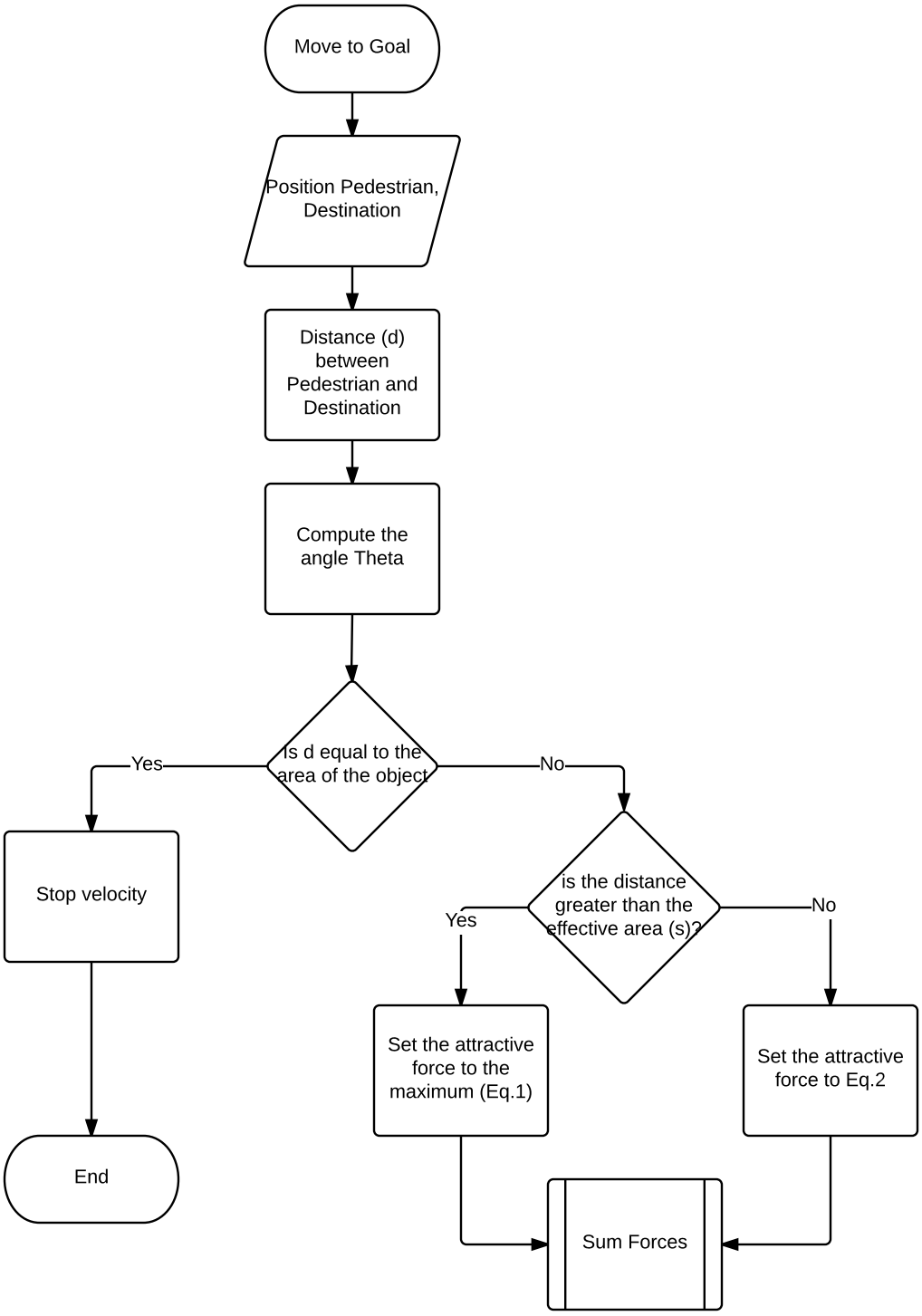


Eq1:

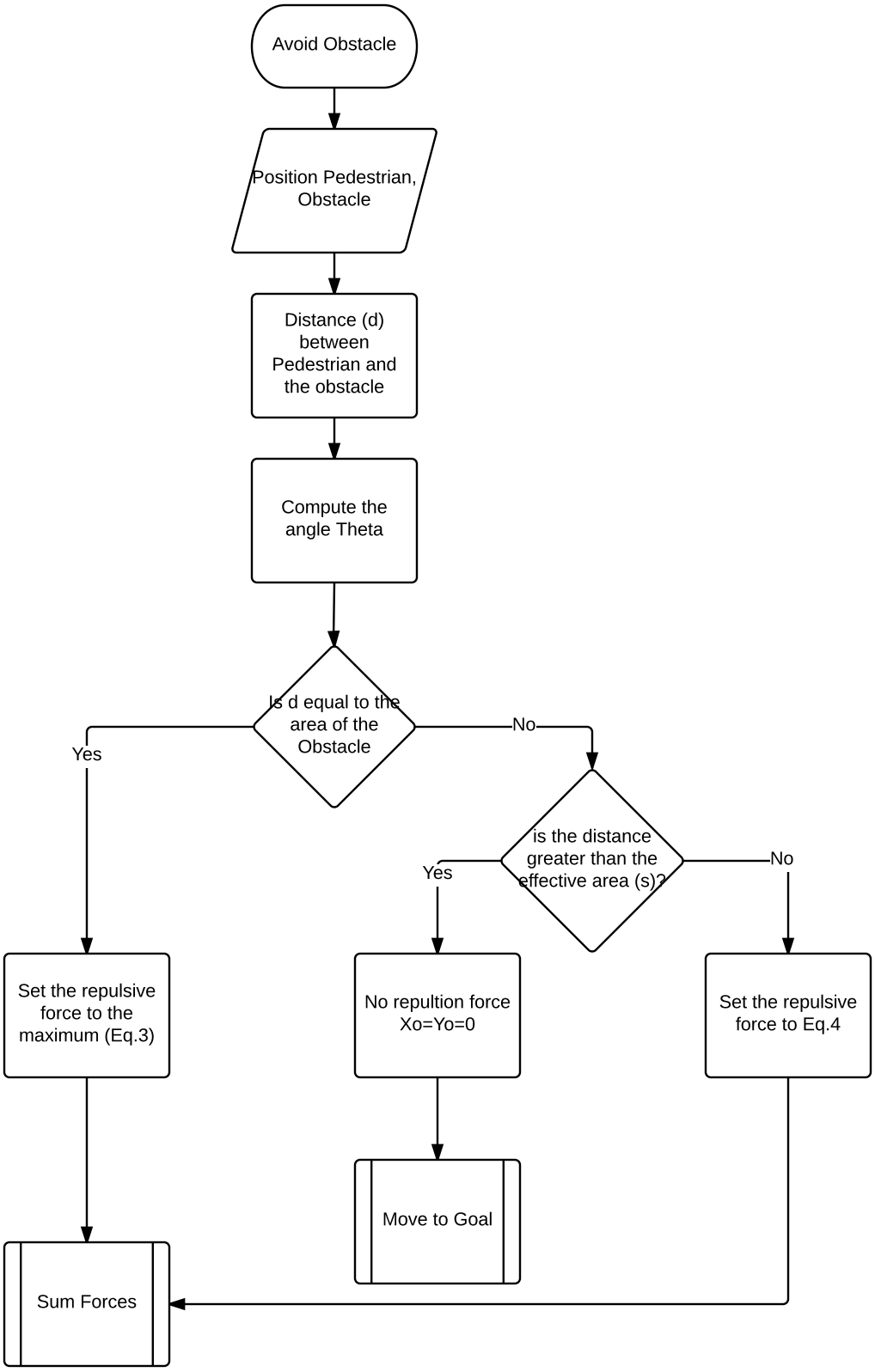
$$\Delta x_G = \alpha(s)Cos(\theta)$$

$$\Delta y_G = \alpha(s)Sin(\theta)$$

Eq2

$$\Delta x_G = \alpha(d-r)Cos(\theta)$$

$$\Delta y_G = \alpha(d-r)Sin(\theta)$$



Eq3

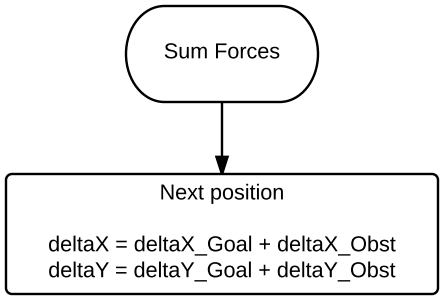
$$\Delta x_o = -\infty Cos(\theta)$$

$$\Delta y_o = -\infty Sin(\theta)$$

Eq4

$$\Delta x_o = -\beta(s + r - d)Cos(\theta)$$

$$\Delta y_o = -\beta(s + r - d)Sin(\theta)$$


Sum Forces
Next position
deltaX = deltaX_Goal + deltaX_Obst
deltaY = deltaY_Goal + deltaY_Obst