

## **DISPUTE REVIEW BOARD RECOMMENDATION**

July 5, 2005

**Brian W. Davidson, Project Manager  
APAC Southeast, Inc.  
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**Roop Khirsukhani and/or  
Michael Tippit, Project Adm.  
Parsons Brinckerhoff CS, Inc.  
8570 Phillips Hwy. Suite 104  
Jacksonville, Florida 32256**

**RE: I-295 Mill & Resurface from I-95 to East end of Buckman Bridge  
FIN Project No. 21351-2-52-01  
Contract No. E2G91  
Duval County**

**Dear Sirs:**

**The Owner, Florida Department of Transportation and Contractor, APAC Southeast, Inc. requested a hearing to determine entitlement of APAC to additional compensation for the removal and replacement of asphalt pavement on the above referenced project.**

**Pertinent issues, correspondence, and other information were forwarded to the Board for review at the hearing held on June 20, 2005.**

### **CONTRACTORS POSITION**

On the night of May 10<sup>th</sup>-11<sup>th</sup> 2005, APAC began our milling and resurfacing operation on the I-295 project. The work was supervised by Gary Rearick. All work began and proceeded as scheduled until a rain event took place directly prior to the placement of the ARMI layer. APAC removed all standing water from the milled surface with mechanical brooms, and then re-milled the area to remove any saturated asphalt. APAC cleaned the milled surface and placed ARMI cover material and structural asphalt. The lane closure was picked up approximately 45 minutes beyond the allowable time. The lane was open to traffic and remained in place until 5-23-05. All lab test and roadway densities for that night passed. The ARB-20 spread rate, rock spread rate and asphalt spread rate were all within DOT specifications.

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The delay in opening all three lanes to traffic was due to the unexpected rain. Also in the first 100 feet of paving some areas of ARMI rolled up during placement of the asphalt because we could not get this area completely dry. We were going to evaluate that area prior to placement of the second lift.

After the rain stopped we broomed the water out, but unable to completely dry the base prior to placement of ARMI layer. To dry the area we milled an addition ¼ inch, rebroomed and place the ARMI coat and asphalt.

The Department rejected the work performed on May 11, 2005. Five reasons were given.

1. **ARMI rubber spread rate extremely light** - was .701 as stated in my e-mail on 5-12-05 our spread rate for that night was .701 gal per square yard. The specs call for .6 to .8 gal/yd. Our spread rate was not only within tolerance but was directly in the middle of the allowable range.

2. **ARMI cover material spread rate extremely light** - As stated in my e-mail on 5-12-05 our spread rate for that night was .293 cubic feet per square yard. The specs call for .26 to .33 cubic feet per square yard. Our spread rate was within .002 of being in the exact middle of the allowable range.

3. **Asphalt spread rate was light** - As stated in my e-mail on 5-12-05 our spread rate for that night was 220.255 lbs per square yard. The designed lift thickness called for 207.858 lbs per square yard. Our spread was not light.

4. **Paperwork showing TL-D instead of TL-E** - This was an administrative mistake on our side. APAC at no time produced, shipped or placed the incorrect asphalt on this project. Asphalt graduation, AC content, volumetric properties and roadway densities all passed for that night.

5. **A good amount of milling left in the edges** - This is the Departments only "deficiency" that cannot be independently verified. option of verifying the asphalt bond was removed by the Departments  
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directive to remove and replace the material. APAC has acknowledged that the material placed between stations 577+86 to station 578+86 was not per

specifications.

It is clearly evident that the Department was incorrect in their assessment of the spread rates. Based on the removal operation, the ARMI was clearly bonded to the ARMI layer. It is our opinion that based on these facts, the Departments grounds for rejecting the entire nights production was clearly incorrect.

APAC is requesting full compensation for all costs associated with the removal and replacement of ARMI and asphalt placed in L-3 between the stations 577+86 and 548+00.

### **DEPARTMENTS POSITION**

The Contractor was not able to remove the water and slurry completely from the milled area.

Regardless of circumstances, it was APAC's , means and methods which resulted in the ARMI layer not bonding to the surface as evidenced by the delaminations at several locations of the milled section. The specification section you pointed out in your email (Section 341-6.2, pertaining to Application of Asphalt Rubber Binder,) also states: " Apply the asphalt rubber binder only under the following conditions. b. The pavement is absolutely dry." Section 300-5 also states: "Before applying any bituminous material, remove all loose material, dust, dirt, caked clay and other foreign material which might prevent proper bond with the existing surface for the full width of the application." The wet surface combined with the 2<sup>nd</sup> milling operation created a muddy "slurry" that stayed pasted in the pockets of the milled surface and in the edges of the milled section after power brooming. Section 341-7 states, "If the asphalt rubber membrane interlayer is unacceptable due to incorrect blending application rate, or not meeting the requirements of this Section, or damaged prior to placement of the asphalt concrete layer, remove and replace it as directed by the Engineer at no additional cost to the Department.

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The Department did consider testing the area but was informed by the District Materials Engineer that there is no test available to test pavement

bondage to an ARMI layer.

As per Section 341-7 we requested the material to be removed and replaced.

### **BOARD FINDINGS**

There were two main specification requirements that led to the rejection, removal and replacement of the asphalt pavement.

1. The pavement must be dry, without any loose or foreign materials that might prevent proper bonding.
2. The hours of operations were restricted to night time work between the hours of 7:30pm and 5:30am.

The Contractor had milled and cleaned the area prior to the rain. The base was ready for the ARMI coat.

After the unanticipated rain the Contractor was not able to return the base to an absolute dry and clean condition and still meet the deadline of having the lanes open by 5:30am, despite making a reasonable effort to do so.

The material placed met all the specification requirements with the exception of the condition of the milled base.

The Contractor and the Department were aware of both requirements. This is a heavily traveled section of I-295 and a back up of commuter traffic will occur if the highway is not opened by around 5:30am.

The Contractor knew that the base still had moisture in some areas, but he had to be off the road and complete the work by 5:30am. The Contractor made the decision to pave in less than perfect conditions in an attempt to meet the lane closure conditions.

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At this point it was impossible to meet both Specification requirements due to the earlier rainfall. The two Specifications limited his options.

It is very possible the Contractor made the very best decision he could under

restraints, the Department and Contractor accept a shared responsibility in this work.

The Board also recommends that a partnering meeting be held to assign and/or accept responsibility for the conflicting specifications, due to unavoidable weather events in the future.

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 by the non- responding party.

I certify that I have participated in all of the meeting of this DRB regarding these Issues and concur with the findings and recommendations.

Respectfully submitted  
Disputes Review Board

Jim Lairscey, DRB Chairman  
James B. Gant, DRB Member  
Peter A. Markham, DRB Member

SIGNED FOR AND WITH THE CONCURRENCE OF ALL MEMBERS: