$\mathbf{r}(t) = \langle 5\ln t, 2\sqrt{t}, t^2 \rangle$, $\mathbf{r}'(t) = \langle 5/t, 1/\sqrt{t}, 2t \rangle$. At $(0, 2, 1)$, $t = 1$ and $\mathbf{r}'(1) = \langle 5, 1, 2 \rangle$. Thus, parametric equations of the tangent line are $x = 5t$, $y = 2 + t$, $z = 1 + 2t$.