We provide a characterization of the crystal bases for the quantum queer superalgebra recently introduced by Grantcharov et al.. This characterization is a combination of local queer axioms generalizing Stembridge’s local axioms for crystal bases for simply-laced root systems, which were recently introduced by Assaf and Oguz, with further axioms and a new graph $G$ characterizing the relations of the type $A$ components of the queer crystal. We provide a counterexample to Assaf’s and Oguz’ conjecture that the local queer axioms uniquely characterize the queer supercrystal. We obtain a combinatorial description of the graph $G$ on the type $A$ components by providing explicit combinatorial rules for the odd queer operators on certain highest weight elements. (Received January 31, 2019)