## ALABAMA DEPARTMENT OF TRANSPORTATION

DATE: September 17, 2019 Special Provision No. <u>18-0226(2)</u>

EFFECTIVE DATE: April 1, 2020

SUBJECT: Concrete for Steel Pile Encasements.

Alabama Standard Specifications, 2018 Edition, SECTION 504 shall be modified as follows:

## SECTION 504 STEEL PILING ENCASEMENT

504.02 Materials.

Article 504.02 shall be replaced with the following:

## 504.02 Materials.

Reinforcing steel material shall be furnished in accordance with the material requirements given in Section 502.

The Contractor's concrete producer shall establish the proportions for the concrete mix following the guidelines given in ALDOT-170, "Method of Controlling Concrete Operations for Structural Portland Cement Concrete", and the design criteria given in this Subarticle. The concrete supplier shall submit the proposed concrete mix design to the Materials and Tests Engineer for approval following the requirements given in ALDOT-170. The distribution of approved concrete mix designs and the re-approval of concrete mix designs will be in accordance with the requirements given in ALDOT-170. Any changes of the materials or proportions of a mix design shall be noted in a revised mix design that shall be submitted for approval.

Concrete for steel pile encasements shall meet the requirements of Class B, as defined in Item 501.02(c)2 with the following exceptions:

- Type II or Type IL cement containing a maximum of 8% C3A shall be used.
- The slump range shall be from 6" to 8" {150 mm to 200 mm} during placement.

Form material shall be capable of withstanding the pressure of the placement of the concrete. Rigid forms shall be used for the construction of the encasements. Fabric forms will not be allowed. The epoxy mortar used to seal the forms shall be made from an approved Type I epoxy adhesive. The mix proportions of the epoxy adhesive and aggregate shall be those recommended by the manufacturer of the epoxy adhesive.