

# EXPECTED IMPLEMENTATION JULY 2017

## 945 ALUMINUM PIPE, INCLUDING UNDERDRAIN, PIPE ARCH, AND STRUCTURAL PLATE PIPE AND PIPE ARCH.

(REV 11-30-16) (FA 12-5-16) (7-17)

SUBARTICLE 945-2.2 is deleted and the following substituted:

**945-2.2 Bolts and Nuts:** In lieu of shaped bolts and nuts, standard type bolts and nuts, with special shaped washers, may be used. For aluminum bolts and nuts the material shall conform to the chemical requirements shown in Table I of ASTM B211, for Alloy 6061. Nuts shall be lubricated at the factory, with a suitable wax compound. The bolts may be sampled and tested before erection or may be accepted on the basis of the manufacturer's certification.

For steel bolts and nuts, the material shall meet the requirements of either ASTM A307 or ASTM F3125, Grade A325, as appropriate, and shall be hot double-dipped galvanized. Aluminized steel bolts, or other equally suitable devices for connecting the plates, may be used if approved by the Engineer.