Interval orders are a class of partially ordered sets (posets), each element of which can be represented by an interval on the real line such that the interval corresponding to \( x \) lies completely to the left of the interval corresponding to \( y \) if and only if \( x \) precedes \( y \) under the poset relation. We will look at variations of interval orders which include length constraints for the intervals. In 1985, Fishburn published a list of forbidden suborders which prevent a partially ordered set from having an interval representation with lengths in \([p, q]\), for positive integers, \( p, q \). Using tools from weighted digraphs, we present an alternative approach to this problem and provide a list of minimal forbidden suborders for interval lengths in \([2, q]\). (Received September 25, 2017)