E-mailed - November 22, 2004

Mr. Joseph Greer Mr. Stephen E. Majewski, PE Project Manager Project Resident Engineer

Modern Continental South, Inc. Parsons Brinckerhoff Construction Services, Inc.

585 North Nova Road 533 North Nova Road

Ormond Beach, Florida 32174 Ormond Beach, Florida 32174

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RE: SR 5A (Nova Rd) from Flomich Avenue to SR 5 (US 1)

FIN No.: 240758-1-52-01

Contract No: 21266 County: Volusia

District 5

November 22, 2004

**Disputes Review Board** 

DISPUTE: Request for Anchor Bolt Tensile Testing Compensation.

Dear Sirs:

The Contractor, Modern Continental South, Inc. (MCS), requested a hearing to determine **entitlement** of MCS to compensation for tensile testing anchor bolts on the referenced project. Should entitlement be established, the Disputes Review Board (DRB) was also to decide quantum of such entitlement.

Pertinent issues, correspondence and other information relating to MCS's, and FDOT's positions were forwarded to the DRB for review and discussion at the hearing that was held on November 05, 2004.

# **CONTRACTOR'S POSITION:**

During installation and adjacent construction several of the 1" anchor bolts on six street light precast foundations were bent. Mastec cold straightened the bolts as they had on all their previous projects where bolts were bent.

PBCS rejected the straightening and directed that the foundations be repaired or replaced in January 2003.

MCS suggested a repair procedure and submitted it on March 7, 2003.

The procedure was never approved even though the method was identical to the DOR's method of raising mast arm foundations later in the project due to design errors.

PBCS directs the removal or submission of repair procedure again on June 10, 2004 to which MCS proposes testing on June 21, 2004 under Standard Specification 5-9.1 Cooperation by the Contractor, which protects the contractor from errant inspection or direction of the owner's representative.

An estimated price of \$3,177.08 was provided for testing under this Specification on August 23, 2004.

Every bolt on all six foundations was successfully tested on August 24, 2004 and the signed and sealed results submitted on September 16, 2004.

PBCS refuses to pay for the testing on August 26, 2004 and again on September 1, 2004. The Specifications referred to by PBCS addresses "repairing" the bolts, in this case "cold straightening" for which no compensation is requested.

Since the bolts were never "out of compliance" as asserted by PBCS, they should bear the costs of their misguided direction to repair or remove the foundations.

MCS requests testing costs as submitted and Mastec's costs in unnecessarily removing and resetting the poles.

## **DEPARTMENT'S POSITION:**

The Department respectfully submits this statement and explanation of its position regarding entitlement and quantum to MCS for claimed additional compensation relating to the Tensile Pull Test for Damaged Anchor Bolts Issue that is to be presented to the Board on November 5, 2004.

It is the Department's understanding that the Board will consider the facts presented by both sides and render a decision on Entitlement and Quantum that is consistent with the terms of the contract. However, it remains the Department's position that there is no entitlement on this issue.

#### Tensile Pull Test for Damaged Anchor Bolts

We completed our analysis of MCS's September 30, 2004 Damaged Anchor Bolts for Light Pole Foundations claim package for the Nova Road project in Ormond Beach requesting compensation in the amount of \$3,177.08 and zero days of additional contract time.

#### MCS's Claim

MCS's claim is based on Standard Specification 5-9.1, Cooperation by Contractor, as the basis for reimbursement for the tensile pull tests performed on the damaged light pole anchor bolts for Poles 88, 93, 95, 99,111 and 125.

#### **Background Information**

The Department advised MCS on January 30, 2003 that the damaged anchor bolts at light pole foundations 88, 93, 95, 99, 111 and 125 were unacceptable; replacement of the light pole foundations or repair of the damaged anchor bolts signed and sealed by a Professional Engineer registered in Florida was required. On June 21, 2004, MCS submitted a request to perform a tensile pull test on the damaged anchor bolts. The FDOT and EOR approved the tensile pull test procedure on July 14, 2004. MCS completed the tensile pull tests on August 24, 2004 and submitted a formal test report on September 16, 2004 that was signed and sealed by a Professional Engineer. PBCS accepted the formal test report.

Attached is a chronology of events concerning the damaged street light pole foundation anchor bolts:

- January 30, 2003 PBCS advises MCS that galvanized anchor bolts for light poles 88, 93, 95, 99, 111 and 125 were damaged and unacceptable and requested method to resolve issue.
  (Exhibit A)1
- March 3, 2003 MCS submits anchor bolt repair procedure (Exhibit B)
- March 27, 2003 FDOT and EOR review submittal. Additional information is required, EOR states that repair procedure needs to be signed by a Professional Engineer registered in Florida. (Exhibit C)
- April 17, 2003 MCS submits repair procedure that will be triple certified, but not signed by Professional Engineer registered in Florida. (Exhibit D)
- April 30, 2003 to June 4, 2003 PBCS states in Weekly Construction Coordination Meeting that MCS must have Specialty Engineer registered in Florida sign off on any method of repair. (Exhibit E)
- June 10, 2003 PBCS advises MCS that galvanized anchor bolts for light poles 88, 93, 95, 99, 111 and 125 are still unacceptable. PBCS directs MCS to remove the light pole assemblies from light poles 99 and 125 in order to avoid jeopardizing public safety. PBCS reminds MCS that any anchor bolt repair procedures need to be signed by a Professional Engineer registered in Florida. (Exhibit F)
- June 11, 2003 MCS states in Weekly Construction Coordination Meeting that MCS will remove and replace foundations and not repair damaged anchor bolts. (Exhibit G)
- June 11, 2004 MCS disagrees with PBCS directive and response on June 10, 2004. (Exhibit H)

<sup>&</sup>lt;sup>1</sup> See original position papers for exhibits.

- June 21, 2004 MCS submits request to perform tensile pull test on damaged anchor bolts. (Exhibit I)
- June 23, 2004 PBCS forwards submittal to EOR. (Exhibit J)
- June 29, 2004 EOR states that tensile pull test should be adequate to determine the structural integrity of the bolts, however, any deformation of the bolt would require replacement of the foundation. EOR recommends that FDOT structures review pull test procedure. (Exhibit K)
- July 14, 2004 FDOT State Materials Office responds that pull test will need to meet the minimum requirements on the contract drawings. A Test Report, supplied with the pull test results, needs to be submitted "stating that the bolts meet the required contract plans and will not jeopardize public safety, signed and sealed by a Professional Engineer". (Exhibit L)
- August 23, 2004 MCS submits request for additional compensation of \$3,177.08 to perform tensile pull tests. Notifies PBCS that Pensacola Testing will perform the tensile pull test. (Exhibit M)
- August 24, 2004 MCS completes tensile pull test for damaged anchor bolts.
- August 26, 2004 PBCS denies request for additional compensation. (Exhibit N)
- August 27, 2004 MCS disagrees with PBCS position and requests that issue be escalated to DRB. (Exhibit 0)
- September 1, 2004 PBCS again denies request for additional compensation and references Standard Specifications 7-14 and 5-1.4.10. (Exhibit P)
- September 16, 2004 MCS submits formal test report from Pensacola Testing dated August 25, 2004 to PBCS. Test Report is signed and sealed by Professional Engineer. (Exhibit Q)
- September 30, 2004 MCS submits claim package (Certification Only) (Exhibit R)
- October 4, 2004 PBCS denies claim package based on Standard Specifications 7-14 and 5-1.4.10. (Exhibit S)

#### The Department's Position

MCS claim package referenced Standard Specification 5-9.1, Cooperation by Contractor, as the basis for reimbursement for the testing of the damaged anchor bolts. However, Standard Specification 5-9.1 pertains to work that was performed by the contractor but not inspected by the Engineer. In that instance, the Department would reimburse the contractor for any additional work to expose, uncover or remove contract work was determined to be acceptable.

However, repairs to the damaged light pole anchor bolts do not pertain to Standard Specification 5-9.1. The installation of the street light pole anchor bolts were inspected by the Department, but prior to the installation of the street light poles, the anchor bolts were hit and damaged. The Department is not responsible for any contractor costs to confirm that previously damaged contract work meets the requirements of the contract plans and specifications.

The contract is clear on the contractors responsibilities for work performed on the project. Standard Specification 7-14, Contractor's Responsibility for Work, specifically states that "Until the Department's acceptance of the work", the contractor is to "take charge and custody of the work, and take every necessary precaution against injury or damage to the work by the action of the elements or from any other cause whatsoever, arising either from the execution or from the non-execution of the work. Rebuild, repair, restore, and make good, without additional expense to the Department, all injury or damage to any portion of the work occasioned by any of the above causes before its completion and acceptance, except that in case of extensive or catastrophic damage".

Since MCS was responsible for the protection of the light pole foundations that were subsequently damaged, Standard Specification 5-1.4.10, Corrections for Construction Errors, allowed the contractor to submit a proposal to correct the work. "For work that the contractor constructs incorrectly or does not meet the requirements of the Contract Documents, the Contractor has the prerogative to submit an acceptance proposal to the Engineer for review and disposition the acceptance proposal shall address structural integrity, aesthetics, maintainability, and the effect of Contract Time". It further stated "When

the engineer judges that a proposal infringes on the structural integrity or maintainability of the structure, the Department will require the Contractor to engage a Specialty Engineer to perform a technical assessment and submit it as described in 5-1.4.5.4. Carry out all approved corrective construction measures at no expense to the Department".

#### **Summary**

In conclusion, the repair procedure for the damaged anchor bolts for the light pole foundations was performed and accepted per Standard Specification 5-1.4.10. There is no entitlement to MCS on this issue, therefore, there is no quantum.

# **CONTRACTOR'S REBUTTAL:**

PBCS was incorrect in deciding that the anchor bolts were "damaged" and therefore unacceptable.

Since the bolts were always of sufficient strength and never "out of compliance", the unnecessary costs of testing and resetting street lights is for the Departments account, in accordance with Standard Specification 5-9.1 Cooperation by the Contractor (Page 2).

Cooperation by the Contractor has nothing to do with whether work was inspected or not. This clause prevents the CEI from unnecessarily burdening the contractor with frivolous and costly testing to prove compliance without compensation.

PBCS did not respond to MCS letters June 21, 2004 and August 23, 2004, stating the specification and approximate price for testing, until after all the bolts were tested and passed.

MCS requests equitable adjustment to the contract in accordance with appropriate specification.

## **BOARD FINDINGS:**

 The Florida Department of Transportation Standard Specifications for Road and Bridge Construction, 2000 edition, Section 5 CONTROL OF THE WORK, subsection 5-1.4.10 states:

5-1.4.10 Corrections for Construction Errors: For work that the Contractor constructs incorrectly or does not meet the requirements of the Contract Documents, the Contractor has the prerogative to submit an acceptance proposal to the Engineer for review and disposition. The acceptance proposal shall describe the error or defect and either describe remedial action for its correction or propose a method for its acceptance. In either case, the acceptance proposal shall address structural integrity, aesthetics, maintainability, and the effect on Contract Time. The Department will judge any such proposal for its effect on these criteria and also for its effect on Contract Administration.

When the Engineer judges that a proposal infringes on the structural integrity or maintainability of the structure, the Department will require the Contractor to engage a Specialty Engineer to perform a technical assessment and submit it as described in 5-1.4.5.4.

Carry out all approved corrective construction measures at no expense to the Department.

Notwithstanding any disposition of the compensation aspects of the defective work, the Engineer's decision on the technical merits of a proposal is final.

Section 5 CONTROL OF THE WORK, subsection 5-9.1 states

#### 5-9 General Inspection Requirements.

5-9.1 Cooperation by Contractor: Do not perform work or furnish materials without obtaining inspection by the Engineer or his representative. Furnish the Engineer with every reasonable facility for ascertaining whether the work performed and materials used are in accordance with the requirements and intent of the Contract Documents. If the Engineer so requests at any time before final acceptance of the work, remove or uncover such portions of the finished work as directed. After examination, restore the uncovered portions of the work to the standard required by the Contract Documents. If the Engineer determines that the work so exposed or examined is unacceptable, perform the uncovering or removal, and the replacing of the covering or making good of the parts removed, at no expense to the Department. However, if the Engineer determines that the work thus exposed or examined is acceptable, the Department will pay for the uncovering or

removing, and the replacing of the covering or making good of the parts removed in accordance with Section 4-4.

• Section 7 LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC, subsection 7-14 states

### 7-14 Contractor's Responsibility for Work.

Until the Department's acceptance of the work, take charge and custody of the work, and take every necessary precaution against injury or damage to the work by the action of the elements or from any other cause whatsoever, arising either from the execution or from the nonexecution of the work. Rebuild, repair, restore, and make good, without additional expense to the Department, all injury or damage to any portion of the work occasioned by any of the above causes before its completion and acceptance, except that in case of extensive or catastrophic damage. The Department may, at its discretion, reimburse the Contractor for the repair of such damage due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to Acts of God, of the public enemy, or of governmental authorities.

- The work did not have to be removed or uncovered to ascertain that the bolts were not in an acceptable condition.
- The anchor bolts were damaged during the course of the project.
- There was no indication that the bolts were damaged by the traveling public.
- Except for the tensile test that was performed, the Contractor did not engage a Specialty Engineer to perform a technical assessment.

## **BOARD RECOMMENDATION:**

Based on materials supplied to the Board and presentations to the BOARD at the DRB hearing, the BOARD finds that the Contractor is not entitled to compensation for this issue.

The **BOARD** sincerely appreciates the cooperation of all parties and the information presented for its review in making this recommendation.

Please remember that a response to the DRB and the other party of your acceptance or rejection of this recommendation is required within 15 days. Failure to respond constitutes an acceptance of this recommendation.

I certify that I have participated in all meetings of the Board regarding this issue and concur with the findings and recommendations.

Respectfully Submitted,

Disputes Review Board

John H. Duke, Sr.; DRB Chairman George W. Seel; DRB Member John B. Coxwell; DRB Member

SIGNED FOR AND WITH THE CONCURRENCE OF ALL MEMBERS:

John H. Duke, Sr. Chairman