

DISPUTES REVIEW BOARD RECOMMENDATION

20 May, 2008

Karina Enrico, P.E.
Senior Project Engineer
GBF Engineering, Inc.
3025 Mathews Road
Ft. Pierce, Fl. 34945

Jason Daley
Project Manager
Ranger Construction Ind.
4510 Glades Cut-Off Road
Ft. Pierce, Fl. 34981

Ref: SR. 70 from MP 10.254 to MP. 13.361/W. of Header Canal.
Financial Project ID: 230262-4-52-01: WPI State Job No.: 94030:
Contract No.: T4080: St. Lucie County: Dispute Review Board hearing
regarding entitlement for the unforeseen work described as the removal
of concrete on the bridge deck after hydrodemolition.

Dear Madam/Sir:

The Florida Department of Transportation and Ranger Construction Industries, Inc. requested a hearing concerning the above referenced issue.

CONTRACTOR'S POSITION

We will state the Contractors position by referencing, copying and paraphrasing their position paper and input from the hearing. Should the reader need additional information please see the complete position paper by the Contractor.

The Contractors position paper has the following statements and references to document their claim for entitlement.

“We will show that the Technical Specification for Hydrodemolition is defective in scope, ambiguous with regard to payment for the additional work of hand removing excess concrete that hydrodemolition failed to remove and in conflict with plan notation. Furthermore the plans and specifications fail to provide a pay item for the removal of existing structure or other work not suitable for hydrodemolition.

The contract plans require the removal of the top six inches of an eighteen inch thick existing bridge deck with a plan area of 23' —6 1/2”

wide by 160'— 6" long. The plan notes clearly state that hydrodemolition is to be used in order to avoid damage to the existing steel reinforcement. After reviewing the As Built drawings and from past experience on similar projects Cone & Graham determined that hydrodemolition would be problematic and made a formal request of the Department on September 28th, 2007 via Cone & Graham letter number 008, to use an alternative method of demolition that would remove all of the concrete including the material concealed under the existing reinforcement at no additional cost to the Department. The Department refused this request citing concerns of micro fractures developing in the twelve inches of sound concrete below the top six inches of the bridge deck concrete removed.

Paragraph D of section 3 addresses areas not accessible or otherwise convenient to hydrodemolition operations and directs the use of jackhammers contradicting plan notation.... The specification does not state that this hand removal is an incidental cost and included under the hydrodemolition pay item. Contrary, the specifications imply that this is extra work by clearly stating "Areas of the deck not accessible or otherwise convenient to hydrodemolition operations shall be treated with *conventional (jackhammers) removal method*".... The specifications **clearly provide an alternative removal method** for areas that are not convenient or accessible. The specifications do not provide any language that would suggest that the contractor would be responsible for this additional removal at his cost or that it should be included in the Hydrodemolition pay item....There is no disagreement that minimal detail chipping would be expected and that those cost could be "incidental" to the hydrodemolition operation.

What we have shown is that the specification is general in nature, vague on procedural implementation and ambiguous with regard to addressing complications. The specification does not address an exhaustive list of potential problems, but clearly addresses some of the problems that might be expected and sets a clear pattern of remedies. The method of removal specified by the contract failed to perform as the engineer had anticipated and required substantial hand removal of residual concrete to achieve the depth and clearance requirements.

The Department directed Cone & Graham to remove the existing concrete using the hydrodemolition process even after being informed about the suitability of the designated methods based upon the contractors experience and providing them with opportunity to make an informed decision on the process and consequences of proceeding, including the potential cost ramifications."

CONTRACTOR'S REBUTTAL

“Review of the Contract Documents” GBF is correct in stating the pay item number and description, 110-12-1 Hydrodemolition (Removal of Bridge Deck). There is no dispute with the existence of the pay item and we fully expect to be compensated accordingly under the pay item for the work described by the pay item, namely hydrodemolition. The specification is defective in not providing pay item number 110-12-2 Removal of Existing Structure for the removal of the existing bridge rail, which is clearly not included under the hydrodemolition pay item.

Page 8, section 6, paragraph 3, GBF states “it was reiterated to the contractor that the Department shall not provide extra compensation to the contractor when utilizing means and methods that would not achieve an acceptable final product.” **By GBF’s own admission this operation was not successful as a result of the means and methods. Cone & Graham suggested an alternative means & method that was rejected by the Department. The means & methods that GBF referred to previously were developed by the Department not the contractor. Everyone agrees that the means and methods failed, and everyone agrees that the Department owns the means and methods that lead to the failure.** Had the Department allowed the contractor to proceed with a proposed alternative means and methods, which would have assure complete removal of the concrete to the depth shown in the plans, then there would have been no additional cost to the Department.

Finally we offer that the Technical Specifications do not come before the industry for review and are therefore expected to be detailed and exact with regard to the intent. If that intent is not sufficiently communicated then the contractor must assume that established specifications and procedures will govern all areas that are ambiguous or lacking.”

DEPARTMENT’S POSITION

We will state the Department’s position by referencing, copying and paraphrasing their position paper and input from the hearing. Should the reader need additional information please see the complete position paper by the Department.

The Department’s position paper has the following statements and references to document their claim for no entitlement to the Contractor.

“The project scope of work is the reconstruction of an approximately three mile section of SR 70 in St. Lucie County from a two lane-undivided roadway into a four- lane divided rural highway.

As per plan sheet D-1 the existing bridge inside travel lane has a 0.02 in/in cross slope correction in order to match up to the newly constructed WB travel lanes. The cross slope correction has been accomplished thru the partial removal of concrete on the inside travel lane and the utilization of a lightweight concrete mixture to match up to the newly constructed roadway cross slope.

An area of 421 square yards of concrete has been indicated on the plans to be partially removed to a depth of 6 inches utilizing hydro demolition methods not to damage the existing rebar, and not to compromise the integrity of any of the structural components.

Discrepancies among the contractor and the CEI (GBF Engineering Inc) occurred upon the completion of the hydro demolition activities pertaining to the interpretation of the Technical Special Provisions (TSP's), specifically to what the hydro demolition pay item entails and what it is classified as Extra Work when performing this activities.

Technical Special Provisions (TSP's) were provided for the Hydro demolition activities.

Sub-section "A" refers to the instance when the contractor must go through an additional depth of deck removal ***above the specified contract limits*** due to the location and the condition of the reinforcing steel re-bars. In order to achieve the proper removal, the contractor must utilize multiple passes to ensure that the concrete is removed to the appropriate depth. Compensation for the conditions classified in this sub-section as extra work is done by paying the contractor the same rate as the original bid item price.

The scenario described above was not encountered by Slagter while performing the work. All the steel rebar found during the hydro demolition corresponded exactly with the rebar configuration provided on the as-built drawings sheets EB-17 and EB-18 of the existing bridge No 940136. In addition, the contractor was never directed to remove the concrete beyond the depth specified in the contract documents because it was not necessary. As-built drawings for the existing bridge were provided to the contractor with the set of plans during the letting process.

Sub-section "D" demonstrates that it is clearly acknowledged by the writer (Engineer of Record) that there are areas that will not be accessible or convenient to the hydro demolition equipment delineated on Section 2. Once again, the Engineer of record also makes reparations on how to achieve a full depth removal which is through the use of pneumatic hammers and chipping tools not to exceed 30 lbs. No additional

payment is allocated to this sub-section because it is consider being an incidental activity required to complete the hydro demolition work. This is the scenario encountered by Cone and Graham while performing the bridge deck removal and once again, based on the Technical Special Provisions the contractor is not entitled to any additional compensation.

Section 8 addresses the Basis of Payment which includes the full compensation for the removal, disposal of concrete, including the labor, materials and equipment and **INCIDENTALS** required to complete each item including the handling of water, cleanup work for the rebar, and ALL other items required to complete the work.

The Departments position based exclusively on the Technical Special Provisions and contract documents is that the subcontractor shall not be entitled to any additional compensation except for the one allowed under the basis of payment.”

DEPARTMENT’S REBUTTAL

“The Technical Specification Provision for the Hydro demolition activity utilized in this project is a well written document which clearly defines the scope of the work under this pay item. It also describes the possibility of encountering unforeseen conditions while utilizing this method. The acceptance and basis of payment for this method of the concrete removal is also clearly stated on the TSP’s and it is based on the depth of concrete removed within the tolerance parameters stated in this document

The Engineer of Record utilizes the TSP’s in conjunction with plan sheet D-1 to communicate to the contract bidders that “hydro demolition” was the desired method of construction.

The Department does not see any ambiguity on the TSP’s; however, what the department acknowledges is that Cone and Graham’s sublet “Slagter” failed to remove the entire 6 inches of concrete depth with the methods specified in the contract documents. Since Slagter failed to obtain the desired depth, they demobilized from the project and left Cone and Graham with an unacceptable product which cost them extra work to meet the TSP’s acceptance criteria.”

FINDINGS OF FACT

The Board’s decisions are governed by the plans, specifications (standard, supplemental, technical, special), and the contract. Therefore our recommendation is based on the following referenced documents and the following facts.

1. Notice of Intent to file a claim was made by Cone & Graham on December 19, 2007 for extra work.
2. Technical Special Provisions for Hydrodemolition was in effect for this project and was part of the bid package that all bidders had.
3. Paragraph D under item 1 Construction states *“Areas of the deck not accessible or otherwise convenient to hydrodemolition operations shall be treated with conventional (jackhammer) removal methods. Such removal may be performed by power chipping or hand tools, except that pneumatic hammers heavier than fifteen pounds (30-pound maximum) will not be permitted.”*
4. Item 6 of the TSP states, *“The bridge deck is to be removed to a depth of ½ inch within the limits defined on the plans. The work must be considered acceptable as defined in this Technical Special Provision.”*
5. Plan Sheets D-1 & D-2 spell out that 6” removal of existing concrete deck.
6. Plan Sheets D-1 & D-2 states “use hydrodemolition only”.
7. TSP item 8 states, *“The removal of the partial bridge deck concrete will be paid for at the Contract unit price per square yard. Such payment will be full compensation for the removal and disposal (permitted off-site Dump) of concrete, including labor, equipment, materials, and incidentals required to complete each item...”*
8. There was no change in the actual location of the rebars in the bridge deck as shown on the as-built plans. No change in site condition.
9. The contractor did not achieve the 6 inches of concrete removal with the hydrodemolition operation. Follow-up work using conventional (jackhammer) removal method was required to meet specification.
10. The TSP and plans are clear on the means and method of the concrete deck removal. It is not a faulty specification in the opinion of the Board. It clearly states what is to be done and how it is to done.

RECOMMENDATION

The Board finds that the Contractor is not entitled to additional compensation for this work. This was not extra work but work that was required to meet the specification of 6 inches of concrete deck removal. All bidders were aware of the TSP requiring the removal of the bridge deck using the hydrodemolition means and methods. The TSP did not provide an option to use conventional methods, except as incidental work in areas not accessible to hydrodemolition.

The Board sincerely appreciates the cooperation of all parties and the information presented for our review in making this recommendation.

The Board unanimously reached the recommendation and reminds the parties that it is only a recommendation. If the Board has not heard from either party within 15 days of receiving this recommendation, the recommendation will be considered accepted by both parties.

Submitted by the Disputes Review Board

Don Henderson, Chairman Stephanie Grindell, Member Jack
Nutbrown, Member

Signed for and with concurrence of all members

Don Henderson, PE