963-53-150   **John McCuan*** (`mccuan@math.gatech.edu`), School of Mathematics, Georgia Institute of Technology, Atlanta, GA 30332. *Continua of singular minimal graphs.* Preliminary report.

In a recent paper of Concus, Finn, and McCuan (Liquid bridges, edge blobs, and Scherk-type capillary surfaces) there is a proof, due to Finn, of the existence of a family of singular minimal graphs over the unit square satisfying a capillary contact angle condition and having Scherk's surface as a limit. The proof uses BV theory and is essentially non-constructive. We discuss work in progress on constructing these graphs explicitly via the Weierstrass representation. (Received January 22, 2001)