

**OFFICE OF STATE AID ROAD CONSTRUCTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

NOTICE TO BIDDERS NO. 13

DATE: **October 19, 1995**

SUBJECT: USE OF GROUND GRANULATED BLAST FURNACE SLAG (GGBFS)

Subject to the conditions set forth herein and at the Contractor's option, GGBFS may be used as a replacement for portland cement as the cementitious material in concrete mixtures and in cement-soil or cement-soil-aggregate mixtures. The replacement of portland cement with GGBFS shall not exceed 50 percent by weight of the total cementitious material and the replacement rate (by weight) shall be one part GGBFS for one part portland cement. Only one mineral admixture will be allowed for portland cement replacement in any mixture.

The addition of GGBFS as a replacement for portland cement will not be permitted in blended hydraulic cement, portland cement combined with fly ash or portland cement (Type III), when specified in the contract.

In addition to meeting the requirements set forth in Subsection S-901-714.06, the source of GGBFS must have been approved for listing in the MDOT's "List of Approved Suppliers of Grade 120 - Ground Granulated Blast-Furnace Slag".

Concrete mixtures containing portland cement combined with GGBFS shall not be mixed or used alternately with concrete mixtures containing other cementitious materials in any structure or part thereof that, in its permanent position, will be visible above the ground.

When GGBFS is proposed to be used in concrete mixtures, the Contractor shall furnish the concrete mixture design with documentation of performance characteristics (based on trial batching or plant produced mixtures) to the Engineer for review prior to use. The approval of the mixture design will be based on verification of performance at the beginning of production.

When GGBFS is used for replacement of portland cement in concrete mixtures, cylinder tests shall be used as a guide for the removal of falsework and forms as set forth in Column B of Subsection S-601.09.3 and S-804.19 and concrete pavement shall not be opened to traffic until cylinder tests have attained a compressive strength of 3500 psi or may be opened after a curing period of 28 days.

Scales for weighing GGBFS shall meet the requirements of cement scales as set forth in Mississippi Department of Transportation's Standard Specifications, Subsection 501.03.2.3.