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Attn: Anne Therese Camacho

Subj: Review of Bid Documents
School Structural Repairs and Roof Coating

Buenas;

At your request, I have performed a review of the documents issued for bidding for the Guam Department of Education School Structural Repairs and Roof Coating. The documents I reviewed were for the Central Package A (Untalan, Carbillido, Price and GW). The documents I reviewed were included in two binders: "OPA-PA-11-019" and "Consolidated OPA-PA-11-019/020/021.

Your question to me was: "Could any reasonable person looking at the bid documents make a reasonable bid". Although the initial documents which were issued did not fully explain the project, further development during the Clarification and Amendment process brought them to a level which a reasonable bidder could utilize. As discussed further in the material below, my answer to your question is "Yes".

DOCUMENTS REVIEWED COMPRISING THE BID DOCUMENTS:

I was not provided with a consolidated Bid Package and therefore have extracted from the binders what I believe constitute the Documents issued for bid. These documents are:

1. Invitation for Bid No. 037-2011 (GDOE 0023 thru 0058)
 - Section 2 - General Information, General Instructions & Project Scope
 - Section 3 - Requirements for all Solicitations
 - Section 4 - Requirements for Construction Contracts
 - Section 5 - Forms Required for all Bids Submitted in Response to IFB

2. Division 1 and Division 7 Specifications (no Bates numbers)
 - reference attached TABLE OF CONTENTS.
3. Drawings entitled Miscellaneous Repairs and Renovations (no Bates numbers)
 - Luis P. Untalan Middle School (11 sheets)
 - BP Carbullido Elementary School (8 sheets)
 - HB Price Elementary School (12 sheets)
 - George Washington High School (18 sheets)
4. Amendments No. 1 through 9 (GDOE 0062 thru 0084)
 - All amendments appear complete. The attachment to Amendment No. 6 was not in the binder and was provided by GDOE today (without Bates page numbering).
5. Pre-Bid Conference Agenda and attendance list. Although the Invitation to Bid (GDOE0027) says minutes will be prepared and distributed, only the list of attendees was distributed. Memo to File dated 12/21/11 (GDOE00333) states that there were no written minutes of meetings held during the Pre-Bid Conferences held on July 8, 2011. Therefore anything statements as to what may have been said at the Pre-Bid Conference cannot be confirmed.

BID DOCUMENTS REVIEW:

My review is based on the documents provided in the binders which address the scope and technical aspects of design and construction. I have not done a field inspection of any of the schools nor have I verified the accuracy of what is shown on the drawings.

Nine Amendments were issued some to extend the bid submission date, and others appear to answer questions received by GDOE. The last Amendment, No 9 was issued September 28, 2011, one week prior to the revised Bid Submittal date of October 5, 2011. Infra Tech in their Attachment #1 to their January 6, 2012 Filing requested further clarifications. This was denied by GDOE due to time. It is fair to cease answering questions and issue a final Amendment a week before bids are due. There will always be a last Amendment and always questions. There needs to be a time when questions are no longer accepted, otherwise the bid date could be extended ad infinitum as each Amendment breeds more questions. It is also noted that the five questions included in the Infra Tech 9/28/11 Request for Clarification were questions that could have been asked earlier as they deal with information previously available.

Each plan shown on the drawings indicates a scale (for example 1/8" = 1'-0"). Scales as appropriate are also shown for the details. I have assumed, but not verified, that the plans are more-or-less true to scale. In a question by Infra Tech included in

Amendment No. 6 they said "the drawings are confusing as most of them are not to scale". It is not known why they had this opinion. The GDOE response was that "you should not try to scale from info on the plans"; in other words, bidders should field verify.

One notable clause, Section 4.3 (GDOE0037), requires Bidders to verify and accept site conditions and makes them responsible for costs required because of "unforeseen conditions". The Amendments limit somewhat this exposure for unforeseen conditions by speaking to the process for asbestos mitigation, existing roof-mounted equipment, electrical lines and A/C condensate drain lines (change orders); and what is required for roofs that are not shown on the drawings (nothing).

The unforeseen conditions clause may seem to open-ended and entail risk by bidders, but they are protected by the specificity of the drawings; such as the indication of the measurements for crack length and spall size. If a crack is longer, or a spall larger than stated on the drawings, the contractor would be entitled to document that difference and propose a change order. The drawings are less specific as to roofing and painting work which are just covered by a note saying "provide elastomeric waterproofing...", and "paint to match existing". In these cases, the burden is placed on the bidder to estimate the effort involved.

The unforeseen conditions clause may prompt bidders to add contingency amounts in their bid. This could add to the bid amount and be to the detriment of GDOE, but it also protects GDOE from the burden of "unforeseen conditions".

SCOPE OF CONSTRUCTION OPERATIONS REQUIRED BY DOCUMENTS:

There are three primary construction tasks asked for by the Bid Documents: Repair of cracks and spalls, roofing, and painting.

Structural repairs to slabs, walls, columns, beams, ceilings, and roofs. These include repair of cracks, spalls, and joint separation in concrete, precast concrete and masonry elements.

The drawings clearly describe the location, type and extent of structural repairs to be done. The details provide information as to recommended methods for correction of the deficiencies. The drawings are specific as to locations, crack lengths, spall sizes, etc and do not require determination of measurements. Specification Section 030130.71 along with the drawing details, notes and explanations adequately describe the repair procedures and are reasonably consistent one to the other.

Using the drawings and specifications along with verification by field inspections, a reasonably accurate take off of repair quantities should be possible. Contrary to the allegation of Infra Tech (Infra Tech letter of October 04, 2011) I do not believe that it was necessary for GDOE to provide the quantities to bidders. Bidder field inspections would entail access to classrooms.

Roof Coating. The roof coating requirements became better developed through the Amendment process. The areas to be coated are all roofs as shown on the drawings. As discussed above, the drawings indicate a scale which a reasonable contractor would verify. For example, the drawings show building plans and if there are overhangs, the roof area will be greater. A reasonable contractor would understand that this may occur and would perform his own measurements to determine the overall roof dimensions. This verification of measurements could be done outside the building without the need for access to classrooms.

Amendment No. 6 states a question by JJ Global: "Would it be possible for GDOE to provide the square footage of each roof of each school involved...?". The GDOE answer was: "It is the Contractor's [sic] responsibility to field verify the square footage of all buildings within the scope of work." While it is true that placing the responsibility for each bidder to determine his own quantities is not necessarily the least expensive approach taking everybody's costs combined, it is a common approach to bidding and something most bidders accept. It is a reasonable approach for GDOE to take and is a further elaboration of the "unforeseen conditions" clause.

The requirements were adequately defined by specification Section 071353 as it was reissued by Amendment No. 6 and further clarified by Amendment No. 9. Because there is also a specification Section 07545 (Advanced Acrylic Fluid Applied Elastomeric Coating System), it is assumed that contractors must meet the most stringent requirement of both 07545 and 071353. As an aside, I believe GDOE would have been better advised to consolidate all roofing requirements into one specification.

The Amendments also provide requirements for removal and disposal of debris on the roofs and old or un-working equipment, treatment at A/C equipment to remain, fiber mesh requirements, and other requirements which are part of the Base Bid. They also indicate that bidders should provide a Base Bid with no consideration for exposed electrical issues (Amendment 6), and leaking A/C condensate lines (Amendment 9) and these would be verified and negotiated as a change order based on unit costs negotiated after contract award.

Infra Tech objected to a requirement that the Applicator shall specialize in that type of work and have a minimum of five years experience, and be an approved applicator by the manufacturer. This is a standard statement, and I would have done the same (in fact, Amendment 9 clauses 1.6, 1.7A and B are lifted directly from the specification my firm prepared for Oceanview MS Gymnasium Repairs). From my perspective of 40 years experience with the uniqueness of Guam building and climate conditions, it is not enough to say that any applicator can do a serviceable job with a material they are not used on the basis only that the warranty provides full protection.

There is risk to GDOE if they do not require experience with the unique climate and weather conditions of our area, familiarity with the material to be used, and verified by the manufacturer. Additionally, one should not rely on the exercise of warranties. Often

the applicator has disappeared, maybe the Technical Representative did not verify proper preparation of the substrate and application of material, and the manufacturer decides there are reasons to refuse to honor the warranty. It is better to ask that the job be done right in the first place.

Question 3. of the Infra Tech Request for Clarification dated September 28, 2011 states the plans do not have enough information to compute the volume of concrete to address the requirement to eliminate ponding water. It should be noted that this question could have been asked months earlier as the drawings and specifications from the start called for correction of ponding water during roof preparation.

Specification 071353 defines excessive ponding water as a "roof surface that allows ponding water 48 hours after a rain shall be considered unacceptable", and the drawings include a detail for Repair of Roof Ponding. The "unforeseen conditions" clause plays a part in this requirement and a reasonable Bidder would determine by field inspection the areas of ponding water and how they could be corrected. Field inspection of the roofs could have been done without disruption to classrooms.

Repainting. General Note 25. on sheet S-1 of each building set states that "All surface areas with existing paint and are affected by cracks, spalls, and joint repairs shall be painted to match existing". While this leaves something to the imagination, Amendment 6 responds with a further GDOE statement: "The extent of new paint is from corner to corner wherever repairs are done". This is the subject of question 4. of the Infra Tech Request for Clarification of September 28, 2011.

Corner to corner painting is a standard approach. It is difficult to match adjacent surfaces unless the paint covers an area defined by boundaries. I would assume that most bidders assumed a corner to corner approach from the start. This clarification was provided by amendment 6 on September 16, 2011 and there was time to investigate the cost impact of this requirement. Field investigation would require access to classrooms.

It is noted from the Table of Contents that there is no painting specification. There are also no further statements in the documents or Amendments to explain the types of paint to be used or the extent of painting. Therefore the bidder and contractor must determine the paint to match the adjacent surfaces. The lack of a paint specification allows a contractor to use the least expensive paints available provided the color, texture and finish match the adjacent surfaces.

DISCUSSION OF THE REVISED BID COST FORM:

A Revised Bid Cost Form was issued by Amendment No. 3. The Form called for a list of unit costs for various kinds of repairs. This is not an unusual approach for repair type work, often they are used later during change order negotiations. In this case the Form states that the breakdown of unit costs is to "support the lump sum bid". This does not say that Quantities x Unit Cost = Total, as Infra Tech presumes in their Attachment #1 to

the Filing. Support of the lump sum bid in my opinion is asking for the basis for pricing, and that basis can vary depending on the particular situations the bidder believes are and will be covered by the unit cost. For example, the unit prices for crack and spall repair can be looked at as the cost to repair the total crack or spall, or the cost which would be involved to repair another few feet of a crack or spall already shown on the drawings.

The Form does not ask for a unit cost for painting or for correcting roof ponding areas and therefore painting costs are to be allocated to the unit costs for the various types of repairs and roof slope correction is to be allocated to the cost for roofing application. A beam spall unit cost is not included on the Form (Infra Tech Request for Clarification of 9/28/11 item 2), but there is no reason that GDOE has to include a work item as the unit costs are to "support" the lump sum bid, and do not constitute the lump sum bid. The Form also does not ask for the unit costs for those items outside the Base Bid which are to be negotiated after contract award such as exposed electrical issues and leaking A/C condensate drain lines which are responses provided in Amendments No. 6 and 9.

Infra Tech's contention that unit prices do not correspond to lump sum bids is irrelevant, subjective and not supportable without the actual quantities used by the "each bidder" and knowing the assumptions they used to built up their bid. Each bidder/contractor will have a different approach to each type of work based on their past experience, source of materials, equipment and labor resources.

In their October 4, 2011 letter, Infra Tech expresses concern that GDOE did not provide the quantities. Whether the method of describing the work by the Bid Documents places a burden on the bidder is not the bidders concern. It is true that the burden for estimating falls on each bidder and when taken together probably represents a cost exceeding what would have been expended by GDOE to identified more precisely the work. But, the bidding conditions were the same for all bidders.

They also state their opinion that lump sum bids should include quantities. I do not see why that is necessary, this is to be a Lump-Sum contract, not a Unit-Price contract. In accordance with Section 2.4.1, award is to be based on the lump sum bid amounts, i.e. price of overall performance, provided a contractor meets the qualifications for competency, ability, character, quality of previous projects, and financial resources. There is no statement in the documents which says GDOE intends to evaluate the Bids on the basis of the unit cost for any subtask.

Infra Tech also contends that the Bid Package did not identify how GDOE will choose the responsive and responsible winning bidder. This is incorrect, the Invitation to Bid documents Section 2.4.1 lists seven bullets point to be used "in determining the lowest responsive bidder". Additionally, section 2.5.1 (GDOE0029~0030) list ten items they should include in the sealed bid envelop to "present satisfactory evidence that bidder or bidder's company has sufficient experience and....is fully prepared....to satisfactorily complete the project".

Infra Tech also states that the bids by others are unbalanced. Losing bidders are always surprised that someone can be lower than them and claim that the others either made a mistake or their bids are inconsistent. I have done a quick review of the three Bid Proposal Forms included in the binder. There is a reasonable correlation between the unit costs of JB Modern Tech and Bascon Corporation, at least nothing seems unreasonable. Allied Pacific Builders did not seem to take the form seriously and used the same unit cost for all types of repair, whether LF or SF.

SUMMARY:

There are many different approaches to preparing and issuing bid and construction documents. The approach used by GDOE for crack and spall repair is of the conventional design-bid-build approach. For roof repair and painting it is in many respects similar to a Design-Build approach where a large burden is placed on the bidder/contractor to determine the final scope of their work. But, one doesn't need to use the term design-build to structure documents and bidding requirements in a manner which places a burden on bidders to do "homework". Yes it involves a cost to many bidders and only one will win, but the choice to take on a project requiring such homework is the choice of the bidder. It is an approach bidders see regularly and I do not believe it limits the competitiveness of the bid process.

The drawing and specification are complete enough for a reasonable bidder to prepare a reasonable bid. The bid documents are well-enough defined as to the scope of work for a bidder to establish his approach, quantities, costs, administrative costs and mark-ups such that his bid is responsible. GDOE is not obligated to do the homework for the bidders.

GDOE can use their checklist included in Section 2.4.1 to determine the lowest responsive and responsible bidder. GDOE does not need to use other criteria such as comparing unit costs or determining the basis (or supposed "balance") of a lump sum price.

Very truly yours,



H. Mark Ruth, FAIA

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