June 21, 2005

Cynthia Snow White Project Manager Ranger Construction Industries, Inc. 1200 Elboc Way Winter Garden, Florida 34787 E-Mail: (swhite@rangerconstruction.com) E-Mailed June 21, 2005

David Vogel Project Engineer HNTB 727 Lee Jackson Hwy Haines City, FL 33844 E-Mail: (DVogel@hntb.com)

RE: SR 25 (US 27) FROM A PT S OF BLUE HERON BAY BLVD TO A PT N OF CR 547 Project Number 403890-1-52-01 Polk County

Issue No. 1: Extra Depth Asphalt

Dear Sir and Madam:

The Owner, Florida Department of Transportation (Department) and Contractor, Ranger Construction Industries, Inc. (Ranger) requested a hearing to determine <u>entitlement</u> of Ranger to additional compensation and contract time for Extra Depth Asphalt Shoulders encountered on the above referenced project. Should entitlement be established, the Dispute Review Board (Board) was not to decide the quantum of such entitlement at this time, as the parties would attempt to negotiate the value of entitlement.

Pertinent issues, correspondence and other information relating to the Department's and the Contractor's positions were forwarded to this Board for review and discussion at the hearing that were held on June 8th 2005.

CONTRACTOR'S POSITION:

Ranger Construction Industries, Inc (RCI) has requested additional compensation and contract time from the FDOT for unforeseen work associated with the removal of the existing outside shoulder on the above referenced project. This request is based on Supplemental Specification 4-3.7 (Differing Site Conditions), which reads as follows:

"During the progress of the work if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the contract, or if unknown physical conditions of an unusual nature **differing materially from those ordinarily encountered at the site**, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the contractor disturbs the conditions to perform the affected work. Upon receipt of written notification of differing site conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly... "

RCI notified the FDOT of the differing site condition in writing on December 2, 2004. A completed cost and time analysis was submitted to the Department on March 15, 2005, after all existing shoulder had been removed and all costs incurred. The FDOT has denied our request for additional compensation, stating that the material encountered did not meet the requirements of Supplemental Specification 4-3.7.

As required in Supplemental Specification 2-4 (Examination of Plans, Specifications, Special Provisions and Site of Work) RCI examined the contract documents and the site of the proposed work carefully and investigated, to the fullest extent possible, the conditions to be encountered during construction before submitting the bid for this project. Unfortunately, because it would require lane closures, it is highly unlikely that the FDOT would allow numerous bidding contractors to investigate the latent conditions of the existing roadway by cutting cores at random locations prior to bid. Therefore, a bidding contractor must rely on information provided in the contract documents and/or industry experience. Because the contract documents do not specify the exact depth of the existing outside shoulder, RCI assumed the asphalt thickness would not

exceed what would normally be encountered and included costs to remove the expected asphalt in the lump sum clearing and grubbing pay item. This assumption is supported by the following information:

- The FDOT Design Standard (Index No 514) includes a thickness chart for the optional base codes. If RCI was simply encountering an area that had been previously constructed with asphalt base in lieu of limerock base, the thickness should not have exceeded 6 to 7 inches (4 inches of asphalt base and 2 to 3 inches of asphalt). Portions of the existing asphalt shoulder reached depths of 13 ³/₄ inches (with turn lanes reaching 17" of asphalt). Even if the shoulders were constructed with asphalt base, the encountered thicknesses are twice what would reasonably be expected. (see attachment #1 - FDOT Base Thickness and Option Codes)
- 2. RCI has constructed and continues to construct numerous FDOT projects within the Central Florida Market (see attachment #2 - list of active Ranger projects within. Central Florida). It is our experience that existing asphalt shoulders do not reach depths of the thickness encountered on this project. In instances where thicker asphalt has been encountered, it is generally noted in the plans. No such note exists in the plans for this project.
- 3. During the construction of FDOT FIN #213502-1-52-01, RCI encountered a similar situation where the existing shoulders were found to be excessively thick. In this occurrence, RCI was granted contract time and compensated for the additional costs incurred. (See attachment #3 Supplemental Agreement)
- 4. The FDOT Materials Department posts a Pavement Composition Data Sheet on its website. Although this information is intended to provide the bidding contractors with data needed to create asphalt mix designs using the milled material, it also includes core locations and core length. The FDOT recorded 2 cores in Outside Right areas and 2 cores in Outside Left areas. The 4 recorded core lengths are 2.75", 2.60", 2.80", 2.50". (See attachment #4 - Pavement Composition Data Sheet)
- 5. As is shown in the 2 attached DRB Recommendations (Attachment #5), it is not uncommon for other bidding contractors to also presume existing asphalt depths based on industry experience. In both cases, the DRB Board ruled in favor of the contractor when excessively thick asphalt was encountered.

As it stands now, the FDOT is taking advantage of the unexpected latent physical conditions on the project. They have received the benefit of RCI's bid assumption that the existing asphalt shoulders would contain asphalt depths that are consistent with the industry norm. Our costs to clear and grub the project are based on these assumptions, and are clearly lower than the actual cost to remove existing outside shoulders with asphalt thicknesses up to 13 ³/₄ inches and turn lanes with asphalt depths of up to 17". RCI is only requesting to recover costs above the reasonable assumptions made at bid time. Had the FDOT provided accurate subsurface information prior to bid, these same costs would have been included in ours, and other contractors', bids.

In closing, RCI maintains that we are entitled to additional compensation for costs incurred as a result of actual field conditions differing from conditions that were reasonably anticipated at the time of bid. Further, RCI requests a contract time extension based on the fact that the additional asphalt depth increased the duration of the asphalt removal and consequently, delayed the subgrade activity, which was a controlling item for the project during the time of this issue. (See attachment #6 - CPM Update for December 2004 and January 2005)

RCI requests that the Dispute Review Board answer the following questions: Is the Contractor entitled to:

- 1) Additional compensation for unforeseen costs associated with the removal of the asphalt that exceeded 3 inches in depth?
- 2) Additional contract time for delays to the Controlling Item of Work (subgrade / stabilization)?

DEPARTMENT'S POSITION:

Background

This project consists of milling and resurfacing and widening 2.5 miles of US 27. The widening for this project is accomplished by removing the outside shoulders and turn lanes and constructing a new 13 foot travel lane and 5 foot shoulder. The existing pavement averaged approximately 11.5 inches thick¹ Ranger Construction Industries (RCI) began the pavement removal on December 9, 2004. During the next 40 days

they attempted removal of the pavement on 4 occasions accomplishing approximately 17% of the total removal. The activity resumed with Delta Milling that completed the removal of the remaining 83% of the pavement in 17 work days²

Contractor's Claim

RCI is requesting \$84,457.88 and 33 days for the cost of removing the existing pavement. They state that their request for additional compensation and time is based on the existing asphalt pavement being thicker and harder than they anticipated. In a February 2, 2005 letter RCI made the following statements³

- The contractual basis of the claim is Supplemental Specification 4-3.7, Differing Site Conditions.
- Their intent was to use a reclaimer to pulverize the existing pavement and use the mixture as a stabilizer additive for the Type B Stabilization.
- *RCI assumed the existing asphalt thickness was 4 inches.*

The request was denied in a March 23, 2005 Ietter⁴

Department's Position

Article 4-3.7 presents the following two scenarios that must be met for additional compensation⁵

• Latent or subsurface conditions are encountered that differ materially from those indicated in the Contract.

or

• Unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided in the Contract are encountered at the site.

An adjustment to Contract will be made if the Engineer finds that conditions materially differ and impact the cost and or time to accomplish the work. The denial was based on the findings that the claim did not meet the requirement of Article 4-3.7.

The first condition would be met if the plans or contract made representations as to the composition of the existing pavement that proved erroneous. A thorough examination of all documents fails to expose any such representations. The plans make no statement as to the thickness or composition of the existing pavement. Removal of any and all flexible pavement, without regard to thickness, is addressed by Supplemental Specification 110, Clearing and Grubbing⁶ This Pay Item is included in the Contract and the removal of the existing pavement is shown to be covered by Standard Clearing and Grubbing on the Typical Section on plan sheet 6⁷

The second condition of Article 4-3.7 is also not met. It is not uncommon or unusual to encounter existing asphalt thicknesses of 11.5 inches or greater. The Department and others via permit routinely use asphalt base to construct turn lanes, widening and shoulders. This is done to speed construction in areas with high traffic volumes or in areas with restricted room. Recent projects in the District have encountered similar conditions:

- The US 27 reconstruction project through Haines City, FIN 197679, has had removal of existing asphalt up to 10 inches thick.
- SR 60 in Bartow, FIN 197168, has removed pavement of up to 15 inches in thickness
- US 98 in Lakeland, FIN 197638, has encountered and removed asphalt up to 12 inches.

In all cases the contractors on the project performed the removal of the pavement with the sole compensation of Pay Item 110-1, Clearing and Grubbing. Furthermore the contractor is obligated per Article 2-4, Examination of Plans, Specifications, Special Provisions and Site of Work, to examine the site of the proposed work to determine the conditions⁸. Since the contractor's stated intent to reclaim the asphalt into stabilizer is so dependent upon the thickness it would seem prudent that they would have tried to determine the feasibility (i.e. the thickness). It would not have been difficult for the contractor to expose the edge of pavement using a shovel to determine the thickness of the existing pavement prior to bidding.

Summary

It is very common to encounter existing pavements with thicknesses of 12 inches or greater on Florida highways. This is caused by several reasons such as repeated overlays, the use of asphalt base and the repair of subsiding pavement. The contractor's compensation for the removal of existing asphalt pavement is limited to Clearing and Grubbing. In extreme cases, they may also receive additional compensation with adjustments to Pay Item 120-6, Embankment which would be adjusted to reflect any additional fill needed to provide the template shown in the plans.

Endnotes

¹Existing Asphalt Thickness and Number of Milling Passes (2 pages)
²Production Days for Milling Shoulders and Turn Lanes
³February 2, 2005 Letter from White to Vogel re. Thick Asphalt
⁴March 23, 2005 Letter from Vogel to White re. Thick Asphalt Entitlement
⁵Article 4-3 Supplemental Specifications FIN 403890 (4 pages)
⁶Article 110-1 Supplemental Specification FIN 403890 (7 pages)
⁷Plan Sheet 6, Typical Section FIN 403890
⁸Article 2-4 Supplemental Specification FIN 403890

DEPARTMENT'S REBUTTAL:

Ranger stated on Page 2 that determining the thickness of the existing shoulders would require a lane closure and cutting cores. This is not true. In approximately 30 minutes we were able to expose the edge of the existing shoulder and measure the thickness in the section north of the project. This was accomplished without a lane closure using only a shovel and ruler. (See photo below)



Ranger is correct the contract documents do not specify the depth of the existing shoulder.

The next comments apply to RCI's supporting citations number 1 through 4.

RCI Citation 1 - Ranger includes Index 514 which depicts the thicknesses for base groups. Their example may be typical of new shoulder construction today but not necessarily of construction in the past. There are numerous reasons why thicker asphalt may be encountered. Some are:

- Work may have been performed under a maintenance permit or by maintenance forces that used different pavement designs.
- Pavement designs continually change.
- The area has been resurfaced thus adding to the asphalt thickness.
- Full depth asphalt is often used to speed construction and limit driver impacts. This is common when shoulders are added to an existing highway.

RCI Citation 2 - Ranger presented a list of active projects they have in Central Florida. They further state that the plans note when thicker asphalt is encountered. HNTB has been unable to confirm the inclusion of any such note on any plans. One of the projects cited, RCI's 3505008, is being administered by HNTB. The project CEI stated that thick asphalt removed at the east end of Seidel Road and there were no notes in the plans. RCI performed the work with no additional compensation.

RCI Citation 3 – Ranger included a Supplemental Agreement for FIN 213502-1-52-01 where the Department granted compensation and time for the removal of thick asphalt. In conversations with the Department, HNTB learned that the project was a Design Build and the DB team was provided erroneous pavement information that showed the existing shoulders had a limerock base.

RCI Citation 4 – Ranger presents the Department's Pavement Composition Data Sheet for the US 27 project. This sheet is an official contract document. The purpose is to provide the contractor with information on the pavement that is shown to be milled and resurfaced and does not represent material to be removed. However, an examination of the sheet shows widely varying thicknesses of the existing asphalt with core lengths up to 14.8 inches. This information is not meant to be all inclusive and merely represents the asphalt properties that may be encountered with the milled asphalt.

RCI Citation 5 – Ranger included two DRP rulings that found the contractor was entitled to additional compensation. The DRP is of course aware that past rulings do not set precedent. The two DRB rulings cited differ significantly from the current case. The first ruling for FPN 256337-1-52-01, cites the impacts of having less limerock for stabilization. This is not an issue with the US 27 project as RCI used the milled asphalt for stabilizer. The second ruling on SPN 97931-3357 is base on erroneous information. The plans implied that there was limerock under the pavement. The US 27 plans make no such assertion.

RCI Citation 6 – RCI's time impacts were due to delays in performing the work rather that additional time needed to actually remove the existing pavement. This is supported by RCI's own Exhibit 9. The schedule durations make no representation as to the cause of the additional time needed.

RCI Citation 7 – There is no exception taken to the asphalt depths cited.

RCIT Citation 8 – RCI provided proper notification.

BOARD FINDINGS:

The applicable specifications read:

4-3.7 Differing Site Conditions: During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the Contract, or if unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for. In the Contract are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the Contractor disturbs. the conditions or performs the affected work.

Upon receipt of written notification of differing site conditions from the Contractor, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the.: Contract, an adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly. The Engineer will notify the Contractor whether or not an adjustment of the Contract is warranted.

The Engineer will not allow a Contract adjustment for a differing site condition unless the Contractor has provided the required written notice.

The Engineer will not allow a Contract adjustment under this clause for any effects caused to any other Department or non-Department projects on which the Contractor may be working.

and

SECTION 110 CLEARING AND GRUBBING

110-1 Description.

Clear and grub within the areas of the roadway right-of-way and of borrow pits, sand-clay base material pits, lateral ditches, and any other areas shown in the plans to be cleared and grubbed. Remove and dispose of all trees, stumps, roots and other such protruding objects, buildings, structures, appurtenances, **existing flexible asphalt pavement**, and other facilities necessary to prepare the area for the proposed construction. Remove and dispose of all product and debris not required to be salvaged or not required to complete the construction.

The plan cross-sections do not identify the materials expected to be encountered in the existing shoulders.

It should have been apparent from a pre-bid site investigation that asphalt existed **on** the shoulders.

While it may be argued that the contractor could have performed a pre-bid site investigation that would have discovered that the shoulders were constructed of **full depth asphalt**, the same argument could be made that the designer could have done the same. Borings should have been included in the plans indicating that the shoulders were full depth asphalt. Even without borings, since this project is on a FDOT facility, the Department knew or should have known what the shoulder base was constructed of. Instead, without some indication that he would encounter shoulders constructed otherwise, the Contractor was left to bid the work based on the material "ordinarily" encountered.

The operable phrase is "ordinarily encountered".

"Ordinary" is that which is commonly encountered; the usual or normal condition encountered. While it is not unusual to encounter full depth asphalt shoulders, it is not the normal condition encountered.

The expected or commonplace condition or situation would be asphalt on limerock base.

BOARD RECOMMENDATION:

Based on the materials supplied to the Board and presentations to the Board at the DRB hearing, the Board finds <u>entitlement</u> of Ranger to additional compensation and contract time (to the extent the activity affected the critical path current at the time of the delay) for Extra Depth Asphalt Shoulders encountered on the above referenced project.

This 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 meetings of this DRB regarding these Issues and concur with the findings and recommendations.

Respectfully Submitted Disputes Review Board

John H. Duke, Sr.; DRB Chairman Rammy Cone; DRB Member Gary Geddes; DRB Member

SIGNED FOR AND WITH THE CONCURRENCE OF ALL MEMBERS:

John H. Duke, Sr. DRB Chairman