

December 27, 1996

Mr. Thomas B. Terpening, P.E.
Project Resident Engineer
HDR Construction Control Corporation
215 Imperial Blvd. - Suite B-1
Lakeland, Florida 33803
FAX: 941/648-1032

Mr. Mike L. Cone
President
Cone Constructors, Inc.
P. O. Box 22869
Tampa, Florida 33622-2869
FAX: 813/839-8921

RE: State Job No. 97160-3304/6303
W.P.I. No.: 1157829
Contract No. 19487
Polk County Parkway - Section 3B
Contract C-4344
Disputes Review Board

Subject: Disputes Review Board - Issue # 2
Finding of Fact Pertaining to Preformed Pile Hole Payment.

On December 11, 1996, at the request of the Contractor, Cone Constructors, Inc. (Cone), and the Florida Department of Transportation (FDOT), the Disputes Review Board (DRB) held a hearing to consider the dispute over method of payment to Cone for work authorized by the Department.

Written documentation was furnished to the Board by each of the parties. This documentation included:

Cone's letter of November 19, 1996, requesting that the hearing be held on December 11, 1996, Cone's submittal of its position dated November 21, 1996, and a letter from HDR Construction Control Corporation (HDR) dated December 2, 1996 outlining and supporting the Florida Department of Transportation's (FDOT) position. Oral presentations were made to the DRB by both parties at the hearing and Cone presented additional documentation entitled "Briefing for Preformed Pile Holes" and "Rebuttal to FDOT Position", both dated December 11, 1996.¹ Copies of documents referenced in their presentations were furnished to the Board during the hearing.

On December 12, 1996, Cone requested that it be allowed to respond in writing to questions posed during the hearing. In the interest of a full and complete hearing, the DRB allowed Cone its request, with the understanding that the FDOT would be allowed to respond to Cone's additional submittal. Both parties understood that this exchange of documentation would delay the DRB's deliberations and ultimate receipt of the DRB's decision.

On December 19, 1996, all DRB members had received Cone's additional information dated December 16, 1996. On December 20, 1996, the DRB received the FDOT's response dated December 20, 1996.

¹ The FDOT waived objection to the introduction of these new documents.

Issue:

Cone's position is that the hard driving experienced while attempting to drive the steel sheet pile forced Cone to alter their planned method of construction for the steel sheet pile walls which resulted in disruptions and delays to the work. Their contention is that the FDOT changed the method of installation and issued a Work Order authorizing the use of Preformed Pile Holes and later issued a second Work Order for deepening the Preformed Pile Holes. The Work Order dated September 5, 1996 directs Cone to: "Trench and backfill trench with granular material prior to driving sheet pile to reduce vibration in houses adjacent to the area where steel sheeting is being driven to penetrate a hard layer of strong soil." **Cone contends** that this method is described in the specifications as an acceptable method of preforming pile holes for steel sheet pile, and as such **they should be paid for Preformed Pile Holes under contract pay item number 455-15**. The summary of negotiations dated September 5, 1996, also refers to Preformed Pile Hole work:

SUMMARY RECORD OF NEGOTIATIONS

Work order No. 999-021-002

Trench for Steel Sheeting

...

BACKGROUND

The Contractor was having difficulty driving the steel sheeting for Wall B as required by the plans. The Turnpike was also receiving numerous complaints about the vibration from adjacent home owners. It was agreed to permit the Contractor to trench the sheeting part way in to assist his driving operations and mitigate the vibrations to adjacent home owners.

SUMMARY

Mike Cone offered to get the Preformed Pile Hole work started for \$20,000.00 or on a time and material basis. This would allow Cone to proceed and then agree on a price for the Preformed Pile Holes at a later date. Full compensation, both time and money, will be addressed later.

Cone agrees to perform the work and accept compensation as determined by the Engineer. However, Cone reserves the rights of its Subcontractors to seek additional compensation pursuant to Article 5-12 of the Standard Specifications.

Cone sites the specifications as additional back up for their position. Cone stated at the hearing that they did not wish for the DRB to rule on the issue as to whether the conditions encountered constituted a changed condition.

The FDOT does not agree that it changed the method of installation and only:

"agreed with Cone's subcontractor's recommendation to pretrench prior to driving the steel sheet piles to lesson (sic) the problem Cone's subcontractor was having driving the steel sheet piles. The Department never agreed to the use of "Preformed Pile Holes."

...

Although the Department disagreed that there was a differing site condition, we were anxious to resolve the issue and expedite the construction rather than force Cone to use an impact hammer or aid the driving with a jet (which the specifications require). Because of the tangible and intangible costs to the Department associated with every issue of this nature, the Department decided it would be more economical to resolve the issue rather than argue. Therefore, on September 5, 1996, Charlie Wegman and Mike Cone agreed that the Department would pay Cone a fair and equitable price for the trenching work, with the understanding that this payment would resolve the entire issue."

The applicable Plan and Specification references are listed below:

Plans

Summary of Roadway Pay Items:

PAGE 3 OF 3			97160-3304	97160-3326	QUANTITY
ITEM			FA NON PART	FA NON PART	TOTAL
NUMBER	ITEM	UNIT			
455-133-	SHEET PILING STEEL	SF	55287.000	.000	55287.000

Summary of Bridge Pay Items:

PAGE 1 OF 1						
ITEM			97160-3304	97160-3304	97160-3304	97160-3304
			BR # 970255	BR # 970256	BR # 970257	BR # 970258
NUMBER	ITEM	UNIT	FA NON PART	FA NON PART	FA NON PART	FA NON PART
455-15--	PILE HOLES PERFORMED	EA	1	2	2	1
						2

Summary of Bridge Pay Items Continued:

PAGE 1 OF 1				97160-3304	QUANTITY
ITEM			BR # 970260		TOTAL
NUMBER	ITEM	UNIT	FA NON PART		
455-15--	PILE HOLES PERFORMED	EA	1		9

Standard Specifications for Road and Bridge Construction - 1991 Edition

DIVISION I

General Requirements and Covenants

Section 2 - PROPOSAL REQUIREMENTS AND CONDITIONS

...

2-2 Proposal Forms.

...The proposal form will state the location and description of the work to be done and will show the estimate of the various quantities, the kinds of work to be performed and the time in which the work must be completed; also, the amount of proposal guaranty, and the date, time and place of the opening of the proposals....

Section 4 - SCOPE OF THE WORK

...

4-3 Alteration of Plans or of Character of Work

4-3.1 General: Alterations provided for herein shall not be considered as a waiver of any conditions of the contract or the bond, nor to invalidate any of the provisions thereof.

4-3.2 Increase or Decrease in Quantities:

4-3.2.1 Significant Changes in the Character of Work: The Engineer reserves the right to make, in writing, at any time during the work, such changes in quantities and such alterations in the work as are necessary to satisfactorily complete the project. Such changes in quantities and alterations shall not invalidate the contract nor release the surety, and the Contractor agrees to perform the work as altered.

If the alterations or changes in quantities significantly change the character of the work under the contract, whether or not changed by any such different quantities or alterations, an adjustment, excluding loss of anticipated profits, will be made to the contract. The basis for the adjustment shall be agreed upon prior to the performance of the work. If a basis cannot be agreed upon, then an adjustment will be made either for or against the Contractor in such amount as the Engineer may determine to be fair and equitable.

If the alterations or changes in quantities do not significantly change the character of the work to be performed under the contract, the altered work will be paid for as provided elsewhere in the contract.

The term "significant change" shall be construed to apply only to the following circumstances: determine to be fair and equitable.

(A) When the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction or

(B) When a major item of work, as defined elsewhere in the contract, is increased in excess of 125 percent or decreased below 75 percent of the original contract quantity. Any allowance for an increase in quantity shall apply only to that portion in excess of 125 percent of original contract item quantity, or in case of a decrease below 75 percent, to the actual amount of work performed....

...

4-3.2.3 Conditions Requiring Supplemental Agreement: Supplemental agreement shall be used to clarify the plans and specifications of the contract; to document quantity overruns that exceed five percent of the original contract amount; to provide for unforeseen work, grade changes, or alterations in plans which could not reasonably have been contemplated or foreseen in the original plans and specifications; to change the limits of construction to meet field conditions; to provide a safe and functional connection to an existing pavement; to settle contract claims; and to make the project functionally operational in accordance with the intent of the original contract.

...

Supplemental Specifications 1994

4-3.2.3 Conditions Requiring Supplemental Agreement is expanded as follows:

Additional or unforeseen work of the type already provided by the contract for which there is a contract price will be paid for at such contract price in accordance with 4-3.2.1.

Additional or unforeseen work having no quantity or price provided in the contract will be paid at a negotiated price.

Where the cost is negotiated, the Contractor shall submit an estimate to the Department in terms of labor, materials, equipment, overhead, and other expenses incurred solely as a result of the additional or unforeseen work.

...

End Supplemental Specifications 1994²

Contract Special Provisions Page 8:

7. CONDITIONS REQUIRING SUPPLEMENTAL AGREEMENTS.

SUBARTICLE 4-3.2.3 (Page 3 of the Supplemental Specifications) The text is deleted and the following substituted.

Additional or unforeseen work of the type already provided by the contract for which there is a contract price will be paid for at such contract price in accordance with 4-3.2.1.

Additional or unforeseen work having no quantity or price provided in the contract will be paid at a negotiated price.

Where the cost is negotiated, the Contractor shall submit an estimate to the Department in terms of labor, materials, equipment, overhead, and other expenses incurred solely as a result of the additional or unforeseen work.

...

Where a price cannot be negotiated for additional or unforeseen work having no quantity or price provided in the Contract, payment shall be made in accordance with the following criteria:

- (1) Labor - Payment for labor and burden shall be based on actual costs of the additional or unforeseen work plus a markup of 25%.
- (2) Material & Supplies - Payment for material & supplies shall be based on costs directly related to the additional or unforeseen work plus a markup of 17.5%. Material is defined as any item used in the work which remains a part of the project. The cost of supplies may be the pro-rata portion caused by the additional work.
- (3) Equipment - Payment for Contractor owned equipment shall be determined as described above, plus a markup of 7.5%. Payment for rented equipment shall be based on invoice cost plus 7.5%.
- (4) General Liability Insurance and Bond - A markup of 1.5% will be allowed on the overall total cost of the additional or unforeseen work.
- (5) the Contractor will be allowed a markup of 10% on the first \$50,000 and a markup of 5% on any amount over \$50,000 on any subcontract directly related to the additional or unforeseen work.

Referenced markups in (1) through (5) above include all indirect costs such as increased Home Office overhead, etc.

amount over \$50,000 on any subcontract directly related to the additional or unforeseen work.

² This Supplemental Specification is deleted by the Contract Special Provisions.

Subcontractors who actually perform the additional or unforeseen work will be allowed all markups specified herein.

The text of this subarticle does not apply to a delay claim.

End of Contract Special Provision.

4-4 Unforeseeable Work

When work is required which is not covered by a price in the contract and such work does not constitute a "Significant Change" as defined in 4-3.2.1, and such work is found essential to the satisfactory completion of the contract within its intended scope, an adjustment will be made to the Contract. The basis of payment of such adjustment will be in the amount as the Engineer may determine to be fair and equitable.

Section 5 - CONTROL OF THE WORK

5-4 Errors or Omissions in Plans or Specifications

The Contractor shall take no advantage of any apparent error or omission which he might discover in the plans or specifications but shall forthwith notify the Engineer of such discovery, who will then make such corrections and interpretations as he deems necessary for reflecting the actual spirit and intent of the plans and specifications.

5-12 Claims by Contractor

Where the Contractor deems that extra compensation is due him for work or materials not clearly covered in the contract or not ordered by the Engineer, the Contractor shall notify the Engineer in writing of his intention to make claim for extra compensation, before he begins the work on which he bases the claim. If such notification is not given, and the Engineer is not afforded proper opportunity for keeping strict account of actual cost, then the Contractor thereby agrees to waive the claim for such extra compensation. Such notice by the Contractor, and the fact that the Engineer has kept account of the cost shall not in any way be construed as establishing the validity of the claim or the allowability or method for computing any compensation of such claim. In case the claim, after consideration by the Engineer, is found to be valid, it shall be allowed and paid for as an extra as provided herein. Nothing in this Article shall be construed as establishing any claim contrary to the terms of 4-3.

Section 9 - MEASUREMENT AND PAYMENT

9-3 Compensation for Altered Quantities:

9-3.1 General: Whenever any change or combination of changes in the plans results in an increase or decrease in the original contract quantities, and the work added or eliminated is of the same general character as that shown on the original plans, the Contractor shall accept payment in full at the original contract unit prices for the actual quantities of work done, and no allowance will be made for any loss of anticipated profits because of increases or decreases in quantities; provided, however, that increased or decreased work covered by a supplemental agreement shall be paid for as stipulated in such agreement.

Section 455 PILING is deleted and the following substituted per Supplemental Specifications to the 1991 Standard Specifications for Road and Bridge Construction - 1994 Edition

Section A455 - STRUCTURES FOUNDATIONS - PILING

A455-2 CLASSIFICATION.

Piling shall be classified as follows:

- (5) Sheet Piling.
 - (a) Concrete sheet piling.
 - (b) **Steel sheet piling.**

A455-3.10 Preformed Pile Holes

A455-3.10.1 Description. *Preformed pile holes are holes necessary due to the presence of rock or strong strata of soils which will not permit the installation of piles to the desired penetration by driving or a combination of jetting and driving or holes determined necessary by the Engineer or when authorized by the Engineer to minimize the effects of vibrations on adjacent existing structures. Preformed holes may be required for any type of pile, including sheet piles. Preformed Pile Holes serve as a penetration aid when all other pile installation methods fail to produce the desired penetration and when authorized by the Engineer to minimize the effects of vibrations on adjacent structures. All piles installed in Preformed Pile Holes shall be driven to determine that the bearing requirements have been met.*

Any voids between the pile and soil remaining after driving through preformed holes shall be filled with concrete sand or other approved clean sand or other approved clean sand in an approved manner.

A455-3.10.2 Provisions for Use of Preformed Pile Holes. *The necessity for Preformed Pile Holes will generally be anticipated and a pay item included in the proposal. When no pay item for Preformed Pile Holes is included in the contract, the work of providing preformed holes will be considered as Unforeseeable Work, when it is established that the required results cannot be obtained when driving the piles with specified driving equipment, while jetting the piles and then driving, or while jetting the piles during driving.*

A455-3.10.3 Conditions Under Which Payment Will Be Made. *Payment for Preformed Pile Holes will be made where it is demonstrated that such work is necessary to achieve the required penetration of the pile. Conditions considered as reasons for Preformed Pile Holes shall include, but not be limited to, the following:*

- (a) *Inability to drive piles to the required penetration with driving and jetting equipment.*
- (b) *To penetrate a hard layer (or layers) of rock or strong stratum which is not considered to be sufficiently thick to support the structure.*
- (c) *To obtain greater penetration into dense (strong) material and into dense material containing holes, cavities or unstable soft layers.*
- (d) *To obtain penetration into a stratum in which it is desired to found the structure.*
- (e) *to minimize the effects of vibrations or heave on adjacent existing structures.*
- (f) *To obtain a penetration up to 20 feet (except where a required pile penetration in excess of 20 feet is shown in the plans or Special Provisions).*
- (g) *to minimize the effects of ground heave on adjacent piles.*

A455-3.10.4 Construction Methods.

(a) **Bearing Piles:** *Preformed Pile Holes for bearing piles shall be constructed by drilling, or driving and withdrawing a suitable punch or chisel at the locations of the piles. ...*

(b) **Sheet Piles:** *Holes for sheet piles may be preformed by any approved method including trenching, provided that the depth is sufficient to obtain the required pile penetration. Holes for sheet piling shall be located in plan position. They shall be of proper width to permit installation without loss of the ability of the sheet pile to withstand lateral pressure. Preformed Pile Holes for sheet piles which are too large to provide lateral stability for the sheet pile shall be backfilled with concrete sand or commercial grade concrete aggregate prior to backfilling to provide lateral stability and maintain alignment.*

A455-7 SHEET PILING.

A455-9.8 Preformed Pile Holes. *The quantity to be paid for under this item shall be the number of completed Preformed Pile Holes acceptably provided, complete for installation of the piles, regardless of the type of pile installed therein. Only such holes as authorized to be paid for, as provided in A455-3.10, will be included in the measurement for payment. Preformed pile holes shall be authorized for payment only when the pile has been placed in proper position and has achieved the desired ^{penetration} installation of the piles, regardless of the type of pile installed therein. Only such*

When preformed holes are used to obtain total penetration of the piles in excess of 20 feet, the work of performing the holes shall be considered as Unforeseeable Work except when the required penetration in excess of 20 feet is shown in the plans as provided in A455-3.10.3.

A455-10.14 Items of Payment. The prices and payments specified in A455-10.1 through A455-10.13 above, shall be full compensation for all the work specified herein.

Payment shall be made under:

- ...
- Item No. 455-15 - Preformed Pile Holes - each.
- ...
- Item No. 455-133 - Steel Sheet Piling - per square foot.

Conclusion:

Based on the wording of the Work Order:

“It was agreed to permit the Contractor to trench the sheeting part way in to assist his driving operations and mitigate the vibrations to adjacent home owners.

Mike Cone offered to get the Preformed Pile Hole work started for \$20,000.00 or on a time and material basis.

coupled with the language contained in the Supplemental Specifications:

A455-3.10.1 Description. *Preformed pile holes are holes necessary due to the presence of rock or strong strata of soils which will not permit the installation of piles to the desired penetration by driving or a combination of jetting and driving or holes determined necessary by the Engineer or when authorized by the Engineer to minimize the effects of vibrations on adjacent existing structures. Preformed holes may be required for any type of pile, including sheet piles. Preformed Pile Holes serve as a penetration aid when all other pile installation methods fail to produce the desired penetration and when authorized by the Engineer to minimize the effects of vibrations on adjacent structures. All piles installed in Preformed Pile Holes shall be driven to determine that the bearing requirements have been met.*

A455-3.10.3 Conditions Under Which Payment Will Be Made. *Payment for Preformed Pile Holes will be made where it is demonstrated that such work is necessary to achieve the required penetration of the pile. Conditions considered as reasons for Preformed Pile Holes shall include, but not be limited to, the following:*

- (e) *to minimize the effects of vibrations or heave on adjacent existing structures.*

A455-3.10.4 Construction Methods.

- (a) ...
- (b) *Sheet Piles: Holes for sheet piles may be preformed by any approved method including trenching, provided that the depth is sufficient to obtain the required pile penetration.*

the Board finds that the trenching authorized is a method of Preforming Pile Holes.

The contract plans specify the location and character of anticipated Preformed Pile Holes as contemplated between the parties at bid time:

Nine (9) Preformed Pile Holes - one or more at the various Bridge sites.

This is located in the Summary of Bridge Pay Items. Item 455-133 - Sheet Piling Steel is found in the Summary of Roadway Pay Items. There is no item for Preformed Pile Holes found within the Roadway Pay Items.

It is obvious that the Department did not anticipate the necessity for Preformed Pile Holes for the Sheet Pile Walls as stated in:

A455-3.10.2 Provisions for Use of Preformed Pile Holes. *The necessity for Preformed Pile Holes will generally be anticipated and a pay item included in the proposal. When no pay item for Preformed Pile Holes is included in the contract, the work of providing preformed holes will be considered as Unforeseeable Work, when it is established that the required results cannot be obtained when driving the piles with specified driving equipment, while jetting the piles and then driving, or while jetting the piles during driving.*

will generally be anticipated and a pay item included in the proposal. When no pay item for Preformed

FLORIDALANTON CHELES
GOVERNOR**DEPARTMENT OF TRANSPORTATION**

605 Suwannee Street, Tallahassee, Florida 32399-0450

April 28, 1997

SEN. G. MATTE
SECRETARY

Mr. James W. Lundy
Project Administrator
Cone Constructors, Inc.
6735 South Lois Avenue
Tampa, Florida 33622-2869

RE: CLAIMS REVIEW COMMITTEE
State Project No. 97160-3304
Polk County Parkway
Pre-formed Pile Holes

Dear Mr. Lundy:

The Claims Review Committee met on April 25, 1997 to review the Claim concerning pre-formed pile holes on the above referenced project.

After a thorough review of the claim as presented by Jim Lundy, Kent Selzer and the Department representatives we came to the following conclusions:

1. The extra work was pre-formed pile holes.
2. The work was unforeseen.
3. There was an item in the contract for pre-formed pile holes in the Bridge section of the plans.
4. There was no item in the roadway plans for pre-formed holes.
5. The steel sheet piling was in the roadway section of the plans.
6. Pre-formed pile holes were not anticipated for the sheet piling.
7. The type of work and equipment necessary to pre-form holes for structural piling is very different in nature than that necessary to pre-form holes for sheet piling.
8. The Department is obligated to make fair and equitable payment, or negotiate for work which is not covered in the contract, or is of a different nature than that in the contract.
9. The Department did maintain records and made a unilateral payment based on men and materials necessary to complete the work with mark-ups as provided in the specifications.

Therefore based on the above conclusions, the Department feels you have been fairly compensated for the unforeseen work necessary to complete the steel sheet pile section of the roadway.

Sincerely,

Jimmy B. Lairsey, P.E.
Director, Office of Construction

JBL/wc

cc: Mr. Bruce Seiler
Mr. Charles Wegman
Mr. Jim Moulton, Jr.
Mr. Jim MacLaughlin
Mr. Freddie Simmons

FYI
bcc: Hanson
Duke
Norton

Duke