



Ohio Department of Transportation

1980 West Broad Street, Columbus, Ohio 43223-1102

January 29, 2007

Mr. Scott Febus, Project Manager
Walsh Construction Company
2575 Medina Road
Medina, OH 44256

Re: ODOT Project 293(04) West 3rd Street Lift Bridge
Claim: 12-040293-01 Wire Rope Length
Decision

Dear Mr. Febus:

Enclosed is the Director's Claims Board decision on the subject claim heard on December 18, 2006.

Under the terms of the contract and Change Order #18 which modified the Dispute Resolution and Administrative Claims Process for project 293(04), the Step 3 Director's Claims Board decision is the final step of the process and may not be appealed within the Department. You must either accept or reject this decision in writing within 30 calendar days of receipt.

Please contact me at (614) 466-3957 with any questions.

Respectfully,

A handwritten signature in black ink that reads "Megan Blackford". The signature is written in a cursive, flowing style.

Megan Blackford, P.E., Esq.
Secretary
Director's Claims Board

copies sent via e-mail and post mail:

Director's Claims Board: Richard Martinko

Director's Claims Board Hearing Panel: Bill Lindenbaum, Mark Kelsey, Tim McDonald

District 12: Randy Over, Tom Hyland

Claim File



**Director's Claims Board
ODOT Project 293(04)**

**Claim 12-040293-01
"Wire Rope Length"**

Decided January 26, 2007

On Monday, December 18, 2006 at ODOT's Central Office in conference room 1C, the Director's Claims Board Hearing Panel ("Panel") heard oral presentations of the Walsh Construction Company ("Walsh" or "Contractor") and ODOT District 12 relative to the subject issue. Prior to the oral presentations and in accordance with the Dispute Resolution and Administrative Claim Process set forth in Change Order #18 executed on April 11, 2006, the Director's Claims Board received written documentation from the Contractor on September 8, 2006 and then from the District on November 20, 2006.

The Panel consisted of William Lindenbaum, P.E., P.S., Deputy Director, Division of Construction Management; Mark Kelsey, Esq., Deputy Director, Division of Contract Administration; and Tim McDonald, P.E., Deputy Director, Division of Production Management.

The District 12 ("District") representatives at the hearing were Dave Ray, Randy Over, Tom Hyland, Pete McHugh, and Julie Meyer. Representing the City of Cleveland was Randy DeVaul and representing ODOT's Office of Structural Engineering was Tim Keller.

The Walsh representatives at the hearing were Mark Hedrick, Scott Febus, and Brad Koester. Barry Miller represented Walsh as its legal counsel. Genesis Structures, Walsh's structural consultant, was represented by Dave Rogowski.

Tom Pannett of ODOT's Office of Chief Legal Counsel and Dustin Arnette of ODOT's Division of Construction Management observed the hearing.

Megan Blackford of ODOT's Division of Construction Management served as the Secretary of the Director's Claims Board.

PROJECT DESCRIPTION:

This bridge replacement and rehabilitation project is located on West 3rd Street over the Cuyahoga River in the City of Cleveland in Cuyahoga County. The project consists of the replacement of the existing lift span, rehabilitation of towers and tower spans, and the reconstruction of both approaches on West 3rd Street. The owner of the structure is the City of Cleveland. ODOT District 12 is administering the Contract. The project was let on June 4, 2004. Walsh was the successful bidder at \$16,814,600 and was awarded the project on June 14, 2004.

CLAIM BACKGROUND:

The work required 64 wire ropes to connect the lift span to the counterweights. These ropes are necessary to transport the lift span the required distance.

Walsh installed the wire ropes and on March 6, 2006 discovered that they were approximately 4 feet too short. Walsh replaced these wire ropes with new wire ropes of sufficient length in June and July of 2006.

Walsh submitted its Early Notice of Intent to File a Claim on March 8, 2006 to recover the costs and time associated with the wire rope issue. On March 10, 2006, Tom Hyland, ODOT's Area Engineer, issued a Step 1 decision letter denying Walsh's claim.

A Step 2 meeting was held on May 15, 2006. The District issued a Step 2 decision on July 11, 2006 denying Walsh's claim. Walsh escalated the dispute to Step 3 of the Dispute Resolution and Administrative Claims Process by letter dated September 8, 2006. Accordingly, the dispute became a claim that would be decided by the Director's Claims Board.

SUMMARY OF CONTRACTOR'S POSITION:

In its Claim Documentation and during the hearing, Walsh asserts several arguments in support of its claim:

1. "The AASHTO specifications for Movable Highway Bridge Design states that 'The structural, mechanical, hydraulic, and electrical design will be furnished by the Owner, unless it is expressly stated in the invitation for bids that such designs, or specified portions of them, are to be furnished by the Contractor'... We should have no reason to think that the Contract plans and the dimensions shown on the plans that were issued for construction were not functional for the design of this project."
2. "The main counterweight wire rope dimensions that were given on the plans did not indicate that these dimensions were not correct for the total design concept or should be used for bidding purposes only."
3. "The designer failed to coordinate their design between the structural design and the mechanical design."
4. "The design engineer directly copied the original design drawings and utilized them in his new design. The design engineer has the responsibility to incorporate his changes and adjust any affected dimensions."
5. "It is impossible to calculate the dimensions of the main counterweight wire rope based on the contract drawings alone"...The "shop drawings were reviewed and subsequently returned 'Conforms as Noted' with no corrections or deviations to the lengths."
6. "This project is new construction rather than a rehabilitation project. Therefore, it was not necessary to look at the original construction plans."

7. The term "calculate" does not place as heavy a burden on the Contractor as the term "verify".

Walsh is requesting reimbursement for the costs associated with replacing the cables in the amount of \$928,491.71. Walsh is not requesting a time extension for this issue.

SUMMARY OF DISTRICT'S POSITION:

The District maintains that Walsh is not entitled to compensation for costs incurred as a result of replacing the cables for the following reasons:

1. "The Contract Documents clearly and unambiguously specify that the Contractor is responsible for determining the final counterweight rope lengths." In six places, the Contract Documents stated that it was the Contractor's responsibility for determining the final counterweight rope lengths.
2. "The Contractor's actions prove that it was aware of its responsibility and subsequently performed either incomplete or incorrect calculations."
3. "The District's 'acceptance' of the shop drawing did not relieve the Contractor of its responsibility to comply with the contract (e.g. its responsibility for the length of the cables)."
4. "It was not impossible to perform the calculation for the proper wire rope lengths as required."
5. "The contract provisions requiring the Contractor to perform the final wire rope calculations prior to fabrication are typical for construction projects of this work type and complexity."

DIRECTOR'S CLAIMS BOARD FINDINGS:

I. Facts

The dispute is primarily a question of the adequacy of the Contract Documents regarding the wire rope requirements for the subject project. Therefore, a majority of the facts contained in the submissions and presentations by the parties pertaining to the performance of the work are consistent and can reasonably be relied upon to form the basis of this decision. Although not in dispute, the following facts warrant mention as they are central to the decision:

1. A note on plan sheet 102/166 listed the dimensions for 32 ropes at 140'-6" and another 32 at 140'-6 ¾". These lengths were obtained from the original plans for this structure.
2. The Contract Documents contained several admonitions regarding the wire rope lengths:
 - A. ODOT 2002 Construction and Material Specifications (C&MS) Section 105.02: "When required to control the Work, supplement the Plans with working drawings. Prepare working drawings when required by the

Contract Documents and after verifying applicable field and plan elevations, dimensions, and geometries. Where Work consists of repairs, extension, or alteration of existing structures, take measurements of existing structures to accurately join old and new Work.”

B. Note on plan sheet 19/166:

“EXISTING STRUCTURAL VERIFICATION:

DETAILS AND DIMENSIONS SHOWN ON THESE PLANS PERTAINING TO THE EXISTING STRUCTURE HAVE BEEN OBTAINED FROM PLANS OF THE EXISTING STRUCTURE AND FROM FIELD OBSERVATIONS AND MEASUREMENTS. CONSEQUENTLY, THEY ARE INDICATIVE OF THE EXISTING STRUCTURE AND THE PROPOSED WORK BUT THEY SHALL BE CONSIDERED TENTATIVE AND APPROXIMATE. THE CONTRACTOR IS REFERRED TO CMS SECTIONS 102.05, 105.02 AND 863.07.

CONTRACT BID PRICES SHALL BE BASED UPON A RECOGNITION OF THE UNCERTAINTIES DESCRIBED ABOVE AND UPON A PREBID EXAMINATION OF THE EXISTING STRUCTURE BY THE CONTRACTOR. HOWEVER, ALL PROJECT WORK SHALL BE BASED UPON ACTUAL DETAILS AND DIMENSIONS WHICH HAVE BEEN VERIFIED BY THE CONTRACTOR IN THE FIELD.”

C. Note on plan sheet 19/166:

“DESIGN SPECIFICATIONS:

THIS STRUCTURE CONFORMS TO THE “STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES” ADOPTED BY THE AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO), 1996 EDITION, INCLUDING THE 1997 TO 1999 INTERIM SPECIFICATIONS, “STANDARD SPECIFICATIONS FOR MOVEABLE HIGHWAY BRIDGES” ADOPTED BY AASHTO, 1988 EDITION, AND THE OHIO DEPARTMENT OF TRANSPORTATION (ODOT) BRIDGE DESIGN MANUAL, 2000 EDITION.”

D. Note on sheet 102/166, bottom right hand corner of the same sheet which contained the rope dimensions: **“NOTE: CONTRACTOR TO CALCULATE ALL ROPE LENGTHS AND SUBMIT TO THE ENGINEER.”**

E. Addendum #6, Special Provisions, Section 015000 Bridge Mechanical, Section 2.15.C: **“Wire rope assemblies shall be provided by the rope manufacturer. The rope assemblies shall have a final length of plus or minus 1/16 inches as specified by the contractor. All wire rope assemblies shall be pre-stretched. Each wire rope assembly shall have a paint stripe indicating that the rope is straight.”**

F. Addendum #6, Special Provisions, Section 015002, Counterweight Ropes, Sheaves, and Bearings, Section 2.4.D: **“Shop test certificates shall be furnished to the Engineer by the Rope Manufacturer. The final length of**

all ropes shall be the required length as determined by the Contractor plus or minus 1/16”.”

3. AASHTO's "Standard Specification for Moveable Highway Bridges" 1988 Edition, General Criteria Section 1.1 states: "The structural, mechanical, hydraulic, and electrical design will be furnished by the Owner, unless it is expressly stated in the invitation for bids that such designs, or specified portions of them, are to be furnished by the Contractor."
4. The rope lengths set forth in the plans were in error as they were 4' deficient. The difference between the rope lengths required for the original structure and the rope lengths required for this project can be attributed to location of the lift span connection point. The original location of the connection point was at the top of the lift span. This project relocated this connection to a point 4' lower on the new lift span beams.
5. ODOT's 2002 C&MS Section 105.02 addresses the Contractor's submission and the Department's review of shop drawings: "The Department will review working drawing submittals to ensure conformance with the Contract and to provide the Contractor a written response to document the results of its review as follows:
 - A. **"ACCEPTED."** The Department accepts the submittal for construction, fabrication, or manufacture.
 - B. **"ACCEPTED AS NOTED."** The Department accepts the submittal for construction, fabrication, or manufacture, subject to the Contractor's compliance with all Department comments or corrections to the submittal. If also marked "RESUBMIT," the Department still accepts the submittal, but requires the Contractor to provide a corrected submittal to the Department.
 - C. **"NOT ACCEPTED."** The Department does not accept the submittal. The submittal does not conform to Contract requirements. Do not begin construction, fabrication, or manufacture of Work included in the submittal. Revise the submittal to comply with Department comments or corrections and Contract requirements and provide the revised submittal to the Department for another review.

The Department's acceptance will not relieve the Contractor of responsibility to complete the Work according to the Contract. Include the cost of furnishing working drawings in the cost of the Work they cover."

6. Walsh submitted shop drawings to the District on June 20, 2005. Walsh's shop drawings contained rope lengths that differed from those contained on plan sheet 102/166. The Walsh submittal listed 32 of the rope lengths at 140'-6" and the other 32 at 142'-6". According to Walsh, it had discovered an error on plan sheet 103/166 and added 23". It explained that this 23" difference was made to adjust for the staggered nature of the bolt take-up lengths.
7. District 12 returned the shop drawings stamped "CONFORMS AS NOTED" on September 21, 2005. This stamp also states the "Review is only for conformance with the design concept of the Project and general compliance with the Contract Documents."

8. The Contractor submitted its calculation for the rope lengths to the Engineer on May 2, 2006, after the ropes were installed and it was discovered that they were deficient.

II. Conclusions

After careful review of the submitted documents and with due consideration of the information provided at the hearing, the Board determined the following to be significant findings relevant to the issue of entitlement:

1. First of all, the Board points out that the length of travel of the wire ropes is critical to ensuring that the lift bridge actually functions as a lift bridge.
2. Although this project replaces the existing lift span it only rehabilitates the towers and tower spans, and reconstructs both approaches. Therefore, this project is characterized as a rehabilitation project.
3. The rope lengths provided on plan sheet 102/166 yield ropes that are 4' deficient.
4. Walsh maintains that it was not responsible for the rope lengths and they were entitled to "assume that these dimensions are correct unless there is an indication that they are not correct." Essentially Walsh argues, under the *Spearin* Doctrine, that there was an implied warranty of accuracy that attached to the plans provided that "if the contractor is bound to build according to plans and specifications prepared by the owner, the contractor will not be responsible for the consequences of defects in the plans and specifications." It is well established that this implied warranty may be overcome by express and specific disclaimers. When determining whether a disclaimer is effective, the degree to which the warning is focused on specific work, and the time at which verification is required (i.e., post-award versus pre-bid) are important considerations.

Here, the Contract Documents, in six locations admonished the Contractor to "calculate," "determine," and "verify" the wire rope lengths. The Contract Documents must be read together in their entirety; therefore, these general and specific disclaimers regarding the rope lengths clearly intend to place responsibility for the final rope lengths on the Contractor. Moreover, it would not have been necessary for the final rope lengths to be known at the time of bid. Therefore, the disclaimers sufficiently overcame the implied warranty that accompanies design specifications. While it was perhaps reasonable to rely on the lengths set forth in the plans when preparing its bid, when it came to performing the Contract, Walsh was clearly allocated the responsibility for the final rope lengths.

5. Walsh failed to perform due diligence in the face of the admonishments contained in the Contract. Although the Contractor desires to distinguish between the terms "calculate," "determine," and "verify" this argument is irrelevant as the Contract Documents required Walsh to perform under all three of the referenced terms. The fact is that Walsh failed to adequately fulfill these obligations.
6. Notwithstanding the effect of the disclaimers, Walsh argues that "an accurate dimension would have been impossible to obtain from the information that was

given on the contract plans.” This argument requires that the Contractor prove that the specifications fail to adequately describe the nature and extent of the constructed work. In other words, the Contractor must prove that the specifications are NOT constructible as designed. All parties agreed during the hearing that it is possible to calculate the rope lengths utilizing the information contained in the Contract Documents in conjunction with making some informed assumptions. Although the calculation may not result in lengths within the required tolerance, the calculation can result in lengths that would be sufficient for the intended purpose. Nevertheless, if the lengths truly were impossible to calculate, Walsh had a legal and contractual duty to notify the Engineer. Simply ordering the wire ropes in reliance on the dimensions given, when Walsh thought that a length was impossible to calculate, would have been entirely unreasonable.

7. Nonetheless, Walsh admittedly did not blindly rely on the rope lengths set forth in the plans; rather, it performed a calculation prior to submitting its shop drawings. This calculation consisted of adding 23” to half of the take-ups to correct for the staggered design of take-ups. Walsh explained that it discovered this error in the plans and accounted for it in the rope lengths. The calculation that Walsh performed was either erroneous or incomplete as the resultant lengths were the lengths that it utilized on the project. Therefore, even if the Contractor were to prevail on the arguments set forth above, the calculation that it performed was an intervening action that renders the plan error or impossibility of the calculation arguments irrelevant. Although it is unfortunate that the designer did not include the correct lengths in the plans, this is not what directly resulted in the claimed damages.
8. Walsh’s argument that the District’s review and subsequent return of the shop drawings shifted the risk of improper rope lengths to the Department is without merit. The shop drawings were returned stamped “CONFORMS AS NOTED.” The Contract Documents and the language contained in the stamp clearly limited the meaning and scope of the District’s review of shop drawings. Further, it is well established law that when the contract specifically limits the scope and meaning of the approval of shop drawings the approval is only general in nature as the Government cannot be expected to pore over the details of shop drawings to uncover contractor deviations, errors or omissions. To impose this kind of requirement on the reviewer of a shop drawing would constitute shifting the requirement of accuracy of the drawing from the preparer to the reviewer.
9. Lastly, the Contractor has a legal and contractual duty to notify the District in accordance with the Contract of any circumstance that may result in a dispute. Further, both the District and Contractor have a shared legal duty to mitigate damages. If Walsh had fulfilled its obligation under the Contract to correctly “calculate”, “determine”, and “verify” in a timely manner it would have discovered either the incorrect rope lengths or the impossibility of the calculation and notified the District prior to ordering the ropes. The timing of this notice would have then allowed for the opportunity to mitigate, or even eliminate, damages.

Based on the aforementioned conclusions, Walsh has not sustained its burden of proving entitlement.

Although we cannot find in favor for the Contractor, the Board would like to commend Walsh and the District for their compliance with the Dispute Resolution and Administrative Claims Process and for continuing to execute the project in a professional manner.

DAMAGES:

Based upon the findings above, the Contractor is not entitled to reimbursement for any damages.

Submitted this 26th day of January, 2007.

A handwritten signature in black ink, appearing to read 'R. Martinko', written over a horizontal line.

Richard Martinko, P.E.
Assistant Director, Highway Management