## **DISPUTE REVIEW BOARD RECOMMENDATION**

July 11, 2016

Mr. E. Tony Williams, Jr. Anderson Columbia Co Inc. 871 NW Guerdon St. Lake City, FL 32055 Mr. Douglas Moseley Lake City Operations Construction Engineer 710 NW Lake Jeffery Road Lake City, FL 32055-2621.

- RE: FPN No. 429551-1-52-01 Contract No. E-2P12 SR 200/US 301 North of Baldwin in Duval County 17 Miles to the Four Lane South of Callahan in Nassau County
- Subject: Disputes Review Board Hearing Dated June 29, 2016 Disputes Review Board Recommendation

Dear Sir,

Anderson Columbia Co Inc. (ACCI) and the Florida FDOT of Transportation (FDOT) requested a Dispute Review Board hearing of a disputed issue. The hearing was held on June 29, 2016 at the FDOT Lake City Operations Office. The parties furnished the Board position papers and a rebuttal paper prior to the hearing. The Disputes Review Board was requested only to consider the question of entitlement to additional cost compensation. In accordance with your request the following recommendation is offered.

#### Background

The project scope consists of the reconstruction of approximately 17 miles of existing two lane rural roadway. The new typical section was a four lane divided roadway with two 12 foot wide travel lanes in each direction divided by a 40 foot wide grassed median. Six existing bridges were also reconstructed. Additional drainage system and retention ponds were also included in the project scope. The project was a Design Build project with the contractor responsible for both design and construction. The 2010 FDOT Standard Specifications applied to this project.

# Issue: Request for compensation for additional costs associated with maintaining and/or reconstructing embankment and roadway ditches

#### **Contractor Position Issue**

The following summary of the Contractor's position is based upon written materials submitted to the Disputes Review Board and upon the hearing presentation made by ACCI. The complete position is available in ACCI's submitted written materials.

# **Key Points**

# 1. Existing Soil Conditions (High Ground Water Levels)

During the exploratory phase of the project proposal development ACCI performed 115 soil borings in the planned roadway pavement area. As a result it was determined that the seasonal high ground water level varied from ground surface level to a depth of 1 to 2 feet below the existing ground surface.

# 2. Existing Site Topography (Surface Runoff to the Project Right of Way)

The topography of the roadway corridor was such that the surface water runoff from the surrounding area drained into the project roadway right of way. In the original roadway configuration, both the offsite storm water and the roadway storm water was collected in common drainage ditches within the right of way and discharged offsite. The new design consisted of two parallel drainage ditches. Offsite storm water entering the right of way was intercepted by perimeter drain ditches along the edge of the right of way. Road way runoff was collected in a second drainage ditch system located on the roadway side of the perimeter ditches. It is ACCI's position that the dual ditch arrangement was required by the typical roadway section provided in the design criteria and could not be changed. ACCI also contends that the dual ditch system contributed to the additional cost of maintaining and reconstructing the embankment and roadway ditches.

## 3. Tropical Storms Beryl and Debbie

When construction began in November 2011, after the approval of clearing and grubbing plans, the existing soil conditions were favorable for construction. Favorable conditions continued through April 2012 with the project receiving approximately 8" of rainfall during the six month period November 2011 – April 2012. Beginning in May 2012 conditions changed from favorable to challenging.<sup>1</sup> and continued through the project completion. Tropical Storm Beryl in late May 2012 and Tropical Storm Debbie in late June 2012 produced an excess of 30" of rainfall at Cecil Field (closest official rainfall recording site, 12 miles from the project) and over 27" of rainfall was recorded on the project during May and June 2012. In addition to flooding the project the US 301 Bridge at Brandy Branch North succumbed to the flood waters and collapsed on June 27, 2012. The FDOT compensated ACCI \$928,357.30 for the placement, maintenance and removal of a temporary bridge and other project recovery work due to the effects of Tropical Storm Debbie.

# 4. Effects of the Site Conditions and the Tropical Storms

Subsequent to the two tropical storms the project never dried out. With the elevated water table, the soils already saturated and the topography of the area forcing the offsite storm water to the project, persistent rainfall events incessantly hindered progress of all of the ongoing activities and ACCI was forced to continually repair/reconstruct both permanent and temporary erosion and sediment control features including but not limited to reconstruction and regrading of embankments and adjacent ditches, turbidity barriers and grassing. Performance of this unforeseen additional work was necessary in order to keep the project progressing. To quantify the actual effects of the unforeseen conditions on the work activities a review of the costs that were experienced in each of the previously referenced sections of the project was performed. The principal work activities that were most affected, relative to additional costs, by the adverse conditions were the earthwork activities. Primarily being reconstruction and re-grading of embankments and roadside ditches.

## <u>Sta. 10+00 - Sta. 180+00</u>

This is the southernmost portion and the first section of the project that was constructed. The earthwork activities in this section of the project began in February 2012 and the rough grading of this section was substantially completed by May 2012. The dual ditch system east of the existing lanes was completed once the traffic was shifted to the newly constructed lanes. Other than the dual ditches on the east, this section was constructed prior to the two tropical storms and the subsequent unforeseen conditions.

<sup>&</sup>lt;sup>1</sup> See Precipitation Analysis Report by Stephen Letro (Appendix 3 to Contractors Position Paper)

### <u>Sta.180+00 - Sta. 923+89</u>

The earthwork for the remainder of the project was performed subsequent to the two tropical storms. Earthwork activities continued throughout the remainder of the project construction time with the allocation of resources to perform this work dependent on the project conditions.

A comparison of the earthwork costs for work performed prior to and subsequent to the two tropical storms indicate a substantial increase, greater than 100%, in the costs subsequent to the two storms. This additional cost is a direct result of the unforeseen conditions caused by the elevated water table and abnormally extreme weather experienced from May 2012 through the completion of the project. The unforeseen conditions created unforeseeable work, beyond the control of ACCI, including reconstruction of temporary (silt fence, turbidity barriers, sediment basins, grassing etc...) and permanent (embankments, roadside ditches, grassing etc...) erosion and sediment control features.

In addition to the unforeseeable earthwork costs there were also unforeseeable costs experienced in the form of temporary and permanent grassing due to the washing and flooding of previously grassed areas and the necessity to use sod in areas that would normally be permissible to seed and mulch.

## 5. Notice of Intent to Claim

In accordance with the requirements of Specifications Section 5-12 ACCI provided appropriate notice to the FDOT originally in its Email dated September 21, 2012 and subsequently in its Email dated January 24, 2014.

## **Contractor Position Summary**

ACCI experienced abnormal weather and an elevated water table during construction of the project. The elevated water table was an unforeseen condition as the FDOT acknowledged in the Supplemental Agreement change from limerock base to asphalt base on 73% of the new construction. The combination of the elevated water table and the abnormal weather created unforeseen work due to damage of temporary and permanent erosion control features as a result of intense, heavy rainfall. The damage was not the fault or result of contractor negligence. ACCI believes that Specification Section 104 provides for compensation to the contractor for the reconstruction of permanent and temporary erosion and sediment control features when that rework is due to factors beyond the control of the Contractor.

## **FDOT Position**

The following summary of the FDOT's position is based upon written materials submitted to the Board and upon the hearing presentation. The complete position is available in the FDOT's submitted written materials.

# **Key Points**

# 1. The Scope of Work and Contractor Responsibility

This project was a Design Build project. The scope of work included all investigation, design, permitting, coordination, design and construction activities. Accordingly the Design/Build Contractor, ACCI, was responsible for survey, geotechnical investigation, design, acquisition of all permits not acquired by the FDOT, any required modification of permits acquired by the FDOT, maintenance of traffic, demolition, and construction on or before the date indicated in the Design/Build Contractor's proposal.

## 2. The Design Build Contractor (ACCI) Was Aware of the Project Site Conditions

Upon review of the Design Build Team's Technical Proposal for this project it becomes evident that they were acutely aware of the wet conditions to be encountered on the jobsite<sup>2</sup>. Even in their opening cover letter

<sup>&</sup>lt;sup>2</sup> See ACCI Technical Proposal (Exhibit 2 in FDOT Position Paper)

it states, "We have discovered key elements of the design that require careful consideration and can have a significant impact on the project. One of these elements is the profile of roadway relative to the seasonal high groundwater table."

Further on in the proposal, under Roadway Design, Horizontal and Vertical Geometry, the Design Build Team states that they performed 115 additional field borings to verify the Seasonal High Water Table (SHWT) and the impact that it would have on the roadway profile due to the requirement of 3 feet of clearance for the roadway base above the SHWT. Addendum 3 clarified base clearances for overbuild sections and new road bed sections, resulting in the design raising the roadway profile to meet the criteria outlined in the Flexible Pavement Design Manual for clearance above the SHWT.

With all this discussion, it is difficult to accept the assertion that there were "differing site conditions" encountered on the project.

## 3. Adherence to Specification Section 5-12 Claims by Contractor

On January 24, 2014, Anderson Columbia submitted an e-mail for a Notice of Intent due to abnormally high rainfall and differing site conditions for the SR 200 project. On January 26, 2014, the FDOT through the CEI responded in acknowledgement of the NOI and requiring that ACCI follow the required specification 5-12 if they were going to pursue a claim.

The notice of January 24, 2014 was the first indication to the FDOT where ACCI had any notification of pursuing a claim. As indicated in section 5-12.2 the contractor shall notify the Engineer in writing before beginning the work. Therefore based on this the only time period that ACCI could request would be starting from January 24, 2014. Furthermore once a notice has been issued, the contractor must provide certain records and information to the FDOT based on specification 5-12.7.

ACCI a did not provide any daily records, correspondence or information during the remainder of the project duration. The FDOT at every progress meeting would request Anderson Columbia if there was any further information or if the claim would be dropped. Anderson Columbia did not drop the notice of intent but also did not adhere to specification 5-12.7.

Based on the submittal of the notice of intent and the failure to follow in accordance with specification 5-12, the Anderson Columbia Claim for additional compensation due to unforeseen soil conditions and weather related impacts should be denied. Note that in section 5-12.2 the Contractor waives the claim for additional compensation or a time extension if such notification is not given and the Engineer is not afforded the opportunity for keeping strict account of actual labor, material, equipment, and time. The majority of the time period of Anderson Columbia's claim is prior to January 24, 2014 and therefore, is not eligible under this specification.

# 4. Existing Soil Conditions

The FDOT's position is that ACCI was informed concerning the site soil conditions prior to submission of their Design Build Proposal. More specifically the FDOT position refers to information in the 2006 Parsons Group 90% Design Documents provided in the Design Criteria Package.<sup>3</sup>

The roadway soil survey indicated there were four soil stratums (2, 3, 4 and 5) that may retain excess moisture and be difficult to dry and compact. These stratums were primarily located in the top 2 meters (approximately 6 feet) of the corridor. In several instances these stratums were located at the surface. Additionally the report also notes that stratum 5 may be difficult to dewater.

<sup>&</sup>lt;sup>3</sup> See 90% Submittal Design Documentation (Exhibit 3 and 4 in FDOT Position Paper)

In the section on Groundwater Control, the report indicates that the groundwater levels were encountered at depths that generally range from 0.5 to 4.1 meters below the ground surface at the times that they were sampled. The report further indicates that "fluctuations in groundwater levels should be anticipated throughout the year primarily due to seasonal variations in rainfall..." The report recommended "that positive site drainage should be established early during construction in order to reduce ponding of surface water during heavy or prolonged rainfall. Means and methods of groundwater and surface water control should be the responsibility of the contractor."

# 5. Topography

Similar to the soil classifications and water table analysis, the FDOT as part of the preliminary engineering also reviewed and prepared drainage maps for the SR 200 corridor. These maps were prepared by Parsons Transportation Group and Arcadis and were made available to the design build teams pursuing the project<sup>4</sup>. The purpose of the drainage maps were to provide general drainage basin flows and help assist the Design Build Teams in identifying any drainage concerns. Upon review of the drainage maps it is apparent that the majority of the existing drainage patterns show storm water coming from offsite onto the project corridor. The Anderson Columbia Design Build Team Technical Proposal (page 4) identified and expressed their understanding of the drainage patterns and the required design necessary to address this condition. The technical proposal also pointed out the need to separate the large amount off site storm water from the new construction and would do this through a double ditch system. This technique was also important in reducing the number and the size of storm water ponds for the project.

As part of the response to Bid Questions on May 27, 2011, the FDOT agreed to provide the St. Johns River Water Management District permitted plans and the US Army Corps of Engineers final permit drawings to the shortlisted Design/Build Firms.<sup>5</sup> These permit plans would provide additional information on wetland and surface water impacts as well as any wetland and surface water areas that were to remain.

From this information the Anderson Columbia Design Build Team developed their drainage maps as part of their design plans capturing and depicting the above described conditions. From the technical proposal and the design plans it is apparent that Anderson Columbia was well informed on the drainage basin and flows for the SR 200 project.

# 5. Tropical Storms Beryl and Debbie

It is noted in the review of the Precipitation Report prepared by Stephen Letro that the rainfall analysis is collected from Cecil Field, which is close to the southern portion of the project. We also reviewed data collected from the Jacksonville International Airport (JIA), which is close to the northern portion of the project. A month by month and year by year comparison of this data was prepared.<sup>6</sup> The data shows that for the remainder of the year 2012, after the storms, there was below normal rainfall amounts of 8.69 inches. Year 2013 had below normal rainfall amounts of 7.53 inches. Only Year 2014 was above normal by 3.00 inches. Therefore there was a year and a half of below normal rainfall activity following the tropical storms. This time period is long enough for the "drying out" process of the watershed discussed in ACCI's Precipitation Analysis as being *"inhibited"*. This refutes ACCI's assertion that *"Rainfall across that area has continued to be general above normal since that time."* Also, The FDOT may grant time extensions, on a day for day basis, for delays caused by the effects of rains or other inclement weather conditions. These "weather days" help the contractor from getting into liquidated damages situations. The FDOT reviewed the granted weather days and compared them to recorded rain events. Of the 156 rain event days that occurred over the project duration, the FDOT generously granted 213 days or 57 additional days of recovery from rain events.

<sup>&</sup>lt;sup>4</sup> See Drainage Maps (Exhibit 8 of the FDOT Position Paper)

<sup>&</sup>lt;sup>5</sup> See Bid Questions (Exhibit 5 of FDOT Position Paper)

<sup>&</sup>lt;sup>6</sup> See Precipitation Spreadsheet and Graph (Exhibits 9 and 10 of FDOT Position Paper)

From the review of the historical rainfall data and the review of weather day information, it is shown that although there were some extreme rainfall events during the project, in general, the conditions were more the normal than excessive. And for those times that were of impact to ACCI, the contractor was compensated and or granted weather days.

## 6. Developmental Specification Section 104

As part of the construction specifications there was a new developmental specification Section 104 Prevention, Control, and Abatement of Erosion and Water Pollution. In section 104-4.2 Erodible Earth Limits, the specification required the contractor to not expose more than 750,000 SF of erodible earth at any one time unless otherwise approved by the Engineer. Anderson Columbia was fully aware of this specification based on the e-mail request from Anderson Columbia on February 15, 2012 to gain relief from this restriction. In their e-mail Anderson Columbia committed to permanently grassing a section once graded. Approval was granted based on these conditions and the fact that the environmental permits still require an area to be stabilized within 7 days of an area being disturbed. Anderson Columbia proceeded to clear the majority of the project limits but did not permanently grass any areas as evidenced in the comparison of the August 2012 aerials to the aerials from October of 2012<sup>7</sup>. The lack of grassing per their commitment led to extensive erosion issues as evidenced by several deficiency letters and multiple meetings with Anderson Columbia and their specialty environmental engineer.<sup>8</sup> As stated before, Anderson Columbia was fully aware of the seasonal high water table and the water shed drainage patterns in this area. Anderson Columbia's desired means and methods of clearing the majority of the project placed themselves in a position that required additional maintenance of erosion control measures. Had they grassed an area and ensured the proper care and growth of the grassing areas, then additional energy maintaining erosion control devices would not have been needed. Therefore this condition was not unforeseen but instead created by Anderson Columbia through their construction methodology.

Anderson Columbia quotes a portion of section 104-4.6: "If reconstruction of permanent or temporary erosion and sediment control features is necessary, as determined by the Engineer, due to factors beyond the control of the Contractor, The FDOT will consider payment for replacement pursuant to 4-4, Unforeseeable Work." However as shown above, Anderson Columbia requested to modify this specification (104-4.2) by increasing the 750,000 SF erodible earth limit creating an excessive amount of exposed earth. Thus this situation was not beyond the control of the Contractor but instead well within his means and methods.

Prior to the quoted sentence from section 104-4.6 above two other related sentences need to be taken Into consideration. "Maintain permanent and temporary erosion and sediment control features, at no Expense to the FDOT, until the project is complete and accepted. If reconstruction of such erosion and sediment control features is necessary due to the Contractor's negligence or carelessness or, in the case of temporary erosion and sediment control features, failure by the Contractor to install permanent erosion or sediment control features as scheduled, the Contractor shall replace such erosion or sediment control features at no expense to the FDOT." Since Anderson Columbia did not grass any of the areas as committed in their request to exceed the 750,000 sf limit then all replacement and or maintenance of the control features shall be at no expense to the FDOT.

Since this situation is not unforeseen then Section 4-4, Unforeseeable Work does not pertain and is not qualified for this claim request.

<sup>&</sup>lt;sup>7</sup> See Arial Photos Provided in Exhibits 11 and 14 in the FDOT Position Paper

<sup>&</sup>lt;sup>8</sup> See Deficiency Letters Provided in Exhibit 15 in the FDOT Position Paper

#### **FDOT Position Summary**

It is the FDOT's position that this claim should be denied entirely based on the Contractor's failure to adhere to specification 5-12. In section 1<sup>9</sup>, it was outlined that no further information other than the initial e-mail was provided even though attempts by the FDOT to further clarify was attempted through several progress meetings. Based on the submittal of the notice of intent and the failure to follow in accordance with specification 5-12, the Anderson Columbia Claim for additional compensation due to unforeseen soil conditions and weather related impacts should be denied. Note that in section 5-12.2 the Contractor waives the claim for additional compensation if such notification is not given and the Engineer is not afforded the opportunity for keeping strict account of actual labor, material, equipment, and time. The majority of the time period of Anderson Columbia's claim is prior to January 24, 2014 and therefore is not eligible under this specification. Although it is clear that this claim should be denied because the contractor did not adhere to specification 5-12, the FDOT also has shown that the claim should also be denied based on the facts in our response to this claim.

Through section 2 (existing soil conditions) and section 3 (topography) the FDOT has shown that the entire Design Build Team was fully aware of the high water table and the drainage flow characteristics of this corridor. They were also aware of the existing soil conditions and the challenges due to moisture retention in the compacting of these materials. All of these elements were outlined in detail in their technical proposal and therefore the contractor's means and methods should have anticipated these factors.

In section 4 the FDOT shown that there has not been a significant amount of rain that the project Experienced with the exception of the tropical storm events. Please note that a Supplemental Agreement was issued to the contractor for the tropical storm events. In addition, the FDOT generously granted 213 weather days or 57 additional days of recovery from rain events.

In section 5 and section 6, it was demonstrated that the contractor's means and methods through their request to exceed the allowable 750,000 sf of erodible earth specification and lack of fulfilling their written conditional obligation to permanently grass an area created additional erosion control activities and reworking of the 17.5 mile project area. Lastly in section 7 it has been demonstrated that it has been demonstrated that the additional asphalt constructed was due to the means and methods of the contractor and not due to wet conditions.

It should be noted that this project was a design build lump sum project. Therefore the design and construction is in full control of the Design Build Team and as such all changes and construction techniques are the responsibility of the Team unless initiated by the owner. At no time did the FDOT impose a change condition or scope to the project that was not addressed in a work order or Supplemental Agreement. The scope of the project has remained consistent from the advertisement of the Design Build contract through the completion of the project. Therefore based on the analysis through the multiple sections of this position paper it is the position of the Department that this claim has no technical merit and should be denied.

<sup>&</sup>lt;sup>9</sup> Section numbers refer to the sections in the FDOT Position Paper

## **Disputes Review Board Findings**

## 1. Existing Site Topography and Soil Conditions

The existing site topography and soil conditions including the high water table and the natural off-site water flow onto the right-of-way were not unforeseen by ACCI. The 90% Design Documentation provided to bidders included sufficient information to adequately represent the existing site conditions. Additionally, as the designer, ACCI performed their own pre-bid site investigation. ACCI confirmed to the Disputes Review Board during their hearing presentation that the existing site topography and soil conditions were not unforeseen by ACCI.

#### 2. Tropical Storms Beryl and Debbie

Tropical storms Beryl and Debbie occurred in the project area in May and June 2012. The heavy rainfall and the fact that the storms occurred back to back significantly impacted the project site. A clear indication of the storm impact can be seen from the fact that during the Debbie event an existing SR 200 bridge over Brandy Branch Creek was washed out. ACCI performed additional work to repair the bridge and other recovery efforts. Supplemental Agreements were issued to provide compensation for the additional work.

The severity of the two tropical storms and the associated record rainfall created an unforeseen condition. The DRB considers the flooding that subsequently occurred and which caused significant damage to the Brandy Branch North bridge, as well as to some already-graded ditches and erosion control features, to be a situation that was uncontrollable by the Contractor.

With the exception of the two storm events, the weather at the project site was not unusual. In the 18 month period following the storms rainfall amounts were below average. It is reasonable to believe that the flooded watershed would require some time to drain out and reach pre-storm conditions. However, given the absence of any scientific proof by ACCI, the Disputes Review Board cannot accept ACCI's representation that effects of the storms continued for remainder of the project duration of approximately 3 years.

#### 3. Notices of Intent to Claim

ACCI represents the Email message sent by Mr. Williams on Sep. 21, 2012 as a proper NOI as required by Specification Section 5-12. However it is clear from the wording of the message that the subject is weather days and not a claim for monetary compensation. The Disputes Review Board does not find the Email message dated Sep. 21, 2012 to be an NOI.

However, the Email message dated January 24, 2014 does meet the requirements of Specification Section 5-12 for an NOI.

#### 4. Developmental Specification Section 104

This specification which was added to this project primarily addresses erosion and water pollution prevention measures. Of relevance to the issue before the Disputes Review Board is the language that provides for compensation to the contractor for the reconstruction of permanent or temporary erosion and sediment control features.

#### 104-4.6 Erosion and Sediment Control Device Inspection and Maintenance

.... If reconstruction of permanent or temporary erosion and sediment control features is necessary, as determined by the Engineer, due to factors beyond the control of the Contractor, the Department will consider payment for replacement pursuant to 4-4, Unforeseeable Work.

Payment is contingent on two criteria:

- 1. The reconstruction must be due to factors beyond the control of the Contractor
- 2. The reconstruction must have been unforeseeable

Permanent and temporary drainage ditches and related embankment, grassing and silt fencing are erosion and sediment control features.

#### **Disputes Review Board Recommendation**

The Disputes Review Board finds that the two tropical storms resulted in an unforeseeable different site condition that was beyond the Contractor's ability to control. However this condition was temporary and of a relatively short duration. The FDOT has compensated ACCI for some recovery work related to the storms.

In accordance with Specification Section 104, it is the Disputes Review Board's recommendation that ACCI be compensated for costs that have not been previously compensated of reconstruction of permanent or temporary erosion and sediment control features only as a direct result of tropical storms Beryl and Debbie. The extent of this work is limited to the erosion control features in place during the tropical storms and the subsequent rework directly caused by the tropical storm effects. This information can be determined by a detailed review of the project field records maintained by the CEI and the Contractor.

The Board found that the basis of entitlement for additional compensation for storm-related rework for erosion control devices and features during the period immediately after the two tropical storms was established and acknowledged by the FDOT when it executed the Supplemental Agreement for additional rework in early August 2012.(Unilateral Payment). It was not necessary for the Contractor to submit a subsequent NOI to preserve its rights to claim for additional compensation for that period since those rights and the entitlement had already been established by the actions of the FDOT.

The Board appreciates the cooperation of all parties and the information presented for review in order to make this recommendation.

I certify that I have participated in all meetings and discussions regarding the issues and concur with the findings and recommendation.

Respectfully submitted, Disputes Review Board

Ralph Ellis Jr. – Chairman Kenneth E. Fusch – Member Roger Bailey- Member

Signed for all with the concurrence of all members.

RayLD Elig.

Ralph D. Ellis, Jr. Chairman