected against any theft or mischief. Guards are also needed for crowd control during operational time. A guard room is therefore provided in the station area.
- Ticket Booth: It is used to dispense manual/computerised ticket of the ropeway to visitors.
- Toilet Block: The amusement park area i.e. LTP area will be equipped with facilities like proposed toilet block for male and female passengers.
- Landscaping: The ropeway company shall undertake minor landscaping of area surrounding the station building & in amusement park area to add to the greenery as well beauty of the place.
- Parking Space: The amusement park area i.e. LTP area will be equipped with parking facility. Hence no further parking shall be provided.
- Staff Welfare, Dining and Rest Room: The amusement park i.e. LTP area will be equipped with rooms for staff entertainment, welfare and dining facility.
- First Aid Room: The lower station shall have first aid room for passengers and the staff, in case of any eventuality within the amusement park itself.

- Diesel Generator Room/Shed: A room housing for a diesel generator at LTP would be provided with a tall stack to conform to the Pollution Control Board norms. Or else, the generator may be an outdoor type with an acoustic housing.
- Rescue Gear Storage Lockers: Upper station traditionally houses the rescue gear for rescuing the passengers from the stranded cabins in event of any eventuality. The rescuers move with the gravity from top to bottom and therefore the rescue gear, including the rescue chair is stored at upper station in two large lockers. These lockers are part of upper station shed and no extra space is needed

Study of Alternative Types of Ropeway Technologies

There are various types of ropeways are described below:

A. Continuously Circulating Ropeway

❖ **Continuously Circulating Mono-cable Ropeway**

A Mono-cable Ropeway System comprises basically an endless rope which acts both as the carrying as well as the haulage rope to which a number of carriages are attached at regular intervals. The carriages circulate around the close system by continuous carrying-cum-haulage rope. The carriages can be in the form of chairs or gondolas / cabins (enclosed carriers). Usually the carrying capacity of each carrier varies from 2 to 8 passengers.

Monocable can either be fixed grip or detachable grip. Fixed grip ones can be either normal fixed grip with chairs, cabins suspended at regular intervals along the line or pulsated, in which case a group of cabins are placed at regular intervals.

Monocable Ropeway Systems are deployed on a terrain which has a gentle slope or convex shape of the profile. The terrain has to be accessible by foot and pathways along the route of the ropeway system. The height of the ropeway is also limited to enable accessibility to the system for rescue, in case of any unprecedented hazard.

Advantages

- Continuous transportation system for passengers
- Adjustment of speed and number of carriers according to actual requirement
- Flexibility of the system i.e. system can start with a low transport capacity with low initial investment and expansion of capacity as the demand grows by increase of speed /

additional carriers or a combination of both.

- Boarding and de-boarding operation with carriers stopped or moving at a very slow speed is possible.
- Simplicity of operation and maintenance
- Less requirement of space for terminal stations in case of fixed grip system.

Constraints

- Low ground clearance necessitates a large number of trestles.
- Maintenance of large number of carriers and towers and line trestle equipment
- System is more sensitive to high winds
- Spans between the towers are limited
- Due to limitation of height of carriers from ground, Mono-cable system it is not possible to cross large valleys.

❖ **Continuously Circulating Bi-cable Ropeway**

This Ropeway System basically consists of two stationary carrying track ropes and a single endless haulage rope. The track rope supports the carriers and the hauling rope hauls the carriers. At terminal stations, carriers move from track ropes to station rails and passengers board / de-board from carriers. Bi-cable system like Mono-cable system can either be fixed or detachable grip type.

Advantages

- Theoretically there is no limit to the maximum slope, which cannot be climbed nor is there any limitation in ground clearance from underneath the carrier.
- Heavier unit load can be carried out
- Larger spans between trestles possible.
- Less maintenance of line trestle equipment

Constraints

4.1 Higher cost of transportation

4.2 System Cost higher

4.3 Rope replacement cost is more

B. Jigback System

- **Mono-cable Jigback**

In this system one endless hauling rope supports and hauls two cabins, one in forward direction and the other in reverse direction between the terminal stations. The cabins are fixed to the rope. Once the cabins reach the terminal stations the movement of the ropeway is reversed. Mono-cable uses cabins of comparatively lower passenger carrying capacity.

Advantages

- Reduced terminal space requirement
- Cost effective
- Simplicity of operation and maintenance

Constraints

- Low transportation capacity

- **Bi-cable Jigback**

Such a system has two carrying ropes and one haulage rope with large cabins attached in either direction, attachment being made on diametrically opposite side of the haulage rope. The cabins are always fixed to the haulage rope.

While one cabin starts moving from one terminal station to the other terminal station, the other cabin simultaneously starts from the opposite terminal station. Once they reach the opposite terminals, de-boarding & boarding takes place. Then the movement of the ropeway is reversed giving the Jig Back effect.

Proposed Ropeway System Technology

The ropeway system will be designed, manufactured and installed in accordance with the latest standards of ropeway technology, will feature state-of-the-art equipment and operate automatically (with the exception of cabin parking). It will fully comply with the latest standards and safety requirements for Aerial Passenger Ropeways.

From the analysis of the terrain on rising hill contour between stations and also the design system capacities being recommended, i.e. 1000 Persons Per Hour (PPH), the Mono-cable Detachable grip system application is mostly useful to increase and decrease the capacity without disturbing the main system and by only adjusting the speed and number of cabins according to actual requirements as well as simplicity of operation and maintenance.

System Description- Mono-cable Detachable Gondola system Ropeway:

The proposed system to be installed is Continuous Detachable Monocable system. The system is designed to transport passenger's upside and downside at a constant speed which can be selected by the operator(s) within the minimum and maximum range. Ropeway can adapt length and terrain condition. In this system, a single endless continuous moving rope supported on intermediate tower rollers carry the bucket, spaced at equal intervals. The incoming bucket to the terminal stations and disengages from the rope and moves on the shut rail They are often considered continuous systems since they feature a haul rope which continuously moves and circulates around two terminal stations to meet the terrain, length and capacity requirement a Mono-cable Detachable Ropeway System is appropriate in this Alignment.

Monocable Detachable Gondola system

TECHNICAL DATA

	Total
TECHNOLOGY OF ROPEWAY	Detachable Monocable Gondola
LENGTH	3602m
ELEVATION, LATITUDE & LONGITUDE of LTP	874.33 m
ELEVATION, LATITUDE & LONGITUDE of UTP	920.15 m
HAULAGE ROPE DIA	43 mm
PASSENGER CAPACITY OF ROPEWAY	1000 PPH
TRIP TIME	11.09 min
DRIVE SPEED	6 m/s
NO. OF TRIPS/DAY	60 trips per day
STATION SPEED	0.25 m/s
NUMBER OF CARRIERS	Initial 37, final 47 cabins.
NUMBER OF OTHER CARRIERS (SERVICE CARRIER)	5 no.
PASSENGERS PER CARRIER	8 no.
CARRIER SPACING	172.8 m
NUMBER OF TOWERS	16 no.

ROPEWAY EQUIPMENT

I.	Haulage Rope	:	43 mm dia
II.	Intermediate trestle completes with cathead and ladder of with steelwork construction.	:	Approx 16 Nos.
III.	Rope supporting trestle mounts comprising of Sheaves, their support beams and pedestals.	:	2 sets per trestle
IV.	Drive Terminal Station complete with required mechanical equipments and support structures of steelwork construction.	:	1 Set

V.	Tension Terminal Station completes with required mechanical equipment and support structures of steel work construction.	:	1 Set
VI.	Ropeway Drive Equipments comprising of Drive Sheave, Speed Reduction Units, Electric Motor, Braking Device etc.	:	1 Set
VII.	Ropeway Tensioning equipment comprising of Return Sheave, Tension Gear, Trolley and Counter Weight, Tension Rope etc.	:	1 Set
VIII.	Ropeway cabin complete with Carriage (Grip)	:	Initial 37, final 47 cabins (8 seater)
IX.	Telecommunication equipment comprising of Telephone and Transmission wires.	:	1 Set at each Station
X.	Auxiliary drive with Diesel Engine for emergency	:	1 set
XI.	Rescue system	:	1 set

Specifications & Guidelines

The specifications and guidelines are provided for the various project components (Ropeway System, associated infrastructure) including, but not limited to the following major provisions: The Concessionaire shall consider Specifications provided by Bureau of Indian Standards and other applicable statutory code of practices like Indian Electricity Act, National Building Code, Building By-laws of Munnar, etc. for design, construction, operation and applicable maintenance of the project facilities. The Concessionaire shall adhere to the provisions of any Act for passenger ropeway that is applicable for enacted in future in the state of Uttar Pradesh. In case of ropeway Cabins and its associated part to be mandatorily procured imported, suitable international standards with justification may be followed.

ENVIRONMENT MANAGEMENT PLAN

Land Environment:

Construction phase:

Total of 202830 sqm of vacant land needs to be converted for construction of Ropeway with Building Constructions (amusement park with mini hill station township). There will be no removal of the trees. The project alignment falls within eco sensitive zone of Western Ghats. Idduki Wildlife Sanctuary is not within the 10 Km radius of the project alignment.

Operation Phase:

Although no major impact on land is envisaged during the operation phase, proper collection shall be taken care for no disposal of solid or hazardous waste & waste water on land.

Air Environment

Construction phase:

During the construction activities, there will be fugitive emission such as particulate emission etc. on small scale. The particulate emissions will be minimal and short term in nature. For the construction of line towers, the generation of the dust will be low as compared to the construction of terminal stations. Moreover, the dust generated during the construction phase will be considerably reduced due to localized meteorological conditions & following measures shall be adopted:

- The project boundaries will be covered with sheets to acts as wind shields.
- All the loose material either stacked or transported will be provided with suitable covering such as tarpaulin, etc. and kept in covered and specific place.
- Water sprinkling will be done at the location where dust generation is anticipated.
- To minimize the occupational health hazard, proper mask will be provided to the workers who are engaged in dust generation activity.
- DG sets shall be bought with adequate stack height.
- Buildings under construction shall be kept covered with green cloth.
- Vehicles used in transportation of construction material shall be kept fully covered & have PUC certificate.

Operation Phase:

The operation of the proposed ropeway will not involve major air emissions. Ropeway operation is an environment friendly non-polluting transport system.

DG set of 2 X 500 KVA & 1 X 360 KVA are proposed for backup power supply located at LTP. These D.G. Sets will be provided with proper stack height as per the CPCB norms.

As per the specifications from D.G. Set manufacturer, the emissions rates that shall be maintained are given in Table below:

D. G. Set. Capacity	No	PM gm/KW-hr	Nox gm/KW-hr	HC gm/KW-hr	CO gm/KW-hr
500 KVA	2	0.3	9.2	1.3	3.5
360 KVA	1	0.3	9.2	1.3	3.5

The impact of pollutants such as SO_2, NO_x and CO mainly released from D.G sets and their concentration & impact will be very negligible and of short term duration.

The system will be operated mainly on electricity provided by Grid. DG sets will be used as a stand-by only at the time of power failure.

Noise Environment

Construction Phase:

The noise emission sources during construction phase will include construction machineries/ equipment to be employed at site. The management measures for noise & vibration control are as follows:

- Standard methods and machinery shall be used.
- Job rotation and provision of earmuffs to the workers in high noise areas.
- Due to the construction activity undertaken for the project there shall be some noise generation due to the movement of vehicles carrying construction materials and as this is only a temporary phenomenon, it shall be managed by properly regulating the movement of vehicular traffic so that the ambient noise quality with respect to noise is not adversely affected.
- All the machinery and equipment shall be regularly maintained to reduce the noise level.
- DG sets shall be installed acoustically enclosed.
- To prevent any occupational hazard, ear muff / ear plug shall be given to the workers working around or operating the plant and machinery emitting high noise levels.

Operation Phase:

DG set of capacity 2 X 500 KVA & 1 X 360 KVA are proposed for backup power supply. Acoustically enclosed DG Sets will be bought and installed at LTP.

The noise & vibration management measures are discussed below:

- Noise free and less air pollution emitting, acoustically enclosed DG Sets, approved by the CPCB will be bought and installed.
- The system will be operated mainly on electricity provided by Grid. DG sets will be used as a stand-by only at the time of power failure. DG sets shall be installed on proper vibration pads to avoid vibration impacts.
- The noise pollution due to operation of DG set can be controlled by installation of silent cowling to a value of 65 dB (A).

The normal ropeway operations are always lower than 50 dB (A) of noise level. Proper maintenance of the ropeway during the operational phase will be done to ensure low or no noise and environmental impacts.

Water Environment

Construction Phase:

Approx. 250 Local labors will be preferably employed. During construction Phase, water will mainly be required for ropeway development, dust suppression & human consumption.

- It is estimated that around 15 KLD of water shall be required during construction phase. The waste water generated shall be disposed off in septic tank via soak pit.
- The water required during construction phase shall be taken from STP treated water supplied through Tankers.
- During the construction period, runoff from the construction site shall not be allowed to stand (water logging) or enter into the roadside or nearby drain. Tanks will be made to store the rain water to reuse for construction purposes / horticulture. The waste water from the site will be collected & used for sprinkling after treatment.
- The vehicles carrying construction material and construction debris shall be cleaned before it is permitted to ply on the road.
- Wheel washing arrangement of construction vehicle shall be provided at site.

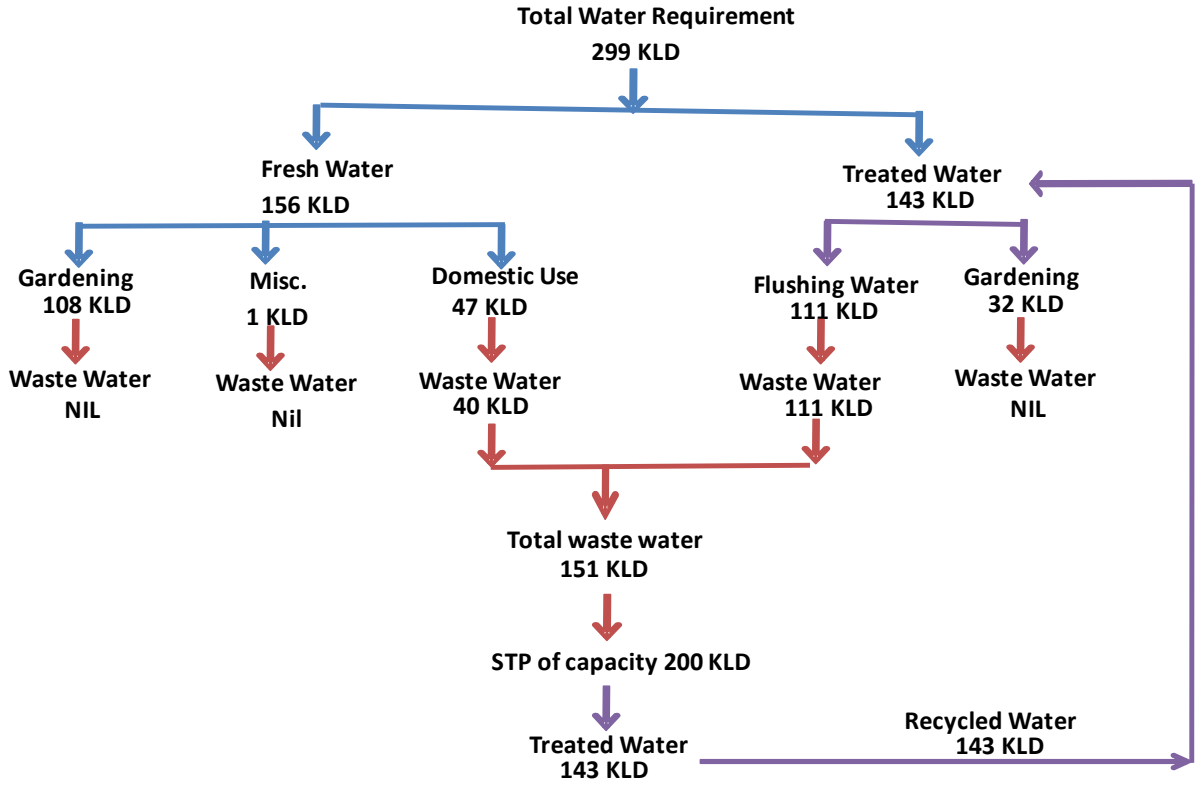
Operation Phase:

The total water requirement has been estimated as 299 KLD as per detailed below and the source will be KWA supply. Water shall be used mainly for domestic, flushing, gardening & misc. purposes. Total quantity of waste water generation has been estimated to be 151 KLD. The waste water generated will be treated in 2 No. of STP of total capacity 200 KLD, installed each at LTP & UTP.

Water MANGAMNET

Particulars	Population	Factor in LPCD	requirement in KL	DOMESTIC in KL	FLUSHING in KL	WASTE WATER in KL
Domestic						
Staff	1500	45	68	20	48	
Visitor	6000	15	90	27	63	
Total	7500		**158**	**47**	**111**	
waste water discharge				**40**	**111**	151
Gardening			140			0
Misc			1			0
Total			**299**			**151**

WATER BALANCE



SCHEME OF SEWAGE TREATMENT PLANT

The generation of total waste water will be 151 KLD, which will be treated in Sewage Treatment Plant of 200 KLD based on FAB **(Fluidized Aerobic Bio-reactor)** Technology.

DESIGN CRITERIA

TREATMENT PROCESS:

THE PROCESS FOR SEWAGE TREATMENT PLANT IS AS FOLLOWS:

The sewage is first passed through a **Bar Screen Chamber & an Oil & Grease Chamber** where any extraneous / floating matter gets trapped.

The sewage is then collected in a **Receiving Sump** where the variations in flow and characteristics are dampened, which otherwise can lead to operational problems and moreover it allows a constant flow rate downstream. Here the sewage is kept in mixed condition by means of coarse air bubble diffusion.

The equalized sewage is then pumped to the **Fluidized Aerobic Bed Reactors (FAB)** where BOD/COD reduction is achieved by virtue of aerobic microbial activities. The FAB reactors run in series. The oxygen required is supplied through coarse air bubble diffusers.

The excess bio-solids formed in the biological process are separated in the downstream **Tube Settler Tank**. The clear supernatant after disinfections is sent to the tertiary polishing section comprising of a **Dual Media Filter** and an **Activated Carbon Filter**, passes through **Softener** for reducing the hardness.

The biological sludge generated from the FAB, which is settled in the Tube Settler, is drained through the Filter Press.

The Sewage Treatment Plant (STP) can give treated water, which can be reused for Flushing, Hand washing & other miscellaneous purposes.

Treated Sewage Characteristics

pH	-	6.5 – 8.5
BOD	mg / l	<10
COD	mg / l	<60
TSS	mg / l	< 10
Oil & Grease	mg / l	NIL

Benefits:

1. Small space requirement

The concept of compact sewage treatment plant is promoted so that expensive conventional treatment is dispensed herewith. The treatment scheme is also versatile, in the sense that units can be re-arranged in any way in which the space and pile caps are available.

2. Lower operating power requirements

The system utilizes aeration tanks of much smaller size, thereby reducing the overall power required in aerating the raw sewage. Since the bio-reactor depth is more, efficient transfer of oxygen takes place, thereby reducing the overall power consumed in treatment.

3. **Simplicity in operation and maintenance**

The system adopted has much less moving parts (only pumps and blowers). Further there is no moving part inside the bio-reactor. This gives the advantage of continuously running the bio-reactor system, under widely fluctuating conditions. All the maintenance on the mechanical systems can be done with normal skilled mechanics available.

The system is unique in operation, such that, only inlet and outlet parameters (i.e. raw sewage BOD / COD / TSS /TP and treated sewage BOD / COD / TSS / TP etc.) need to be analysed. Since the bio-reactor is self sustaining, there is no requirement of recycling the biomass from the secondary clarifier. Hence, analysis such as MLSS / MLVSS / SVI (sludge volume index) / F / M ratio etc. is not required to be done. This greatly reduces the analytical load on the plant chemist / supervisor, and makes the system very simple to operate and control.

The bio-reactor system adopted in the FAB based STP is provided with nutrients removal, and removal of disease causing E-coli bacteria.

4. Nutrient removal

The bio-reactor system operates at very food to micro-organisms ratio (F / M ratio). This helps in totally converting the Ammonical nitrogen to nitrate nitrogen. In the process of synthesis of organic substrate, about 40 – 50% of the total phosphates load is also reduced. The remaining phosphates can be precipitated by addition of aluminum ions dosed in form of Poly Aluminum Chloride (PAC). Phosphates react with aluminum ions and precipitate as aluminum phosphate, which is an insoluble salt. Thus the total phosphates load can be easily reduced by more than 90%.

5. Coliform removal

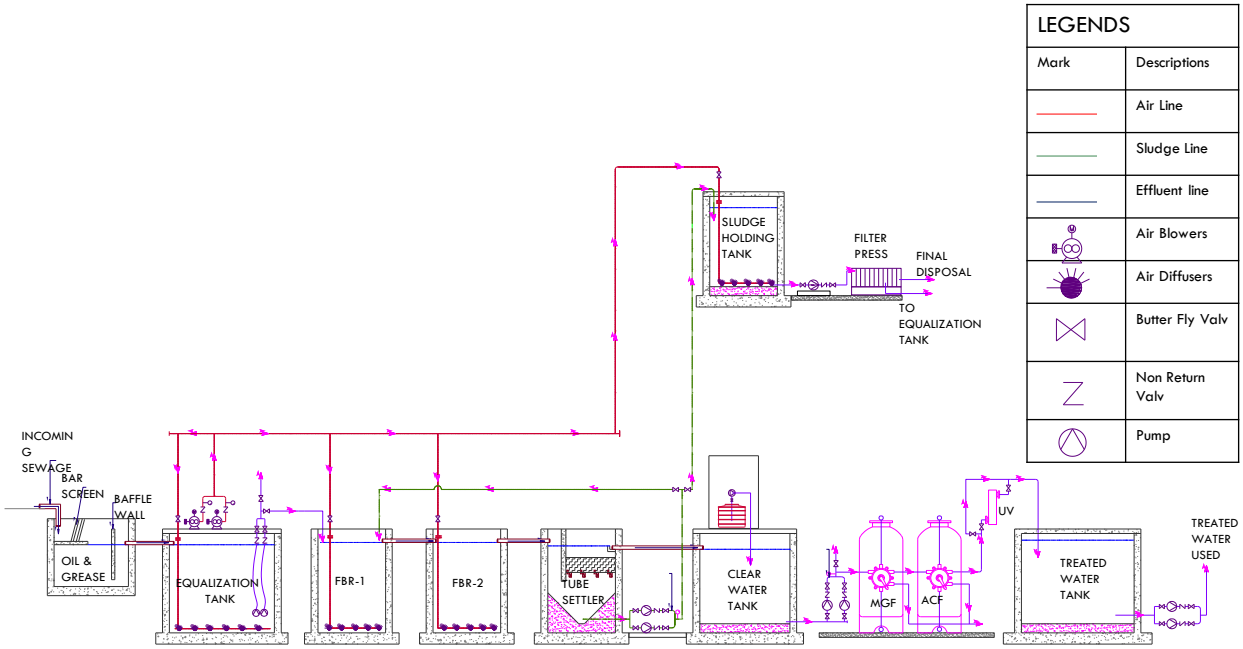
The outlet BOD of the bio-reactor system being very low (in other words, hardly any food is available to the E-coli), most of the coliform are killed in the reactor itself. The treated sewage outlet coliform count will conform to WHO standards.

6. Sludge handling

The sludge generated in the bio-reactors is totally digested. Since the F / M ratio in the bio-reactors is very low, the excess sludge generation is lower than compared to the conventional ASP system. Normally, this sludge is anaerobically digested to stabilize the organic matter. The present system does not envisage any sludge digestion (since the sludge is aerobically stabilized in the bioreactors itself), making the system more suitable for operation with less manpower.

The excess sludge is separated in the secondary clarifier, and then disposed off either on drying beds, or can be directly used as soil conditioner.

HYDRAULIC FLOW DIAGRAM OF SEWAGE TREATMENT PLANT



Storm Water Management

Maximum collection of rain water shall be done and the stored water shall be reused wherever possible. Rain water collection tanks of capacity 1700 KL shall be made.

Garland drains are proposed around the pillars/towers to ensure the proper drainage of the storm water and to prevent disturbance to the drainage pattern of the area.

- Scheme for Rain water collection

The rainwater will be diverted from the rooftop using rain water pipes to the surface / underground drainage network. The entire campus will be sub divided. The rainwater will be diverted into Rain water collection tanks.

RAIN WATER HARVESTING PLAN

S.no.	Type of surface	Catchment area in Sq m	Harvesting Factor/ Collection Efficiency per area	Retention time capacity of recharge tank in 15 min (60 mm)	Total Volume of water Available for Rain Water Harvesting (cu. m /15 min)
1	Water Available from Terraces and other roof-top surfaces	37424	0.85	15	477
	TOTAL	37424			477 cum

477 cum of water shall be stored in Rain water collection tanks of capacity 1700 KL.

Solid Waste Management

Construction Phase: Wastes which are likely to be generated during the construction of terminals include the following:

- **Municipal Waste:** Site clearance
- **Construction Waste:** Construction materials arising from the construction may include waste timber work, spent concrete and cement screening and material and equipment wrappings.
- **Excavated materials:** Excavation during pillar foundations will lead to generation of excess soil. Top soil will be used for landscaping and left out soil will be used for land filling.
- During construction, Approx. 250 Local labors will be preferably employed, no labour camp will be setup at the site. Approx. 38 Kg/day wastes will be generated which will be sent to solid waste/landfill site.

Operation Phase: During operation phase, solid waste will be generated by ropeway users, employee, etc. The estimates of the solid waste generated from the proposed project have been shown in table below:

Type of Waste	Colour of Bin	Category	Disposal Method	Total Waste (kg/day)
Organic Waste	Green	Bio-degradable	The waste will be treated in Organic Waste Convertor and converted into compost	788
Recyclable Waste	Blue	Recyclable	Collected and given to approved recycler	337
Total Waste				**1125 kg/ day**

The above table indicates that the total **1125 Kg/day** of waste will be generated due to the proposed development.

The waste oil generated from D.G sets will be sent to authorize hazardous waste disposal authority.

Technology of Organic Waste Convertor

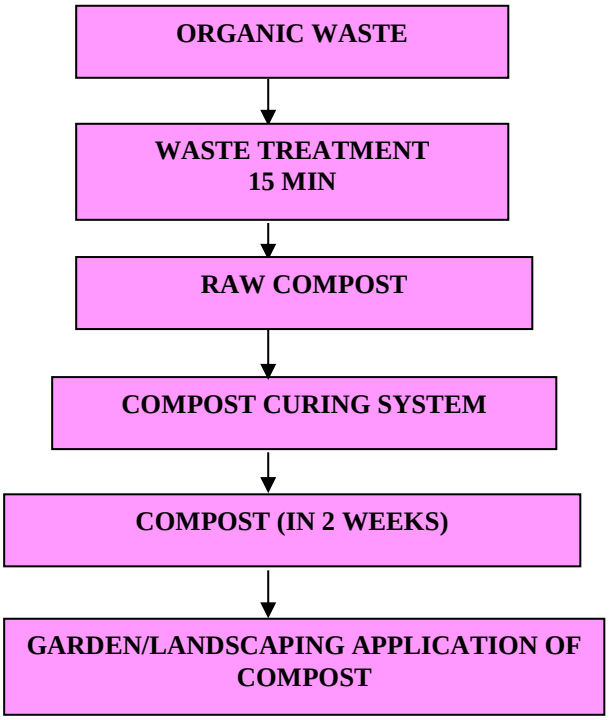
Salient Features

- Quick waste disposal solution
- Easy to operate, fast, takes very less space and makes waste odour free.
- APT for Household, Industrial canteen, Restaurants, Temples, Markets, Large housing complex
- Organic Waste Converter uses bio-culture to decompose waste into black manure
- It helps maintain hygiene and create cleaner, greener and healthier environment.

Process Description for Organic Waste Converter Machine System

- The segregated organic waste is bio-mechanically treated in the **Organic Waste Converter Machine.**
- Waste is homogenizes with bio-culture and organic media. The coarse wastes are **shredded** prior to feeding into OWC machine. Leachate is also controlled during homogenization process.
- The output from Machine is **raw compost** which is uniform in colour and soil structured coarse powder, and also **free of bad odour**.
- The Organic Waste Converter operates in batch cycle of about **15-20 minutes** The waste treated in Converter machine accelerates the composting cycle.
- The raw compost is placed into **compost curing system** & moisture is controlled by using fogging system.
- The **raw compost** is bio-converted **matured compost,** in about 10-15 days of curing period.
- The matured compost can be utilized for gardening etc.

Process flow chart



Ecological Environment

The alignment falls within a Environmental Sensitive Area of Western Ghats for development of terminal stations & line towers.

Socio Economic Scenario

There will be no displacement or immigration of the human population due to the proposed project.

Provide direct and indirect employment opportunities to the local people.

Enhance visitor experience and boost tourism in the region.

SAFETY AND RESCUE PLAN

Maintenance Schedule:

Detailed operation and maintenance instruction manuals covering all aspects of maintenance of the Ropeway System would form an integral part of system documentation.

The essential aspects of maintenance are, however, briefly listed below:

- cabins, hangers and grips etc shall be done.
- Periodic lubrication at the Stations shall be done.
- Routine lubrication at the Stations.

- Regular cleaning at stations to ensure a clean and dust-free atmosphere.
- Periodic Inspection, checking and replacement of hauling rope especially the spliced zones.
- Inspection, checking, lubrication and replacement if and when required of line components such as line sheaves.
- Tightening of all station tower bolts periodically.
- Checking of prime mover such as motors, gearbox, couplings etc.
- Regular checking of service and emergency brakes.
- Regular checking of DG set and Diesel Engine.
- Mock trial of rescue system at periodic intervals.
- Adequate maintenance spares will be stocked for smooth operation.

- Special tools & tackles will kept in the workshop.

Safety Plan

The proposed ropeway is short and maximum degree of elevation is less than 30 degrees. Safe profiling of the system will result in cabins at less than 20 meters from the ground profile.

The ropeway technology is fixed grip and hence the issue of grip slipping does not arise. The grips of the ropeway shall be shifted once in three months to a new location to allow the rope to breathe and revert into its original condition. The health and condition monitoring of the rope and Ultra Testing of all load bearing components will be carried out annually. The drive and return terminal rotating components will undergo vibration testing and recording for generation of failure trend.

The ropeway, therefore, is unlikely to meet with any incident or accident, if maintained properly as per the manufacturer recommendation.

Some of short term failure and their mitigation are as enumerated below:

Power Failure: In the event of main electrical power failure and cabins with passenger on rope line, the ropeway will restore motion by starting and taking on load the full capacity Diesel Generator. The ropeway can and will continue commercial operation on Diesel Generator.

Main Gear Box Failure: In the event of main gear box failure or allied power transmission system, the emergency drive (Diesel engine or Hydraulic Motor or Electrical Motor) can be coupled with main girth gear which is hard coupled to main drive sheave. These prime movers are aimed at operating the ropeway at speeds less than 1m/s and bring back the stranded

passengers in the cabin back to nearest terminal station. These auxiliary drives are not intended for continuation of commercial operation.

Before making it for public use the ropeway project shall be thoroughly inspected to ensure the ropeway project is safe for public use. After getting clearance certificate, the commercial operation of the ropeway would be able to commence.

Safety Measures

- Strict adherence of ropeway manufacturers' maintenance routine shall be complied with. The routine undertaken shall be recorded in maintenance register with description of routine and the person undertaking routine shall be indicated clearly.
- The ropeway shall logically undertake two shut down routines during lean season. One shut down for about 3-5 days will be taken as Half Yearly Shut Down. 7-10 days of shut down will be taken once in year as Annual Maintenance Shut Down. The shutdown schedule shall be intimated to district administration as well displayed at prominent location of ropeway premises for the visitors.
- The ropeway operator will undertake rope testing through magnetograph to ascertain thickness of the rope and broken wires. IS standard is to be followed in determining residual life of rope and decision to replace the rope. The rope shall be immediately changed and no commercial operation shall be permitted, if the strands have collapsed and touching each other; also known as "dead rope".
- All load bearing pins and shaft and critical components as grips and hangers shall be tested using Ultra Testing and record of such testing should be retained. All rotary components and bearing housing shall be tested for vibration analysis. On the basis of signature forecast, preventive replacement and maintenance shall be undertaken.
- The Gondolas shall be provided with door lock, which cannot be opened by the passengers
- All elements of the ropeway shall be mounted onto a steel structure which is anchored on concrete foundations.
- Emergency push buttons should be provided at all stations to stop the ropeway, if required.

Rescue Arrangement:

1. 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 stranded on line.
2. Ladder Rescue shall be adopted for cabins which are stranded close to the ground. An attendant stabilizes the ladder from below while another attendant goes up to open the door and help the passengers to come down.
3. Vertical Rescue System shall be provided involving small winch and the carrier unit which will enable a rescuer to reach the stranded cabins and lower the passengers to the ground.
4. The Emergency Drive with diesel engine enables the passengers to be evacuated in the event of the power failure.

PROJECT SCHEDULE & COST ESTIMATES

The estimated project cost is of Rs. 615 crore.

The scheduled completion date shall occur after 2 years from the appointed date. On or before the scheduled Completion date, the concessionaire shall have completed the construction of the entire project.

COST ON EMP

Sl No	Description	Capital Cost (Rs. In Lacs)	Recurring Cost (Rs. in Lacs/ Year)
1	Landscaping	3.0	0.5
2	STP / Waste water treatment	120.0	10.0
3	D.G. set Stack & Enclosure	5.0	1.0
4	Solid Waste Management/ OWC	30.0	3.0
5	Environmental Monitoring	-	1.0
	Total	Rs. 158.0 Lacs	Rs. 15.5 Lacs/yr

PROJECT BENEFITS

I. **Infrastructure Development & Management of area:** It will increase Infrastructure of the area & will be a planned & managed development in the area. It will set a precedent for others to develop planned Ropeway with Building Constructions project which will cumulatively help the area to be much more managed in future.

II. **Facilities within reach for the residents:** It will provide a planned commercial facility, staff accommodation facility and amusement park to fulfil basic needs of the residents as well as the people of nearby areas. With a view to provide a sky-diving area and amusement park facility with mini hill station township for the tourists, the project has been proposed. Ropeway, will inter-connect Amusement park area and Sky Diving area. Aerial Ropeway is fast emerging technology of providing not only tourist experience but an urban transportation means especially for hilly and tough terrains. It is totally environment friendly with least generation of any type of pollutants.

III. **Safety & Comfort**: Ropeways provide more safe and comfortable journey.

IV. **Traffic Regulation:** The ropeway would help in regulating traffic as only a specified number of tourists can board and de-board the system at a pre-defined interval of time. This would help in restricting and regulating carrying capacity of the place.

V. **Socio-Economic benefits:** The increase in tourism of the area would subsequently increase the ancillary businesses, thereby increasing the local economy of the area and of the Idukki District.

VI. **Local Employment:** The project would require local people, who are accustomed of living under the existing conditions, for skilled / unskilled activities in course of construction and operations of the project. The project will provide direct and indirect employment opportunities to the local people & hence improving their status of living.

VII. **Infrastructure development** or facilities like toilets, drinking water, sewage treatment, solid waste management, medical facilities, etc. will be helpful in maintaining the beauty as well as ecology of such alluring place. And, the medical facilities will help the casualties caused to be addressed on time & in proper way.

ENCLOSURE-IV- DISCLOSURE OF CONSULTANT

Quality Council of India
National Accreditation Board for Education & Training

CERTIFICATE OF ACCREDITATION

This is to certify that

Perfact Enviro Solutions Pvt. Ltd, New Delhi

is hereby accorded accreditation under the QCI-NABET Scheme for Accreditation of EIA Consultant Organizations (Version 3)

Scope of Accreditation

Sl.No.	Name of the Sector	Cat.
1.	Mining of minerals including Open cast/ Underground mining	A
2.	Mineral beneficiation including pelletisation	A
3.	Leather/skin/hide processing industry	A
4.	Textile – cotton and manmade fibers	B
5.	Synthetic organic chemicals industry (dyes & dye intermediates; bulk drugs and intermediates excluding drug formulations; synthetic rubbers; basic organic chemicals, other synthetic organic chemicals and chemical intermediates)	A
6.	Distilleries	A
7.	Industrial estates/ parks/ complexes/ Areas, export processing zones(EPZs), Special economic zones (SEZs), Biotech parks, Leather complexes	A
8.	Aerial ropeways	A
9.	Common municipal solid waste management facility (CMSWMF)	B
10.	Building and large construction projects including shopping malls, multiplexes, commercial complexes, housing estates, hospitals, institutions	B
11.	Townships and Area development projects	B
12.	Bio Medical waste treatment Facilities	B

Name of approved EIA Coordinators and Functional Area Experts are mentioned in SAAC minutes published on website dated March 9, 2016.

Accreditation to the above is subject to the EIA reports being prepared by the experts (EIA Coordinators and Functional area Expert) mentioned in the above minutes and compliance to the Terms and Conditions of Accreditation

Certificate No: NABET/ EIA/1417 / SA 008

Valid Up to: March 23, 2017
(Subject to continual compliance to NABET scheme)

C.E.O
NABET

ENCLOSURE-V- PROPOSED TOR

7(g):STANDARD TERMS OF REFERENCE FOR CONDUCTING ENVIRONMENT IMPACT ASSESSMENT STUDY FOR AERIAL ROPEWAYS AND INFORMATION TO BE INCLUDED IN EIA/EMP REPORT

1) Examine and submit a brief description of the project-name, project site, geology, topography, nature, size, location of the project, project coverage, master plan, length of the proposed aerial rope way, details of ROW, height from MSL and its importance to the region/ State.

2) Any adverse impact of the works already carried out.

3) Submit the details of facilities viz. administration building, restaurant, toilets, waste collection and disposal etc at Lower terminal and upper terminal including parking area.

4) Submit the details of trees required to be cut for the project, including the type, girth size etc. Necessary permission from competent authority shall be obtained for tree cutting. Compensatory tree plantation shall be carried out and cost provision should be made for regular maintenance. Details to be submitted.

5) Examine and submit the likely impact due to influx of people and associated developments

6) Submit maps of the project area and 10 km surrounding area from boundary of the proposed/existing project area, thereby delineating project areas wild life sanctuaries notified under the Wild Life (Protection) Act, 1972/critically polluted areas as identified by the CPCB from time to time/notified eco-sensitive areas/inter state boundaries and international boundaries. Any bio- diversity park or any protected site.

7) Submit baseline data and description of existing situation of the land at the proposed project site including description of terrain, hill slopes, inland topography, slope and elevation, rock types, regional tectonic setting (reported fractures/faulting/folding, warping), and history of any volcanic activity, seismicity and associated hazards.

8) Submit details of power requirement and source. Energy efficiency measures in the activity should be drawn up. PP should also submit details of D.G. Sets along with noise control measures.

9) Details of anticipated impact during construction stage and operation stage w.r.t. landslides, surface drainage etc., should be predicted. The existing surrounding features up to 1 km and impact on them should be addressed separately.

10) PP should examine and submit activities associated with aerial ropeway construction and operations and likely associated hazards and accidents. It is therefore desirable that based on the categories of hazards prevailing at the project site, risk assessment may be carried out by specialists in the field and recommendations may be implemented. Risk assessment should be carried out for seismicity, slope stability, soil erosion, and flood hazard.

11) Any litigation pending against the proposed project and/or any direction/order passed by any court of law against the project, if so, details thereof should be provided.

12) Submit Certificate from the competent authorities for safety of ropeway and its monitoring.

13) Public hearing to be conducted for the project in accordance with provisions of Environmental Impact Assessment Notification, 2006 and the issues raised by the public should be addressed in the Environmental Management Plan. The Public Hearing should be conducted based on the ToR letter issued by the Ministry and not on the basis of Minutes of the Meeting available on the web-site.

14) A detailed draft EIA/EMP report should be prepared in accordance with the above additional TOR and should be submitted to the Ministry in accordance with the Notification.

15) Details of litigation pending against the project, if any, with direction /order passed by any Court of Law against the Project should be given.

16) The cost of the Project (capital cost and recurring cost) as well as the cost towards implementation of EMP should be clearly spelt out.

17) Any further clarification on carrying out the above studies including anticipated impacts due to the project and mitigative measure, project proponent can refer to the model ToR available on Ministry website "http://moef.nic.in/Manual/Aerial Ropeway".

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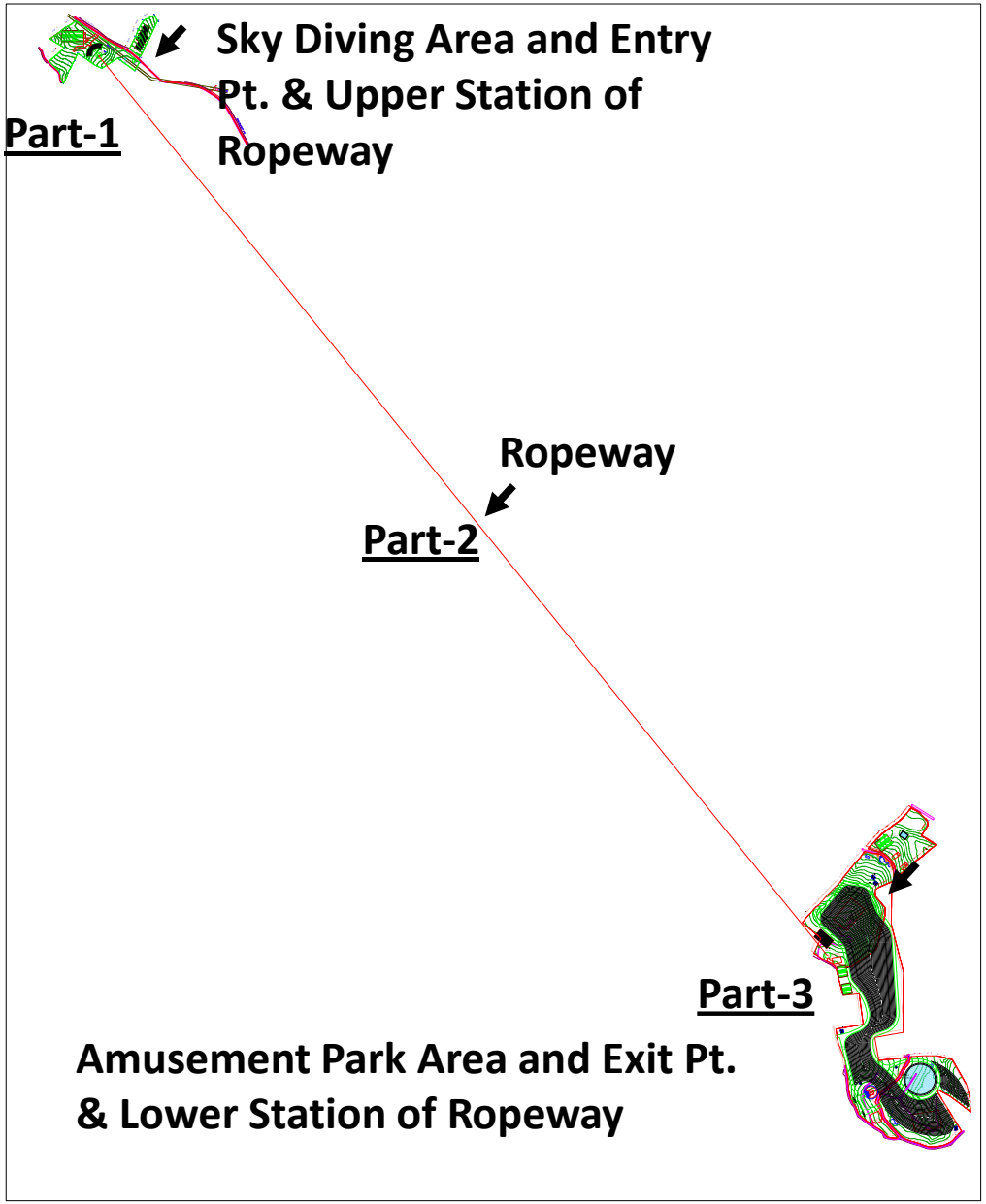
ENCLOSURE-VI- SURVEY OF INDIA TOPOSHEET

TOPOGRAPHICAL MAP-10KM RADIUS MAP
ROPE WAY PROJECT FOR HILL STATION TOWNSHIP CUM RESORT AT MUNNAR, IDDUKI, DISTRICT, KERALA
DEVELOPED BY M/S VALLEY WORLD ENTERTAINMENTS PVT. LTD.

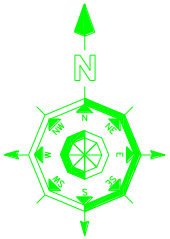
ENCLOSURE-VII- LAYOUT

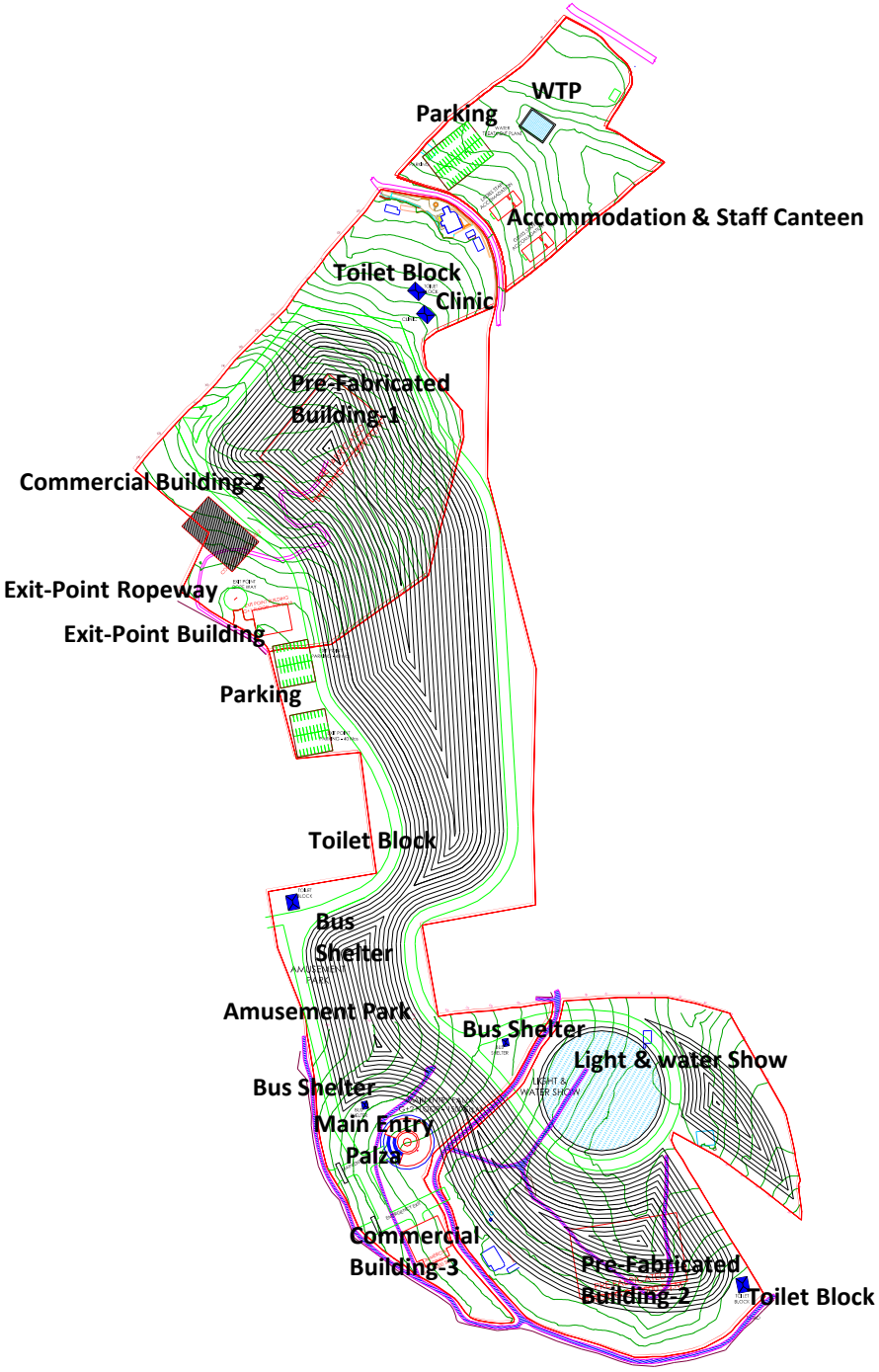
Complete Layout Plan



Layout Plan (UTP AREA)

Layout Plan (LTP AREA)





ENCLOSURE-VIII- SURVEY No. LIST

SL NO	NAME	SY NO	EXTENT IN HECTRES
1	VARGHESE	49/5	0.026
		49/4	0.0141
		1/1 348/3/1	0.607
2	VINCENT	510/11	0.7001
3	CHANDY	510/3 510/10	1.38
		1/1,	0.0697
4	BENNY	1/1 4216	2.0234
5	KESAVAN SISUPALAN	1/1 3823	0.5178
		1/1 3825	0.1012
6	SHAJI JOSEPH	90/3	0.146
		189/11	0.068
		189/5	0.36
		189/2	0.1375
		188/6	0.0285
		187/1	0.042
7	LAISY SHAJI	190/5	0.45
8	C J SIMON	189/10	0.1135
		189/8	0.2125
		189/1	0.0225
		188/7	0.0265
		190/8	0.258
9	JOBY	183/9	0.43
10	SUMATHI SUKUMARAN	180/1	0.265
		1/1 347/2-1	0.4958
11	BABU JOSEPH	1/1 347/2-1	1.5581
		1/1 594/3	0.2266
		1/1 594/1	0.864
		1/1 594/1	0.4047
12	PAULOSE	1/1 923/2	0.3915
		1/1 924/2	0.686

		1/1 921/1	0.1882
		511/6	0.079
13	THOMAS VARGHESE	938/1	0.2226
14	JOSEPH MATHEW	493/3	0.56
		493/6	0.38
15	MATHEW THOMAS	511/1	0.709
16	SEBASTIAN MATHEW	1/1 348/3.2	0.3642
17	BINDHU GEORGE	1/1 348/3.2	0.0405
18	BABU JOSEPH	1/1 436/4-1	0.0283
		1/1 436/4-1	0.388
		1/1 436/3-2	0.8185
		1/1 436/4-1	0.3258
19	SANTHOSH PARAMESWARAN	183/6	0.345
20	SHEEJA PAULOSE AND SANTHOSH	1/1 938/3	0.0647
21	BENNY	507/12	0.971
		508/3	0.38
		509/7	0.266
		507/10	0.4605
22	JOY ABRAHAM	348/3-1	0.4917
23	BEENA JOY	512/5	0.574
		TOTAL	**20.283 ha**