

Area Calculation

(Protected Forest Area proposed for diversion for non forestry Use)

**Proposed Essar Oil Limited Retail Outlet On Bareilly-Mathura-Bharatpur Road, (SH-33)
At KHASRA No.-165 Ka & 166, Village: Nagla Shisham, Tehsil: Hathras,
District: Hathras (Uttar Pradesh)**

Area Calculation Measurements on basis of Georeferenced Map & Layout Plan.

Entry to Petrol Pump=Curve Polygon (ABA1) + Polygon (B B1 A2 A1)

$$= 36.34 + (19.37 \times 9.0) \text{sqm}$$

$$= (36.34 + 174.33) \text{sqm}$$

$$= 210.67 \text{sqm}$$

$$\text{Curve Radius} = 13 \times 13 = 169$$

$$\pi r^2 / 4 = 3.14 \times 13 \times 13 / 4$$

$$= 132.66$$

$$\text{Area of Curve Polygon} = 169 - 132.66$$

$$36.34 \text{SQM}$$

$$\text{Protected Forest Land B/W Entry and Exit} = \text{Polygon (B1 C1 D2 A2)} = (19.37 \times 12) \text{sqm}$$

$$\text{Protected Forest Land B/W Entry and Exit} = 232.44 \text{sqm}$$

$$\text{Exit from Petrol Pump} = \text{Polygon (C1 C D1 D2)} + \text{Polygon Curve (C D D1)}$$

$$= (19.36 \times 9.0 \text{sqm} + 36.34 \text{sqm})$$

$$\text{Protected Forest Area for Exit from Petrol Pump} = 210.67 \text{sqm}$$

$$\text{Total Proposed Protected Forest Area for Diversion}$$

$$= 210.67 \text{sqm (Entry)} + 232.44 \text{sqm (Forest Area B/W Entry \& Exit)} + 210.67 \text{sqm (Exit)}$$

$$= (210.67 + 232.44 + 210.67) \text{sqm}$$

$$= 653.78 \text{sqm}$$

$$= 0.065378 \text{Ha}$$