PROJECT SUMMARY

Just outside of Tucson, Arizona, a series of flood control retaining walls were recently designed and constructed using fiber reinforced concrete. After an original design specifying the heavy use of reinforcing bars, construction and safety concerns were brought forward with the challenging conditions of placing the bars in the narrow trenches in the soil. Upon the contractors request, Euclid Chemical engineers worked with the structural engineer for this project to incorporate fiber reinforcement in order to reduce the bars. As a result, TUF-STRAND SF synthetic macro-fiber was used at a dosage of 5 lb/yd³ (3kg/m³) in the concrete. This allowed for reducing the bars to only one mat in the trenches and also reducing the amount of rebars in the flood walls above the ground.