

March 16, 2017

JVA Engineering Contractor, Inc.
Attn: Frank Cajade
6600 NW 32nd Ave.
Miami, FL. 33147

Mr. Arturo Perez, PE
Pinnacle
2190 NW 2nd Street
Miami, Florida 33125

Re: FN 418312-2-52-01, 1st Street East
Dispute No. 1, Asphalt Base

Dear Sirs:

The Florida Department of Transportation (Department) and JVA Engineering Contractor, Inc (JVA) requested a hearing concerning monetary entitlement for the use of asphalt base. Summaries of the Department's and JVA's positions were forwarded to the Disputes Review Board (DRB), and a hearing was held on February 27, 2017.

ISSUE: Is the Contractor entitled to compensation for being forced to use Asphalt Base?

Contractor's Position

Bidding a project is an art of understanding the contract documents and using past experiences in creating a logical sequence to construct. This sequence is what is bid on as can be reflected in the bid tabs from all the contractors. Each Contractor has their own methodology, efficiency, cost-effective factors, risk factors, and profit margins which does not allow the equal and fair comparison of two contractors. To counter this, the Department uses statewide and local averages through the use of pay items that allow the comparison at a state or local level. This in turn creates the fairest way to document and enable changes to a contract.

During the bidding process for 418312-2-52-01 (E6k59) JVA used previous knowledge of bidding on the Flagler Grouping projects and multiple urban projects with similar scope and complexity when completing the bid. JVA took into account the progress and constructability of the other three Flagler Grouping projects in developing our bid. JVA estimated prices based on the difficulties encountered, site conditions present, and factors brought up in the plans to create JVA's construction train of operations for the project.

JVA reviewed the contract documents and reasonably concluded that there were no errors or omissions (Article A). JVA did not have any knowledge of the pavement design due to high water table nor did the plans show a necessity of requiring an asphalt base. Without this knowledge, JVA bid pay item 285-7-09 Optional Base Group 9 (OBG9) with no exception which coincides with our price for a limerock base option when compared with the averages.

After bidding, please notice the timeline of events:

- *July 28, 2016: JVA Engineering was the lowest responsible bidder for this project*
- *July 29, 2016: Notice to Contractor*
- *August 17, 2016: The Contract was awarded this project*
- *October 3, 2016: Error and/or Omissions on Plans and Specs*
- *October 13, 2016: Preconstruction Meeting – Verbally directed to do B-12.5*

- October 24, 2016: Request for Modification (RFM) to substitute for Limerock sent
- January 31, 2017: Request for Information (RFI) for Asphalt Curb Pad sent

The Department did not question the bid price for the OBG9 Pay Item 285-7-09 per the Notice to Contractor (Attachment B). If the Department did not question our price, it has effectively agreed that it was a reasonable cost for the work entailed.

On October 13th, at the Pre-Construction meeting, the requirement of the Black Base (B-12.5) was discussed with the District Construction Engineer. At this point it became clear that the Department's interpretation of the plans is that the OBG9 referenced on Sheet 15 of the Plans Typical Section (Attachment C) is B-12.5 Only. To clarify the plans, JVA sent an RFM (Attachment D) which was denied without reason. JVA then sent out an RFI (Attachment E) requesting for the asphalt curb pad locations and specifications to be provided. JVA is about 2-4 weeks of possibly starting base operations but still does not have clear direction as to where B-12.5 is required since there is no detail in the Contract Documents for the harmonization aspect.

Finally, if the note in Plan Sheet 15 Typical Section (Attachment C) prohibited a contractor from electing a separate base option, then it would be fair to assume the rest of the Contract Documents would coincide with the Department's view point.

JVA presents to the Board the following which show the inconsistencies of the Contract Documents and proof that there was neither a necessity nor intent of B-12.5 at the time of bidding:

1. At the Preconstruction Meeting, JVA was directed to install B-12.5 from STA 39+28 to STA 86+82. The Department is stating that the plans are correct and the intention is clear.
 - a. We refer to the introduction of the Plans Preparation Manual (PPM) 1.1(Attachment F) that states "It is imperative that the contract plans and specifications set forth the work to be done in a clear and concise manner." We also refer to PPM 6.2 note 5 (Attachment G) "Describe pavement construction in a clear, precise manner," a common message that the plans cannot be open to differing interpretation.
 - i. The plan note the Department is referencing does not specifically state "Type B-12.5 Only," as required in Chapter 6 per PPM Exhibit Typ-6A (Attachment H). The note in the current Plans does not prohibit a Contractor from using a separate base.
2. Per the Flexible Pavement Design Manual (FPDM) 5.6.2 (Attachment D), restrictions of a certain OBG in the same project will have separate pay items. If the Contract Documents called for B-12.5, why is the second pay item not included to allow fair bidding by separating the cost of both materials?
 - a. The purpose of pay items is to quantify each facet of construction which allows documentation and control in overrun and underrun situations. By omitting a pay item and forcing a contractor to use mixed materials, any changes to the

plans causes unfair prices as there is a significant difference in cost which is why the FPDM calls for separate pay items.

- i. JVA sent an RFI (Attachment E) on February 8th, 2017 requesting clarification of base options in the harmonization areas as the Department's Engineer of Record stated that all areas use B-12.5. If there is an overrun in these quantities, without the second pay item, what price will be used?*
- 3. B-12.5 is being requested due to the high water table elevation that could affect the base clearance. After a review of the roadway profiles (Attachment E) there is no indication in the profile view that the base is in conflict with the high water table. This does not follow PPM 5.1.2 note 8 (Attachment F) and PPM 10.3.1 (Attachment G) which states "Show and label all high water elevations affecting base clearance or roadway grades." If the plans called for B-12.5 due to the high water table, why was the Design High Water table never referenced?*
- 4. The plans do not include an asphalt base curb pad detail on either Sheet 15 (Attachment C) or 16 (Attachment M) of the Plans as required per PPM 6.2 note 8 (Attachment G). There are no notes in the Plans that would direct us to build an asphalt curb pad or to include the cost in a certain pay item as per PPM 7.2.2 note 2 (Attachment N). An asphalt curb pad is not referenced in the Plan Sheet 15 Typical Section (Attachment C) as per PPM Chapter 6 Exhibit Typ-6A (Attachment H). If the plans called for B-12.5 why was none of this information or details available at the time of the bid?*
 - a. JVA has requested this information per email sent December 14, 2016 (Attachment O). JVA sent an official RFI requesting this information again on January 31, 2017 (Attachment E). The Department provided a sketch on February 3rd, 2017 (Attachment E). As of this date, we still have a pending RFI regarding the curb pad in harmonization areas that isn't expressed and a pending plan revision to incorporate the sketch and any additional details.*
 - b. The plans Typical Section only show a single cross section for the entire length using a base course that is over 6." Per PPM 6.1 (Attachment P) "Typical sections should show typical conditions only. Non-standard conditions that prevail for short distances only should not be shown." If the plans called for B-12.5, for over the majority of the project, why would the Typical Section show otherwise?*
- 5. Plan Sheet SQ-11 (Attachment Q) note: "Earthwork has been calculated using the Group 9 Base Limerock Option." PPM 3.4.4 (Attachment R) states to use the most probable option. If the majority of excavation in the project would be in the B-12.5 area, why would the Department use a Limerock option for the quantities?*
- 6. Specification 285-3 (Attachment S) allows only one Base selection per Typical Cross Section. The only cross section shown on the Sheet 15 Typical Section (Attachment C) does not reflect that B-12.5 is a necessity. Why wasn't a second cross section shown to distinguish both base courses?*

- a. *A Disputes Review Board made a ruling on December 15, 2003 (Attachment T) in District 7 for a similar case. We would like to emphasize that the Board agreed with the Contractor's points:*
 - i. *Supplemental Specification Section 285-3, Selection of Base Option, states: The plans will include typical cross sections indicating the various types of base construction (material and thickness) allowable. Select one base option allowed for each typical cross-section shown in the plans. Only one base option is permitted for each typical cross section.*
 - ii. *The typical section is the sole contractual method for designating types of base in the contract*

To summarize these points, there is no implication in the Contract Documents that B-12.5 is required.

In addition to the inconsistencies of the Contract Documents, JVA requested the Pavement Design (Attachment U) for the project to review the OBG selection.

7. The water table is shown as being high from STA 65+00 to STA 75+00 on Page 3.

- a. *This is the root cause of requiring B-12.5. As previously mentioned, since the plans did not show the high water table as required per PPM 5.1.2 note 8 (Attachment K) and PPM 10.3.1 (Attachment L), JVA had no knowledge that the water table could affect the base course at the time of bid.*

8. The Engineer stated that the pavement design is consistent on page 3

- a. *Instead of restricting B-12.5 to STA 65+00 to 75+00, the design was incorporated to be from STA 39+28 to STA 86+82 which contradicts the intent of the OBG pay item per FPDM 5.6.2 (Attachment I) of "Allowing the contractor the full range of base materials will permit him to select the least costly material, thus resulting in the lowest bid price."*
 - i. *If the plans call for B-12.5 and Traffic Level B asphalt courses from STA 39+28 to STA 86+82 (Attachment C), why is the design not consistent with T6339 which has no asphalt base course and Traffic Level C and directly abuts the project (Attachment Y). Furthermore, the fact that Traffic Level B is required does not correlate with the traffic shown on the typical sheet. The other 2 projects on the Flagler grouping are also Traffic Level C, why isn't the Engineer consistent with the Flagler grouping as a whole?*
 - ii. *The plans are not consistent within themselves as there are proposed elevations in the areas which do not have a B-12.5 requirement that are lower than the elevations in the area that do require B-12.5. (Attachment J and Attachment V) Again we ask, what is the Engineer being consistent with?*

- *“Optional Base Group 9 (Type B-12.5).”*

This information is non-ambiguous as it clearly indicates to bidders which base material shall be implemented for this roadway section. Note that Reconstruction from STA 86+82.30 to STA 98+89.14 states simply “Optional Base Group 9”, purposefully omitting the Type B-12.5 designation.

JVA’s “Request for DRB Hearing” also states,

- *“JVA disagrees that the plans do not accurately reflect this requirement and was bid as an Optional Base Group with no limitations.”*

No information in any Contract document conflicts with the typical section requirements on Contract Plan Sheet 15 [Attachment B]. No other Contract document mandates a contradicting typical section material, nor does any other Contract document designate Type B-12.5 as discretionary. Furthermore, it is evident that the Contract Plans do accurately reflect the Type B-12.5 requirement as both the second and third-placed contractors bid the pay item accordingly [Attachment F]. JVA bid \$15.40 per SY, while Bidder 2 bid \$30 and Bidder 3 bid \$36.81, a 95% and 139% difference respectively.

Please reject the Contractor’s entitlement claim. We look forward to discussing this matter at the upcoming hearing.

List of Hearing Attendees:

- *Mario Cabrera, PE, District Construction Engineer*
- *Heidi Solaun-Dominguez, PE, Assistant District Construction Engineer*
- *Andres Berisiartu, PE, Construction Project Manager*
- *Arturo Perez, PE, PSM, Senior Project Engineer*
- *Doug Schumann, PE, Project Engineer*
- *Adriana Manzanares, PE, Design Project Manager*
- *Daniel Greenberg, PE, Engineer of Record*
- *Rodney Devera, PE, Engineer of Record*

Attachments:

- *JVA “Request for DRB Hearing” [Attachment A]*
- *Contract Plan Sheet 15 provides roadway typical section requirements [Attachment B]*
- *Contract Plan Sheet 4 lists Pay Item 285-701, Optional Base Group 09 [Attachment C]*
- *Standard Specification Section 285 Optional Base Course [Attachment D]*
- *Design Standards Index 514 Optional Base Group and Structural Numbers [Attachment E]*
- *Tabulation of Bids for Optional Base Group 09 [Attachment F]*

Contractors Rebuttal

The Department stated “Furthermore, it is evident that the Contract Plans do accurately reflect the Type B-12.5 requirement as both the second and third-placed contractors bid the pay item

accordingly [Attachment F]. JVA bid \$15.40 per SY, while Bidder 2 bid \$30 and Bidder 3 bid \$36.81, a 95% and 139% difference respectively.” Please see our response below:

1. The Department is making the assumption that a contractor bid a pay item higher thus they must have chosen a certain material. Since the pay item is an optional base, it is incorrect to assume that the other bidders are in agreement with the Department regarding the obligation of a specific material.
2. Comparing the other two bidders you will see that every pay item has a difference. Using only the pay items presented by the Department (Attachment AA), a vast difference in pay item costs is immediately evident. The percentage differences range from 0.85% for Optional Base Group 1 to 236.99% for the Delivery of Salvageable Material. Every Contractor has their own methodology in producing a quote.
3. JVA would also like to present a report (Attachment AB) by the Office of Program Policy Analysis and Government Accountability that discusses the comparison of pay item prices from various bidders. FDOT responded to the report and Page 7 contains the following paragraph written by Secretary Ben Watts, P.E.: “The analysis is apparently based on an assumption that bid prices which are higher than the average are inappropriate. This ignores the fact that there are valid reasons for differences in bid amounts for specific items. Individual contractors approach a project differently depending on manpower resources, equipment and material availability. Other intangibles affect the bid amount including complexity of the work, contract time allowed and level of competition in the area. Contractors must account for these factors in their assessment of risk and, ultimately, their bid. A difference in bid amount for a particular item does not in itself indicate an anticipation of quantity overruns by the contractor. Using the average price for an item is questionable since the spread can vary significantly on a particular project. Again, using one of the projects cited, the bid prices for the sheeting ranged from \$80 to \$420. In short, the report fails to recognize the variability of costs for materials and labor among contractors.”

Department’s Rebuttal

On February 15, 2017, the Contractor, JVA Engineering Contractor, Inc., submitted their “Disputes Review Board B-12.5 Position Paper” [Attachment A]. Excerpts from this paper are bulleted below, followed by the Department’s response:

- “The plan note the Department is referencing does not specifically state “Type B-12.5 Only,” as required in Chapter 6 per PPM Exhibit Typ-6A (JVA Attachment H).”

Plans Preparation Manual (PPM) Section 1.1 [Attachment C] states, “These exhibits are not to be used as a source for criteria unless specified in the PPM.” The “Only” descriptive is not mandated in the PPM. Furthermore, the Plans Preparation Manual is not a Contract document;

the Contractor should reference Contract Plan Sheet 15 [Attachment B], a Contract document which provides roadway typical section requirements. Details for the Reconstruction from STA 39+28.00 to STA 86+82.30 identify Optional Base Group 9 (Type B-12.5).

- *“Per the Flexible Pavement Design Manual (FPDM) 5.6.2 (JVA Attachment D), restrictions of a certain OBG in the same project will have separate pay items. If the Contract Documents called for B-12.5, why is the second pay item not included to allow fair bidding by separating the cost of both materials?”*

The FDOT Basis of Estimates (BOE) [Attachment D], which was used to establish the pay items, does not require or contain a separate pay item for Asphalt Base Course. Furthermore, the Flexible Pavement Design Manual is not a Contract document; the Contractor should reference Contract Plan Sheet 15 [Attachment B], a Contract document which provides roadway typical section requirements. Details for the Reconstruction from STA 39+28.00 to STA 86+82.30 require Optional Base Group 9 (Type B-12.5).

- *“If there is an overrun in these quantities, without the second pay item, what price will be used?”*

All Optional Base Group 09 materials, including areas with Type B-12.5, shall be paid under Pay Item 285-709.

- *“If the plans called for B-12.5 due to the high water table, why was the Design High Water table never referenced?”*

The lack of a Design High Water Table should not steer the Contractor from bidding according to the Contract Plans. Specifically, Contract Plan Sheet 15 [Attachment B] which provides details for the Reconstruction from STA 39+28.00 to STA 86+82.30, designated as Optional Base Group 9 (Type B-12.5).

- *The plans Typical Section only show a single cross section for the entire length using a base course that is over 6”. Per PPM 6.1 (JVA Attachment P) “Typical sections should show typical conditions only. Non-standard conditions that prevail for short distances only should not be shown.” If the plans called for B-12.5, for over the majority of the project, why would the Typical Section show otherwise?*

Again, the Contractor should use Contract documents for bidding purposes, not the Plans Preparation Manual. Contract Plan Sheet 15 [Attachment B] provides roadway typical section requirements. Details for the Reconstruction from STA 39+28.00 to STA 86+82.30 states Optional Base Group 9 (Type B-12.5).

- *Specification 285-3 (JVA Attachment S) allows only one Base selection per Typical Cross Section. The only cross section shown on the Sheet 15 Typical Section (JVA Attachment C) does not reflect that B-12.5 is a necessity. Why wasn’t a second cross section shown to distinguish both base courses?*

Contract Plan Sheet 15 [Attachment B] provides roadway typical section requirements. Details for the Reconstruction from STA 39+28.00 to STA 86+82.30 states Optional Base Group 9 (Type

B-12.5). Reconstruction from STA 86+82.30 to STA 98+89.14 states simply "Optional Base Group 9", purposefully omitting the Type B-12.5 designation. The Contractor may use any Base Group 9 option for this non-specified section of roadway, STA 86+82.30 to STA 98+89.14.

- The other 2 projects on the Flagler grouping are also Traffic Level C, why isn't the Engineer consistent with the Flagler grouping as a whole?

The Contractor should not use the proposed pavement design for unrelated projects when preparing a bid; the Contractor should use Contract documents that are relevant to the project they are bidding.

- The plans are not consistent within themselves as there are proposed elevations in the areas which do not have a B-12.5 requirement that are lower than the elevations in the area that do require B-12.5. (JVA Attachment J and JVA Attachment V). Again, we ask what is the Engineer being consistent with?

The Engineer's decisions as to what areas, as the Contractor acknowledges, "do require B-12.5", are not germane to the Contractor's requirement to bid accordingly. The Contractor should bid the areas that "do require B-12.5" appropriately, such as shown on Contract Plan Sheet 15 [Attachment B].

Please reject the Contractor's entitlement claim. We look forward to discussing this matter at the upcoming hearing.

*****Note*** - For the purposes of brevity the parties' attachments are omitted from this recommendation**

DRB Findings

Both parties submitted exhibits and attachments which are not part of the construction contract *per se*; generally, these exhibits are not given the same weight as contractual requirements, except when the contract is silent to the issue at hand or if there is confusion in the language or requirements. Some examples of these would be:

- Plans Preparation Manual (PPM)
- Flexible Pavement Design Manual (FPDM)
- Basis of Estimates Manual (BOE)
- Construction Project Administration Manual (CPAM)

Much of the argument hinges on the clarity lack thereof) of the typical section contained on page 15 of the plans. The typical is shown below:

TRAFFIC DATA (SW 17 AVE TO SW 8 AVE)

CURRENT YEAR = 2008 AADT 13000
ESTIMATED OPENING YEAR = 2019 AADT 18600
ESTIMATED DESIGN YEAR = 2039 AADT 31200
K = 8.07% D = 100% T = 5.70% (24 HOURS)
DESIGN SPEED = 40 MPH
POSTED SPEED = 30 MPH
SIDE STREET DESIGN SPEED = 20 MPH

RECONSTRUCTION
STA. 39+28.00 TO STA. 86+82.30

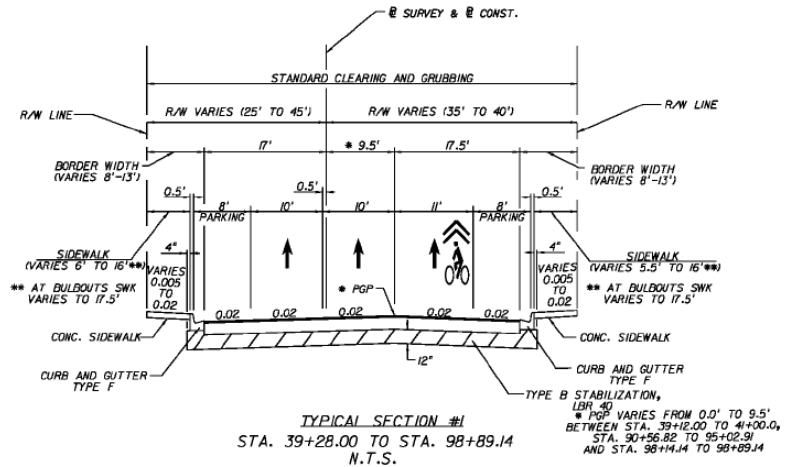
OPTIONAL BASE GROUP 9 (TYPE B-12.5) WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC B) (1-1/2")
AND FRICTION COURSE (TRAFFIC B, FC-12.5, PG 76-22, ARB) (1-1/2")

TRAFFIC DATA (SW 8 AVE TO SW 6 AVE)

CURRENT YEAR = 2008 AADT 9900
ESTIMATED OPENING YEAR = 2019 AADT 15900
ESTIMATED DESIGN YEAR = 2039 AADT 25800
K = 8.07% D = 100% T = 5.70% (24 HOURS)
DESIGN SPEED = 40 MPH
POSTED SPEED = 30 MPH
SIDE STREET DESIGN SPEED = 20 MPH

RECONSTRUCTION
STA. 86+82.30 TO STA. 98+89.14

OPTIONAL BASE GROUP 9 WITH
TYPE SP STRUCTURAL COURSE (TRAFFIC C) (1-1/2")
AND FRICTION COURSE (TRAFFIC C, FC-12.5, PG 76-22, ARB) (1-1/2")



The area in question is from Sta. 39+28.00 to Sta. 86+82.30 where the base option indicates “Optional Base Group 9 (Type B-12.5).” The Department’s stated intent is that only asphalt base is to be used. The contractor believes that the word “only” should have been inserted after (Type B-12.5) to avoid any confusion. This statement is based on an examination of other construction plans in the same general vicinity as this project. Further, these other plans contained curb pad details for situations where asphalt base is utilized. This project did not. Since the word “only” was omitted, the prudent contractor is then forced to examine other parts of the contract documents in an attempt to ascertain the designer’s intent. JVA pointed out that plan sheet SQ-11 notes that the Department assumed a limerock base option for the purposes of establishing an excavation quantity.

The Board finds as follows:

1. There is sufficient confusion to lead the bidder to assume limerock base was acceptable. The plans do not give a clear direction as to the Department’s intent.
2. Although the typical section description includes “Optional Base Group 9 (Type B 12.5)” the typical section as shown could be interpreted to allow the use of the limerock base option. The base box in the typical is generic, there is no indication of the required asphalt curb pad under the curb and gutter. While there is no contractual requirement for the Department to depict the curb pad, this appears to be a practice (or) customary way of dealing with Type B 12.5 on an adjacent project; i.e. the typical was not sufficiently clear.
3. The Department’s stated intent was to require Type 12.5 base for the majority of the project; but, in the Summary of Quantities, the excavation pay item note assumes a limerock base option. While it could be argued that this note is academic and simply establishes an equal benchmark for all bidders, as to excavation quantity, the fact that limerock base was assumed by the Department further confuses the intent of the typical section.

4. When the Contractor seemed confused at bid time he examined past bid plans and compared them to this set. The plans for this job were not consistent with the past jobs where it was completely clear where and when asphalt base was required. Therefore, the Board presumes the bidding contractor looked at the combination of all information available in these plans, and made his determination as to plan intent based on his past experience and made a prudent judgement.
5. Comments were made that "...the contractor could have asked a question of the Department prior to bid..." While this is a true statement, it assumes that the bidder had noticed the discrepancy prior to the cutoff period for questions. However, in order to ask a question, the Contractor must see the discrepancy upon which the question is based. The contractor, after his review of ALL contract information and all other analyzed data, did not believe that asphalt base was a "demanded requirement" of the contract and, therefore, never developed a question. Therefore, this argument holds little weight.

DRB Recommendation

The Board finds that the Contractor is entitled to additional compensation if forced to use asphalt base.

The Board is also in receipt of a letter from Mr. Arturo Perez which takes issue with the abbreviated recommendation sent to the parties previously. The Board opts to address some of his comments as follows:

- Contract Plan Sheet 15 [Attachment B] provides roadway typical section requirements. Details for the Reconstruction from STA 39+28.00 to STA 86+82.30 states, "Optional Base Group 9 (Type B-12.5)." This is primary evidence, unambiguous in its intent and focus. The absence of a curb pad detail and the non-mandated guidelines provided in the Plans Preparation Manual should not be considered more persuasive than the actual Contract Plan directive.

The Board disagrees with this statement. The Department is relying entirely on the typical section description without due consideration for other plan details that if included would have clarified Department intent.

- This statement asserts that the method by which excavation volume was calculated is more compelling than the Contract Plans stating a clear directive to use Type B 12.5 asphalt base in the Typical Sections.

It is not a question of which statement is more compelling. The excavation calculation is in conflict with the note.

- The Department strongly disagrees with the Recommendation and finds the stated positions as based on design manuals and Contractor emotions rather than on Contractual evidence. This Recommendation sets a dangerous precedent...

The Board did not rely on any information brought forth in non-contract documents, nor "Contractor emotions" to render this recommendation. The Board cannot and will not concern itself as to whether a recommendation sets a "dangerous precedent."

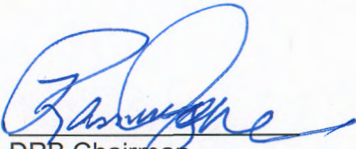
I certify that I participated in all of the meetings of the DRB regarding the Dispute indicated above and concur with the findings and recommendations.

Respectfully Submitted,

Disputes Review Board

Rammy Cone, DRB Chairman
Enrique Espino, DRB Member
Pat McCann, DRB Member

SIGNED FOR AND WITH THE CONCURRENCE OF ALL MEMBERS:



DRB Chairman

CC: file