

Area Calculation Sheet

Proposed Non Forest Land in Pilibhit Tiger Reserve to be diverted for entry/exit to HPCL Retail Outlet on Pilibhit-Madhotanda Road, in KM 2 (Ch. 1.396 to 1.439), at Gata No 288, Vill-Chidaiyadeh, Tehsil & Distt Pilibhit (Uttar Pradesh)

Area as per Approved Layout Plan.

$$\begin{aligned}\text{Entry to Petrol pump} &= \text{Curve Polygon (ABA1)} + \text{Polygon (B B1 A2 A1)} \\ &= 36.34 + (12 * 14.79) \text{ sqm} \\ &= (36.34 + 177.48) \text{ sqm} \\ &= 213.82 \text{ sqm}\end{aligned}$$

$$\therefore \text{Curve Radius} = 13 * 13 = 169$$

$$\begin{aligned}\pi r^2 / 4 &= 3.14 * 13 * 13 / 4 \\ &= 132.66\end{aligned}$$

$$\begin{aligned}\text{Area of Curve Polygon} &= 169 - 132.66 \\ &= 36.34 \text{ sqm}\end{aligned}$$

$$\begin{aligned}\text{Non Forest land B/W Entry/Exit} &= \text{Polygon (B1 C1 D2 A2)} = (13 * 14.79) \text{ sqm} \\ \text{Non Forest land B/W Entry/Exit} &= 192.27 \text{ sqm}\end{aligned}$$

$$\begin{aligned}\text{Exit from Petrol Pump} &= \text{Polygon (C1 C D1 D2)} + \text{Polygon Curve (C D D1)} \\ &= (10 * 14.79 \text{ sqm} + 36.34 \text{ sqm}) \\ &= (147.90 \text{ sqm} + 36.34 \text{ sqm})\end{aligned}$$


$$\text{Protected Forest Area for Exit from Petrol Pump} = 184.24 \text{ sqm}$$

$$\begin{aligned}\text{Retail Outlet Private Land} &= \text{Base * Hight} \\ &= 35 \times 30 \\ &= 1050 \text{ sqm}\end{aligned}$$

Total Proposed Non Forest Area for Diversion

$$\begin{aligned}&= 213.82 \text{ sqm (Entry)} + 192.27 \text{ sqm (Area B/W Entry \& Exit)} + 184.24 \text{ sqm (Exit)} \\ &\quad + 1050 \text{ sqm (Private Land)} \\ &= (213.82 + 192.27 + 184.24 + 1050) \text{ sqm} \\ &= 1640.33 \text{ sqm} \\ &= 0.164033 \text{ Ha.}\end{aligned}$$

$$\text{Or } = 0.16403 \text{ Ha.}$$


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