Let $D$ be an oriented knot diagram on the 2-sphere, and let $b$ be a base point of $D$. A warping crossing point of $D$ with $b$ is a crossing point of $D$ such that we meet the crossing point as an under-crossing first when we travel $D$ from $b$. The warping degree of $D$ with $b$ is the number of the warping crossing points of $D$ with $b$. In this talk we define the warping matrix of $D$ by using warping degrees. We show that we can recreate $D$ from the warping matrix of $D$, and investigate the property of warping matrix. (Received February 18, 2015)