REGIONAL DISPUTES REVIEW BOARD RECOMMENDATION

MARCH 6, 2007

To: Mr. Ricky Polizzi Project Manager Westwind Contracting 2 Enterprise Drive, Suite B Bunnell, FL 32110 Mr. T. R. Gillis Project Administrator GAI Consultants, Inc. 20802 Macon Parkway Orlando, FL 32833

RE: SR 520 Widening Project FN: 237466-1-52-01 Contract Number: T-5041 Brevard County

ISSUE: RDRB Hearing on Payment for Pile Splices

Gentlemen:

The Contractor, Westwind Contracting, requested a hearing regarding the payment for pile splices for the foundation of the St. Johns River bridge on the above referenced project. The Contractor was putting forward a claim as requested by the sub-contractor on the piling and bridge project, Superior Construction Company, Inc.

CONTRACTORS POSITION:

On Thursday, December 14, 2006, GAI sent an e-mail to Westwind Contracting stating that they were going to deduct payment for pile splices (which had been previously paid) under Spec. 455-11.8, which states, "No separate payment will be made for splices required to obtain the authorized length." This e-mail referenced the letter from the geotechnical engineer who specified the authorized production pile lengths to be nine (9) piles at 87 If and eighteen (18) piles at 144 lf. The maximum permissible pile length delivered by truck is 120 lf. Superior Construction had to order the 144 lf piling in two pieces to accommodate delivery, but payment could not be made for the splicing. The delivery of piling to this jobsite can only be achieved by trucks, since there is no feasible way to deliver by barges.

Based on the soil borings given on sheets B-13 and B-14, Superior Construction at bid time anticipated the project requiring 115 lf production piles for intermediate bents 2 and 3, and 110 lf production piling for intermediate bents 4 and 5. Superior based this on what they perceived in the borings to be dense material above Elevation -100. Note number 5 on sheet B-16 pf the project drawings states, "Pre-planned pile splices to

achieve authorized pile lengths may be needed on this project." Superior did not add additional costs for splicing production piles based on the information contained in the soil borings. Note Number 5 was not considered because the borings indicate that splicing piles will not be necessary. It is Superior's contention that the payment for splicing these piles falls under 4-3.5, Extra Work.

The FDOT's geotechnical engineer authorized lengths that cannot be shipped on trucks. Superior Construction's competitive pricing to Westwind was based on the assumption that the production piles did not have to be spliced based on the information provided in the contract documents.

Further, in an e-mail from Superior to Westwind, Superior Construction states:

- We agree that Specs 455-11.8 and 455-12.12 do not refer to paying for splices in this situation.
- Note 5, on sheet B-16 of the drawings states, "pre-planned pile splices to achieve authorized pile lengths may be needed on this project." Authorized pile lengths can only be determined after the test pile program.
- Authorized lengths for these piles were at 144 lf.
- Since 18 production piles were greater than 120 lf (max for trucking), splices were necessary.
- We are entitled to compensation under spec. 4-3.5, Extra Work.
- Our costs to splice the 18 production piles after the test pile program is \$ 3,591.00 x 18 splices = \$ 64,638.00.

DEPARTMENT'S POSITION:

The plans called for three (3) test piles to be driven. The authorized length of each test pile was 161 lf. The test piles were driven in bents 2, 4, and 6. The dynamic analysis of the test piling set the authorized pile lengths as follows:

- Bents 1 and 6: Nine (9) piles at 87 lf
- Bents 2, 3, 4, and 5: Eighteen (18) piles at 144 lf

The pile driving criteria established by GRL Engineers, Inc., allowed the 144 lf permanent piling to be manufactured in two lengths of 72 lf each with a mechanical splice. This decision was made after discussions with the Bridge Superintendent, in order to allow the piling to be transported by truck.

The Department, CEI, and the Designer feel that more than adequate information and warnings were given in the contract documents that alerted the bidder of the authorized pile lengths expected to be established for this bridge site. Listed below are the information and warnings given in the contract documents:

1. The summary of pay items on plan sheet 2A give an estimated quantity of 3,972 lf of 24 inch concrete piling. A total of 27 permanent piling were required on the

project, thus giving 146 lf as the average estimated length for all permanent piling.

- 2. The soil boring sheets for the bridges are shown on sheets B-12, B-13, B-14, and B-15. These borings show that bearing material is not present until approximate elevation -110 to -120.
- 3. Plan sheet B-16, entitled Foundation Layout has a note number 5 which states, pre-planned pile splices to obtain authorized lengths may be needed on this project. The Contractor's pre-planned pile splices shall be in accordance with Section 455-7.8, entitled Pre-Planned Pile Splices, in the contract specifications".

The Contract Special Provisions, Section 455-11.8, Pile Splices states: "Authorized splices in concrete piling, steel piling, and test piling, which are made for the purpose of obtaining greater lengths than originally authorized by the Engineer, or to incorporate test piling in the finished structure, or for further driving of test piling, will be paid for as described in Section 455-12.13. <u>No separate payment will be made for splices required to obtain the authorized length.</u>

CONTRACTOR'S REBUTTAL:

The contractor offered the following rebuttal to the above three items as follows:

- 1. Specification 455-5.14.2, Production Pile Length states that pile lengths shown in the plans are based on information available during design and are approximate only. The Engineer will determine final pile lengths in the field which may vary significantly from the lengths or quantities shown on the plans. The average driven lengths for bents 2, 3, 4, and 5 is 134.83 lf, which varies considerably from the estimated length of 146 lf for production pilings.
- 2. Superior studied the boring information given in the contract documents and, based on our experience and engineering knowledge, it is our opinion that sufficient information was given to determine at bid time that approximately115 foot production piles could have been used at bents 2 and 3, and approximately 110 foot production piles could have been used for bents 4 and 5.
- 3. If the EOR had been explicit in his instructions, Note 5 on Plan Sheet B-16 would have read, "Pre-planned pile splices to obtain authorized lengths (**will or shall**) be needed on this project". Superior Construction Company did not add additional costs for splicing production piles based on the information provided in the soil borings.

It is Superior Construction Company's position that payment for splicing these piling falls under Section 4-3.5, Extra Work.

DEPARTMENT'S REBUTTAL:

The contractor is taking a risk if his bid is based on something less than the estimated quantities and lengths of piling shown in the contract documents. The bid documents specified the estimated pile lengths and number of piling to be paid for on a unit price basis. Bidders were not asked to come up with their own pile designs and lengths. All bidders are aware that production pile lengths are determined from the results of test piles, not from assumptions made by the bidders.

As stated in our original position the EOR gave sufficient warnings in the bid documents to alert the bidders that the production piling could be in excess of the legal haul length of 120 lf. The Contractor has acknowledged these warnings in his own position papers.

BOARD FINDINGS:

The Board finds as follows:

- 1. The production piling length can be estimated from the planned quantities given in the bid documents. The total piling length of 3,972 lf for the 27 piling shown on the plans would indicate an average piling length of 147.1 lf per pile. This would be longer than the 120 lf maximum length for hauling by truck.
- 2. Production piling lengths are authorized by the EOR based on the results of driving the test piles on the site. Three test piles were driven on this project, each with an authorized length listed in the plans of 161 lf.
- 3. Very dense bearing material is shown on the borings at approximate Elevation -110 ft and below. The contractor should have considered that this material likely influenced the Geotechnical Engineer in setting estimated lengths and could easily be a factor in setting authorized lengths. Piles bearing in this material would be in excess of 120'.
- 4. Specification Section 455-11.8 states, No separate payment will be made for splices required to obtain the authorized length.

In summary, the Board finds that Items 1 through 3 above provide sufficient warning to bidders that piles in excess of 120' could easily result from the Engineer's determination of authorized lengths. Nothing is found that is sufficient to alter the application of Section 455-11.8 to the splices in question.

BOARD RECOMMENDATION:

Based on the Position Papers and information given at the hearing, the Board finds **NO ENTITLEMENT** to payment for the pile splices used to obtain the authorized lengths. The splices are adequately covered within the contract documents and do not qualify under 4-3.5, Extra Work.

Please respond to the Board and the other party of your acceptance or rejection of this recommendation with 15 days. Failure to respond will constitute your acceptance.of the recommendation as presented.

D5 Regional Disputes Review Board

George W. Seel Chair (Signed for and with the concurrence of all members)

Jimmy Lairscey Mike Bone