

EXPECTED IMPLEMENTATION JULY 2016

451 PRESTRESSED SOIL ANCHORS. (REV 10-14-15) (FA 1-11-16) (7-16)

SUBARTICLE 451-8.2.3 is deleted and the following substituted:

451-8.2.3 Anchorage and Trumpet: Use non-restressable anchorage devices except where indicated in the Plans. Provide restressable anchorages on those prestressed soil anchors designated as restressable in the Plans. Ensure that the post-tensioning supplier provides a restressable anchorage compatible with the post-tensioning system provided along with written recommendations concerning the restressing of the tendons.

If using strand tendons, submit written recommendations from the post-tensioning supplier for seating the wedges. Include with the recommendations the minimum load required to properly seat the wedges in the anchor head.

Size the bearing plates so that:

1. the bending stresses in the plate do not exceed the yield strength of the steel when applying a load equal to 95% of the minimum specified ultimate tensile strength of the tendon; and

2. the average bearing stress on the concrete does not exceed that recommended in Section 3.1.7 of the Post Tensioning Institute Guide Specification for Post-Tensioning Materials.

Weld the trumpet to the bearing plate. Provide a trumpet that has an inside diameter equal to or larger than the hole in the bearing plate. Ensure that the trumpet is long enough to accommodate movements of the structure during testing and stressing. For strand tendons with encapsulation over the unbonded length, provide a trumpet that is long enough to enable the tendon to make a transition from the diameter of the tendon in the unbonded length to the diameter of the tendon at the anchor head without damaging the encapsulation. Ensure that trumpets filled with corrosion-inhibiting grease have a permanent Buna-N synthetic rubber or approved equal seal provided between the trumpet and the unbonded length corrosion protection. Ensure that trumpets filled with grout have a temporary seal provided between the trumpet and the unbonded length corrosion protection or that the trumpet overlaps the unbonded length corrosion protection by a minimum of 12 inches and fits tightly over the unbonded length corrosion protection.