DATE: May 2, 2011 J. B. COXWELL CONTRACTING, INC. JOAQUIN OLIVELLA ATTN: EDDIE GREENE PROJECT ENGINEER 6741 LLOYD Rd. GAINESVILLE OPERATIONS CENTER JACKSONVILLE, FL 32254-1200 FDOT DISTRICT 2

RE: SR 329 RECONSTRUCTION FIN PROJ ID 207785-1-52-01

The D2 Regional Dispute Review Board held a hearing April 29, 2011 to determine entitlement for time and/or money involving the compaction method to be utilized on the Limerock Base Course.

DEPARTMENT'S POSITION

PROJECT DESCRIPTION

Work under this contract consists of the reconstruction of existing pavement (1.083 miles) to include 12 inches of stabilized sub-grade, optional base, and 2.5 inches of asphalt; replacement of existing curb; drainage and ADA improvements; signing and pavement markings and signalization to include new mast arm installation for FPID 20778515201; water and sewer line construction for FPID 20778515603, both on SR 329 (South Main Street from Depot Avenue to NW 8th Avenue) in Alachua County.

SUMMARY OF ISSUE

J.B. Coxwell Contracting, Inc, who will be referred to as JBCCI, states that the compaction of limerock base in static mode is not required under this contract and asked to be allowed to compact the limerock base in vibratory mode.

The Department denied this request using the following reasoning:

The Contract plans include a note directing the Contractor to compact asphalt and earthwork in static mode only so as to protect existing structures, existing storm sewer, and existing utility lines.

TYPICAL SECTION NOTES

2.) ALL COMPACTION OF THE ASPHALT AND EARTHWORK SHALL BE PERFORMED WITH ROLLERS OR COMPACTION MACHINERY IN STATIC MODE ONLY, DUE TO EXISTING STRUCTURES, STORM SEWER, AND UTILITY LINES.

The above mentioned note is found in all the typical sections of the Contract plans. The Engineer of Record states specifically in the plan note, to protect existing utility lines and structures, which are known to be old and fragile, from damage due to excessive compaction effort during the construction of the roadway.

It is the position of the Department that the use of vibratory compaction in the construction of <u>any</u> layer of the roadway would violate the letter and intent of the Contract plan note. Furthermore, the Department believes it would be unreasonable to conclude that the vibratory compaction of the limerock base could be allowed while the compaction of the roadway layers both below and above (stabilized sub-grade and asphalt layer) would be explicitly disallowed in order to protect utilities.

It is for these reasons that the Department directed JBCCI to follow the contract plan note and did not allow any vibratory compaction.

It is the Contractor's argument that the plan note shown below and found in the Typical Sections sheets of the contract plans addresses compaction of the Asphalt and Earthwork, but not of the Limerock Base. The Department has stressed the point that the intent of this plan note is not to address material treatment, but to address the protection of existing utility lines and structures in the area.

TYPICAL SECTION NOTES

2.) ALL COMPACTION OF THE ASPHALT AND EARTHWORK SHALL BE PERFORMED WITH ROLLERS OR COMPACTION MACHINERY IN STATIC MODE ONLY, DUE TO EXISTING STRUCTURES, STORM SEWER, AND UTILITY LINES.

The Engineer of Record followed common practice at the time of design (2007-2009) and intended in a modified plan note that compaction in static mode only was required for this

section of roadway. The EOR explicitly mentioned that the protection of structures and utility lines was the purpose of this note. It would be unreasonable for the Contractor to assume that the layer between the stabilized sub-grade and the asphalt layer would have a different impact on these existing structures and utilities if compacted in vibratory mode. J.B. Coxwell Contracting, Inc, who will be referred to as JBCCI, mentioned in their position paper, that the contract plans for SR-5 and SR-10 included a note directing the Contractor to compact all materials in static mode only. Such mentioned note differs from the note in this Contract plans because it does not make mention of its purpose, and does not address Protection of existing lines and structures.

TYPICAL SECTION No. 2

JBCCI mentioned that the note above was only found on Typical Section No. 1 (456.77ft) and Typical Section No. 3 (4,527.27ft). Typical Section No. 2 (812.46ft) does not include this note and cover those areas with parking bays on both sides of the roadway. It would be impractical for the Contractor to base their bid on only 14% of the length of roadway. Although the issue at hand is not the handling of material but the protection of the existing utility lines and structures, and the fact that a final limerock base lift of 6 inches can be achieved after compacting 8 inches of limerock in static mode, the Department did not enforce note No. 1 of Typical Section No. 2, and in all cases the desired product was obtained at the end.

The Department respectfully requests that there is no entitlement for time or money for the Limerock compaction.

CONTRACTOR'S POSITION

J. B. Coxwell Contracting, Inc. (JBCCI), contends that the compaction of limerock base in static mode is not required under this contract. JBCCI discussed this matter with the Department on several occasions. Reference is made to the discussions held between JBCCI and the Department at the pre-operations meeting held on 9-14-09, subsequent construction progress meetings, operations/field work planning meetings, and in written format via email dated 9-22-09, 10-01-09, 10-02-09, and formal letter dated 10-02-09. JBCCI contends that the contract plan notes "typical section 1 and 3" directs the contractor to compact **"asphalt"** and **"earthwork"** in a static mode. While typical section 2 does not address compaction at all. Rather, note number 1, on typical section 2 reads: "Should the contractor choose to use limerock as the optional base, construct the base in 8" lifts to achieve a 6" lift after compaction. The same note regarding the compaction of the limerock base is also present on typical section 3, in note number 2. It is JBCCI's position that limerock base cannot be compacted in an 8" lift to compress the material to a final 6" lift strictly by using a static mode compaction operation. This note refers to the FDOT standard specifications, section 200 for "Rock Base" with regards to the allowable placement and thickness of the material installed. This note does not refer to the type of compaction method required to achieve the required density for this material.

The plan note refers to "earthwork", and it is our understanding of the earthwork or finished grading template as discussed in the plans preparation manual vol.1, section 3.1.1 dated 11/01/09 and FDOT specifications section 120-2.3 does not include the roadway base, as the base lies above the earthwork template.

At the time of bid, we evaluated the plan note and understood that the compaction of the earthwork (area to include the 12" sub-grade and below) was to be performed in a static mode. However, as stated before, the roadway base is not part of earthwork. Also, JBCCI compared these contract plans with the FDOT District 2 projects recently performed by our firm and noted that the other projects's plan notes and typical sections contained very clear statements such as: "ALL COMPACTI ON FOR ANY MATERIAL SHALL BE LIMITED TO THE STATIC MODE ONLY", or another variation of that statement for "ALL MATERIALS (to include asphalt, base, and earthwork)". Concise statements like the plan notes described above are shown as examples from recent projects performed by JBCCI on SR-5 and SR-10 which do not leave the issue up for interpretation.

Included in our contract were major Gainesville Regional Utility Water and Sewer (GRU) utility removals and replacements along the project corridor. The "fragile existing utilities" were removed and/or abandoned in place after their replacements were cleared for public use

through the DEP and GRU testing processes. The roadway re-construction was performed only after the utilities in question were upgraded and placed into service.

The Department states that it would be unreasonable to assume that the limerock could be compacted in the vibratory mode when the layers above and below the base were specifically prohibited from vibratory compaction. The layer above the limerock is asphalt superpave. Vibratory compaction of superpave asphalt is not allowed as vibration tends to move the asphalt sideways. That leaves, according to the plan notes only the earthwork with no vibratory compaction. This is not unreasonable.

CONCLUSION

It is for these reasons that the JBCCI asked the Department to allow vibratory compaction for the construction of the limerock base. Once this request was denied and we felt that we could not reach an understanding on this issue, JBCCI filed our notice of intent to file a claim to seek additional compensation and contract time for this matter. The Department's direction to proceed with static mode compaction of the limerock base caused JBCCI's operations to increase personnel and equipment over the anticipated amounts included with our original bid, which led to longer durations and increased costs for the limerock base construction.

JBCCI asks the Regional Dispute Review Board to assign entitlement for this issue, to allow the negotiation of fair and equitable compensation and additional contract time for the work performed under the static mode base construction.

BOARD FINDINGS

At first reading it would appear that the plan sheet notes intended to convey that all layers of the re-constructed road were to be compacted by static means. However, the contractor pointed out that the upper layer (super pave asphalt) is no longer compacted using vibratory rollers as it tends to "walk" sideways due to the vibrations. Now there are only two layers left to consider. Of the two remaining layers only one, earthwork has the requirement of compacting by non-vibratory methods. The plan notes are silent as to how to compact the base course. The plan notes do say "if the contractor chooses to use limerock for the optional base it is to be place in 8" lifts to give a compacted thickness of 6". It is impossible to place an 8" layer of limerock and compact it to 6" lift as the lime rock will "bridge" after two or three inches and the remainder of the layer will be loose.

BOARD RECOMMENDATIONS

The Board recommends that there is entitlement to time and money. The Board appreciates the time and effort of the FDOT and J.B.Coxwell Contracting, Inc. in the preparation of the documentation and their presentations.

Signed with concurrence of the entire Board.

Peter A. Markham, PE

Chairman