

**Animal Safety and Passage Plan**  
**for Talsari tok to Gaundar Motor Road in District Rudraprayag**  
**(Uttarakhand)**

The Uttarakhand State Government is planning to construct a motor road to provide connectivity to the remote village 'Gaundar' in District Rudraprayag through constructional division, PWD, Ukhimath (User Agency). The Village falls under Kedarnath Wildlife Sanctuary hence forest land transfer is required for the project. The land transfer proposal is prepared by User agency for which Animal safety and Passage plan is required as per Guidelines of National Wildlife Board.

The proposal includes construction of a 5.00 Km single lane hill road having roadway width of 5.95 m. at the straight portions to 6.85 m at curved portions. The average speed of a vehicle in such a hilly road is about 25-30 Km/hr and maximum speed is less than 50 km/hr due to premix carpet road surface which is not a smooth surface to ride in higher speed. Since the speed of vehicle is low to medium, it is less likely to cause a vehicle – animal collision so as to cause the death of a wildlife animal. However User Agency is going to adopt all necessary measures for safety of wildlife animals. Moreover 'Gaundar' is last village of the district having population of 242 and there is not any habitat beyond the village hence the traffic density on the road will be low which will create minimum hindrance to wildlife.

**Construction of Culverts-Cum-Underpass**

The hill slope of the proposed area is 50 – 60 degrees. Construction of Land bridge and canopy bridge for escape of wildlife animals on the proposed project site is not possible being a hilly steep terrain. Six to eight culverts are to be made per kilometer on the road to collect the longitudinal drain water and serves as cross drainage. The proposed area does not contain any stream or perennial source of water that means the culverts will serve its purpose only during rainy season. These culverts if constructed sufficiently wide and high some of them can serve as underpass for animals.

The list of most prevailing wildlife animals in Kedarnath Wildlife Sanctuary which are found in the area with their maximum heights are as follows.

Sl. No.	Wildlife Animal	Maximum height (Meter)
1.	Leopard	0.75
2.	Musk Deer	0.60
3.	Himalayan Black Bear	0.90
4.	Indian Jackal	0.45
5.	Blue Sheep/Bharal	0.90
6.	Indian Boar	0.90

The maximum animal height listed above is 0.90 m. Cross Drainage works to be done in the road are to be done with construction of scupper/culverts with catch pit. The Minimum width of opening inside the scupper/culverts will be 2.00 m and height of opening will be 1.80 m which is sufficient for any wild life animal not to stuck inside. Parapets are to be provided at the road edge above the scupper/culverts to resist

the accidental fall of animals in the cat-pit. Steps are to be provided in cat-pit of the scupper/culvert for the easy escape of wildlife animal.

**Construction of parapets instead of crash barriers**

Parapets at the edge of road are to be made by Stone masonry or Plum concrete of size 2.5x0.6x0.45 m (LxBxH) with 2 – 3 m gap in between to allow the passage of wild life animals. Metal Beam Crash barriers are avoided.

**Installation of Sign boards**

Cautionary sign boards to be installed to alert the driver of animal movement areas to reduce animal vehicle collisions

<p>(1)</p> 	<p>(2)</p> <p>आप संरक्षित क्षेत्र में प्रवेश कर रहे हैं, कृपया धीरे चले।</p>
<p>(3)</p> 	<p>(4)</p>  <p>आप संरक्षित क्षेत्र में हैं कृपया प्रेशर हार्न का प्रयोग न करें।</p>

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ऊखीमठ (रुद्रप्रयाग)

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अधिसासी अभियन्ता  
निर्माण खण्ड, लो० नि० वि०  
ऊखीमठ (रुद्रप्रयाग)

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वन क्षेत्राधिकारी  
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(गुप्तकाशी)

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प्रभागीय वनाधिकारी  
केदारनाथ वन्य जीव प्रभाग  
गोपेश्वर।