

SEP 15 2005

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RE: FDOT Disputes Review Board
FN 237506-2-52-01
FED. PROJ. ID 2761-040P

MASS CONCRETE CLAIM

BOARD FINDINGS:

Based on the information supplied by both parties, and the in-depth and open presentations and discussions that took place at the hearing, the Board finds as follows:

On 12/1/04, SCC submitted a delay claim on the project due to several delays to the project encountered during the mass concrete pours of the footings. These delays, imposed by the Engineer, were due to the apparent inability of the contractor to meet the requirement of a maximum temperature gradient of 35 degrees F in the mass concrete during the curing period.

The 35 degree F temperature differential was measured from the center of the mass concrete to the exterior surface by thermocouples as required in the contract documents.

The contractor maintained that the concrete specifications, requiring a CL V, 6,000 psi concrete with microsilica, noted as "special" on the plans, was an erroneous concrete mix design for the intended purpose.

In response to a request for clarification, an e-mail was received from Robert Robertson, FDOT Tallahassee Structures, confirming that the 2002 Standard Design Guidelines (SDG) was in error in that only piles contain CL V Special concrete. This error was corrected in newer versions of the SDG (no date of correction given). It was further explained that there was no FDOT pay item for CL V Special concrete to be paid for in a cubic yard or other volumetric basis, as normal cast in place concrete would require.

It was noted that the pay item for the mass CIP concrete on this particular project is:
"Line no. 0060, 8107, Concrete CL V (microsilica substructure mass, 1,594.3 CY (cubic yards).

As a result of exceeding temperature differentials as noted (with the job-specified mix), the concrete pouring operations were suspended on three occasions prior to 4/27/04:

From 1/11/04 to 1/12/04 due to bad thermocouple installation

From 3/1/04 to 3/5/04 due to excessive temp. differential

From 3/24/04 to 4/27/04 due to excessive temp. differential

There were no suspensions of the concrete pouring operations for the remaining pours (approximately half of the number of footings) following a change in the concrete mix design.

Prior to original concrete placement, and at each of the pour suspensions, the contractor engaged the services of a Specialty Engineer, in accordance with the contract documents. Several options and alternative schemes for temperature control were made and implemented during the suspension periods.

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The contractor requested, and FDOT approved a concrete mix design change from the original CL V, 6,000 psi concrete (with microsilica) to a CL IV 5,500 psi concrete on 4/27/04, after the contractor had poured 8 footings on the job with temperature differential problems. FDOT stated this change was for the convenience of the contractor. There were no temperature differential problems following this concrete mix change.

During the course of the presentations, the FDOT pointed out that the delay claim as presented by the contractor was denied on the basis that the CIP footers were not designated as a critical item of work on the contractor's schedule update for January 4, 2004, and remained non-critical until the May 10, 2004 schedule update.

The contractor referred to a letter from the FDOT dated December 28, 2003 in response to the December 3, 2003 schedule update (on which the footers were shown as critical), suggesting the contractor make every attempt to keep item 4500, Mass Substructure Footings, on schedule to prevent further negative float.

In response to this letter, the contractor committed a 60-hr work week on the footers in lieu of the planned 40-hr work week previously planned. This commitment was reflected in the contractor's schedule update submitted on January 4, 2004, taking the footers off the critical path and minimizing further negative float. This plan then proved unattainable due to the suspensions incurred due to the excessive temperature differentials in the footing pours.

In conclusion, the FDOT maintained that the footers were not on the critical path. The concrete change was for the convenience of the contractor at his request, as the original design mix was buildable.

The contractor maintained that the original concrete specified was in error, and that the scheduling logic for this type of work would always have the footers on the critical path.

BOARD RECOMMENDATION:

Based on the written material received, and the presentations made at the hearing, the Board finds that:

Per Spec Section 5-12.2.2, Claims For Delay; "...There shall be no Contractor entitlement to any monetary compensation or time extension for any delays or delay impacts, whatsoever, that are not to a controlling work item....". The delay claim is being made by the contractor on a "non-critical" item of work (mass concrete, footers) per the contractor's schedule as submitted for the January, 2004 update.

Per Spec. Section 346-3.3, Mass Concrete; This section discusses the thermal analysis required for mass concrete, the need for a Specialty Engineer, the 35 degree temperature differential required on the cure, and concludes "...The Department will make no compensation, either monetary or time, for the analyses or tests or any impacts upon the project".

Based on the above, the Board finds there is **NO ENTITLEMENT** due the contractor on this claim as submitted. In regard to the practicality of successfully placing the microsilica mass concrete mix there was no expert testimony given to the Board. We recommend that the owner consult with their mass concrete experts and determine if it could have been accomplished utilizing acceptable industry practices. This type of information would assist the Department in determining if a time extension is merited.

The Board suggests that prior to acceptance / rejection of this recommendation, that the FDOT recognize that this project was bid on April 30, 2003, and that the implications made in the e-mail

sent from Robert Robertson, FDOT Tallahassee Structures, did in no way impact the concrete mix design originally specified at the time of bid.

Respectfully submitted by the Board and signed by (one), the chairman, for all.

Robert D Buser

cc: George Seel
Dallas Wolford