Route 52 (1933) Causeway, Section 1 From US Route 9 to Bay Avenue City of Somers Point and Ocean City Atlantic and Cape May Counties

## **Responses to comments on Contractor's Information Meeting held April 7, 2005**

Listed below are the responses to the questions received as a result of the Contractor's Information Meeting held April 7, 2005. The responses, which are provided in bold *italic text* following each numbered comment, are for all questions received up to the May 9, 2005 deadline provided in the subject meeting. All questions received after said date will be evaluated and the resolution, if deemed appropriate, will be considered for incorporation into the final Contract Documents.

# Document No. 1 dated April 19, 2005 from George Harms Construction Company

1.1 In reference to the precast segmental concrete pieces, will the contract drawings be detailed enough to eliminate the need for submission of shop drawings, or will shop drawings be required for each segment? If shop drawings are required, it is our opinion that the NJDOT has not allocated enough time for project completion.

Although the contract drawings are detailed enough, shop drawings are still required for the Precast concrete segments. Due to the complexity of rebar and post-tensioning layout in this type of construction, shop drawings are typically required to be prepared in order to fabricate the segments. We believe that with proper planning and management of the process, the time required to prepare, submit and eventually obtain approval of the shop drawings, could be built into the allotted construction schedule for project completion. It should be noted that electronic submission of shop drawings is acceptable; however, signatures (approvals) will be accomplished by hard copy.

1.2 When the NJDOT provides the final design drawings on CD at bid time, please include all the drawings as one PDF file, or at least have each part as its own PDF file. This would facilitate much faster printing. Having to open each drawing as its own file and then sending it to print is a labor-intensive and time-consuming process.

The PDF files were provided in a format similar to that used on recent NJDOT projects; i.e. each PDF file is a stand-alone file. The industry has found this format to be acceptable and it appears that the above request is a preference. The contractor can combine the files as needed to meet their needs. However, if requested, the Department will consider one (1) PDF file for each part of the contract drawings for an additional charge. 1.3 We believe the electronic version of microstation design drawings should be provided to the apparent low bidder. These drawings shall be provided in an open " format (WI opposed to a "read only" format) to allow the contractor to open the files and use them in all respects. Providing the design drawings in this way would save an enormous amount of layout time for the contractor and would allow contractors to use state of the art surveying equipment that is now available in the industry.

Stand-alone drawings, such as superstructure segments and details, substructure details could be provided at the contractor's request. Other design drawings, as requested by the Contractor, will be evaluated and provided if proven to facilitate the advancement of construction. The drawings to be provided will be with write access to the files.

### Document No. 2 dated May 3, 2005 from George Harms Construction Company

2.1 In order to complete a specialized project of this nature in the time required, we feel a provision should be added to Specification Section 109.06 to allow for a material stored part for the post-tensioning strand if stored out of state, similar to structural steel. As you are aware, all strand manufacturers are located out of state and normally must produce large amounts of the strand at onetime, therefore resulting in a material stored payment request. We suggest Section 109.06 be revised to account for this.

We also suggest adding wording to the post-tensioning specification section to allow for incremental payment of tendons installed, similar to the theory used for payment of precast segments.

It is our opinion that both suggestions will ultimately result in more competitive bid prices.

The Standard Specifications Section 109.06 provides provisions for payment for material furnished and not installed provided that the material is stored within the State except for structural steel. The project Special Provisions will be revised to allow for payment for Post-tensioning steel in the event that it is stored out of State.

Payment for post-tensioning is addressed in the Special Provisions Section 502 "Prestressed Concrete Structures", Subsection "Post Tensioning System", Item 5. Basis of Payment. Payment is subject to the successful placement, stressing, grouting, inspection, protection and approval by the Engineer. This requirement applies to both transverse and longitudinal post tensioning. The purpose of requiring the protection of the end anchors prior to payment for the item is to ensure that the tendons ends are not left unprotected for an extended period of time.

#### Document No. 3 dated May 3, 2005 from George Harms Construction Company

3.1 Right now it appears that there will be one rebar bid item for the project (Item #410). We assume this item will include the rebar required on site, and the rebar in the precast segments. We suggest two separate rebar bid items; one bid item for Rebar in Precast Segments, and a separate item for Rebar in Cast in Place Concrete. We believe this will result in a cost savings at bid time and will also be easier for the contractor and NJDOT management staff during construction.

The stated observation and assumption is incorrect as there are more than one rebar bid item. Payment for rebar is made under Pay Item Nos. 410, 528, 539, 549, 558 and 567 to accommodate the various bid alternatives available to the Contractor. The contract plans provide clear breakdown of the quantities for each type of construction (Precast concrete piles, CIP foundation, CIP columns, CIP superstructure girders, CIP decks and Precast segments.)

Although Pay Item 410 includes quantity for rebar for Precast segments and CIP concrete, The rebar quantity in the precast concrete segments is slightly over 90% of the total rebar quantity for this Pay Item.

#### Document No. 4 dated May 9, 2005 from George Harms Construction Company Document is 5 Pages and will be numbered A through E

4A.We request that Section 701 "Electric and Cable Distribution Lines" be changed to allow any contractor to perform the work for Conectiv and Comcast and, for that matter, any of the utility relocation work.

Of course, the utility company can retain the right to review each contractor's qualifications before approving any specific contractor. Changing this restriction will provide the prime contractor more flexibility in either performing the work itself or choosing a subcontractor, resulting in cost savings and better coordination of the work.

The sentence in the Electric and Cable Distribution Lines portion of Section 701 "Conectiv and Comcast shall approve the conduit contractor in writing, and shall be one of the three listed below" will be revised to read "Conectiv and Comcast shall approve the conduit contractor in writing and it is suggested to be from the list of the three approved conduit and cable contractors listed below. However, if the contractor elects to perform this utility relocation work, or if the contractor elects to employ a subcontractor other than from the Approved Conduit and Cable Contractors list below, then the proposed contractor shall meet the qualifications of the utility company and obtain written approval from the utility company prior to performing any work."

4B. Article 105.19 provides that the Contractor shall be responsible for maintenance of the bridge thirty (30) days after the notice to proceed is issued for the project. Further, the article describes that maintenance and/or repairs that are not the fault of the Contractor shall be paid under Force Account.

The NJDOT obviously has records of the annual cost for repairs to these Structures. Normal construction operation in the vicinity of these structures may well cause these expenditures to increase. One would anticipate a substantial allowance item at least equal to the Department's known repair listing to be included as part of the bid items to account for the several years the contractor will have to maintain the existing structures.

# The current version of the Special Provisions with respect to maintenance and repair of the existing structures has slightly been modified from the version made available at the Information Meeting.

Maintenance of the existing roadways, bridges and project site is included in the Standard Special Provisions Subsection 105.19, which states: "all costs for maintenance during construction shall be included in the various Pay Items scheduled in the Proposal." However, a new Pay Item "Emergency Call-Outs" will be created for the maintenance and repair of the existing structures for damages that are not the fault of the Contractor. Payment for all these repairs under this new Pay Item will be made on the basis of actual costs calculated under the provisions under subsection 109.03 Force Account Payment. The Department will establish an estimated amount to reimburse the contractor and include it in the Proposal. 4C. Article 219.06 "Basis of Payment" for the dredging work under the referenced contract indicates that there will be an item included in "Mobilization/Demobilization", Dredging Equipment and Plant" where the first fifty percent (50%) payment will be made upon completion of mobilization at the first dredging site. The remaining fifty percent (50%) is to be included in the final payment for work under this contract.

Please clarify that the intent is to pay the final fifty percent (50%) with the final payment for the dredging work under this contract. For many different reasons, final payment under any contract can sometimes be months after actual work has been completed.

The sentence in 219.06 "The remaining fifty percent (50%) will be included in the final payment for work under this contract." will be revised to read "The remaining fifty percent (50%) of the mob/demob lump sum price will be paid to the contractor after the Dredging/Processing/ Disposal work has been completed and the results of a post dredge survey are available and accepted by the Department." In addition, payment for this Pay Item in excess of \$\_\_\_\_\_ will not be made until completion.

4D.There is a requirement for a load test for the truss for Span-by-Span erection of segments under Article 3.2.2 of the draft specification. The procedure includes the construction of two temporary piers approximately the size and shape of the upper portion of the permanent piers to be constructed. These piers may be constructed on foundation for the permanent structures.

For cost efficiency, the Contractor should be allowed the option to perform the load test on two of the permanent piers with the requirement that the Contractor would be responsible to repair or replace the permanent piers if the load test results in any damage to the structures.

The project Special Provisions will be modified to require the truss load testing to be performed on either temporary or permanent piers that would simulate the largest carrying load and span that the truss will encounter in this contract. Should the contractor decide to use the permanent piers for the load test, then extra care should be exercised so that the piers are not damaged and that the piles are not subjected to any loads that exceed the allowable loads. The Permanent piers shall be instrumented and monitored to measure stress and movements. A plan for instrumenting and monitoring during the load test shall be submitted to Engineer for approval. In addition, the Contractor shall be solely responsible for any damage or permanent piers and supporting piles and footings. Permanent piers and supporting piles and footings with any damage related to the load testing shall not be incorporated into the final structure, but shall be reconstructed in accordance with the Plans at no cost to the State. 4E. Item #11 "Trainees," is shown to have a quantity of 150,000 hours. We understand that these are still preliminary quantities, but using the average of 1000 hours/trainee, that would equate to 150 trainees. We believe this is an extremely high number of trainees on this project, especially since a majority of this project involves setting precast concrete segments.

We suggest you reduce the trainee item contract quantity prior to bid advertisement.

Further review has determined that the initially proposed quantity of 150,000 hours of training is too high. Final documents will be issued with a revised quantity that will be lower than what was originally estimated.

### Document No. 5 dated May 4, 2005 from Weidlinger Associates INC

5.1 If the contractor elects to use the segmental precast concrete pier alternative, what will be the disposition of the design liability?

Should the successful contractor elect to bid on the Precast concrete alternative for the substructure columns, there will be no design submission requirements as the contract plans present pier designs for the various precast pier types. The contractor, however, will be required to provide shop drawings showing complete detailing for this alternative including segment dimensions, rebar schedules and post-tensioning details. The project Special Provisions is currently being modified to reflect the above change in this requirement. PLEASE NOTE THAT THIS RESPONSE IS DIFFERENT THAN WHAT WAS PROVIDED DURING PRE-ADVERTISEMENT MEETING ON APRIL 7, 2005.

5.2 Is the Site Specific Seismic Report available?

The Site Specific Seismic Report will be made available for review to the contractors during advertisement period prior to bidding. Upon request, the report will be made available to the successful bidder.

5.3 Was EQ and Scour (500 Year) Combined in an Extreme Event Load Case?

EQ and 500 year scour were not combined under the same load combination as both are considered extreme event load cases and thus are not combined under the same load group.

5.4 Would the use of drilled shafts be considered for Value Engineering?

The Contract Documents reflect what we believe are the most suitable foundation alternatives, after careful evaluation of many foundation types, including drilled shafts. The Standard Specifications preclude Value Engineering of the bridge substructure.

5.5 Will an electronic version of the Plans be made available to the low bidder?

Stand-alone drawings, such as superstructure segments and details, substructure details could be provided at the contractor's request. Other design drawings, as requested by the Contractor, will be evaluated and provided if proven to facilitate the advancement of construction. The drawings to be provided will be with write access to the files.