## AGREEMENT

THIS AGREEMENT entered into this 27th day of February , 2006, by and between the BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA, a political subdivision of the State of Florida, hereinafter referred to as "Owner", and Douglas Asphalt Company , doing business as (a corporation, a partnership, or an individual), hereinafter referred to as "Contractor".

WITNESSETH: For and in consideration of the payments and agreements hereinafter mentioned, the parties agree as follows:

- 1. Contractor shall perform all work and furnish all necessary labor, equipment, material, and transportation for the Full Depth Reconstruction of CR 121 from US 1 to the Duval County Line, Nassau County, Florida, hereinafter referred to as the "Work".
- 2. The Work includes, but is not limited to, the full depth reclamation of approximately 35 miles of roadway, widening of existing roadway to a 25 foot wide base typical section with 12' travel lanes, reconstruction of paved connections to match new profile as needed, and optional installation of pavement, striping, reflective pavement markers, guardrails, and sod.

Contractor will provide all required testing and certifications except base proctor/density testing, which will be performed by the owner or owner's representative, at the owners cost.

- All Work is to be performed per Nassau County Ordinance 99-17 and the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, dated 2004, supplements thereto, when not specifically stated in the Special Provisions, or shown on the plans. FDOT Ride-ability standards shall not apply to this project.
- 3. The Contractor will commence the Work required by the Contract Documents within fifteen (15) calendar days after the date of the Notice to Proceed and will SUBSTANTIALLY complete the same within 90 consecutive calendar days, and fully complete the Project in a total of 150 consecutive calendar days after the date of the Notice

to Proceed unless the period for completion is extended otherwise by the Contract Documents.

Time is of the essence in the construction of this Project. The Owner will suffer financial damage if this Project is not substantially completed on the date set forth in the Contract Documents. Therefore, the Owner and the Contractor specifically agree that the Contractor shall pay to the Owner the sum of Three Hundred and no/100 Dollars (\$300.00) per calendar day or any part thereof elapsing between the date established as provided in Section 16 of the General Conditions, and the actual date upon which substantial completion is achieved. Moreover, if after thirty (30) calendar days after the date of substantial completion of the Project is achieved, the Project is not fully and finally complete, then the sum of Three Hundred and no/100 Dollars (\$300.00) per calendar day of any part thereof elapsing between the established date of final completion and the actual date of final completion shall be paid to the Owner by the Contractor.

These amounts to be paid to the Owner by the Contractor shall, in no event, be considered as a penalty or otherwise than the consequential and adjusted damages of the Owner because of the delay. Furthermore, the sums per calendar day or any part thereof set forth hereinabove, may be at the sole option of the Owner and may be deducted and retained out of the sums payable to the Contractor. If not so deducted, the Contractor shall remain liable therefore.

4. The Owner has determined and declared the abovenamed Contractor to be the lowest responsible bidder on the above referenced Project, and has duly awarded this Contract to said Contractor, for the sum named in the proposal, to-wit:

Six Million Eight Hundred Ninety Seven Thousand Nine Hundred Forty-Four & 56/100 (Amount of Bid)

The Owner shall pay the Contractor for the Work performed as follows: Payment for unit price items shall be at the unit price bid for actual construction quantities measured in place and approved by the Owner or its Resident Project Representative(s). Payment for lump-sum priced items shall be at the lump-sum price bid. set forth in Section 20 of the General Terms and Conditions. Supplemental to Section 20 is the following:

a. Copies of invoices for payment shall be simultaneously sent to the Contract Manager for review and recommendation for payment or non-payment. The Contract Manager shall submit the recommendation to the Engineering Services Director, who shall review the invoice and make a recommendation to the County Administrator, who shall review said invoice, who shall review said invoice and make a recommendation and forward same to the Clerk of the Court for review and submittal to the Board of County Commissioners. If there is a dispute as to a payment, and if it is not addressed by the Contractor and the County's representative, the dispute resolution shall be utilized.

The Owner reserves the right to make additions or deletions to bid quantities and/or portions of the bid at the bid item prices.

- 5. Contractor, by signing this Agreement, acknowledges that they have the ability to perform the work set forth in the attached documents and have performed their due diligence prior to execution of the contract and can proceed based upon the attachments and bid submittal.
- 6. The Owner will pay the Contractor in a manner and at such times as set forth in the General Conditions such amounts as required by the Contract Documents.
- 7. The term "Contract Documents" means and includes the following:
  - a. Bid Form
  - b. Sworn Statement
  - c. Bid Bond
  - d. Agreement
  - e. Notice of Award
  - f. Notice to Proceed
  - g. Change Order Request
  - h. Performance Bond
  - i. Payment Bond
  - j. Hold Harmless Agreement
  - k. General Conditions
  - 1. Specifications prepared by the Engineer
  - m. Drawings

- 8. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
- 9. All facilities, programs, and services should be compliant with the Florida Accessibility Code and the Federal Americans with Disabilities Act (ADA).
- 10. Appropriations necessary for the funding of this Agreement shall be adopted annually by the Board of County Commissioners during the regular budget process. Non-appropriation by the Board of County Commissioners will cause this Agreement to terminate.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in two (2) copies, each of which shall be deemed an original on the date first above written.

OWNER:

BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA

THOMAS D. BRANAN, JR

Its: Chairman

ATTEST:

JOHN A. CRAWFORD

Its: Ex-Officio Clerk

Approved-as-to-form-by-the Nassau-County-Attorney Approved as to form by the Nassau County Attorney:

MICHAELS. MULLIN

Douglas Asphalt Company

Jod Samen

By:

solvey fresi

See Page 2

# **Payment Bond**

Conforms with the American Institute of Architects, AIA Document A312.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address): DOUGLAS ASPHALT COMPANY 10010 NORTH MAIN STREET JACKSONVILLE, FLORIDA 32218 SURETY (Name and Principal Place of Business): ARCH INSURANCE COMPANY 3 PARKWAY, SUITE 1500 PHILADELPHIA, PA 19102

OWNER (Name and Address):

BOARD OF COUNTY COMMISSIONERS OF NASSAU
COUNTY, FLORIDA - P. O. BOX 1010
FERNANDINA BEACH, FLORIDA 32035-1010
CONSTRUCTION CONTRACT

Date:

Amount: SIX MILLION EIGHT HUNDRED NINETY SEVEN THOUSAND NINE HUNDRED FIFTY FOUR AND 56/100 DOLLARS (\$6,897,954.56)

Description (Name and Location): Full Depth Reconstruction of CR 121 from US 1 to the Duval County Line, Nassau County, Florida (35 miles of Roadway, Widening of existing Roadway to a 25 foot wide base typical section, etc)

BOND

Date( Not earlier than Construction Contract Date):

Amount: SIX MILLION EIGHT HUNDRED NINETY SEVEN THOUSAND NINE HUNDRED FIFTY FOUR AND 56/100 DOLLARS (\$6,897,954.56)

Modifications to this Bond:

CONTRACTOR AS PRINCIPAL

Company: DOUGLAS ASPHALT COMPANY

(Corporate Seal)

None SURETY

Company: ARCH INSURANCE COMPANY (Corporate Seal)

Signature:

Name and Title: Will South Vice (Any additional signatures appear on page 2.)

(Any additional signatures appear on page 2.)
(FOR INFORMATION ONLY Name, Address and

Telephone) AGENT or BROKER: H & H INSURANCE SERVICES, INC. - 3160 CAMPUS DRIVE, SUITE 100 NORCROSS, GEORGIA 30071 (770) 409-0014

- 1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.
- 2 With respect to the Owner, this obligation shall be null and void if the Contractor:
  - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and
  - 2.2 Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.

ATTORNEY-IN-FACT

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

- 3 With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.
- 4 The Surety shall have no obligation to Claimants under this Bond until:
  - **4.1** Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and, with substantial accuracy, the amount of the claim.
  - **4.2** Claimants who do not have a direct contract with the Contractor:
    - .1 Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and

- .2 Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and
- .3 Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.
- 5 If a notice required by paragraph 4 is given by Owner to the Contractor or to the Surety, that is sufficient compliance.
- **6** When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:
  - 6.1 Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
  - **6.2** Pay or arrange for payment of any undisputed amounts.
- 7 The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
- Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
- 9 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
- 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- 11 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which

- the work or part of the work is located or after the expiration of one year from the date (I) on which the Claimant gave the notice required by Subparagraph 4. I or Clause 4.2.3, or (2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (I) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 12 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page. Actual receipt of notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
- 13 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
- 14 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### 15 DEFINITIONS

- 15.1 Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in terms "labor, materials or equipment" that part of water, gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.
- **15.2** Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- 15.3 Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional signatur	res of added parties, oth	er than those appearing on the cove	r page.)
CONTRACTOR AS PRINCIPAL		SURETY	
Company:	(Corporate Seal)	Company:	(Corporate Seal)
Signature:		Signature:	
Name and Title:		Name and Title:	
Address:		Address:	

In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this 1st day of February, 2006
authorized officers, this <u>1st</u> day of <u>February</u> , 20 <u>06</u> .  Arch Insurance Company
Attested and Certified
Martin J. Nifsen, Secretary  The secretary Secretary  The secretary Secretary  The secretary Secretary Secretary Secretary  The secretary Secretar
STATE OF NEW YORK SS
COUNTY OF NEW YORK SS
I Peter J. Calleo, a Notary Public, do hereby certify that Edward M. Titus and Martin J. Nilsen personally known to me to be the same persons whose names are respectively as Vice President and Secretary of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.  PETER J. CALLEO, ESQ.  Notary Public, State of New York  Peter J. Calleo, Notary Public
No. 02CA6109336 Qualified in New York County CERTIFICATION  No. 02CA6109336  Qualified in New York County Commission Expires May 3, 2008  My commission expires 5-03-2008
I, Martin J. Nilsen, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said Edward M. Titus, who executed the Power of Attorney as Vice President, was on the date of execution of the attached Power of Attorney the duly elected Vice President of the Arch Insurance Company.
IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on thisday of, 20  Martin J. Nilsen, Secretary
This Power of Attorney limits the acts of those named therein to the bonds and undertakings specifically named therein and they have no authority to bind the Company except in the manner and to the extent herein stated.
PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:
Arch Surety 3 Parkway, Suite 1500 Philadelphia, PA 19102



C5-06-72

# CHANGE ORDER APPROVAL FORM

PROJECT: <u>CR121 Widening &amp; Resurfacing</u> CH	IANGE ORDER NUMBER: 01
Project- One month extension for date of completion	DATE:June 19, 2006
(from 08/03/06 to 09/03/06)	CONTRACT NUMBER:
TO CONTRACTOR: Douglas Asphalt Company	
Original Contract Sum	\$6,897,944.56
Net Change by Previous Change Order/Supplemental Ag	
Contract Sum Prior to This Change Order	\$6,897,944.36
Amount of This Change Order (Add/Deduct)	\$
New Contract Sum Including this Change Order	\$ 6,897,944.56
APPROVED BY:  Michael Maharey, County Administr	DATE: August 9, 2006
APPROVED BY: Michael Mullin, County Attorney	DATE: August 9, 2006
APPROVED BY: Thomas D. Branan, Jr. Chairman	DATE: August 9, 2006
APPROVED BY: A M. AMARIAN	DATE: August 9, 2006
ACCEPTED BY: Kill Mon Show Courts  Contractor	DATE: 8/14/06

#### AIA Document A312

# **Performance Bond**

BOND NO. SU1016646

Conforms with the American Institute of Architects, AIA Document A312.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address): DOUGLAS ASPHALT COMPANY 10010 NORTH MAIN STREET JACKSONVILLE, FLORIDA 32218 SURETY (Name and Principal Place of Business): ARCH INSURANCE COMPANY 3 PARKWAY, SUITE 1500 PHILADELPHIA, PA 19102

OWNER (Name and Address):

BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA - P. O. BOX 1010 FERNANDINA BEACH, FLORIDA 32035-1010

CONSTRUCTION CONTRACT

Date:

Amount: SIX MILLION EIGHT HUNDRED NINETY SEVEN THOUSAND NINE HUNDRED FIFTY FOUR AND 56/100 DOLLARS (\$6,897,954.56)

Description (Name and Location): Full Depth Reconstruction of CR 121 from US 1 to the Duval County Line, Nassau County, Florida (35 miles of Roadway, Widening of existing Roadway to a 25 foot wide base typical section, etc)

BOND

Date (Not earlier than Construction Contract Date):

Amount: SIX MILLION EIGHT HUNDRED NINETY SEVEN THOUSAND NINE HUNDRED FIFTY FOUR AND 56/100 DOLLARS (\$6,897,954.56)

Modifications to this Bond:

CONTRACTOR AS PRINCIPAL

Company: DOUGLAS ASPHALT COMPANY

(Corporate Seal)

None SURETY

Company: ARCH INSURANCE COMPANY (Corporate Seal)

See Page 2

Signature:

KUK SERVEY Name and Title: (Any additional signatures appear on page 2.)

(FOR INFORMATION ONLY - Name, Address and

Telephone) AGENT or BROKER: H & H INSURANCE SERVICES, INC. - 3160 CAMPUS DRIVE, SUITE 100 NORCROSS, GEORGIA 30071 (770) 409-0014

- The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
- 2 If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.
- If there is no Owner Default, the Surety's obligation under this Bond shall arise after:
  - 3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to

Signature Name and Title: JERRY BOUTWELL

ATTORNEY-IN-FACT

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and

- 3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and
- 3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
- When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

- **4.1** Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or
- **4.2** Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or
- **4.3** Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or
- **4.4** Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
  - After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or
  - .2 Deny liability in whole or in part and notify the Owner citing reasons therefor.
- 5 If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
- After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:
  - **6.1** The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
  - **6.2** Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and
  - **6.3** Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

- 7 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators or successors.
- 8 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 10 Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address shown on the signature page.
- 11 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 12 DEFINITIONS

- 12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
- **12.2** Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contract Documents and changes thereto.
- **12.3** Contractor Default: Failure of the Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.
- **12.4** Owner Default: Failure of the Owner, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional sign	natures of added parties, oth	er than those appearing on the cover	r page.)
CONTRACTOR AS PRINCIPAL		SURETY	
Company:	(Corporate Seal)	Company:	(Corporate Seal)
Signature:		Signature:	
Name and Title:		Name and Title:	
Address:		Address:	

### NOTICE OF AWARD

TO: Douglas Asphalt Company

10010 N. Main Street

Jacksonville, Florida 32218

PROJECT DESCRIPTION:

Widening/Resurfacing of CR 121 from US 1 to the Duval County Line Nassau County, Florida

The Owner has considered the Bid submitted by you for the above described Work in response to its Advertisement for Bids dated  ${\color{red}November~2,~2005}$ , and Information for Bidders.

You are hereby notified that your Bid has been accepted in the amount of \$6,897,944.56

You are required by the Information for Bidders to furnish the required Contractor's Performance Bond, Payment Bond, and certificates of insurance within ten (10) calendar days from the date of this Notice to you.

If you fail to furnish said Bonds and certificates of insurance within ten (10) days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid as abandoned and as such you forfeit your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the Owner.

DATED this 27th day of February , 20 06.

BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA

Its: Chairman

ATTEST:
John Cafe
JOHN A. CRAWFORD
Its: Ex-Officio Clerk
Approved as to form by the
Nassau County Attorney
1111
M/ Mula
MICHAEL S MILLIAN

# ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged by:

Hyle Sorrey, 2006.	 this	13	day
MAS			
By Kyle Sorty VICE President			

## NOTICE TO PROCEED

. . .

To: <u>Douglas Asphalt Company</u> Date: <u>02/27/06</u>
10010 N. Main Street Project: Bid No. NC025-05
Jacksonville, FL 32218
You are hereby notified to commence work in accordance
with the Agreement dated the,
2006, on or before the <u>6th</u> day of <u>March</u> , 2006,
and you are to substantially complete the Work within
consecutive calendar days, and fully complete the
Project in a total of $\underline{\hspace{1cm}}$ days after the date of
this Notice to Proceed. The Date of Completion of all Work
is therefore August 3, 2006
OWNER:
BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA
THOMAS D. BRANAN, JR.  Its: Chairman
JOHN A. CRAWFORD  Its: Ex-Officio Clerk
Approved as to form by the Nassau County Attorney

## ACCEPTANCE OF NOTICE

Receipt	of	the	above	Notice	To	Proceed	is	hereby
acknowled	dged	by:						

Douglas Asphalt Company, this 13 day of march, 2006.

Its:

	CORD, CERTIFIC	CATE OF LIAE					DATE /09/2006
PRODU	Willis North America, 26 Century Blwd.	877-945-737	ONLY ANI	THIS CERTIFICA	UED AS A MATTER O O RIGHTS UPON T ATE DOES NOT AME AFFORDED BY THE F	HE CE	ERTIFICATE EXTEND OR
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	Douglas, GA 31534		INSURERC: Zuz	ich American	Insurance Company (		27855-003 15105-091
251/5			INSURER E:				
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TR INS	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE	POLICY EXPIRATION	LM	TS	
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	CLAIMS MADE X OCCUR				MED EXP (Any one person)	\$	10,000
					PERSONAL & ADV INJURY		1,000,000
	GEN'L ACCRECATE LIMIT APPLIES PER:				PRODUCTS - COMPION AGG		2,000,000
	POLICY X PRO- LOC						220,0,000
1	X ANYAUTO	BAP937710702	10/31/2005	10/31/2006	COMBINED SINGLE LIMIT (Es saddent)	\$ 1	1,000,000
	ALLOWNED AUTOS  90HEDULED AUTOS				BODILY INJURY (Per person)	\$	
	X HIREDAUTOS X NON-OWNED AUTOS				BODII Y INJURY (Per recident)	\$	
					PROPERTY DAMAGE (Per accident)	s	
	GARAGELIABILITY				AUTOONLY - EA ACCIDENT	\$	
	ANYAUTO				OTHER THAN EA ACC		
3	EXCESS LIABILITY	UM01606797	10/31/2005	10/31/2006	EACHOCCURRENCE	\$ 1	1,000,000
	X OCCUR CLAIMS MADE				AGGREGATE	\$ 1	1,000,000
	DEDUCTIBLE					\$	
W	PETENTION \$ PORKERS COMPENSATION AND				X WC STATU: OTH	\$	
EN	MPLOYERS' LIABILITY	WC489529502	12/31/2005	12/31/2006	E.L. EACH ACCIDENT		1,000,000
A!	NY PROPRIETOR/PARTNER/EXECUTIVE FFICER/MEMBER EXCLUDED?				E.L. DISEASE - EA EMPLOYEE		L,000,000
111	yes, describe under PECIAL:PROVISIONS below				E.L. DISEASE - POLICY LIMIT		1,000,000
0	THER : xcess Workers Comp	SP1B98GA	12/31/2005	12/31/2006	\$1,000,000. Limit \$1,000,000. Limit	Each I	Accident Employee
ob I ew i	PTION OF OPERATIONS/LOCATIONS/VEHICLE Name: C.R. 121 — Reclai Location: Nassau CO., F Job No.: 06477 • of Work: Base Reclaim	m Paving L			Excess of SIR of \$	750,00	
ERT	IFICATE HOLDER		CANCELLAT	ION			
	Wassau County B.O.C.C Attn: Jose Deliz		DATE THEREOF, NOTICE TO THE IMPOSE NO OBL	THE ISSUING INSURI CERTIFICATE HOLDER IGATION OR LIABILIT	ED POLICIES BE CANCELLED ER WILL ENDEAYOR TO MAIL IN NAMED TO THE LEFT, BUT F Y OF ANY KIND UPON THE I	30	DAYS WRITTE
	Attn: Jose Deliz P.O. Box 1010 Fernandina Beach, FL 3203	35.	AUTHORIZED REP		th		
	RD 25 (2001/08) Co.	1=1538097 Tp1:4520			@ ACORD C		

Page 2 of 2

## **IMPORTANT**

If the certificate holder is an ADDITIONAL INSURED, the policy(les) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s)

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s)

#### DISCLAIMER

The Certificate of Insurance on the reverse side of this form does not constitute a contract between the Issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon

ACORD 25 (2001/08)

Coll:1538097 Tpl:452041 Cert:6936212

# **PROJECT MANUAL**

# CONTAINING

# BIDDING REQUIREMENTS, CONTRACT DOCUMENTS & SPECIFICATIONS

# **FOR**

CR 121 Widening & Resurfacing Bid No. NC025-05

Prepared for:

**Board of County Commissioners Nassau County, Florida** 

August 2005

#### ADVERTISEMENT FOR BID

**OWNER:** BOARD OF COUNTY COMMISSIONERS

OF NASSAU COUNTY, FLORIDA

Post Office Box 1010

Fernandina Beach, FL 32035-1010

Separate sealed BIDS for the construction of:

Widening & Resurfacing of CR 121 from US 1 to the Duval County line.

Bid No.: NC025-05

SEALED BIDS shall include an original and three (3) copies of the sealed bid and must be in writing and should be addressed to the Board of County Commissioners, C/O John A. Crawford, Ex-Officio Clerk, Nassau County Judicial Annex, 76347 Veterans Way, Yulee, Florida 32097. Bids will be received until 2:00 p.m. on November 2, 2005. Bids will be opened and read aloud at 2:05 p.m. on November 2, 2005 at the Office of the Ex-Officio Clerk to the Board of County Commissioners at the Judicial Annex, 76347 Veterans Way, Yulee, Florida 32097. Bids shall be sealed and clearly marked "CR 121 Widening/Resurfacing, Bid No.: NC025-05".

WORK shall consist of the following items:

#### PROJECT DESCRIPTION

#### Base Project:

Full Depth Reclamation (FDR) per the attached specification of approximately 35 miles of roadway, 25 ft. wide base typical section, stabilized with 3% cement or as indicated by actual conditions based on boring results, to an average depth of 6.5 inches below existing FDR to be performed in conjunction with Nassau County Road Bridge Department operations and other contractors to Project shall include excavation of a 2 to 3 foot wide determined. trench along both sides of existing edge of pavement to accommodate widening. Project shall also include profiling of reclaimed base as indicated in typical section. Nassau County Road & Bridge Department will provide the base material to be deposited in the widening trench for subsequent mixing with existing roadway materials during FDR.

#### Optional Bid Item No. 1:

Widening and reconstruction of approximately 35 miles of roadway, 25 ft., wide base typical section, stabilized with 4 inches of limerock deposited on top of the existing pavement for subsequent FDR to a depth of 6.5 inches below existing surface. Widening and reconstruction to be performed in conjunction with the Nassau County

Road & Bridge Department and other contractors to be determined. Project shall include excavation of a 2 to 3 foot wide trench along both sides of the existing edge of pavement to accommodate widening. Project shall also include profiling of reclaimed base as indicated in typical section.

### Optional Bid Item No. 2:

Paving of reclaimed base with 2 inch layer of SP 12.5 Level C fine graded asphalt per FDOT requirements as depicted by the plans. Optional bid item 1 shall also include the repaving of existing paved connections per plans including milling existing pavement as required to match new profile.

### Optional Bid Item No. 3:

Installation of guardrails per FDOT requirements as depicted by the plans.

### Optional Bid Item No. 4:

Installation of thermoplastic lane striping with glass beads and reflective pavement markers per FDOT requirements as depicted by the plans.

### Optional Bid Item No. 5:

Installation of latex lane striping with glass beads and reflective pavement markers per FDOT requirements as depicted by the plans.

#### Optional Bid Item No. 6:

Installation of 1 foot strip of Bermuda sod along both sides of the widened roadway section.

The work is to be coordinated through the Nassau County Engineering Services Department, which will also provide inspection services. Bidders must demonstrate successful experience with the FDR process in recent projects.

ALL BIDDERS must be qualified for the type of work for which the BID is submitted. BIDS must be enclosed in an opaque envelope and marked:

## CR 121 WIDENING/RESURFACING BID NO.: NC 025-05

# BIDS SHALL BE ADDRESSED TO: NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS

c/o John A. Crawford Ex-Officio Clerk 76347 Veterans Way Yulee, FL 32097

The CONTRACT DOCUMENTS, consisting of ADVERTISEMENT FOR BIDS, INFORMATION FOR BIDDERS, BID, BID BOND, AGREEMENT, GENERAL CONDITIONS, SUPPLEMENTAL GENERAL CONDITIONS (if applicable), PAYMENT BOND, PERFORMANCE BOND, NOTICE OF AWARD, NOTICE TO PROCEED, CHANGE ORDER, DRAWINGS, SPECIFICATIONS, SPECIAL CONDITIONS AND ADDENDA, MAY BE EXAMINED AT THE FOLLOWING LOCATION(S):

Nassau County Clerk of Courts 76347 Veterans Way Yulee, Florida 32097

Nassau County Engineering Services Department 96161 Nassau Place Yulee, Florida 32097

Copies of the CONTRACT DOCUMENTS may be obtained at the office of:

Nassau County Engineering Services Department 96161 Nassau Place Yulee, Florida 32097

Copies of the Plans and Specifications may be obtained at the office of Nassau County Engineering Services Department, 96161 Nassau Place, Yulee, Florida 32097. Charges for these Plans are twenty five dollars and twenty eight cents (\$25.28) for each complete set; which amount will not be refunded. Partial set of Plans and Specifications will not be issued. All requests for Plans and Specifications must be accompanied by a check or money order in the full amount of the purchase.

BIDS must be accompanied by a Certified Check or BID BOND of a reputable bonding company authorized to do business in the State of Florida in the amount of five percent (5%) of the total amount of the

BID to guarantee that the Contractor will enter into a Contract in the form prescribed and will provide the required bond.

The successful BIDDER(s) must provide an acceptable contract PERFORMANCE BOND in the amount of one hundred percent (100%) of the Contract Price, and a PAYMENT BOND in the amount of one hundred percent (100%) of the Contract Price.

No BIDS may be withdrawn for a period of sixty (60) days after closing time scheduled for receipt of BIDS.

The OWNER reserves the right to reject any and all BIDS and waive all informalities in whole or in part, with or without cause, and/or to accept the bid that, in its best judgment, will be for the best interest of Nassau County, Florida.

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a proposal/bid on a contract to provide any goods or services to a public entity, may not submit a proposal/bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit a proposal/bid on leases or real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor or consultant under contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for Category Two for a period of thirty six months from the date of being placed on the convicted vendor list.

The Nassau County Board of County Commissioners reserves the right to waive formalities in any proposal; reject any or all proposals in whole or in part, with or without cause, and to accept the proposal that in its best judgment will be for the best interest of Nassau County, Florida.

Persons with disabilities requiring accommodation in order to participate in this program or activity should contact the Office of the Ex-Officio Clerk to the Board of County Commissioners at (904) 548-4660 or Florida Relay Service at 1-800-955-8770(v) or 1-800-955-8771(TDD) at least seventy two hours in advance to request such accommodation.

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS ANSLEY N. ACREE, Chairman

## ATTEST:

John A. Crawford

Its: Ex-Officio Clerk

An Affirmative Action/Equal Opportunity Employer

#### INFORMATION FOR BIDDERS

BIDS will be received by OWNER, NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS, until 2:00 p.m. on November 2, 2005, at the Office of the Clerk, 76347 Veterans Way, Yulee, FL 32097. Bids will be publicly read aloud and recorded at 2:05 p.m. on November 2, 2005 at the Office of the Ex-Officio Clerk, 76347 Veterans Way, Yulee, Florida 32097.

EACH BID MUST BE SUBMITTED IN A SEALED OPAQUE ENVELOPE, ADDRESSED TO:

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS C/o John A. Crawford Ex-Officio Clerk 76347 Veterans Way Yulee, FL 32097

Each sealed envelope containing A BID must be plainly marked on the outside as:

CR 121 WIDENING/RESURFACING Nassau County, Florida

OTHERWISE THE BID SHALL NOT BE OPENED.

If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OWNER at:

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS C/O John A. Crawford Ex-Officio Clerk 76347 Veterans Way Yulee, FL 32097

All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. An original and three (3) copies of the BID form are required. Bidders shall also complete pages thirty two (32) and thirty three (33) and include in Bid with the Bid Bond.

The County reserves the right to make additions or deletions to bid quantities, and/or portions of the Bid at the bid item prices.

The OWNER may waive any informalities or minor defects or reject any and all BIDS with proper justification. Any BID may be withdrawn prior to the above scheduled time for the opening of BIDS or authorized postponement thereof.

No BIDDER may withdraw a BID within sixty (60) days after the actual date of the opening thereof. Should there be reasons why the contract cannot be awarded within the specified period, the time may be extended by mutual agreement between the OWNER and the BIDDER.

BIDDERS must satisfy themselves of the accuracy of the estimated quantities in the Bid Schedule by examination of the site(s) and review of the Contract Documents including Addenda. After BIDS have been submitted, the Bidder shall not assert that there was a misunderstanding concerning the quantities of Work or of the Work to be done.

The Contract Documents contain the provisions required for the construction of the Project. Information obtained from an officer, agent, or employee of the Owner or any other person shall not affect the risks or obligations assumed by the Contractor or relieve him/her from fulfilling any of the conditions of the contract.

Each Bid must be accompanied by a Bid Bond payable to the Owner for five percent (5%) of the total amount of the Bid. As soon as the Bid prices have been compared, the Owner will return the bonds of all except the three (3) lowest responsible Bidders. When the Agreement is executed, the bonds of the two remaining unsuccessful Bidders will be returned. The Bid Bond of the successful Bidder will be retained until the Payment Bond and the Performance Bond have been executed and approved, after which the Bid Bond will be returned. A certified check may be used in lieu of a Bid Bond.

A Performance Bond and a Payment Bond, each in the amount of one hundred percent (100%) of the Contract Price, with a corporate surety approved by the Owner, will be required for the faithful performance of the Contract.

Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the State of Florida.

Attorneys-in-fact who sign Bid Bonds or Payment Bonds and Performance Bonds must file with each Bond a certified and effective dated copy of their Power of Attorney. The Bidder to whom the Contract is awarded will be required to initially execute the Agreement and the Notice of Award. Copies of the fully executed Agreement and the Notice of Award will be provided to the Bidder, and upon receipt, the Bidder shall have ten (10) calendar days to provide the Performance Bond and the Payment Bond to the Owner. In case of failure of the Bidder to execute the Agreement, the Owner may, at its option, consider the Bidder in default, in which case, the Bid Bond accompanying the proposal shall become the property of the Owner.

Should the Owner not execute the Agreement or Notice of Award within ninety (90) calendar days after opening of the Bids, the Bidder may, with written notice, withdraw its signed Agreement. Such notice of withdrawal shall be effective upon receipt of the notice by the Owner.

Should there be reasons why the Performance Bond and the Payment Bond cannot be provided by the Bidder within the ten-day period or the Agreement or Notice of Award cannot be executed by the Owner within the ninety-day period, the time period may be extended by the mutual agreement between Owner and Bidder.

The Owner, within thirty (30) calendar days of receipt of acceptance of Performance Bond and Payment Bond, shall issue the Notice to Proceed. Should there be reasons why the Notice to Proceed cannot be issued within such period, the time may be extended by mutual agreement between Owner and Bidder. If the Notice to Proceed has not been issued within the thirty-day period or within the period mutually agreed upon, the Bidder may terminate the Agreement without future liability on the part of either party.

The Owner may make such investigations as it deems necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that the Bidder is properly qualified to carry out the obligations of the Agreement and to complete the Work contemplated therein.

A conditional or qualified Bid will not be accepted.

All applicable laws, ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the Project shall apply to the Contractor throughout.

Each Bidder is responsible for inspecting the site(s) and for reading and being thoroughly familiar with the Contract Documents. The failure or omission of any Bidder to do any of the foregoing shall in no way relieve any Bidder from any obligation in respect to its Bid.

Further, the Bidder agrees to abide by the requirements under Executive Order No 11246, as amended, including specifically the provisions of equal opportunity.

The low Bidder must supply the names and addresses of major material suppliers and subcontractors when requested to do so by the Engineer and/or Owner as well as a categorical cost breakdown of various portions of the total Bid price.

The Contractor shall provide a Construction Schedule to the Project Engineer as stated in Section 3. of the General Conditions. Updates will be required every two (2) weeks if schedule changes are anticipated.

#### THE ENGINEER IS:

Nassau County Engineering Services Mr. José Deliz, P.E., Engineering Services Director 96161 Nassau Place Yulee, Florida 32097

#### BID FORM

## FOR Widening/Resurfacing of

## CR 121 from US 1 to the Duval County Line

FOR

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS

SUBMITTED	BY:	 DATE	

The undersigned, as Bidder, hereby declares that the only person or persons interested in the proposal as Principal(s) is, or are, named herein and that no other person that herein mentioned has any interest in this proposal or in the contract to be entered into; that this proposal is made without connection with any other person, company, or parties making a bid or proposal; and that it is in all respects fair and in good faith, without collusion or fraud.

The Bidder further declares that he has examined the site of the Work and informed himself fully in regard to all conditions pertaining to the places where the Work is to be done; that he has examined the Plans and Specifications for the Work and the Contract Documents relative thereto, and has read all special provisions furnished prior to the opening of Bids, that he has satisfied himself relative to the Work to be performed.

The Bidder proposes and agrees, if this proposal is accepted, to contract with Nassau County, Florida, in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, and labor necessary to complete the contract in full and complete in accordance with the shown, noted, described, and reasonably intended requirements of the Plans and Specifications and Contract Documents to the full satisfaction of the Contract with Nassau County, Florida, with a definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and Contract Documents.

## LISTING OF SUBCONTRACTORS AND EQUIPMENT MANUFACTURERS

In the space below, the Bidder shall list all proposed subcontractors and their addresses for approval by the Owner.

The Bidder shall also describe that portion of the Work he proposes to sublet to each subcontractor listed.

Equipment Manufacturers shall be listed for each item of major equipment herein. No changes shall be allowed after acceptance by the Owner. Any blanks shall be filled in by the Owner and provided by the Contractor at no additional cost.

Use additional sheets as required.

NAME	ADDRESS	DESCRIPTION OF
		WORK TO BE
		PERFORMED

#### TRENCH SAFETY ACT

### (90-96, Laws of Florida)

Bidder acknowledges that included in the appropriate bid items of the proposal in the Total Bid Price are costs for complying with the Florida Trench Safety Act (90-96, Laws of Florida) effective October 1, 1990. The Bidder further identifies the costs of such compliance to be summarized below:

	Trench Safety Measure (Description)	Measure	Unit (Quantity)	Unit Cost	Extended Cost
Α					
В					
С.					
D					
			TOTAL: \$		

If applicable, the Contractor certifies that all trench excavation done within his control in excess of five feet (5') in depth shall be in accordance with the Florida Department of Transportation's Special Provisions Article 125-1 and Subarticle 125-4.1 (Trench Excavation Safety System and Shoring, Special - Trench Excavation).

FAILURE TO COMPLETE THE ABOVE MAY RESULT IN THE BID BEING DECLARED NON-RESPONSIVE.

#### BID SCHEDULE

Proposal of

(hereinafter called "Bidder"), organized and existing under the laws of the State of Florida, and doing business as:

(Insert "a corporation", "a partnership", or "an individual") as applicable.

TO: BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA, (hereinafter referred to as "Owner").

In compliance with your Advertisement for Bids, Bidder hereby proposes to:

Perform all work and furnish all necessary labor, equipment, material, and transportation for the Widening/Resurfacing of CR 121 from US 1 to the Duval County Line.

All Work is to be performed per Nassau County Ordinance 99-17 and the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, dated 2004, supplements thereto, when not specifically stated in the Special Provisions, or shown on the plans.

In strict accordance with the Contract Documents, within the time set forth therein, and at the prices stated in the Bid Schedule.

By submission of this Bid, each Bidder certifies, and in the case of a joint Bid, each party thereto certifies as to his own organization, that this Bid has been arrived at independently, without consultation, communication or agreement as to any matter relating to this Bid with any other Bidder or with any competitor.

Bidder hereby agrees to commence the work under this Contract on or before a date to be specified in the Notice to Proceed and to **SUBSTANTIALLY** complete the Project within **90 consecutive calendar days** thereafter, and fully complete the Project in a total of **150 consecutive calendar days** thereafter.

Time is of the essence in the construction of this Project. The Owner will suffer financial damage if this Project is not substantially completed on the date set forth in the Contract Documents. Therefore, the Owner and the Contractor specifically agree that the Contractor shall pay to the Owner the sum of Three Hundred and no/100 Dollars (\$300.00) per calendar day or any part thereof elapsing between the

date established as provided in Section 16 of the General Conditions, and the actual date upon which substantial completion is achieved. Moreover, if after thirty (30) calendar days after the date of substantial completion of the Project is achieved, the Project is not fully and finally complete, then the sum of Three Hundred and no/100 Dollars (\$300.00) per calendar day of any part thereof elapsing between the established date of final completion and the actual date of final completion shall be paid to the Owner by the Contractor.

These amounts to be paid to the Owner by the Contractor, shall, in no event, be considered as a penalty or otherwise than the consequential and adjusted damages of the Owner because of the delay. Furthermore, the sums per calendar day or any part thereof set forth hereinabove, may be at the sole option of the Owner and may be deducted and retained out of the sums payable to the Contractor. If not so deducted, the Contractor shall remain liable therefore.

Bidder agrees to perform all the work described in the Contract Documents for the listed unit prices or lump sums shown in the Bid Schedule as follows:

## Bid Schedule

Bid Item No.	Description	Bid Item Price
1	Base Project	\$
2	Optional Bid Item No. 1	\$
3	Optional Bid Item No. 2	\$
4	Optional Bid Item No. 3	\$
5	Optional Bid Item No. 4	\$
6	Optional Bid Item No. 5	\$
7	Optional Bid Item No. 6	\$
	Total Bid Amount	\$

We, the Undersigned, hereby declare that no person, persons, firm, or corporation, other than the undersigned, are interested in this proposal as principals and that this Proposal is made without collusion with any person, firm, or corporation.

CORPORATE/COMPANY:		
Company Name:		(Seal)
By:	(Name typed or printed)	
By:	(Name typed or printed)	
Address:		
Telephone No.: ()	Fax No.: ()	
Florida State Registration Nu	ımber:	

Federal I.D. Tax Number:		
INDIVIDUAL:		
Name:		
(Signature)	(Name typed or printed)	(Title)
Address:		
Telephone No.: ()_		
Nassau County Registratio	n Number:	
Federal I.D. Tax Number:		

#### FLORIDA STATUTES 287.133(2)(A)

A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity and may not transact business with any public entity, and may not transact business with any public entity in excess or the threshold amount provided in Section 287.017, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

## BID BOND

KNOW	ALL	MEN	BY T	HESE	PRESE	INTS,	that	we,	th	ie u	ndersi	gned
6411	140								as		Princi	pal,
11724								as S	Suret	:y, a	re he	reby
held a	and :	firmly	bound	unto	the	BOAR	D OF	COUNT	Y CO	MMISS	IONERS	OF
NASSAU	COU	NTY,	FLORIDA	1, a	polit:	ical	subdi	vision	of	the	State	of
Florid	a,	as	Ow	ner,	in	1	the	pe	nal	S	um	of
								410	,	five	per	cent
(5%) 0	f the	Bid,	for th	e payı	ment o	f whi	ch, we	ell and	d tru	aly to	o be m	ade,
we he:	reby	joint	ly and	d sev	erally	bin	d our	selves	, s	ucces	sors,	and
assign	s.											
Signed	, thi	.s	da	y of _			, 20	·•				

The condition of the above obligation is such that whereas the Principal has submitted to Owner a certain Bid, attached hereto and hereby made a part hereof to enter into a contract in writing for:

# CR 121 Widening/Resurfacing from US 1 to the Duval County Line Nassau County, Florida

NOW, THEREFORE,

- 1. If said Bid shall be rejected, or in the alternate,
- 2. If said Bid shall be accepted and the Principal shall execute and deliver a contract in the Form of Contract attached thereto (properly completed in accordance with said Bid) and shall furnish a bond for his faithful performance of said contract, and for the payment of all persons performing labor or furnishing materials in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said Bid;

Then this obligation shall be void, otherwise the same shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as herein stated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by an extension of the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, and day and year first set forth above.

By:	
By: Its:	
SURETY:	
By:	

PRINCIPAL:

IMPORTANT - Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570, as amended) and be authorized to transact business in the State of Florida.

# INSERT POWER OF ATTORNEY - IF APPLICABLE

## AGREEMENT

	THIS	AGR	EEMENT	ent	ered	iı	nto	this	3				day	of
		,	20	, b	y a	nd	betv	veen	the	BO	ARD	OF	COU	NTY
COMM	ISSIONE	RS C	F NASS	SAU CO	UNTY,	FL	ORIDA	1, a	pol:	itica:	l sub	odivi	sion	of
the	State	of	Florid	da, h	erein	afte	er r	eferi	ced	to a	as "	Ownei	c",	and
							,	d	oing	bu	sines	ss	as	(a
corp	oration	, a	partne	ership	, or	an	indi	vidua	al),	here	inaft	er 1	refer	red
to a	s "Cont	ract	or".											

WITNESSETH: For and in consideration of the payments and agreements hereinafter mentioned, the parties agree as follows:

- 1. Contractor shall perform all work and furnish all necessary labor, equipment, material, and transportation for the Full Depth Reconstruction of CR 121 from US 1 to the Duval County Line, Nassau County, Florida, hereinafter referred to as the "Work".
- 2. The Work includes, but is not limited to, the full depth reclamation of approximately 35 miles of roadway, widening of existing roadway to a 25 foot wide base typical section with 12' travel lanes, reconstruction of paved connections to match new profile as needed, and optional installation of pavement, striping, reflective pavement markers, guardrails, and sod.

All Work is to be performed per Nassau County Ordinance 99-17 and the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, dated 2004, supplements thereto, when not specifically stated in the Special Provisions, or shown on the plans.

3. The Contractor will commence the Work required by the Contract Documents within fifteen (15) calendar days after the date of the Notice to Proceed and will <u>SUBSTANTIALLY</u> complete the same within <u>90 consecutive calendar days</u>, and fully complete the Project in a total of <u>150 consecutive calendar days</u> after the date of the Notice to Proceed unless the period for completion is extended otherwise by the Contract Documents.

Time is of the essence in the construction of this Project. The Owner will suffer financial damage if this Project is not substantially completed on the date set forth in the Contract Documents. Therefore, the Owner and the Contractor specifically agree that the Contractor shall pay to the Owner the sum of Three Hundred and no/100 Dollars (\$300.00) per calendar day or any part thereof elapsing between the date established as provided in Section 16 of the General Conditions, and the actual date upon

which substantial completion is achieved. Moreover, if after thirty (30) calendar days after the date of substantial completion of the Project is achieved, the Project is not fully and finally complete, then the sum of Three Hundred and no/100 Dollars (\$300.00) per calendar day of any part thereof elapsing between the established date of final completion and the actual date of final completion shall be paid to the Owner by the Contractor.

These amounts to be paid to the Owner by the Contractor shall, in no event, be considered as a penalty or otherwise than the consequential and adjusted damages of the Owner because of the delay. Furthermore, the sums per calendar day or any part thereof set forth hereinabove, may be at the sole option of the Owner and may be deducted and retained out of the sums payable to the Contractor. If not so deducted, the Contractor shall remain liable therefore.

4. The Owner has determined and declared the above-named Contractor to be the lowest responsible bidder on the above referenced Project, and has duly awarded this Contract to said Contractor, for the sum named in the proposal, to-wit:

#### (Amount of Bid)

The Owner shall pay the Contractor for the Work performed as follows: Payment for unit price items shall be at the unit price bid for actual construction quantities measured in place and approved by the Owner or its Resident Project Representative(s). Payment for lump-sum priced items shall be at the lump-sum price bid.

The Owner reserves the right to make additions or deletions to bid quantities and/or portions of the bid at the bid item prices.

- 5. The Owner will pay the Contractor in a manner and at such times as set forth in the General Conditions such amounts as required by the Contract Documents.
- 6. The term "Contract Documents" means and includes the following:
  - a. Bid Form
  - b. Sworn Statement
  - c. Bid Bond
  - d. Agreement
  - e. Notice of Award
  - f. Notice to Proceed
  - g. Change Order Request

- h. Performance Bond
- i. Payment Bond
- j. Hold Harmless Agreement
- k. General Conditions
- 1. Specifications prepared by the Engineer
- m. Drawings
- 7. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
- 8. All facilities, programs, and services should be compliant with the Florida Accessibility Code and the Federal Americans with Disabilities Act (ADA).
- 9. Appropriations necessary for the funding of this Agreement shall be adopted annually by the Board of County Commissioners during the regular budget process. Non-appropriation by the Board of County Commissioners will cause this Agreement to terminate.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in two (2) copies, each of which shall be deemed an original on the date first above written

first above written.	shall be deemed an original o
	OWNER:
	BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA
	ANSLEY N. ACREE
	Its: Chairman
ATTEST:	
JOHN A. CRAWFORD Its: Ex-Officio Clerk	_
Approved as to form by the Nassau County Attorney	
MICHAEL S. MULLIN	_
	CONTRACTOR:
	By: Its:

# NOTICE OF AWARD

TO:
PROJECT DESCRIPTION:
Widening/Resurfacing of CR 121 from US 1 to the Duval County Line Nassau County, Florida
The Owner has considered the Bid submitted by you for the above described Work in response to its Advertisement for Bids dated, and Information for Bidders.
You are hereby notified that your Bid has been accepted in the amount of $\frac{1}{2}$
You are required by the Information for Bidders to furnish the required Contractor's Performance Bond, Payment Bond, and certificates of insurance within ten (10) calendar days from the date of this Notice to you.
If you fail to furnish said Bonds and certificates of insurance within ten (10) days from the date of this Notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid as abandoned and as such you forfeit your Bid Bond. The Owner will be entitled to such other rights as may be granted by law.
You are required to return an acknowledged copy of this Notice of Award to the Owner.
DATED this day of, 20
BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA
ANSLEY N. ACREE Its: Chairman

ATTEST:
JOHN A. CRAWFORD Its: Ex-Officio Clerk
Approved as to form by the Nassau County Attorney
MICHAEL S. MULLIN
ACCEPTANCE OF NOTICE  Receipt of the above Notice of Award is hereby acknowledged by:
, this day of
By: Its:

## NOTICE TO PROCEED

To:	Date:
	Project: Bid No
	<del></del>
You are hereby notified	to commence work in accordance with the
Agreement dated the	day of, 2005, on or before
the day of	, 2005, and you are to substantially
complete the Work within	consecutive calendar days, and
fully complete the Project in	n a total of days after the
date of this Notice to Proce	ed. The Date of Completion of all Work
is therefore	·
	OWNER:
	BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA
	ANSLEY N. ACREE Its: Chairman
ATTEST:	
JOHN A. CRAWFORD Its: Ex-Officio Clerk	
Approved as to form by the Nassau County Attorney	
MICHAEL S. MULLIN	_

# ACCEPTANCE OF NOTICE

Receipt	of	the	above	Notice	То	Proceed	is	hereby	acknowledged	d by:	
				20			_′	this		day	of
By:											

Nassau County Department of Public Works	County Contractor	
	Field	
	Other	
CHANGE ORI	DER REQUEST	
PROJECT: CHANGE	ORDER NUMBER:	
DATE:		
CONT	RACT NUMBER:	
TO CONTRACTOR:		
The Contract is changed as follows:		
Original Contract Sum	\$	
Net change by Previous Change Order	\$	
Contract Sum Prior to This Change Order	\$	
Amount of This Change Order (Add/Deduct)	\$	
New Contract Sum, Including this Change Order	\$	
The Contract Time for substantial com (unchanged) by days.	mpletion will be	(increased) (decreased
This document, when signed by all par Contract and all provisions of the Contra		
RECOMMENDED BY:  Resident Project Repres	DATE:	
ACCEPTED BY:		
Contractor Approved by:	DATE:	
Board of County Commission Or their Designee		

# INSERT CERTIFICATE(S) OF INSURANCE

## COMMON-LAW COMBINED PERFORMANCE AND PAYMENT BOND:

the following form:
BY THIS BOND, We, as Principal whose principal business address and telephone number are, and, a corporation, as Surety, whose principal address and telephone number are bound to the Board of County Commissioners of Nassau County, Florida, herein called Owner, whose principal business address and phone number are Post Office Box
1010, Fernandina Beach, FL 32035-1010, 904-491-7377, in the sum of \$, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.
A description of the project sufficient to identify it is:
The improvements are generally described as follows:
NOTE: The Bond shall be recorded in the public records of Nassau County.
THE CONDITION OF THIS BOND is that if Principal:
1. Performs the Contract dated, and whose contract number designated by Owner is, between Principal and Owner for construction of, the Contract being made a part of this Bond by reference and call the "Contract" herein, at the times and in the manner prescribed in the Contract; and
2. Pays Owner all for losses, damages, including delay or liquidated damages, and losses and damages due to latent or patent defects that Owner sustains because of a default by Principal under the Contract; and
3. Pays Owner all for expenses, costs, and attorneys' fees, including such fees in appellate proceedings, that Owner sustains because of a default by Principal under the Contract; and
4. Performs the guarantee of all work and materials furnished under the Contract for the time specified in the Contract; and
5. Protects, indemnifies, keeps and saves harmless the Owner

The Common-Law Combined Performance and Payment Bond shall be in

against all claims, liabilities, judgments, costs, damages, expenses, and attorneys' fees that may in any way accrue or come against the Owner as a result of the breach of Contract or other actions of the

Principal arising out of the work of the Principal, or that may in any way result form the acts, carelessness, or neglect of the Principal, its agents, employees, workers, or subcontractors, in any respect whatsoever, or that may result on account of any infringement of any patent, trademark, or copyright by reason of the materials, machinery, processes, devices, or apparatus used or furnished in the performance of the Contract; and

6. Promptly makes payments to all claimants, as defined in Florida Statutes, 255.05(1), who furnish labor, services, or materials for the prosecution of the work provided for in the Contract; then this Bond is void; otherwise it remains in full force.

Any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this Bond.

The forty-five (45) day notice, the ninety (90) day notice, and the time within which to file an action, provided by <u>Florida Statutes</u>, 255.05, and the manner of giving notices provided by <u>Florida Statutes</u>, 713.18, shall apply to claimants on the payment bond undertaking of this Bond.

# HOLD HARMLESS AGREEMENT

(Contractor), its
officers and members shall, through the signing of this document by
an authorized party or agent, covenant and agree that it will
indemnify, hold harmless, and defend the Board of County
Commissioners of Nassau County, Florida, and the damage, cost,
charge, expense, suit and/or action, including attorney's fees and
all costs of litigations and judgment of every name and description
brought against the Owner as a result of any act, action, neglect,
loss, damage or injury to person or property by reason of any act or
failure to act by the Contractor, its agents, servants, or employees
during and as a result of the performance under this Contract whether
direct or indirect, and whether to any person or property to which
the Owner or said parties may be subject.
Name of Firm:
Name of Agent:
Title of Agent:
Signature of Agent:
Date:

#### GENERAL CONDITIONS

#### SECTION:

- 1. Definitions
- 2. Additional Instructions and Detail Drawings
- 3. Schedules, Reports and Records
- 4. Drawings and Specifications
- 5. Shop Drawings
- 6. Materials, Services, and Facilities
- 7. Inspection and Testing
- 8. Substitutions
- 9. Patents
- 10. Surveys, Permits, Regulations
- 11. Protection of Work, Property, Persons
- 12. Supervision by Contractor
- 13. Changes in the Work
- 14. Unit Price Work
- 15. Changes in Contract Price
- 16. Time for Completion and Liquidated Damages
- 17. Correction of Work
- 18. Subsurface Conditions
- 19. Suspension of Work, Termination, and Delay
- 20. Payment to Contractor
- 21. Acceptance of Final Payment as Release
- 22. Insurance
- 23. Contract Security
- 24. Assignments
- 25. Indemnification
- 26. Separate Contracts
- 27. Subcontracting
- 28. Engineer's Authority
- 29. Land and Right-of-Way
- 30. Guaranty
- 31. Disputes
- 32. Taxes
- 33. Determination of Lowest Qualified Bidder
- 34. Acceptance and Rejections of Proposals
- 35. Pre-Construction Conference
- 36. Experience-Process Equipment Manufacturers
- 37. Record Drawings
- 38. Operating, Maintenance, and Service Manuals
- 39. Operating Instructions
- 40. Examination of Plans, Sites, Etc.
- 41. Florida Deceptive and Unfair Trade Practices Act
- 42. Waiver of Trial By Jury and Venue

## 1. Definitions:

Wherever used in the Contract Documents, the following terms shall have the meanings indicated which shall be applicable to both the singular and plural thereof.

- (a) Addenda written or graphic instruments issued prior to the execution of the Agreement which modify or interpret the Contract Documents, Drawings, and Specifications, by additions, deletions, clarifications, or corrections; a change made prior to bid opening.
- (b) Application for Payment the form accepted by the Owner which is to be used by Contractor in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.
- (c) **Bid** the offer or proposal of the Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- (d) **Bidder** any person, firm, or corporation submitting a Bid for the Work.
- (e) **Bonds** Bid, Performance, and Payment Bonds and other instruments of security, furnished by the Contractor and his Surety in accordance with the Contract Documents.
- (f) Change Order a written order to the Contractor, which is signed by the Contractor and the Owner, authorizing an addition, deletion, or revision to the Work within the general scope of the Contract Documents, or authorizing an adjustment in the Contract Price or Contract Time.
- (g) Contract Documents the Contract Documents are defined as those listed in the Agreement and together, comprise the entire Agreement between Owner and Contractor.
- (h) Contract Price the total monies payable to the Contractor under the terms and conditions of the Contract Documents subject to the provisions of General Condition, Section 15.
- (i) Contract Time the number of consecutive calendar days stated in the Contract Documents for substantial or full completion of the Work.

- (j) Contractor the person, firm, or corporation with whom the Owner has executed the Agreement.
- (k) **Drawings** the part of the Contract Documents which show the characteristics and scope of the Work to be performed and which have been prepared or approved by the Engineer.
- (1) **Field Order** a written order effecting a change in the Work not involving an adjustment in the Contract Price or an extension of the Contract Time, issued by the Owner or its Resident Project Representative(s) to the Contractor during construction.
- (m) Engineer for this project, the Engineer is the Director of Engineering Services.
- (n) Notice of Award written notice of acceptance of the Bid from the Owner to the successful Bidder.
- (o) **Notice to Proceed** Written communication issued by the Owner to the Contractor authorizing him to proceed with the Work and establishing the date of commencement of the Work.
- (p) Owner Board of County Commissioners of Nassau County, Florida.
- (q) **Project** the undertaking to be performed as provided in the Contract Documents.
- (r) Resident Project Representative(s) the authorized representative(s) of the Owner who is/are assigned to the Project site or any part thereof.
- (s) **Shop Drawings** all drawings, diagrams, illustrations, brochures, schedules, and other data which are prepared by the Contractor, a subcontractor, manufacturer, supplier, or distributor, which illustrate how specific portions of the Work shall be fabricated or installed.
- (t) **Specifications** a part of the Contract Documents consisting of written descriptions of a technical nature of materials, equipment, construction systems, standards, and workmanship.
- (u) **Subcontractors** an individual, firm, or corporation having a direct contract with the Contractor or with any other subcontractor for the performance of a part of the Work at the site.

- (v) Substantial Completion that date as certified by the Owner or its Resident Project Representative(s) when the construction of the Project or a specified part thereof is sufficiently completed, in accordance with the Contract Documents, so that the Project or specified part thereof can be utilized for the purposes for which it is intended.
- (w) **Suppliers** any person, supplier, or organization who supplies materials or equipment for the Work, including that fabricated to a special design, but who does not perform labor at the site.
- (x) Underground Facilities all pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, which have been installed underground to furnish any of the following services or materials; electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic, or other control systems, or water.
- (y) Work all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in the project.
- (z) Written Notice any notice to any party of the Agreement relative to any part of this Agreement in writing and considered delivered and the service thereof completed, when posted by certified or registered mail to the said party at his last given address, or delivered in person to said party or his authorized representative on the Work.

## 2. Additional Instruction and Detail Drawings:

The Contractor may be furnished additional instruction and detail drawings by the Owner, Engineer or Resident Project Representative(s), as necessary to carry out the Work required by the Contract Documents.

The additional drawings and instruction thus supplied will become a part of the Contract Documents. The Contractor shall carry out the Work in accordance with the additional detail drawings and instructions.

## Schedules, Reports, and Records:

The Contractor shall submit to the Owner or Engineer such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records, and other data as the Owner or Engineer may request concerning Work performed or to be performed.

Prior to the first partial payment estimate the Contractor shall submit schedules showing the order in which he proposes to carry on the Work, including dates of which he will start the various parts of the Work, estimated date of completion of each part, and, as applicable, the dates at which special detail drawings will be required; and respective dates for submission of Shop Drawings, the beginning of manufacture; the testing and the installation of materials, supplies, and equipment.

The Contractor shall also submit a schedule of payments that he anticipates he will earn during the course of the Work. The schedule shall consist of a detailed breakdown of the contract price, giving the quantities of various kinds of work and the unit prices for materials and labor and total prices thereof.

## 4. Drawings and Specifications:

Unless otherwise specifically stated herein, or shown on the plans, Nassau County Ordinance 99-17 and the 2004 edition of Standard Specifications for Road and Bridge Construction and supplements thereto, as prepared by the Florida Department of Transportation, in its entirety, shall govern this project.

The intent of the Drawings and Specifications is that the Contractor shall furnish all labor, materials (not furnished by the Owner), tools, equipment, and transportation necessary for the proper execution of the Work in accordance with the Contract Documents and all incidental work necessary to complete the Project in an acceptable manner, ready for use, occupancy or operation by the Owner.

In case of discrepancy, the governing order of documents shall be as follows:

- 1. Plans
- 2. Special Provisions
- 3. Specifications Prepared by Engineer
- 4. Road Design, Structures, and Traffic Operations Standards
- 5. Supplemental Specifications
- 6. Standard Specifications

Any discrepancies found between the Drawings and Specifications and site conditions or any inconsistencies or ambiguities in the Drawings and Specifications shall be immediately reported to the Owner, Engineer or Resident Project Representative(s), in writing within three days of discovery, who shall promptly correct such inconsistencies or ambiguities in writing after consultation with the The Contractor will not be allowed to take advantage of discrepancies, inconsistencies or ambiguities instructions will be furnished by the Owner. The Contractor shall liable for damages resulting from such discrepancies, inconsistencies or ambiguities in the Contract Documents unless the recognized such discrepancies, inconsistencies ambiguities and knowingly failed to report it to the Owner. done by the Contractor after his discovery of such discrepancies, inconsistencies or ambiguities shall be done at the Contractor's risk.

#### 5. Shop Drawings:

The Contractor shall provide the Engineer with Shop Drawings as may be necessary for the prosecution of the Work as required by the Contract Documents. The Engineer will then promptly review all Shop Drawings. The Engineer's approval of any Shop Drawings shall not release the Contractor from responsibility for deviations from the Contract Documents. The approval of the Shop Drawings which substantially deviates from the requirement of the Contract Documents shall be evidenced by a Change Order.

When submitted for the Engineer's review, Shop Drawings shall bear the Contractor's certification that he has reviewed, checked, and approved the Shop Drawings and that they are in conformance with the requirements of the Contract Documents. Five (5) copies of each shop drawing will be required for submission.

Portions of the Work requiring a Shop Drawing or sample submission shall not begin until the Shop Drawing or submission has been approved by the Engineer and the Owner or specifically authorized by the Owner. A copy of each approved Shop Drawing and each approved sample shall be kept in good order by the Contractor at the site and shall be available to the Engineer and the Owner.

# 6. Materials, Services, and Facilities:

It is understood that, except as otherwise specifically stated in the Contract Documents, the Contractor shall provide and pay for all materials, labor, tools, equipment, water, light, power,

transportation, supervision, temporary construction of any nature, and all other services and facilities of any nature whatsoever necessary to execute, complete, and deliver the Work within the specified time.

Materials and equipment shall be so stored as to insure the preservation of their quality and fitness for the Work. Stored materials and equipment to be incorporated in the Work shall be located so as to facilitate prompt inspection.

Manufactured articles, materials, and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned as inspected by the manufacturer.

Materials, supplies, or equipment shall be in accordance with samples submitted by the Contractor and approved by the Engineer and the Owner.

Materials, supplies, or equipment to be incorporated into the Work shall not be purchased by the Contractor or the Subcontractor subject to a chattel mortgage or under a conditional sale contract or other agreement by which an interest is retained by the seller.

## 7. Inspection and Testing:

All materials and equipment used in the construction of the Project shall be subject to adequate inspection and testing in accordance with FDOT requirements.

The Contractor shall provide, at his expense, the necessary testing and inspection services required by the Contract Documents, unless otherwise provided.

The Owner shall provide all other inspection and testing services not required by the Contract Documents.

If the Contract Documents, laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction require any work to specifically be inspected, tested, or approved by someone other than the Contractor, the Contractor will give the Owner or its Resident Project Representative(s) timely notice of readiness. The Contractor will then furnish the Owner or its Resident Project Representative(s) the required certificates of inspection, testing, or approval.

Neither observations by the Engineer nor inspections, tests, or approval by persons other than the Contractor shall relieve the

Contractor from his obligations to perform the Work in accordance with the requirements of the Contract Documents.

The Owner, Engineer or Resident Project Representative(s) will at all times have access to the Work. In addition, authorized representatives and agents of any participating Federal and State agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the Work and also for any inspection, or testing thereof.

If any Work is covered prior to acceptance by the Owner or its Resident Project Representative(s) or contrary to the written request of the Owner or its Resident Project Representative(s), it must, if required by the Engineer or the Owner, be uncovered for his observation and replaced at the Contractor's expense.

If sufficient notice has been provided in writing to the Owner or the Resident Project Representative(s), then any Work that has which the Owner or its Resident been covered Representative(s) has not specifically requested to observe prior to its being covered, or if the Owner or its Resident Project Representative(s) considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the Owner or its Resident Project Representative(s)' request, will uncover, expose, or otherwise make available for observation, inspection, or testing as the Owner or its Resident Project Representative(s) may require, that portion of the Work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such Work is defective, the Contractor will bear all the expense of such uncovering, exposure, observation, inspection, and testing of satisfactory reconstruction. If, however, such Work is not found to be defective, the Contractor will be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction and an appropriate Change Order will be issued.

The Owners Resident Project Representative, shall have no authority to permit deviations from, nor to relay any of the provisions of, the Contract Documents no to delay the Contract by failure to inspect the materials and work without reasonable promptness without the written permission or instruction of the Engineer.

## 8. Substitutions:

Whenever shown or specified in the Contract Documents, the brands, make of materials, devices or equipment shall be regarded as the design standard. If the Contractor wishes to submit alternate brands, makes of materials, devices or equipment he shall submit to the Owner or its Resident Project Representative(s) supportive data from the manufacturer with his Bid. The alternate items are to be of equal quality, workmanship, durability, performance and economy of operation.

The Contractor shall be, in the event that the alternates are approved by the Engineer, responsible for any and all changes in construction at no additional cost to the Owner.

Alternate items which require major design or construction alterations shall not be approved by the Engineer or its Resident Project Representative(s).

In all cases, new materials shall be used unless this provision is waived by written notice from the Owner and Engineer.

## 9. Patents:

The Contractor shall pay all applicable royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for any such loss when a particular process, design, or the product of a particular manufacturer is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Owner or its Resident Project Representative(s).

#### 10. Surveys, Permits, Regulations:

From the information provided by the Owner, unless otherwise specified in the Contract Documents, the Contractor shall make all detail surveys needed for construction, such as slope stakes, batter boards, stakes for pipe locations and other working points, lines, elevations, and cut sheets. Contractor shall maintain an accurate and precise record of the location and elevation of all pipe lines, conduits, structures, maintenance access structures, handholds, fittings and the like and shall prepare record or "as-built" drawings of the same which are sealed by a Professional Surveyor. The Contractor shall deliver these records in good order to the County as

the work is completed. The cost of all such field layout and recording work is included in the prices bid for the appropriate items. All record drawings or As-Built surveys shall be made on reproducible paper and shall be delivered to the County prior to, and as a condition of, final payment.

The Contractor shall carefully preserve bench marks, reference points, and stakes and, in case of willful or careless destruction, he shall be charged with the resulting expense and shall be responsible for any mistakes that may be caused by their unnecessary loss or disturbance.

Permits and licenses of a temporary nature necessary for the prosecution of the Work shall be secured and paid for by the Contractor. Permits, licenses and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Owner, unless otherwise specified.

The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the Work as drawn and specified.

If the Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the Owner or its Resident Project Representative(s) in writing and any necessary changes shall be adjusted as provided in Section 13, Changes in Work.

### 11. Protection of Work, Property, and Persons:

The Contractor will be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. The Contractor will be exclusively responsible for safety. He will take all necessary precautions for the safety of, and will provide the necessary protection to prevent damage, injury or loss to all employees on the Work and other persons who may be affected thereby, all the Work and all materials or equipment to be incorporated therein, whether in storage on or off the site, and other property at the site or adjacent thereto, including trees, shrubs, lawn, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

The Contractor will comply with all applicable laws, ordinances, rules, regulations and orders of any public body having jurisdiction. He will erect and maintain, as required by the conditions and progress of the Work, all necessary safeguards for safety and protection. He will notify owners of adjacent utilities when

prosecution of the Work may affect them. Neither the County nor its Engineer shall be responsible for nonperformance by the utility owners.

The Contractor will remedy all damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the Contractor, any subcontractor or anyone directly or indirectly employed by any of them or anyone for whose acts any of them is liable, except damage or loss attributable to the fault of the Contract Documents or to the acts or omissions of the Owner or the Engineer or anyone employed by either of them or anyone for whose acts either of them may be liable, and not attributable directly or indirectly, in whole or in part, to the fault or negligence of the Contractor.

In emergencies affecting the safety of persons or the Work or property at the site or adjacent thereto, the Contractor, without special instruction or authorization from the Owner or its Resident Project Representative(s), shall act to prevent threatened damage, injury, or loss. He will give the Owner or its Resident Project Representative(s) prompt Written Notice of any significant changes in the Work or deviations from the Contract Documents caused thereby, and a Change Order may thereupon be issued covering the changes and deviations involved.

Location and Damage to Existing Facilities, Equipment or Utilities: As far as possible, all existing utility lines in the Project area have been shown on the plans. However, the County does not guarantee that all lines are shown, or that the ones indicated are in their true location. It shall be the Contractor's responsibility to identify and locate all underground and overhead utility lines or equipment affecting or affected by the Project. No additional payment will be made to the Contractor because of discrepancies in actual and plan location of utilities, and additional costs suffered as a result thereof.

The Contractor shall notify each utility company involved at least thirty (30) days prior to the start of construction to arrange for positive underground location, relocation or support of its utility where that utility may be in conflict with or endangered by the proposed construction. Relocation of water mains or other utilities for the convenience of the Contractor shall be paid by the Contractor. All charges by utility companies for temporary support of its utilities shall be paid for the Contractor. All costs of permanent utility relocation to avoid conflict shall be the responsibility of the utility company involved. No additional payment will be made to the Contractor for utility relocations,

whether or not said relocation is necessary to avoid conflict with other lines.

The Contract shall schedule the work in such a manner that the work is not delayed by the utility providers relocating or supporting their utilities. The Contractor shall coordinate its activities with any and all public and private utility providers occupying the right-of-way. No compensation will be paid to the Contractor for any loss of time or delay.

All overhead, surface or underground structures and utilities encountered are to be carefully protected from injury or displacement. All damage to such structures is to be completely repaired within a reasonable time; needless delay will not be tolerated. The County reserves the right to remedy such damage by ordering outside parties to make such repairs at the expense of the Contractor. All such repairs made by the Contractor are to be made to the satisfaction of the utility owner. All damaged utilities must be replaced or fully repaired. All repairs are to the inspected by the utility owner prior to backfilling.

## 12. Supervision by Contractor:

The Contractor will supervise and direct the Work. He will be solely responsible for the means, methods, techniques, sequences, and safety of construction otherwise not specified in the construction documents. The Contractor will employ and maintain on the Work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site.

The Supervisor shall have full authority to act on behalf of the Contractor and all communications given to the Supervisor shall be as binding as if given to the Contractor. The Supervisor shall be present on the site at all times as required to perform adequate supervision and coordination of the Work. The supervisor shall always be reachable via telephone during work hours if not present at the project site.

## 13. Changes in the Work:

The Owner or its Resident Project Representative(s) may at any time, as the need arises, order changes within the scope of the Work without invalidating the Agreement. If such changes increase or decrease the amount due under the Contract Documents, or in the time

required for performance of the Work, an equitable adjustment shall be authorized by Change Order.

The Owner, Engineer or Resident Project Representative(s), also, may at any time, by issuing a Field Order, make changes in the details of the Work. The Contractor shall proceed with the performance of any changes in the Work so ordered by the Owner, Engineer or Resident Project Representative(s) unless the Contractor believes that such Field Order entitles him to a change in Contract Price or Time, or both, in which event he shall give the Owner, Engineer or Resident Project Representative(s) Written Notice thereof within fifteen (15) days after the receipt of the ordered change, and the Contractor shall not execute such changes pending the receipt of an executed Change Order or further instruction from the Owner, Engineer or Resident Project Representative(s).

## 14. Unit Price Work:

Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purposes of comparison of Bids and determining an initial Contract Price. Actual quantities will be determined by the Owner or its Resident Project Representative(s) and verified by the Contractor as required to complete the Work.

Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

#### 15. Changes in Contract Price:

The Contract Price may be changed only by a Change Order. The value of any work covered by a Change Order or of any claim for increase or decrease in the Contract Price shall be determined by one or more of the following methods in the order of precedence listed below:

- (a) Unit Prices previously approved.
- (b) An agreed lump sum.

(c) The actual cost for labor, materials, supplies, equipment, and other services necessary to complete the work. In addition, there shall be added an amount to be agreed upon but not to exceed ten percent (10%) of the actual cost of the Work to cover the cost of general overhead and profit.

## 16. Time for Completion and Liquidated Damages:

The date of beginning and the time of completion of the Work are essential conditions of the Contract Documents and the Work embraced shall be commenced on a date specified in the Notice to Proceed.

The Contractor will proceed with the Work at such rate of progress to insure full completion within the Contract Time.

It is expressly understood and agreed, by and between the Contractor and the Owner, that the Contract Time for the completion of the Work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the Work.

If the Contractor shall fail to substantially or fully complete the Work within the Contract Time, or extension of time granted by the Owner, then the Contractor will pay to the Owner the amount for consequential damages as specified in the Bid for each calendar day that the Contractor shall be in default after the time stipulated in the Contract Documents.

The Contractor shall not be charged with damages or any excess cost when the delay in the completion of the Work is due to the following, and the Contractor has promptly given Written Notice of such delay to the Owner or Engineer:

- (a) To any preference, priority, or allocation order duly issued by the Owner.
- (b) To unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including, but not restricted to, acts of God, or of the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather; and
- (c) To any delays of Subcontractor occasioned by any of the causes specified in Paragraphs 16 (a) and 16 (b) of this Article.

## 17. Correction of Work:

The Contractor shall promptly remove from the premises all Work rejected by the Owner, Engineer, or its Resident Project Representative(s) for failure to comply with the Contract Documents, whether incorporated in the construction or not, and the Contractor shall promptly replace and re-execute the Work in accordance with the Contract Documents and without expense to the Owner and shall bear the expense of making good all Work of other Contractors destroyed or damaged by such removal or replacement. All removal and replacement Work shall be done at the Contractor's expense. If the Contractor does not take action to remove such rejected Work within ten (10) days after receipt of Written Notice, the Owner may remove such Work and store the materials at the expense of the Contractor.

## 18. Subsurface Conditions:

The Contractor shall familiarize himself thoroughly of existing conditions at the site prior and incorporate all features/conditions not otherwise shown on the contract documents into the bid cost. The Contractor shall promptly, and before such conditions are disturbed, except in the event of any emergency, notify the Owner, Engineer or Resident Project Representative(s) by Written Notice of:

- (a) Subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents; or
- (b) Unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract Documents.

The Owner, Engineer or Resident Project Representative(s) shall promptly investigate the conditions, and if it finds that such conditions could not have been foreseen at the time of the bid and do so materially differ and cause an increase or decrease in the cost of, or in the time required for, performance of the Work, an equitable adjustment shall be made, and the Contract Documents shall be modified by a Change Order.

Any claim of the Contractor for adjustment hereunder shall not be allowed unless he has given the required Written Notice; provided that the Owner, Engineer or Resident Project Representative(s) may, if it determines the facts so justify, consider and adjust such claims asserted before the date of final payment.

## 19. Suspension of Work, Termination, and Delay:

The Owner may, at any time and without cause, suspend the Work on any portion thereof for a period of not more than ninety (90) days or until such time as agreed upon by the Contractor, by Written Notice to the Contractor and the Engineer, which Notice shall fix the date on which Work shall be resumed. The Contractor will resume the Work on the date so fixed. The Contractor will be allowed an extension of the contract Time directly attributable to any suspension.

If the Contractor is adjudged as bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the Contractor or for any of his property, or if he files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he repeatedly fails to make prompt payments to Subcontractors for labor, regulations or orders of any public body having jurisdiction of the Work, or if he disregards the of the Owner, Engineer or Resident Representative(s), or if he otherwise violates any provision of the Contract Documents, then the Owner may, without prejudice to any other right or remedy and after giving the Contractor and his Surety a minimum of ten (10) days from delivery of a Written Notice, terminate the services of the Contractor and take possession of the Project and of all materials, equipment, tools, equipment, and machinery therein owned by the Contractor, and finish the Work by whatever method the Owner may deem expedient. In such case, the Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds the direct and indirect costs of completing the Project, including compensation for additional professional services, such excess shall be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor will pay the difference to the Owner. Such costs incurred by the Owner will be determined and incorporated in a Change Order.

Where the Contractor's services have been so terminated by the Owner, said termination shall not affect any right of the Owner against the Contractor whether existing or which may thereafter accrue. Any retention or payment of monies by the Owner due the Contractor will not release the Contractor from compliance with the Contract Documents.

After ten (10) days from delivery of a Written Notice to the Contractor, the Owner may, without cause and without prejudice to any

other right or remedy, elect to abandon the Project and terminate the Contract. In such case, the Contractor shall be paid for all Work executed and any expense sustained plus reasonable profit.

If, through no act or fault of the Contractor, the Work is suspended for a period of more than ninety (90) days by the Owner or under an order of Court or other public authority, or the Owner, Engineer or Resident Project Representative(s) fails to act on any request for payment within forty-five (45) days after submitted, or the Owner fails to pay the Contractor substantially the sum awarded by a mediator within thirty (30) days of its approval and presentation, the Contractor may after ten (10) days from delivery of a Written Notice to the Owner, terminate the Contract and recover from the Owner payment for all Work executed and all expenses In addition to and in lieu of terminating the Contract, sustained. if the Owner has failed to act on a request for payment, or if the Owner has failed to make any payment as aforesaid, the Contractor may, upon ten (10) days Written Notice to the Owner, stop the Work until he has been paid all amounts then due, in which event and upon resumption of the Work, a Change Order shall be issued for adjusting the Contract Price or extending the Contract Time, or both, to compensate for the costs and delays attributable to the stoppage of the Work.

Extension to the contract time for delays caused by the effects of inclement weather shall be submitted as a request for a change in the contract time. These time extensions are justified only when rains or other inclement weather conditions or related adverse soil conditions prevent the Contractor from productively performing controlling items of work identified on the accepted schedule or updates resulting in:

- 1. Contractor being unable to work at least fifty (50%) percent of the normal workday on controlling items of work identified on the accepted schedule or updates due to adverse weather conditions; or
- 2. Contractor must make major repairs to the Work damaged by weather. Providing the damage was not attributable to a failure to perform or neglect by the Contractor, and providing that the Contractor was unable to work at least fifty (50%) percent of the normal workday on controlling items of work identified on the accepted schedule or updates.

No Damages For Delay: If the Contractor is delayed at any time in the progress of the work by any act or neglect of the Owner, or by changes ordered in the scope of the Work, or by fire, adverse weather

conditions or any other causes beyond the control of the Contractor, then the required completion date or duration set forth in the progress schedule shall be extended by the amount of time that the Contractor shall have been delayed thereby. However, to the fullest extent permitted by law, the County and its agents and employees, shall not be held responsible for any loss or damage sustained by the Contractor, or additional costs incurred by the Contractor, through delay caused by the County, its agents or employees, or any other Contractor, through delay caused by Authority, its agents or employees, or any other Contractor or Subcontractor, or by any other cause, and Contractor agrees that the sole remedy therefore shall be an extension of time.

## 20. Payment to Contractor:

At least ten (10) days before each progress payment falls due (but no more often than once a month), the Contractor will submit to the Nassau County Clerk of Courts, Post Office Box 4000, Fernandina Beach, Florida 32035 a partial payment estimate filled out and signed by the Contractor covering the Work performed during the period covered by the partial payment estimate and supported by such data as the Owner, Engineer or Resident Project Representative(s) reasonably require. If payment is requested on the basis materials and equipment not incorporated in the Work but delivered and suitably stored at or near the site, the partial estimate shall also be accompanied by such supporting data, satisfactory to the Owner, Engineer or Resident Project Representative(s), as will establish the Owner's title to the material and equipment and protect interest therein, including applicable insurance. application for payment shall include a list of Subcontractors employed by the Contractor that provided or performed work included in the application, the Subcontractors' partial release of lien from the previous payment and an updated progress schedule.

The Owner, Engineer or Resident Project Representative(s) will, within twenty (20) days after receipt of each partial payment estimate, either indicate in writing his approval of payment or return the partial payment estimate to the Contractor indicating in writing his reasons for refusing to approve payment. In the latter case, the Contractor may make the necessary corrections and resubmit the partial payment estimate.

The Owner will, within forty-five (45) days and pursuant to Section 218.70, Florida Statues, the Florida Prompt Payment Act, of presentation to it of an approved partial payment estimate, pay the Contractor a progress payment on the basis of the approved partial payment estimate.

The Owner shall retain ten percent (10%) of the amount of each payment until final completion and acceptance of all Work covered by the Contract documents. The Owner at any time, however, after fifty percent (50%) of the Work has been completed may reduce the retainage to five percent (5%) on the current and remaining estimates. The Owner may reinstate up to ten percent (10%) retainage if the Owner determines, at its sole discretion, that the Contractor is not making satisfactory progress or there is other specific cause for such retainage. The Owner may accept securities negotiable without recourse, condition, or restriction, a release of retainage bond, or an irrevocable letter of credit provided by the Contractor in lieu of all or part of the cash retainage.

On completion and acceptance of a part of the Work on which the price is stated separately in the Contract Documents, payment may be made in full, including retained percentages, less authorized deductions.

The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.

Upon completion and acceptance of the Work, the Owner shall issue a certificate attached to the final payment request that the Work has been accepted by him under the conditions of the Contract Documents.

The entire balance found to be due the Contractor, including the retained percentages, but except such sums as may be lawfully retained by the Owner, shall be paid to the Contractor within forty-five (45) days of completion and acceptance of the Work.

The Contractor will indemnify and save the Owner or the Owner's agents harmless from all claims growing out of the lawful demands of subcontractors, laborers, workmen, mechanics, materialmen, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the Work. The Contractor shall, at the Owner's request, furnish satisfactory evidence that all obligations of the nature designated above have been paid, discharged, or waived. If the Contractor fails to do so, the Owner may, after having notified the Contractor, either pay the unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged, whereupon payment to the Contractor shall be resumed in accordance with the terms of the

Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor, his Surety, or any third party.

In paying any unpaid bills of the Contractor, any payment so made by the Owner shall be considered as a payment made under the Contract Documents by the Owner to the Contractor, and the Owner shall not be liable to the Contractor for any such payments made in good faith.

Contractor shall follow the following procedure: Contractor shall provide to Owner, with the application for payment, an updated accounts payable aging report for the Project. In addition, Contractor shall provide Owner the payment checks for all materials, equipment, subcontractors, and other expenses related to the Project for review. Each payment shall include a request for written release of lien. The above conditions being met and approval of the pay request by the Engineer being received, Owner will pay the Contractor at the next scheduled pay date.

In order for Owner to approve subsequent pay requests, Contractor shall provide Owner with release of lien statements for payments made on the previous pay request.

## 21. Acceptance of Final Payment as Release:

Whenever the Contractor has completely performed the Work provided for under the Contractor and the Owner has performed a final inspection and made final acceptance, the Contractor will prepare a final estimate showing the value of the Work as soon as the Contractor makes the necessary measurements and computations. The Contractor will correct all prior estimates and payments in the final estimate and payment. The Owner will pay the amount in the estimate, less any sums that the Owner retained under the provisions of the Contract, as soon as practicable after final acceptance of the Work.

Before issuance of final payment, the Contractor shall deliver to the County a complete release of all liens arising out of this contract, receipts in full in lieu of thereof; an affidavit certifying that all suppliers and subcontractors have been paid in full and that all other indebtedness connected with the Work has been paid, or a consent of the surety to final payment; and the final corrected as-built drawings.

The acceptance by the Contractor of final payment shall be and shall operate as release to the Owner of all claims and all liability to the Contractor other than claims in stated amounts as may be

specifically excepted by the Contractor for all things done or furnished in connection with this Work and for every act and neglect of the Owner and other relating to or arising out of this Work.

Any payment, however, final or otherwise, shall not release the Contractor or his sureties from any obligations under the Contract Documents or the Performance Bond and Payment Bonds.

## 22. Insurance:

The Contractor shall purchase and maintain such insurance as will protect him from claims set forth below which may arise out of or result from the Contractor's execution of the Work, whether such execution be by himself or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

- (a) Claims under workers' compensation, disability benefit, and other similar employee benefit acts;
- (b) Claims for damages because of bodily injury, occupational sickness or disease, or death of his employees;
- (c) Claims for damages because of bodily injury, occupational sickness or disease, or death of any person other than his employees;
- (d) Claims for damages insured by usual personal injury liability coverage which are sustained (l) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (2) by any other person; and
- (e) Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

Certificate(s) of Insurance acceptable to the Owner shall be filed with the Owner prior to commencement of the Work. These Certificate(s) shall contain a provision that coverages afforded under the policies will not be cancelled unless at least fifteen (15) days prior Written Notice be given to the Owner.

The Contractor shall procure and maintain, at his expense, during the Contract Time, liability insurance as hereinafter specified:

(1) Contractor's General Public Liability and Property Damage Insurance including vehicle coverage issued to the Contractor and protecting him from all claims for destruction of or damage to property, arising out of or in connection with any operations under the Contract Documents, whether such operations be by any subcontractor under him, or anyone directly or indirectly employed by the Contractor or by a Subcontractor under him. Insurance shall be written with a limit of liability of not less than \$1,000,000.00 for all damages arising out of bodily injury, including death, at any time resulting therefrom, sustained by any one person in any one accident; and a limit of liability of not less than \$3,000,000.00 for any such damages sustained by two or more persons in any one accident.

Insurance shall be written with a limit of liability of not less than \$1,000,000.00 for all property damage sustained by any one person in any one accident; and a limit of not less than \$1,000,000.00 for any such damage sustained by two or more persons in any one accident.

The Contractor must procure a contractual liability endorsement to the comprehensive general liability insurance policy to indemnify (hold harmless) the Owner and Engineer for claims arising out of the Contractor's negligence.

(2) The contractor shall acquire and maintain, if applicable, Fire and Extended Coverage insurance upon the Project to the full insurable value thereof for the benefit of the Owner, the Contractor, and Subcontractors as their interest(s) may appear. This provision shall in no way release the Contractor or Contractor's Surety from obligations under the Contract Documents to fully complete the Project.

The Contractor shall procure and maintain, at his own expense, during the Contract Time, in accordance with the provisions of the laws of the State of Florida, Workers' Compensation Insurance, including occupational disease provisions, for all his employees at the site of the Project and, in case any work is sublet, the Contractor shall require such Subcontractor similarly to provide Workers' Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. In case any class of employees engaged in hazardous work under this Contract at the site of the Project is not protected under the Workers' Compensation Statute, the Contractor shall provide, and shall cause each Subcontractor to provide, adequate and suitable insurance for the protection of his employees not otherwise protected.

The Contractor shall secure, if applicable, "All Risk" type Builder's Risk Insurance for Work to be performed. Unless

specifically authorized by the Owner, the amount of such insurance shall not be less than the Contract Price totaled in the Bid. The policy shall cover not less than the losses due to fire, explosion, hail, lightening, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke during the Contract Time, and until the Work is accepted by the Owner.

### 23. Contract Security:

The Contractor shall, within ten (10) days after the receipt of the Notice of Award, furnish the Owner with a Performance Bond and a Payment Bond in penal sums equal to the amount of the Contract Price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions, and agreements of the Contract to all persons supplying labor and materials in the prosecution of the Work provided by the Contract Documents.

Such Bonds shall be executed by the Contractor and a corporate bonding company licensed in the State of Florida and named on the current list of "Surety Companies Acceptable on Federal Bonds, as published in the Treasury Department Circular number 570. The expense of these Bonds shall be borne by the Contractor.

If at any time a surety on such Bond is declared a bankrupt or loses its right to do business in the State of Florida or is removed from the list of Surety Companies accepted on Federal Bonds, the Contractor shall within ten (10) days after Notice from Owner to do so, substitute an acceptable Bond (or Bonds) in such form and sum and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on such Bond(s) shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable Bond to the Owner.

#### 24. Assignments:

Neither the Contractor nor the Owner shall sell, transfer, assign, or otherwise dispose of the Contract or any portion thereof, or of his right, title, or interest therein, or his obligations thereunder, without written consent of the other party.

#### 25. Indemnification:

The Contractor will indemnify and hold harmless the Owner and its agents and employees from and against all claims, damages, losses and expenses, including attorney's fees, arising out of or resulting from the performance of the Work, provided that any such claims,

damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to loss to or destruction of tangible property, including loss of use resulting therefrom; and is caused in whole or in part by any negligent or willful act or omission of the Contractor and/or Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

In any and all claims against the Owner or any of its agents or employees, by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for the Contractor or any Subcontractor under Workers' Compensation acts, disability benefit acts, or other employee benefits act.

The obligation of the Contractor under this Paragraph shall not extend to the liability of the Engineer, his agents or employees arising out of the preparation or approval of maps, drawings, options, reports, surveys, Change Orders, designs, or Specifications.

#### 26. Separate Contracts:

The Owner reserves the right to let other contracts in connection with the Project. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and the execution of their Work with the Contractor's. If the proper execution or results of any part of the Contractor's work depends upon the Work of any other Contractor, the Contractor shall inspect and promptly report to the Owner or its Resident Project Representative(s) any defects in such Work that render it unsuitable for such proper execution and results.

The Owner may perform additional Work related to the Project by itself, or it may let other contracts containing provisions similar to these. The Contractor will afford the other contractors who are parties to such Contracts (or the Owner, if it is performing the additional Work itself), reasonable opportunity for the introduction and storage of materials and equipment and the execution of Work, and shall properly connect and coordinate his work with the Owner's.

If the performance of additional Work by other contractors or the Owner is not noted in the Contract Documents prior to the execution of the Contract, Written Notice thereof shall be given to the Contractor prior to starting any such additional Work. If the Contractor believes that the performance of such additional work by the Owner or others involves him in additional expense or entitles him to an extension of the Contract Time, he may make a claim therefore as provided in Sections 15 and 16.

## 27. Subcontracting:

The Contractor may utilize the services of specialty subcontractors on those parts of the Work which, under normal contracting practices, are performed by specialty Subcontractors.

The Contractor shall not award Work to Subcontractors, in excess of fifty percent (50%) of the Contract Price, without prior written approval of the Owner.

The Contractor shall be fully responsible to the Owner for the acts and omissions of his Subcontractors, and of persons either directly or indirectly employed by them, as he is for the acts and omissions of persons directly employed by him.

The Contractor shall cause appropriate provisions to be inserted in all subcontracts relative to the Work to bind Subcontractors to the Contractor by the terms of the Contract Documents insofar as applicable to the Work of Subcontractors and to give the Contractor the same power as regards terminating any subcontract that the Owner may exercise over the Contractor under any provision of the Contract Documents.

## 28. Engineer's Authority:

The Engineer will make visits to the site at the Owner's request and determine if the Work is proceeding in accordance with the Contract Documents.

The Contractor will be held strictly to the intent of the Contract Documents in regard to the quality of materials, workmanship, and execution of the Work. Inspections may be made at the factory or fabrication plant of the source of material supply.

The Engineer and the Owner will not be responsible for the construction's means, controls, techniques, sequences, procedures, or construction safety.

## 29. Land and Right-of-Way:

The Contractor shall provide at his own expense and without liability to the Owner any additional land and access thereto that

the Contractor may desire for temporary construction facilities, or for storage of materials.

The Owner shall provide to the Contractor information which delineates and describes the lands owned and rights-of-way acquired.

### 30. Guaranty:

The Contractor shall guarantee all materials and equipment furnished and the Work performed for a period of one (1) year from the date of final acceptance. The Contractor warrants and guarantees for a period of one (1) year from the date of Final Acceptance of the system that the completed system is free from all defects due to faulty materials or workmanship, and the Contractor shall promptly make such corrections as may be necessary by reason of such defects, including the repairs of any damage to other parts of the system resulting from such defects. The Owner will give notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make such repairs, adjustments, or other Work that may be made necessary by such defects, the Owner may do so and charge the Contractor the cost thereby incurred. The Performance Bond shall remain in full force and effect throughout the guaranty period.

## 31. Disputes:

Any dispute arising under this contract, shall be addressed by the representatives of the County and the Contractor as set for Disputes shall be set forth in writing to the County Administrator, with a copy to the Contracts Manager and provided by overnight mail, UPS, FedEx, or certified mail, with a response provided in the same manner prior to any meetings of representatives. The initial meeting shall be with the County Administrator and the Contract Manager or their designee and a representative of the If the dispute is not settled at that level, the County Contractor. Attorney shall be notified in writing by the Contract Manager or his/her designee, and the County Attorney, County Administrator and the Contract Manager or their designee(s) shall meet with the Contractor's representative(s). Said meeting shall occur within sixty (60) days of the notification by the Contract Manager. there is no satisfactory resolution, the claims, disputes, or other matters in question between the parties of this Contract arising out of or relating to this Contract or breach thereof, if not disposed of by agreement as set forth herein, shall be submitted to mediation in accordance with mediation rules as established by the Florida Supreme Mediators shall be chose by the County and the cost of mediation shall be borne by the Contractor. If either party initiates a Court proceeding, and the Court orders, or the parties

agree to, mediation, the cost of mediation shall be borne by the Contractor. Contractor shall not stop work during the pendency of mediation or dispute resolution. No litigation shall be initiated unless and until the procedures set forth herein are followed.

## 32. Taxes:

The Contractor will pay all sales, consumer, use, and other similar taxes required by the State of Florida.

## 33. Determination of Lowest Qualified Bidder:

The Owner may make such investigations as it deems necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. The Owner reserves the right to reject any bid if the evidence submitted by or investigation of such Bidder fails to satisfy the Owner that such Bidder is properly outfitted to carry out the obligations of the Contract and to complete the Work contemplated therein. Responsibility of the Bidder will be based on whether a permanent place of business is maintained, has adequate plant equipment to do the Work properly and within the established time limit, and has the financial status to meet his obligations contingent to the Work.

Only qualified Bidders who have adequate experience, finances, equipment, and personnel will be considered in making awards. The Owner also reserves the right to make award for an amount of work less than the total indicated, in order to come within proposed funds for the Project. Except where the Owner exercises the right reserved herein to reject any or all proposals, the Contract will be awarded by the Owner to both a qualified and responsible Bidder who has submitted the lowest bid.

## 34. Acceptance or Rejection of Proposals:

The Owner reserves the right to waive informalities in or to reject any or all Bids. Bid envelopes must, however, bear on the outside the name of the Bidder and his address. Otherwise the Bid shall not be opened.

Any proposal which is incomplete, obscure, or irregular may be rejected; any proposal having erasures or corrections in the Bid Proposal may be rejected; any proposal which omits a bid price may be rejected; any Proposal in which manufacturers of equipment or

subcontractors are not listed may be rejected; any Proposal accompanied by an insufficient or irregular certified check of Bid Bond may be rejected. Conditional bids will be not accepted. Any proposals may be withdrawn prior to the scheduled time for opening of such or authorized postponement thereof.

Any Proposal received after the time and date specified shall not be considered. No Bidder may withdraw a Proposal within thirty (30) days after the actual date of the opening thereof. Should there be any reason why the Contract cannot be awarded within thirty (30) days after the opening of the Proposals, the time may be extended by mutual agreement between the Owner and the Bidder.

## 35. Pre-Construction Conference:

Shortly after the Notice of Award and the signing of the Contract forms, the Owner shall notify the Contractor(s) of the date for a Pre-Construction conference.

The Contractor(s) shall attend this conference and be prepared to discuss organization, start dates, construction schedules, supervision, communication, safety, and various other pertinent items. Minutes of the meeting will be recorded by the Owner, and a written summary will be available upon request.

## 36. Experience-Process Equipment Manufacturers:

Process equipment manufacturers shall have a minimum of five (5) years experience in the design and manufacturing of their product. The manufacturer of each item of equipment shall, in writing, provide to the Owner a list of installations of their equipment and operational data from a similar type installation. Test data or pilot plan data is NOT acceptable.

In lieu of the above, the Owner shall require a Performance Bond or Cash Bond of not less than one hundred fifty percent (150%) of the cost of the equipment, including installation, and also a five (5) year warranty guarantee on the piece of equipment, unless otherwise stipulated under other specific items in these specifications.

## 37. Record Drawings and/or As-Built Surveys:

Record Drawings shall be kept by each Contractor showing any items of construction and equipment for which he is responsible. These records shall also show any additional work, existing features, or utilities revealed by construction work which are not shown on the Contract Drawings. These records shall be kept up-to-date daily.

They may be kept on a marked set of Contract Documents to be furnished prior to the beginning of the Work. They shall be available at all times during construction for reference by the Engineer and the Owner, and shall be delivered to the Owner upon completion of the Work and reviewed by the Engineer prior to final payment. As-Built Surveys may be required to verify proper construction at the Engineer's discretion.

## 38. Operating, Maintenance, and Service Manuals:

If applicable, each Contractor is required to provide three (3) complete Operating, Maintenance, and Service Manuals for all equipment for the entire system as furnished under his contract. The manual shall be indexed and bound in hard cover binders containing full information for each system, piece of equipment, and all controls.

Material submitted shall include, but not be limited to, the following:

- (a) Manufacturer's descriptive literature
- (b) Normal equipment operating characteristics
- (c) Performance data, curves, ratings, etc.
- (d) Wiring diagrams
- (e) Control diagrams with written descriptions of operations
- (f) Manufacturer's maintenance and service manuals
- (g) Spare parts and replacement parts lists
- (h) Name, address, and telephone number of local or nearest manufacturer's service organization.

All items shall be identified with the same identification, name, mark, number, etc., as indicated on drawings. All material must be submitted to the Owner or its representative(s) within six (6) months after award of the Contract.

## 39. Operating Instructions:

Unless otherwise specified in the Project Specifications, the following requirements shall be met:

(a) Contractors shall make available to the Owner, after all equipment is in operation and at a time agreed upon by Owner and Contractor, competent instructors well versed in the operation of the process, mechanical and electrical systems for the purpose of training Owner's personnel in all phases of operation of the equipment and systems.

- (b) Instructions shall be conducted during consecutive normal working days, for a period satisfactory to the Owner.
- (c) When deemed necessary by the Owner, these instructions shall include the services of factory-approved representatives for all major equipment, including controls.

## 40. Examination of Plans, Site, Etc.:

The Bidder(s) must examine for themselves the Specifications, Plans, profiles, etc., the location of the proposed Work, and exercise their own judgment as to the extent of the Work to be done, and difficulties attending the erection of the Work; and the Contractor must assume all risks of variance in any computations, by whosoever made, of statements of amounts or quantities necessary to complete the Work required by the Contract, and agree to fully complete said Work in accordance with all plans and Specifications for the price bid. Any item or quantities contained either in the Specifications, or on profiles or Drawings, but omitted from the others respectively, will be considered part of the Work. Insofar as possible, the Contractor, in carrying out his work, must employ such methods or means as will not cause any interruption of or interference with the Work of any other contractor of services.

## 41. Florida Deceptive and Unfair Trade Practices Act:

CS/SB 1066 by the Committee on Judiciary, relating to the Florida Deceptive and Unfair Practices Act: Deletes the definitions of "consumer transaction" and "supplier", substituting instead a definition for "trade or commerce" and "thing of value". Amends the definition of "violation" to include a violation of any rules promulgated pursuant to the Federal Trade Commission of the Federal Courts, any law statute, rule, regulation, or ordinance, which proscribes unfair methods of competition, unfair, deceptive, or unconscionable acts or practices. Reduces the time period during which a petition for an order modifying or setting aside a subpoena may be made. Provides for penalties, fees, and costs for intentional noncompliance with a subpoena. Exempts an act or practice involving the sale, lease, rental, or appraisal of real estate by a person licensed under Chapter 475, Florida Statutes, if the act or practices violates the provisions of that Chapter. Provides a misdemeanor penalty to persons who see used goods as new. Effective Date: 30, 1993.

## 42. Waiver of Trial By Jury

Both parties agree by the execution of this Agreement to waive any entitlement to a jury trial. Any trial shall be a bench or "Judge" trial and venue for any trial shall be Nassau County, Florida.

#### TECHNICAL SPECIFICATIONS

#### Portland Cement Stabilization

## Description

The work consists of the construction of a two to three (2-3) foot widening on each side of the existing roadway and portland cement stabilized subbase by use of mix-in-place equipment capable of pulverizing, blending, and mixing existing materials with portland cement and aggregate as needed to achieve a homogenous base material to a depth of eight (8) inches, graded and compacted.

## TS 1 - Widening

Construction. Widening will be done on each side of the roadway for a width of two to three (2-3) feet from the edge of the existing bituminous surface and as stationed by the County to a depth of six (6) inches. The County will compact the subgrade prior to the placement of any backfill material. The County will provide suitable material for the backfill of the widening (limerock or millings). The fill material must be treated and placed in the widening at the same time as the existing mainline to ensure a homogenously mixed and stabilized base.

#### TS 2 - Material

- a. Reclaimed Material Ninety five (95) percent of the material is required to pass through a two (2) inch sieve. Not less than fifty five (55) percent of the material must pass through the 4.75 mm (#4) sieve.
  - b. Portland Cement Type I or II ASTM C150-86 AASHTO M85-89.
- c. Aggregate No. 8, 10, 57 and 67. Add the gradation and quantity to the mix as required.

- d. Mix Design Design must be completed by a certified geotechnical lab familiar with cement stabilization. Final design must be submitted to the County's Engineering Services Department for approval prior to commencement of construction.
- e. Mixture Combine the reclaimed material, aggregates (if necessary), and portland cement. Add sufficient water to produce a mix for optimum moisture content. The mixture of reclaimed material shall substantially conform to ASTM D-2940.

#### TS 3 - Construction

- a. Equipment Use equipment that will produce the completed cement stabilized subbase as follows:
  - 1. Use equipment capable of automatically metering the liquids with a variation of not more than plus or minus two (2) percent by weight of liquids. Apply the cement by use of spreader units capable of spreading up to eighty (80) pounds per square yard in a single pass in a uniform and consistent manner by means of cyclone, screw-type or pressure-manifold type.
  - 2. Spreaders must be calibrated and witnessed by County representative, prior to the project beginning.
  - 3. Sufficient on site storage capacity for cement must be provided so that operations can continue uninterrupted for a minimum of three (3) days should material not be available for delivery.
  - 4. Maintain all equipment in a satisfactory operating condition.
- b. Mixing Break down, pulverize and mix the existing pavement to a minimum depth of six (6) inches in a single pass. Rough grade to desired cross slope and profile. Apply the designed quantity of portland cement and water to assure proper compaction. Measure the milling depth at the time of pulverization. Make at least one (1) measurement for each three thousand (3000) square yards of work done and record the measurement to ensure that the specified milling depth is met.
- c. Compaction Shape, grade, and compact to the lines, grades and depth as shown on the typical cross sections after the material has been processed.

Commence rolling at the lower side of the course: except leave three (3) to six (6) inches from any unsupported edge or edges

unrolled initially to prevent distortion. Determine the in-place density requirements by the construction of at least one (1) control strip under the guidance of a nuclear gauge operator. After each pass of the compaction equipment, take a nuclear density reading in accordance with PTM No. 402. Continue compaction with each piece of equipment until additional passes obtain no appreciable increase in density. Upon completion of compaction, make a minimum of ten (10) tests at random locations to determine the average in-place density of the control strip. Compact the recycled mixture to a target density of at least ninety six (96) percent of the average control strip. Determine the in-place density in accordance with PTM No. 402.

- d. Finishing Complete any portion of the base course during daylight hours, unless other permitted by the County.
- e. Protection Protect any finished portion of the base course upon which construction equipment is required to travel to prevent marring, distortion or damage of any kind. Immediately and satisfactorily correct any such damage.
- f. Surface Tolerance When directed by the engineer, test the completed base course for smoothness and accuracy of grade, both transversely and longitudinally using suitable templates and straightedges. Final grade and slope will be achieved in a single full lane past with a quarter (¾) inch tolerance both transversely and longitudinally using suitable templates and straightedges. This work must be accomplished using a machine specifically designed for grade and slope control.
- g. Maintenance of Traffic Maintain the completed base course and control traffic as specified in Section 401.3(n).

END OF TECHNICAL SPECIFICATIONS

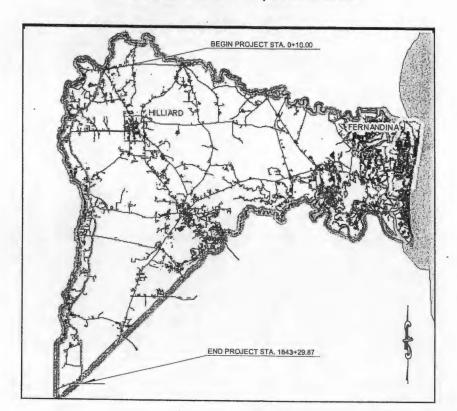
#### C1.1 (Cover Sheet) C2.1 (Notes) C2.2 (Typical Sections) C3.1 (Plan View) C3.2 (Plan View) C3.3 (Plan View) C3.4 (Plan View) C3.5 (Plan View) C3.6 (Plan View) C3.7 (Plan View) C3.8 (Plan View) C3.9 (Plan View) C3.10 (Plan View) C3.11 (Plan View) C3.12 (Plan View) C3.13 (Pian View) C3.14 (Plan View) C3.15 (Plan View) C3.16 (Plan View) C3.17 (Plan View) C3.18 (Plan View) C3.19 (Plan View) C3.20 (Plan View) C3.21 (Plan View) C3.22 (Plan View) C3.23 (Plan View) C3.24 (Plan View) C3.25 (Plan View) C3.26 (Plan View) C3.27 (Plan View) C3.28 (Plan View) C3.29 (Plan View) C3.30 (Plan View) C3.31 (Pian View) C3.32 (Plan View) C3.33 (Plan View) C3.34 (Plan View) C3.35 (Plan View) C3.36 (Plan View) C3.37 (Plan View) C3.38 (Plan View) C3.39 (Plan View) C3.40 (Plan View) C3.41 (Plan View) C3.42 (Plan View) C3.43 (Plan View) C3.44 (Plan View) C3.45 (Plan View) C3.46 (Plan View) C3.47 (Plan View) C3.48 (Plan View) C3.49 (Plan View) C3.50 (Plan View) C3.51 (Plan View) C3.52 (Plan View) C3.53 (Plan View) C3.54 (Plan View)

C4.1 (Maintenance of Traffic)

INDEX OF DRAWINGS Sheet Title

# WIDENING & IMPROVEMENT PLANS FOR **COUNTY ROAD 121**

# NASSAU COUNTY, FLORIDA



#### PLANS PREPARED FOR: NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS

Ansley Acree District 2 Chairperson

Jim B. Higginbotham District 1

Floyd Vanzant District 4

Tom Branan District 3

Marianne Marshall District 5

John A. Crawford Clerk of the Court

Mike Mahaney County Administrator

PLANS PREPARED BY: NASSAU COUNTY ENGINEERING SERVICES DEPARTMENT

> José R. Dellz, P.E. **Engineering Services Director**

**UTILITY CONTACTS** CABLE-**ADELPHIA** ELECTRIC-

TELEPHONE-

BELLSOUTH

(904) 731-7960 (800) 375-2434 (800) 630-3734

**REVIEW AND PERMIT ONLY** NOT FOR CONSTRUCTION **JUNE 03, 2005** 

NASSAU COUNTY



CHECKED BY:

02/18/2005

#### **GENERAL NOTES:**

- ALL EXISTING DRAINAGE STRUCTURES WITHIN CONSTRUCTION LIMITS SHALL REMAIN UNLESS OTHERWISE NOTED.
- ONLY THAT EXCAVATION FOR BASE WIDENING THAT CAN BE BACK FILLED BY THE END OF THE WORK DAY WILL BE EXCAVATED, NO OPEN TRENCH WILL BE ALLOWED TO REMAIN AFTER WORK ENDS FOR THE DAY.
- ANY PUBLIC LAND CORNER MONUMENT WITHIN THE LIMITS OF CONSTRUCTION SHALL BE PROTECTED AT ALL TIMES, ANY MONUMENT DAMAGED OR DESTROYED SHALL BE REESTABLISHED BY A PROFESSIONAL LAND SURVEYOR AT THE CONTRACTORS EXPENSE.
- FINAL ELEVATIONS SHALL BE WITHIN 0.01' (FOOT) OF THE REQUIRED ELEVATION AND SURFACES SHALL BE SLOPED TO DRAIN AS SHOWN IN THIS PLAN SET.
- 5. ALL EXCESS EXCAVATED MATERIAL SHALL BE CONSIDERED PROPERTY OF THE CONTRACTOR AND SHALL BE PLACED OR DISPOSED OF BY SAID DEPARTMENT AS DIRECTED BY THE COUNTY WITHIN A 20 MILE RADIUS OF THE SITE.
- DRIVEWAY CONNECTION LOCATIONS BEING MODIFIED DUE TO THE CONSTRUCTION PROPOSED IN THIS PLAN SET SHALL BE LEFT TO THE DISCRETION OF THE COUNTY ENGINEER.
- REMOVAL OF EXISTING CULVERTS SHALL INCLUDE DISPOSAL BY THE CONTRACTOR AT HIS EXPENSE. AT THE COUNTY'S DISCRETION, SALVAGEABLE CULVERT'S SHALL BE RELIED.
- ALL PRIVATE SIGNS AND FENCES WITHIN PROJECT LIMITS SHALL BE REMOVED OR REPLACED. ANY DAMAGED FENCES OUTSIDE OF THE RIGHT-OF-WAY SHALL BE REPAIRED OR REPLACED TO THE SATISFACTION OF THE DWINER AT THE CONTRACTORS EXPENSE.
- 8. ALL PRIVATE WALLS AND OR DECORATIVE MATERIALS WITHIN RIGHT-OF-WAY AND CONSTRUCTION AREA SHALL BE REMOYED AT THE CONTRACTOR'S EXPENSE AND OFFERED TO THE ADJACENT LAND OWNER MATERIALS NOT CLAMBED BY ADJACENT LOND OWNER SHALL BECOME PROPERTY OF THE CONTRACTOR AND DISPOSED OF AT THE CONTRACTOR'S EXPENSE.
- ALL AREAS TO RECEIVE SOD SHALL BE BERMUDA AND SHALL BE FREE OF MOXIOUS WEEDS AND GRASSES INCLUDING TROPICAL SODA APPLE.
- 11. THE CONTRACTOR SHALL SUBBIT ALL NECESSARY SHOP DRAWINGS TO THE NASBALL COUNTY ENGINEERING BERVICES DEPARTMENT FOR APPROVAL PRIOR TO CONSTRUCTION. ANY CONSTRUCTION OCCURING DURING SHOP DRAWING BEVIEW SHALL BE SUBJECT TO REMOVAL BASED UPON APPROVAL OR DISAPPROVAL OF SHOP DRAWINGS.
- ALL ASPHALT MILLING ITEMS REMOVED WITHIN THE LIMITS OF CONSTRUCTION, SHALL BE STOCKPILED ON SITE FOR PICK-UP BY COUNTY OR DELIVERED WITHIN A 20 MILE RADIUS OF THE SITE AS DIRECTED BY THE COUNTY.
- TURNOUTS AT EXISTING PUBLIC STREETS SHALL BE CONSTRUCTED WITH THE MATERIAL SHOWN ON THE TYPICAL SECTION.
- ALL SWALES, SHOULDERS, AND AREAS DISTURBED OR CREATED BY CONSTRUCTION SHALL RECEIVE IMMEDIATE (WITHIN 48 HOURS) COVERING WITH PERMANENT OR TEMPORARY SODDING.
- 18. ROADWAY SWALES AND OTHER EXCAVATIONS SHALL CONFORM TO THE UNIT'S INDICATED ON THE PLANS OR SPECIFIED HEREIN. THIS WORK SHALL INCLUDE SHAPING AND SLOPING AND OTHER HECESSARY WORK, TO DRAIN, AND TO BRING THE EARTHWORK TO THE REQUIRED GRADES, ALIGNMENT AND CROSS SECTIONS. THIS SHALL INCLUDE BUT NOT BE LIMITED TO ANY RECONSTRUCTION OF AREAS DISTURBED OUTSIDE OF THE PLANNED CONSTRUCTION LIMITS.
- 18. CONTRACTOR SHALL PERFORM REMOVAL AND DISPOSAL OF ALL ORNAMENTAL DRIVEWAY WALLS, FENCES, AND RAILINGS AFTER 30 DAYS FROM THE DATE THE CONTRACTOR CONTACTS THE AFFECTED PROPERTY OWNERS. AFFECTED PROPERTY OWNERS. SHALL BE GIVEN THE OPTION (IN WRITING) OF HAVING ANY REMOVED MATERIALS STOCK PHED ON PROPERTY OWNERS AFFECTED PROPERTY OR DISPOSED OF BY THE CONTRACTOR. MATERIALS REJECTED BY THE CONTRACTOR WHO SHALL THEN BE RESPONSIBLE FOR LEGALLY APPROPRIATE OFF-SITE DISPOSAL ANY MATERIALS RETAINED BY THE AFFECTED PROPERTY OWNER SHALL BECOME PROPERTY OWNER SHALL SECOME PROPERTY OWNER SHOULD SHALL SHOW SHOW SHALL SHOW SHOW SHALL SHOW SHA
- 17. EXISTING PAVED DRIVEWAYS WITHIN THE LIMITS OF THIS PROJECT SHALL BE REPLACED AT THE SAME LOCATION, UNLESS OTHERWISE

- 18. A 2" THICK TOPSOIL LAYER SHALL BE PROVIDED IN AREA OF SODDING, OR SEEDING AND MILLCHING, AND SHALL BE A FERTIBLE, FRIABLE, NATURAL SURFACE SOIL, FROM WELL DRAINED STEE, IT SHALL BE WITHOUT MIXTURE OF SUBSOIL AND ENTIRELY FREE OF ROOTS, BRUSH, STUMPS, OR OTHER EXTRANEOUS MATTER, AND SHALL NOT BE DELIVERED OTHLE IN A MUDOY CONDITION.
- 19. TOPSOIL DELIVERED TO THE SITE SHALL HAVE AN ACIDITY RANGE OF PH 6.0 TO 7.0 AND SHALL CONTAIN NO LESS THAN 5 PERCENT ORGANIC MATTER. TOPSOIL SAMPLE TESTS SHALL BE TAKEN AT 1000 MTTERVALS AS DIRECTED SY THE COUNTY ENGINEER.
- 20. THE CONTRACTOR SHALL PROVIDE ADEQUATE GROWTH AND COVERAGE OF SODDED AREAS IN COMPLANCE WITH THE SPECIFICATIONS AND SAID AREAS, SHOULD REACH A SATISFACTORY LEVEL OF VI SAILE GROWTH WITH NO BARE SPOTS LARGER THAN ONE SOURCE FOOT. BARE SPOTS SHALL BE SCATTERED AND THE TOTAL BARE AREAS SHALL NOT COMPROMISE MORE THAN 1/100 OF ANY GIVEN AREA. THE CONTRACTOR SHALL ESTABLISH PERMANEST VEGETATION ON ALL AREAS SODDED PRIOR TO ANY ACCEPTANCE OF THE PROJECT. THIS SHALL CONSIST OF PRESERVING, PROTECTION, WATERING, MOWING, RE-SEEDING OR RE-SODDING, OR REPLANTING AS NECESSARY TO KEEP THE PLAYED AREAS IN A SATISFACTORY CONDITION.
- 21. THESE PLANS WERE PREPARED WITHOUT THE BENEFIT OF A SURVEY. THE LOCATION OF EXISTING UTILITIES AND TO-OGRAPHY HAVE BEEN PREPARED FOM THE MOST RELIABLE INFORMATION AVAILABLE TO THE ENGINEER. THIS INFORMATION IS NOT GUARANTEED AND IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES AND TO VERIFY TO-POGRAPHY PRIOR TO CONSTRUCTION.
- THE CONTRACTOR SHALL PROVIDE AND INSTAL SLIT BARRIERS AMDOR OTHER EROSIGN CONTROLS TO REPVENT EROSION AND POLLUTION OF WATER IN ACCORDANCE WITH FOOT SPECIFICATION NO. 104 AS DIRECTED BY THE COUNTY ENGINEER. SEE EROSION CONTROL SHEETS AND NPDES SHEETS FOR APPROXIMATE LOCATIONS.
- ALL CAST IN PLACE DRAINAGE STRUCTURES SHALL HAVE A MINIMUM WALL THICKNESS OF 8", PRE-CAST STRUCTURES SHALL HAVE A MINIMUM WALL THICKNESS OF 8".
- MAIL BOXES NOTES
  - A. THE LOCATION AND CONSTRUCTION OF MAILBOXES SHALL COMFORM TO THE RULES AND REGULATIONS OF THE UNITED STATES POSTAL SERVICE AS MODIFIED BY THE DESIGN STANDARD.
  - B. MAILBOXES WILL NOT BE PREMITTED ON INTERSTATE HIGHWAYS, FREEWAYS, OR OTHER HIGHWAYS WHERE PROHIBITED BY LAW OR REGULATION.
  - C. THE CONTRACTOR SHALL GIVE THE POSTMASTER OF THE DELIVERY ROUTE WRITTEN NOTICE OF PROJECT CONSTRUCTION 7 DAYS PRIOR TO THE BEGINNING OF WORK, WITH SATURDAYS, SUNDAYS, AND HOLIDAYS EXCLUDED.
  - D. FOR ALL GENERAL NOTES AND DETAILS OF FURNISHING INSTALLATION AND MAINTAINING MAILBOXES DURING CONSTRUCTION REFER TO FDOT STANDARDS (2002) INDEX NO. 832
- 25. PAVEMENT MARKINGS FOR ALL ROAD WORK (INCLIDING ORIVEWAYS) SHALL BE MANUFACTURED AND INSTALLED PURSUANT TO NASAU COUNTY ORIONANCE BE 17 AND FOOT STANDARDS (LATEST EDITION). ALL STRIPING WILL BE THERMOPLASTIC AND AUGMENTED WITH REPLECTIVE PAVEMENT MARKERS, EXISTING SIONS BHALL BE RELOCATED PER MUTCO.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION WITH AND RELOCATION OF UTILITIES. ALL UTILITY LOCATES AND RELOCATES SHALL BE CONSIDERED INCIDENTAL AND THE COST MADE PART OF THIS CONTRACT.
- CONTRACTOR SHALL NOTIFY THE ENGINEER WITHIN ONE BUSINESS DAY OF ANY CONDITIONS CONFLICTING WITH THE REQUIREMENTS OF THESE PLANS.
- 28. ALL CONCRETE DRIVEWAYS SHALL BE 6" THICK, 3000 PSI AND REINFORCED FIBER MESH.
- ALL WORK MATERIALS & TESTING SHALL BE COMPLETED IN ACCORDANCE WITH THE FBOT ROADWAY & TRAFFIC DESIGN STANDARDS AND THE LATEST NASSAU COUNTY ROADWAY AND DRAINAGE STANDARDS.
- 30. GOVERNING STANDARDS AND SPECIFICATIONS: FLORIDA DEPARTMENT OF TRANSPORTATION, DESIGN STANDARDS DATED

LEGEND

EXISTING PAVING TO BE REMOVED

CENTERLINE OF ROADWAY

EDGE OF NEW PAVEMENT

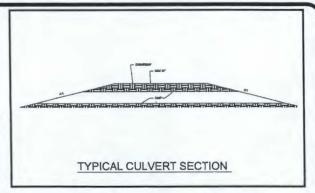
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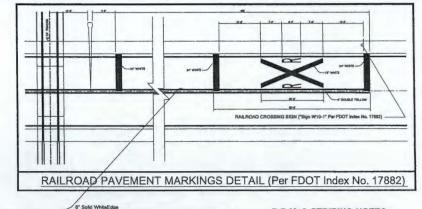
EXISTING CONDITIONS

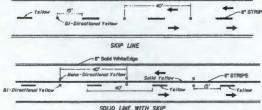
CMP

P.C. POINT OF CURVE

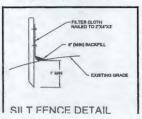
P.T. POINT OF TANGENCY







SOLID LINE WITH SKIP (NO PASSING LANES PER PLAN)



#### R.P.M. & STRIPING NOTES:

- REFLECTIVE PAVEMENT MARKERS SHALL BE SPACED AT 40' ON ALL SKIP LANE LINES AND SKIP CENTER LINES.
- 2. THE SPACING ON SOLID LINES AND SOLID/SKIP COMBINATION LINES SHALL BE 40".
- 3. ALL R.P.M.s SHALL BE OFFSET 1" FROM SOLID LINES.
- THESE SPACINGS MAY BE REDUCED FOR SHARP CURVES IF REQUIRED.
- 5. ALL R.P.M.s SHALL BE CLASS "B"
- ALL STRIPPING SHALL BE THERMOPLASTIC LANE STRIPPING PER FDOT INDEX NO. 17346.



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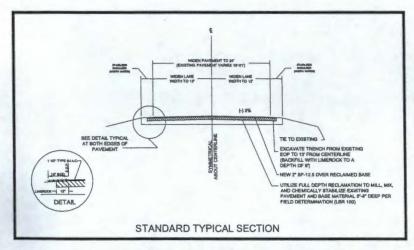
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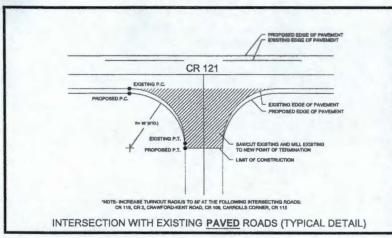


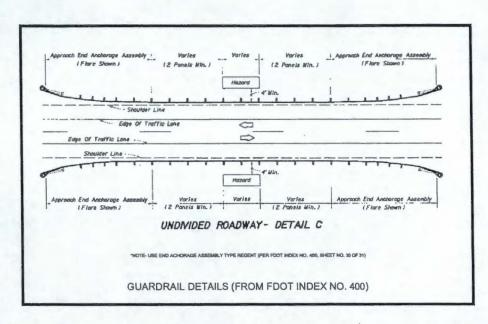
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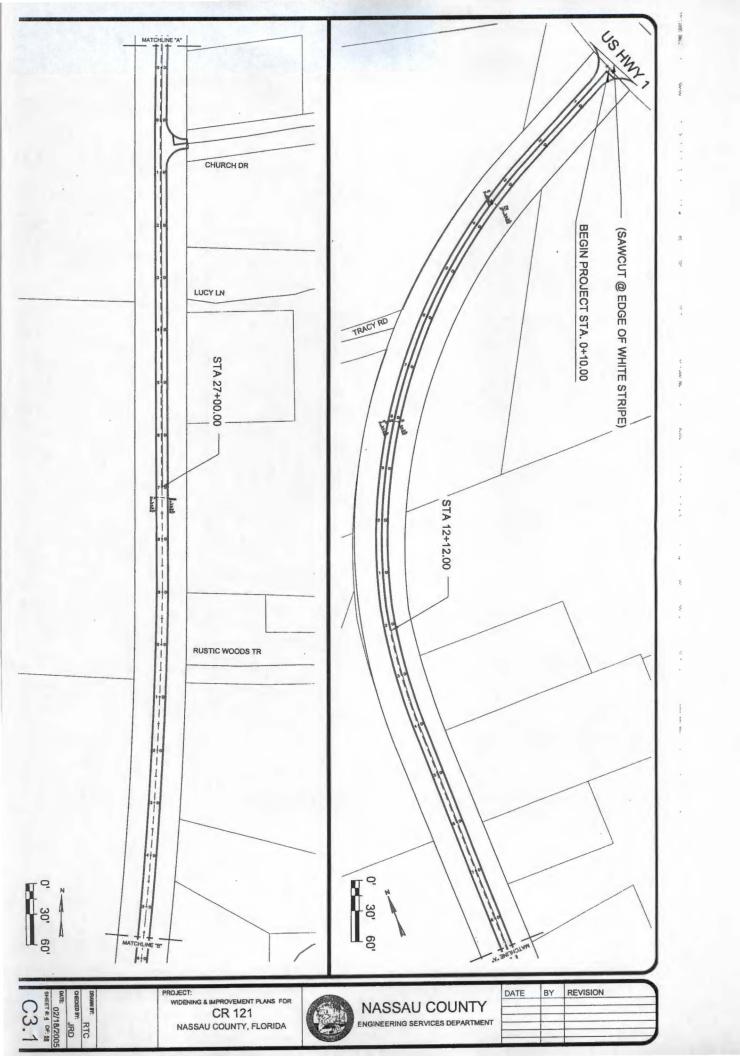


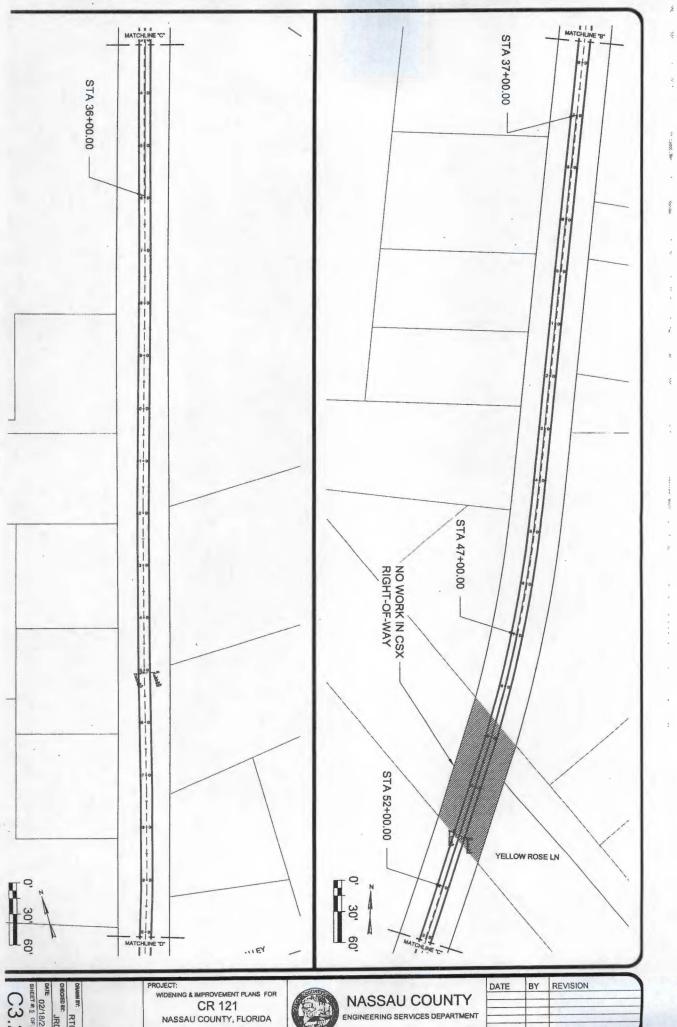
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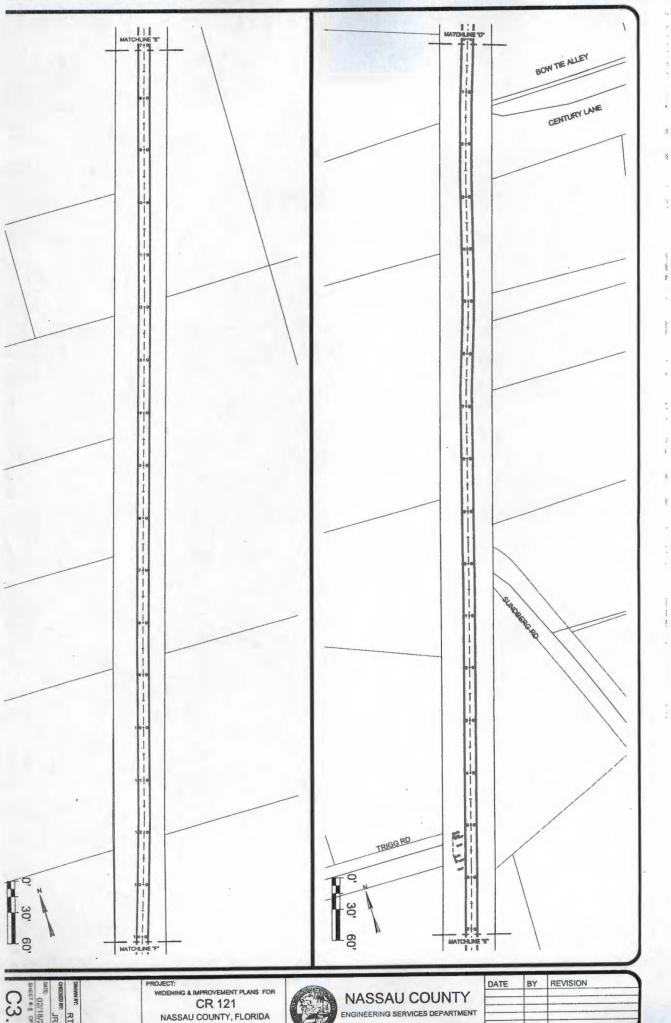
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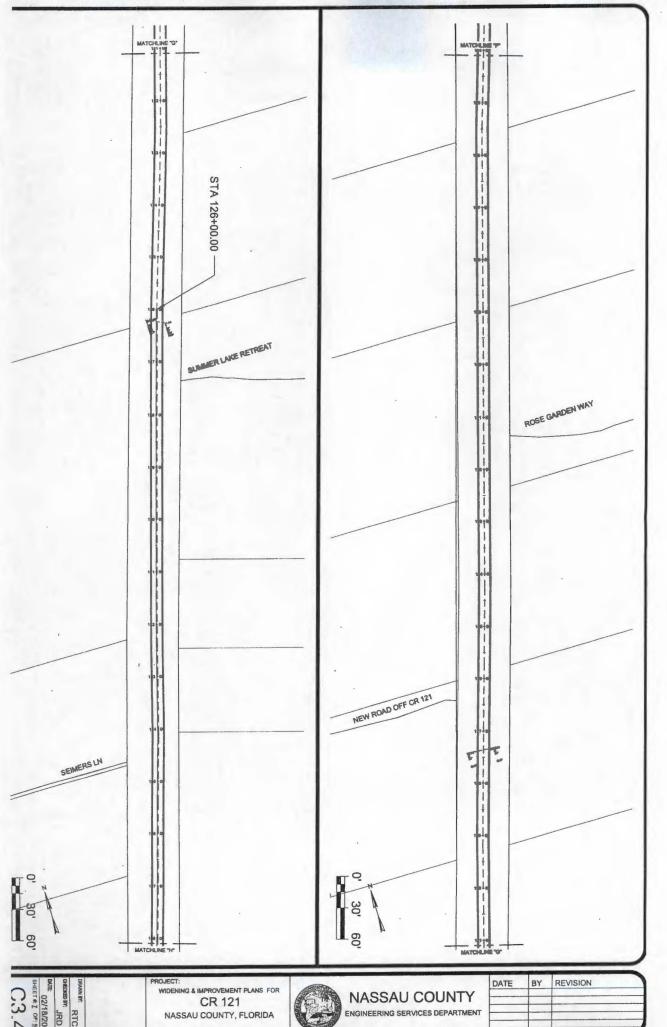




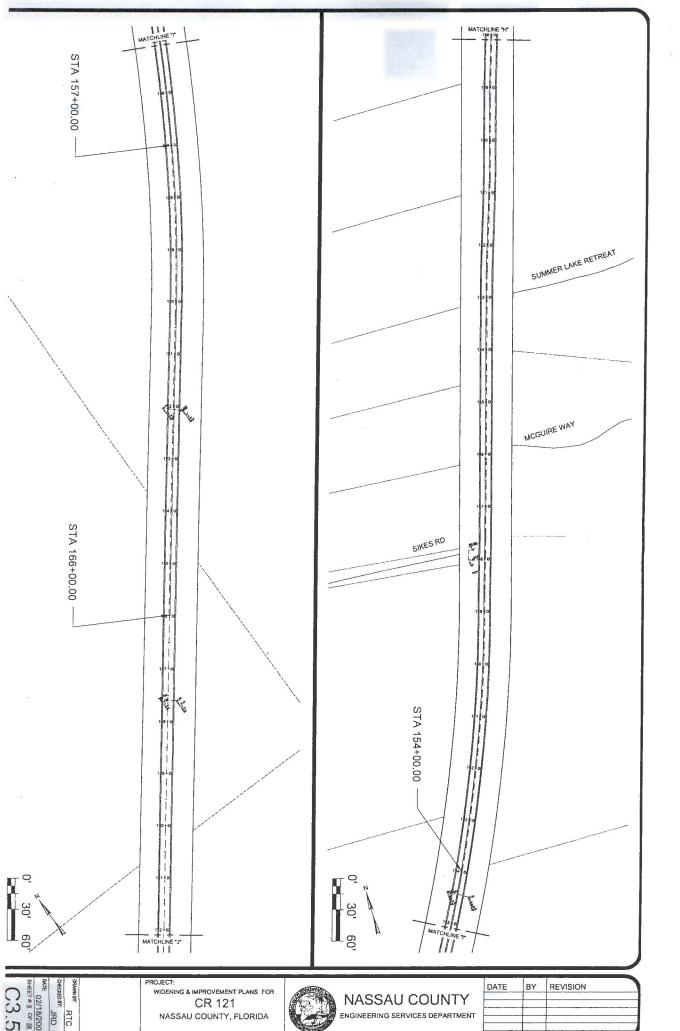
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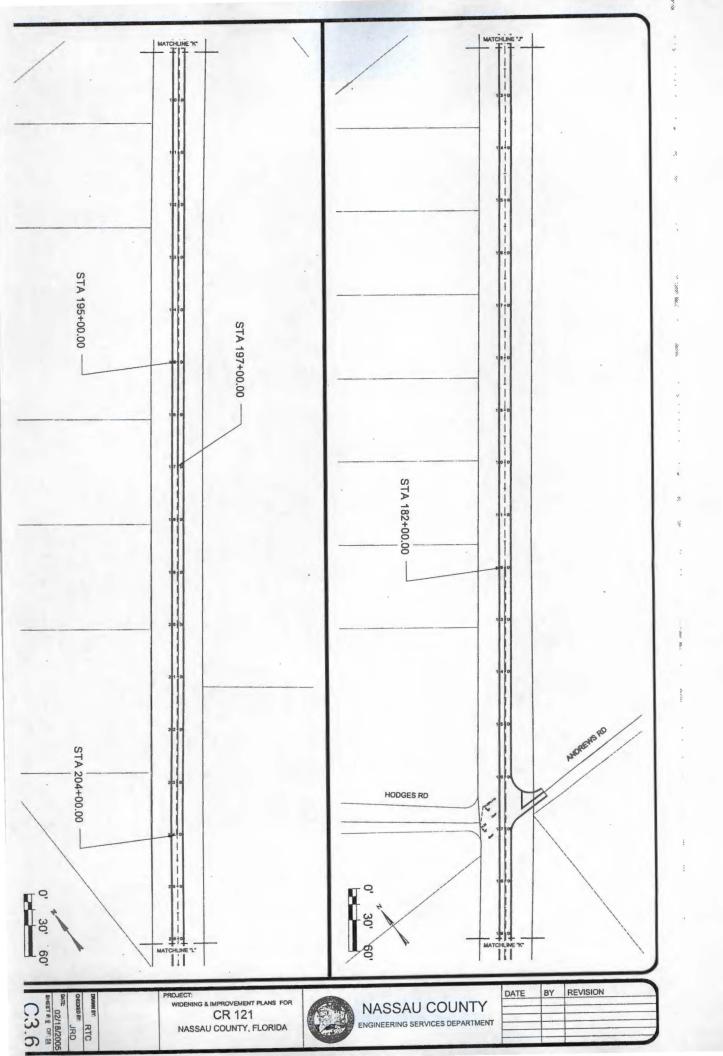


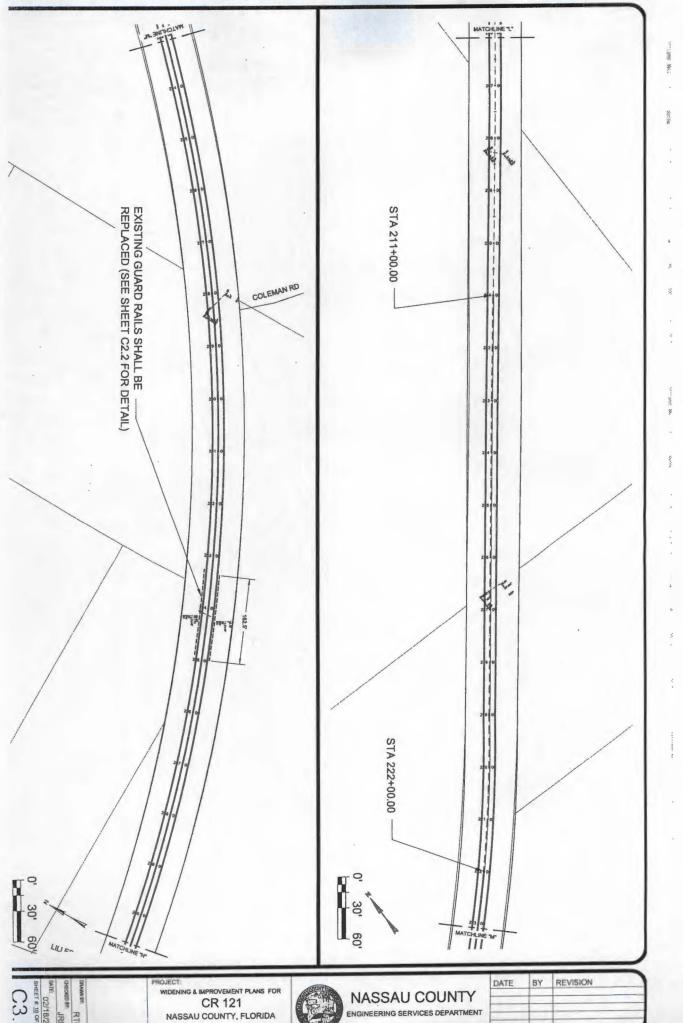




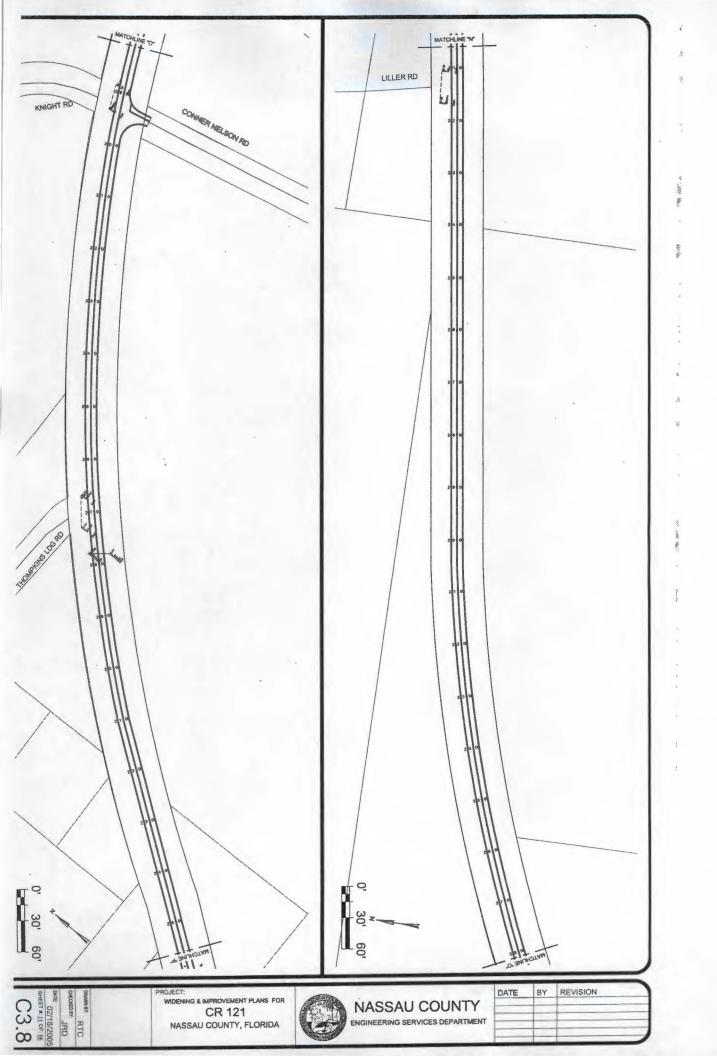


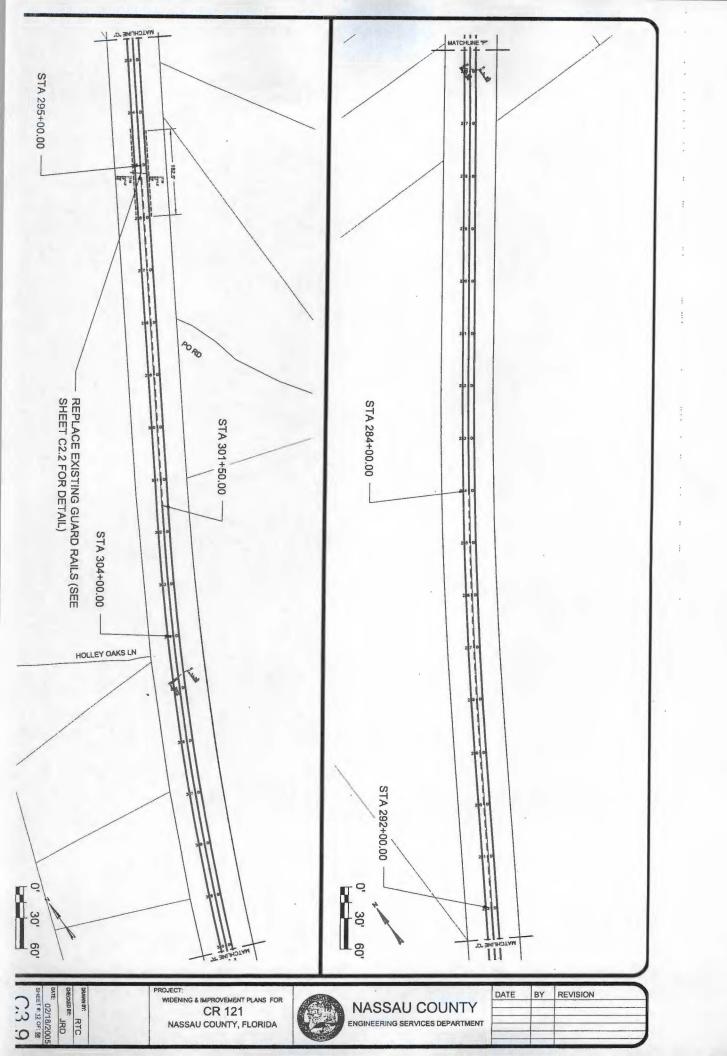
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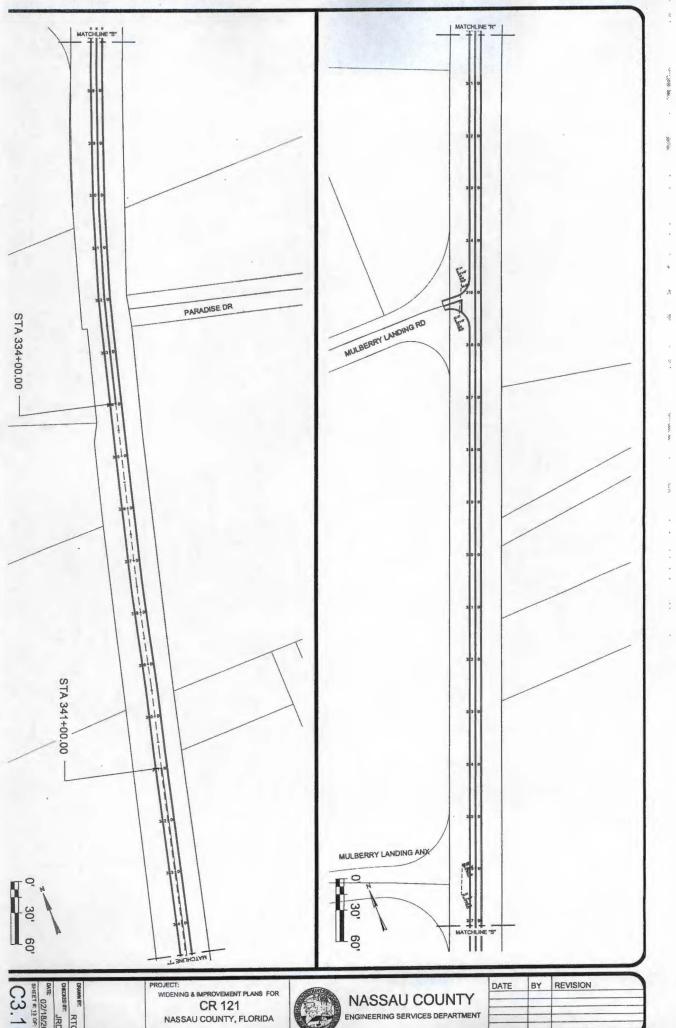


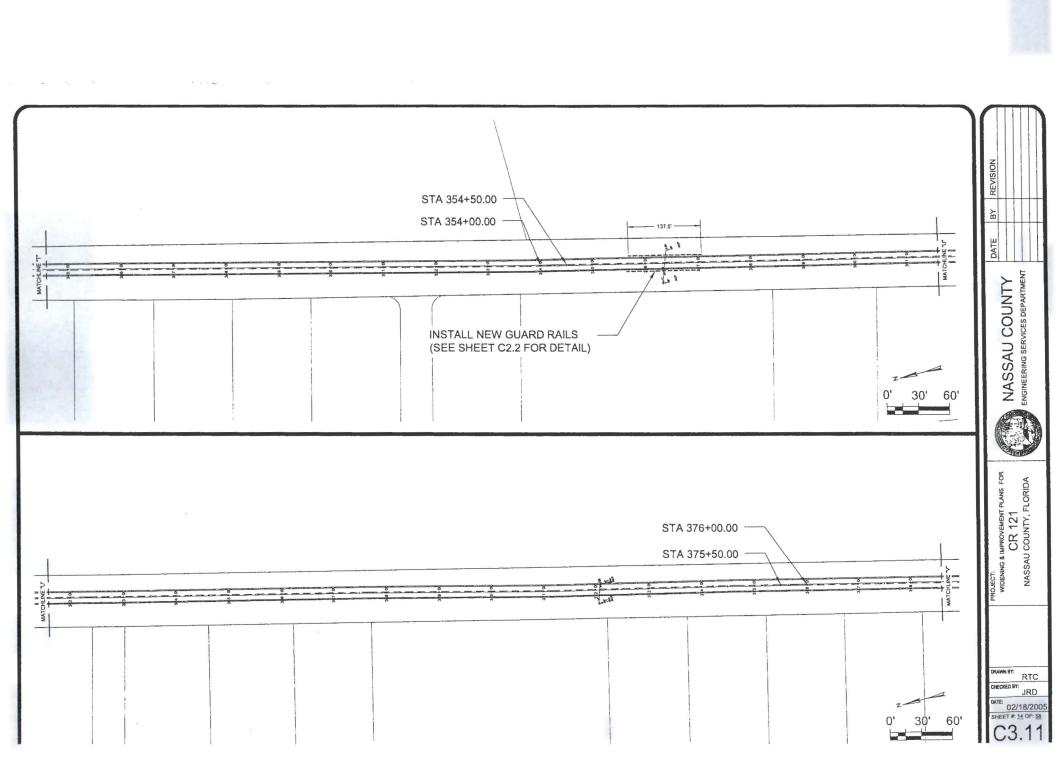


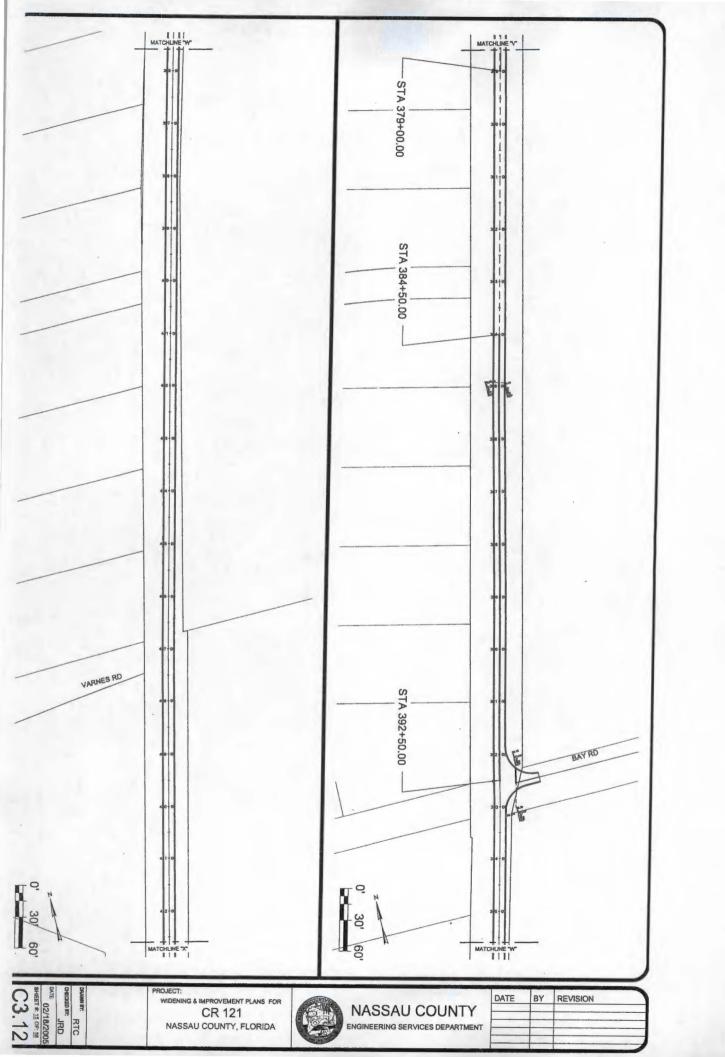


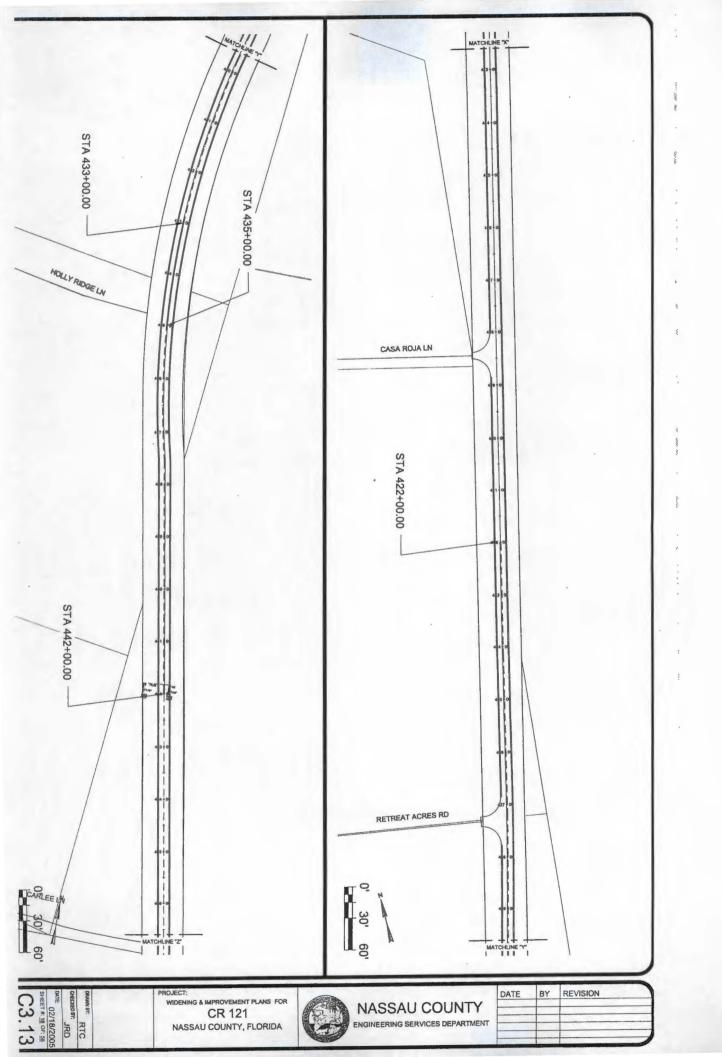


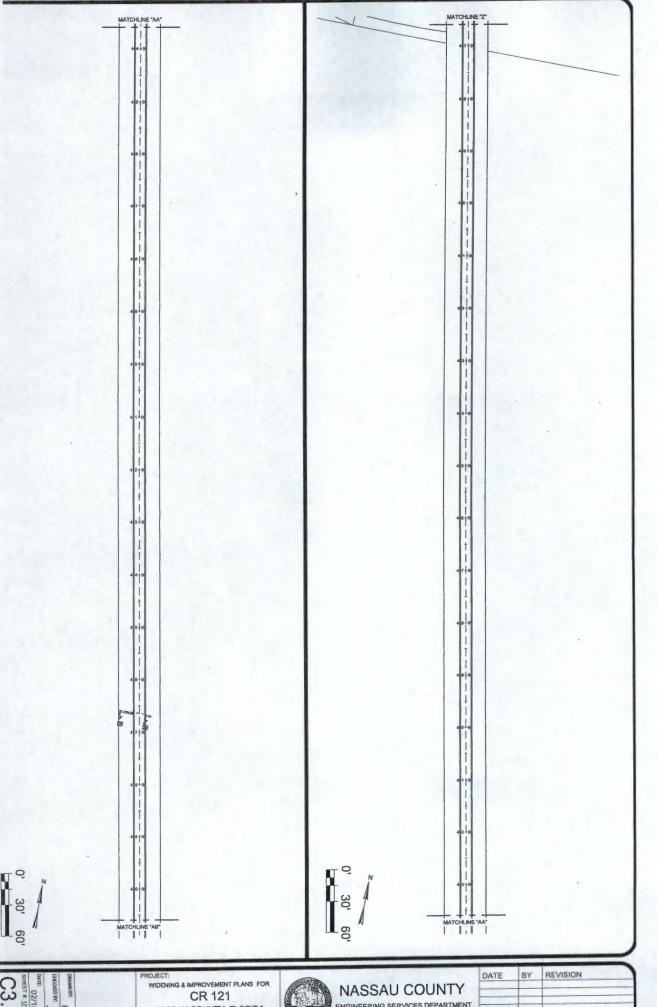










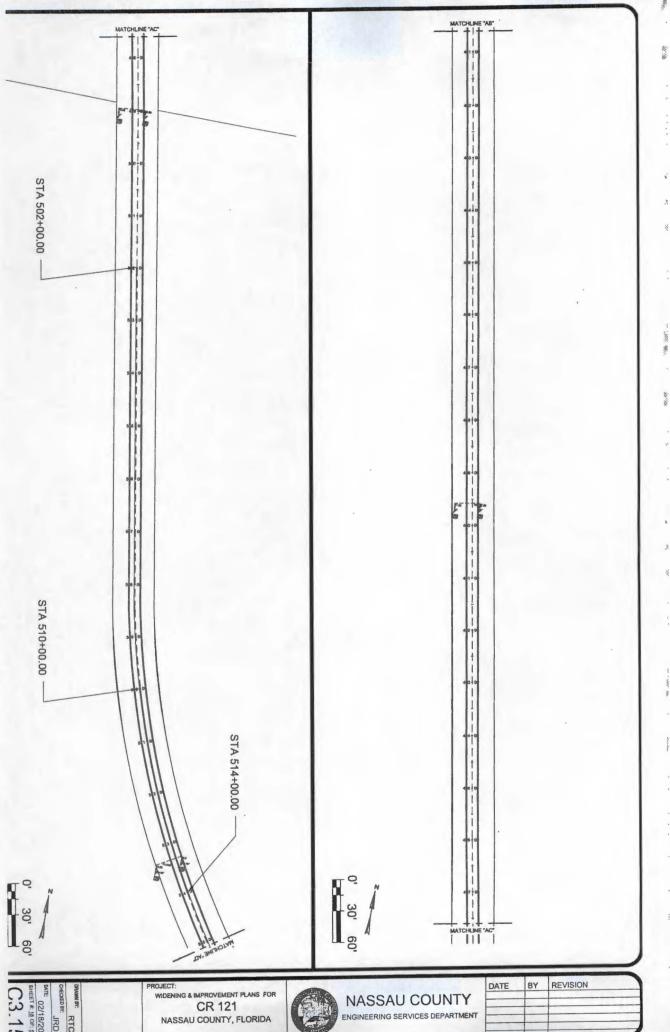


CR 121 NASSAU COUNTY, FLORIDA



ENGINEERING SERVICES DEPARTMENT

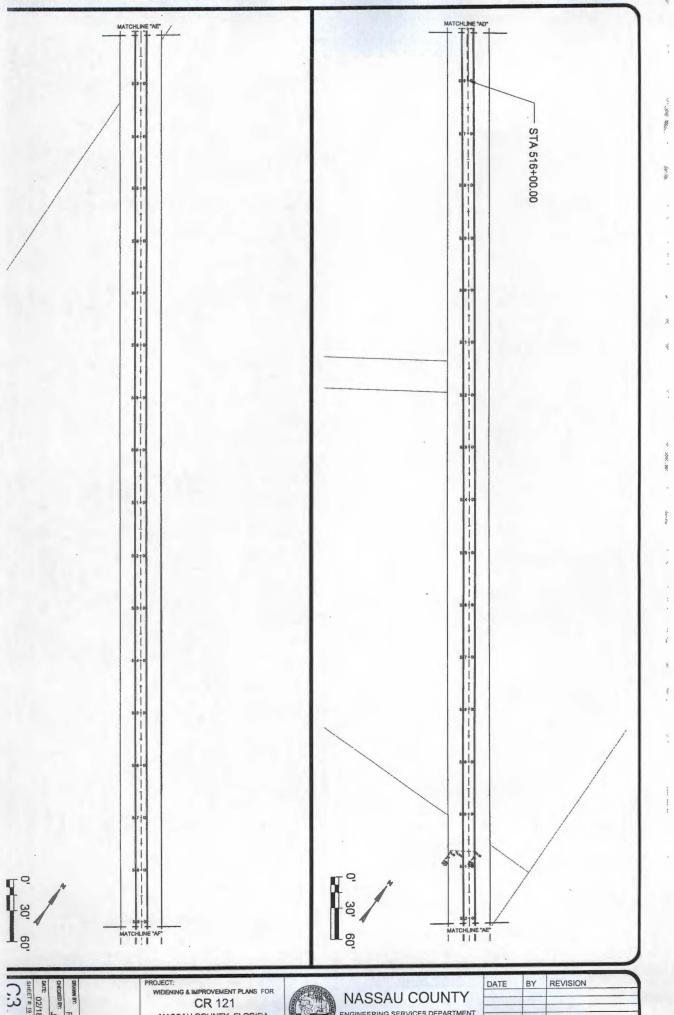
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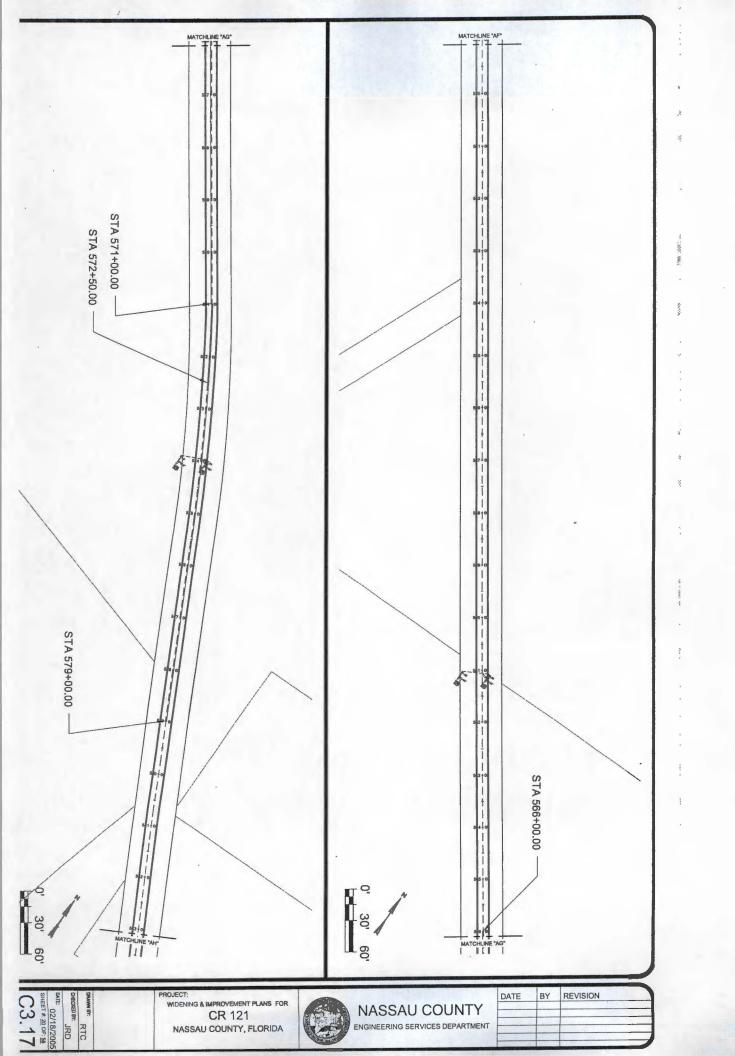
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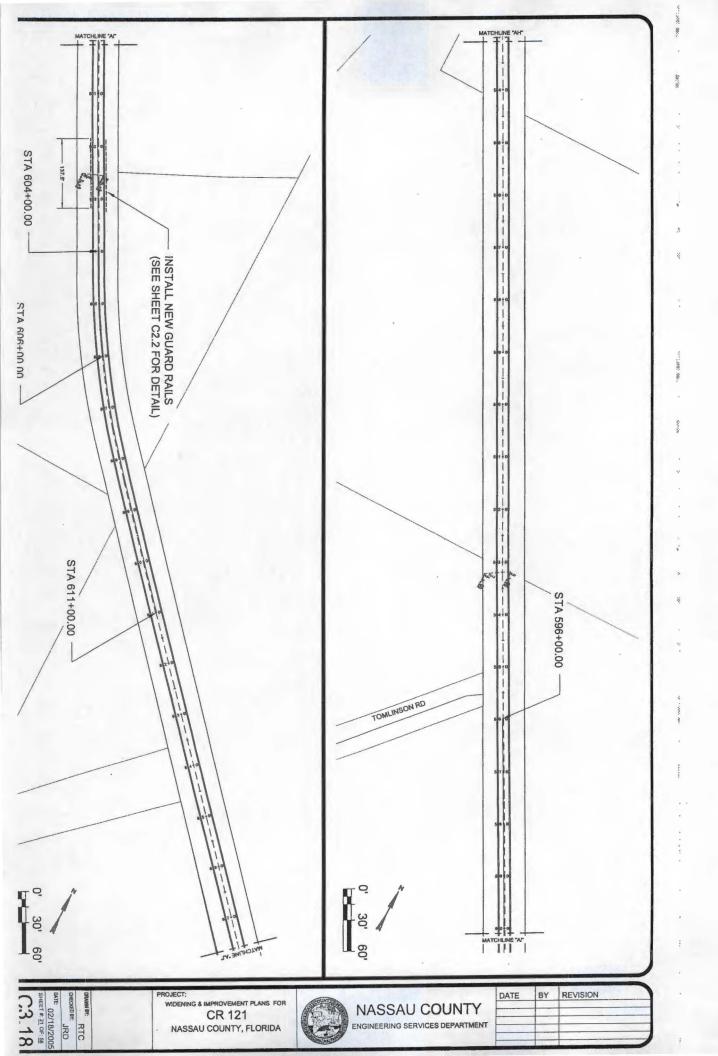
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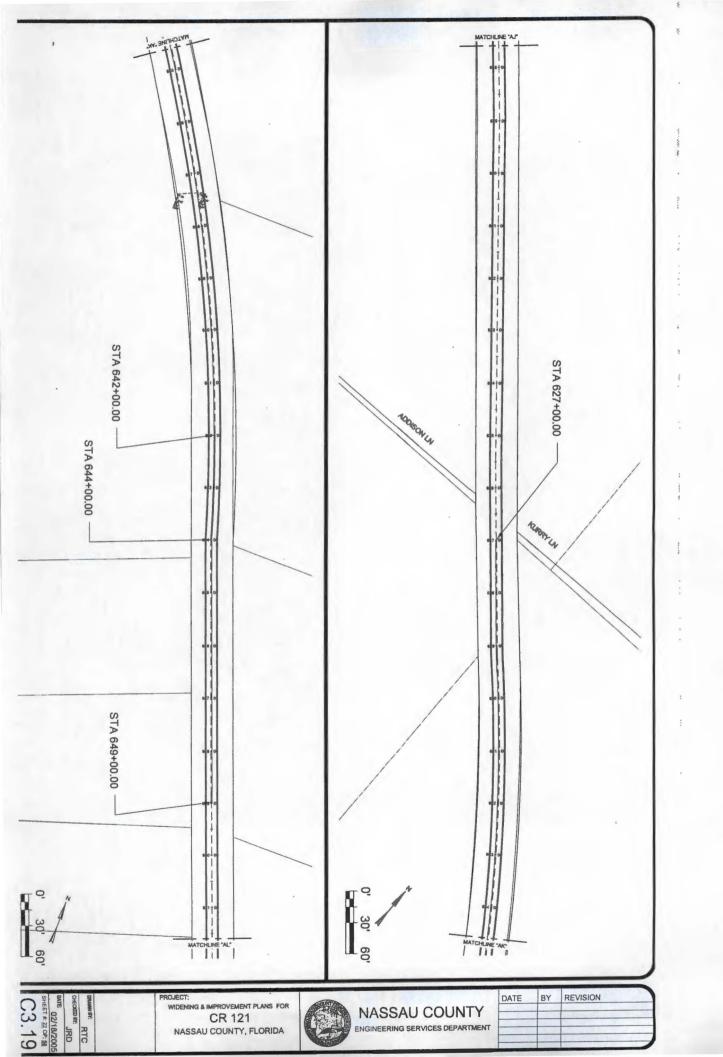


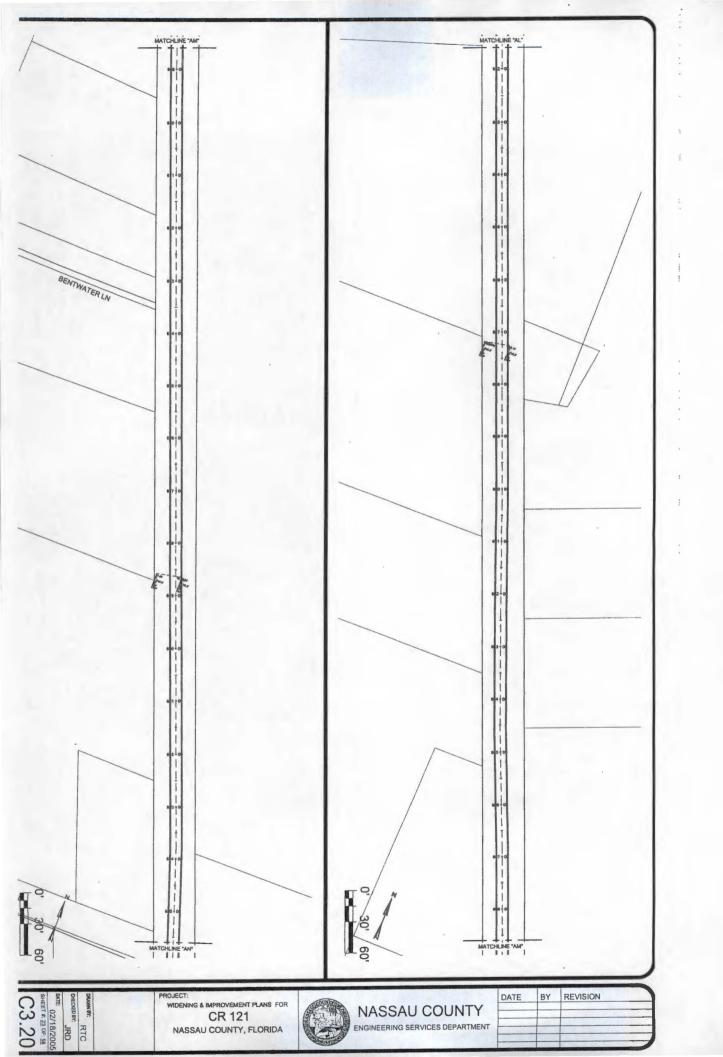
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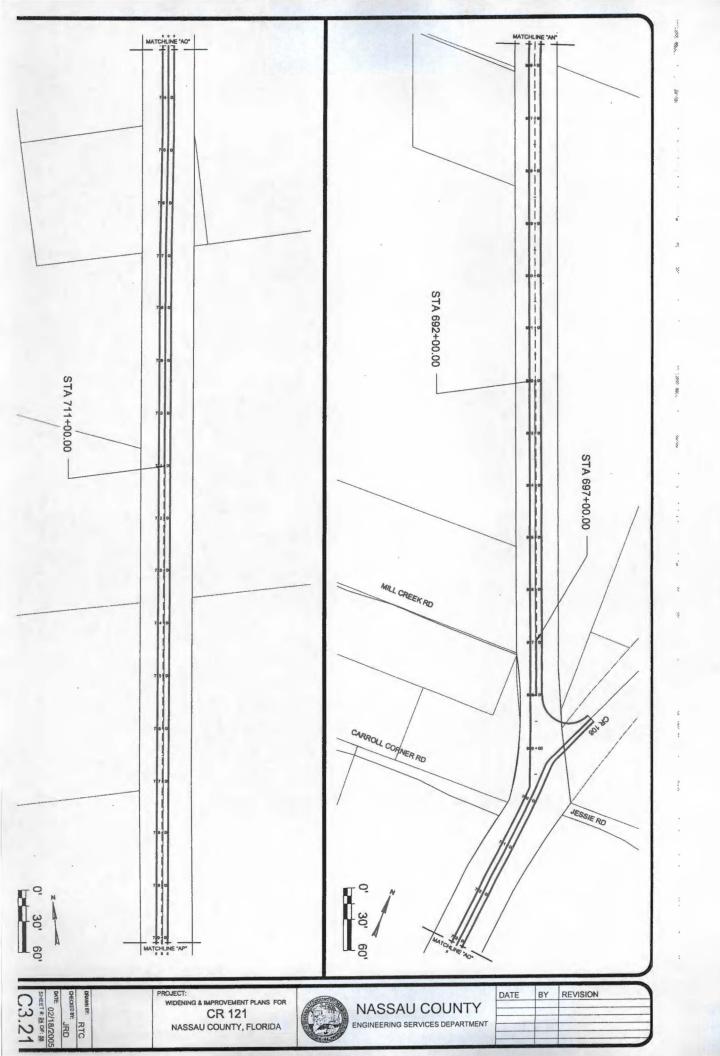
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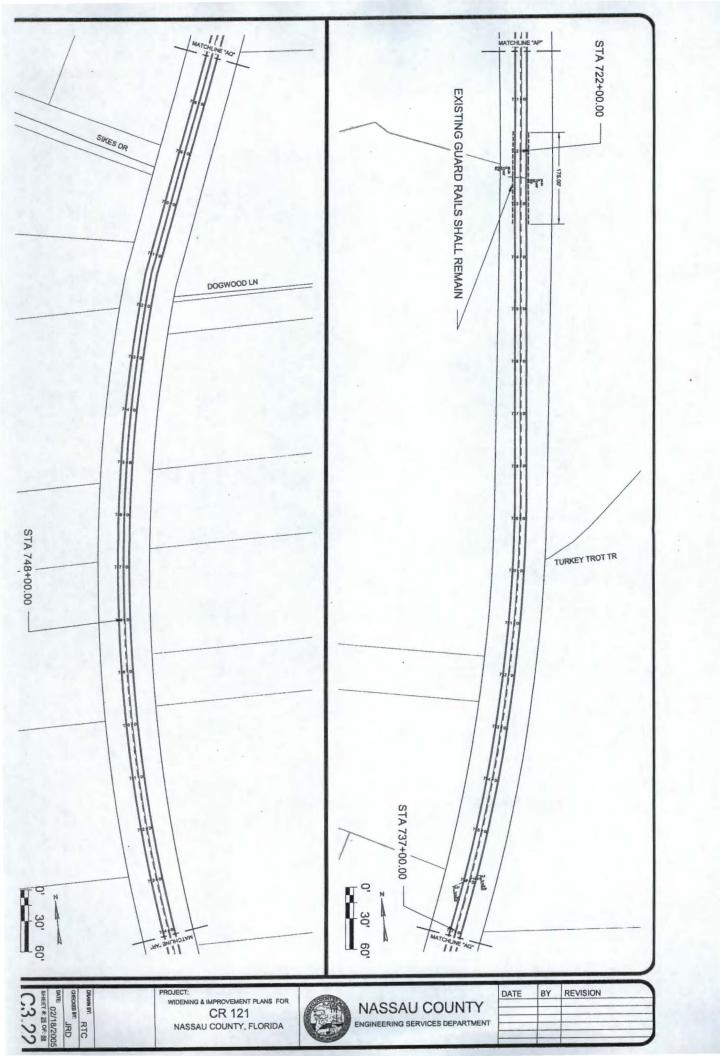


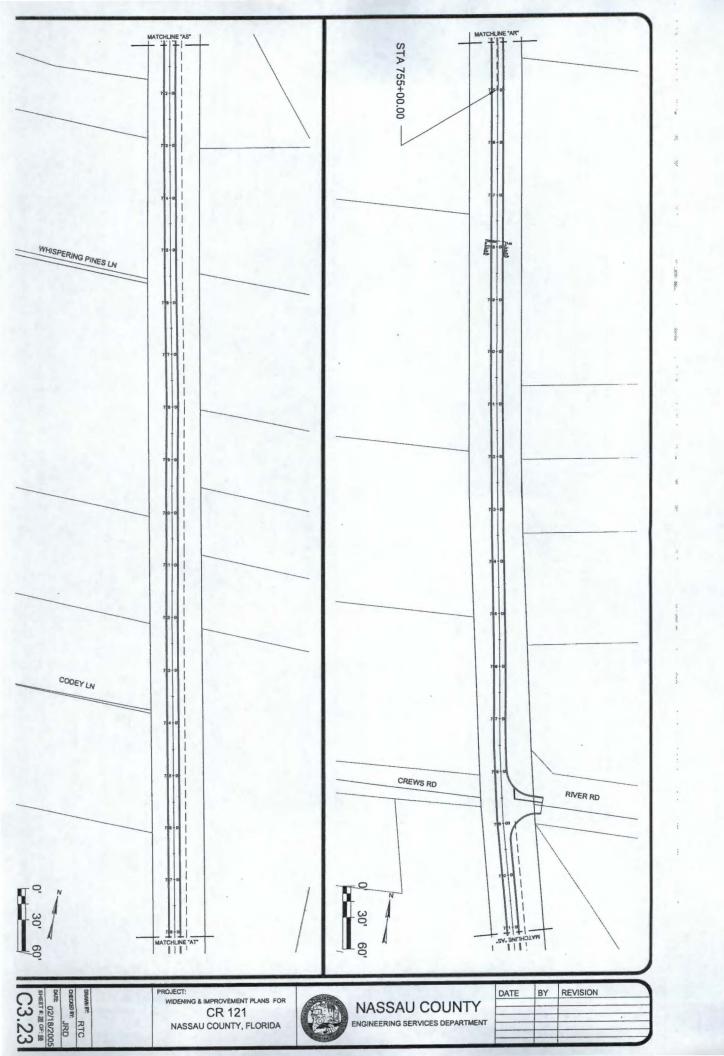


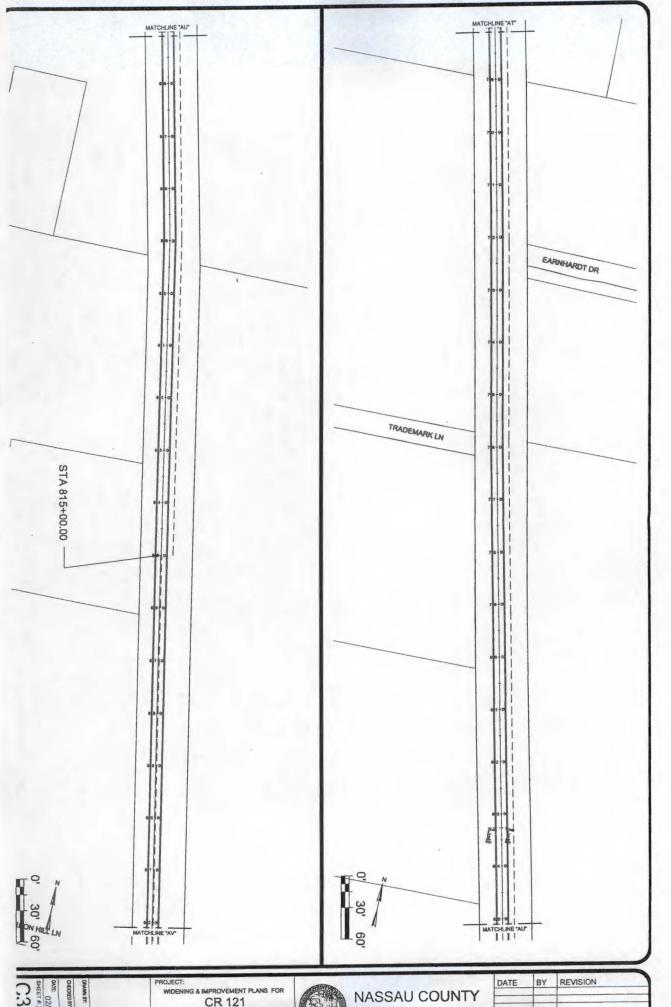








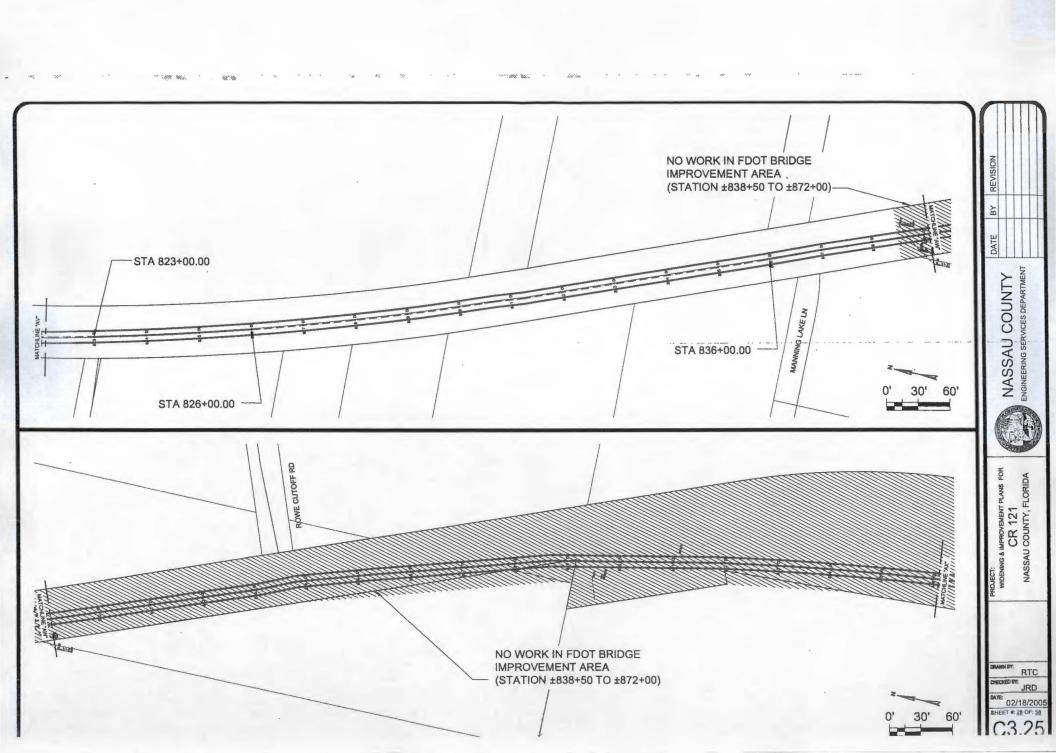


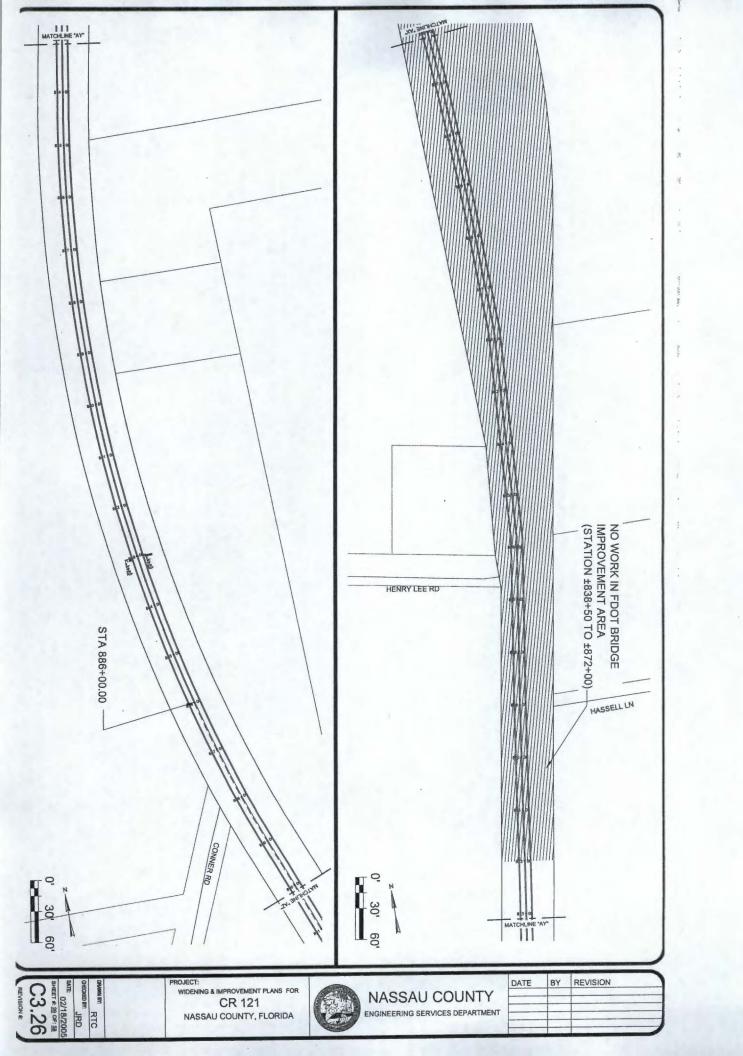


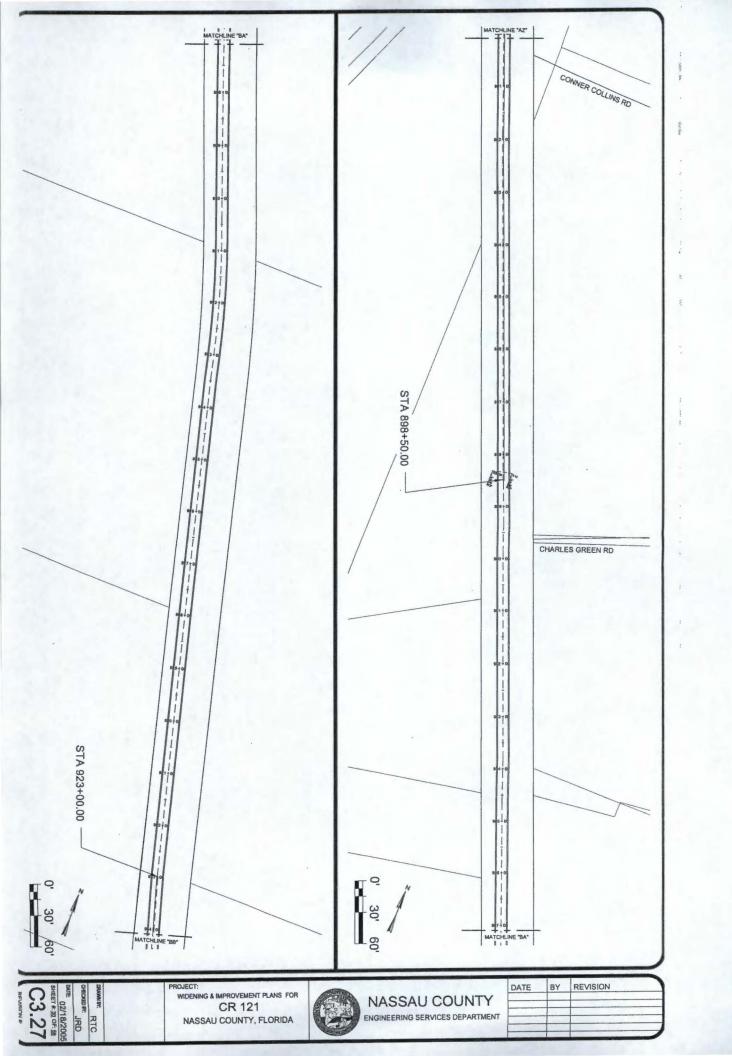
widening & improvement plans for CR 121

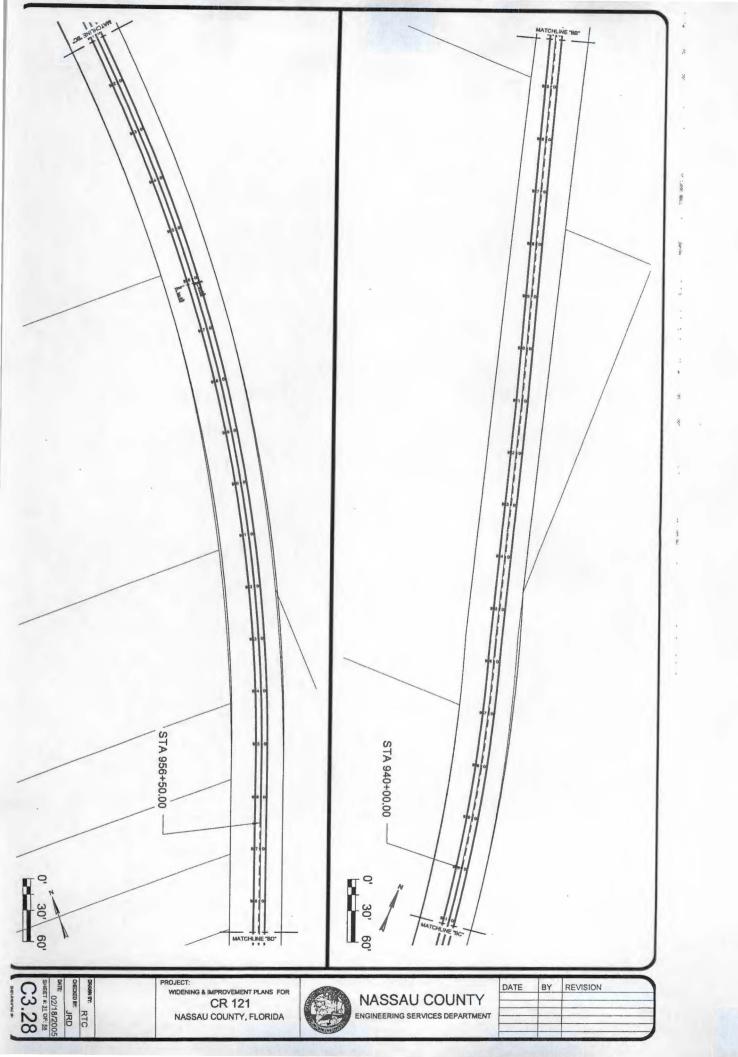
NASSAU COUNTY, FLORIDA

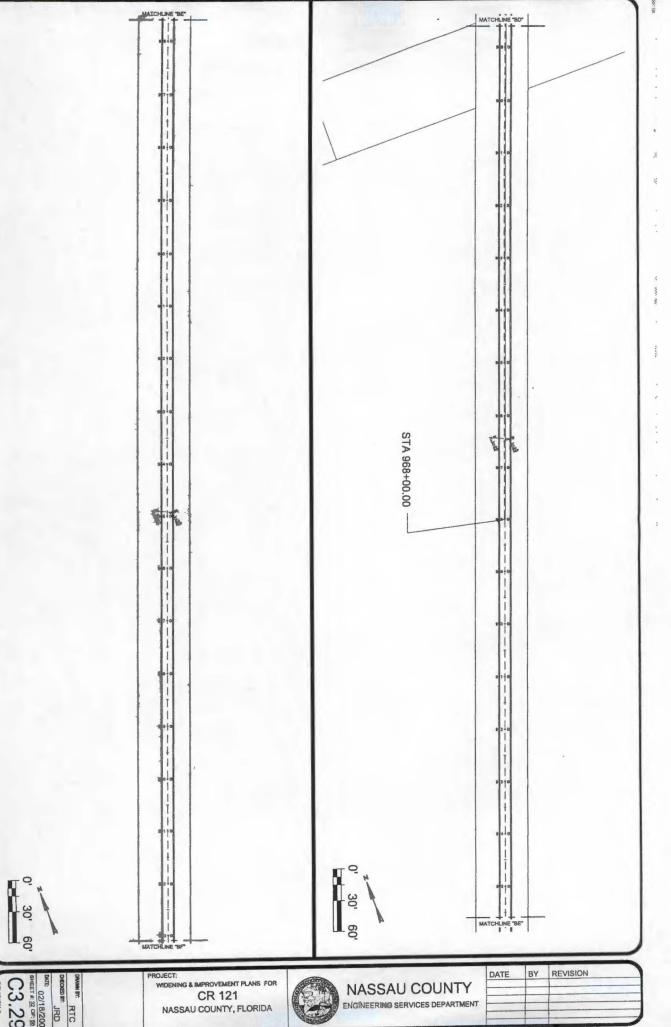




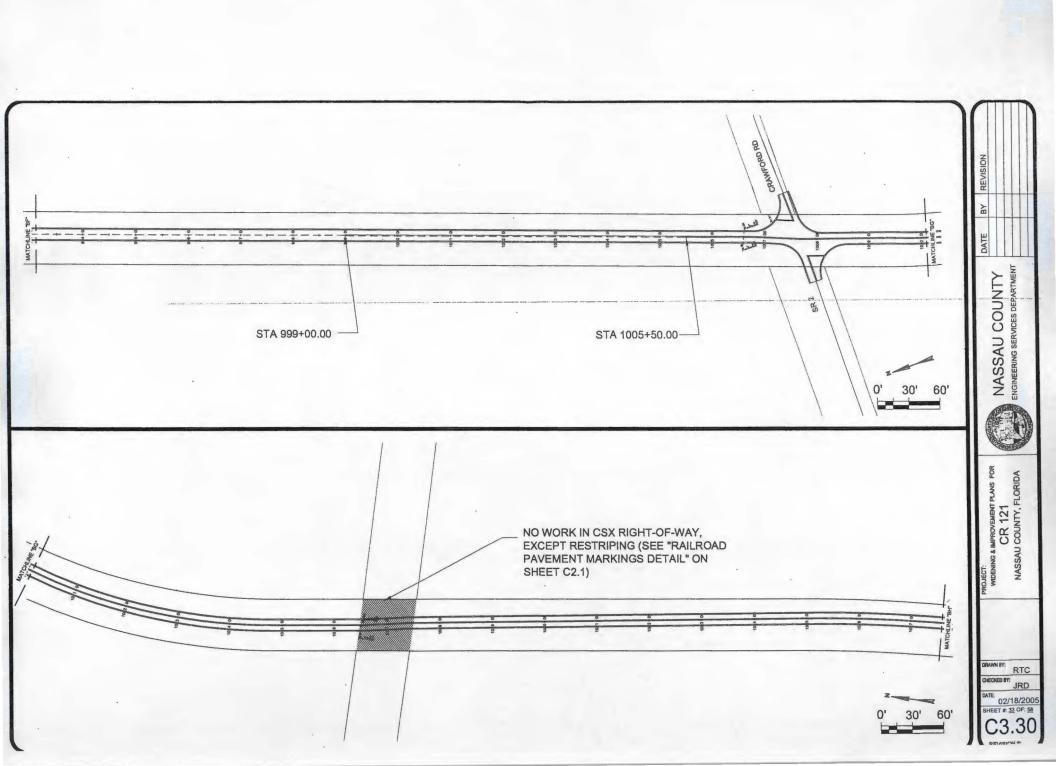


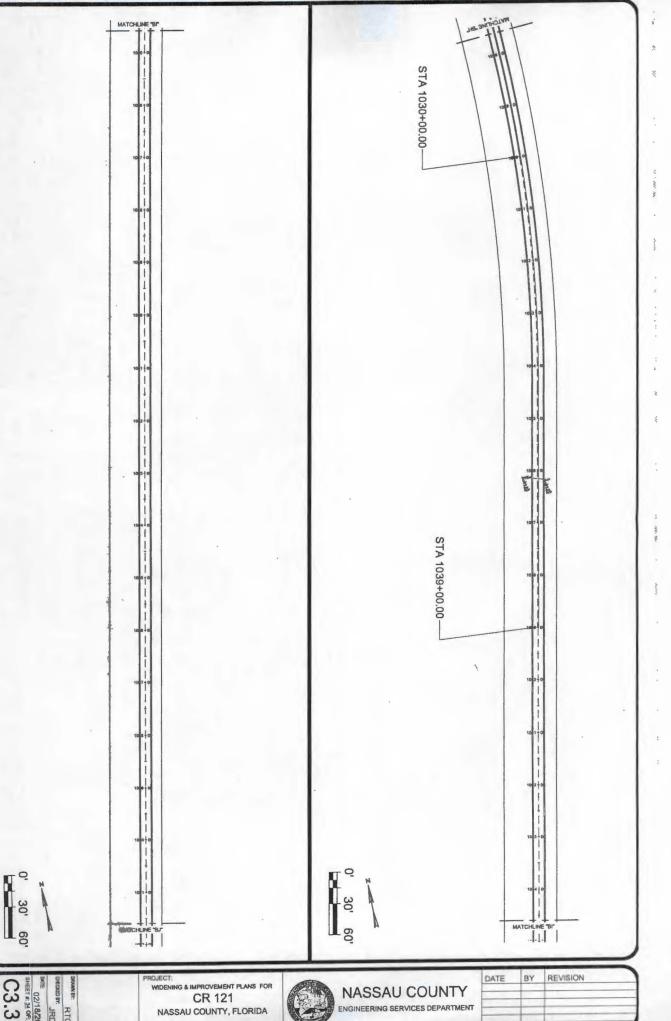






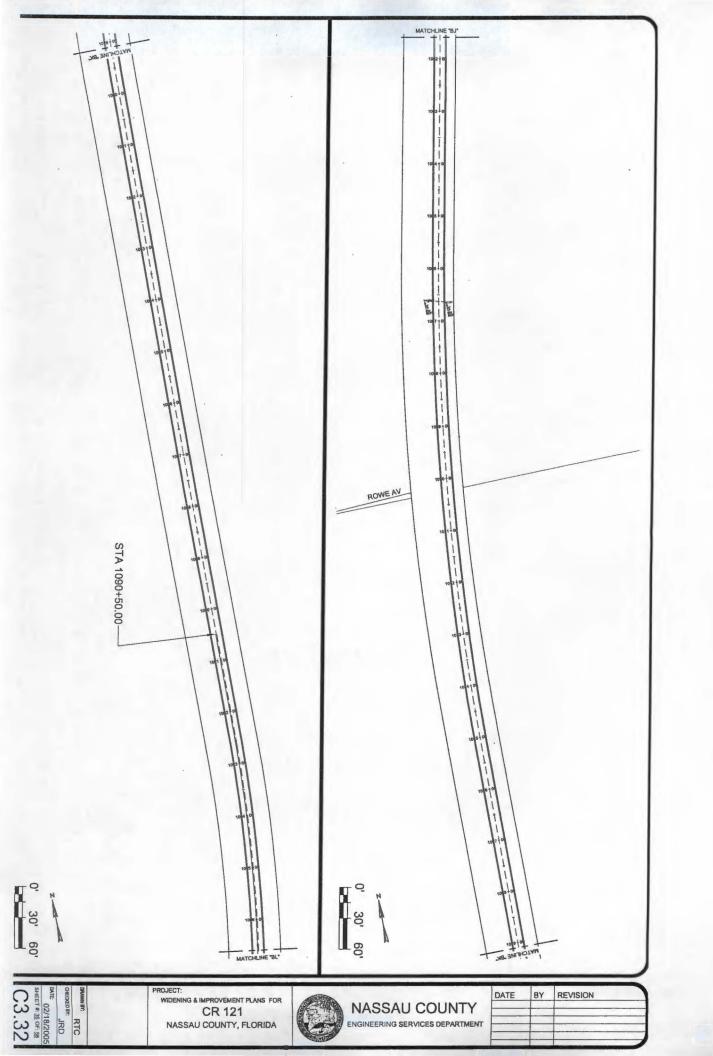


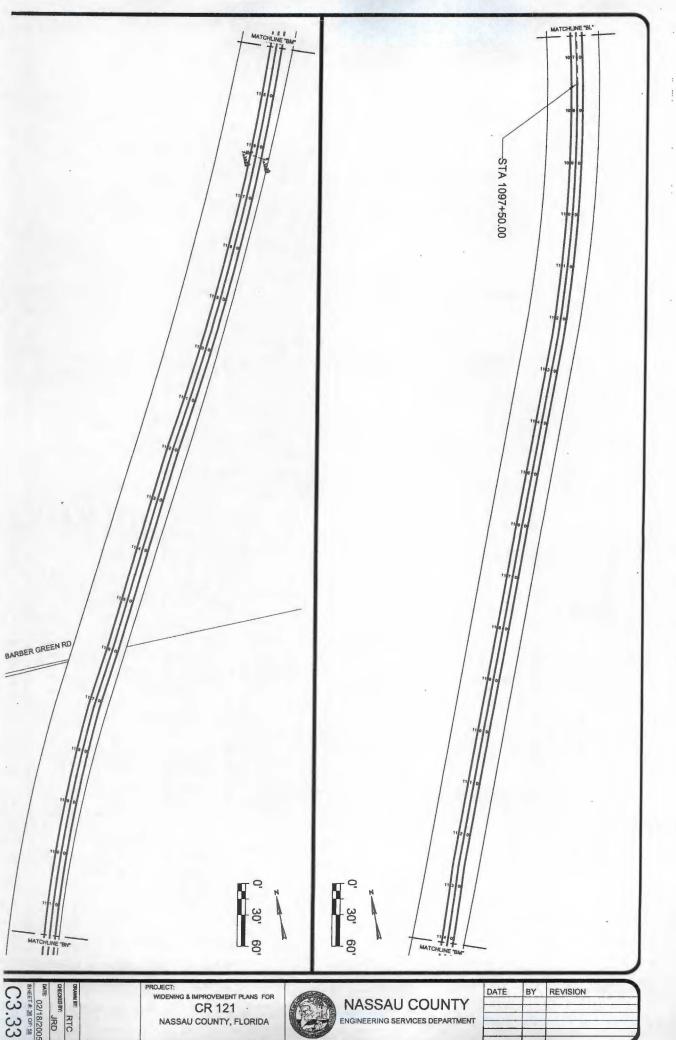






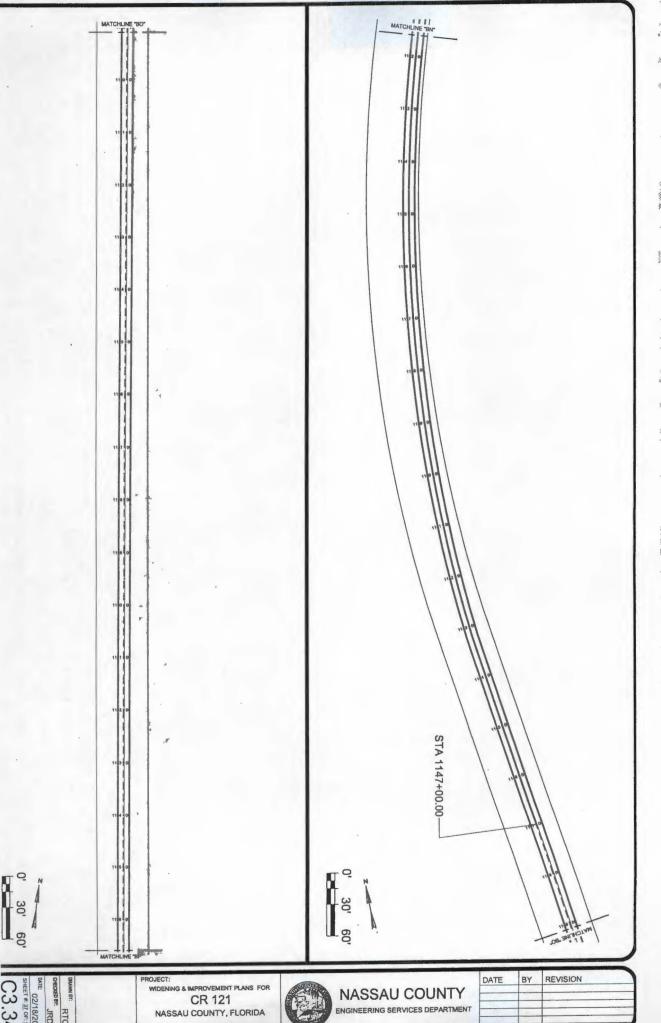
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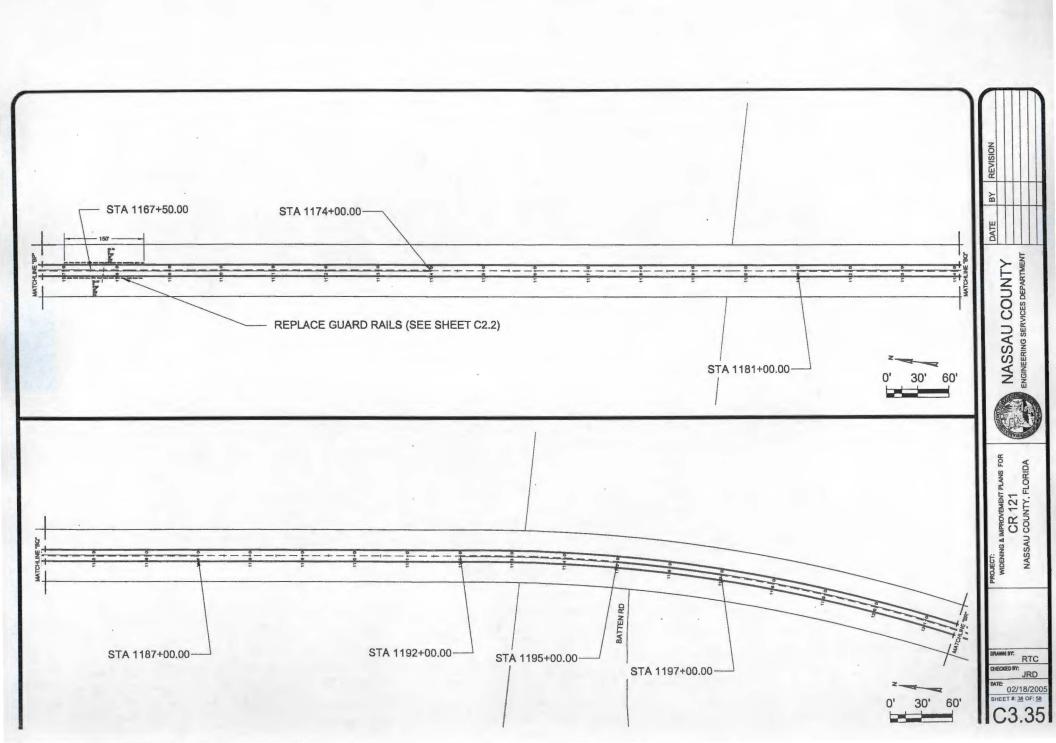


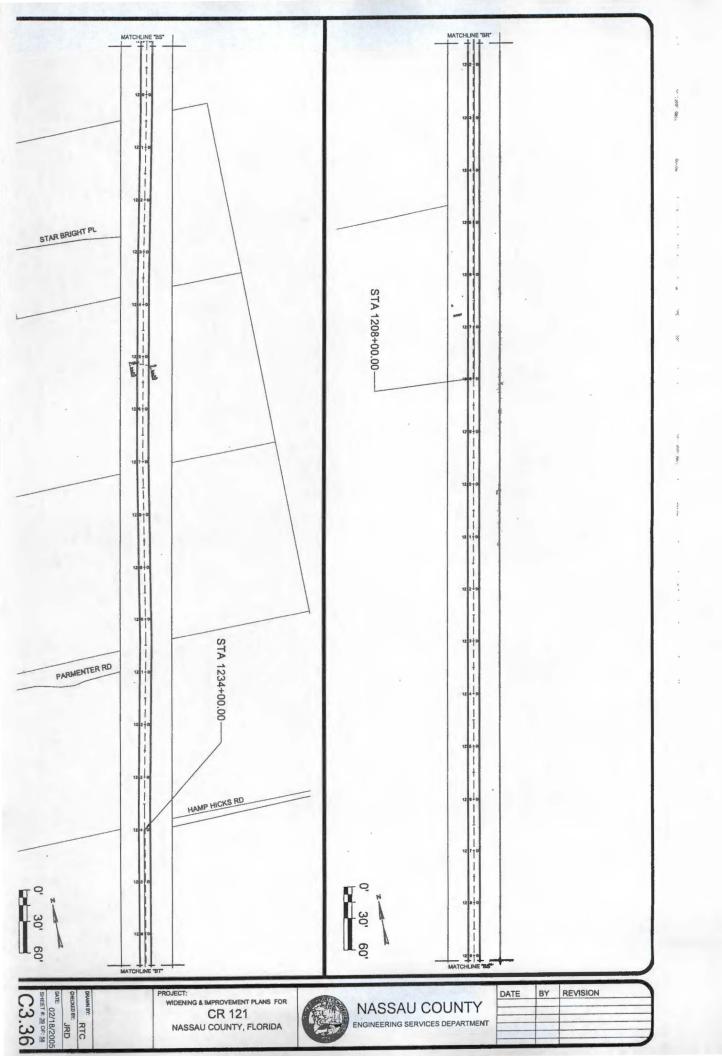


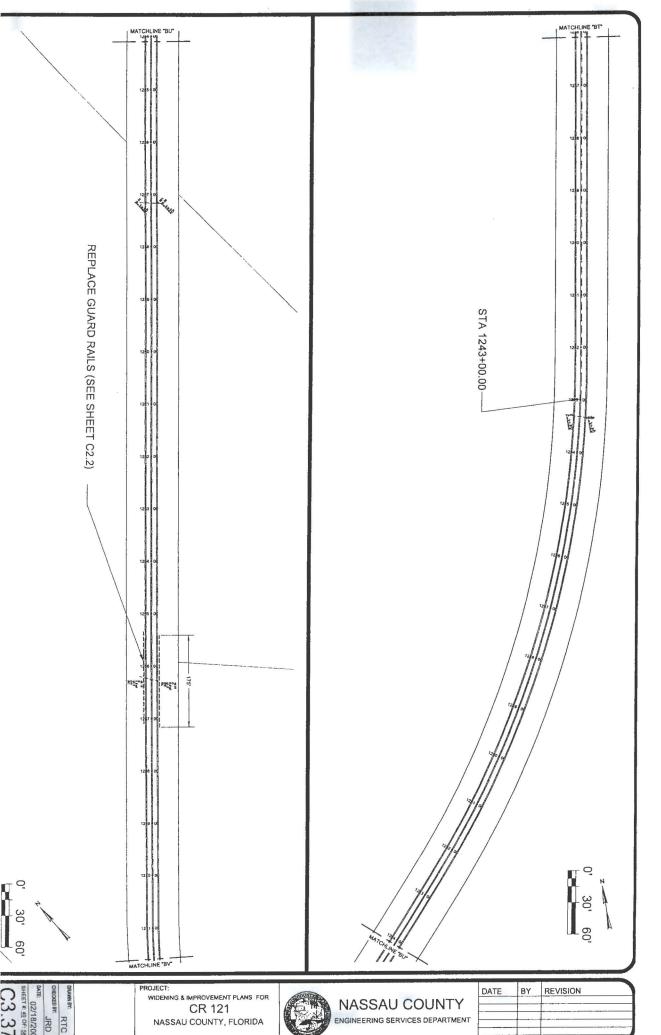
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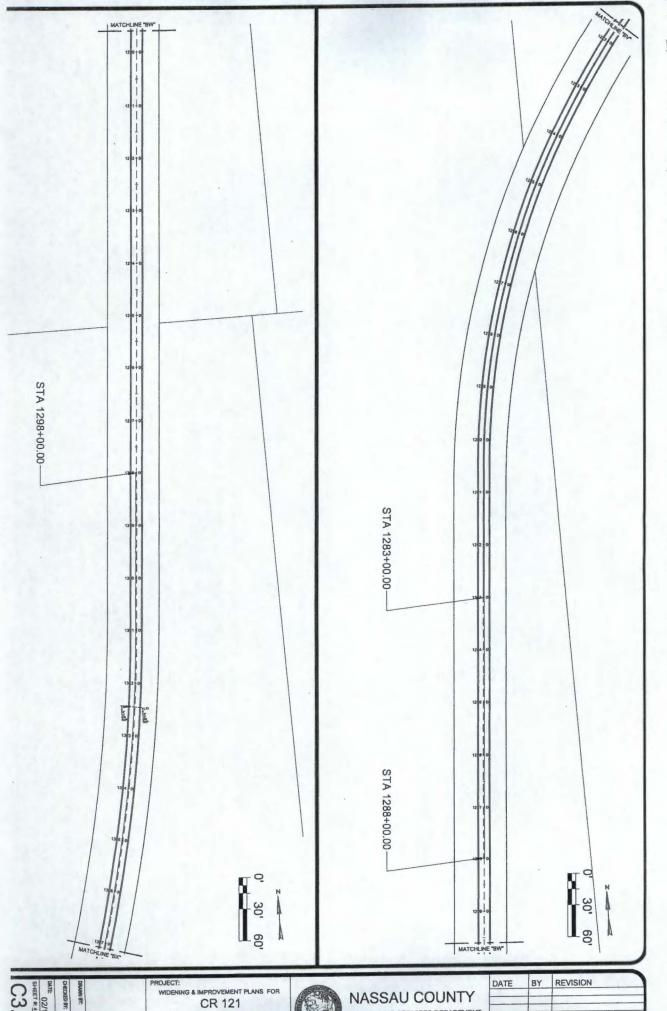




JRD



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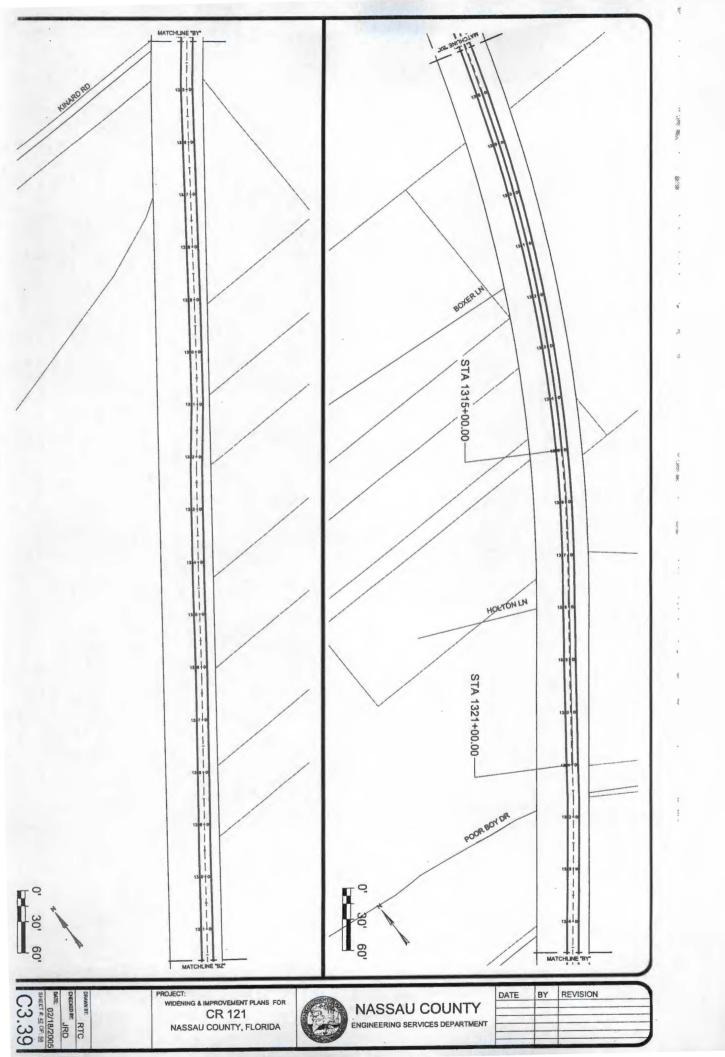


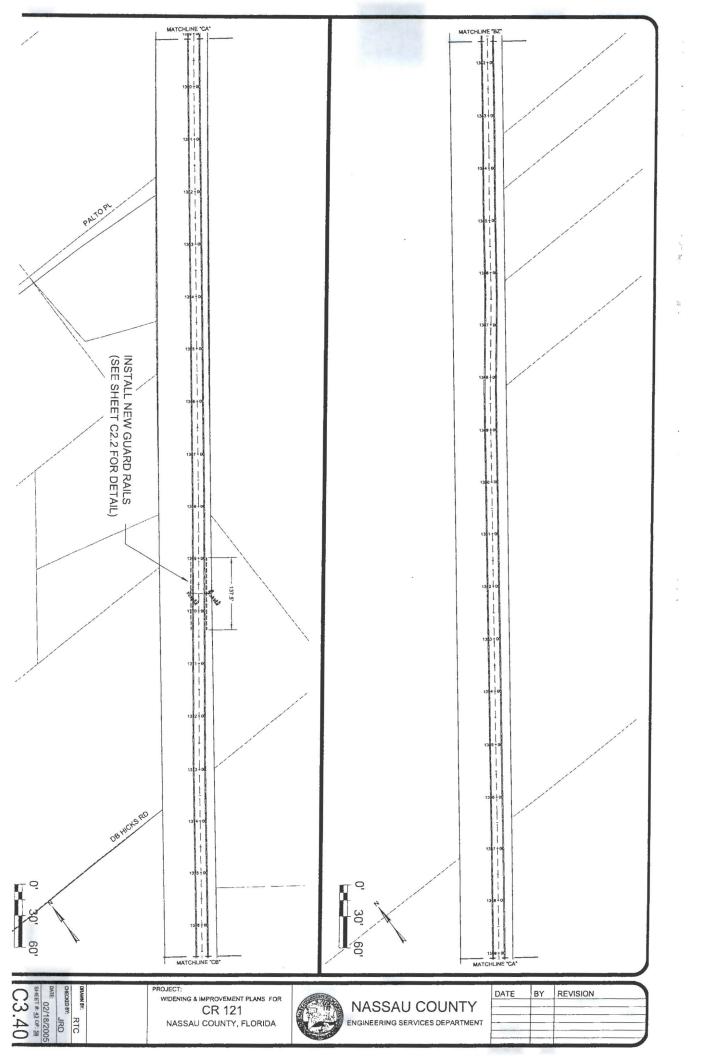
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WIDENING & IMPROVEMENT PLANS FOR
CR 121

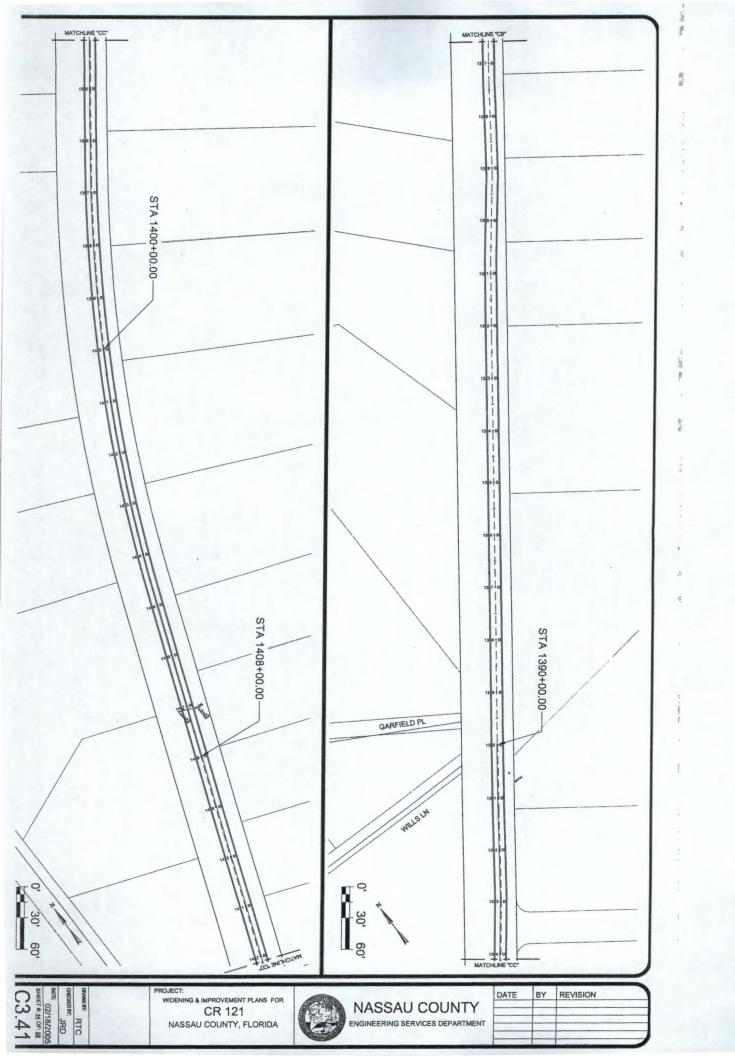
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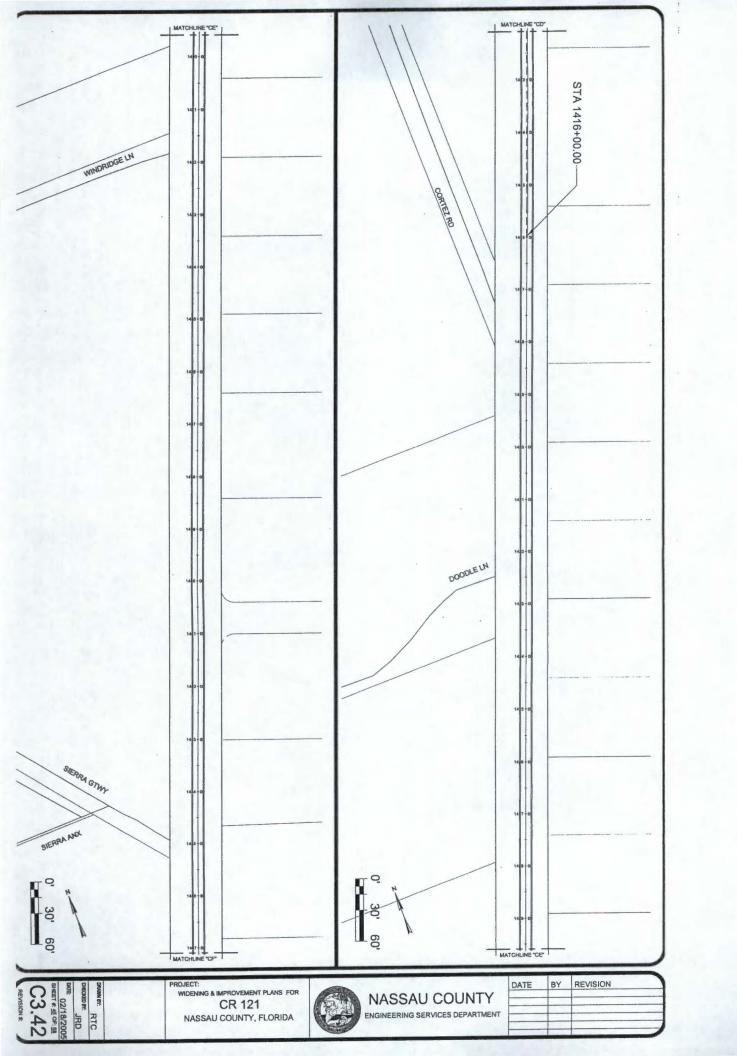


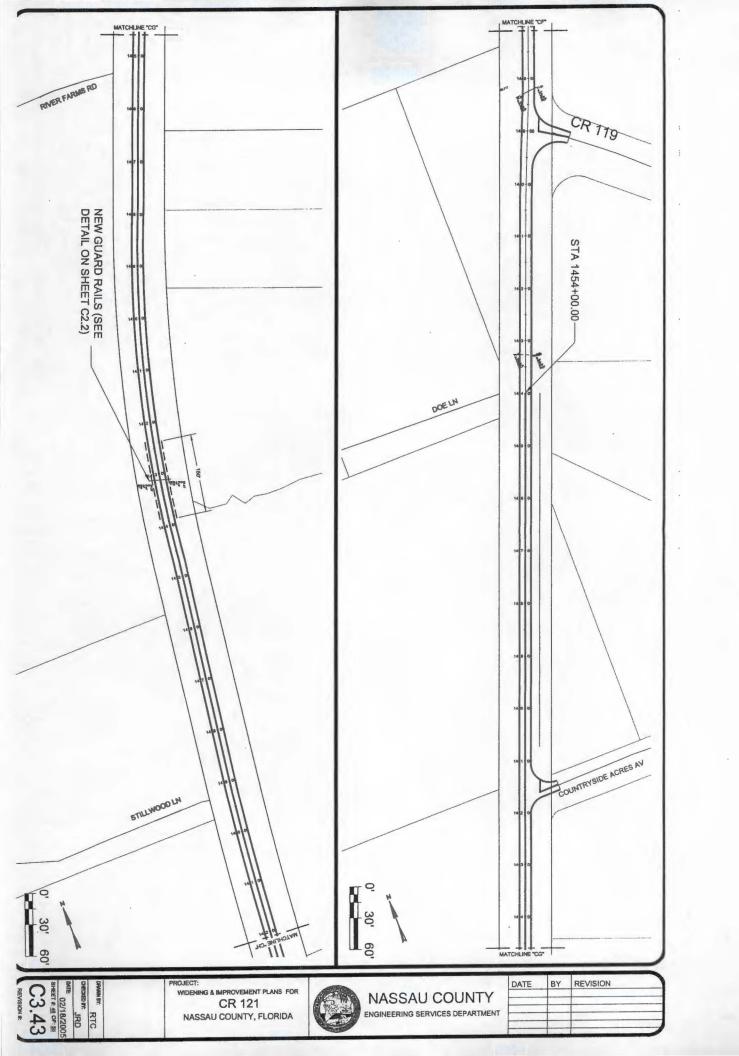
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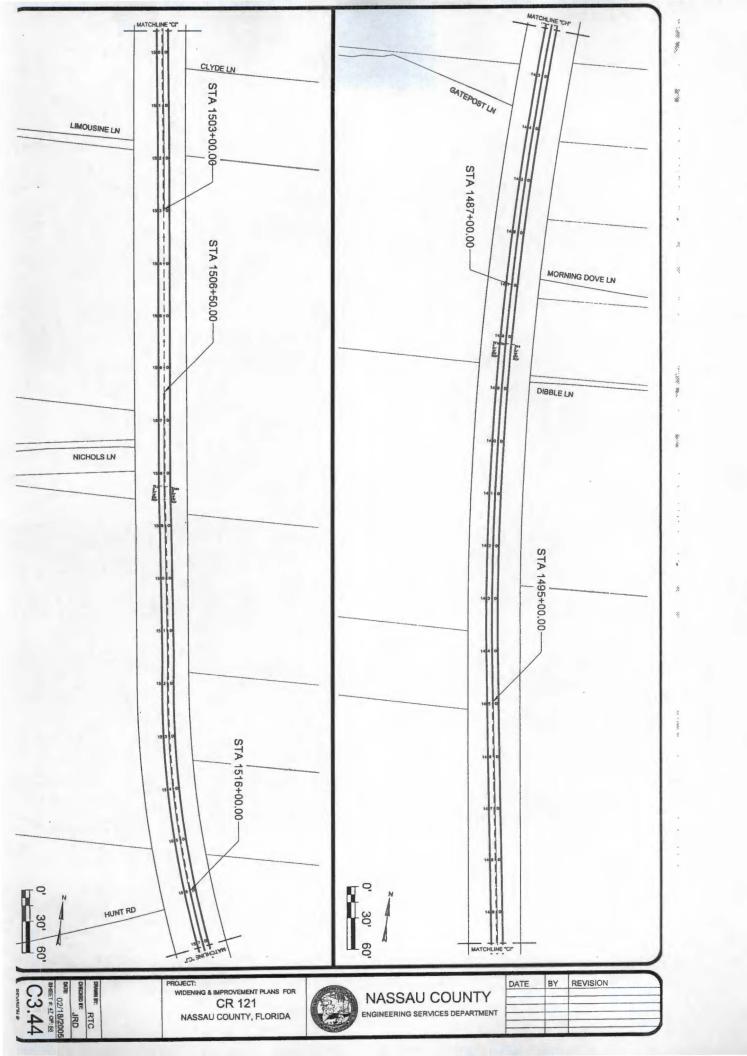


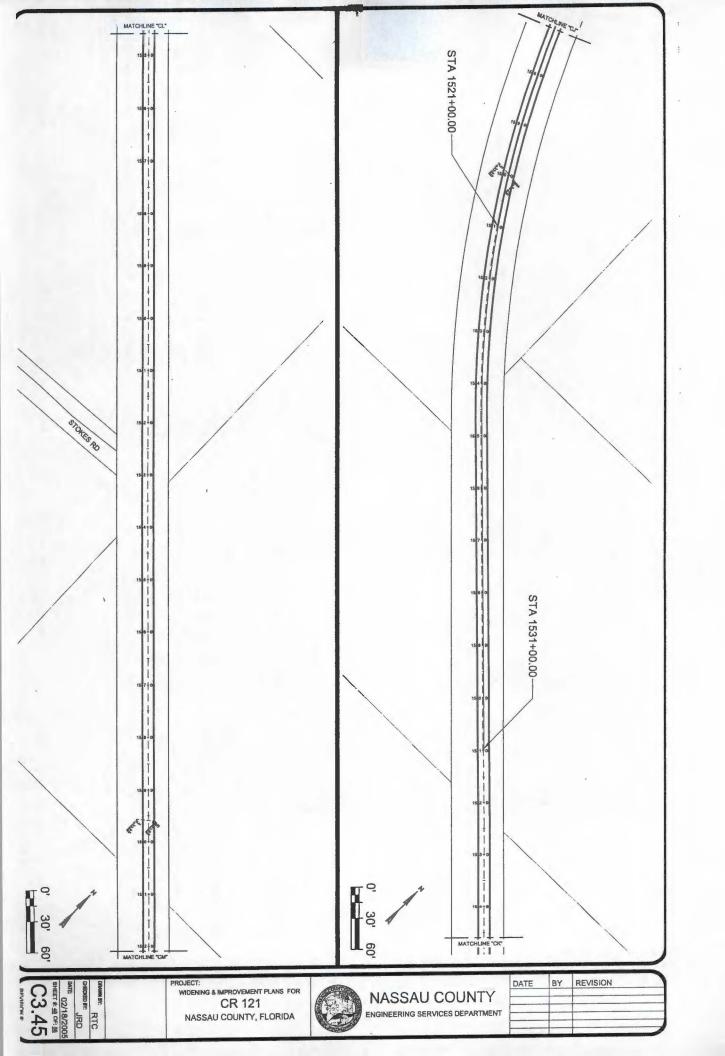


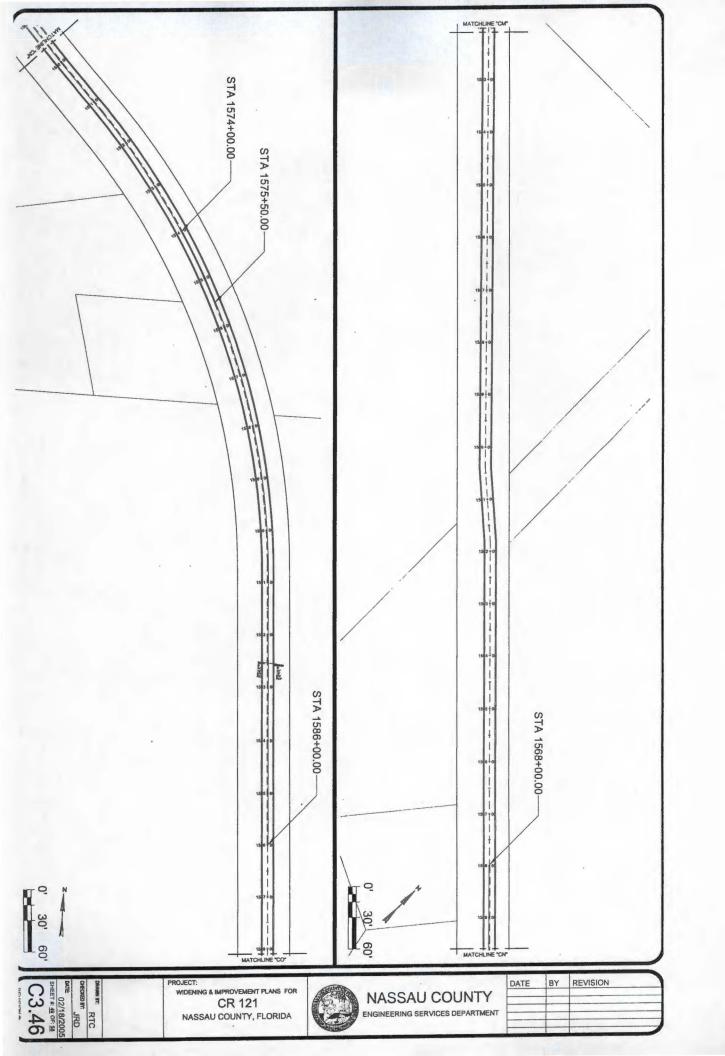


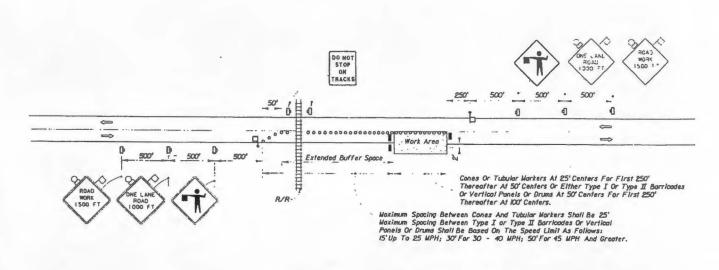












#### **GENERAL NOTES:**

SYMBOLS

Work Area

Sign With 18" x 18" (Min. )
Orange Flag And Type B Ughl

Type I, Type II Or Type III Barricode
Or Vertical Panel Or Drum

Type I Or Type II Barricade Or Vertical Panel
 Or Cone Or Tubular Marker Or Drum

D Wort Zone Sign

U" Flagger

WORK OPERATIONS SHALL BE CONFINED TO ONE TRAFFIC LANE, LEAVING THE OPPOSITE LANE OPEN TO TRAFFIC.

ALL VEHICLES, EQUIPMENT, WORKERS, (EXCEPT FLAGGERS), AND THEIR ACTIVITIES ARE RESTRICTED AT ALL TIMES TO ONE SIDE OF THE ROADWAY.

WHEN FLAGGERS ARE THE SOLE MEANS OF ONE-WAY CONTROL. THE FLAGGERS SHALL, BE IN SIGHT OF EACH OTHER OR IN DIRECT COMMUNICATION AT ALL TIMES.

THE FIRST TWO WARNING BIONS SHALL MAVE AN  $M^{\prime\prime}$  I IS (wir.) DRANGE PLAG AND A TYPE B LIGHT ATTACHED AND OPERATING AT ALL TIMES.

MESH SIGNS MAY BE USED FOR (DAYLIGHT ONLY) OPERATIONS. TYPE B LIGHTE AND ORANGE PLAGS ARE NOT REQUIRED.

THE FLAGGER LEGEND SIGN MAY BE SUBSTITUTED FOR THE SYMBOL BIOK.

THE ONE-LANE ROAD SIGNS ARE TO BE PILLY COVERED AND THE PLAGGER BIGHE RITHER REMOVED OR FILLY COVERED WHEN NO WORK IS SEND FERFORMED AND THE HIGHWAY IS DEEN TO TWO-MAY TRAFFIC.

ARROWS DENOTE DIRECTION OF TRAFFIC ONLY AND DO NOT REPLECT PAVEMENT MARKINGS.

CONGITUDINAL DIMENSIONS ARE TO BE ADJUSTED TO FIT FELD CONDITIONS SEE FOOT INCIEX No. 600.

WHEN A SIDE ROAD INTERSECTS THE HIGHWAY ON WHICH WORK IS SEIND PERFORMSED ADDITIONAL TRAFFIC CHIRDL DEVICES SHALL BE SERECTED IN ACCORDANCE WITH OTHER APPLICABLETCZ INDEXES.

FOR GENERAL TCZ REQUIREMENTS AND INFORMATION. REFER TO INDEX No. 800.

DISCONTINUING OF EXTENDED SUFFER SPACE W.L. NOT OCCUR UNTIL THE QUEUE LENGTH PLUS 300 IS REACHED.

TYPICAL MAINTENANCE OF TRAFFIC PLAN (PER FDOT INDEX NO. 603)

NASSAU COUNTY

MASSAU COUNTY

INGINEERING SERVICES DEPARTMENT

WIDEWING & MAPROVENENT PLANS FOR CR 121
NASSAU COUNTY, FLORIDA

OHORDEN JRD

C4.1



10010 N. MAIN STREET JACKSONVILLE, FL 32218

## FLORIDA PLANT TELEFAX CORRESPONDENCE

DATE:

1/3/06

TO:

**CHARLOTTE YOUNG** 

COMPANY:

NASSAU COUNTY ENGINEERING SERVICES

PHONE NUMBER:

(904) 548-4590

FAX NUMBER:

(904) 321-2658

FROM:

RAY GRODE

COMPANY:

DOUGLAS ASPHALT CO.

PHONE # (904) 751-2240 FAX # (904) 751-2502

NUMBER OF PAGES:

3

(INCLUDING COVER PAGE)

REMARKS:

PLEASE USE THIS ADJENDA FOR THE ISSUES TO BE

PRESENTED FRIDAY FOR THE CR 121 MEETING.

THANKS, July



Joel Spivey, President Kylc Spivey, Vice President & Operations Manager

### **NASSAU COUNTY ROAD 121**

#### C.R. 121 TECHNICAL ISSUES:

#### 1 Determination of Cement Percentage for Reclaimed Base;

- Low Percent for "Waterproofing" (3%) will not support immediate traffic.
- b) To allow Reclaimed Base to cure must consider Detours around construction.
- c) Handling of Local Traffic resident's access.
- Percentage use ability to procure cement and schedule start of job.
- e) Assumption base content value = 116.9 lbs/sy. (See Testing note).

#### 2 Weather Considerations:

- a) Effect of rainy weather on water table (see Time note).
- Interaction of high level water table acidity with the curing ability of the reclaimed base cement.

### 3 Maintenance of Traffic Requirements:

- a) Access for Emergency Services Vehicles.
- b) Handling of Traffic on Reclaimed Base during non-work hours.
- c) Handling of Traffic on incomplete Reclaimed Base areas.

#### 4 Rideability Specification:

- Non-ability to perform adjustments to single lift asphalt on reclaimed base.
- No set FDOT Rideability standards for single lift paving on reclaimed base.

#### 5 Waterproofing Failure Alternatives:

- Construction Scheme Alternative available if Reclaimed Base Scheme does not perform adequately as initially specified for construction.
- b) Impact of adjustments to the allotted project contract days (See Time note).
- Adjustment for reconfigured cement base to amend reclaimed base spec to a position to perform adequately (See Testing note).

#### 6 Testing During Construction:

- Variance in roadway's specific gravity (surface & base) requiring additional testing to adjust proctor and the associated cement percentages.
- Time adjustment to identify and adjust for variances of roadway's specific gravity.



Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

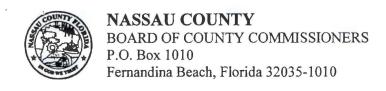
### C.R. 121 CONTRACT ISSUES:

### 1 Time - Allotted Contract Days:

- a) Issuance of Liquidated Damages Charge based on CR 121 "Assumed Base Values" (116.9 lbs/sy) as identified in the cement work up.
- Required Maintenance of Traffic Procedures amending ability to perform work within specified time frame.

#### 2 Project Warranty:

 Project failures resulting from specified products and, or procedures that fail and are due to circumstances beyond the control of the contractor.



Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY County Administrator

## CR 121 Widening & Resurfacing, Nassau County, Florida Bid No.: NC025-05

## Addendum No. 1

October 11, 2005

To All Interested Bidders:

On October 6, 2005 our office received a written letter from a potential bidder making a request and addressing concerns regarding the above referenced bid.

- Q. Request for Nassau County to schedule a "Pre-Bid Conference" so that a proper channel of questions from the contractors, and feed-back from the project representatives can be achieved prior to the bid date of November 2, 2005.
- A. Nassau County has opted not to conduct a pre-bid conference. Any concerns requiring clarification shall be submitted in writing to Nassau County Engineering Services Department. Responses to said concerns will be published through addenda to the contract documents so that all bidders have the same information.
- Q. The information provided by the CR 121 Plans of 6/3/05, Page C4, 1 and the referenced FDOT specifications (Index 600) for Maintenance of Traffic (MOT) do not address the job specific conditions for:
  - 1. Lane Closure Limitations Pertinent to "Clear Zone" work area restrictions; phasing and coordination of the various roadway construction items (widening, reclaiming, resurfacing, etc.); length of the work zone and the corresponding phasing of the temporary striping (and RPMs); and the subsequent ability to have vehicular traffic occupy non-paved work zones; contractor's ability to perform work during "daytime" and, or "nighttime" work shifts.
  - 2. Contract Time The variability of the lane closure limitations, corresponding phasing of the roadway construction items and work shift limitations will have a direct bearing on our ability to complete the project with the contract time of 6 months.

(904) 225-2610 Board Room; 491-7380, (800) 789-6673

Further identification of the lane closure limitations, construction phasing and identification of work shift ability will alter our calculation of the amount of time required to complete the CR 121 Project and will give us direction as to our construction strategies.

A. The contractor shall determine Maintenance of Traffic (MOT) requirements as appropriate to suit their proposed construction methodology and schedule and the cost shall be incorporated into the bid. Although considerable latitude is given to contractors in determining MOT requirements, DFOT standards shall be followed.

Nassau County does not wish to stipulate lane closure, phasing, or work shift criteria. It is up to the bidder to propose alternatives that will satisfy the contract scope and completion date and submit bids accordingly.



## Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

PAM/TINA:

Please mail a copy of this letter and attached

downents to everyone

Who bear purchased a

documents (Bid Distribution)

copy of the bid

José Deliz, Director

October 10, 2005

Mr. Raymond Grode Douglas Asphalt Company 10010 N. Main Street Jacksonville, FL. 32218

RE: CR121 Addendum No. 1 to Bidding Requirement

Dear Mr. Grode,

I am in receipt of your letter of October 6, 2005 (copy: Clurk's office. By Addendum No. 1 to the contract documents and is intended to address your concerns.

Back-uf

Nassau County has opted not to conduct a pre-bid conf be submitted in writing to Nassau Country will be published through add information.

The contractor sha proposed construct Although considera shall be followed.

Nassau County does 1 bidder to propose alter accordingly.

osé R. Deliz, P.E.

Sincerely,

Cc: Rick Miller, Construction Engineering Inspector Charlotte Young, Contracts Manager

. Any concerns requiring clarification shall es Department. Responses to said concerns so that all bidders have the same

equirements as appropriate to suit their hall be incorporated into the bid. ing MOT requirements, FDOT standards

work shift criteria. It is up to the d completion date and submit bids

YULEE (904) 491-3609

Bid Distribution

TOLL FREE 1 800-948-3364 FAX (904) 491-3611

## DOUGLAS ASPHALT COMPANY 10010 N. MAIN STREET JACKSONVILLE, FL 32218

## FLORIDA PLANT TELEFAX CORRESPONDENCE

DATE:

10/6/05

TO:

MR. JOSE DELIZ, ENGINEER

COMPANY:

NASSAU CO. ENGINEERING SERVICES

PHONE NUMBER:

FAX NUMBER:

(904) 491-3611

FROM:

RAY GRODE

COMPANY:

DOUGLAS ASPHALT CO.

PHONE # (904) 751-2240 FAX # (904) 751-2502

NUMBER OF PAGES:

3

(INCLUDING COVER PAGE)

REMARKS:

PLEASE CONTACT US BACK REGARDING YOUR

RESPONSES TO THE ATTACHED INQUIRY.

THANKS, July J.



Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

Nassau County Engineering Services Mr. Jose' Deliz, P.E., Engineering Services Dir. 96161 Nassau Place Yulee, FL 32097

10/6/2005

#### Re: C.R. 121 - Technical Information

These following items (and possibly others) lend us to suggest the need to schedule a "Pre-Bid Conference" as is standard for a project of this magnitude. An open forum of Contractors and Project Representatives will go a long way to eliminate potential "bumps in the road" that could curtail the progress of this project.

Several of our immediate concerns that require direction are as follows:

**MAINTENANCE OF TRAFFIC:** The information provided by the C.R. 121 Plans of 6/3/06, Page C4.1 and the referenced FDOT specifications (Index 600) for Maintenance of Traffic (M.O.T.) do not address the job specific conditions identified below.

#### 1 Lane Closure Limitations

Pertinent to "Clear Zone" work area restrictions.

Pertinent to the phasing and coordination of the various roadway construction items (widening, reclaiming, resurfacing etc.).

Pertinent to the length of the work zone and the corresponding phasing of the temporary striping (and RPMs); and the subsequent ability to have vehicular traffic occupy non-paved work zones.

Pertinent to the contractor's ability to perform work during "daytime" and, or "nighttime" work shifts.

#### 2 Contract Time

The variability of the lane closure limitations, corresponding phasing of the roadway construction items and work shift limitations will have a direct bearing on our ability to complete the project with the contract time of 6 months.

Further identification of the lane closure limitations, construction phasing and identification of work shift ability will alter our calculation of the amount of time required to complete the CR 121 Project and will give us direction as to our construction strategies.



Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

Additional questions regarding the contractor's administration and construction of this project will be presented once we further develop our construction strategies and contact the prospective subcontractors required to complete this bid.

Please entertain our request for a "Pre-Bid Conference" so that a proper channel of questions from the contractors, and feed-back from the project representatives can be achieved prior to the bid date of November 2, 2005.

Thank you for your time and consideration of these matters.

Sincerely

Raymond Grode

Division Manager

### **Charlotte Young**

From: Pam Stalvey

Sent: Monday, October 10, 2005 4:35 PM

To: Charlotte Young

Cc: Mary Wood
Subject: FW: Bid Pkg.

Please see José's message below, the addendum is attached.

Thanks, Pam

From: Jose Deliz

Sent: Monday, October 10, 2005 3:31 PM

**To:** Pam Stalvey **Subject:** RE: Bid Pkg.

Please do notify all involved that Addendum No. 1 (and any subsequent adend) must be included in every bid package that goes out. Addendum No. 1 is the response letter (with original letter attached) to Douglas Asphalt. You may need to send a scanned copy to the clerk's office ASAP.

# Nassau County Capital Projects Administration

96135 Nassau Place, Suite 6 Yulee, Florida 32097

> Phone 904-491-7377 Fax 904-321-2658

# FACSIMILE TRANSMITTAL

Date: October 12, 20	005
To: CR121 Potential Bidders	Fax:
From: Charlotte Young	
Total Pages (including cover page):4	
MESSAGE:	
Please see attached Addendums 1 & 2	

If you cannot clearly read this transmission, or have any questions regarding this transmission please

contact us at (904) 491-7377.



### Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

José Deliz, Director

October 10, 2005

Mr. Raymond Grode Douglas Asphalt Company 10010 N. Main Street Jacksonville, FL. 32218

RE: CR121 Addendum No. 1 to Bidding Requirements

Dear Mr. Grode,

I am in receipt of your letter of October 6, 2005 (copy attached). This response shall be considered Addendum No. 1 to the contract documents and is intended to address your concerns.

Nassau County has opted not to conduct a pre-bid conference. Any concerns requiring clarification shall be submitted in writing to Nassau County Engineering Services Department. Responses to said concerns will be published through addenda to the contract documents so that all bidders have the same information.

The contractor shall determine Maintenance of Traffic (MOT) requirements as appropriate to suit their proposed construction methodology and schedule and the cost shall be incorporated into the bid. Although considerable latitude is given to contractors in determining MOT requirements, FDOT standards shall be followed.

Nassau County does not wish to stipulate lane closure, phasing, or work shift criteria. It is up to the bidder to propose alternatives that will satisfy the contract scope and completion date and submit bids accordingly.

Sincerely,

osé R. Deliz, P.E.

Cc: Rick Miller, Construction Engineering Inspectors

Charlotte Young, Contracts Manager

Bid Distribution

### DOUGLAS ASPHALT COMPANY 10010 N. MAIN STREET

JACKSONVILLE, FL 32218

### FLORIDA PLANT

### TELEFAX CORRESPONDENCE

DATE:

10/6/05

TO:

MR. JOSE DELIZ, ENGINEER

COMPANY:

NASSAU CO. ENGINEERING SERVICES

PHONE NUMBER:

FAX NUMBER:

(904) 491-3611

FROM:

RAY GRODE

COMPANY:

DOUGLAS ASPHALT CO.

PHONE # (904) 751-2240 FAX # (904) 751-2502

NUMBER OF PAGES:

(INCLUDING COVER PAGE)

REMARKS:

PLEASE CONTACT US BACK REGARDING YOUR

RESPONSES TO THE ATTACHED INQUIRY.



# **Douglas Asphalt Company**

Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

Nassau County Engineering Services Mr. Jose' Deliz, P.E., Engineering Services Dir. 96161 Nassau Place Yulee, FL 32097

10/6/2005

#### Re: C.R. 121 - Technical Information

These following items (and possibly others) lend us to suggest the need to schedule a "Pre-Bid Conference" as is standard for a project of this magnitude. An open forum of Contractors and Project Representatives will go a long way to eliminate potential "bumps in the road" that could curtail the progress of this project.

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<u>MAINTENANCE OF TRAFFIC:</u> The information provided by the C.R. 121 Plans of 6/3/06, Page C4.1 and the referenced FDOT specifications (Index 600) for Maintenance of Traffic (M.O.T.) do not address the job specific conditions identified below.

#### 1 Lane Closure Limitations

Pertinent to "Clear Zone" work area restrictions.

Pertinent to the phasing and coordination of the various roadway construction items (widening, reclaiming, resurfacing etc.).

Pertinent to the length of the work zone and the corresponding phasing of the temporary striping (and RPMs); and the subsequent ability to have vehicular traffic occupy non-paved work zones.

Pertinent to the contractor's ability to perform work during "daytime" and, or "nighttime" work shifts.

#### 2 Contract Time

The variability of the lane closure limitations, corresponding phasing of the roadway construction items and work shift limitations will have a direct bearing on our ability to complete the project with the contract time of 6 months.

Further identification of the lane closure limitations, construction phasing and identification of work shift ability will alter our calculation of the amount of time required to complete the CR 121 Project and will give us direction as to our construction strategies.



# **Douglas Asphalt Company**

Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

Additional questions regarding the contractor's administration and construction of this project will be presented once we further develop our construction strategies and contact the prospective subcontractors required to complete this bid.

Please entertain our request for a "Pre-Bid Conference" so that a proper channel of questions from the contractors, and feed-back from the project representatives can be achieved prior to the bid date of November 2, 2005.

Thank you for your time and consideration of these matters.

Sincerely.

Raymond Grode Division Manager Capital Projects Administration 96135 Nassau Place, Suite 6 Yulee, FL 32097 (904) 548-4590 Fax: (904) 321-2658

# facsimile transmittal

Ryan Essex (mille Coop)	Fax:	770-968-0002	
Charlotte J. Young Contract Manager	Date:	11/01/05	
CR121 Widening & Resurfacing Bid No. NC025-05	Pages:	14	
ent	Comment	☐ Please Reply	☐ Please Recycle
	Charlotte J. Young Contract Manager  CR121 Widening & Resurfacing  Bid No. NC025-05	Charlotte J. Young Contract Manager  CR121 Widening & Resurfacing  Pages:  Bid No. NC025-05  Please Comment	Charlotte J. Young Date: 11/01/05 Contract Manager  CR121 Widening & Resurfacing Pages:   4  Bid No. NC025-05  Please Comment

Pursuant to your request, please find attached addendum 1 through 6 for the above referenced bid

\* \* \* Memory TX Result Report ( Nov. 1. 2005 5:56PM ) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Nov. 1. 2005 5:53PM

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E. 3) No answer
E. 5)

E. 2) Busy
E. 4) No facsimile connection

Capital Projectly Administration 96135 Narraw-Piece, Swiss 6 Yulte, FL 32(97 (904) 548-4598 Facc (904) 321-2658

## क्षितास्य विद्यालया है।

	To:	Ryan Essex	Faxc	770-968-0002		
	Front	Charlotte J. Young Contract Manager	Date;	11/01/05	1/01/05	
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Capital Projects Administration
96135 Nassau Place, Suite 6
Yulee, FL 32097
(904) 548-4590 Fax: (904) 321-2658

# facsimile transmittal

	To:	Butch Hartman		Fax:		
		Floyd Vanzant				
	From:	Charlotte J. You Contract Manag		Date:	11/03/05	
	Re:	CR121 Widenin	g & Resurfacing	Pages:	3	
		Bid No. NC025	-05			
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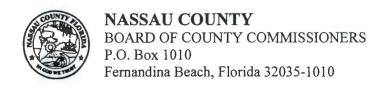
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\* \* \* Memory TX Result Report ( Nov. 3. 2005 3:07PM ) \* \* \*

Date/Time: Nov. 3. 2005 3:02PM

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	Rec	CR121 Widening & F	Lesurfacing	Peges:	3	
	-CC:	Bid No. NC025-05				
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N. Oak						
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Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY County Administrator

# CR 121 Widening & Resurfacing, Nassau County, Florida Bid No.: NC025-05

## Addendum No. 2

October 11, 2005

To All Interested Bidders:

On October 11, 2005 our office received a written letter from a potential bidder making a request and addressing concerns regarding the above referenced bid.

- Q. We are a subcontractor and our company does MILLING. Prior to ordering plans, we like to know the square yards of milling to see if purchasing plans will be cost effective. Is there any milling in this project? If so, would you please provide us with the "square yard quantity" for this project?
- A. The advertised bid is for full depth reclamation/widening of CR121, which is not the same as milling since the full-depth reclamation process achieves pulverization of not just the asphalt course but also a certain amount of base material. Milling is only indicated to reconstruct paved intersections with other roads. It is the bidder's responsibility to familiarize themselves with existing conditions and determine appropriate quantities, e.g. count the number of paved connections and estimate the area of milling required.

### **Charlotte Young**

From: Jose Deliz

Sent: Tuesday, October 11, 2005 5:02 PM

To: Mary Wood; Charlotte Young

Subject: CR121 addendum No. 2

Please publish the attached addendum to appropriate distribution.

Backup addendum #2

The request letter will be sent to you via interoffice mail

# Mary Wood

From:

Sent:

Mary Wood Wednesday, October 12, 2005 1:40 PM 'edg@gsequipment.net' Charlotte Young CR121 Addendums

To:

Cc: Subject:

Please see attached.

CR121 Bid Addend.pdf

\* \* \* Memory TX Result Report (Oct. 12. 2005 1:51PM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 12. 2005 1:36PM

File No. Mode	Destination	Pg(s)	Result	Page Not Sent
1880 Memory TX	19047512502 19047832970 18635334404 19046968951 19042886301	P. 4	OK OK OK OK	

Reason for error
E. 1) Hang up or line fail
E. 2) Busy
E. 3) No answer
E. 5) Exceeded max. E-mail size

E. 4) No facsimile connection

If you cannot clearly read this transmission, or have any questions regarding this transmission please commen us at (904) 491-7377.
Please see attached Addendums I & 2
WES2AGE:
Total Pages (including cover page): 4
From: Charlotte Young
To: CR121 Potential Bidders Fax:
Date: October 12, 2005

#### **FACSIMILE TRANSMITTAL**

Fax 904-321-2658 Phone 904-491-7377

Yulee, Florida 32097 96135 Nassau Place, Suite 6 Capital Projects Administration Nassau County

\* \* \* Memory TX Result Report (Oct. 12. 2005 1:47PM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 12. 2005 1:35PM

File No. Mode	Destination		Pg(	s)	Result	Page Not Sent
1879 File Transmission	19046950433 19042623694 17705329123 16106789691		Р.	4	OK OK OK	
(Stored Fi	le) P. 1-4	:FAX0001	Р.	4		

Reason for error

E. 1) Hang up or line fail
E. 2) Busy
E. 3) No answer
E. 5) Exceeded max. E-mail size

E. 4) No facsimile connection

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om: Charlotte Young	· · · · · · · · · · · · · · · · · · ·
CKINI Potential Biddens	Fax:

#### **EVCZIMITE TRANSMITTAL**

Fax 904-321-2658 Phone 904-491-7377

Yulee, Florida 32097 96135 Nassau Place, Suite 6 Capital Projects Administration Nassau County



Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY
County Administrator

# CR 121 Widening & Resurfacing, Nassau County, Florida Bid No.: NC025-05

## Addendum No. 3

October 17, 2005

To All Interested Bidders:

On October 14 and 17, 2005 our office received a written letter from two potential bidders requesting additional information about the above referenced bid.

- Q. Is a current plan holder list available?
- A. The list is available upon request. Please contact Ms. Charlotte Young, Contract Manager, at (904) 491-7377.
- Q. Who will act as coordinator among the various operations taking place?
- A. The Engineering Services Director or his designee
- Q. Does the County have dump sites for the excavated material generated by the widening? How far from the project are they located?
- A. Nassau County operates a landfill just north of Callahan adjacent to US1 on Landfill Road. There are tipping fees involved and no hazardous waste is allowed. Disposal of asphalt millings only can be made at the Hilliard Road & Bridge yard on Eastwood Road at no charge. Clean soil or muck can be disposed of at the Judicial Complex site in Yulee off William Burgess Boulevard, at no charge. Nassau County cannot guarantee accommodation of any other debris disposal except as mentioned above. In all cases the Contractor will be responsible for hauling costs.

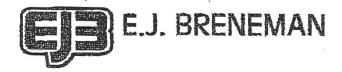
(904) 225-2610 Board Room; 491-7380, (800) 789-6673

- Q. What responsibility will the contractor have at the dump site (push off, environmental, erosion controls, etc.)?
- A. Except as described above, the Contractor assumes all responsibility for proper disposal of project related debris.
- Q. What testing has to be done on the excavated material?
- A. It remains the responsibility of the Contractor to determine any requirements necessary for proper disposal of excavated materials, except for disposal of millings at R&B yard in Hilliard or soil/muck at the Judicial Complex which requires no testing.
- Q. Do we bid on all items which would mean we have to secure subcontractors, or do we just bid the items we are interested in doing ourselves?
- A. Nassau County prefers to have as few contractors involved in this project as possible. To that effect we encourage bidders to submit bids for the optional bid items, but at the very least shall include a bid for the FDR portion. The contract documents specify language pertaining to acceptance of bids in whole or in part.
- Q. We anticipate approximately 95 days for the full depth reclamation portion of the project and are concerned there is not enough time in the project. Realizing that time is of the essence to the County, can a provision be made that as long as there is continuous work on project for each phase, the 90 days are waived unless approved by Nassau County?
- A. Although the bid documents stipulate 90 days for the completion of full depth reclamation and 150 for completion of the overall project, Nassau County will accept proposed schedules in which the different activities (FDR, paving, striping, etc.) are run concurrently and thus achieve an overall completion within 150 days. Please note that Nassau County has made a commitment to completing this project by November 2006 and failure to achieve the deadline may compromise future State funding for other roadway projects.
- Q. The specified depth of the reclamation is somewhat inconsistent. On page 2, the depth is listed at 6.5" and on page 65 reference is to an 8" depth and on page 66 it calls for 6". In addition, the widening needs to be the same depth as the reclaimed base is. What is the correct depth?
- A. The correct depth is 8" for both existing roadway section and widening. We apologize for the confusion.
- Q. Is the County going to deliver the rap or lime rock to the road? If so, how is the material going to be spread and if not, where will the material be stockpiled at?

- A. At the time the Bid documents were prepared it was envisioned that Nassau County would participate extensively in order to reduce cost. At this time, however, and in consideration for recent events, Nassau County can no longer support this project with direct labor and therefore the Contractor will be required to provide the necessary base material. Base material must comply with FDOT Standard Specifications for Road & Bridge Construction. All costs related to base material, included but not limited to transportation, shall be included in the bid.
- Q. How much material will be supplied per day?
- A. Please refer to previous response. Nassau County can no longer support this project with direct labor.
- Q. When will the type of material be determined as we will have to know for design purposes?
- A. Please refer to previous response. The Contractor will be required to provide the necessary base material. Bidders are encouraged to find the most cost effective solution within FDOT specified material requirements.
- Q. Do we reclaim straight across intersecting roads or do we reclaim back into the returns. The plans seem to indicate straight reclaiming through the intersection and pave into the returns.
- A. Please refer to page C2.2 of the plans. Reclaiming will be employed to achieve a widened section of CR121 only. At intersections with existing paved roads, the existing return will be milled and repaved as necessary to match the widened CR121 section.
- Q. How are we treating line painting on the reclaimed base until the overlay is complete?
- A. The contractor shall determine Maintenance of Traffic (MOT) requirements as appropriate to suit their proposed construction methodology and schedule and the cost shall be incorporated into the bid. Although considerable latitude is given to contractors in determining MOT requirements, DFOT standards shall be followed.
  - Nassau County does not wish to stipulate lane closure, phasing, or work shift criteria. It is up to the bidder to propose alternatives that will satisfy the contract scope and completion date and submit bids accordingly
- Q. The bid description for Base Project indicates that Nassau County will provide the base material for the widening. What kind of material will be provided? How will it be provided? By County vehicles or will the Contractor be responsible for loading and hauling to jobsite? If by County vehicles, what will be the delivery rate of material? If by the Contractor, where is the stockpile located?
- A. At the time the Bid documents were prepared it was envisioned that Nassau County would participate extensively in order to reduce cost. At this time, however, and in consideration for

recent events, <u>Nassau County can no longer support this project with direct labor</u> and therefore the Contractor will be required to provide the necessary base material. Base material must comply with FDOT Standard Specifications for Road & Bridge Construction. All costs related to base material, included but not limited to transportation, shall be included in the bid.

- Q. Optional Bid Item No. 1 indicates that 4" of limerock is to be used as a stabilizer in the Full Depth Reclamation process. Will this material be provided by the County or the Contractor?
- A. Please refer to previous response. Nassau County can no longer support this project with direct labor.
- Q. The bid item description for the Base Project says the "Full Depth Reclamation is to be performed in conjunction with Nassau County Road & Bridge Department operations and other contractors to be determined." What other forces or contractors? What scope of work will they be performing?
- A. As mentioned previously, Nassau County can no longer support this project with direct labor. There is a possibility that the awarded contract for FDR will not include any or some of the optional bid items (paving, striping, etc.) The FDR Contractor will need to coordinate construction activities with other contractors performing these tasks as necessary.



#### FAX TRANSMISSION COVER SHEET

October 14, 2005

TO: Nassau County Engineering

ATTENTION: José Deliz, P.E.

P. 904-491-3609

F.904-491-3611

FROM: John M. DeMartino

SUBJECT: CR 121

ORIGINAL TO FOLLOW IN MAIL X NO ORIGINAL TO FOLLOW

We are sending \_\_2\_ pages including this cover sheet. If you do not receive all pages, please call (610) 678-1913.

Mr. Deliz,

I will wait for the addendum to answer the attached questions.

John M. DeMartino Partner

610-678-1913 \* FAX 610-678-9691 jdemarti@ejbreneman.com



Mr. José Deliz, P.E. Nassau County Engineering Department 96161 Nassau Place Yulee, Fl. 32097

Re: County Road 121

Mr. Deliz,

Upon reviewing the specifications for the full depth reclamation of County Road 121, I have several questions I would like to raise.

- Is a current plan holder list available
- Who will act as a coordinator among the various operations taking place?
- Does the County have dump sites for the excavated material generated by the widening? How far from the project are they located?
- What responsibility will the contractor have at the dump site ( push off, environmental, erosion controls, etc)
- What testing has to be done on the excavated material
- Do we bid on all items which would mean we have to secure subcontractors, or do we just bid the items we are interested in doing ourselves
- We anticipate approximately 95 days for the full depth reclamation portion of
  the project and are concerned there is not enough time in the project.
  Realizing that time is of the essence to the County, can a provision be made
  that as long as there is continuous work on project for each phase, the 90 days
  are waived unless approved by the County.
- The specified depth of the reclamation is somewhat inconsistent. On page 2, the depth is listed at 6.5 " and on page 65 reference is to an 8" depth and on page 66 it calls for 6". In addition, the widening needs to be the same depth as the reclaimed base is. What is the correct depth?
- Is the County going to deliver the rap or lime rock to the road? If so, how is the material going to be spread and if not, where will the material be stockpiled at?
- How much material will be supplied per day
- When will the type of material be determined as we will have to know for design purposes.
- Do we reclaim straight across intersecting roads or do we reclaim back into the returns. The plans seem to indicate straight reclaiming through the intersection and pave into the returns
- How are we treating line painting on the reclaimed base until the overlay is complete?

Thank you for your time.

Sincerely,

John M DeMartino

Partner

(610) 678-1913 • FAX (610) 678-9691 1117 SNYDER ROAD, WEST LAWN, PA 19609-1100 MILLER MUNICIPAL SUPPLY (610) 678-8207

sales@ejbreneman.com

#### Jose Deliz

From: Christopher Wright [cwright@southernpavements.com]

Sent: Monday, October 17, 2005 3:15 PM

To: Jose Deliz

Cc: Mike McEuen; Kevin Wishnacht

Subject: CR 121 Bid

Mr. Deliz,

The bid item description for Base Project indicates that Nassau County will provide the base material for the widening. What kind of material will be provided? How will it be provided? By County vehicles or will the Contractor be responsible for loading and hauling to jobsite? If by County vehicles, what will be the delivery rate of material? If by the Contractor, where is the stockpile located?

Optional Bid Item No. 1 indicates that 4" of limerock is to be used as a stabilizer in the Full Depth Reclamation process. Will this material be provided by the County or the Contractor?

Chris Wright
Estimator
John Carlo, Inc.
Ph. (904) 696-8865
Fax (904) 696-8951
Cell (904) 759-0647
E-mail cwright@carlocompanies.com

#### Jose Deliz

From: Christopher Wright [cwright@southernpavements.com]

Sent: Monday, October 17, 2005 4:09 PM

To: Jose Deliz

Cc: Mike McEuen; Kevin Wishnacht

Subject: CR 121 Bid

Mr. Deliz,

The bid item description for the Base Project says the "Full Depth Reclamation is to be performed in conjunction with Nassau County Road & Bridge Department operations and other contractors to be determined." What other forces or contractors? What scope of work will they be performing?

Chris Wright
Estimator
Southern Pavements, LLC
Ph. (904) 741-8200
Fax (904) 741-8463
Cell (904) 759-0647
E-mail cwright@carlocompanies.com

# NASSAU COUNTY CAPITAL PROJECTS ADMINISTRATION

96135 Nassau Place, Suite 6 Yulee, Florida 32097 Phone No. (904) 491-7377 Fax No. (904) 321-2658

# **FACSIMILE TRANSMITTAL**

DATE: <u>10-19-05</u>

TO: All Potential Bidders for CR121 Reconstruction	
	Fax No
FROM: Charlotte Young	
Total pages (including cover page): 5 ************************************	*******
MESSAGE: Please see attached Addendum No. 3 to Bid S reconstruction of CR121.	pecifications for the
Thank you	

If you cannot clearly read this transmission, or have any questions regarding this transmission please contact us at (904) 548–4590.

\* \* \* Memory TX Result Report (Oct. 19. 2005 9:39AM) \* \* \* 1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 19. 2005 9:24AM

File No. Mode	Destination	Pg(s)	Result	Page Not Sent
1942 Memory TX	19042623694 18635334404 19042966574	P. 5	OK OK OK	

Reason for error

E. 1) Hang up or line fail
E. 2) Busy
E. 3) No answer
E. 5) Exceeded max. E-mail size

E. 4) No facsimile connection

transmission please contact us at (904) 548-4590. If you cannot clearly read this transmission, or have any questions regarding this

Thank you

MESSAGE: Please see attached Addendum No. 3 to Bid Specifications for the reconstruction of CRLSI. Josg baßez (jucjngjuß caact baße): 2

FROM: Charlotte Young

Fax No.\_

TO: All Potential Bidders for CR121 Reconstruction

DATE: 10-19-05 FACSIMILE TRANSMITTAL

Phone No. (904) 421-2658 Fax No. (904) 321-2658 96135 Massau Place, Suite 6 Yulce, Florida 32097

CAPITAL PROJECTS ADMINISTRATION NASSAU COUNTY

\* \* \* Memory TX Result Report (Oct. 19. 2005 9:44AM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 19. 2005 9:20AM

File No.	Mo d e	Destination	Pg (	(s)	Result	Page Not Sent
1941	Memory TX .	19046950433 17705329123 16106789691 19047512502 19046968951 19047832970 19042886301 17042821126	Р.	5	OK OK OK OK OK OK OK OK	

Reason for error
E. 1) Hang up or line fail
E. 3) No answer
E. 5) Exceeded max. E-mail size

E. 2) Busy E. 4) No facsimile connection

10-25.05

If you cannot clearly read this transmission, or b transmission please comfact us at (904) 548-455

CARL e APAC 1 288-6301 ADDW.#3

Called Stating he ded NOST receive Oden. #3

Re. Sent (4)

HAMILTON PRESS

833 T. J. Courson Road / P. O. Box 6105 Fernandina Beach, FL 32035-6105 (3%4) 261-6510 • Fax (904) 277-8113 Thank you

Total pages (including cover pages): 5
MESSAGE: Please see attached Adderdum No
reconstruction of CR121,

FROM: Charlotte Young

TO: All Potential Bidders for CR121 Reconstr

PACSIMILE TR

TAL PROJECTS
96135 Nassau Fl
Yules, Florid
Phone No. (904
Par No. (904

CAPITAL PROJECTS

# facsimile transmittal

То:	Carl (APAC)		Fax:	904-288-6301	
From:	m: Charlotte Young, Contract Manager		Date:	10/25/2005	
Re:	e: CR121 – Bid No. NC025-05		Pages:	5	
CC:					
☐ Urgei	nt	☐ Please 0	comment	☐ Please Reply	☐ Please Recycle
6			7		

Please find attached Addendum No. 3 for the above referenced bid

\* \* \* Memory TX Result Report (Oct. 25. 2005 11:31AM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 25. 2005 11:29AM

File No. Mode	Destination	Pg(s)	Result	Page Not Sent
2005 Memory TX	19042886301	P. 5	OK	

Reason for error
E. 1) Hang up or line fail
E. 3) No answer
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E. 2) Busy E. 4) No facsimile connection

To: Card (APAC) Face 904-288-6301

Face Obarbote Young, Contract Manager Date: 10/25/2005

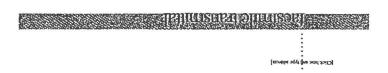
Rex CR121 - Bid Mo. MC025-05 Pages: 5

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Usgent | For Newlew | Please Consnerd | Please Recycle

Speed find attached Addendum No. 3 for the above referenced bid



#### **Pam Stalvey**

From:

Pam Stalvey

Sent:

Tuesday, October 18, 2005 6:14 PM

To:

Mary Wood

Cc:

Charlotte Young; Jose Deliz

Subject:

Addendum #3

Attachments: \_1018175804\_001.pdf

Hi Mary,

Attached is Addendum #3 from José, please see that it is mailed to everyone on the Plan Holders List, I have included a copy in all the packages you sent to us today to be sold.

Thanks,

Pam

Pamela M. Stalvey

Administrative Assistant

Nassau County Engineering Services

Phone (904)491-3607

Fax (904) 491-3611

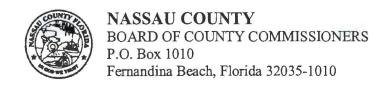
E-Mail pstalvey@nassaucountyfl.com

Ms Pan.

this Addendon must go to all @Bidlers that have

celready purchased the Plans/spects AND included in ANY Future packages sent out.

Also please send a copy to Charlotte for Her File



Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY County Administrator

# CR 121 Widening & Resurfacing, Nassau County, Florida Bid No.: NC025-05

## Addendum No. 3

October 17, 2005

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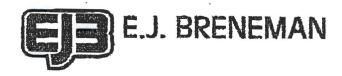
(904) 225-2610 Board Room; 491-7380, (800) 789-6673

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- A. The correct depth is 8" for both existing roadway section and widening. We apologize for the confusion.
- Q. Is the County going to deliver the rap or lime rock to the road? If so, how is the material going to be spread and if not, where will the material be stockpiled at?

- A. At the time the Bid documents were prepared it was envisioned that Nassau County would participate extensively in order to reduce cost. At this time, however, and in consideration for recent events, **Nassau County can no longer support this project with direct labor** and therefore the Contractor will be required to provide the necessary base material. Base material must comply with FDOT Standard Specifications for Road & Bridge Construction. All costs related to base material, included but not limited to transportation, shall be included in the bid.
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#### FAX TRANSMISSION COVER SHEET

October 14, 2005

TO: Nassau County Engineering

ATTENTION: José Deliz, P.E.

P. 904-491-3609

F.904-491-3611

FROM: John M. DeMartino

SUBJECT: CR 121

ORIGINAL TO FOLLOW IN MAIL X NO ORIGINAL TO FOLLOW

We are sending \_\_2\_ pages including this cover sheet. If you do not receive all pages, please call (610) 678-1913.

Mr. Deliz,

I will wait for the addendum to answer the attached questions.

John M. DeMartino Partner

610-678-1913 \* FAX 610-678-9691 jdemarti@ejbreneman.com



Mr. José Deliz, P.E. Nassau County Engineering Department 96161 Nassau Place Yulee, Fl. 32097

Re: County Road 121

Mr. Deliz,

Upon reviewing the specifications for the full depth reclamation of County Road 121, I have several questions I would like to raise.

- Is a current plan holder list available
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- How are we treating line painting on the reclaimed base until the overlay is complete?

Thank you for your time.

John M DeMartino

Partner

Sincerely,

(610) 678-1913 • FAX (610) 678-9691
1117 SNYDER ROAD, WEST LAWN, PA 19609-1100
MILLER MUNICIPAL SUPPLY (610) 678-9207
sales @ eibreneman.com

1

#### Jose Deliz

From: Christopher Wright [cwright@southernpavements.com]

Sent: Monday, October 17, 2005 4:09 PM

To: Jose Deliz

Cc: Mike McEuen; Kevin Wishnacht

Subject: CR 121 Bid

Mr. Deliz,

The bid item description for the Base Project says the "Full Depth Reclamation is to be performed in conjunction with Nassau County Road & Bridge Department operations and other contractors to be determined." What other forces or contractors? What scope of work will they be performing?

Chris Wright
Estimator
Southern Pavements, LLC
Ph. (904) 741-8200
Fax (904) 741-8463
Cell (904) 759-0647
E-mail <a href="mailto:cwright@carlocompanies.com">cwright@carlocompanies.com</a>

#### Jose Deliz

From: Christopher Wright [cwright@southernpavements.com]

Sent: Monday, October 17, 2005 3:15 PM

To: Jose Deliz

Cc: Mike McEuen; Kevin Wishnacht

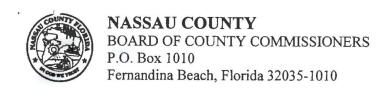
Subject: CR 121 Bid

Mr. Deliz,

The bid item description for Base Project indicates that Nassau County will provide the base material for the widening. What kind of material will be provided? How will it be provided? By County vehicles or will the Contractor be responsible for loading and hauling to jobsite? If by County vehicles, what will be the delivery rate of material? If by the Contractor, where is the stockpile located?

Optional Bid Item No. 1 indicates that 4" of limerock is to be used as a stabilizer in the Full Depth Reclamation process. Will this material be provided by the County or the Contractor?

Chris Wright
Estimator
John Carlo, Inc.
Ph. (904) 696-8865
Fax (904) 696-8951
Cell (904) 759-0647
E-mail cwright@carlocompanies.com



Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY
County Administrator

# CR 121 Widening & Resurfacing, Nassau County, Florida Bid No.: NC025-05

## Addendum No. 4

October 24, 2005

To All Interested Bidders:

On October 20, 2005 our office received a written letter from a potential bidder requesting additional information about the above referenced bid.

Q. Your answer on Addendum #3 to the question "Do we bid on all items...or do we just bid the items we are interested in doing ourselves?", which in essence states that all or part of this project may be awarded to a single contractor may cause our bid, and possibly others, to be inconsistent or uncompetitive. When we bid on a project there are management costs that are included in the bid to complete the project. If some of these bid items may be completed by other contractors, the management costs included for all items are lost. If we put all our management costs into just 1 or 2 bid items, we could become uncompetitive. Also, we lose control of scheduling the project and this could cause liquidated damages to be assessed to us even though we had no control.

We believe the County needs to award the entire project to one contractor. At a minimum we would accept the Base Project, Asphalt paving and Striping combined. The guardrail and sodding could be subcontracted separately. Without at least these items combined, scheduling is out of our control.

A. Nassau County has independent continuing services contracts for installation of most optional bid items. Although Nassau County would prefer to award the entire project to the successful bidder, we can only do so if the bid amounts compare favorably with the established contract rates. For example, if the proposed unit cost of asphalt is much higher than the established contract amount, Nassau County may elect to use the existing contractor for that optional bid item.

(904) 225-2610 Board Room; 491-7380, (800) 789-6673

- Q. The response if the project goes beyond the 90 day substantial completion date indicates that Nassau County may or may not impose the liquidated damages as set forth in the contract documents. Please clearly specify when liquidated damages will start. after 90 days? after 100 days? after 150 days?
- A. Liquidated damages will commence after 150 days after Notice to Proceed.
- Q. What amount has been funded for this project? Will Nassau County still award the project if the bids exceed funded amount? Is this project funded by both State funds and County funds?
- A. At this time this information cannot be disclosed. A firm budget for the project has not been established pending the results of the bids. Nassau County may still award the contract if the bids exceed the State funded amount, but such a decision has not been made. The bid documents contain enough information to provide a competitive bid.
- Q. Have borings been completed to determine the cement required? Who will be doing these? Please supply the boring results. Who determines what percentage of cement will be required? If the amount of cement required varies from the 3% stated, what avenue will be used for price adjustments since this is a lump sum project?
- A. Borings were obtained prior to the request for bids by our geotechnical consultant. The same consultant established the optimal percentage of cement at 3%. Attached is a table summarizing the boring results. Adjustments to the percent cement required may be made through change orders.
- Q. Can the FDR be accomplished by either the Base Project description or the Optional Bid Item #1? We need to know what the existing typical cross section is. If Optional Bid Item #1 is used will it still require FDR to 8" below the existing surface or just 8" below new asphalt surface since the profile will be increased? If the Base Project is used and the existing cross section of asphalt and base is less than 8" will we need to add limerock to the subbase to make a full 8" of subbase?
- A. FDR shall be accomplished as described in the Base Project description **OR** Optional Bid item #1. Nassau County will select one of these alternatives once bids are received. If Optional Bid Item 1 is ultimately selected, the 8" will be measured below the new asphalt surface. If the Base Project is used no additional limerock (or equivalent base material for that matter) is needed since the existing base is approximately 18" deep.

# **NASSAU COUNTY CAPITAL PROJECTS ADMINISTRATION**

96135 Nassau Place, Suite 6 Yulee, Florida 32097 Phone No. (904) 491-7377 Fax No. (904) 321-2658

# **FACSIMILE TRANSMITTAL**

DATE: <u>October 24, 2005</u>
TO: All Plan Holders
SUBJECT: CR121 Widening & Resurfacing Project - Bid No. NC025-05
FROM: Charlotte J. Young, Contract Manager
Total pages (including cover page): 3 ************************************
Please find attached Addendum No. 4 for the above reference bid

If you cannot clearly read this transmission, or have any questions regarding this transmission please contact us at (904) 548-4590.

\* \* \* Memory TX Result Report (Oct. 24. 2005 1:39PM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

# NASSAU COUNTY CAPITAL PROJECTS ADMINISTRATION

96135 Nassau Place, Suite 6 Yulee, Florida 32097 Phone No. (904) 491-7377 Fax No. (904) 321-2658

# FACSIMILE TRANSMITTAL DATE: October 24, 2005

TO: All Plan Holders

SUBJECT: CR121 Widening & Resurfacing Project - Bid No. NC025-05

FROM: Charlotte J. Young, Contract Manager

Total pages (including cover page): 3

MESSAGE:

Please find attached Addendum No. 4 for the above reference bid

If you cannot clearly read this transmission, or have any questions regarding this transmission please contact us at (904) 548–4590.

\* \* \* Memory TX Result Report (Oct. 24. 2005 1:39PM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 24. 2005 1:17PM

File No. Mode	Destination		Pg(s	3)	Result	Page Not Sent
1989 File Transmission (Stored	19042623694 17705329123 16106789691 19047512502 18635334404 19046968951 19047832970 19042886301 17042821126 19042966574 19047510940 19046950433 File) P. 1-3	: FAX0002	P. P.	3	OK OK OK OK OK OK OK OK OK	

From: Charlotte Young

Sent: Monday, October 24, 2005 1:41 PM

To: 'edg@gsequipment.net'

Subject: CR121 Widening & Resurfacing (Bid NC025-05) - Addendum No. 4

Please find attached addendum no. 4 for the above referenced bid

\* \* \* Memory TX Result Report (Oct. 24. 2005 2:28PM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 24. 2005 2:24PM

File No. Mode	Destination	Pg(s)	Result	Page Not Sent
1990 Memory TX	17705417340 12292737579 13863281887	P. 3	OK OK OK	

Reason for error
E. 1) Hang up or line fail
E. 3) No answer
E. 5) Exceeded max. E-mail size

E. 2) Busy E. 4) No facsimile connection

# NASSAU COUNTY CAPITAL PROJECTS ADMINISTRATION

96135 Nassau Place, Suite 6 Yulee, Florida 32097 Phone No. (904) 491-7377 Fax No. (904) 321-2658

#### FACSIMILE TRANSMITTAL

DATE: October 24, 2005

TO: All Plan Holders

SUBJECT: CR121 Widening & Resurfacing Project - Bid No. NC025-05

FROM: Charlotte J. Young, Contract Manager

Total pages (including cover page): 3

MESSAGE:

Please find attached Addendum No. 4 for the above reference bid

If you cannot clearly read this transmission, or have any questions regarding this transmission please contact us at (904) 548-4590.

# NASSAU COUNTY CAPITAL PROJECTS ADMINISTRATION

96135 Nassau Place, Suite 6 Yulee, Florida 32097 Phone No. (904) 491-7377 Fax No. (904) 321-2658

# **FACSIMILE TRANSMITTAL**

**DATE:** October 24, 2005

	,
TO: All Pl	an Holders
Subject:	CR121 Widening & Resurfacing Project Bid No. NC025-05
FROM:	Charlotte Young, Contract Manager
1 0 \	including cover page): 3  ***********************************
Attachment t	o Addendum No. 4:
Table summa	urizing the boring results

If you cannot clearly read this transmission, or have any questions regarding this transmission please contact us at (904) 548–4590.

## Nassau County CR 121 Coring Sheet

Date cores taken: 4/27/05

Road Name: CR 121

Core	Location (Feet)	Direction	Lane	HMA Depth	Base Depth	Base Type	Notes
1		NB	L	3.75	5	Subgrade Mix	From Duval County to US 1
2		NB	С	3.75	5	Subgrade Mix	•
3		NB.	L	3.5	5	Subgrade Mix	
4		NB	С	2.5	5	Subgrade Mix	
5		NB	L	5.5	5	Subgrade Mix	
6		NB	C	3.5	5	Subgrade Mix	
7		NB	L	3.5	5	Subgrade Mix	
8		NB	С	3	5	Subgrade Mix	
9		NB	L	3	5	Subgrade Mix	
10		NB	С	2.5	5	Subgrade Mix	
11		NB	L	3	5	Subgrade Mix	
12		NB	C	2.75	5	Subgrade Mix	
13		NB	L	3.25	5	Subgrade Mix	
14		NB	C	2.5	5	Subgrade Mix	
15		NB	L	2.25	5	Subgrade Mix	
16		NB	C	2	5	Subgrade Mix	
17		NB	L	3.5	5	Subgrade Mix	
18		NB	С	2.5	5	Subgrade Mix	
19		NB	L	3.25	5	Subgrade Mix	
20		NB	С	3.25	5	Subgrade Mix	
21		NB	L	2.25	5	Subgrade Mix	
22		NB	С	3.25	5	Subgrade Mix	
23		NB	L	2.25	5	Subgrade Mix	
24		NB	С	2.5	5	Subgrade Mix	
25		NB	L	3.5	5	Subgrade Mix	
26		NB	С	3	5	Subgrade Mix	
27		NB	L	3.25	5	Subgrade Mix	
28		NB	С	2.5	5	Subgrade Mix	
29		NB	L	3.75	5	Subgrade Mix	
30		NB	С	3	5	Subgrade Mix	
31		NB	L	3	5	Subgrade Mix	
32		NB	С	4	5	Subgrade Mix	
33		NB	L	2.5	5	Subgrade Mix	
34		NB	С	3.5	5	Subgrade Mix	
35		NB	L	5.5	5	Subgrade Mix Subgrade Mix	
36		NB	C L	2.5 3	5 5	Subgrade Mix	
37		NB NB	C	3	5	Subgrade Mix	ř.
38		NB NB	L	3.5	5		Average 3.08" core 1 to 39
39 40		SB	R	1.5	7	Limerock	Average 5.00 core 1 to 39
41		NB	C	0.25	7	Limerock	
42		NB	L	0.25	6	Limerock	
43		SB	R	0.25	5.5	Limerock	
44		NB	C	0.25	7	Subgrade Mix	
45		NB	L	1.25	7	Subgrade Mix	
46		SB	R	1.25	7	Subgrade Mix	
47		NB	C	1	7	Subgrade Mix	
48		NB	Ĺ	1	6	Subgrade Mix	
49		SB	R	1.25	7	Subgrade Mix	
50		NB	С	1.5	7	Subgrade Mix	

51	NB	L	1.75	7	Subgrade Mix	
52	SB	R	1	7	Subgrade Mix	
53	NB	C	1	7	Subgrade Mix	
54	NB	L	1.5	7	Subgrade Mix	
55	SB	R	1	7	Subgrade Mix	
56	NB	C	1	7	Subgrade Mix	
57	NB	L	1	7	Subgrade Mix	3
58	SB	R	1	7		Average 1" core 40 to 58
59	NB	C	3	7	Subgrade Mix	
60	NB	L	4	7	Subgrade Mix	
61	SB	R	2.5	7	Subgrade Mix	
62	NB	C	2.25	7	Subgrade Mix	
63	NB	L	3.5	7	Subgrade Mix	
64	SB	R	2.5	7	Subgrade Mix	121 Split off of 108 & 121 Toward US 1
65	NB	C	2	7	Subgrade Mix	
66	NB	L	3	7	Subgrade Mix	
67	SB	R	3	7	Subgrade Mix	
68	NB	C	2.25	7	Subgrade Mix	
69	NB	L	2.75	7	Subgrade Mix	
70	SB	R	2.5	7	Subgrade Mix	
71	NB	C	2.5	7	Subgrade Mix	
72	NB	L	2.75	7	Subgrade Mix	
73	SB	R	3.5	7	Subgrade Mix	
74	NB	C	2	7	Subgrade Mix	
75	NB	L	4	7	Subgrade Mix	
76	SB	R	3.5	7	Subgrade Mix	
77	NB	C	2	7	Subgrade Mix	
78	NB	L	4	7	Subgrade Mix	
79	SB	R	3.5	7	Subgrade Mix	
80	NB	C	2.25	7	Subgrade Mix	
81	NB	L	4	7	Subgrade Mix	121 from split to Beaver St
82	SB	R	3	5	Subgrade Mix	
83	SB	R	4	5	Subgrade Mix	
84	SB	R	3.5	5	Subgrade Mix	
85	SB	R	2.75	5	Subgrade Mix	
86	SB	R	4	5	Subgrade Mix	
87	SB	R	3.5	5	Subgrade Mix	
88	SB	R	3.5	5	Subgrade Mix	*
89	SB	R	3.5	5	Subgrade Mix	
90	SB	R	3.25	5	Subgrade Mix	
91	SB	R	2.5	5	Subgrade Mix	
92	SB	R	4.5	5	Subgrade Mix	
93	SB	R	4.5	5	Subgrade Mix	
94	SB	R	4	5	Subgrade Mix	
95	SB	R	4.5	5	Subgrade Mix	
96	SB	R	3	5	Subgrade Mix	
97	SB	R	3.25	5	Subgrade Mix	
98	SB	R	3.5	5	Subgrade Mix	
99	SB	R	3	5	Subgrade Mix	
Averages			2.73	5.81		Total average of HMA in thicker areas is 3.14"

#### Notes:

Cores were taken in 3 different locations on CR 121. R is several feet from edge of pavement on the SB lane, the C core was taken in wheel path near centerline in NB lane and L was taken several feet from edge of pavement in the NB lane.

Length of proposed project is approx. 176,352 If from the Duval Line to US 1 (not including bridge areas of 1.3mi for both)

Cored by: Wayne Jackson, Universal Engineering Sciences Recorded by: Chris Evers, E.J. Breneman, L.P.

#### **NASSAU COUNTY** CAPITAL PROJECTS ADMINISTRATION

96135 Nassau Place, Suite 6 Yulce, Florida 32097 Phone No. (904) 491-7377 Fax No. (904) 321-2658

#### **FACSIMILE TRANSMITTAL**

DATE: October 24, 2005

TO: All Plan Holders

Subject:

CR121 Widening & Resurfacing Project Bid No. NC025-05

FROM:

Charlotte Young, Contract Manager

Total pages (including cover page): 3

MESSAGE:

Attachment to Addendum No. 4:

Table summarizing the boring results

If you cannot clearly read this transmission,  $\alpha$  have any questions regarding this transmission please contact us at (904) 548–4590.

\* \* \* Memory TX Result Report (Oct. 24. 2005 4:03PM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 24. 2005 3:35PM

File No. Mode	Destination	Pg(s)	Result	Page Not Sent
1991 Memory TX	19046950433 19042623694 17705329123 16106789691 19047512502 18635334404 19046968951 19042886301 17042821126 19042966574 17705417340 12292737579 13863281887	P. 3	OK OK OK OK OK OK OK OK OK OK	

\* \* \* Memory TX Result Report (Oct. 25. 2005 8:29AM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 25. 2005 8:27AM

File No. Mode	Destination	Pg(s)	Result	Page Not Sent
2001 Memory TX	19042687479	P. 3	OK	

Reason for error
E. 1) Hang up or line fail
E. 3) No answer
E. 5) Exceeded max. E-mail size

E. 2) Busy
E. 4) No facsimile connection

If you cannot clearly read this transmission, or have any questions regarding this distribution please contact as at (904) 548-4590.

Table summarizing the boring results

Attachment to Addendum No. 4:

MESSAGE:

Total pages (including cover page): 3

FROM: Charlotte Young, Contract Manager

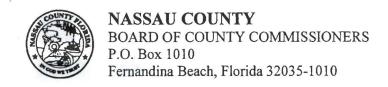
Subject: CR121 Widening & Resurfacing Project
Bid No. NC025-05

TO: All Plan Holders

# DATE: October 24, 2005 FACSIMILE TRANSMITTAL

TANAMA CASA MERINA Place, Suite 6
Yuloc, Florida 32097
Phone No. (904) 491–7377
Par No. (904) 321-2658

CVLILYT BKOTECTS ADMINISTRATION NASSAU COUNTY



Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY County Administrator

# CR 121 Widening & Resurfacing, Nassau County, Florida Bid No.: NC025-05

# Addendum No. 5

October 27, 2005

To All Interested Bidders:

On October 24 and 25, 2005, our office received written letters from potential bidders requesting additional information about the above referenced bid.

- Q. We would like to know if we could use the excavated material from the widening to rebuild the shoulders in lieu of hauling off the material and then potentially having to import material later to rebuild the shoulders.
- A. This approach is acceptable.
- Q. If the option two is used and four inches of limerock is placed on the road and then incorporated into existing base with no additive, what will hold the road together for traffic and who will be liable for the deformation of the base caused by traffic?
- A. The contractor must either devise a Maintenance of Traffic plan that will preclude damage to the base by traffic or repair such damage prior to paving. The cost of either alternative shall be considered incidental to the work and not subject to additional compensation.
- Q. Likewise, without any binding agent, how are we supposed to open a pulverized road to traffic, especially truck traffic?

(904) 225-2610 Board Room; 491-7380, (800) 789-6673

- A. Please refer to previous response.
- Q. If the pulverized material is rained on, it will turn into a soft mess. How will those repairs be handled and how is the base to be protected?
- A. The usual practice is to prime the finished base course to protect it from rain. The usual repair method otherwise is to scarify the base to air dry it and then reshape/recompact. In any case it is up to the contractor to determine a method that will produce an acceptable product.
- Q. Will any soft and yielding areas be paid for by change order?
- A. The existing road has been in place for over 40 years and does not exhibit evidence of yielding caused by underlying unsuitable soils. Soft and yielding areas, if any, will most probably be caused by faulty materials or workmanship of the reclaimed base course. The contractor would be responsible to rework the base to an acceptable condition. In the highly unlikely event that subgrade over excavation is needed it will be paid for through a change order provided strong justification.
- Q. Is the contract time based on calendar days or work days? Will there be any accommodation for inclement weather?
- A. Calendar days. Extensions to the deadline will be allowed for inclement weather at the discretion of the Director of Engineering Services. Our policy is to approve reasonable requests for time extensions due to inclement weather.
- Q. Who will establish the centerline?
- A. The contractor.
- Q. The typical in the plans show reclaimed base at 13 feet per side with a 12 foot cart way and a 1 foot reclaimed base with sod on top. Just want to verify that the reclaimed base is wider than the overlay.
- A. The reclaimed base is wider than the overlay. The typical section contains an error in that it depicts a 26' wide base (13' from centerline extending 1' beyond end of pavement). The typical section should depict a 25' wide base (12.5' from centerline extending 6" beyond end of pavement). We appreciate your letting us know, the plans will be corrected prior to construction.
- Q. The overlay is indicated at 2 inches in the proposal and 1 ½ inches in the plans. Want to verify the overlay depth.

- A. A 2" thick layer of SP-12.5 asphalt will be placed over the reclaimed base. We appreciate your letting us know, the plans will be corrected prior to construction.
- Q. In the proposal the sodding is listed at 1 foot and the plans show 2 foot. Again, need to verify.
- A. A 1' wide strip of sod will be placed adjacent to the edge of pavement. We appreciate your letting us know, the plans will be corrected prior to bid.



Blount Construction Company, Inc. • 1730 Sands Place • Marletta, Georgia 30325 • (770) 541-7333 • Fax: (770) 541-7340

#### **Fax Cover Sheet**

To:	Charlotte J. Young	Fr	om:	Cory Hennebe	rg
Company:	Nassau County	Pa	iges;	2	
Fax:	904-321-2658	D <sub>t</sub>	ate:	10/24/2005	
Phone:	904-491-7377	C	D:	(Click here and	type name)
Rei	CR 121				
☐ Urgent	☐ For Review	☐ Please Comment		lease Reply	☐ Please Recycle

<sup>•</sup> Comments: If you have any questions please contact me at 678-873-8998

Notice of Confidentiality

This facsimile may contain information that is privileged and confidential and/or exempt from disclosure under applicable law. This transmission is intended solely for the individual or entity designated above. If you are not the intended recipient, you should understand that any distribution, copying, or use of the information contained in this facsimile by anyone other than the designated recipient is unauthorized and strictly prohibited. If you have received this facsimile in error, please immediately notify the sender by telephone.



1730 Sands Place Marietta, GA 30067 Phone: 770-541-7333

Fax: 770-541-7340

Monday, October 24, 2005

Charlotte J. Young Contract Manager Nassau County Capital Projects Administrator 96135 Nassau Place, Suite 6 Yulee, Florida 32097

FAX 904-321-2658

#### Dear Charlotte:

I have a question regarding the widening on CR 121 we would like to know if we could use the excavated material from the widening to rebuild the shoulders in lieu of hauling off the material and then potentially having to import material later to rebuild the shoulders.

Sincerely,

Cory Henneberg Project Manager

Cell: 678-873-8998

E-mail: chenneberg@blountconstruction.com

P. 1

\* \* \* Memory TX Result Report (Oct. 24. 2005 4:06PM) \* \* \* \* 17 NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 24. 2005 4:06PM

File No.	Mode	Destination	Pg(s	)	Result	Page Not Sent
1994	Memory TX	JOSE_CHRIS	P.	2	OK	

Reason for error

E. 1) Hang up or line fail
E. 3) No answer
E. 5) Exceeded max. E-mail size

E. 2) Busy E. 4) No facsimile connection

FILE No. 278 10/24 '05 15:28 ID:BLOUNT CONSTRUCTION

FAX:770 541 7340

PAGE 1/2

d recipitational or bright primer, me described with the companies of the

Fax Covet Sheaf

litered Construction Company, Inc. + 4139 Sends Place + Markette, Georgia 19325 - (719) 541-7550 - Fax: (178) 541-7540



From: Charlotte Young

Sent: Tuesday, October 25, 2005 11:39 AM

To: Jose Deliz

Subject: CR121 Bid - Blount Construction

Yesterday I faxed to your office a letter from Cory Henneberg, Blount Construction dated 10/24/05. The letter was regarding a question he had for the CR121 bid. Have you had a chance to respond? Will this require another Addendum?

10/27/2005

From: Jose Deliz

Sent: Tuesday, October 25, 2005 12:27 PM

To: Charlotte Young

Subject: RE: CR121 Bid - Blount Construction

I saw the letter and will have to respond, but I don't have time today

----Original Message-----From: Charlotte Young

**Sent:** Tuesday, October 25, 2005 11:39 AM

To: Jose Deliz

Subject: CR121 Bid - Blount Construction

Yesterday I faxed to your office a letter from Cory Henneberg, Blount Construction dated 10/24/05. The letter was regarding a question he had for the CR121 bid. Have you had a chance to respond? Will this require another Addendum?

From: Mary Wood

**Sent:** Friday, October 28, 2005 1:58 PM

**To:** Charlotte Young **Subject:** FW: addendum

----Original Message-----From: Pam Stalvey

Sent: Friday, October 28, 2005 1:43 PM

To: Mary Wood

**Subject:** FW: addendum

Hi Mary,

This needs to be copied to all on the Plan Holders List. :)

addem. #5

Capital Projects Administration 96135 Nassau-Place, Suite 6 Yulee, FL 32097 (904) 548-4590 Fax: (904) 321-2658

# facsimile transmittal

То:	Potential Bidders - Plan Holders	Fax:		
From:	Charlotte J. Young Contract Manager	Date:	10/28/05	
Re:	CR121 Widening & Resurfacing Bid No. NC025-05	Pages:	4	
CC:				
□ Urge	ent For Review Please	Comment	☐ Please Reply	☐ Please Recycle

Please find Addendum No. 5 for the above referenced bid

\* \* \* Memory TX Result Report (Oct. 28. 2005 3:09PM) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Capital Projects Administration 96135 Nasian-Place, Suite 6 Yulce, FL 32(87) (904) 548-4590 Pacc (904) 321-2658

## เมื่อเจราเล็กที่ได้ มีอุดกัสเด็กที่ไม่เด็

	From:	Charlotte J. Young Contract Manager	Dute:	10/28/05	
	Rec	CR121 Widening & Resurfacing	Pages:	4	
		Bid No. NC025-05			
	CC:				
	<b>D</b>	net   For Review   Plants	Comment	☐ Please Reply	☐ Please Recycle
THE COL	12.				
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\* \* \* Memory TX Result Report (Oct. 28. 2005 3:09PM) \* \* \* \* 13 NASSAU CTY ATTY OFF 904 321 2658

Date/Time: Oct. 28. 2005 2:24PM

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2041	Memory TX	19046950433 19042623694 17705329123 16106789691 19047512502 18635334404 19046968951 19042886301 17042821126 19042687479 19042966574 19047510940 17705417340 12292731579 13863281887 17277917285 19048105999	P. 5	OK OK OK OK OK OK OK OK OK OK OK OK OK O	P. 1-5

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\* \* \* Memory TX Result Report (Oct. 28. 2005 3:52PM) \* \* \*

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2046 Memory TX	12292737579	Ρ.	4	OK		

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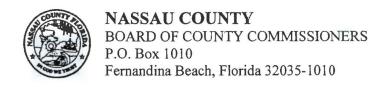
E. 2) Busy E. 4) No facsimile connection

Capital Projects Administration. 96135 Manage-Pach, Soite 6 Yulon, FL 32/37 (904) 548-4590 Fast: (904) 321-2658

# វីដីខេត្តក្នុងកែ បក្សពីនៅការ៉េនៅ

	Toc	Potential Bidders Plan Holders	Fexc	118.4	
	Fronc	Charlotte J. Young Contract Manager	Dates	10/21/05	
	Re:	CR121 Widewing & Resurfacing	Pages:	4	
		Bid No. NC025-05			
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Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY County Administrator

# CR 121 Widening & Resurfacing, Nassau County, Florida Bid No.: NC025-05

## Addendum No. 6

November 1, 2005

To All Interested Bidders:

On November 1, 2005 our office received written request for clarification of the specifications for the above referenced bid.

On page seven (7), of the bid specifications, it states "Bidders shall also complete pages thirty two (32) and thirty three (33) and include in Bid with the bid Bond".

The only bond required to be included in the bid is the "Bid Bond". You will find the form to submit on page 19.

The "Common-Law Combined Performance and Payment Bond" is only required of the awarded bidder.



### H & H Insurance Services, Inc.

3160 Campus Drive, Suite 100 Norcross, Georgia 30071 (770) 409-0014 Telephone (770) 368-0404 Facsimile

#### **FAX COVER PAGE**

DATE:

11/1/05

TO:

Charlotte

FROM:

Leslie A. Paulsen

FAX:

(904) 321-2658

RE:

CR 121 Widening/Resurfacing

This fax transmission will consist of l pages. Should you not receive this fax in its entirety or if this fax is illegible, please contact the Sender immediately. Thank You.

Good Morning Charlotte. The captioned job bids tomorrow. We have issued the required bid bond on behalf of our client; however they have indicated the bid specifications require that pages 32 and 33 are completed as well and included in their bid proposal package. As you may know it is not customary in the bond industry to complete the performance and payment bond **prior to** the bid proposal and apparent low bidder and corresponding award of the contract.

Could you please call and/or email clarification of this requirement at your earliest convenience? You are also welcome to email me at <a href="mailto:lesliepaulsen@h-hinsurance.com">lesliepaulsen@h-hinsurance.com</a>.

Thank you in advance for your attention to this matter.



H & H Insurance Services, Inc.

3160 Campus Drive, Suite 100 Norcross, Georgia 30071 (770) 409-0014 Telephone (770) 368-0404 Facsimile

#### **FAX COVER PAGE**

DATE:

11/1/05

TO:

Charlotte

FROM:

Leslie A. Paulsen

FAX:

(904) 321-2658

RE:

CR 121 Widening/Resurfacing

This fax transmission will consist of 1 pages. Should you not receive this fax in its entirety or if this fax is illegible, please contact the Sender immediately. Thank You.

Good Morning Charlotte. The captioned job bids tomorrow. We have issued the required bid bond on behalf of our client; however they have indicated the bid specifications require that pages 32 and 33 are completed as well and included in their bid proposal package. As you may know it is not customary in the bond industry to complete the performance and payment bond **prior to** the bid proposal and apparent low bidder and corresponding award of the contract.

Could you please call and/or email clarification of this requirement at your earliest convenience? You are also welcome to email me at <a href="mailto:lesliepaulsen@h-hinsurance.com">lesliepaulsen@h-hinsurance.com</a>.

Thank you in advance for your attention to this matter.

Charlotte-Please see attached regarding pages 32 and 33-

# ATTN: Leslie 1-770-368-0404

## INFORMATION FOR BIDDERS

BIDS will be received by OWNER, NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS, until 2:00 p.m. on November 2, 2005, at the Office of the Clerk, 76347 Veterans Way, Yulee, FL 32097. Bids will be publicly read aloud and recorded at 2:05 p.m. on November 2, 2005 at the Office of the Ex-Officio Clerk, 76347 Veterans Way, Yulee, Florida 32097.

EACH BID MUST BE SUBMITTED IN A SEALED OPAQUE ENVELOPE, ADDRESSED TO:

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS C/o John A. Crawford Ex-Officio Clerk 76347 Veterans Way Yulee, FL 32097

Each sealed envelope containing A BID must be plainly marked on the outside as:

> CR 121 WIDENING/RESURFACING Nassau County, Florida

OTHERWISE THE BID SHALL NOT BE OPENED.

If forwarded by mail, the sealed envelope containing the BID must be enclosed in another envelope addressed to the OWNER at:

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS C/O John A. Crawford Ex-Officio Clerk 76347 Veterans Way Yulee, FL 32097

All BIDS must be made on the required BID form. All blank spaces for BID prices must be filled in, in ink or typewritten, and the BID form must be fully completed and executed when submitted. An original and three (3) copies of the BID form are required. Bidders shall also complete pages thirty two (32) and thirty three (33) and include in Bid with the Bid Bond.

The County reserves the right to make additions or deletions to bid quantities, and/or portions of the Bid at the bid item prices.

#### COMMON-LAW COMBINED PERFORMANCE AND PAYMENT BOND:

The Common-Law Combined Performance and Payment Bond shall be in the following form:
BY THIS BOND, We, as Principal whose principal business address and telephone number are
, and, a corporation, as Surety, whose principal address and telephone number are bound to the Board of County Commissioners of Nassau County, Florida, herein called Owner, whose principal business address and phone number are Post Office Box 1010, Fernandina Beach, FL 32035-1010, 904-491-7377, in the sum of \$, for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.
A description of the project sufficient to identify it is:
The improvements are generally described as follows:
NOTE: The Bond shall be recorded in the public records of Nassau County.
THE CONDITION OF THIS BOND is that if Principal:
1. Performs the Contract dated, and whose contract number designated by Owner is, between Principal and Owner for construction of, the Contract being made a part of this Bond by reference and call the "Contract" herein, at the times and in the manner prescribed in the Contract; and
2. Pays Owner all for losses, damages, including delay or liquidated damages, and losses and damages due to latent or patent defects that Owner sustains because of a default by Principal under the Contract; and
3. Pays Owner all for expenses, costs, and attorneys' fees, including such fees in appellate proceedings, that Owner sustains because of a default by Principal under the Contract; and
4. Performs the guarantee of all work and materials furnished under the Contract for the time specified in the Contract; and

against all claims, liabilities, judgments, costs, damages, expenses, and attorneys' fees that may in any way accrue or come against the Owner as a result of the breach of Contract or other actions of the

Protects, indemnifies, keeps and saves harmless the Owner

Principal arising out of the work of the Principal, or that may in any way result form the acts, carelessness, or neglect of the Principal, its agents, employees, workers, or subcontractors, in any respect whatsoever, or that may result on account of any infringement of any patent, trademark, or copyright by reason of the materials, machinery, processes, devices, or apparatus used or furnished in the performance of the Contract; and

6. Promptly makes payments to all claimants, as defined in Florida Statutes, 255.05(1), who furnish labor, services, or materials for the prosecution of the work provided for in the Contract; then this Bond is void; otherwise it remains in full force.

Any changes in or under the Contract Documents and compliance or noncompliance with any formalities connected with the Contract or the changes does not affect Surety's obligation under this Bond.

The forty-five (45) day notice, the ninety (90) day notice, and the time within which to file an action, provided by <u>Florida Statutes</u>, 255.05, and the manner of giving notices provided by <u>Florida Statutes</u>, 713.18, shall apply to claimants on the payment bond undertaking of this Bond.

From: Charlotte Young

Sent: Tuesday, November 01, 2005 12:35 PM

To: 'lesliepaulsen@h-hinsurance.com'

Subject: CR121 Widening/Resurfacing (Bid No. NC025-05)

There is an error on page 7 of the bid specifications which require page 32 & 33 to be included. Only the bid bond is required to be submitted with the bid. The bid bond form is on page 19.

I will be sending out an addendum to all plan holders and potential bidders.

Thanks for bringing this to my attention.

Capital Projects Administration
96135 Nassau Place, Suite 6
Yulee, FL 32097
(904) 548-4590 Fax: (904) 321-2658

# facsimile transmittal

	То:	All Plan Holders	Fax:		- 11-
	From:	Charlotte J. Young Contract Manager	Date:	11/01/05	
	Re:	CR121 Widening & Resurfacing Bid No. NC025-05	Pages:	2	
	cc:	Did No. Neo23-03			
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Please find attached addendum no. 6 for the above referenced bid

\* \* \* Memory TX Result Report ( Nov. 1. 2005 2:42PM ) \* \* \*

1) NASSAU CTY ATTY OFF 904 321 2658

Capital Projects Administration 96135 NatasePlace, Scite 6 Yulos, FL 32097 (904) 546-4590 Par. (904) 321-2651

# ែរ(១៩)ការរៀប ដែលក្រុងក្នុងប៉ុន្តែវ

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\* \* \* Memory TX Result Report (Nov. 1. 2005 4:19PM) \* \* \* \*

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Cupital Projects Administration 96135 Nessan-Place, Suin: 6 Yulee, FL 32097 1904) 548-4999 Fac: (904) 331-260

#### រដែលប្រជាជ្រែមក្តារាងជាដែរ

	To:	All Plan Holders	Fuc		
	From:	Charlotte J. Young Contract Manager	Date:	11/01/05	
	Rec	CR121 Widening & Resurfacing	Pages:	2	
		Bid No. NC025-05			
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## Exhibit C to the Contract for Corrective Action Required for the Contractor on Nassau County Road 121

#### I. Reference Documents

- A. The reference documents, unless otherwise noted shall be included in their entirety and shall be considered a part of this contract as it is written herein. In the event of a conflict between reference documents, the Engineer, as designated by Nassau County, shall decide and provide a written statement resolving such conflict or apparent conflict. The following are the reference documents for this project:
- 1. The Florida Department of Transportation, "Standard Specifications for Road and Bridge Construction", 2004 Edition (further known as "The Red Book").
- 2. The Florida Department of Transportation, "Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Street and Highways", May 2005 Edition (further known as: The Green Book").
- 3. The Florida Department of Transportation, "Roadway and Traffic Standards for Design, Construction, Maintenance and Utility Operations" (Design Standards). July 2004 Edition, Index 600.
- 4. "Widening and Improvement Plans for County Road 121, Nassau County, Florida" dated February 18, 2005.
- 5. Typical Section provided by the Engineer prior to or Subsequent to the start of work on this project.

#### II. Quality Process (QC,, VT, IA)

- A. The Contractor shall submit for review by the Engineer and approval by Nassau County, a comprehensive Quality Control (QC) Plan in accordance with FDOT Requirements that specifically addresses the construction activities for County Road 121. The QC plan shall include the resumes of all personnel to be used on this project.
- B. The Contractor shall provide Quality Control (QC) for the project through the use of internal personnel or the hiring of an independent testing laboratory for the purposes of providing full-time quality assurance of the construction activities at no additional cost to Nassau County. Sufficient numbers of personnel shall be provided to assure coverage of all construction activities. The duties of the QC personnel shall be clearly outlined in the QC plan and shall include the following minimum activities:

#### **Duties of the Contractor QC**

- 1. Documentation of Plant Asphalt production and delivery to the jobsite of all asphaltic concrete materials and mixes.
- 2. Measuring and documentation of asphaltic concrete temperatures at the time of delivery and at laydown. Temperature shall be measured with a calibrated thermometer while in the delivery truck and in the hopper of the paving machine. Surface thermometers shall not be used.
- 3. Measuring and documentation of pavement machine settings to achieve the required layer thicknesses after compaction.
- 4. Measuring and documentation of pavement layer thicknesses by coring on a daily basis for the area covered that day.

- 5. Measuring and documentation of a control strip compaction process in accordance with FDOT requirements. The control strip compaction process shall be normalized to temperature and verified by laboratory density measurement of cores prior to continuing production.
- 6. Measurement and documentation of rolling straightedge to comply with surface flatness requirements.
- 7. Measurement and documentation of day's production using station numbers and GPS.
- 8. Daily submittal of all documentation to Nassau County and its designated Engineer for review.
- C. Nassau County will hire an independent testing laboratory for the purpose of Verification Testing (VT). The VT firm will "Spot check" the QC activities of the contractor and will make independent measurements of quality parameters on a random basis.
- D. The Contractor shall provide sufficient personnel, equipment and materials to assure a continuous operation for the work periods.

#### III. Maintenance of Traffic

- A. The Contractor shall be responsible to provide all maintenance of traffic and shall submit a Maintenance of Traffic Plan (MOTP) prior to beginning work. Maintenance of Traffic shall apply 24 hours per day, 7 days per week throughout the term of construction and until the project is accepted by Nassau County as complete. FDOT Design Standards Index 600 shall be followed for MOT.
- B. The appropriate subindex of Index 600 shall be used for the conditions on the roadway at the time. For example, if equipment is stored off the roadway, and the roadway lanes are clear during non-work hours, the appropriate warnings and signage such as found in subindex 602 shall be used. During daylight work activities when lanes are not clear and traffic must be interrupted or detoured per lane, subindex 603 shall be used. Other subindexes may be applicable depending on work activities or workflow.

#### IV. Milling

- A. All existing asphaltic concrete above the base material shall be milled to remove the asphaltic concrete in its entirety, so as to expose and scarify the top surface of the base material.
- B. Milling shall be done so as to achieve a two percent (2%) cross slope defined from the centerline to the pavement edge and to minimize the amount of base material removed.
- C. In areas where coring has shown the base course thickness to be at or less than 6 inches, and to achieve the proper cross slope additional base course must be milled. The Contractor shall provide a thickened asphalt section top compensate for the removed or deficient base at no additional cost to Nassau County. The thickened asphaltic section shall be transitioned into and out of deficient base area for a minimum of 50 linear feet beyond the limits of the deficiency or the length to achieve a transition of not more than ¼ inch in 10 feet, whichever is greater. This additional asphalt shall not include in the required thickness of the asphalt of the asphaltic concrete layer to be applied over the base.

#### V. Prime Coat Application

- A. After proper milling and cleaning of the milled surface to remove dust, debris or laitance, apply a prime coat of RS-1 or approved equivalent material at the rate of not less than 0.15 gallons per square yard (gal/SY). Prime coat shall be applied uniformly by spraybar application to a surface that has a moisture content ranging from a minimum of 8 percent by weight to 11 percent by weight. The surface might require light dampening with a uniform water spray, followed by rolling with a traffic roller. Roller application is not acceptable. VT will be responsible for the verification testing of the Prime Coat. Immediately after application of the prime coat, embed 3 strips of canvas fabric, each 12 inches long, randomly into the first 10 feet of wet prime coat, leaving a 2-inch dry "tail" of canvas to allow gripping the test strip. After 15 minutes of dwell time, pull the canvas "tails". If the prime coat pulls cleanly from the surface of the base material in this "peel test", the prime coat application shall be rejected
- B. the prime coat shall be covered with a cover material coated with 2 to 4 percent asphalt cement and applied at a rate of 10 lb/SY. After application of the cover material, roll the surface with a traffic roller to produce a dense mat of priming material over the base material.
- C. Provide temporary centerline striping using acrylic striping paint.

#### VI. Tack Coat Application

- A. Prior to the application of the tack coat, clean surface of any loose material, debris, dust or loose cover material. Tack coat to be applied to the primed surface and on the surface of asphalt course prior to placement of the next asphalt course.
- B. Apply a uniform spray bar coating of RA-500 tack coat heated to 250F-300F. (Douglas Asphalt has indicated that 0.05 gal/SY is at the high end of the requirement. Douglas Asphalt has indicated there should be two rates, (1) a fogging application at a target rate of 0.02-0.05 gal/SY on the prime surface and; (2) tack coat at a target rate of 0.05 gal/SY on asphalt surface.)
- C. Allow the tack coat to dry but remain tacky prior to application of the asphalt pavement layer. Do not allow traffic onto the tack coated surface prior to paving. Paving may be done when the tack coat is sufficiently dry that when a full hand pressure is applied to the surface and pulled away, there is noticeable adhesion but no material is pulled away on the hand or from the primed surface.

#### VII. Pavement Application

A. To the milled, primed and tacked base surface, apply the first lift consisting of one layer, 1-1/2 inches thick, of SP12.5 asphalt designed in accordance with FDOT requirements. The SP12.5 mix shall be a recent design mix, not more than 90 days old, and shall not contain more than 25 percent recycled asphalt from millings. Roll and compact to a consistent surface texture and density of at least 96 percent of the theoretical maximum density of the mix. All asphalt placements shall be at the temperatures recommended by FDOT.

- B. After proper rolling and compaction of the lift, a rolling straightedge and prior to the second lift of asphalt course the Contractor shall be used to check the surface flatness and tolerance. Corrections to the surface flatness shall be made at no additional cost to Nassau County, prior to continuing with the second lift of asphalt.
- C. After a correction of surface irregularities in the first lift of asphalt, place the second lift in a continuous layer of 1-1/2 inches, properly rolled and compacted to achieve a density of at least 96 percent of the theoretical maximum density of the mix.
- D. Vertical joints in the lifts shall be offset by a t least 6 six inches.
- E. If more than 48 hours elapses between the placements of asphalt lifts, the surface shall be tack coated with 0.02 gal/SY of RA-500 or approved equivalent tack coat prior to placement of the second lift. All lane joint edges shall be tack coated and cross rolled.
- F. The final surface of the pavement shall achieve density, surface texture and ride quality acceptable to Nassau County.

#### VIII. Pavement Striping

A. Final striping and placement of the RPM on the pavement shall be acrylic as contained in the original contract.

#### IX. Inclusion

A. The inclusion of certain provisions of the pavement specifications herein is intended to reiterate those items of specific contention between the Contractor and Nassau County in the original contract and to make clear such provisions. This inclusion does not reduce the effect of any provisions of pavement construction or control contained in the reference documents.

#### **Ann Myers**

From:

John C. Taylor [jtaylor@TDCLAW.COM]

Sent:

Friday, July 14, 2006 5:22 PM

Sent:

Ann Myers

Subject:

FW: Ltr to michael mullin



\_0714171856\_001.

Sorry this is late. My secretary said the fax would not go thru.

John C. Taylor, Jr., Esquire Taylor, Day, Currie, Boyd & Johnson 50 North Laura Street Suite 3500 Jacksonville, Florida 32202

The information contained in this electronic mail transmission is intended by John C. Taylor, Jr. and Taylor, Day, Currie, Boyd & Johnson for receipt by the named individual or entity to which it is directed. This electronic mail transmission may contain information that is privileged or otherwise confidential. It is not intended for transmission to or receipt by anyone other than the named addressee (or person authorized to deliver it to the named addressee). It should not be copied or forwarded to any unauthorized persons. If You have received this electronic transmission in error, please delete it from your system without copying or forwarding it, and notify the sender of the error by reply e-mail or by calling the law offices of Taylor, Day, Currie, Boyd & Johnson at 904-356-0700, so that our address record can be corrected. Thank you.

----Original Message-----From: Louanne H. Smith

Sent: Friday, July 14, 2006 5:20 PM

To: John C. Taylor

Subject: Ltr to michael mullin

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ATTORNEYS AT LAW

MARSA S BECK
CAROL M BISHOP
GREGORY E BLACKWELL
RHONDA B BOGGESS
CHRISTOPHER P BOYD
BRIAN E CURRIE
STEPHEN E DAY
DAVID M GAGNON
REED W GRIMM
BRADLEY R JOHNSON
BONNIE J MURDOCH
JOHN D OSGATHORPE
TARA N POOLE
HEATHER E SOSNOWSKI
JOHN C TAYLOR JR

BANK OF AMERICA TOWER

50 NORTH LAURA STREET SUITE 3500

JACKSONVILLE, FLORIDA 32202

TELEPHONE (904) 356-0700

FACSIMILE (904) 356-3224

WWW TDCLAW COM

AMELIA ISLAND OFFICE
26 SOUTH FIFTH STREET
FERNANDINA BEACH FLORIDA 32034
TELEPHONE (904) 261-8585
FACSIMILE (904) 261-4898

July 14, 2006

Michael Mullin, Esquire Nassau County Attorney 96135 Nassau Place, Room 6 Yulee, Florida 32097

Re: Douglas Asphalt Company - County Road 121

Dear Mr. Mullin:

As you know, my firm represents Douglas Asphalt Company ("Douglas") in connection with its contract with Nassau County dated February 27, 2006, for the full depth base reclamation and resurfacing of County Road 121 in Nassau County. The purpose of this letter is to set out the history of Douglas' dealings with the county and address issues between the parties.

Before doing that, there are several issues that I believe need to be dealt with. These include:

- (a) The payment of invoice numbers 5 and 6 for the subject job, in the amount of approximately \$1 million;
- (b) The completion of the remaining work on Douglas' contract with the county and how it is to be performed;
- (c) Potential defects in the required manner of performance for the subject job and their impact on (a) and (b) above.

#### <u>History</u>

Douglas has been in the asphalt business for many years. For the past three years it has had a contract with Nassau County to perform continuous asphalt work in the county and the work has been performed to the satisfaction of the county so far as I know.

#### Taylor, Day, Currie, Boyd & Johnson

Michael Mullin, Esquire July 14, 2006 Page 2

Douglas learned of the county's intention to do repaving work on County Road 121 sometime in April 2005. It learned at that time that the county intended to strengthen the base, in addition to adding new asphalt to the road. It learned early on that the county intended to use the "Turner system" to do the work on the base.

Douglas immediately began preparation of a budget for the job. It was aware that the Turner system had not been used in the northeast Florida area under conditions similar to those which would have been present on the CR121 job. It sought advice from prospective subcontractors who were, in the opinion of Douglas, experts in doing base work and found that there was concern on the part of these prospective subs about the use of the Turner system. In particular, there was concern about whether the base would withstand the level of traffic that would be present on these roads in the short period of time that was to be allotted for the setting of the base. With that concern in mind, and others, Douglas requested a pre-bid conference with the county.

The request was denied. Douglas, and other bidders, were told that they could seek financial information, but nothing technical. They were told that the Turner system was going to be used on this particular job. In <u>Addendum No. 1</u> dated October 11, 2005, the county stated that the contractor was to determine "Maintenance of Traffic" requirements to suit their proposed methodology and the cost should be incorporated into the bid. In <u>Addendum No. 3</u>, the county reiterated that it did not wish to stipulate lane closure, phasing, or work shift criteria and that it was up to the bidder to propose alternatives that would satisfy the contract. Douglas submitted a bid which was determined to be the low bid and was accepted by the county.

However, Douglas had concerns about the use of the Turner treatment that it continued to voice. As a result, there was a pre-contract meeting held on January 6, 2006, that was attended by Dave Turner, the creator of the Turner system, and others. Douglas was told at that time that it must either use the Turner system or withdraw from the process. It was asked to confirm that it could carry out the requirements of the Turner system and did so in its letter of January 9, 2006, indicating that based upon the representations that were made by Mr. Turner and others at that meeting, the Turner treatment was a workable process. Mr. Deliz, on January 10, 2006, acknowledged receipt of Douglas' confirmation that the Turner treatment was a workable process and stated that Nassau County "cannot be held liable for errors contained in this document;" the reference to a document was a copy of the Process Guidelines received from Mr. Turner which were given to Douglas. Douglas remained of the belief that the Turner treatment was a workable process but was concerned about allowing traffic on the road after only eight hours of curing time.

Michael Mullin, Esquire July 14, 2006 Page 3

At that same January 6th meeting, a principal concern of the Douglas representatives present was the question of the handling of local traffic. Douglas' reps expressed the concern that if traffic was going to be allowed back on the road after only eight hours, there could be a problem with the base.

Although the pre-bid information had indicated that the contractor would be in charge of maintenance and traffic requirements, Douglas was told that the local residents would not stand for the inconvenience of the road being closed for any longer period of time. Mr. Turner of the Turner system was present at that meeting. Mr. Turner explained to Douglas in great detail that the base would harden during that eight-hour period and that it would not be damaged by logging trucks using the road after then. At the same time, Douglas was told that it must allow access to the roads after an eight-hour period or withdraw from the job. Relying upon the county's consultant, Douglas agreed to proceed with the job, firmly believing that Mr. Turner was giving accurate advice.

Subsequently, Douglas entered into the formal contract agreement with the county and began the prescribed work. The base work was all performed in accordance with the plans and specifications. The county's representatives were constantly on the job analyzing the quality of the base work and allowing it to go forward. It was performed as specified. At an unrecorded pre construction meeting the county waived the requirement of a prime on the base and Douglas proceeded accordingly.

#### Waivers

At the meeting on January 6th, Douglas pointed out that this was a single lift asphalt job, based upon the plans. There are no FDOT rideability standards for single lift paving jobs on a reclaimed base. The county recognized this and, in the contract terms, waived the rideability requirement. This was appropriate under all of the circumstances. The county also waived the requirement that a primer be applied to the road, recognizing that it would not have time to cure.

#### The Problems

Douglas commenced work as scheduled in March and the job proceeded in accordance with the plans and directions from the county. The Turner system was used and logging traffic was allowed back on the roads after eight hours. As citizens began later using the road, they complained that the finished surface was "too wavy." Mr. Deliz acknowledged that the county had waived rideability standards and admitted that the waviness would probably pass rideability in any event, but concluded that "something has to be done" (5/15/06 email - Deliz to Grode). Subsequently, the asphalt surface added to the base began to slide off the base, after being exposed to traffic.

Michael Mullin, Esquire July 14, 2006 Page 4

Douglas has agreed with the county to do a test strip which is presently in the process of being analyzed. In the meantime, Douglas has performed no further work on the job since approximately May 24th. This is because it believes that performing the work as directed by the county, as a result of the advice from the county's consultant, is the cause of these problems. Neither Douglas nor the county will be served by continued performance of a contract which, as prescribed, is not producing the result that everyone desired.

#### The Law

This case is governed by the *Spearin* doctrine, as enunciated originally by the United States Supreme Court in the case of *United States v. Spearin*, 248 U.S. 132 (1918). In the *Spearin* case, the government had contracted Spearin to perform work at the Brooklyn Navy Yard. Unfortunately, in preparing the plans and specifications, the government was unaware of the existence of a dam, which diverted water, causing internal pressure and eventually breakage of a sewer. In prior years, the sewers had from time to time overflowed and the government was aware of that fact, but had not communicated it to Spearin, the contractor. Spearin had made an examination of the premises and obtained information from the civil engineer's office at the Navy Yard regarding conditions. Spearin notified the government that he considered the sewers a menace to the work and that the government needed to remove the danger or assume responsibility for any damage or extra cost. The government insisted that the responsibility for remedying the condition rested with the contractor and Spearin denied that.

The Supreme Court acknowledged the general rule that, on contract principles, if one agrees to do something for a fixed sum, he is not excused because unforeseen difficulties are encountered (at 136). The Court then held for Spearin finding 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. (Citations omitted.)

This responsibility of the owner is not overcome by the usual clauses requiring builders to visit the site, to check the plans, and to inform themselves of the requirements of the work . . . (at 136).

The obligation to examine the site did not impose upon him the duty of making a diligent inquiry into the history of the locality with a view to determining, at his peril, whether the sewer specifically prescribed by the government would prove adequate. The duty to check plans did not impose

Michael Mullin, Esquire July 14, 2006 Page 5

view. And the provision concerning contractor's responsibility cannot be construed as abridging rights or rising under specific provisions of the contract.

The clear ruling by Justice Brandeis is that a contractor has not breached his contract if he does what the owner tells him to and the result is a defective condition. This principle has been adopted in Florida.

It has taken different forms. In *Wood Hopkins Contracting Co. v. Masonry Contractors, Inc.*, 235 So.2d 548 (1st D.C.A. 1970), the court held that if the owner required that a certain kind of brick be used on the job, and the contractor purchased the exact type of brick called for in the specifications, then the contractor would not be liable for breach of contract; the manner of performance of the job was approved by the owner's agent, and supervising architect, a contractor would not be liable for water damage resulting from failed windows; see *City National Bank of Miami v. Chitwood Construction Co.*, 210 So.2d 234 (3rd D.C.A. 1968); see also Fred Howland, Inc. v. Gore, 13 So.2d 303 (Fla. 1942), and *Enid Corporation v. Mills*, 101 So.2d 906 (3rd D.C.A. 1958).

The holding of these cases is simply common sense: if a contractor does what he has agreed to do, and what he is told, he ought not to be liable. The contractor, of course, did not do the design work on this job; the county consultant confirmed that the work as directed by the county would produce a good result. Just because it has not does not mean that Douglas has breached its contract in any fashion whatsoever.

#### The Future

To date, Douglas has performed in accordance with the plans and specifications, and pursuant to the directions of the county. Under those circumstances, it is entitled to be paid for the work it has invoiced to the county. Douglas stands ready and willing to complete the CR121 job. It is clear now, however, that proceeding as directed by Mr. Turner, and allowing the roads to be opened to traffic after only eight hours, is going to produce more faulty results. While Mr. Turner felt his system was acceptable for this County road, he clearly did not appreciate the extent of the use of that road. Douglas is willing to discuss any alternatives the county would propose in order to finish this job satisfactorily. These could include relief from the county's traffic restrictions, abandonment or adjustment of reclaimed base work, abandonment of Turner system, or any other concept that the county finds acceptable. The one thing Douglas cannot do is proceed to do the work in a manner which, though directed by the county (and approved by its consultant), is producing an unacceptable result.

Michael Mullin, Esquire July 14, 2006 Page 6

In the meantime, the county needs to go ahead and pay the outstanding invoices since the work has been properly performed.

We welcome any discussions you or county representatives would like to have with us regarding any of the above.

Sincerely,

John C. Taylor, .

JCTJr/lou

Page 1

63 L.Ed. 166, 42 Cont Cas Fed. (CCH) P 77,225 (Cite as: 248 U.S. 132, 39 S.Ct. 59)

UNITED STATES

v. SPEARIN. SPEARIN v.

UNITED STATES.

Nos. 44, 45.

Supreme Court of the United States

Argued Nov. 14 and 15, 1918

Decided Dec 9, 1918

Appeals from the Court of Claims.

Suit by George B. Spearin against the United States. From judgment for plaintiff (51 Ct. Cl. 155), both parties appeal. Affirmed.

#### EVIDENCE \$\infty 441(7)

157k441(7)

The parol evidence rule did not preclude a dry dock contractor from relying on the government's warranty, implied by law from provisions of contract, that if he made necessary relocation of sewer as prescribed it would be adequate to permit erection of dry dock.

### UNITED STATES \$\infty 70(8) 393k70(8)

Rev.St. § 3744, 41 U.S.C.A. § 16, providing that contracts of the Navy Department shall be reduced to writing, did not preclude contractor to build dry dock from relying on government's warranty, implied by law from provisions of contract, that if he made necessary relocation of sewer as prescribed, it would be adequate to permit erection of dry dock.

#### UNITED STATES ⋘73(24)

393k73(24)

Where dry dock was to be built in accordance with plans furnished by the United States, and contract provided for necessary relocation of sewer, articles prescribing its character, dimensions, and location imported warranty that if complied with sewer would be adequate, and, despite general clauses requiring contractor to examine site, etc., he could refuse to resume work where he relocated sewer as provided, and it was not sufficient, and, when government annulled contract without justification, it became liable in damages.

#### CONTRACTS 232(1)

95k232(1)

Where one agrees to do for a fixed sum a thing possible to be performed, he will not be excused or become entitled to additional compensation on account of unforeseen difficulties.

#### CONTRACTS \$\infty 280(3)

95k280(3)

If contractor is bound to build according to owner's plans and specifications, owner will be responsible for consequences of defects in plans and specifications, despite clauses requiring checking of plans, etc.

#### CONTRACTS ⋘319(1)

95k319(1)

One who, after partially performing a contract, is wrongfully prevented by the other contracting party from completing it, may recover actual expenditures made by him on account of such contract, and also damages for loss of profits.

\*\*60 \*133 Messrs. Frank W. Hackett, of Washington, D. C., and Charles E. Hughes, of New York City, for Spearin.

Mr. Assistant Attorney General Thompson, for the United States.

Mr. Justice BRANDEIS delivered the opinion of the Court.

Spearin brought this suit in the Court of Claims demanding a balance alleged to be due for work done under a contract to construct a dry dock and also damages for its annulment. Judgment was entered for him in the sum of \$141,180.86 (51 Ct. Cl. 155), and both parties appealed to this court. The government contends that Spearin is entitled to recover only \$7,907.98. Spearin claims the additional sum of \$63,658.70.

First. The decision to be made on the government's appeal depends upon whether or not it was entitled to annul the contract. The facts essential to a determination of the question are these:

Spearin contracted to build for \$757,800 a dry dock at the Brooklyn Navy Yard in accordance with plans and specifications which had been prepared by the government. The site selected by it was intersected by a 6-foot brick sewer; and it was necessary to divert and relocate a section thereof before the work of

constructing the dry dock could begin. The plans and specifications provided that the contractor should do the work and prescribed the dimensions, material and location of the section to be \*134 substituted. All the prescribed requirements were fully complied with by Spearin; and the substituted section was accepted by the government as satisfactory. It was located about 37 to 50 feet from the proposed excavation for the dry dock; but a large part of the new section was within the area set aside as space within which the contractor's operations were to be carried on. Both before and after the diversion of the 6-foot sewer, it connected, within the Navy Yard but outside the space reserved for work on the dry dock, with a 7-foot sewer which emptied into Wallabout Basin

About a year after this relocation of the 6-foot sewer there occurred a sudden and heavy downpour of rain coincident with a high tide. This forced the water up the sewer for a considerable distance to a depth of 2 feet or more. Internal pressure broke the 6-foot sewer as so relocated, at several places; and the excavation of the dry dock was flooded. Upon investigation, it was discovered that there was a dam from 5 to 5 1/2 feet high in the 7-foot sewer; and that dam, by diverting to the 6-foot sewer the greater part of the water, had caused the internal pressure which broke it. Both sewers were a part of the city sewerage system; but the dam was not shown either on the city's plan, nor on the government's plans and blueprints, which were submitted to Spearin. On them the 7-foot sewer appeared as unobstructed. The government officials concerned with the letting of the contract and construction of the dry dock did not know of the existence of the dam. The site selected for the dry dock was low ground; and during some years prior to making the contract sued on, the sewers had, from time to time, overflowed to the knowledge of these government officials and others. But the fact had not been communicated to Spearin by any one. He had, before entering into the contract, made a superficial examination of the premises and sought from the civil engineer's office at the Navy \*135 Yard information concerning the conditions and probable cost of the work; but he had made no special examination of the sewers nor special inquiry into the possibility to the work being flooded thereby, and had no information on the subject.

Promptly after the breaking of the sewer Spearin notified the government that he considered the sewers under existing plans a menace to the work and that he would not resume operations unless the government either made good or assumed responsibility for the damage that had already occurred and either made such changes in the sewer system as would remove the danger or assumed \*\*61 responsibility for the damage which might thereafter be occasioned by the insufficient capacity and the location and design of the existing sewers. The estimated cost of restoring the sewer was \$3,875. But it was unsafe to both Spearin and the government's property to proceed with the work with the 6-foot sewer in its then condition. The government insisted that the responsibility for remedying existing conditions rested with the contractor. After 15 months spent in investigation and fruitless correspondence, the Secretary of the Navy annulled the contract and took possession of the plant and materials on the site. Later the dry dock, under radically changed and enlarged plans, was completed by other contractors, the government having first discontinued the use of the 6-foot intersecting sewer and then reconstructed it by modifying size, shape and material so as to remove all danger of its breaking from internal pressure. Up to that time \$210,939.18 had been expended by Spearin on the work; and he had received from the government on account thereof \$129,758.32. The court found that if he had been allowed to complete the contract he would have earned a profit of \$60,000 and its judgment included that sum.

[1][2] The general rules of law applicable to these facts are well \*136 settled. Where one agrees to do, for a fixed sum, a thing possible to be performed, he will not be excused or become entitled to additional compensation, because unforeseen difficulties are encountered. Day v. United States, 245 U. S. 159, 38 Sup. Ct. 57, 62 L. Ed. 219; Phoenix Bridge Co. v. United States, 211 U.S. 188, 29 Sup. Ct. 81, 53 L. Ed. 141. Thus one who undertakes to erect a structure upon a particular site, assumes ordinarily the risk of subsidence of the soil. Simpson v. United States, 172 U. S 372, 19 Sup. Ct. 222, 43 L. Ed. 482; Dermott v. Jones, 2 Wall. 1, 17 L. Ed. 762. But 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. MacKnight Flintic Stone Co. v. The Mayor, 160 N. Y. 72, 54 N. E. 661; Filbert v. Philadelphia, 181 Pa. 530;, [FN\*] Bentley v. State, 73 Wis. 416, 41 N. W 338 See Sundstrom v. State of New York, 213 N. Y. 68, 106 N. E. 924. This responsibility of the owner is not overcome by the usual clauses requiring builders to visit the site, to check the plans, and to inform themselves of the requirements of the work, as is shown by Christie v. United States, 237 U. S. 234, 35

39 S.Ct. 59 (Cite as: 248 U.S. 132, \*136, 39 S.Ct. 59, \*\*61)

Sup. Ct. 565, 59 L. Ed. 933; Hollerbach v. United States, 233 U. S. 165, 34 Sup. Ct. 553, 58 L. Ed. 898, and United States v. Stage Co., 199 U. S. 414, 424, 26 Sup. Ct. 69, 50 L. Ed. 251, where it was held that the contractor should be relieved, if he was misled by erroneous statements in the specifications.

[3] In the case at bar, the sewer, as well as the other structures, was to be built in accordance with the plans and specifications furnished by the government. The construction of the sewer constituted as much an integral part of any part of the dry dock proper. It was as necessary as any other work in the preparation for the foundation. It involved no separate contract and no separate consideration. The contention of the government that the present case is to be distinguished from the Bentley Case, supra, and other similar cases on the ground that the contract with reference to the sewer is purely collateral is clearly without \*137 merit. The risk of the existing system proving adequate might have rested upon Spearin, if the contract for the dry dock had not contained the provision for relocation of the 6-foot sewer. But the insertion of the articles prescribing the character, dimensions and location of the sewer imported a warranty that if the specifications were complied with, the sewer would be adequate. This implied warranty is not overcome by the general clauses requiring the contractor to examine the site, [FN1] to check up the plans, [FN2] and to assume responsibility for the work until completion and acceptance. [FN3] The obligation to examine the site did not impose upon him the duty of making a diligent inquiry into the history of the locality with a view to determining, at his peril, whether the sewer specifically prescribed by the government would prove adequate. The duty to check plans did not impose the obligation to pass upon their adequacy to accomplish the purpose in view. And the provision concerning contractor's responsibility cannot be construed as abridging rights arising under specific provisions of the contract.

[4][5] Neither section 3744 of the Revised Statutes (Comp. St. 1916, § 6895) which provides \*138 that contracts of the Navy Department shall be reduced to writing, nor the parol evidence rule, precludes reliance upon a warranty implied by law See Kellogg Bridge Co. v. Hamilton, 110 U. S. 108, 3 Sup. \*\*62 Ct. 537, 28 L. Ed. 86. The breach of warranty, followed by the government's repudiation of all responsibility for the past and for making working conditions safe in the future, justified Spearin in refusing to resume the work. He was not obliged to restore the sewer and to proceed, at his peril, with the

construction of the dry dock. When the government refused to assume the responsibility, he might have terminated the contract himself, Anvil Mining Co. v. Humble, 153 U. S. 540, 551, 552, 14 Sup. Ct. 876, 38 L. Ed. 814; but he did not. When the government annulled the contract without justification, it became liable for all damages resulting from its breach.

[6] Second. Both the main and the cross appeal raise questions as to the amount recoverable.

The government contends that Spearin should, as requested, have repaired the sewer and proceeded with the work; and that having declined to do so, he should be denied all recovery except \$7,907.98, which represents the proceeds of that part of the plant which the government sold plus the value of that retained by it. But Spearin was under no obligation to repair the sewer and proceed with the work, while the government denied responsibility for providing and refused to provide sewer conditions safe for the work. When it wrongfully annulled the contract, Spearin became entitled to compensation for all losses resulting from its breach.

Spearin insists that he should be allowed the additional sum of \$63,658.70, because, as he alleges, the lower court awarded him (in addition to \$60,000 for profits) not the difference between his proper expenditures and his receipts from the government, but the difference between such receipts and the value of the work, materials, and plant (as reported by a naval board appointed by the defendant). \*139 Language in the findings of fact concerning damages lends possibly some warrant for that contention; but the discussion of the subject in the opinion makes it clear that the rule enunciated in United States v. Behan, 110 U. S. 338, 4 Sup. Ct. 81, 28 L. Ed. 168, which claimant invokes, was adopted and correctly applied by the court.

The judgment of the Court of Claims is, therefore, affirmed.

Mr. Justice McREYNOLDS took no part in the consideration and decision of these cases.

FN\* 37 Atl. 545.

FN1 '271. Examination of Site.—Intending bidders are expected to examine the site of the proposed dry dock and inform themselves thoroughly of the actual conditions and requirements before submitting proposals.'

39 S.Ct. 59 (Cite as: 248 U.S. 132, \*139, 39 S.Ct. 59, \*\*62)

FN2 '25. Checking Plans and Dimensions; Lines and Levels --The contractor shall check all plans furnished him immediately upon their receipt and promptly notify the civil engineer in charge of any discrepancies discovered therein \* \* \* The contractor will be held responsible for the lines and levels of his work, and he must combine all materials properly, so that the completed structure shall conform to the true intent and meaning of the plans and specifications.

FN3 '21. Contractor's Responsibility --The contractor shall be responsible for the entire work and every part thereof, until completion and final acceptance by the Chief of Bureau of Yards and Docks, and for all tools, appliances, and property of every description used in connection therewith. \* \*

END OF DOCUMENT

# Douglas Asphalt Company

Quality Control
Plan
C.R. 121
Nassau County

Asphalt:

HMA-3.2 Personnel HMA-3.2.1 Qualifications

Paving Level 1 Personnel – Jimmie Nelms-N45243269

James Roach-R20045878 Neal Meeks-M20062176 Chris Meeks-M20010575

Donny Johnson-J52517666

Greg Kendall-K53428571

Paving Level 2 Personnel - Jimmie Nelms-N45243269

Richard Robertson- R16374161 Neal Meeks-M20062176 Greg Kendall-K53428571

Chris Meeks-M20010575

In the event the above listed personnel are not available, CTQP qualified personnel will be utilized and the Engineer will be notified within 24 hours with the name and TIN.

Mix Designer – Quality Assurance Testing Labs, L.L.C. 360 North Seagrave St. Daytona Beach, FL 32114 William Loyed TIN: L30093066

HMA-3.2.2 Level of Responsibility - The primary contact for the Department will be Tommy Peake. Per 330-2.3.1 Personnel Qualifications, personnel will be provided for the respective areas. Paving Level 1 Technician will be responsible for the pavement infrared temperature, verifying density with a density measuring device, and monitoring the pavement smoothness with a 15 foot rolling straightedge. Paving Level 2 Technician will be in responsible charge of the paving operations. This individual will also be responsible for monitoring the mix spread rate, monitoring the pavement cross slope, all required reports and documentation, cutting of cores, transporting cores to asphalt lab, and mix temperature of the first five loads and every fifth load thereafter.

#### **HMA-3.3 Raw Materials**

**HMA-3.3.1 Source** - The following plant will be used to provide Hot Mix Asphalt for the project:

Douglas Asphalt Company, Inc. 10010 North Main Street Jacksonville, FL 32218 Plant Number A0-734

#### **Asphalt**

HMA-3.3.2 Certification - Mixtures and products incorporated into project will be in conformance to specifications, load tickets will bear approved mix design number and/or producer certification.

HMA-3.4 Storage Facilities for Raw Materials - Hot Mix Storage addressed in Producer's Quality Control Plan and 330-6.4. Other materials, such as ARMI cover stone will be stockpiled and loaded to prevent segregation and contamination. Asphalt Rubber Binder will per 336-5. Prime and tack per section 300.

HMA-3.5 Production Equipment - Refer to Producer's QC Plan. HMA-3.6 Plant Requirements

HMA-3.6.1 Plant Identification - Refer to Producer's QC Plan.

HMA-3.6.2 Process Control System - Refer to Producer's QC Plan.

HMA-3.6.3 Loading and Shipping Control - Refer to Producer's QC Plan.

HMA-3.6.4 Types of Products Generated - Refer to Producer's QC Plan.

#### **HMA-3.7 Other Requirements**

**HMA-3.7.1** Copy of Certification - Attached are examples of certifications issued by the plant/Contractor for the products approved by the Department. (Example of: Tack delivery ticket, ARMI Binder, Asphalt mix delivery tickets, ARMI Cover Stone).

HMA-3.7.2 Statement of Compliance - The materials and processes used in the construction of this project will comply with all quality requirements set forth by the Department including Contract Documents and other Department manuals.

HMA-3.7.3 Information on Producer's Quality Control Plan - See section 3.3.1 for list of approved producers.

**HMA-3.7.4 Documentation Procedure:** All testing reports, cross-slope measurement forms, etc. will be stored at the production facility, and will be made available to Department personnel for review, upon request. These documents will be available for review during normal business hours.

# Douglas Asphalt Company Nassau County C.R. 121 Asphalt

HMA-3.8 Final Manufactured Product - Plant Operations
HMA-3.8.1 Storage - Not Applicable. See Producer's QC Plan.
HMA-3.8.2 Disposition of Failing Materials - Not Applicable. See
Producer's QC Plan.

HMA-3.9 Final Manufactured Product - Field Operations
HMA-3.9.1 Transportation - Trucks hauling Hot Mix will be of tight construction which prevents the loss of material, and will be equipped with a tarpaulin or waterproof cover mounted in such a manner it can cover the entire load. The trucks will be cleaned of all foreign material, and coated with a soapy solution or release agent. The bed of the truck will be equipped with a hole for measuring the temperature of the mix.

HMA-3.9.2 Storage - Not Applicable.

Maintenance of Traffic: The traffic control will include provision of signage at both ends of the 19.2 mile project. In association with the moving lane closure, appropriate construction activity signage will be provided as outlined in FDOT Standard Design Index, Section 600. Each lane closure operation will be setup to maintain a single lane of traffic, and it will include flagmen (at each end) with paddles, radios, and other devices as required by Section 600 of the FDOT Standard Design Index.

**HMA-3.9.3 Placement:** See HMA-3.9.3.5(In addition the following will be the parameters for paving in non-density areas: Immediately cease transportation of asphalt mixtures from the plant when the rain begins at the roadway. Do not place asphalt mixtures while the rain is falling, or when there is water on the surface to be covered. Once the rain has stopped and water has been removed from the tack surface to the satisfaction of the Engineer and the temperature of the mixture caught in transit still meets the requirements as specified in 330-9.1.2, the Contractor may then place the mixture caught in transit.)

HMA-3.9.3.1 Milling - Will be accomplished with equipment per 327-2 and monitored per sections 327-3 & 327-4. The milled cross slope will be verified at a frequency of at least every 250 feet unless modified in writing by the Department. Emphasis will be made for proper texture and ride wherever necessary. The milling of the newly placed 2" asphalt lift (including the scoring of the reclaimed roadway base) will be controlled by the roadway centerline, utilizing a 2% slope from the crown of the road.

**HMA-3.9.3.2 ARMI** - Monitor per 341-4,5 and 6 and adjust as necessary to maintain application rates.

**HMA-3.9.3.3 Preparation** - Prior to application of tack material, the existing surface will be cleaned of all foreign material, which might prevent proper bond over the full width of the application. Attempts will be made to minimize tack drop-off coming from truck tires, or mix droppings on the pavement surface prior to paving.

HMA-3.9.3.4 Prime and Tack —Once the milled roadway segment is properly cleaned, the roadway will be primed (per FDOT Specifications, Section 300) using RS-1 or equal. Subsequent to the prime application, a sand cover will be provided, and a temporary centerline stripe will be applied in order to allow vehicular traffic use of the milled roadway segment. Tack material will be verified by verifying the spread rate for each application. Adjustments to the application will be made to maintain the spread rate within the specified range. Monitor per Specification 330-4.

HMA-3.9.3.5 Paving - Use properly maintained equipment per 320-5 and monitor paving operations per 330-2.2 (temperature, slope, mix spread rate), and placement requirements per section 330-3, 9, 11, 12, 13 with emphasis on uniformity and smoothness. Reasonable attempts will be made to make smooth transitions at bridge approaches, manholes, and joints. In the event of rain (standing water or otherwise agreed to), paving will cease and trucks in route will be fully tarped as soon as possible. Once rain ceases and the pavement is mechanically swept of standing water, paving will continue on the tacked surface using mixtures meeting temperature requirements.

HMA-3.9.3.6 Compaction: After the prime coat is allowed sufficient curing time (1 – 2 days), the milled roadway will be cleaned, tacked, and the first lift of 1 ½", SP 12.5 TL-C asphalt will be applied to the milled roadway surface, followed by a temporary centerline stripe. The asphalt application will follow in sequence with the milling operation throughout the entire (northbound & southbound) 19.2 mile project. As the initial asphalt lift is being placed, mix testing will be performed. After the lift placement, rideability straight edge testing will be performed and the first asphalt lift corrections will be made. After corrections are accomplished, the tack coat and surface lift (1 ½" SP 12.5 TL-C) will be placed. In sequence with

the surface lift placement, the final surface striping will be applied. The operation will be performed in a continuous effort throughout the 19.2 mile northbound and southbound lanes. Compaction will be achieved using an adequate number of properly maintained rollers meeting applicable sections of 320-5.3. The compactive effort will be adjusted to control and achieve density as referenced in 330-10. Specification 330-10.1.2 is not applicable in SuperPave asphalt paving. Care will be taken not to over compact the pavement layer or use no more force than necessary to achieve density.

In areas where density testing is not required, the following rolling pattern is proposed to be done using the following equipment and coverages:

Roller 1: Ingersol Rand DD-90 Coverages: 5 passes Roller 2: Ingersol Rand DD-90 Coverages: 5 passes Roller 3: Ingersol Rand DD-110 Coverages: 5 passes

This proposed rolling pattern will then be documented immediately after completion and reviewed with the Engineer for approval. Informational cores will be taken as directed by the Engineer to determine the initial optimal density in these areas. If density of the process control cores varies by more than three PCF from the initial cores that were taken when the rolling pattern was established, then a new pattern will be established. When Process Control Cores are required the Paving level 2 technician will ensure that these cores are taken in the appropriate locations. Changes in rolling procedure shall require modifications to the QCP as approved by the Engineer. In the event that the rolling procedure deviates from the approved procedure, placement of the mix shall be stopped.

**HMA-3.9.3.7 Friction Courses** - Meet requirements for various Friction Courses listed in 337, including process control per 337-5 and roadway acceptance per 337-7, with emphasis on uniformity, smoothness, and density as required. Care to be taken not to over compact mixes and crush aggregate particles in final surface.

#### **Asphalt**

HMA-3.9.4 Disposition of Failing Materials - Per 334-9 Low Pay Factor Material, 330-6.3 Mix Temperature, 330-6.5 Contractors Responsibility of Mixture Requirements, and 330-12 Surface Requirements. If mix, determined by the Paving Level 2 Technician, appears to be out of specification, the following steps will be taken.

HMA-3.9.4.1 - Rechecking and/or retesting sample to validate test result and/or calculations. (As deemed necessary, an additional sample may be taken and tested to compare results). At the roadway, should nuclear density tests indicate we are not getting optimum density, we will stop paving operations and determine what the problem may be. We will then change the rolling pattern to achieve the required optimum density. The Project Administrator will be notified so that he can document the change in the rolling pattern.)

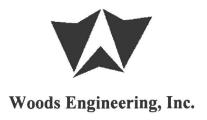
HMA-3.9.4.2 - Investigation to determine cause and potential solutions, including discussions with roadway and plant personnel. Depending on results of materials the Contractor may initiate and submit to the Project Engineer for approval an Engineering Analysis Report (EAR) along with a request for the material to be left in place. If the Composite Pay Factor is between 0.75 and 0.80 and upon approval of the Engineer, an Engineering Analysis Report (EAR) may be initiated. This evaluation will be in accordance with 334-9.4. The lab selected to perform the EAR will not be working on this project for the FDOT performing verification or working for (Douglas Asphalt Company, Inc.) performing CQC testing. The name of the lab chosen to perform the analysis will be submitted to the Engineer for approval prior to engaging their services. The lab will be accredited and approved to do the testing procedure required for the EAR.

HMA-3.9.4.3 - Implementing remedial action (if necessary) to correct the problem - include notation on daily reports of any changes in process.

HMA-3.9.4.4 - Notification of the QC Manager if necessary.
HMA-3.9.4.5 - Notification of the Engineer if results exceed limits described in section 334-7 or 334-9.

**HMA-3.10 Testing Laboratories** - Douglas Asphalt Company, Inc., Lab will perform all quality control related testing. Contacts for this lab will be:

Tommy Peake-P20055877 Ryan Smith-S53079678 James Roach-R20045878 Floyd "Bucky" McDaniel- M23524571



February 12, 2007

Ms. Charlotte Young County Attorney's Office Nassau County Government 96160 Nassau Place Yulee, Florida 32097

Subject:

Exhibit/Appendix C to Douglas Asphalt Contract

WEI Project 06-938

Dear Ms. Young:

Attached is a document intended to be attached as Exhibit/Appendix "C" to the Nassau County-Douglas Asphalt Contract for remediation of the defects for County Road 121. This document represents our recommendations for specific items of remediation.

We appreciate this opportunity to be of assistance. If you have any questions regarding this matter, please contact us.

Sincerely.

Woods Engineering, Inc.

M. Ronald Woods, P.E.

Consulting Engineer

Licensed, Florida 23122

This is an electronic transmission to expedite the delivery of the information contained herein. A signed and sealed copy of this report is maintained on file and will be submitted separately.

## Exhibit C to the Contract for Corrective Action Required for the Contractor on Nassau County Road 121

#### I. Reference Documents

A. The reference documents, unless otherwise noted shall be included in their entirety and shall be considered a part of this contract as it is written herein. In the event of a conflict between reference documents, the Engineer, as designated by Nassau County, shall decide and provide a written statement resolving such conflict or apparent conflict. The following are the reference documents for this project:

- 1. The Florida Department of Transportation, "Standard Specifications for Road and Bridge Construction", 2004 Edition (further known as "The Red Book").
- 2. The Florida Department of Transportation, "Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Street and Highways", May 2005 Edition (further known as :The Green Book").
- 3. The Florida Department of Transportation, "Roadway and Traffic Standards for Design, Construction, Maintenance and Utility Operations" (Design Standards). July 2004 Edition, Index 600.
- 4. "Widening and Improvement Plans for County Road 121, Nassau County, Florida" dated February 18, 2005.
- 5. Typical Section provided by the Engineer prior to or Subsequent to the start of work on this project.

#### II. Quality Process (QC, VT, IA)

- A. The Contractor shall submit for review by the Engineer and approval by Nassau County, a comprehensive Quality Control (QC) Plan in accordance with FDOT Requirements that specifically addresses the construction activities for County Road 121. The QC plan shall include the resumes of all personnel to be used on this project.
- B. The Contractor shall provide Quality Control (QC) for the project through the use of internal personnel or the hiring of an independent testing laboratory for the purposes of providing full-time quality assurance of the construction activities at no additional cost to Nassau County. Sufficient numbers of personnel shall be provided to assure coverage of all construction activities. The duties of the QC personnel shall be clearly outlined in the QC plan and shall include the following minimum activities:

#### **Duties of the Contractor OC**

- 1. Documentation of Plant Asphalt production and delivery to the jobsite of all asphaltic concrete materials and mixes.
- 2. Measuring and documentation of asphaltic concrete temperatures at the time of delivery and at laydown. Temperature shall be measured with a calibrated thermometer while in the delivery truck and in the hopper of the paving machine. Surface thermometers shall not be used.
- 3. Measuring and documentation of pavement machine settings to achieve the required layer thicknesses after compaction.
- 4. Measuring and documentation of pavement layer thicknesses by coring on a daily basis for the area covered that day.

- 5. Measuring and documentation of a control strip compaction process in accordance with FDOT requirements. The control strip compaction process shall be normalized to temperature and verified by laboratory density measurement of cores prior to continuing production.
- 6. Measurement and documentation of rolling straightedge to comply with surface flatness requirements.
- 7. Measurement and documentation of day's production using station numbers and GPS.
- 8. Daily submittal of all documentation to Nassau County and its designated Engineer for review.
- C. Nassau County will hire an independent testing laboratory for the purpose of Verification Testing (VT). The VT firm will "Spot check" the QC activities of the contractor and will make independent measurements of quality parameters on a random basis.
- D. The Contractor shall provide sufficient personnel, equipment and materials to assure a continuous operation for the work periods.

#### III. Maintenance of Traffic

- A. The Contractor shall be responsible to provide all maintenance of traffic and shall submit a Maintenance of Traffic Plan (MOTP) prior to beginning work. Maintenance of Traffic shall apply 24 hours per day, 7 days per week throughout the term of construction and until the project is accepted by Nassau County as complete. FDOT Design Standards Index 600 shall be followed for MOT.
- B. The appropriate subindex of Index 600 shall be used for the conditions on the roadway at the time. For example, if equipment is stored off the roadway, and the roadway lanes are clear during non-work hours, the appropriate warnings and signage such as found in subindex 602 shall be used. During daylight work activities when lanes are not clear and traffic must be interrupted or detoured per lane, subindex 603 shall be used. Other subindexes may be applicable depending on work activities or workflow.

#### IV. Milling

- A. All existing asphaltic concrete above the base material shall be milled to remove the asphaltic concrete in its entirety, so as to expose and scarify the top surface of the base material.
- B. Milling shall be done so as to achieve a two percent (2%) cross slope defined from the centerline to the pavement edge and to minimize the amount of base material removed.
- C. In areas where coring has shown the base course thickness to be at or less than 6 inches, and to achieve the proper cross slope additional base course must be milled. The Contractor shall provide a thickened asphalt section top compensate for the removed or deficient base at no additional cost to Nassau County. The thickened asphaltic section shall be transitioned into and out of deficient base area for a minimum of 50 linear feet beyond the limits of the deficiency or the length to achieve a transition of not more than ¼ inch in 10 feet, whichever is greater. This additional asphalt shall not include in the required thickness of the asphalt of the asphaltic concrete layer to be applied over the base.

#### V. Prime Coat Application

- A. After proper milling and cleaning of the milled surface to remove dust, debris or laitance, apply a prime coat of RS-1 or approved equivalent material at the rate of not less than 0.15 gallons per square yard (gal/SY). Prime coat shall be applied uniformly by spraybar application to a surface that has a moisture content ranging from a minimum of 8 percent by weight to 11 percent by weight. The surface might require light dampening with a uniform water spray, followed by rolling with a traffic roller. Roller application is not acceptable. VT will be responsible for the verification testing of the Prime Coat. Immediately after application of the prime coat, embed 3 strips of canvas fabric, each 12 inches long, randomly into the first 10 feet of wet prime coat, leaving a 2-inch dry "tail" of canvas to allow gripping the test strip. After 15 minutes of dwell time, pull the canvas "tails". If the prime coat pulls cleanly from the surface of the base material in this "peel test", the prime coat application shall be rejected
- B. The prime coat shall be covered with a cover material coated with 2 to 4 percent asphalt cement and applied at a rate of 10 lb/SY. After application of the cover material, roll the surface with a traffic roller to produce a dense mat of priming material over the base material.
- C. Provide temporary centerline striping using acrylic striping paint.

#### VI. Tack Coat Application

- A. Prior to the application of the tack coat, clean surface of any loose material, debris, dust or loose cover material. Tack coat to be applied to the primed surface and on the surface of asphalt course prior to placement of the next asphalt course.
- B. Apply a uniform spray bar coating of RA-500 tack coat heated to 250F-300F. (Douglas Asphalt has indicated that 0.05 gal/SY is at the high end of the requirement. Douglas Asphalt has indicated there should be two rates, (1) a fogging application at a target rate of 0.02-0.05 gal/SY on the prime surface and; (2) tack coat at a target rate of 0.05 gal/SY on asphalt surface.)
- C. Allow the tack coat to dry but remain tacky prior to application of the asphalt pavement layer. Do not allow traffic onto the tack coated surface prior to paving. Paving may be done when the tack coat is sufficiently dry that when a full hand pressure is applied to the surface and pulled away, there is noticeable adhesion but no material is pulled away on the hand or from the primed surface.

#### VII. Pavement Application

A. To the milled, primed and tacked base surface, apply the first lift consisting of one layer, 1-1/2 inches thick, of SP12.5 asphalt designed in accordance with FDOT requirements. The SP12.5 mix shall be a recent design mix, not more than 90 days old, and shall not contain more than 25 percent recycled asphalt from millings. Roll and compact to a consistent surface texture and density of at least 96 percent of the theoretical maximum density of the mix. All asphalt placements shall be at the temperatures recommended by FDOT.

- B. After proper rolling and compaction of the lift, a rolling straightedge and prior to the second lift of asphalt course the Contractor shall be used to check the surface flatness and tolerance. Corrections to the surface flatness shall be made at no additional cost to Nassau County, prior to continuing with the second lift of asphalt.
- C. After a correction of surface irregularities in the first lift of asphalt, place the second lift in a continuous layer of 1-1/2 inches, properly rolled and compacted to achieve a density of at least 96 percent of the theoretical maximum density of the mix.
- D. Vertical joints in the lifts shall be offset by a t least 6 six inches.
- E. If more than 48 hours elapses between the placements of asphalt lifts, the surface shall be tack coated with 0.02 gal/SY of RA-500 or approved equivalent tack coat prior to placement of the second lift. All lane joint edges shall be tack coated and cross rolled.
- F. The final surface of the pavement shall achieve density, surface texture and ride quality acceptable to Nassau County.

#### VIII. Pavement Striping

A. Final striping and placement of the RPM on the pavement shall be acrylic as contained in the original contract.

#### IX. Inclusion

A. The inclusion of certain provisions of the pavement specifications herein is intended to reiterate those items of specific contention between the Contractor and Nassau County in the original contract and to make clear such provisions. This inclusion does not reduce the effect of any provisions of pavement construction or control contained in the reference documents.

## Exhibit C to the Contract for Corrective Action Required for the Contractor on Nassau County Road 121

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## COUNTY ROAD 121 WIDENING AND RESURFACING PROJECT

- 1. ORIGINAL CONTRACT DATED FEBRUARY 27, 2006
- 2. CHANGE ORDER #1 TO THE FEBRUARY 27, 2006 CONTRACT TO PROVIDE FOR A ONE MONTH EXTENSION FOR DATE OF COMPLETION
- 3. STATUS REPORT DATED MAY 30, 2006 FROM FORMER ENGINEERING SERVICES DIRECTOR. PROGRESS REPORT DATED MAY 19, 2006 ATTACHED.
- 4. STATUS REPORT DATED JUNE 26, 2006 FROM FORMER ENGINEERING SERVICES DIRECTOR. DAC WILL REPLACE TEST SECTION IN THE VICINITY OF SR 2. FDOT HAS INDICATED THE PROPOSED SINGLE SURFACE TREATMENT IS UNNECESSARY. THE TEST SECTION WILL BE MILLED, PRIMED AND REPAVED. TEST SECTION WILL BE REEVALUATED TO DETERMINE IF PROPER ADHESION HAS BEEN ACHIEVED.
- 5. LETTER FROM JOSE DELIZ, FORMER ENGINEERING SERVICES DIRECTOR, DATED JULY 3, 2006 TO RAY GRODE OF DOUGLAS ASPHALT COMPANY DIRECTING THAT HE PERFORM CORE TESTING TO DELINEATE AREAS OF DEFICIENT THICKNESS
- 6. STATUS REPORT FROM JOSE DELIZ, FORMER ENGINEERING SERVICES DIRECTOR, DATED JULY 24, 2006 TO THE BOARD OF COUNTY COMMISSIONERS REGARDING THE PROJECT
- 7. STATUS REPORT DATED AUGUST 30, 2006 FROM FORMER ENGINEERING SERVICES DIRECTOR TO THE BOARD. NEGOTIATIONS HAVE COMMENCED REGARDING REMEDIATION WORK. WOODS ENGINEERING HIRED TO PROVIDE CONSULTING SERVICES. NO CONSTRUCTION WORK HAS OCCURRED.
- 8. FLORIDA DEPARTMENT OF TRANSPORTATION FAILURE INVESTIGATION REPORT DATED SEPTEMBER 2006
- 9. AMENDMENT #1 TO THE FEBRUARY 27, 2006 CONTRACT FOR COMPLETION OF APPROXIMATELY 19.2 MILES OF ROADWAY APPROVED BY THE BOARD OF COUNTY COMMISSIONERS ON NOVEMBER 8, 2006
- 10. AGREEMENTS WITH THE FLORIDA DEPARTMENT OF TRANSPORTATION REGARDING SMALL COUNTY OUTREACH PROGRAM (SCOP) FUNDS
- 11. PROPOSED FUNDING PLAN
- 12. MINUTES FROM THE BOARD OF COUNTY COMMISSIONERS MEETINGS REGARDING DISCUSSIONS AND ACTIONS AS TO THE PROJECT

- A. 6-15-05 BOARD APPROVES TO SOLICIT BIDS FOR THE CR 121 WIDENING AND RESURFACING PROJECT FOR THE FULL DEPTH RECLAMATION, AND PROVIDE ASPHALT PAVING, GUARDRAIL, AND STRIPING AS OPTIONS
- B. 12-21-05 BOARD APPROVES FUNDING PLAN FOR THE PROJECT AND APPROVES TO AWARD BID TO THE LOW BIDDER, DOUGLAS ASPHALT COMPANY.
- C. 2-27-06 BOARD APPROVES THE CONTRACT WITH DOUGLAS ASPHALT AND APPROVES FUNDING SOURCE FOR THE PROJECT AS FOLLOWS: SCOP \$6,027,150.00; .25 MIL \$567,324.00; ONE CENT SURTAX RESERVES \$1,088,369.00 FOR TOTAL FUNDING IN THE AMOUNT OF \$7,682,843.00
- D. 3-27-06 BOARD AWARDS GEOTECHNICAL SERVICES IN SUPPORT OF CR 121 WIDENING AND RESURFACING PROJECT TO UNIVERSAL ENGINEERING SCIENCES (TASK ORDER #2 TO THEIR CONTINUING CONTRACT)
- E. 4-12-06 FORMER ENGINEERING SERVICES DIRECTOR TO BRING PHOTOGRAPHS OF THE PROJECT CONSTRUCTION TO THE NEXT BOARD MEETING
- F. 6-7-06 FORMER ENGINEERING SERVICES DIRECTOR PRESENTS A LETTER DATED JUNE 7, 2006 FROM JOEL SPIVEY, PRESIDENT OF DOUGLAS ASPHALT, REGARDING PROBLEM AREAS IN THE PAVEMENT. COUNTY ATTORNEY SUGGESTED BOARD SET A SPECIAL MEETING FOR JUNE 14, 2006 IN ORDER TO ALLOW TIME FOR THE ISSUE TO BE REVIEWED.
- G. 6-14-06 CORRESPONDENCE PRESENTED FROM DOUGLAS ASPHALT COMPANY. MEETING TO BE HELD WITH DOUGLAS ASPHALT COMPANY AND COUNTY REPRESENTATIVES TO DISCUSS CONTRACTUAL ISSUES AND CONCERNS. BOARD SCHEDULED A SPECIAL MEETING FOR JUNE 19, 2006.
- H. 6-19-06 SPECIAL BOARD MEETING TO DISCUSS TENTATIVE AGREEMENT WITH DOUGLAS ASPHALT COMPANY. FORMER ENGINEERING SERVICES DIRECTOR PRESENTS UPDATE ON THE STATUS OF CONTRACT NEGOTIATIONS AND STATED THAT THE CONTRACTOR HAS AGREED TO PERFORM ALL THE REPAIRS TO DEFECTS AT NO ADDITIONAL COST TO NASSAU COUNTY, AND TO EMPLOY A REVISED CONSTRUCTION METHOD ON THE BALANCE OF THE PROJECT. CONTRACTOR HAS REQUESTED AN EXTENSION OF THE CONTRACT DEADLINE IN ORDER TO ADDRESS: THE AVAILABILITY OF LIMEROCK; TIME TO ANALYZE THE

CONDITIONS IN THE FIELD; AND TO ALLOW TIME FOR CONTRACTOR AND COUNTY TO NEGOTIATE AN AGREEMENT. BOARD AUTHORIZES CHANGE ORDER TO CONTRACT TO PROVIDE FOR A ONE MONTH EXTENSION OF THE CONTRACT FROM AUGUST 3, 2006 TO SEPTEMER 3, 2006.

- I. 7-3-06 COUNTY ATTORNEY ADVISED CONTRACTOR IS AWAITING THE EVALUATION OF THE TEST STRIP AND DIRECTION FROM THE BOARD BEFORE MOVING FORWARD. MEETING TO TAKE PLACE BETWEEN COUNTY AND DOUGLAS ASPHALT REPRESENTATIVES. RECOMMENDATION TO BE BROUGHT BACK TO THE BOARD.
- J. 7-31-06 LETTER FROM DOUGLAS ASPHALT SEEKING AN EXTENSION OF TIME TO ALLOW FOR THE THIRD PARTY INDEPENDENT EVALUATION. COUNTY ATTORNEY SUGGESTED THAT MEETING BE CONDUCTED BETWEEN COUNTY REPRESENTATIVES AND DOUGLAS ASPHALT REPRESENTATIVES.
- K. 8-01-06 BOARD DISCUSSED REQUEST FROM DAC TO EXTEND CONTRACT TIME TO ALLOW FOR INDEPENDENT EVALUATION. BOARD SET A SPECIAL MEETING FOR AUGUST 10, 2006 TO CONTINUE DISCUSSION OF THE PROJECT AND IN THE INTERIM, COUNTY ATTORNEY TO REVIEW THE BID PACKAGE AND CONTRACT WITH THE APPROPRIATE PARTIES AND BRING BACK A LIST OF ACTIONS TAKEN AND ANY DISAGREEMENTS BETWEEN THE PARTIES.
- L. 8-09-06 BOARD APPROVES CHANGE ORDER NO. 1 TO THE DAC CONTRACT FOR THE EXTENSION OF THE CONTRACT FROM AUGUST 3, TO SEPTEMBER 3, 2006.
- M. 8-14-06 COUNTY ATTORNEY REPORTS HE HAS MET WITH DAC LEGAL COUNSEL AND HE WILL CONTINUE TO ADDRESS THE ISSUES IN ORDER TO COMPLETE THE PROJECT AS IT WAS ORIGINALLY INTENDED. COUNTY ATTORNEY WILL RETAIN WOODS ENGINEERING FOR THIRD PARTY CONSULTING ENGINEERING SERVICES TO LOOK AT THE ISSUES INCLUDING LITIGATION, IF NEEDED. CONSENSUS OF THE BOARD TO MOVE FORWARD WITH DISCUSSIONS WITH DAC LEGAL REPRESENTATIVE.
- N. 8-28-06 COUNTY ATTORNEY PROVIDED AN UPDATE ON THE 121 WIDENING AND RESURFACING PROJECT. APPROVAL TO EXTEND THE CONTRACT WITH DAC FOR 30 DAYS AND APPROVE TO SEND A LETTER TO FDOT SEEKING EXTENSION OF THE NOVEMBER 2006 DEADLINE FOR THE SCOP AGREEMENT.

- O.  $\frac{9-8-06}{\text{COUNSEL}}$  COUNTY ATTORNEY ADVISED THAT DAC LEGAL COUNSEL HAS EXPRESSED WILLINGNESS TO ADDRESS THE PROJECT ON 50/50 BASIS.
- P. 10-02-06 COUNTY ATTORNEY REPORTS THAT FDOT REPORT HAS BEEN RECEIVED. COUNTY ATTORNEY TO MEET WITH DAC COUNSEL TO WORK OUT ISSUES AND BRING BACK TO THE BOARD.
- 10-18-06 COUNTY ATTORNEY PRESENTED REVISIONS TO Q. THE PROPOSED CONTRACT WITH DAC. BOARD CONSIDERS EXHIBIT A TO THE CONTRACT, WHICH INDICATES A BREAKDOWN OF 19.2 MILES TO REPAIR IN THE AMOUNT \$2,685,016.73 SPLIT EQUALLY BETWEEN PARTIES; AND EXHIBIT B WHICH INDICATES THE BREAKDOWN FOR THE ADDITIONAL ONE AND A HALF INCH SURFACE COURSE, AS RECOMMENDED BY FDOT AND STAFF, IN THE AMOUNT OF \$1,892,211.17, TO BE PAID BY THE COUNTY. BOARD DISCUSSES RIDEABILITY AND OTHER ASPECTS AND COSTS ASSOCIATED WITH THE PROJECT. BOARD SETS SPECIAL MEETING FOR OCTOBER 25, 2006 CONTINUE DISCUSSIONS OF CONTRACTUAL NEGOTIATIONS REGARDING REMEDIATION AND COMPLETION OF THE PROJECT. COMMISSIONER REQUESTED BREAKDOWN OF THE ORIGINAL FIGURES PAID FOR LABOR AND MATERIALS.
- R. 10-25-06 BOARD APPROVAL OF THE CONCEPT OF THE AGREEMENT WITH DOUGLAS ASPHALT FOLLOWING FDOT SPECIFICATIONS; AND TO SCHEDULE A SPECIAL MEETING FOR OCTOBER 30, 2006 TO CONTINUE DISCUSSION OF THE CONTRACT NEGOTIATIONS REGARDING REMEDIATION AND COMPLETION. ROAD DEPARTMENT SUPERINTENDENT TO MEET WITH FDOT OFFICIALS TO GET AN UNDERSTANDING AS TO THE TECHNICAL ASPECTS AND BRING BACK IN WRITING FOR THE BOARD TO CONSIDER.
- 10-30-06 ROAD AND S. BRIDGE SUPERINTENDENT DISTRIBUTED COPIES OF LETTER SENT TO DEPARTMENT OF TRANSPORTATION REGARDING OVERVIEW, SCOPE OF WORK AND SUMMARY FOR THE PROJECT. NO OBJECTION BY DAC TO INCLUSION OF THE RED BOOK REFERENCES. DOUGLAS ASPHALT REOUESTS PAYMENT IN ORDER THAT THEY CAN PAY THEIR SUBCONTRACTOR (THE MILLER GROUP). COUNTY SUGGESTED THE ROAD AND ATTORNEY BRIDGE SUPERINTENDENT DISCUSS WITH FDOT THE MANNER IN WHICH FDOT RECOMMENDS THAT THE JOB BE DONE. MR. TAYLOR CLARIFIED SPECIFIC QUESTIONS DIRECTED FROM COUNTY ATTORNEY: (1) DAC HAS THE MANPOWER TO ACCOMPLISH THE JOB; (2) DAC CAN ACCOMPLISH THE JOB WITHIN THE TIMEFRAME SET FORTH; (3) DAC HAS

THE FINANCIAL ABILITY TO UNDERTAKE AND COMPLETE THE PROJECT; AND (4) DAC HAS DONE THEIR DUE DILIGENCE AND IS PREPARED TO PROCEED. COUNTY ATTORNEY REVIEWED THE REVISIONS TO THE CONTRACT AS FOLLOWS: PAGE 1, ADDITIONAL WORK, FIFTH SENTENCE: THE PARTIES WOULD HOLD A PRE-CONSTRUCTION MEETING AFTER EXECUTION OF THE AGREEMENT AND BOARD SHALL DETERMINE THE SCOPE OF WORK AND PORTIONS OF FDOT GREEN OR RED BOOK WHICH SHALL GOVERN THE CONDUCT OF THE JOB, AND ANY OTHER TECHNICAL REQUIREMENTS. SPECIFICATIONS SHALL BE SET FORTH AS AN EXHIBIT TO BE ATTACHED TO THE CONTRACT. THERE SHALL BE NO INCREASE IN COST OR EXPENSE TO THE COUNTY BASED UPON THE SCOPE SET FORTH. BOARD APPROVES CONTRACT WITH CHANGES STATED BY THE COUNTY ATTORNEY.

- T. 11-08-06 COUNTY ATTORNEY DISTRIBUTES CURRENT AND AMENDED CONTRACT WITH DOUGLAS ASPHALT. BONDING COMPANY HAS INDICATED DESIRES THAT THE AGREEMENT BE ENTITLED "AMENDMENT". BOARD APPROVES "AMENDMENT #1 TO THE ORIGINAL CONTRACT BETWEEN NASSAU COUNTY AND DOUGLAS ASPHALT COMPANY". ALL OTHER TERMS AND CONDITIONS REMAIN THE SAME.
- 13. DOUGLAS ASPHALT COMPANY QUALITY CONTROL PLAN SUBMITTED BY THE CONTRACTOR
- 14. PROPOSED EXHIBIT C TO THE AMENDED CONTRACT FOR APPROVAL, WHICH IS THE SCOPE OF WORK FOR THE PROJECT
- 15. PROPOSED CONTRACT FOR APPROVAL WITH PBS&J FOR CONSTRUCTION ENGINEERING INSPECTION (CEI) SERVICES
- 16. SUBMITTAL BY RON WOODS OF WOODS ENGINEERING, INC. ENGINEERING EVALUATION OF COUNTY ROAD 121 FOR THE NASSAU
  COUNTY BOARD OF COMMISSIONERS, NASSAU COUNTY, FLORIDA
  DATED JANUARY 31, 2007 (ATTACHED UNDER SEPARATE COVER)

#### AGREEMENT

THIS AGREEMENT entered into this 27th day of February , 2006, by and between the BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA, a political subdivision of the State of Florida, hereinafter referred to as "Owner", and Douglas Asphalt Company , doing business as (a corporation, a partnership, or an individual), hereinafter referred to as "Contractor".

WITNESSETH: For and in consideration of the payments and agreements hereinafter mentioned, the parties agree as follows:

- 1. Contractor shall perform all work and furnish all necessary labor, equipment, material, and transportation for the Full Depth Reconstruction of CR 121 from US 1 to the Duval County Line, Nassau County, Florida, hereinafter referred to as the "Work".
- 2. The Work includes, but is not limited to, the full depth reclamation of approximately 35 miles of roadway, widening of existing roadway to a 25 foot wide base typical section with 12' travel lanes, reconstruction of paved connections to match new profile as needed, and optional installation of pavement, striping, reflective pavement markers, guardrails, and sod.

Contractor will provide all required testing and certifications except base proctor/density testing, which will be performed by the owner or owner's representative, at the owners cost.

- All Work is to be performed per Nassau County Ordinance 99-17 and the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, dated 2004, supplements thereto, when not specifically stated in the Special Provisions, or shown on the plans. FDOT Ride-ability standards shall not apply to this project.
- 3. The Contractor will commence the Work required by the Contract Documents within fifteen (15) calendar days after the date of the Notice to Proceed and will **SUBSTANTIALLY** complete the same within **90 consecutive calendar days**, and fully complete the Project in a total of **150 consecutive calendar days** after the date of the Notice

to Proceed unless the period for completion is extended otherwise by the Contract Documents.

Time is of the essence in the construction of this Project. The Owner will suffer financial damage if this Project is not substantially completed on the date set forth in the Contract Documents. Therefore, the Owner and the Contractor specifically agree that the Contractor shall pay to the Owner the sum of Three Hundred and no/100 Dollars (\$300.00) per calendar day or any part thereof elapsing between the date established as provided in Section 16 of the General Conditions, and the actual date upon which substantial completion is achieved. Moreover, if after thirty (30) calendar days after the date of substantial completion of the Project is achieved, the Project is not fully and finally complete, then the sum of Three Hundred and no/100 Dollars (\$300.00) per calendar day of any part thereof elapsing between the established date of final completion and the actual date of final completion shall be paid to the Owner by the Contractor.

These amounts to be paid to the Owner by the Contractor shall, in no event, be considered as a penalty or otherwise than the consequential and adjusted damages of the Owner because of the delay. Furthermore, the sums per calendar day or any part thereof set forth hereinabove, may be at the sole option of the Owner and may be deducted and retained out of the sums payable to the Contractor. If not so deducted, the Contractor shall remain liable therefore.

4. The Owner has determined and declared the above-named Contractor to be the lowest responsible bidder on the above referenced Project, and has duly awarded this Contract to said Contractor, for the sum named in the proposal, to-wit:

Six Million Eight Hundred Ninety Seven Thousand Nine Hundred Forty-Four & 56/100 (Amount of Bid)

The Owner shall pay the Contractor for the Work performed as follows: Payment for unit price items shall be at the unit price bid for actual construction quantities measured in place and approved by the Owner or its Resident Project Representative(s). Payment for lump-sum priced items shall be at the lump-sum price bid. set forth in Section 20 of the General Terms and Conditions. Supplemental to Section 20 is the following:

a. Copies of invoices for payment shall be simultaneously sent to the Contract Manager for review and recommendation for payment or non-payment. The Contract Manager shall submit the recommendation to the Engineering Services Director, who shall review the invoice and make a recommendation to the County Administrator, who shall review said invoice, who shall review said invoice and make a recommendation and forward same to the Clerk of the Court for review and submittal to the Board of County Commissioners. If there is a dispute as to a payment, and if it is not addressed by the Contractor and the County's representative, the dispute resolution shall be utilized.

The Owner reserves the right to make additions or deletions to bid quantities and/or portions of the bid at the bid item prices.

- 5. Contractor, by signing this Agreement, acknowledges that they have the ability to perform the work set forth in the attached documents and have performed their due diligence prior to execution of the contract and can proceed based upon the attachments and bid submittal.
- 6. The Owner will pay the Contractor in a manner and at such times as set forth in the General Conditions such amounts as required by the Contract Documents.
- 7. The term "Contract Documents" means and includes the following:
  - a. Bid Form
  - b. Sworn Statement
  - c. Bid Bond
  - d. Agreement
  - e. Notice of Award
  - f. Notice to Proceed
  - g. Change Order Request
  - h. Performance Bond
  - i. Payment Bond
  - j. Hold Harmless Agreement
  - k. General Conditions
  - 1. Specifications prepared by the Engineer
  - m. Drawings

- 8. This Agreement shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors, and assigns.
- 9. All facilities, programs, and services should be compliant with the Florida Accessibility Code and the Federal Americans with Disabilities Act (ADA).
- 10. Appropriations necessary for the funding of this Agreement shall be adopted annually by the Board of County Commissioners during the regular budget process. Non-appropriation by the Board of County Commissioners will cause this Agreement to terminate.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in two (2) copies, each of which shall be deemed an original on the date first above written.

OWNER:

BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA

THOMAS D. BRANAN, JR

Its: Chairman

ATTEST:

JOHN A. CRAWFORD

Its: Ex-Officio Clerk

Approved-as-to-form-by-the Nassau-County-Attorney

Approved as to form by the Nassau County Attorney:

MICHAELS. MULLIN

CONTRACTOR: Youglas Asphalt Company

Too

Joel Solvey, Vieside

By: Its:

# 5

# CHANGE ORDER APPROVAL FORM

PROJECT: <u>CR121 Widening &amp; Resurfacing</u> CH	ANGE ORDER NUMBER: 01
Project- One month extension for date of completion	DATE: June 19, 2006
(from 08/03/06 to 09/03/06)	CONTRACT NUMBER:
TO CONTRACTOR: Douglas Asphalt Company	
Original Contract Sum	
Net Change by Previous Change Order/Supplemental Agr Contract Sum Prior to This Change Order	
Amount of This Change Order (Add/Deduct)	\$
New Contract Sum Including this Change Order	\$ 6,897,944.56
APPROVED BY:  Michael Mahaney, County Administra	DATE: August 9, 2006
APPROVED BY: Michael Multin, County Attorney	DATE: August 9, 2006
APPROVED BY: Thomas D. Branan, Jr. Chairman	DATE: August 9, 2006
APPROVED BY: John X. Crawford, Clerk of Courts	DATE: August 9, 2006
ACCEPTED BY: Kuynow How	DATE: 8/14/06
Contractor	



# NASSAU COUNTY

BOARD OF COUNTY COMMISSIONERS P.O. Box 1010

Fernandina Beach, Florida 32035-1010

Ansley Acree Tom Branan Floyd L. Vanzant

Jim B. Higginbotham Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach

Dist. No. 3 Yulee Dist. No. 4 Hilliard Marianne Marshall Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MICHAEL MAHANEY County Administrator

MEMORANDUM

TO:

Board of County Commissioners

FROM:

José Deliz, Director of Engineering Services

DATE:

May 30, 2006

SUBJECT:

CR 121 Widening & Resurfacing Status Update

#### Engineering Design

Section closed 01/09/06.

#### Permitting

Section closed 01/09/06.

#### Utilities

Section closed 01/09/06.

# Bidding

Section closed 04/25/06

# Construction

Please refer to attached memo summarizing the status of construction. Engineering Services continues to work towards a satisfactory resolution to the rippling effect. controls have been implemented the ripples have not reoccurred. Corrective measures are currently being evaluated for the first portion of the project where ripples occurred. Some areas of paving have been displaced by heavy trucks, therefore they will be removed and re-installed.

(904) – 225-2610 Board Room; 321-5782, (800) 789-6673



# Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

José Deliz, Director

#### **MEMORANDUM**

To:

Michael Mahaney, County Administrator

From:

José R. Deliz, Director of Engineering Services

Date:

May 19, 2006

Subject:

CR 121 Progress Report

As requested, the following is subject report on the progress achieved and problems encountered. The project can be divided in six phases:

# Phase 1 - Widening Trench

A motor grader was modified by welding a 2 to 3 foot spade the blade. The grader ran alongside the edge of the road and dug a trench 6 inches deep along the edge. The trench was immediately backfilled with asphalt millings (rap) from a modified spreader, which was then compacted and regraded to match the existing contours. After sweeping the road the excess soil was removed offsite.

This phase progressed with no incident and was completed within approximately 3 weeks.

# Phase 2 - Full Depth Reclamation

The first section to be reclaimed was roughly 4 miles from the Duval County line. A third party technician performs testing every day prior to the reclaiming to establish the optimum density of the mix. The initial strategy was to wet the existing road surface thoroughly, deposit approximately 3% portland cement onto it with a spreader, then mill the old pavement into the existing base (along with the cement) to a target depth of 6 inches. The pulverized mix was then rolled with a rubber-tire roller, graded to the proper profile (2% cross slope), compacted further with a vibratory drum roller, re-graded, then rolled with a finish roller. The same technician then performs testing to ensure the compaction achieves at least 95% of optimum density.

Although the initial strategy produced good results (98% on the first compaction), the poor condition of the existing asphalt resulted in greater than desired size chunks in the reclaimed mix. To remedy the situation, the current approach was devised in which a reclaimer will do a first pass

YULEE (904) 491-3609 FAX (904) 491-3611 TOLL FREE 1-800-264-2065 1 800-948-3364 HILLIARD (904) 845-3610 (904) 491-3626 FAX (904) 845-1230 to a depth of roughly 3 inches, water and cement are added, then a second reclaimer follows to further pulverize the asphalt and mix everything together to a depth of 6 inches.

The resulting base is stronger than the existing, more resistant to water damage, will not be subject to longitudinal cracks along the widening seam, and corrects the cross slope where needed. It is sturdy enough to support traffic and weather without paving for a limited time (1 week more or less). The reclaiming operation as of this date is just north of Carroll's Corner, which represents roughly 2/3 of the total length.

#### Phase 3 - Paving

Although this is a separate phase, it runs concurrently with Phase two, but lags approximately 2-3 miles behind. This is done to allow the paving crew to continue working even if the reclaiming crew is stopped for any reason.

The typical section was designed using the FDOT flexible pavement design guideline, which incorporates the AASHTO design principles. After analyzing the traffic volumes, an estimated number of trucks was calculated per year (cars don't count for pavement design). This amount was adjusted for growth increase by a factor of 4% a year, extrapolated for the next 20 years, then doubled (to be on the safe side). The required structural value was calculated, which in turns determines the pavement thickness.

The new FDOT standard for flexible pavement is Superpave, which is similar to the previous Marshall mixes but with better quality control. Based on the calculations described, a thickness of 2 inches of SP12.5 was required for the asphalt layer. A top friction course was not recommended by the FDOT guidelines because of the limited amount of traffic. The vast majority of paving jobs are done in a single layer without rideability problems.

The paving strategy for this project is pretty standard. A dump truck is backed into a paving machine composed of a receiving hopper, a feeder conveyor belt to move the asphalt from the hopper to the rear of the machine and deposited on the ground, auger screws to spread the asphalt uniformly on the ground, and an adjustable screed that forms the asphalt into a specific thickness mat. Sonar sensors measure the distance from the screed to the base and adjusts the screed to maintain the desired thickness. The mat is then compacted with two big vibratory drum rollers and a smaller finish roller. After the surface cools enough to cure the asphalt, traffic is allowed onto the newly laid mat. Shortly thereafter the centerline is painted for safety.

The finished surface passes all standards of quality control but exhibits one particular defect. Every 100-150 feet there is a noticeable ripple in the surface which causes vehicles to heave slightly. This particular annoyance is causing many complaints from citizens in the area.

In an attempt to gauge the magnitude of the problem, the contractor was directed to perform a rideability test on the surface. A 15' rolling straightedge was used as specified by FDOT standards. A height differential greater than 3/16 inch within the 15 feet is considered a rideability failure. The newly installed surface failed this test on one location throughout the approximately 40 lane miles. The pavement on this location was promptly heated and cross-rolled to correct the deficiency.

Although the surface is within the tolerance allowed by the contract, the concern is that the imperfection should not occur at all. In an effort to determine and correct the cause of this nuisance, several leading FDOT and industry experts were consulted. In between the experts and the team several ideas were pursued:

- The paving machine is defective. The machine has been replaced now three times- No noticeable improvement.
- The paving crew is incompetent. The crew was augmented with more experienced personnel
   Small improvement.
- The contractor is rolling the asphalt too hot. The initial rollers are now lagging well behind the paving machine, allowing the surface to cool down No noticeable improvement.
- The contractor is rolling the asphalt too cold. See above.
- The paving machine is advancing too fast. The machine was slowed down to a crawl. No improvement.
- The rollers need to slow down: See above.
- The hopper needs to remain full of asphalt; keep a dump truck in front of the paver to maintain a full load. This practice has been implemented continuously since the start – No action taken
- The auger screws are not spreading the asphalt properly. The augers normally are automatically controlled by the paving machine, but are now manually energized more frequently Significant improvement, but sporadic areas remain rippled.
- The base is not uniformly compacted. Test results show that base compaction routinely exceeds required density No action taken.
- The base is not flat. Driving over the base prior to paving does not reveal any surface irregularities that correspond to the pattern that occur in the asphalt layer. It is reasonably smooth and level No action taken.
- The asphalt layer needs to be installed in two lifts. A test was run whereby an inch of asphalt was installed first and then a second 1 inch lift was placed on top. The first lift did not exhibit the nuisance ripples, but they became apparent after the second lift Practice discontinued.
- The contractor needs a shuttle buggy to keep the hopper full of asphalt. This suggestion came from a complaining citizen who claims to have vast experience in asphalt paving. Although no one seems to know what a shuttle buggy is, the hopper is being kept full of asphalt by the continuous queue of dump trucks No action taken.
- The asphalt layer needs to be installed by placing a leveling course of ½ inch, then a 1-1/2 inch layer on top. This practice was just recently implemented. Although not enough area has been completed to judge the effectiveness, it appears to be devoid of ripples, although the next solution may have something to do with it also Vast improvement

■ Use a straightedge to smooth the transition between successive "pulls." As each dump truck empties into the paving machine, it moves ahead and out of the way to be replaced by a full truck. The paving machine may be stopped in between each pull, or may slow down to allow the full truck to be positioned. In either case, as the paver starts to push the new dump truck, the screed moves slightly up then down, leaving behind a ridge. The location of these ridges were observed to correspond exactly to the ripples in the finished pavement. The contractor was instructed to use a hand rake or loop to smooth out the ridges prior to compaction – Vast improvement

The combination of the above mentioned corrective actions have resulted in a great improvement of the finished surface. We continue to try to identify "the" source of the problem, but it may not be attributable to a single issue, but rather a combination. It may take some time to narrow down the root cause, at which time we will have a better idea on possible corrective action. If the undulation turns out to be caused by the above mentioned "ridges" (probable), the most likely correction will be to heat the asphalt surface and use rollers to smooth out the imperfections.

The scope of work specified in the contract calls for driveways to be restored to previous conditions by the contractor. In addition, wherever an unpaved driveway or road connects to CR121, the contractor is to install an additional 2 foot tapered section to protect the edge. The contractor is now installing the 2 foot taper concurrently with mainline paving and will install the outstanding prior to completion of the project. Connections to paved roads will also be constructed after mainline paving.

In one location the asphalt has unraveled. This is not unusual and will be repaired shortly. The paving currently extends to CR108.

# Phase 4 – Striping and Reflective Pavement Markers (RPMs)

Centerline (yellow) striping is applied as soon as practicable after paving to alleviate safety concerns. Shortly after edge lines (white) are applied. RPMs have yet to be installed.

#### Phase 5 - Guardrails

Guardrails will be installed subsequent to paving operations.

# Phase 6 - Sodding

A 1 foot strip of sod will be placed against the edge of pavement to prevent erosion derived problems subsequent to paving operations.





#### NASSAU COUNTY

BOARD OF COUNTY COMMISSIONERS P.O. Box 1010 Fernandina Beach, Florida 32035-1010

Jim B. Higginbotham Dist. No. 1 Fernandina Beach Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall

Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MICHAEL MAHANEY County Administrator

#### MEMORANDUM

TO:

Board of County Commissioners

FROM:

José Deliz, Director of Engineering Services

DATE:

June 26, 2006

SUBJECT: CR 121 Widening & Resurfacing Status Update

#### Engineering Design

Section closed 01/09/06.

#### Permitting

Section closed 01/09/06.

#### Utilities

Section closed 01/09/06.

# Bidding

Section closed 04/25/06

#### Construction

See attached correspondence. Douglas Asphalt will replace a test section in the vicinity of the intersection of SR2. has indicated the proposed single surface treatment (by Douglas) is unnecessary. The test section will be milled, primed and repaved. Two weeks after repaving the section will be re-evaluated to determine if proper adhesion has been achieved.

(904) – 225-2610 Board Room; 321-5782, (800) 789-6673

#### Jose Deliz

From: Jose Deliz

**Sent:** Friday, June 23, 2006 1:55 PM

To: Michael Mahaney
Cc: Charlotte Young

Subject: CR121 Meeting with Douglas 23JUN06

To summarize our meeting this morning, Douglas will remove the existing pavement (by milling) on a section 1,500' long starting at SR2 and going north.

They will immediately prime it and sand it to allow traffic back on this section. Within a short period of time (not really specified but roughly 1-3 days) they will repave with 2" of SP12.5. Nassau County (me, Pat, and our consultants) will observe the conditions to determine if the prime still retains the bonding properties, and if needed a tack coat will be applied.

Douglas was also advised that numerous FDOT officials have indicated the single surface treatment is unnecessary and that proper adhesion can be achieved using a prime coat and scarifying the base surface.

Nassau County will be present during the priming and obtain samples of the prime to verify it meets FDOT specs. We will also be present during the paving to ensure proper placement and obtain material samples to verify the asphalt also meets FDOT specs.

The test strip will be monitored for two weeks to observe the effects of traffic. A representative number of core samples will be taken upon completion of the evaluation period and sent to an independent laboratory to ascertain if proper bonding has been achieved. Once this process is complete then Douglas will make a determination to commit or not to performing remedial work at no additional cost to whatever extend is required.

We don't know yet when this action will take place, but I stressed the importance of performing this test as quickly as possible. Ray mentioned an industry-wide shortage of materials, but they indicated they have enough to do this test strip.

R, José R. Deliz, P. E Director of Engineering Services Nassau County

P. S. Pat and I will meet onsite next Wednesday to continue marking areas where the asphalt is failing with a different color paint. We will continue this process to document degradation of the asphalt surface, using different color paint each week.





## Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

José Deliz, Director

06 JUL -6 AM

OFFICE

July 3, 2006

Mr. Raymond Grode, Division Manager Douglas Asphalt Company 10010 N. Main Street Jacksonville, FL 32218

RE: CR121 Asphalt Thickness

Dear Mr. Grode,

The thickness of the asphalt layer on the southbound lane of the section of CR121 south of the intersection with CR119 appears to be less than the specified two inches (2"). You are directed to perform core testing as prescribed by FDOT Standard Specifications to delineate the areas of deficient thickness. Coordinate with our Department for scheduling and specific locations.

José R. Deliz, P.E.

Cc: Board of County Commissioners
Michael Mahaney, County Administrator
Michael S. Mullin, County Attorney
Charlotte Young, Contract Manager
Pat Gilroy, Construction Engineering Inspector



### Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

José Deliz, Director

July 3, 2006

Mr. Raymond Grode, Division Manager Douglas Asphalt Company 10010 N. Main Street Jacksonville, FL 32218

er

RE: CR121 Asphalt

Dear Mr. Grode,

I have reviewed the asphalt test results submitted by Douglas Asphalt Company on June 27, 2006. Using the quality control criteria stipulated in FDOT Standard Specifications (incorporated in the contract by reference), we find LOT 7 and LOT 19 to be low-pay factor material per Section 334-9. In addition, Sublot 3 of LOT 19 does not meet the requirements for gradation (P-8) of Table 334-5. Please refer to the attached spreadsheets.

Per Sections 334-7 and 334-9 you are required to report the situation to the Engineer whenever a material sublot fails to achieve the requirements of Table 334-5 or whenever an individual pay factor for any quality characteristic of a LOT falls below 0.90. In both the above described situations you failed to send the required notification.

I will provide this information to our Board of County Commissioners for their consideration and action. You are directed to submit any and all outstanding asphalt test results applicable to this project and to abide by the notification requirements stipulated in the contract. You are also directed to specify the extents of paving, referencing station numbers, where material from LOT 7 and LOT 19 were utilized by close of business Friday June 7, 2006.

osé R. Deliz, P.E.

Cc: Board of County Commissioners
Michael Mahaney, County Administrator
Michael S. Mullin, County Attorney
Charlotte Young, Contract Manager

Pat Gilroy, Construction Engineering Inspector

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2.36 (No. 8)	4	15	44.03	47.08	3.05	4.00	45.55		1.42	48.10	41.90	1.80					1	.05	44.72	46.37	47.08	44.03
1.18 (No. 16	) 3	34	33.14	34.23	1.09	4.00			0.46	100.00	0.00	145.10							34.23	33.90	33.73	33.14
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300 (No. 50)	2	24	21.59	24.30	2.71	4.00	23.42		1.24	100.00	0.00	62.00							24.30	23.86	21.59	23.93
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19 (3/4")	10			0.46	4.00	99.89	0.23		0.00	0.50	434.28	100.00	100.00			100.00	100.00	99.54	100.00
12.5 (1/2")	9			5.42	4.00	93.92	2,56		0.00	2.38	36.72	100.00	100.00			92.30	92.56	93.08	97.72
9.5 (3/8")	8		86.89	2.22	4.00	85.67	1.09		0.00	13.15		100.00	100.00	100.00		86.89	86.28	84.83	84.67
4.75 (No. 4)	6			2.79	4.00	64.43	1.2		0.00	27.91	50.56	100.00	100.00			65.82	65.13	63.03	63.73
2.36 (No. 8)	4			1.11	4.00	45.85	0.4		41.90		8.39	100.00	100.00		1.05	46.50	45.85	45.67	45.39
1.18 (No. 16)				1.98	4.00	33.34	1.0		0.00	65.98		100.00	100.00		1.00	33.95	34.44	32.46	32.50
600 (No. 30)	2			3.23	4.00	27.06	1.5		0.00	48.26		100.00	100.00			27.97	28.66	26.16	25.43
300 (No. 50)	2	4 20.29		3.01	4.00	21.81	1.30		0.00	57.54		100.00	100.00			22.54	23.30	21.12	20.29
150 (No. 100	) 1			3.50	4.00	11.98	1.90		0.00	44.88		100.00	100.00			13.62	13.74	10.24	10.33
75 (No. 200)	3.	7 3.16	3.62	0.46	4.00	3.35	0.19		2.70		3.31	100.00	100.00		1.05	3.16	3.30	3.30	3.62
AC	5.	4 5.37	5.91	0.54	4.00	5.60	0.23		5.00	0.90	2.65	80.00	100.00		0.95	5.91	5.56	5.55	5.37
									500.50	15.25.5							992-925		
Sample	Individual	analysis												l					
Lot/Sub	2									2/1	2/2	2/3 2	2/4	•					
Property	Target	Min	Max	Range	Count	AVG	STD	USL	LSL										
25 (1")	10	0 100.00	100.00	0.00	4.00	100.00	0.0	100.00	0.00	100.00	100.00	100.00	100.00						
19 (3/4")	10	0 99.54	100.00	0.46	4.00	99.89	0.23	100.00	0.00	100.00	100.00	99.54	100.00						
12.5 (1/2")	9	2 92.30	97.72	5.42	4.00	93.92	2.50	100.00	0.00	92.30		93.08	97.72						

2.22 9.5 (3/8") 85 84.67 86.89 4.00 85.67 1.09 100.00 0.00 86.89 86.28 84.83 84.67 4.75 (No. 4) 63.03 64 65.82 2.79 4.00 64.43 1.27 100.00 0.00 65.82 65.13 63.03 63.73 2.36 (No. 8) 45 45.39 46.50 1.11 4.00 45.85 0.47 50.50 39.50 46.50 45.85 45.67 45.39 1.18 (No. 16) 34 32.46 34.44 1.98 4.00 33.34 1.01 100.00 0.00 33.95 34.44 32.46 32.50 600 (No. 30) 29 25.43 28.66 3.23 4.00 27.06 1.51 100.00 0.00 27.97 28.66 26.16 25.43 300 (No. 50) 24 20.29 23.30 3.01 4.00 21.81 1.36 100.00 0.00 22.54 23.30 21.12 20.29 150 (No. 100) 12 10.24 13.74 3.50 4.00 11.98 1.96 100.00 0.00 13.62 13.74 10.24 10.33 75 (No. 200) 3.7 3.16 3.62 0.46 4.00 3.35 0.19 5.20 2.20 3.16 3.30 3.30 3.62 AC 5.4 5.37 5.91 0.54 4.00 5.60 0.23 5.95 4.85 5.91 5.56 5.55 5.37 1097-992 992-925

Sample	LOT Anal	ysis																	
Lot/Sub	3	Lowest PF	-> 1.05													3/1 3	3/2 3	V3 3	V4
Property	Target	Min	Max	Range	Count	AVG	STD	USL	LSL	Qu	QI	Pu	PI	PWL I	PF .				
25 (1")	10	0 100.00			4.00	100.00	0.0	00 100.0	0.00	#DIV/0!	#DIV/01	100.00	100.00	100.00		100.00	100.00	100.00	100.00
19 (3/4")	10	0 100.00	100.00	0.00	4.00	100.00	0.0	00 100.0	0.00	#DIV/01	#DIV/0!	100.00				100.00	100.00	100.00	100.00
12.5 (1/2*)	9.	2 92.74	95.82	3.08	4.00	93.94	1.3	33 100.0	0.00	4.55	70.51	100.00	100.00	100.00		93.82	95.82	93.36	92.74
9.5 (3/8")	8	5 86.22	88.19	1.97	4.00	87.12	0.8	100.0	0.00	15.68	106.07	100.00	100.00	100.00		87.20	88.19	86.87	86.22
4.75 (No. 4)	6	4 62.31	66.46	4.15	4.00	64.27	1.	73 100.0	0.00	20.63	37.11	100.00	100.00	100.00		62.31	63.75	66.46	64.57
2.36 (No. 8)	4		46.03	3.27	4.00	44.56	1.3	35 48.1	41.90	2.63	1.97	100.00	100.00	100.00	1.05	42.76	44.72	46.03	44.71
1.18 (No. 16		4 30.72	32.30	1.58	4.00	31.69	0.	73 100.0	0.00	92.97	43.14	100.00	100.00	100.00		30.72	32.22	32.30	31.53
600 (No. 30		9 24.30	25.30	1.00	4.00	24.76	0.	49 100.0	0.00	153.14	50.39	100.00	100.00	100.00		24.30	25.30	25.05	24.39
300 (No. 50		4 19.25	20.35	1.10	4.00	19.77	0.	53 100.0	0.00	152.30	37.54	100.00	100.00	100.00		19.25	20.35	20.08	19.41
150 (No. 10		2 9.51	10.97	1.46	4.00	10.40	0.	64 100.0	0.00	140.53	16.32	100.00	100.00	100.00		9.51	10.41	10.97	10.72
75 (No. 200			3.94	0.67	4.00	3.55	0.	30 4.7	2.70	3.79	2.82	100.00	100.00	100.00	1.0	3.27	3.36	3.94	3.64
AC	5.	4 5.11	5.45	0.34	4.00	5.35	0.	16 5.8	5.00	2.79	2.17	100.00	100.00	100.00	1.0	5 5.11	5.44	5.45	5.40
Sample	Individual	Analisys																	
Lot/Sub	3									3/1	3/2	3/3	3/4						
Property	Target	Min	Max	Range	Count	AVG	STD	USL	LSL										
25 (1")	10	0 100.00	100.00	0.00	4.00	100.00	0.	00 100.0	0.00	100.00	100.00	100.00	100.00	)					
19 (3/4")	10	0 100.00	100.00	0.00	4.00	100.00	0.	00.0	0.00	100.00	100.00	100.00	100.00	)					

0.00

0.00

0.00

39.50

0.00

0.00

0.00

0.00

2.20

4.85

93.82

87.20

62.31

42.76

30.72

24.30

19.25

9.51

3.27

5.11

95.82

88.19

63.75

44.72

32.22

25.30

20.35

10.41

3.36

5.44

93.36

86.87

66.46

46.03

32.30

25.05

20.08

10.97

3.94

5.45

92.74

86.22

64.57

44.71

31.53

24.39

19.41

10.72

3.64

5.40

12.5 (1/2")

9.5 (3/8")

4.75 (No. 4)

2.36 (No. 8)

1.18 (No. 16)

600 (No. 30)

300 (No. 50)

150 (No. 100)

75 (No. 200)

AC

92

85

64

45

34

29

24

12

3.7

5.4

92.74

86.22

62.31

42.76

30.72

24.30

19.25

9.51

3.27

5.11

95.82

88.19

66.46

46.03

32.30

25,30

20.35

10.97

3.94

5.45

3.08

1.97

4.15

3.27

1.58

1.00

1.10

1.46

0.67

0.34

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

4.00

93.94

87.12

64.27

44.56

31.69

24.76

19.77

10.40

3.55

5.35

1.33

0.82

1.73

1.35

0.73

0.49

0.53

0.64

0.30

0.16

100.00

100.00

100.00

50.50

100.00

100.00

100.00

100.00

5.20

5.95

Sample																			
Lot/Sub	4		PF -> 1.05												4	/1 4	/2 4	/3 4	1/4
Property	Target	Min	Max	Range	Count	AVG	STD	USL	LSL	Qu	QI	Pu	PI	PWL PI			-		
25 (1")	10	0 100.	00 100.00		4.00	100.00	0.00	100.00		#DfV/01	#DIV/01	100.00	100.00			100.00	100.00	100.00	100.00
19 (3/4")	10	00 100.	00 100.00	0.00	4.00	100.00	0.00	100.00	0.00	#DIV/01	#DIV/0!	100.00	100.00	100.00		100.00	100.00	100.00	100.00
12.5 (1/2")	9	2 92.	26 97.12	4.86	4.00	94.06	2.30	100.00	0.00	2,59	40,92	100.00	100.00	100.00		92.32	97.12	92.26	94.53
9.5 (3/8")		85.	32 87.75	2.43	4.00	66.44	1.01	100.00	0.00	13,41	85.44	100.00	100.00	100.00		86.54	85.32	86.14	87.75
4.75 (No. 4)		63.	71 67.40	3.69	4.00	65.61	2.0	100.00	0.00	16.74	31.93	100.00	100.00	100.00		67.40	63.71	67.37	63.95
2.36 (No. 8)		l5 <b>43</b> .	48 45.83	2.35	4.00	44.75	1.18	48.10	41.90	2.85	2.43	100.00	100.00	100.00	1.05	45.83	44.03	45.67	43.48
1.18 (No. 16	,	30.	32.30	1.64	4.00	31.53	0.89	100.00	0.00	77.15	35.53	100.00	100.00	100.00		32.30	30.87	32.29	30.66
600 (No. 30		29 23.	82 25,11	1.29	4.00	24.38	0.6	100.00	0.00	115.51	37.23	100.00	100.00	100.00		25.11	23.83	24.75	23.82
300 (No. 50		24 18.	99 20.27	1.28	4.00	19.63	0.70	100.00	0.00	115.30	28.16	100.00	100.00	100.00		20.19	18.99	20.27	19.06
150 (No. 10	,	12 10.	20 10,46	0.26	4.00	10.30	0.12	100.00	0.00	740.06	84.96	100.00	100.00	100.00		10.46	10.21	10.32	10.20
75 (No. 200			34 3.75	0.41	4.00	3,55	0,19	4.70	2.70	5.94	4.37	100.00	100.00	100.00	1.05	3.75	3.43	3.67	3.34
AC	5	.4 5.	22 5.44	0.22	4.00	5.36	0.10	5.80	5.00	4.55	3.73	100.00	100.00	100.00	1.05	5.38	5.44	5.40	5.22
																		8	338-708
Comple	In all all large	I A1-1-																	
Sample Lot/Sub	individua	l Analysis												l .					
	Tarcet	Min	Mau	D	C1	11/0	OTB			4/1	4/2	4/3	4/4						
Property 25 (1")	Target	Min	Max	Range	Count	AVG	STD	USL	LSL										

Sample	Individual A	Analysis											-	
Lot/Sub	4									,	4/1	4/2	4/3	4/4
Property	Target	Min	Max	Range	Count	AVG	STD	USL	LSI					
25 (1")	100	100.00	100.00	0.00	4.00	100.00	0.	00 10	0.00	0.00	100.00	100.00	100.00	100.00
19 (3/4")	100	100.00	100.00	0.00	4.00	100.00	0.	00 10	0.00	0.00	100.00	100.00	100.00	100.00
12.5 (1/2")	92	92.26	97.12	4.86	4.00	94.06	2.	30 10	0.00	0.00	92.32	97.12	92.26	94.53
9.5 (3/8")	85	85.32	87.75	2.43	4.00	86.44	1.	10	0.00	0.00	86.54	85.32	86.14	87.75
4.75 (No. 4)	64	63.71	67.40	3.69	4.00	65.61	2.	5 10	0.00	0.00	67.40	63.71	67.37	63.95
2.36 (No. 8)	45	43.48	45.83	2.35	4.00	44.75	1.	16 5	0.50	39.50	45.83	44.03	45.67	43.48
1.18 (No. 16)	34	30.66	32.30	1.64	4.00	31.53	0.	39 10	0.00	0.00	32.30	30.87	32.29	30.66
600 (No. 30)	29	23.82	25,11	1.29	4.00	24.38	0.	35 10	0.00	0.00	25.11	23.83	24.75	23.82
300 (No. 50)	24	18.99	20.27	1.28	4.00	19.63	0.	70 10	0.00	0.00	20.19	18.99	20.27	19.06
150 (No. 100)	12	10.20	10.46	0.26	4.00	10.30	0.	12 10	0.00	0.00	10.46	10.21	10.32	10.20
75 (No. 200)	3.7	3.34	3.75	0.41	4.00	3.55	0.	19	5.20	2.20	3.75	3.43	3.67	3.34
AC	5.4	5.22	5.44	0.22	4.00	5.36	0.	10	5.95	4.65	5.38	5.44	5.40	5.22
														B <b>38-7</b> 08

_																		
Sample	LOT Anal	ysis																
Lot/Sub	6	Lowest PF	-> 0.97568												6	/1 6	3/2	3/3
Property	Target	Min	Max	Range	Count	AVG S	STD	USL	LSL	Qu (	QI I	Pu F	미	PWL PF				
25 (1")	100	100.00		0.00	3.00	100.00	0.00	100.00	0.00	0.00	0.00	100.00	100.00	100.00		100.00	100.00	100.00
19 (3/4")	100	98.43	100.00	1.57	3.00	99.09	0.82	100.00	0.00	1.12	121.45	100.00	100.00	100.00		98.83	100.00	98.43
12.5 (1/2")	92	87.93	89.96	2.03	3.00	88.96	1.02	100.00	0.00	10.88	87.62	100.00	100.00	100.00		89.96	87.93	88.98
9.5 (3/8")	88	82.16	83.60	1.44	3.00	82.93	0.73	100.00	0.00	23.54	114.36	100.00	100.00	100.00		83.03	82.16	83.60
4.75 (No. 4)	64	4 61.34	65.38	4.04	3.00	63.81	2.17	100.00	0.00	16.70	29.44	100.00	100.00	100.00		61.34	64.72	65.38
2.36 (No. 8)	4	5 41.71	46.41	4.70	3.00	44.39	2.42	48.10	41,90	1.54	1.03	100.00	85.14	85.14	0.98	41.71	45.04	46.41
1.18 (No. 16	) 34	4 30.27	33.38	3.11	3.00	31.86	1.56	100.00	0.00	43.79	20.47	100.00	100.00	100.00		30.27	31.92	33.38
600 (No. 30)	29	23.96	26.14	2.18	3.00	24.93	1.11	100.00	0.00	67.59	22.44	100.00	100.00	100.00		23.96	24.66	26.14
300 (No. 50)		4 19.42	21.08	1.86	3.00	20.03	0.92	100.00	0.00	87.33	21.87	100.00	100.00	100.00		19.42	19.58	21.08
150 (No. 100		2 10.16	11.27	1.11	3.00	10.66	0.56	100.00	0.00	158.91	18.97	100.00	100.00	100.00		10.16	10.56	11.27
75 (No. 200)	3.7	7 3.86	3.76	0.10	3.00	3.71	0.05	4.70	2.70	19.60	20.13	100.00	100.00	100.00	1.05	3.72	3.76	3.66
AC	5.4	4 5.26	5.43	0.17	3.00	5.32	0.10	5.80	5.00	5.03	3.35	100.00	100.00	100.00	1.05	5.27	5,26	5.43
Sample	Individual	Analysis																
Lot/Sub	6									6/1	6/2	6/3						
Property	Target	Min	Max	Range	Count	AVG S	STD	USL	LSL									
25 (1")	100	100.00	100.00	0.00	3.00	100.00	0.00	100.00	0.00	100.00	100.00	100.00						
19 (3/4")	100	98.43	100.00	1.57	3.00	99.09	0.82	100.00	0.00	98.83	100.00	98.43						

0.00

0.00

0.00

0.00

0.00

0.00

0.00

2.20

4.85

39.50

87.93

82.16

64.72

45.04

31.92

24.68

19,58

10.56

3.78

5.26

89.98

83.03

61.34

41.71

30.27

23.96

19.42

10.18

3.72

5.27

88.98

83.60

65.38

46.41

33.38

26.14

21.08

11.27

3.66

5,43

12.5 (1/2")

9.5 (3/8")

4.75 (No. 4)

2.36 (No. 8) 1.18 (No. 16) 600 (No. 30)

300 (No. 50)

150 (No. 100)

75 (No. 200)

AC

92

85

64

45

34

29

24

12

3.7

5.4

87.93

82.16

61.34

41.71

30.27

23.96

19.42

10.16

3.66

5.26

89.96

83.60

85.38

46,41

33.38

26.14

21.08

11.27

3.76

5.43

2.03

1.44

4.04

4.70

3.11

2.18

1.66

1.11

0.10

0.17

3.00

3.00

3.00

3.00

3.00

3.00

3.00

3.00

3.00

3.00

88.96

82.93

63.81

44.39

31.86

24.93

20.03

10.66

3.71

5.32

1.02

0.73

2.17

2.42

1.56

1.11

0.92

0.56

0.05

0.10

100.00

100.00

100.00

100.00

100.00

100.00

100,00

5.20

5.95

50.50

Sample	LOT Anal	lysis																				
Lot/Sub	7	Lowe	est PF	> 0.88859															7/	1	7/1 7	7/1
Property	Target	Min		Max	Range	Count	AVG	STD	l	JSL L	SL	Qu	Q	1	Pu F	P	PWL	PF				
25 (1")	10	0 1	00.00	100.00	0.00	3.00	100.00	(	0.00	100.00	0.00	)	0.00	0.00	100.00	100.00	100.00			100.00	100.00	100.00
19 (3/4")	10	0	98.36	100.00	1.64	3.00	99.00	(	88.0	100.00	0.00	)	1.14	112.85	100.00	100.00	100.00			98.64	100.00	98.36
12.5 (1/2")	9	2	86.38	90.56	4.18	3.00	88.87	- 2	2.20	100.00	0.00	)	5.05	40.36	100.00	100.00	100.00			86.38	90,56	89.67
9.5 (3/8")	8	5	79.57	84.15	4.58	3.00	82.21	- 2	2.37	100.00	0.00	)	7.51	34.70	100.00	100.00	100.00			79.57	82.91	84.15
4.75 (No. 4)	6	4	62.66	64.18	1.52	3.00	63.22	(	0.84	100.00	0.00	) .	44.04	75.69	100.00	100.00	100.00			62.82	62.66	64.18
2.36 (No. 8)		5	41.61	45,71	4.10	3.00	43.22	- 2	2.19	48.10	41.90	)	2.23	0.61	100.00	67,72	67.72		0.89	42.35	41,61	45.71
1.18 (No. 16)	3	4	29.49	32.64	3.15	3.00	30.67		1.72	100.00	0.00	)	40.37	17.86	100.00	100.00	100.00			29.88	29.49	32.64
600 (No. 30)	2	9	23.13	25.23	2.10	3.00	24.18		1.05	100.00	0.00	)	72.21	23.03	100.00	100.00	100.00			23.13	24.19	25.23
300 (No. 50)		4	18.42	20.00	1.58	3.00	18.95	(	0.91	100.00	0.00	)	89.41	20.91	100.00	100.00	100.00			18.44	18.42	20.00
150 (No. 100	,	2	9.04	10.46	1.42	3.00	9.76	(	0.71	100.00	0.00	) 1:	27.03	13.74	100.00	100.00	100.00	1		9.79	9.04	10.46
75 (No. 200)	3.	.7	3.23	3.49	0.26	3,00	3.34	(	0.13	4.70	2.70	)	10.19	4.83	100.00	100.00	100.00		1.05	3,31	3.49	3.23
AC	5.	4	5.26	5.36	0.10	3.00	5.32	(	0.05	5.80	5.00	)	9.07	6.05	100.00	100.00	100.00	)	1.05	5.26	5.36	5.34
																			13	393-1203	1203-1097	

Sample	Individual.	Analysis												
Lot/Sub	7		200								7/1		7/1	7/1
Property	Target	Min	Max	Range	Count	AVG	STD		USL	LSL				
25 (1")	100	100.00	100.00	0.00	3.00	100.00		0.00	100.00	0.6	00 10	00.00	100.00	100.00
19 (3/4")	100	98.36	100.00	1.64	3.00	99.00		0.88	100.00	0.0	00 9	98.64	100.00	98.36
12.5 (1/2")	92	86.38	90.56	4.18	3.00	88.87		2.20	100.00	0.0	3 00	36.38	90.56	89.67
9.5 (3/8")	85	79.57	84.15	4.58	3.00	82.21		2.37	100.00	0.0	00 7	79.57	82.91	84.15
4.75 (No. 4)	64	62.66	64.18	1.52	3.00	63.22		0.84	100.00	0.6	00 6	52.82	62.66	64.18
2.36 (No. 8)	45	41.61	45.71	4.10	3.00	43.22		2.19	50.50	39.	50 4	12.35	41.61	45.71
1.18 (No. 16)	34	29.49	32.64	3.15	3.00	30.67		1.72	100.00	0.0	00 2	29.88	29.49	32.64
600 (No. 30)	29	23.13	25.23	2.10	3.00	24.18		1.05	100.00	0.6	00 2	23.13	24.19	25.23
300 (No. 50)	24	18.42	20.00	1.58	3.00	18.95		0.91	100.00	0.0	00 1	18.44	18,42	20.00
150 (No. 100)	) 12	9.04	10.46	1.42	3.00	9.76		0.71	100.00	0.0	00	9.79	9.04	10.46
75 (No. 200)	3.7	3.23	3.49	0.26	3.00	3.34		0.13	5.20	2.	20	3.31	3.49	3.23
AC	5.4	5.26	5.36	0.10	3.00	5.32		0.05	5.95	4.8	35	5.26	5.36	5.34
											1393-	1203	1203-1097	

Sample	LOT Anal	ysis																			
Lot/Sub	19	Lowes	t PF -> 0.760	99														19	2	19/2	19/3
Property	Target	Min	Max	Range	Count	AVG	STD	USL	. 1	LSL C	Qu (	QI	Р	u F	ગ	PWL	PF				
25 (1")	10	0 100	0.00 100.	0.00	3.00	100.00	0	.00 1	00.00	0.00	0.00		0.00	100.00	100.00	100.00	)		100.00	100.00	100.00
19 (3/4*)	10	0 96	6.29 100.	00 3.71	3.00	97.86	1	.92	100.00	0.00	1.11	5	51.02	100.00	100.00	100.00	)		100.00	97.30	96.29
12.5 (1/2")	9	2 8	7.03 90.	3.50	3.00	88.50	1	.82	100.00	0.00	6.33	4	48.69	100.00	100.00	100.00	):		90.53	87.03	87.93
9.5 (3/8*)	8	5 7	7.13 82.	5 5.62	2 3.00	79.61	2	2.87	100.00	0.00	7.11	2	27.76	100.00	100.00	100.00	Y		82.75	78.95	77.13
4.75 (No. 4)	6	4 5	4.51 63.	2 9.2	3.00	59.11	4	.61 1	100.00	0.00	8.88	1	12.84	100.00	100.00	100.00	1		63.72	59.11	54.51
2.36 (No. 8)		5 3	7.89 43.	5.79	3.00	41.08	2	.94	48.10	41.90	2.39		-0.28	100.00	43.05	42.20	)	0.76	43.68	41.67	37.89
1.18 (No. 16)	) 3	4 2	7.39 32.	5.25	3.00	29.99	2	2.63	100.00	0.00	26.67	1	11.42	100.00	100.00	100.00	)		32.64	29.95	27.39
600 (No. 30)	2	9 2	1.63 25.	25 3.62	3.00	23.40	1	.81 1	00.00	0.00	42.29	1	12.92	100.00	100.00	100.00	)		25.25	23.31	21.63
300 (No. 50)			7.42 21.	38 4.46	3.00	19.27	2	2.33	100.00	0.00	34.72		8.29	100.00	100.00	100.00	)		21.88	18.51	17.42
150 (No. 100	,		8.86 11.		3.00	9.83	1	.16 1	100.00	0.00	77.59		8.46	100.00	100.00	100.00	)		11.12	9.52	8.86
75 (No. 200)			3.00 3.	39 0.39	3.00	3.14	C	.21	4.70	2.70	7.26		2.07	100.00	100.00	100.00	)	1.05	3.04	3.39	3.00
AC	5.	4	4.93 5.	29 0.36	3.00	5.15	C	).19	5.80	5.00	3.37		0.78	100.00	74.36	73.62	2	0.92	5.29	5.23	4.93
																				1	838-764

Y

Sample	Individual .	Analysis											
Lot/Sub	19										19/2	19/2	19/3
Property	Target	Min	Max	Range	Count	AVG	STD		USL	LSL			
25 (1")	100	100.00	100.00	0.00	3.00	100.00		0.00	100.00	0.0	0 100.00	100.00	100.00
19 (3/4")	100	96.29	100.00	3.71	3.00	97.86		1.92	100.00	0.0	0 100.00	97.30	96.29
12.5 (1/2")	92	87.03	90.53	3.50	3.00	88.50		1.82	100.00	0.0	0 90.53	87.03	87.93
9.5 (3/8")	85	77.13	82.75	5.62	3.00	79.61		2.87	100.00	0.0	0 82.75	78.95	77.13
4.75 (No. 4)	64	54.51	63.72	9.21	3.00	59.11		4.61	100.00	0.0	0 63.72	59.11	54.51
2.36 (No. 8)	45	37.89	43.68	5.79	3.00	41.08		2.94	50.50	39.5	0 43.68	41.67	37.89
1.18 (No. 16)	34	27.39	32.64	5.25	3.00	29.99		2.63	100.00	0.0	0 32.64	29.95	27.39
600 (No. 30)	29	21.63	25.25	3.62	3.00	23.40		1.81	100.00	0.0	0 25.25	23.31	21.63
300 (No. 50)	24	(2000) (2000)	21.88	4.46	3.00	19.27		2.33	100.00	0.0	0 21.88	18.51	17.42
150 (No. 100)	12	8.86	11.12	2.26	3.00	9.83		1.16	100.00	0.0	0 11.12	9.52	8.86
75 (No. 200)	3.7	3.00	3.39	0.39	3.00	3.14		0.21	5.20	2.2	0 3.04	3.39	3.00
AC	5.4	4.93	5.29	0.36	3.00	5.15		0.19	5.95	4.8	5 5.29	5.23	4.93
													838-764



#### NASSAU COUNTY

BOARD OF COUNTY COMMISSIONERS P.O. Box 1010

Fernandina Beach, Florida 32035-1010

Ansley Acree Tom Branan Floyd L. Vanzant

Jim B. Higginbotham Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach

Dist. No. 3 Yulee Dist. No. 4 Hilliard Marianne Marshall Dist. No. 5 Callahan

> JOHN A CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MICHAEL MAHANEY County Administrator

MEMORANDUM

TO:

Board of County Commissioners

FROM:

José Deliz, Director of Engineering Services

DATE:

July 24, 2006

SUBJECT:

CR 121 Widening & Resurfacing Status Update

#### Engineering Design

Section closed 01/09/06.

#### Permitting

Section closed 01/09/06.

### Utilities

Section closed 01/09/06.

# Bidding

Section closed 04/25/06

#### Construction

Please refer to attached correspondence and minutes. Invoices 5 & 6 were returned to the Contract Manager per memo dated June 30. Additional information related to asphalt quality and thickness was requested from the Contractor per letters dated July 3 prior to invoice approval.

The Contractor responded through their attorney contesting the basis for disapproving payment per letter dated July 14. County Attorney responded with letter dated July 17.

(904) – 225-2610 Board Room; 321-5782, (800) 789-6673

A meeting was held on July 17 (please refer to minutes). The County Administrator indicated the Contractor needed to provide the information requested in letters dated July 3 before payment would be approved. During this meeting the contractor also indicated that the 1,500' section that was milled, primed, and repaved would not hold up, which is contrary to the observations from Universal Engineering. The meeting concluded with an agreement to consult with a third party as to the viability of the reclamation process and to perform core testing to determine if the repaved section had proper bonding.

The Contractor sent letters dated July 18 indicated that the information requested is being complied [sic], and they in turn request copies of base density testing performed by Universal. They also request a time extension to accommodate the evaluation by an independent engineer.

On July 20 the Contractor was reminded of the requirement to remove and properly dispose of excess dirt resulting from excavation of the widening trench.

Universal Engineering submitted the test results of core samples and determined that the bond between asphalt and base material appears satisfactory.

# Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

José Deliz, Director

#### **MEMORANDUM**

To:

Charlotte Young, Contract Manager

From:

José R. Deliz, Director of Engineering Services

Date:

June 30, 2006

Subject:

CR121 Douglas Asphalt Company Invoices 5 & 6

I am in receipt of subject invoices. At this time I recommend withholding payment because of the following conditions:

#### **Base Project Item #1:**

Although the base widening and reclaiming appear to meet the project specifications, the Contractor has stated on numerous occasions that the deficiencies exhibited in the asphalt layer are caused by failures in the base. If the Contractor is not willing to vouch for the integrity of the base then I should not do so either, therefore I recommend withholding payment until the Contractor provides assurance that the base is acceptable.

#### Optional Bid Item #2:

Several paved areas are in need of repair and/or replacement. In some areas the asphalt is slipping off the base, other areas exhibit ripples caused by failure to smooth out the asphalt mat before compaction, and some areas appear to not meet the 2" thickness requirement.

In addition, analysis of the submitted asphalt testing results reveal that in two asphalt LOTs the gradation is not within acceptable parameters. The FDOT Standard Specification stipulate in Section 334-9 that the Engineer was to be notified in this event, but we have received no such notice.

At this time I cannot determine how much of the asphalt, if at all, meets the contract specifications, therefore I cannot estimate an accurate partial payment.

#### Optional Bid Item #5:

The contract calls for latex lane striping with glass beads for retro-reflectivity. The striping performed does not have glass beads. This contract line item also includes the installation of reflective pavement markers, which have not bee installed to date.

YULEE (904) 491-3609 FAX (904) 491-3611 TOLL FREE 1-800-264-2065 1 800-948-3364 HILLIARD (904) 845-3610 (904) 491-3626 FAX (904) 845-1230 CR121 Douglas Asphalt Company Invoices 5 & 6 June 30, 2006 Page 2 of 2

Pursuant to my determination, I am therefore returning these invoices to you pending satisfactory resolution of the above listed issues.

Cc: Michael Mahaney



## Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

José Deliz, Director

July 3, 2006

Mr. Raymond Grode, Division Manager Douglas Asphalt Company 10010 N. Main Street Jacksonville, FL 32218

RE: CR121 Asphalt

Dear Mr. Grode,

I have reviewed the asphalt test results submitted by Douglas Asphalt Company on June 27, 2006. Using the quality control criteria stipulated in FDOT Standard Specifications (incorporated in the contract by reference), we find LOT 7 and LOT 19 to be low-pay factor material per Section 334-9. In addition, Sublot 3 of LOT 19 does not meet the requirements for gradation (P-8) of Table 334-5. Please refer to the attached spreadsheets.

Per Sections 334-7 and 334-9 you are required to report the situation to the Engineer whenever a material sublot fails to achieve the requirements of Table 334-5 or whenever an individual pay factor for any quality characteristic of a LOT falls below 0.90. In both the above described situations you failed to send the required notification.

I will provide this information to our Board of County Commissioners for their consideration and action. You are directed to submit any and all outstanding asphalt test results applicable to this project and to abide by the notification requirements stipulated in the contract. You are also directed to specify the extents of paving, referencing station numbers, where material from LOT 7 and LOT 19 were utilized by close of business Friday June 7, 2006.

Cory José R. Deliz, P.E.

Cc: Board of County Commissioners
Michael Mahaney, County Administrator
Michael S. Mullin, County Attorney
Charlotte Young, Contract Manager
Pat Gilroy, Construction Engineering Inspector



# Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

José Deliz, Director

July 3, 2006

Mr. Raymond Grode, Division Manager Douglas Asphalt Company 10010 N. Main Street Jacksonville, FL 32218

RE: CR121 Asphalt Thickness

Dear Mr. Grode,

The thickness of the asphalt layer on the southbound lane of the section of CR121 south of the intersection with CR119 appears to be less than the specified two inches (2"). You are directed to perform core testing as prescribed by FDOT Standard Specifications to delineate the areas of deficient thickness. Coordinate with our Department for scheduling and specific locations.

Copy José R. Deliz, P.E.

Cc: Board of County Commissioners
Michael Mahaney, County Administrator
Michael S. Mullin, County Attorney
Charlotte Young, Contract Manager
Pat Gilroy, Construction Engineering Inspector

ATTORNEYS AT LAW

MARSA S BECK
CAROL M BISHOP
GREGORY E BLACKWELL
RHONDA B BOGGESS
CHRISTOPHER P BOYD
BRIAN E CURRIE
STEPHEN E DAY
DAVID M GAGNON
REED W GRIMM
BRADLEY R JOHNSON
BONNIE J MURDOCH
JOHN D OSGATHORPE
TARA N POOLE
HEATHER E SOSNOWSKI

JOHN C TAYLOR JR

BANK OF AMERICA TOWER
SO NORTH LAURA STREET SUITE 3500
JACKSONVILLE, FLORIDA 32202
TELEPHONE (904) 356-0700
FACSIMILE (904) 356-3224
WWW TDCLAW COM

AMELIA ISLAND OFFICE
26 SOUTH FIFTH STREET
FERNANDINA BEACH FLORIDA 32034
TELEPHONE (904) 261-8565
FACSIMILE (904) 261-4898

July 14, 2006

Michael Mullin, Esquire Nassau County Attorney 96135 Nassau Place, Room 6 Yulee, Florida 32097

Re: Douglas Asphalt Company - County Road 121

Dear Mr. Mullin:

As you know, my firm represents Douglas Asphalt Company ("Douglas") in connection with its contract with Nassau County dated February 27, 2006, for the full depth base reclamation and resurfacing of County Road 121 in Nassau County. The purpose of this letter is to set out the history of Douglas' dealings with the county and address issues between the parties.

Before doing that, there are several issues that I believe need to be dealt with. These include:

- (a) The payment of invoice numbers 5 and 6 for the subject job, in the amount of approximately \$1 million;
- (b) The completion of the remaining work on Douglas' contract with the county and how it is to be performed;
- (c) Potential defects in the required manner of performance for the subject job and their impact on (a) and (b) above.

#### History

Douglas has been in the asphalt business for many years. For the past three years it has had a contract with Nassau County to perform continuous asphalt work in the county and the work has been performed to the satisfaction of the county so far as I know.

Michael Mullin, Esquire July 14, 2006 Page 2

Douglas learned of the county's intention to do repaving work on County Road 121 sometime in April 2005. It learned at that time that the county intended to strengthen the base, in addition to adding new asphalt to the road. It learned early on that the county intended to use the "Turner system" to do the work on the base.

Douglas immediately began preparation of a budget for the job. It was aware that the Turner system had not been used in the northeast Florida area under conditions similar to those which would have been present on the CR121 job. It sought advice from prospective subcontractors who were, in the opinion of Douglas, experts in doing base work and found that there was concern on the part of these prospective subs about the use of the Turner system. In particular, there was concern about whether the base would withstand the level of traffic that would be present on these roads in the short period of time that was to be allotted for the setting of the base. With that concern in mind, and others, Douglas requested a pre-bid conference with the county.

The request was denied. Douglas, and other bidders, were told that they could seek financial information, but nothing technical. They were told that the Turner system was going to be used on this particular job. In <u>Addendum No. 1</u> dated October 11, 2005, the county stated that the contractor was to determine "Maintenance of Traffic" requirements to suit their proposed methodology and the cost should be incorporated into the bid. In <u>Addendum No. 3</u>, the county reiterated that it did not wish to stipulate lane closure, phasing, or work shift criteria and that it was up to the bidder to propose alternatives that would satisfy the contract. Douglas submitted a bid which was determined to be the low bid and was accepted by the county.

However, Douglas had concerns about the use of the Turner treatment that it continued to voice. As a result, there was a pre-contract meeting held on January 6, 2006, that was attended by Dave Turner, the creator of the Turner system, and others. Douglas was told at that time that it must either use the Turner system or withdraw from the process. It was asked to confirm that it could carry out the requirements of the Turner system and did so in its letter of January 9, 2006, indicating that based upon the representations that were made by Mr. Turner and others at that meeting, the Turner treatment was a workable process. Mr. Deliz, on January 10, 2006, acknowledged receipt of Douglas' confirmation that the Turner treatment was a workable process and stated that Nassau County "cannot be held liable for errors contained in this document;" the reference to a document was a copy of the Process Guidelines received from Mr. Turner which were given to Douglas. Douglas remained of the belief that the Turner treatment was a workable process but was concerned about allowing traffic on the road after only eight hours of curing time.

Michael Mullin, Esquire July 14, 2006 Page 3

At that same January 6th meeting, a principal concern of the Douglas representatives present was the question of the handling of local traffic. Douglas' reps expressed the concern that if traffic was going to be allowed back on the road after only eight hours, there could be a problem with the base.

Although the pre-bid information had indicated that the contractor would be in charge of maintenance and traffic requirements, Douglas was told that the local residents would not stand for the inconvenience of the road being closed for any longer period of time. Mr. Turner of the Turner system was present at that meeting. Mr. Turner explained to Douglas in great detail that the base would harden during that eight-hour period and that it would not be damaged by logging trucks using the road after then. At the same time, Douglas was told that it must allow access to the roads after an eight-hour period or withdraw from the job. Relying upon the county's consultant, Douglas agreed to proceed with the job, firmly believing that Mr. Turner was giving accurate advice.

Subsequently, Douglas entered into the formal contract agreement with the county and began the prescribed work. The base work was all performed in accordance with the plans and specifications. The county's representatives were constantly on the job analyzing the quality of the base work and allowing it to go forward. It was performed as specified. At an unrecorded pre construction meeting the county waived the requirement of a prime on the base and Douglas proceeded accordingly.

#### **Waivers**

At the meeting on January 6th, Douglas pointed out that this was a single lift asphalt job, based upon the plans. There are no FDOT rideability standards for single lift paving jobs on a reclaimed base. The county recognized this and, in the contract terms, waived the rideability requirement. This was appropriate under all of the circumstances. The county also waived the requirement that a primer be applied to the road, recognizing that it would not have time to cure.

#### The Problems

Douglas commenced work as scheduled in March and the job proceeded in accordance with the plans and directions from the county. The Turner system was used and logging traffic was allowed back on the roads after eight hours. As citizens began later using the road, they complained that the finished surface was "too wavy." Mr. Deliz acknowledged that the county had waived rideability standards and admitted that the waviness would probably pass rideability in any event, but concluded that "something has to be done" (5/15/06 email - Deliz to Grode). Subsequently, the asphalt surface added to the base began to slide off the base, after being exposed to traffic.

Michael Mullin, Esquire July 14, 2006 Page 4

Douglas has agreed with the county to do a test strip which is presently in the process of being analyzed. In the meantime, Douglas has performed no further work on the job since approximately May 24th. This is because it believes that performing the work as directed by the county, as a result of the advice from the county's consultant, is the cause of these problems. Neither Douglas nor the county will be served by continued performance of a contract which, as prescribed, is not producing the result that everyone desired.

#### The Law

This case is governed by the *Spearin* doctrine, as enunciated originally by the United States Supreme Court in the case of *United States v. Spearin*, 248 U.S. 132 (1918). In the *Spearin* case, the government had contracted Spearin to perform work at the Brooklyn Navy Yard. Unfortunately, in preparing the plans and specifications, the government was unaware of the existence of a dam, which diverted water, causing internal pressure and eventually breakage of a sewer. In prior years, the sewers had from time to time overflowed and the government was aware of that fact, but had not communicated it to Spearin, the contractor. Spearin had made an examination of the premises and obtained information from the civil engineer's office at the Navy Yard regarding conditions. Spearin notified the government that he considered the sewers a menace to the work and that the government needed to remove the danger or assume responsibility for any damage or extra cost. The government insisted that the responsibility for remedying the condition rested with the contractor and Spearin denied that.

The Supreme Court acknowledged the general rule that, on contract principles, if one agrees to do something for a fixed sum, he is not excused because unforeseen difficulties are encountered (at 136). The Court then held for Spearin finding 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. (Citations omitted.)

This responsibility of the owner is not overcome by the usual clauses requiring builders to visit the site, to check the plans, and to inform themselves of the requirements of the work . . . (at 136).

The obligation to examine the site did not impose upon him the duty of making a diligent inquiry into the history of the locality with a view to determining, at his peril, whether the sewer specifically prescribed by the government would prove adequate. The duty to check plans did not impose

Michael Mullin, Esquire July 14, 2006 Page 5

view. And the provision concerning contractor's responsibility cannot be construed as abridging rights or rising under specific provisions of the contract.

The clear ruling by Justice Brandeis is that a contractor has not breached his contract if he does what the owner tells him to and the result is a defective condition. This principle has been adopted in Florida.

It has taken different forms. In *Wood Hopkins Contracting Co. v. Masonry Contractors, Inc.*, 235 So.2d 548 (1st D.C.A. 1970), the court held that if the owner required that a certain kind of brick be used on the job, and the contractor purchased the exact type of brick called for in the specifications, then the contractor would not be liable for breach of contract; the manner of performance of the job was approved by the owner's agent, and supervising architect, a contractor would not be liable for water damage resulting from failed windows; see *City National Bank of Miami v. Chitwood Construction Co.*, 210 So.2d 234 (3rd D.C. A. 1968); see also Fred Howland, Inc. v. Gore, 13 So.2d 303 (Fla. 1942), and *Enid Corporation v. Mills*, 101 So.2d 906 (3rd D.C.A. 1958).

The holding of these cases is simply common sense: if a contractor does what he has agreed to do, and what he is told, he ought not to be liable. The contractor, of course, did not do the design work on this job; the county consultant confirmed that the work as directed by the county would produce a good result. Just because it has not does not mean that Douglas has breached its contract in any fashion whatsoever.

#### The Future

To date, Douglas has performed in accordance with the plans and specifications, and pursuant to the directions of the county. Under those circumstances, it is entitled to be paid for the work it has invoiced to the county. Douglas stands ready and willing to complete the CR121 job. It is clear now, however, that proceeding as directed by Mr. Turner, and allowing the roads to be opened to traffic after only eight hours, is going to produce more faulty results. While Mr. Turner felt his system was acceptable for this County road, he clearly did not appreciate the extent of the use of that road. Douglas is willing to discuss any alternatives the county would propose in order to finish this job satisfactorily. These could include relief from the county's traffic restrictions, abandonment or adjustment of reclaimed base work, abandonment of Turner system, or any other concept that the county finds acceptable. The one thing Douglas cannot do is proceed to do the work in a manner which, though directed by the county (and approved by its consultant), is producing an unacceptable result.

## TAYLOR, DAY, CURRIE, BOYD & JOHNSON

Michael	Mullin,	Esquire
July 14,	2006	
Page 6		

In the meantime, the county needs to go ahead and pay the outstanding invoices since the work has been properly performed.

We welcome any discussions you or county representatives would like to have with us regarding any of the above.

Sincerely,

ohn C. Taylor, J

JCTJr/lou

39 S.Ct. 59 63 L.Ed. 166, 42 Cont. Cas. Fed. (CCH) P 77,225 (Cite as: 248 U.S. 132, 39 S.Ct. 59)

UNITED STATES
v.
SPEARIN.
SPEARIN
v.
UNITED STATES.

Nos. 44, 45.

Supreme Court of the United States

Argued Nov. 14 and 15, 1918.

Decided Dec 9, 1918.

Appeals from the Court of Claims.

Suit by George B. Spearin against the United States. From judgment for plaintiff (51 Ct. Cl. 155), both parties appeal. Affirmed.

#### EVIDENCE \$\iins 441(7)

157k441(7)

The parol evidence rule did not preclude a dry dock contractor from relying on the government's warranty, implied by law from provisions of contract, that if he made necessary relocation of sewer as prescribed it would be adequate to permit erection of dry dock.

## UNITED STATES ⋘70(8)

393k70(8)

Rev.St. § 3744, 41 U.S.C.A. § 16, providing that contracts of the Navy Department shall be reduced to writing, did not preclude contractor to build dry dock from relying on government's warranty, implied by law from provisions of contract, that if he made necessary relocation of sewer as prescribed, it would be adequate to permit erection of dry dock.

#### UNITED STATES \$\infty 73(24)

393k73(24)

Where dry dock was to be built in accordance with plans furnished by the United States, and contract provided for necessary relocation of sewer, articles prescribing its character, dimensions, and location imported warranty that if complied with sewer would be adequate, and, despite general clauses requiring contractor to examine site, etc., he could refuse to resume work where he relocated sewer as provided, and it was not sufficient, and, when government annulled contract without justification, it became liable in damages.

#### CONTRACTS @=232(1)

95k232(1)

Where one agrees to do for a fixed sum a thing possible to be performed, he will not be excused or become entitled to additional compensation on account of unforeseen difficulties.

#### CONTRACTS \$\infty 280(3)

95k280(3)

If contractor is bound to build according to owner's plans and specifications, owner will be responsible for consequences of defects in plans and specifications, despite clauses requiring checking of plans, etc.

#### CONTRACTS €=319(1)

95k319(1)

One who, after partially performing a contract, is wrongfully prevented by the other contracting party from completing it, may recover actual expenditures made by him on account of such contract, and also damages for loss of profits.

\*\*60 \*133 Messrs. Frank W. Hackett, of Washington, D. C., and Charles E. Hughes, of New York City, for Spearin.

Mr. Assistant Attorney General Thompson, for the United States.

Mr. Justice BRANDEIS delivered the opinion of the Court.

Spearin brought this suit in the Court of Claims demanding a balance alleged to be due for work done under a contract to construct a dry dock and also damages for its annulment. Judgment was entered for him in the sum of \$141,180.86 (51 Ct. Cl. 155), and both parties appealed to this court. The government contends that Spearin is entitled to recover only \$7,907.98. Spearin claims the additional sum of \$63,658.70.

First. The decision to be made on the government's appeal depends upon whether or not it was entitled to annul the contract. The facts essential to a determination of the question are these:

Spearin contracted to build for \$757,800 a dry dock at the Brooklyn Navy Yard in accordance with plans and specifications which had been prepared by the government The site selected by it was intersected by a 6-foot brick sewer; and it was necessary to divert and relocate a section thereof before the work of

constructing the dry dock could begin. The plans and specifications provided that the contractor should do the work and prescribed the dimensions, material and location of the section to be \*134 substituted. All the prescribed requirements were fully complied with by Spearin; and the substituted section was accepted by the government as satisfactory. It was located about 37 to 50 feet from the proposed excavation for the dry dock; but a large part of the new section was within the area set aside as space within which the contractor's operations were to be carried on. Both before and after the diversion of the 6-foot sewer, it connected, within the Navy Yard but outside the space reserved for work on the dry dock, with a 7-foot sewer which emptied into Wallabout Basin.

About a year after this relocation of the 6-foot sewer there occurred a sudden and heavy downpour of rain coincident with a high tide. This forced the water up the sewer for a considerable distance to a depth of 2 feet or more. Internal pressure broke the 6-foot sewer as so relocated, at several places; and the excavation of the dry dock was flooded. Upon investigation, it was discovered that there was a dam from 5 to 5 1/2 feet high in the 7-foot sewer; and that dam, by diverting to the 6-foot sewer the greater part of the water, had caused the internal pressure which broke it. Both sewers were a part of the city sewerage system; but the dam was not shown either on the city's plan, nor on the government's plans and blueprints, which were submitted to Spearin. On them the 7-foot sewer appeared as unobstructed. The government officials concerned with the letting of the contract and construction of the dry dock did not know of the existence of the dam. The site selected for the dry dock was low ground; and during some years prior to making the contract sued on, the sewers had, from time to time, overflowed to the knowledge of these government officials and others. But the fact had not been communicated to Spearin by any one. He had, before entering into the contract, made a superficial examination of the premises and sought from the civil engineer's office at the Navy \*135 Yard information concerning the conditions and probable cost of the work; but he had made no special examination of the sewers nor special inquiry into the possibility to the work being flooded thereby, and had no information on the subject.

Promptly after the breaking of the sewer Spearin notified the government that he considered the sewers under existing plans a menace to the work and that he would not resume operations unless the government either made good or assumed responsibility for the

damage that had already occurred and either made such changes in the sewer system as would remove the danger or assumed \*\*61 responsibility for the damage which might thereafter be occasioned by the insufficient capacity and the location and design of the existing sewers. The estimated cost of restoring the sewer was \$3,875. But it was unsafe to both Spearin and the government's property to proceed with the work with the 6-foot sewer in its then condition. The government insisted that the responsibility for remedying existing conditions rested with the contractor. After 15 months spent in investigation and fruitless correspondence, the Secretary of the Navy annulled the contract and took possession of the plant and materials on the site. Later the dry dock, under radically changed and enlarged plans, was completed by other contractors, the government having first discontinued the use of the 6-foot intersecting sewer and then reconstructed it by modifying size, shape and material so as to remove all danger of its breaking from internal pressure. Up to that time \$210,939.18 had been expended by Spearin on the work; and he had received from the government on account thereof \$129,758.32 The court found that if he had been allowed to complete the contract he would have earned a profit of \$60,000 and its judgment included that sum.

[1][2] The general rules of law applicable to these facts are well \*136 settled. Where one agrees to do, for a fixed sum, a thing possible to be performed, he will not be excused or become entitled to additional compensation, because unforeseen difficulties are encountered. Day v. United States, 245 U.S. 159, 38 Sup. Ct. 57, 62 L. Ed. 219; Phoenix Bridge Co. v. United States, 211 U. S. 188, 29 Sup. Ct. 81, 53 L. Ed. 141. Thus one who undertakes to erect a structure upon a particular site, assumes ordinarily the risk of subsidence of the soil. Simpson v. United States, 172 U. S 372, 19 Sup. Ct. 222, 43 L. Ed. 482; Dermott v. Jones, 2 Wall. 1, 17 L. Ed. 762. But 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. MacKnight Flintic Stone Co. v. The Mayor, 160 N. Y. 72, 54 N. E. 661; Filbert v. Philadelphia, 181 Pa. 530; [FN\*] Bentley v. State, 73 Wis. 416, 41 N. W. 338 See Sundstrom v. State of New York, 213 N. Y. 68, 106 N. E. 924. This responsibility of the owner is not overcome by the usual clauses requiring builders to visit the site, to check the plans, and to inform themselves of the requirements of the work, as is shown by Christie v. United States, 237 U. S. 234, 35

39 S.Ct. 59 (Cite as: 248 U.S. 132, \*136, 39 S.Ct. 59, \*\*61)

Sup. Ct. 565, 59 L. Ed. 933; Hollerbach v. United States, 233 U. S. 165, 34 Sup. Ct. 553, 58 L. Ed. 898, and United States v. Stage Co., 199 U. S. 414, 424, 26 Sup. Ct. 69, 50 L. Ed. 251, where it was held that the contractor should be relieved, if he was misled by erroneous statements in the specifications.

[3] In the case at bar, the sewer, as well as the other structures, was to be built in accordance with the plans and specifications furnished by the government. The construction of the sewer constituted as much an integral part of any part of the dry dock proper. It was as necessary as any other work in the preparation for the foundation. It involved no separate contract and no separate consideration. The contention of the government that the present case is to be distinguished from the Bentley Case, supra, and other similar cases on the ground that the contract with reference to the sewer is purely collateral is clearly without \*137 merit. The risk of the existing system proving adequate might have rested upon Spearin, if the contract for the dry dock had not contained the provision for relocation of the 6-foot sewer. But the insertion of the articles prescribing the character, dimensions and location of the sewer imported a warranty that if the specifications were complied with, the sewer would be adequate. This implied warranty is not overcome by the general clauses requiring the contractor to examine the site, [FN1] to check up the plans, [FN2] and to assume responsibility for the work until completion and acceptance. [FN3] The obligation to examine the site did not impose upon him the duty of making a diligent inquiry into the history of the locality with a view to determining, at his peril, whether the sewer specifically prescribed by the government would prove adequate. The duty to check plans did not impose the obligation to pass upon their adequacy to accomplish the purpose in view. And the provision concerning contractor's responsibility cannot be construed as abridging rights arising under specific provisions of the contract.

[4][5] Neither section 3744 of the Revised Statutes (Comp. St. 1916, § 6895) which provides \*138 that contracts of the Navy Department shall be reduced to writing, nor the parol evidence rule, precludes reliance upon a warranty implied by law. See Kellogg Bridge Co. v. Hamilton, 110 U. S. 108, 3 Sup. \*\*\*62 Ct. 537, 28 L. Ed. 86. The breach of warranty, followed by the government's repudiation of all responsibility for the past and for making working conditions safe in the future, justified Spearin in refusing to resume the work. He was not obliged to restore the sewer and to proceed, at his peril, with the

construction of the dry dock. When the government refused to assume the responsibility, he might have terminated the contract himself, Anvil Mining Co. v. Humble, 153 U. S. 540, 551, 552, 14 Sup. Ct. 876, 38 L. Ed. 814; but he did not. When the government annulled the contract without justification, it became liable for all damages resulting from its breach.

[6] Second. Both the main and the cross appeal raise questions as to the amount recoverable.

The government contends that Spearin should, as requested, have repaired the sewer and proceeded with the work; and that having declined to do so, he should be denied all recovery except \$7,907.98, which represents the proceeds of that part of the plant which the government sold plus the value of that retained by it. But Spearin was under no obligation to repair the sewer and proceed with the work, while the government denied responsibility for providing and refused to provide sewer conditions safe for the work. When it wrongfully annulled the contract, Spearin became entitled to compensation for all losses resulting from its breach.

Spearin insists that he should be allowed the additional sum of \$63,658.70, because, as he alleges, the lower court awarded him (in addition to \$60,000 for profits) not the difference between his proper expenditures and his receipts from the government, but the difference between such receipts and the value of the work, materials, and plant (as reported by a naval board appointed by the defendant). \*139 Language in the findings of fact concerning damages lends possibly some warrant for that contention; but the discussion of the subject in the opinion makes it clear that the rule enunciated in United States v. Behan, 110 U. S. 338, 4 Sup. Ct. 81, 28 L. Ed. 168, which claimant invokes, was adopted and correctly applied by the court.

The judgment of the Court of Claims is, therefore, affirmed.

Mr. Justice McREYNOLDS took no part in the consideration and decision of these cases.

FN\* 37 Atl. 545

FN1 '271. Examination of Site.—Intending bidders are expected to examine the site of the proposed dry dock and inform themselves thoroughly of the actual conditions and requirements before submitting proposals.'

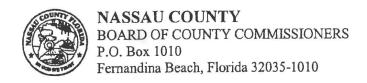
39 S.Ct. 59

(Cite as: 248 U.S. 132, \*139, 39 S.Ct. 59, \*\*62)

FN2 '25. Checking Plans and Dimensions; Lines and Levels --The contractor shall check all plans furnished him immediately upon their receipt and promptly notify the civil engineer in charge of any discrepancies discovered therein \* \* \* The contractor will be held responsible for the lines and levels of his work, and he must combine all materials properly, so that the completed structure shall conform to the true intent and meaning of the plans and specifications.

FN3 '21 Contractor's Responsibility --The contractor shall be responsible for the entire work and every part thereof, until completion and final acceptance by the Chief of Bureau of Yards and Docks, and for all tools, appliances, and property of every description used in connection therewith. \* \*

END OF DOCUMENT



Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY County Administrator

July 17, 2006

#### VIA E-MAIL & REGULAR MAIL

John C. Taylor, Jr., Esquire 50 North Laura Street Suite 3500 Jacksonville, FL 32202

Dear John:

I am in receipt of your letter along with a copy of the <u>Spearin</u> case.

At this point, I agree with your points on Page 1 as to issues that need to be discussed. I do not agree with your total analysis as set forth in the letter. Your client assumes that the basis for the alleged problems are as stated in the letter, and, at this point, I do not agree.

I look forward to meeting with you as we address solutions. am advised that this process might also add that I has been utilized in northeast Florida, successfully and Douglas' a meeting in Bryceville, indicated that representative, at subcontractor was at fault.

y yours

MICHAEL S MULLIN

Sincere

MSM/am

cc: Michael Mahaney
Jose Deliz

Charlotte Young

z/amyers/road-projects/taylor-cr121-jul-17-2006

#### YULEE, FLORIDA JULY 17, 2006

An advertised meeting was held this 17th day of July 2006 at 1:30 PM in the Conference Room of the County Attorney's Office, located at the Nassau County Governmental Complex, 96135 Nassau Place, Yulee, Florida 32097, with representatives of Douglas Asphalt Company to address issues related to the test strip and payment issues for the CR 121 widening and resurfacing project. Present were: Michael S. Mullin, County Attorney; Mike Mahaney, County Administrator; Tom Branan, Board Chairman; Charlotte Deliz, Engineering Services Young, Contract Manager; Jose Director; Pat Gilroy, Nassau County CEI; John A. Crawford, Ex-Officio Clerk; Dennis Gay, Clerk's Internal Auditor; Chris Lacambra, Deputy Comptroller; Darrell Setser, P.E. of Universal Jeff Register and Greg Evans of Statewide Engineering; Engineering; Joel Spivey and Ray Grode of Douglas Asphalt Company; John Taylor, Esquire, for Douglas Asphalt Company; Amanda Bishop with the Nassau County Record; and Joyce Bradley, Recording Secretary.

The County Attorney has received a copy of a letter from Mr. John Taylor, attorney retained by Douglas Asphalt Company, and stated that the letter outlines discussion points that need to be addressed. These items are: (a) the payment of Invoices 5 and 6 for the job in the amount of approximately \$1 million; (b) the completion of the remaining work on Douglas' contract with the county and how it is to be performed; and (c) potential

defects in the required manner of performance for the job and the impact on (a) and (b) outlined herein.

The County Attorney advised that as to the payment of Invoices 5 and 6, the Engineering Services Director has reviewed these and has discussed these with him and Mr. Mahaney. Mr. Mahaney stated that he feels there should be a release of a portion of the invoices but stated that there are items that the county has requested that must be followed through on by the contractor; Mr. Mahaney demonstrated on the drawing board a portion of CR 119 on which the county had requested the contractor to perform some cores, stating that there were indications that some of the asphalt was not two inches thick. Mr. Mahaney stated that this is addressed in a letter from Mr. Deliz to Ray Grode dated July 3, 2006 wherein he indicated that the thickness of the asphalt layer on the southbound lane of the section of CR 121 south of the intersection with CR 119 appears to be less than the specified two inches and directed the contractor to perform core testing as prescribed by FDOT Standard Specifications to delineate the areas of deficient thickness. Additionally in another letter from Mr. Deliz to Mr. Grode dated July 3, 2006, Mr. Deliz wrote the following to Ray Grode:

July 3, 2006

Mr. Raymond Grode, Division Manager Douglas Asphalt Company 10010 N. Main Street Jacksonville, FL 32218

RE: CR 121 Asphalt

Dear Mr. Grode,

I have reviewed the asphalt test results submitted by Douglas Asphalt Company on June 27, 2006. Using the quality control criteria stipulated in FDOT Standard Specifications (incorporated in the contract by reference), we find LOT 7 and LOT 9 to be low-pay factor material per Section 334-9. In addition, Sublot 3 of LOT 19 does not meet the requirements for gradation ( $P_{-8}$ ) of Table 334-5. Please refer to the attached spreadsheets.

Per Sections 334-7 and 334-9 you are required to report the situation to the Engineer whenever a material sublot fails to achieve the requirements of Table 334-5 or whenever an individual pay factor for any quality characteristic of a LOT falls below 0.90. In both the above described situations you failed to send the required notification.

I will provide this information to our Board of County Commissioners for their consideration and action. You are directed to submit any and all outstanding asphalt test results applicable to this project and to abide by the notification requirements stipulated in the contract. You are also directed to specify the extents of paving, referencing station numbers, where material from LOT 7 and LOT 19 were utilized by close of business Friday June 7, 2006. (sic)

Jose R. Deliz, P.E.

CC: Board of County Commissioners
Michael Mahaney, County Administrator
Michael S. Mullin, County Attorney
Charlotte Young, Contract Manager
Pat Gilroy, Construction Engineering Inspector

Mr. Mahaney stated that the county had indications that the pavement was out of specification requirements; however the county has not received a response to this request. Mr. Mahaney also stated that the contractor is required to submit a quality control plan and stated that if the contractor expects payment, there are items that need to be addressed in order to accomplish that. Mr. Deliz concurred with Mr. Mahaney's statements.

Mr. Deliz inquired of the representatives of Douglas
Asphalt Company when they would anticipate being able to provide

the lab results and the quality control plan. Mr. Mahaney stated that he has reviewed the requirements in the FDOT Standard Specifications that address quality control and stated that these requirements, as far as he can determine, have not been met by the contractor.

Mr. Grode stated that the individual who is the quality control (QC) expert in the company is not available. Mr. Grode stated that what he understands Mr. Mahaney is asking for is a parallel for Superpave in a QC 2000 testing environment. Grode stated that he did not believe that the county had the basis set up to qualify that environment and stated that the environment would need to be modified to give the county the specific elements of the environment that they are requiring or requesting. Mr. Grode stated that from what he understands of the QC 2000 changes as they apply to Superpave, the FDOT has a specific environment for that and Mr. Grode stated that this is what needs to be determined, and a determination of how much of the environment that needs to be implemented. Mr. Deliz inquired of Mr. Grode if the company had a quality control plan for the project. Mr. Grode replied that the company could generate a quality control plan based on the county's ability to monitor or set up the environment and testing, stating that it would have to be modified from FDOT.

Mr. Mahaney stated the calculations that were done were the basis for the letter from Mr. Deliz, and stated that a representative of the Department of Transportation checked the

calculations on the lab results that are attached to the letter, and agrees that, based on those results, there is some Superpave that is out of specification. Mr. Mahaney requested that a representative from Douglas Asphalt Company respond to Mr. Deliz' letter. Mr. Jeff Register stated that the county's inspector is generally responsible for checking the spread as asphalt is placed, stating that he was uncertain of the frequency. Mr. Gilrov stated that the QC should have the spread rates, extractions and variations taken. Mr. Register stated that the spread rate was calculated by the county's representative. Gilroy replied that it is considered by both parties, explaining that OA looks at QC. Mr. Gilroy stated that he should receive the reports from the QA and the QC and reviewe both to ensure their correctness. Upon inquiry by Mr. Mahaney, Mr. Gilroy stated that the QA is being done by Williams Earth Sciences. Mr. Grode stated that he was not certain of the individual that did the QC on the job site on Saturday, July 1, 2006, but would check into that to find out.

Mr. Taylor requested clarification of his understanding of the county's request and inquired if the intent is for a quality control program as to the thickness of the asphalt in general or if there is an indication that the company had produced an insufficient amount of asphalt on the road. Mr. Mahaney explained that the situation as he sees it, by demonstrating on the drawing board, the issue is cores need to be done on a portion of CR 121 south of the intersection with CR 119 stating

that it has been determined that there is not two inches of Superpave in a number of locations above the reclaimed base. Mr. Mahaney again referred to the letter dated July 3, 2006 from the Director of Engineering Services regarding that portion of CR 121 on the southbound lane south of the intersection with CR 119. Mr. Mahaney stated that up to SR 2 generally, as long as this portion does not begin sliding, is okay except for the bumps. Mr. Mahaney, demonstrating on the drawing board, from SR 2 to the bridge is generally not in good shape; from the bridge up CR 108, including Rowe Cutoff, is generally in good shape. Mr. Mahaney stated that Mr. Deliz had requested by letter information as to station numbers as to the asphalt in question; however, that information has not yet been provided.

Mr. Taylor stated that as to the principal problem, to the extent that the asphalt may be less than two inches, the company feels this may be contributed to the heavy traffic that was placed on the road too quickly under the plans and specifications after the work was done. Mr. Taylor stated that the company will perform the testing as is being requested by the county, but stated that if there are indications that the asphalt is less than two inches in various locations it is not due to the company not placing sufficient asphalt down.

Mr. Deliz inquired of Mr. Taylor if he had visited the project. Mr. Taylor indicated that he had not, and Mr. Deliz stated that he would recommend that he do so. Mr. Deliz stated that the southbound lane hardly has any slippage areas, and

stated that by taking a pocket knife it appears the base is a half inch, but the surface is still uniform. Mr. Deliz stated that it appeared the base was irregularly shaped and the company may have retried to apply the asphalt, as it is thick in some places and extremely thin in others.

Mr. Grode stated that he has done a preliminary, based on close proximity of station, an average yield rate and stated that there are indications of a 2,000 ton asphalt overrun on the project, stating that his theory for this is that the base is being rutted and moved and thus causing the company to have to fill in the ruts. At the same time, this is causing an opposite reaction to which the asphalt is being moved causing it to be thinner in spots. Mr. Grode stated that he would provide Mr. Deliz with the tickets to review in conjunction with the amount of roadway, stating that this would indicate the amount of overrun that he is referring to, and stated that the company is putting the asphalt out but it is moving.

Mr. Gay inquired where the asphalt was moving to. Mr. Grode explained it is moving in depth and is also spreading in width because it is being pushed, as evidenced by pictures presented by representatives of Douglas Asphalt Company.

Mr. Mahaney stated, to clarify his understanding of what the Douglas Asphalt Company representatives are indicating, is that the traffic was placed on the roadway too soon and the reclaimed base was rutting where the wheels are on the road and thus causing it not to be a smooth surface. This was confirmed

by one of the representatives (Mr. Evans(?)). Mr. Deliz inquired of the company if they were paving over a rutted surface. Mr. Grode stated that he could not answer that question, as he was not present when the roadway was paved. Mr. Evans (?) confirmed this, stating that it could be documented in the 1500 foot test section. Mr. Deliz inquired if it were the company's position that the base is rutted because it is yielding because traffic was placed on the pavement too soon, clarified language was that the traffic caused the road to settle forming ruts. Register stated that the company's position is that there are ruts there. Mr. Deliz stated that it is important to determine if the base is settling and forming the ruts or if the wheel path was eroded. Mr. Deliz explained that if the base is eroded but not yielding then the company could pave over it and not have resulting ruts on the surface. Mr. Register stated that the test strip indicates that the rutting is manifesting itself in the surface of the asphalt, stating that Mr. Deliz may be correct or it may be a combination. Mr. Gilroy stated that the only location he could think of that it would be rutting in the test section would be where it was rutting in the base and the company was requested to fill that in and compact to that one point and it was paved over without compaction.

Mr. Mullin stated that he feels that there will need to be engineers retained for a determination in order to make a payment, stating that there are county employees who are required

to sign off on the payment requests certifying that the payment is within contract and is a legal payment.

Mr. Mullin stated that he has made a determination that the county needs to retain the firm of Keith and Schnars, an engineering firm.

Mr. Taylor stated that he would like to have the county provide the company with information as to what they have done that makes them feel that the company has breached their contract or is not in compliance with the plans and specifications. Mr. Taylor stated that the company feels that they have complied with the plans and specifications; however, if the result is less than desired this would not affect the company's ability to receive a payment that would be due them and which they would be entitled to. Mr. Taylor stated that the items requested in Mr. Deliz' letter would be responded to by the company, but stated that he felt the company has complied with the plans and specifications. Mr. Taylor stated that if core tests are performed in the areas as demonstrated by Mr. Mahaney and these are found to be less than two inches, this would not be a violation of the plans and specifications by the company.

Mr. Taylor requested to step out of the room with his clients to caucus. The recording device was turned off at time.

Upon the return to the room by the group, the recording device was resumed.

Mr. Taylor stated the group will do the following: Douglas
Asphalt will provide the calculations as has been requested. At

the same time, they will provide the spread rate calculation. The spread rate calculation will demonstrate the 2,000 extra tons of asphalt for the job and will also demonstrate that the company did the job correctly. Additionally, the company would like to see any core testing that the county has done that indicates there are locations where there is insufficient asphalt. Taylor stated that he feels the problem lies with the heavy trucks (logging trucks) being allowed to be placed back on the pavement too soon after the work was done. Mr. Mullin inquired of Mr. Taylor how the logging trucks were allowed too soon or what was meant by too soon. Mr. Taylor stated that the company was told by the county, at a meeting on January 6, 2006, that traffic could be placed back on the pavement after eight hours after the base was put down. Mr. Taylor stated that at a meeting January Mr. Dan Turner indicated this could be successfully. Mr. Taylor assured the county representatives that the company would provide the core testing by Friday week. Mr. Taylor inquired the locations for the core testing. Mr. Mahaney stated that Mr. Deliz could go to the job site and point those locations out exactly. Mr. Deliz added that those locations are also described within his letter. Mr. Taylor stated that he would require a response from the county as to when the company could expect payment once the core testing is completed and provided. Mr. Taylor also stated that the company would address Mr. Deliz' letter of July 3, 2006 regarding the lots and sublots by Friday week.

Mr. Mullin stated that to address Mr. Taylor's question regarding the timeline for payment to the company, the county representatives would have to meet again regarding this matter and a definitive answer could be provided by the Friday week timeline that Mr. Taylor had referenced.

Mr. Taylor stated that he would endorse having Keith and Schnars involved and to review the matter and felt that this company would be knowledgeable and independent in determining what the problem is.

Mr. Taylor stated that the company is not desirous of moving forward with the work only to have the problems continue and stated that the future of the contract needs to be addressed as well as the timeframes set forth within the contract. Mr. Taylor stated that an extension should be done on the contract and the company needs direction on completing the job, but that it be done in a manner that would produce the desired result. Mr. Mullin stated that the county's position is that the manner in which the company was asked to do the job is not the core problem, noting that he felt there were extensive discussions as to the company's ability to perform. Mr. Mullin stated that if the theory is that the company performed based upon this method and it is the method that is flawed, then the county will have a response to that by the Friday week timeline as has been discussed. Mr. Mullin added that the company was cautioned many times in meetings he attended to ensure that they could perform the work or to not do it.

Mr. Taylor stated that as to the quality control, the individual that is most knowledge as to this aspect is unavailable but stated that a report will be sent back on this issue.

The group agreed to conduct their next meeting on Friday, July 28, 2006 at 1:00 PM in the County Attorney's Conference Room.

Mr. Mullin stated that, as he understands it, the 1500 test strip is not workable. Mr. Taylor responded that the test strip was done in accordance with what the company was asked to do by the county's engineer and stated that it appears there is a problem with adhesion. Mr. Mullin inquired of Mr. Setser of Universal Engineering to explain. Mr. Setser stated that there is adhesion between the asphalt and the base, but this has not been cored, stating that this is from observation. Mr. Mullin inquired if this area would be cored before the next meeting of Friday week. Mr. Deliz inquired, even after priming and scarifying the base, the asphalt is not adhering properly. The response was that the asphalt was not adhering to the prime.

Mr. Taylor inquired when the company would be able to obtain the county's core testing that has been reasoning for the company's inability to provide the county with what they needed. Mr. Gilroy stated that Williams Earth Sciences cored the portion of the roadway where the bumps were, but stated that these were not done for thickness. Mr. Register stated that the company needs asphalt density, base density, and proctor on the base. Mr.

Taylor stated that the company is asking for the test results that were done that resulted in Mr. Deliz' letter of July 3, 2006. Mr. Gilroy stated that these were done by visual observation. Mr. Deliz stated that he is asking the company to verify the proper thickness in the areas as indicated in the letter. Mr. Mahaney suggested that if there are specific locations on the roadway that Mr. Deliz could point these areas out, whether it be by observation or individuals, to indicate these to the company and indicate where the company should do the core. Mr. Deliz stated that he had no objection to this, stating that he has marked the roadway where this needs to be done and suggested that this be coordinated with Mr. Gilroy.

Mr. Taylor requested the test results for the density on the base. The representatives from Universal Engineering will provide this information to the Contract Manager for dissemination.

There being no further business, the meeting adjourned at 2:50 PM.



# **Douglas Asphalt Company**

Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

MR. JOSE DELIZ, P. E., Engin. Ser. Dir. Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097 7/18/2006

RE: Request for Contract Time Extension for Nassau C.R. 121

Dear Mr. Deliz:

During our recent meeting with Nassau County of 7/17/06, Douglas Asphalt Company learned of Nassau County's intention to utilize an independent engineer to evaluate the methods and performance of the C.R. 121 paving operations. Douglas Asphalt Company welcomes this evaluation as hopefully a positive step in getting resolution to the issues facing the C.R. 121 paving project.

At this time, Douglas Asphalt Company is requesting an extension of time that allows for this independent evaluation. Douglas Asphalt Company feels that contract time should resume once direction is given by Nassau County to resume paving operations using the methods prescribed by Nassau County.

At your earliest convenience, please review this request, and contact us with your conclusions regarding this time extension.

Sincerely,

Raymond Grode Division Manager RECEIVED NASSAU COUNTY
NASSAU COUNTY
ENGINEERING SERVICES
DEPARTHENT
200 P 6: 0



# **Douglas Asphalt Company**

Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

MR. JOSE DELIZ, P. E., Engin. Ser. Dir.

Nassau County Engineering Services 96161 Nassau Place

Yulee, Florida 32097

RE: Request for Testing Documentation for Nassau C.R. 121

Dear Mr. Deliz:

7/18/2006

NASSAU COUNTY
ENGINEERING SERVICE
DEPARTMENT
2006 JUL 20 P 6: 0

During the course of our meeting with Nassau County on 7/17/06, representatives of Nassau County stated that they needed several documents from Douglas Asphalt Company to complete their records regarding the asphalt testing on C.R. 121.

#### These items included:

- 1 Identification of the lab testing of SP 12.5 Lots 7 & 13.
- 2 The compilation of a core sample report of the areas of C.R 121 (as designated by Mike Mahaney, Administrator, Nassau Co.)
- 3 Make reference to two (2) lab test deficiencies as they relate to the FDOT approval of the subject mix sub-lots.
- 4 In conjunction with Item 2 captioned above, provide Nassau County with an Average Yield Summary (per FDOT Specifications) for the areas paved to date ( minus the test strip).
- 5 Provide a Quality Control Plan as governed by the testing regime instructions related to Douglas Asphalt Company by Nassau County.

These items are currently being complied by Douglas Asphalt Company for documentation to Nassau County in the prescribed time frame as agreed upon by all parties present during the 7/17/06 meeting.

In addition, Douglas Asphalt Company's lawyer, Mr. John Taylor, made a request of Nassau County to provide the Reclaimed Base Proctor and Density Test Results complied for Nassau County by Universal Engineering.

page 1 of 2.



# **Douglas Asphalt Company**

Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

page 2 of 2.

Subsequent to the 7/17/06 meeting, Douglas Asphalt Company (on 7/18/06) has presented a written request for a Contract Time Extension for C.R. 121 based on Nassau Co.'s utilization of an Independent Engineering Evaluation of the issues facing C.R. 121.

Douglas Asphalt Company requests that both the Universal Testing Records and the Time Extension Decision be presented to our company prior to the same time frame deadline requested by Nassau County for the asphalt testing documentation.

Thank you in advance for your consideration of this matter.

Sincerely,

Raymond Grode Division Manager



## Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

José Deliz, Director

July 20, 2006

Mr. Raymond Grode, Division Manager Douglas Asphalt Company 10010 N. Main Street Jacksonville, FL 32218

RE: CR121 Disposal of Excess Soil

Dear Mr. Grode,

This is to re-iterate that the contract requires proper disposal of excess dirt resulting from the excavation of the widening trench. Specific instructions on this regard were issued in Addendum No. 3 of the contract, copy of which is attached for your convenience. Please ensure that the excess material is removed from the roadside and/or swales and disposed of properly immediately.

Regards,

Copy José R. Deliz, P.E.

Cc: Michael Mahaney, County Administrator Charlotte Young, Contract Manager Pat Gilroy, Construction Engineering Inspector



Consultants In: Geotechnical Engineering • Environmental Engineering • Construction Materials Testing • Threshold Inspection • Private Provider Inspection

5561 Florida Mining Boulevard South • Jacksonville, FL 32257 • (904) 296-0757 • Fax (904) 296-0748

#### **ACTIVITY RECORD**

Client:

**Nassau County Board of County Commissioners** 

76347 Veterans Way Yulee, FL 32097

Project:

Cr 121 Widening & Resurfacing Project

Dates of Activity:

July 21, 2006

Reference:

**Pavement and Base Coring** 

Inspector:

Darrell M. Setser, P.E.

On this date Universal Engineering Sciences, Inc. (UES) arrived on site at the intersection of SR 2 and CR 121. UES members on site were: Darrell M. Setser, P.E., Paul Buchler, Corey Cawvey, Andrew Ricks, and Donald Collier. Mr. Buchler and Mr. Cawvey performed coring operations and Mr. Ricks and Mr. Collier performed flagging operations.

After setting up MOT one traffic lane was closed for coring operations. We obtained 4 six-inch diameter cores (full depth - asphalt pavement and reclaimed base) from the 1,500 ft "test strip" area, 2 in the northbound lane and 2 in the southbound lane. We obtained 2 six-inch diameter cores north of the "test strip" area, 1 in the northbound lane and 1 in the southbound lane. The following table provides information for each core:

Core ID	Located in test Strip	Relative Location	Asphalt Thickness, in	Base Thickness, in	Asphalt Bond w/base	Comments
Core No.1	Yes	130 ft north of south end of test strip	1.90	5.50	Yes	northbound lane, between wheel paths
Core No. 2	Yes	130 ft north of south end of test strip	1.80	6.00	Yes	southbound lane, in wheel path
Core No. 3	Yes	1,370 ft north of south end of test strip	2.60	7.70	Yes	northbound lane, in wheel path
Core No. 4	Yes	1,370 ft north of south end of test strip	2.20	6.00	Yes	southbound lane, in wheel path

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Core No. 5	No	1,685 ft north of south end of test strip	1.60	7.50	No	northbound lane, in wheel path and "slip" area
Core No. 6	No	1,685 ft north of south end of test strip	2.50	6.60	No	southbound lane, between wheel paths

Cores No. 1 and No. 2 were placed in a 6 in. diameter field shear device and a 50 lb. force was applied in an attempt to shear the bond between the asphalt and the base and provide an indication of the relative bond strength between the asphalt surface and the base material. The cores did not shear in the field.

No "slip" areas were observed in the test strip during our site visit. Based on our field services performed on this date the bond between the asphalt surfacing and the base, in the "test strip" area, appears satisfactory.

All holes were patched with cold patch. The samples were transported to our laboratory in Jacksonville.

Photographs of the cores obtained on this date are attached.

Darrell M. Setser, P.E. FL P.E. Number 45379

Universal Engineering Sciences















#### NASSAU COUNTY

BOARD OF COUNTY COMMISSIONERS

P.O. Box 1010

Fernandina Beach, Florida 32035-1010

Jim B. Higginbotham Dist. No. 1 Fernanding Beach Ansley Acree

Dist. No. 2 Fernandina Beach

Tom Branan Dist. No. 3 Yulee Floyd L. Vanzant

Dist. No. 4 Hilliard Marianne Marshall Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MICHAEL MAHANEY County Administrator

MEMORANDUM

TO:

Board of County Commissioners

FROM:

José Deliz, Director of Engineering Services  $\mathbb{R}$ 

DATE:

August 30, 2006

SUBJECT:

CR 121 Widening & Resurfacing Status Update

## Engineering Design

Section closed 01/09/06.

### Permitting

Section closed 01/09/06.

## Utilities

Section closed 01/09/06.

## Bidding

Section closed 04/25/06

## Construction

Negotiations between County Attorney and Douglas Asphalt FDOT received copies of design, contract counsel ongoing. documents, and testing reports to provide a review of the Woods Engineering hired to provide consulting project. No construction work has occurred since last services. report.

Mulla to prode egdate Mit week

(904) - 225-2610 Board Room; 321-5782, (800) 789-6673

An Affirmative Action / Equal Opportunity Employer



# STATE OF FLORIDA



# Failure Investigation of CR 121 in Nassau County

Howard L. Moseley, P.E. Henry H. Haggerty, P.E. Stephen C. Sedwick, P.E. Daniel C. Cobb, P.E.

September 2006

**DISTRICT 2 MATERIALS OFFICE** 

## TABLE OF CONTENTS

List of Figuresii
List of Tablesiii
Background and Problem Statement
Field Observations and Test Results
Laboratory Test Results
Summary and Conclusions5
Figures6
Tables9
Appendix A-1 – SP 04-3691B
Appendix A-2 – Summary of CR 121 Production Data
Appendix A-3 – Typical Section Core
Appendix A-4 – Transverse Crack Originating in Base
Appendix A-5 –Thin Asphalt Layer
Appendix A-6 - Suggested Specifications for Soil-Cement Base Course Construction

# LIST OF FIGURES

Figure 1 – Typical Section	
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Figure 1 – 1 ypical and the	
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***************************************	4444440
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Figure 2 – Shoving  Figure 3 – More Shoving	0
1-6	
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7 - 8	

## LIST OF TABLES

Table A – Asphalt and Base Thicknesses	9
Table B – Laboratory Results	0
Table C - Reclaimed Base Unit Weight and Strength Data	1

#### BACKGROUND AND PROBLEM STATEMENT

In the spring of 2006, work began on Nassau County Road 121 (CR 121) that included base reclamation, widening, and resurfacing. The existing pavement varied from 18 to 21 feet in width. The plans called for the project to be widened to a standard 24 feet. The project limits stretched from US 1 in the northwest part of Nassau County (STA 0+10.00) to the intersection of Balderdash Place in the southwest corner of the county (STA 1843+29.87). The total length of the project was 34.9 miles. The standard typical section called for a full depth reclamation of the existing pavement. The existing pavement and base were milled, mixed, and chemically stabilized six to eight inches deep according to field determination. A new layer of asphalt pavement, two inches of Superpave type SP 12.5, was placed on top of the full depth reclamation. The typical section is shown in Figure 1.

The Prime Contractor on the project is Douglas Asphalt Company. The mixture produced and placed by Douglas was a FDOT SP-12.5 mm structure course, designated mix design number SP 04-3691B. A copy of the mix design can be found in Appendix A-1. This mix design has been successfully used on five state projects between September 2005 and May 2006. The production data has acceptable quality air voids, ranging from 2.53 to 4.84 over 79 samples, as well as acceptable asphalt content and reasonable variation in gradation.

The District Two Materials Office was requested in September 2006 to perform field testing and review design and production information to help ascertain any assignable causes to the premature failure.

The Department requested daily construction reports from Nassau County that would document the daily activities of the work. CEI notes are available for review at the County offices. County personnel indicated that a prime coat was not used on the project except for a small test section located just north of County Road 2. Some laboratory production data was provided by Nassau County for this report and is summarized in Appendix A-2.

#### FIELD OBSERVATIONS AND TEST RESULTS

Three sections on CR 121 were investigated, sampled, and tested. A summary of the sections can be found in Table A. The first two sections were in areas where shoving occurred. The third section was in an area that exhibited no shoving or other pavement distress. There are also exception areas contained within the project limits that were previously reconstructed with accompanying bridge work several years ago. The exception areas are performing quite well.

For location A, three cores were taken between the wheel paths (a non-distressed location) adjacent to the shoved area. A fourth core was taken in the shoved area. Each of the cores had an asphalt thickness of at least two inches and an average thickness of 2.1 inches. The reclaimed based looked to be well mixed, cohesive, and had an average thickness of 6.2 inches.

Four cores were also taken from location B. Similar to the first section, three cores were taken in a non-distressed area between the wheel paths next to the shoved area. A fourth core was taken in the shoved area. The average asphalt thickness in this section was 2.2 inches. The average thickness of the reclaimed base was 5.4 inches (6 – 8 inches is specified). The reclaimed base looked to be well mixed and cohesive. For location C, which exhibited no distress, two cores

were taken between the wheel paths of each lane. The average asphalt thickness was 2.2 inches. The average thickness of the reclaimed base was 6.3 inches.

Some of the cores taken from the two distressed locations A and B sheared apart under the stress of the coring operation at the interface between the asphalt and the reclaimed base layers. During the coring at location C, no shearing occurred at the interface. A picture of a core from location C is shown in Appendix A-3. A bituminous coat at the interface of the asphalt pavement and the reclaimed base can be seen on the cores obtained from location C. The bituminous coat is noticeably absent on the cores obtained from locations A and B.

A fourth section (location D) was also investigated. A couple of visual irregularities were noticed in this area. The first issue was a small transverse crack between the wheel paths. A core was taken which showed that the crack had originated in the base and reflected to the surface. The thickness of the asphalt pavement in this area was 1.4 inches while the thickness of the reclaimed base was 6.8 inches. A picture of this core is shown in Appendix A-4. A thin area was also noticed near this crack. A core was taken in the thin area in the inside wheel path. The thickness of the asphalt pavement was 0.5 inches. The thickness of the reclaimed base was 6.8 inches. A picture of this core is shown in Appendix A-5. A summary of the asphalt pavement and reclaimed base thicknesses for each section is provided in Table A.

#### LABORATORY TEST RESULTS

Laboratory tests were performed on the asphalt pavement layer of the cores taken from sections A, B, and C. Only the asphalt pavement of undamaged cores was tested. The cores taken from

the actual shoved areas were not tested and were used for observations. The in place air voids, maximum theoretical density, AC content, and gradation were determined for each area. A summary of the test results can be found in Table B. The AC content was a little high in sections A and B, 6.0 and 5.8 percent respectively with a target of 5.4 percent. The asphalt content in section C was 5.5 percent. The average in place air voids for sections A, B, and C were 5.6, 4.6, and 5.7 percent respectively. These values indicate that the asphalt pavement is performing similarly with respect to densification between the three sections.

A total of 15 cores were selected for further analysis and testing of the reclaimed base. The cores included samples of the base materials at locations A, B, and C discussed above, as well as three additional locations also believed to be representative of the base materials supporting the pavement wearing surface. The cores were trimmed to remove the overlying asphalt pavement and the rough and irregularly shaped bottom of the reclaimed base layer. In all cases, the interface between the asphalt pavement and the reclaimed base were observed to be distinct and with no zone of loose or otherwise weak materials apparent at the top of the reclaimed base. The purpose of the testing was to determine the variability of the strength and unit weight of the reclaimed base. The data is summarized in Table C.

The unit weight of the cores ranged from a high of 123 pounds per cubic foot (pcf) to a low of 112 pcf and averaged 117 pcf. Unconfined compressive strength ranged from about 820 pounds per square inch (psi) to about 410 psi. Given the age of the specimens (time since initial mixing and compaction), the range and magnitude of the strength results appears to be compatible with published research data for cement treated pavement base layers. The test data from the base

cores generally support a visual impression that the reclaimed base is uniformly mixed and appears to possess suitable strength to support the overlying pavement wearing surface.

#### SUMMARY AND CONCLUSIONS

Reclaimed base has been used as an option by numerous state and local governments. A literature review quickly identified an article of interest titled, "Suggested Specifications for Soil-Cement Base Course Construction", written by the Portland Cement Association. This article is attached as Appendix A-6.

Several areas of the newly resurfaced CR 121 in Nassau County are experiencing premature shoving. Records show that the base did not receive a prime coat or other curing compound nor any other means by which to assure adequate bond between the asphalt pavement and reclaimed base interface layer for the areas that are shoving. Further, after discussions with Nassau County staff, they informed us location C, which did not exhibit any premature distress, did receive a prime coat, a bituminous tack coat, and sand to be used as a blotter material. This area is performing well. Cores were sampled and tested in areas that experienced shoving and the small area that had a prime coat. Based on field observations, laboratory testing, and facts obtained from Nassau County staff that witnessed the project construction, the premature pavement distress is most likely the result of a poor bond between the asphalt pavement and reclaimed base.

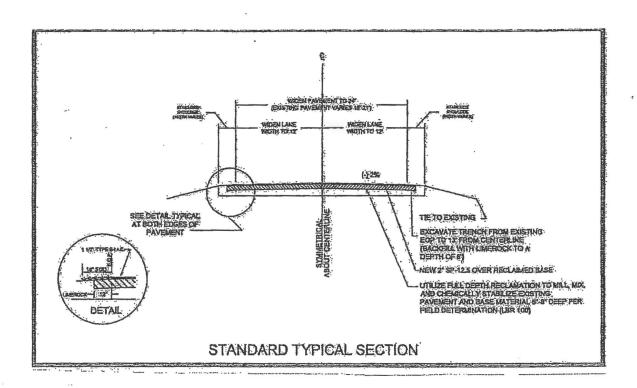


Figure 1 - Typical Section

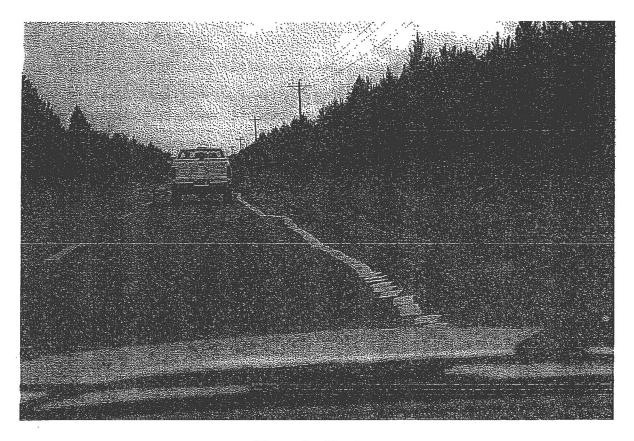


Figure 2 – Shoving

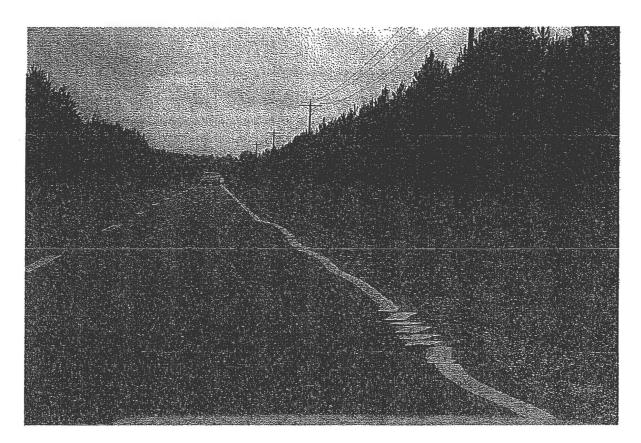


Figure 3 – More Shoving

Table A - Asphalt and Base Thicknesses

					Thickness		
Section	Lane	Station	Core	Location	Asphalt	Base	Description
A			1 .	BWP	2.2	6.1	Shoving
A		1002:20	2	BWP	2.2	6.1	Shoving
A	L-1	1063+30	3	BWP	2.1	6.1	Shoving
A			4	OWP	2.0	6.4	Shoving
В			1	BWP	2.2	5.2	Shoving
В	L-l	975+66	2	BWP	2.3	5.4	Shoving
В			3	BWP	. 2.2	5.5	Shoving
В		975+84	4	OWP	2.2	5.5	Shoving
С	R-1	995+00	1	BWP	2.3	7.0	Good
С	R-1	1000+00	2	BWP	1.8	6.3	Good
С		1000+00	3	BWP ·	2.3	5.5	Good
С	L-1	995+00	4	BWP	2.2	6.3	Good
D	7.1	1607.00		BWP	1.4	6.8	Cracked
D	K-1	R-1 1687+20		IWP	0.5	6.8	Thin

Table B - Laboratory Data

						Per	rcent Pass	sing	
Section	Core	In place	Maximum  Density (Gmm)	AC content	1/2" sieve	3/8" sieve	#4 sieve	#8 sieve	#200 sieve
Targ	get	2.449 5.4 92 8		85	64	45	3.7		
FDOT I	Limits			± 0.55				± 5.5	± 1.5
A	1	5.4							
A	2	5.4	2.463	6.0	96.2	91.4	67.1	49.0	5.4
A	3	5.9							
В	1	4.7		5.8				49.0	
В	2	4.6	2.450		95.8	95.8 91.3	68.1		5.1
В	3	4.7	eville i i						
С	1	6.1							
С	2	5.4	2 405	5.5	046	89.6	60.5		4.3
С	3	6.9	2.495	5.5	94.6	89.0	0.6 68.5	47.2	4.3
С	4	4.5							

Table C - Reclaimed Base Unit Weight and Strength Data

Section	Lane	Station	Core	Base thickness (in.)	Unit weight (pcf)	Compressive strength (psi)
A			1	6.1	117	561
A		1063130	2	6.1	120	639
A	L-1	1063+30	3	6.1	119	484
A			4	6.4	120	607
В			1	5.2	115	610
В		975+66	2	5.4	115	710
В	L-1		3	5.5	112	733
В		975+84	4	5.5	114	450
С	R-1	995+00	1	7.0	116	529
С	K-1	1000+00	2	6.3	122	457
С	r 1	1000+00	3	5.5	116	413
С	L-1	995+00	4	6.3	117	415
D	R-1	1687+20	143	6.8	114	427
	R-1	732+67	145	6.1	123	606
-	R-1	971+82	137	6.4	122	818
	Ave	rage		6.0	117	564

### Appendix A-1 SP 04-3691B

## STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION STATEMENT OF SOURCE OF MATERIALS AND JOB MIX FORMULA FOR BITUMINOUS CONCRETE SUBMIT TO THE STATE MATERIALS ENGINEER, CENTRAL BITUMINOUS LABORATORY, 5007 NORTHEAST 38TH AVENUE, GAINESVILLE, FLA. 32609

Contractor		Douglas As	phalt Compa	iny	Address	100	010 N. Main Street, Jacksonville, FL. 32218			
Phone No.	(904)	751-2240	Fax No.	(904) 75	51-2502 Fir	E-mail	ryan.	asphalt.com		
Submitted By		Q.A.T.L., L.L.	.c.	Type Mbc	SP-12.5		_ Intended Us	se of Mix	Structural	
Design Traffic Le	vel		Gyratio	ns @ Ndes	75					
TYPI	E MATERIA	L	F.D.O.T. CODE		PRODUCER		PIT NO.	DATE	SAMPLED	
1. Crushed R.A.	P.		1-05	Douglas Asp	halt Company		A0734	02/	04/2003	
2. #67 Stone			42		Ita Aggregate:		TM-579 NS-315	02/04/2003		
3. #89 Stone			54	Martin Mariet	ta Aggregate:	\$	TM-579 NS-315	15 02/04/2003		
4. W-10 Screeni	ngs		23	Martin Marie	ta Aggregates	S	TM-579 NS-315			
5. Local Sand				Douglas Asp	halt Company		A0734 . 02/04/2003		04/2003	
6. PG 64-22			916-PG							
		PER	CENTAGE I	BY WEIGHT TO	OTAL AGGRE	GATE PAS	SSING SIEVES			
Blend	29%	21%	15%	25%	10%		JOB MIX	CONTROL	.PRIMARY	
Number	1	2	3	4	5	6	FORMULA	POINTS	CONTROL SIEVE	
3/4" 19.0mm	100	100	100	100	100		100	100		
1/2" 12.5mm	98	- 64	100	100	100		92	90 - 100		
N 3/8" 9.5mm	91	44	95	100	100		85	- 90		
No. 4 4.75mm	78	8	43	92	100		64			
No. 8 2.36mm	59	2	12	61	100		45	28 - 58	39	
No. 16 1.18mm	48	2	4	- 36	100		34			
No. 30 600pm	• 43	2	2	23	100		29	•		
No. 50 300µm	37	2	2	15	85		24			
No. 100 150µm	19	2	2	8	35		12			
No. 200 75pm	8.8	1.0	1.0	3.8	0.1		3.7	2 - 10		
on Gss	2,678	2.640	2.625	2.610	2,630		2.640			

The mix properties of the Job Mix Formula have been conditionally verified, pending successful final verification during production at the assigned plant, the mix design is approved subject to F.D.O.T. specifications.

JMF reflects aggregate changes expected during production

SP 04-3691B (TL-C)

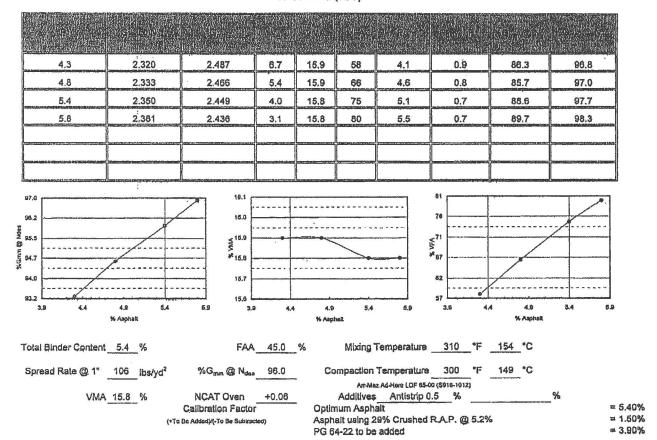
SP 04-3691A revised to reflect change in No.200 sleve.

Direct	or, Office of Materials	Thomas O. Malerk, P.E.
	Effective Date	Original document retained at the State Network Unice 09 / 12 / 2005
	<b>Expiration Date</b>	11 / 02 / 2007

http://materials.dot.state.fl.us/Smo/Bituminous/CentralBitLab/CentratBituminoust.ab.htm

#### HOT MIX DESIGN DATA SHEET

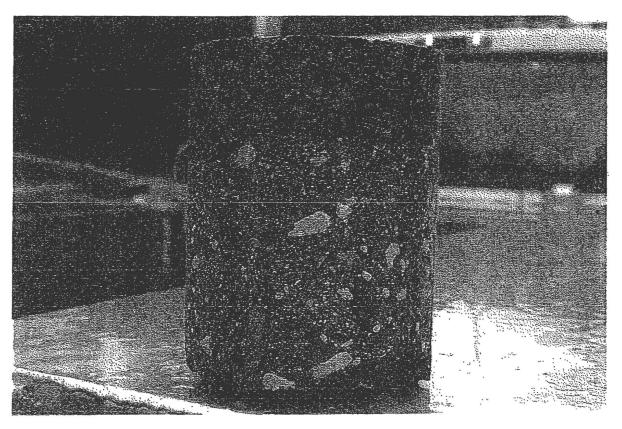
#### SP 04-3691B (TL-C)



Appendix A-2 - Summary of CR 121 Production Data

	Air	AC	#8	#200
Date	voids	content	sieve	sieve
JMF	4.0	5.4	45.0	3.7
4/7/06	2.5	5.6	44.7	4.2
4/8/06	2.8	5.7	46.4	3.1
4/13/06	3.0	5.5	47.1	3.7
4/14/06	2.6	5.7	44.0	3.9
4/20/06	3.5	5.3	42.4	3.3
4/21/06	2.9	5.4	41.6	3.5
5/1/06	3.3	5.3	45.7	3.2
4/22/06	3.0	5.9	46.5	3.2
4/24/06	3.5	5.6	45.9	3.3
4/25/06	4.3	5.3	41.7	3.7
4/26/06	2.8	5.3	45.0	3.8
4/26/06	2.9	5.4	46.4	3.7
5/5/06	3.8	5.6	45.7	3.3
5/6/06	3.4	5.4	45.4	3.6
5/8/06	4.2	5.1	42.8	3.3
5/9/06	3.7	5.4	44.7	3.4
5/10/06	3.8	5.5	46.0	3.9
5/11/06	3.6	5.4	44.7	3.6
5/12/06	3.6	5.4	45.8	3.8
5/13/06	3.2	5.3	43.7	3.0
5/15/06	3.1	5.4	44.0	3.4
5/16/06	2.5	5.2	41.7	3.4
5/17/06	3.3	4.9	37.9	3.0
5/18/06	3.6	5.4	45.7	3.7
5/19/06	4.3	5.2	43.5	3.3
Average	3.3	5.4	44.4	3.5

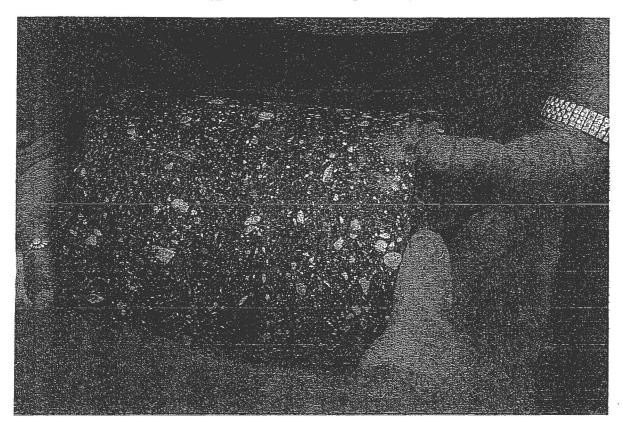
Appendix A-3 – Typical Section Core



Appendix A-4 – Transverse Crack Originating in Base



Appendix A-5 - Thin Asphalt Layer



PORTLAND CEMENT ASSOCIATION

# SOIL-CEMENT

### Suggested Specifications for Soil-Cement Base Course Construction

#### 1. GENERAL

1.1 Description. Soil-cement shall consist of soil, portland cement, and water proportioned, mixed, placed, compected, and cured in accordance with these specifications; and shall conform to the lines, grades, thicknesses, and typical cross-sections shown in the plans.

These suggested specifications cover construction of soil-cement base course, also referred to in some areas as cement-treated based, cement-treated aggregate base, full depth recycling of flexible pavements, cement-recycled asphalt and base, and other names.

These specifications are intended to serve as a guide to format and content for normal soil-cement construction. Most projects have special features or requirements that should be incorporated in the project documents,

#### 2. MATERIALS

2.1 Solf. "Soil" may consist of (1) any combination of gravel, stone, sand, silt, and clay; (2) miscellaneous material such as caliche, scoria, stag, sand-shell, cinders, and ash; (3) waste material from aggregate production plants; (4) high-quality crushed stone and gravel base course aggregates; or (5) old flexible pavements, including the bituminous surface and stone or gravel base course.

The soil shall not contain roots, topsoil, or any material deleterious to its reaction with cement. The soil as processed for construction shall not contain material retained on a 2-in. (50-mm) sleve except for bituminous surface recycjing work, which can contain up to 5% of the total mixed material retained on a 2-in (50-mm) sleve.

2.2 Portland Cement. Portland cement shall comply with the latest specifications for portland cement (ASTM C 150, ASTM C 1157, CSA A-23.5, or AASHTO M 85) or blended hydraulic cements (ASTM C 595, ASTM C 1157, CSA A-362, or AASHTO M 240).

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- 2.3 Water, Water shall be free from substances deleterious to the transcending of the soft-cement.
- 2.4 Pozzotans. If used, pozzotans including fly ash, stag, and silica fume shall comply with the appropriate specifications (ASTM C 618, AASHTO M 295 for fly ash; ASTM C 989, AASHTO M 302 for stag, ASTM C 1240 for silica fume; or CSA A-23.5 for all).
- 2.5 Curing Compounds, Curing compounds shall comply with the latest specifications for emulsified asphalt (ASTM D 9773) or liquid membrane-forming compounds for curing concrete (ASTM C 309).
- 2.6 Sand Blotter. Sand used for the prevention of pickup of curing materials shall be clean, dry, and non-plastic.

#### 3. EQUIPMENT

- 3.1 Description. Soil-cement may be constructed with any machine or combination of machines or equipment that will produce completed soil-cement meeting the requirements for soil pulverization, cement and water application, mixing, transporting, placing, compacting, finishing, and curing as provided in these specifications.
- 3.2 Mixing Methods. Mixing shall be accomplished in a central mixing plant or in place, using single-shaft or multiple-shaft mixers. Agricultural disks or motor graders are not acceptable mixing equipment.
- 3.3 Cement Proportioning. The cement meter for central-plant mixing and the cement spreader for in-place mixing shall be capable of uniformly distributing the cement at the specified rate. Cement may be added in a dry or a sturry form, if applied in slurry form, the slurry mixer end truck shall be capable of completely dispersing the cement in the water to produce a uniform slurry, and shall continuously agitate the slurry once mixed.

PORTLAND CEMENT ASSOCIATION

# SOIL-CEMENT

## Suggested Specifications for Soil-Gement Base Course Construction

#### 1. GENERAL

1.1 Description. Soil-cement shall consist of soil, portland cement, and water proportioned, mixed, placed, compacted, and cured in accordance with these specifications; and shall conform to the lines, grades, thicknesses, and typical cross-sections shown in the plans.

These suggested specifications cover construction of soil-cement. base course, also referred to in some areas as cement-treated based, cement-treated aggregate base, full depth recycling of flexible pavements, cement-recycled asphalt and base, and other names.

These specifications are intended to serve as a guide to format and content for normal soil-cement construction. Most projects have special features or requirements that should be incorporated in the project documents.

#### 2. MATERIALS

2.1 Soft. "Soft" may consist of (1) any combination of gravel, stone, sand, silt, and clay; (2) miscellaneous material such as calliche, scorla, stag, sand-shell, cinders, and ash; (3) waste material from aggregate production plants; (4) high-quality crushed stone and gravel base course aggregates; or (5) old flexible pavements, including the bituminous surface and stone or gravel base course.

The soil shall not contain roots, topsoil, or any material deleterious to its reaction with cement. The soil as processed for construction shall not contain material retained on a 2-in. (50-mm) sleve except for bituminous surface recycling work, which can contain up to 5% of the total mixed material retained on a 2-in (50-mm) sleve.

2.2 Portland Cement. Portland cement shall comply with the latest specifications for portland cement (ASTM C 150, ASTM C 1157, CSA A-23.5, or AASHTO M 85) or blended hydraulic cements (ASTM C 595, ASTM C 1157, CSA A-362, or AASHTO M 240).

2.3 Water. Water shall be free from substances deleterious to the hardening of the soil-cement.

2.4 Pozzotans. If used, pozzotans including fly ash, stag, and stitica furne shall comply with the appropriate specifications (ASTM C 618, AASHTO M 295 for fly ash; ASTM C 989, AASHTO M 302 for stag; ASTM C 1240 for stitica furne; or CSA A-23.5 for etc).

2.5 Curing Compounds. Curing compounds shall comply with the latest specifications for emulsified asphalt (ASTM D 9773) or liquid membrane-forming compounds for curing concrete (ASTM C 309).

2.6 Sand Blotter. Sand used for the prevention of pickup of curing materials shall be clean, dry, and non-plastic.

#### a. EOUIPMENT

3.1 Description. Soil-cement may be constructed with any machine or combination of machines or equipment that will produce completed soil-cement meeting the requirements for soil pulverization, cement and water application, mixing, transporting, placing, compacting, finishing, and curing as provided in these specifications.

3.2 Mixing Methods. Mixing shall be accomplished in a central mixing plant or in place, using single-shaft or multiple-shaft mixers. Agricultural disks or motor graders are not acceptable mixing enultament.

3.3 Cement Proportioning. The cement meter for central-plant mixing and the cement spreader for in-place mixing shall be capable of uniformly distributing the cement at the specified rate. Cement may be added in a dry or a sturry form, if applied in slurry form, the slurry mixer and truck shall be capable of completely dispersing the cement in the water to produce a uniform sturry, and shall continuously agitate the slurry once mixed.

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- 3.4 Application of Water, Water may be applied through the mixer or with water trucks equipped with pressure-spray bars.
- 3.5 Compaction. Soil-cement shall be compacted with one or a combination of the following: tamping or grid roller, presmatic-tire roller, steel-wheel roller, vibratory roller, or vibrating-plate compactor.

#### 4. CONSTRUCTION REQUIREMENTS

#### 4.1 General

- 4.1.1 Preparation of Subgrade. Before soil-cement processing begins, the area to be paved shall be graded and shaped to lines and grades as shown in the plans or as directed by the engineer. During this process any unsuitable soil or material shall be removed and replaced with acceptable material. The subgrade shall be firm and able to support without yielding or subsequent settlement the construction equipment and the compaction of the soil-cement hereinafter specified. Soft or yielding subgrade shall be corrected and made stable before construction proceeds.
- 4.1.2 Mixing and Placing. Soil-cement shall not be mixed or placed when the soil aggregate or subgrade is frozen, or when the air temperature is below 40 °F (4 °C). Moisture in the soil at the time of cement application shall not exceed the quantity that will permit a uniform and intimate moture of the soil and cement during mixing operations, and shall be within 2% of the optimum moisture content for the soil-cement mixture at start of compaction.

The operation of cement application, mixing, spreading, compacting and finishing shall be continuous and completed within 4 hours from the start of mixing. Any solf-cement mixture that has not been compected and finished shall not be left undisturbed for longer that 30 minutes.

#### 4.2 Central-Plant-Mixed Method

4.2.1 Mixing. Soil-cement shall be central-plant mixed in an approved continuous-flow or batch-type pugmill, or rotary-drum mixer. The plant shall be equipped with metering and feeding devices that will add the soil, cement, and water into the mixer in the specified quantities. If necessary, a screening device shall be used to remove oversized material greater than 2 in (50 mm) from the raw soil feed prior to mixing. Soil and cement shall be mixed sufficiently to prevent cement balls from forming when water is added. The maximum plasticity index of the soil shall be eight.

The mixing time shall be that which is required to secure an intimate, uniform mixture of the soil, cement, and water.

Free access to the plant must be provided to the engineer at all times for inspection of the plant's operation and for sampling the soil-cement mixture and its components. If the actual quantities of the mix vary more than 3% by weight of the specified quantities, the engineer may require such changes in the plant operation as will provide the required accuracy.

4.2.2 Handling. The soil-cement mixture shall be transported from the mixing plant to the paving area in trucks or other equipment having beds that are smooth, clean, and tight. Truck bed covers shall be provided and used at the engineer's discretion to protect the solf-cement, during transport from moisture variations due to weather conditions. Any solf-cement wat excessively by rain, whether during transport or after it has been spread, will be subject to rejection.

The total elapsed time between the addition of water to the mixture and the start of compaction shall be the minimum possible. Haut time shall not exceed 30 minutes, and compaction shall start as soon as possible after spreading. In no case shall the total elapsed time exceed 45 minutes between the addition of water to the soil and cement and the start of compaction.

The contractor shall take all necessary precautions to avoid damage to completed soil-cement by the equipment.

4.2.3 Placing, immediately prior to placement of the soil-cement, the receiving surface shall be in a moist condition. The mixture shall be placed without segregation at a quantity per linear foot (meter) that will produce a uniformly compacted layer conforming to the required grade and cross section. The mixture shall be spread by one or more approved spreading devices. Not more than 60 minutes shall elapse between placement of soil-cement in adjacent lanes at any location except at longitudinal and transverse construction joints.

#### 4.3 Mixed-in-Place Method

- 4.3.1 Preparation. The surface of the soil to be processed into soil-cement shall be at an elevation so that, when mixed with cement and water and recompacted to the required density, the final elevation will be as shown in the plans or as directed by the engineer. The material in place and surface conditions shall be approved by the engineer before the next phase of construction is begun.
- 4.3.2 Scarifying. Before cernent is applied, the soil to be processed may be scarified to the full depth of mixing. Scarification and prepulverization are required for the following conditions:
- (1) For cohesive soils with a plasticity index greater than 20, the soil shall be damp at the time of scarifying to reduce dust and aid in pulvertication.
- (2) For full depth recycling of flexible pavements where the bituminous surface is incorporated into the mixture, the pulverization to final specified gradation, as noted in Section 4.3.4, shall be accomplished prior to cement application.
- (3) For slurry application of cement, initial scarification shall be done to provide a method to uniformly distribute the slurry over the soil without excessive runoff or ponding.
- 4.3.3 Application of Cement. The specified quantity of cement shall be applied uniformly in a manner that minimizes dust and is satisfactory to the engineer. If cement is applied as a stury, the time from first contact of cement with water to application on the soil shall not exceed 60 minutes. The time from sturry placement on the soil to start of mixing shall not exceed 30 minutes.
- 4.3.4 Mixing. Mixing shall begin as soon as possible after the cement

2

has been spread and shalf continue until a uniform mixture is produced. The mixed material shall meet the following gradation conditions:

(1) For soils, 100% of the soil-cement mixture shall pass a 1-in. (25-mm) sieve and a minimum of 90% shall pass a No. 4 (4.75-mm) sieve, exclusive of any gravel or stone. Gravel or stone shall be no more than 2-in. (50-mm) nominal maximum size.

(2) For full-depth recycling, the final mixture (bituminous surface, granular base, and subgrade soil) shall be pulverized such that 95% passes the 2-in, (50-mm) sieve and at least 55% passes the No. 4 (4.75-mm) sieve. No more than 50% of the final mixed material shall be made of the existing bituminous material unless approved by the engineer and included in a mixture design. Additional material may be added to the top or from the subgrade to improve the mixture gradation, as long as this material was linctuded in the mixture design.

The final pulverization test shall be made at the conclusion of mixing operations. Mixing shall be continued until the product is uniform in color, meets gradation requirements, and is at the required moisture content throughout. The entire operation of cement spreading, water application, and mixing shall result in a uniform soil, cement, and water mixture for the full design depth and width.

4.4 Compaction. Soft-cement shall be uniformly compacted to a minimum of 98% of maximum density based on a moving average of five consecutive tests with no individual test below 96%. Field density of compacted soil-cement can be determined by the 1) nuclear method in the direct transmission mode (ASTM D 2922, AASHTO T 238); 2) sand cone method (ASTM D 1556, AASHTO T 191); or rubber balloon method (ASTM D 2167 or AASHTO T 205). Optimum moisture and maximum density shall be determined prior to start of construction and also in the field during construction by a moisture density test (ASTM D 558 or AASHTO T 134).

At the start of compaction whether central-plant mixed or mixed-inplace, the moisture content shall be within 2% of the specified optimum moisture. No section shall be left undisturbed for longer than 30 minutes during compaction operations. All compaction operations shall be completed within 2 hours from the start of mixing.

4.5 Finishing. As compection nears completion, the surface of the soil-cement shall be shaped to the specified lines, grades, and cross sections. If necessary or as required by the engineer, the surface shall be lightly scarified or broom-dragged to remove imprints left by equipment or to prevent compaction planes. Compaction shall then be continued until uniform and adequate density is obtained. During the finishing process the surface shall be kept moist by means of fogtype sprayers. Compaction and finishing shall be done in such a manner as to produce dense surface free of compaction planes, cracks, ridges, or loose material. All finishing operations shall be completed within 4 hours from start of mixing.

4.6 Curing. Finished portions of soil-cement that are traveled on by equipment used in constructing an adjoining section shall be protected in such a manner as to prevent equipment from marring or damaging completed work. After completion of final finishing, the surface shall be cured by application of a bituminous or other approved sealing membrane, or by being kept continuously most for a period of 7 days with a fog-type water spray that will not erode the surface of the soil-cement, if curing material is used, it shall be applied as soon as possible, but not later than 24 hours after completing finishing operations. The surface shall be kept continuously moist prior to application of curing material,

For bituminous curing material, the soil-cement surface shall be dense, free of all loose and extraneous materials, and shall contain sufficient moisture to prevent excessive penetration of the bituminous material. The bituminous material shall be uniformly applied to the surface of the completed soil-cement. The exact rate and temperature of application for complete coverage, without undue runoff, shall be specified by the engineer.

Should it be necessary for construction equipment or other traffic to use the bituminous-covered surface before the bituminous material has dried sufficiently to prevent pickup, sufficient sand bictier cover shall be applied before such use.

Sufficient protection from freezing shall be given the soil-cement for at least 7 days after its construction or as approved by the engineer.

4.7 Construction Joints. At the end of each day's construction a straight transverse construction Joint shall be formed by cutting back into the completed work to form a true vertical face.

Soil-cement for large, wide areas shall be built in a series of parallel lanes of convenient length and width meeting approval of the engineer. Straight longitudinal joints shall be formed at the end of each day's construction by cutting back into completed work to form a true vortical face free of loose or shared material.

Special attention shall be given to joint construction to ensure a vertical Joint, adequately mixed material, and compaction up against the joint. On mixed-in-place construction using transverse shall mixers, a longitudinal joint constructed adjacent to partially hardened sollcement built the preceding day may be formed by cutting back into the previously constructed area during mixing operations. Guide stakes shall be set for cement spreading and mixing.

4.8 Traffic. Completed portions of soil-cement can be opened immediately to low-speed local traffic and to construction equipment provided the curing material or moist curing operations are not impaired, and provided the soil-cement is sufficiently stable to withstand marring or permanent deformation. The section can be opened up to all traffic after the soil-cement has received a curing compound or subsequent surface, and is sufficiently stable to withstand marring or permanent deformation. It continuous moist curing is employed in lieu of a curing compound, the soil-cement can be opened to all traffic after the 7-day moist curing period, provided the soil-cement has hardened sufficiently to prevent marring or permanent deformation.

4.9 Surfacing. Subsequent pavement layers (asphalt, chip-seal, or concrete) can be placed any time after finishing, as long as the soil-cement is sufficiently stable to support the required construction equipment without marring or permanent distortion of the surface.

#### PORTLAND CEMENT ASSOCIATION

4.16 Waintenance. The contractor shall maintain the soil-cement in good condition until all work is completed and accepted. Such maintenance shall be done by the contractor at his own expense.

Maintenance shall include immediate repairs of any defects that may occur. If it is necessary to replace any soil-cement, the replacement shall be for the full depth, with vertical cuts, using either soil-cement or concrete. No skin patches will be permitted.

#### 5. INSPECTION AND TESTING

5.1 Description. The engineer, with the assistance and cooperation of the contractor, shall make such inspections and tests as deemed necessary to ensure the conformance of the work to the contract documents. These inspections and tests may include, but shall not be limited to, (1) the taking of test samples of the soil-cement and its individual components at all stages of processing and after completion and (2) the close observation of the operation of all equipment used on the work. Only those materials, machines, and methods meeting the requirements of the contract documents shall be approved by the engineer.

All testing of soil-cement or its individual components, unless otherwise provided specifically in the contract documents, shall be in accordance with the tatest applicable ASTM, AASHTO, or CSA specifications in effect as of the date of advertisement for bids on the project.

#### 8. MEASUREMENT AND PAYMENT

6.1 Measurement. This work will be measured (1) in square yards (square meters) of completed and accepted soll-cement base course as determined by the specified lines, grades, and cross sections shown on the plans and (2) in toris (tonnes) or cwt of cement incorporated into the soil-cement base course in accordance with the instructions of the engineer.

6.2 Payment. This work will be paid for at the contract unit price per square yard (square meter) of soil-cement base course and at the contract unit price per ton (tonne) or cwt of cement furnished, multiplied by the quantities obtained in accordance with Section 6.1. Such payment shall constitute full reimbursement for all work necessary to complete the soil-cement, trichuding watering, curing, inspection and testing assistance, and all other incidental operations.

KEYWORDS: compacting, curing, density, finishes, Inspection, joints, maintenance, measurement, soils, soil-cement, specifications, subgrades.

ABSTRACT: Specifies materials to use and construction methods needed to produce soil-cement base courses. A résumé of preparation; pulverization; cement application, mixing and spreading (mixed-in-place and central-plant-mixed methods); comapction; finishing; curing; jointing; maintenance; measurements; and basis of payment for a soil-cement base course.

REFERENCE: Suggested Specifications for Soil-Cement Base Course (Soil-Cement, Cement-Treated Base, Cement-Treated-Aggregate Base), ISOO8.11, Portland Cement Association. 2001.

CAUTIONE Avoid prolonged contact between unhardened (wet) cement or cement-treated mixtures and skin surfaces. To prevent such contact, it is advisable to wear protective clothing. Skin areas that have been exposed to wet cement or cement-treated mixtures, either directly or indirectly or through salurated clothing, should be thoroughly washed with water.

This publication is based on the facts, tests, and authorities wated herein. It is fritanded for the use of professional personnal competent to evaluate the significance and limitations of the reported findings and who will accept responsibility for the application of the material it contains. The Portland Cement Association disclaims any and all responsibility for application of the stated principles or for the accuracy of any of the sources other than work performed or information developed by the Association.



5420 Old Orchard Road Skokle, Iltinois 60077-1083 847.966.6200 www.portcement.org

An organization of cement companies to improve and extend the uses of portland cement and concrete through market development, engineering, research, education, and public affairs work.

IS008.12

## AMENDMENT # ONE TO ORIGINAL CONTRACT DATED FEBRUARY 27, 2006

AMENDMENT made this 8<sup>th</sup> day of November, 2006, between **Douglas Asphalt**, a **Georgia corporation**, hereinafter called "DAC", and **Board of County Commissioners** of Nassau County, Florida, a political subdivision of the State of Florida, hereinafter "Owner".

WHEREAS, DAC and Owner entered into an agreement on February 27, 2006 (the "Agreement"), for the performance of certain highway construction work, as defined in that Agreement; and

WHEREAS, DAC partially performed work in accordance with said Agreement, covering approximately 19 miles of roadway from the Duval County/Nassau County line on County Road 121 North; and

WHEREAS, a dispute has arisen between the parties regarding the performance of that work; and

WHEREAS, the parties executed an agreement on October 30, 2006, which was intended to be an amendment, but was inadvertently entitled a new "Contract", and, therefore, the parties hereby clarify that by rescinding that "Contract" and executing this Amendment; and

WHEREAS, based upon this amendment, the parties desire to otherwise resolve and settle their differences by executing this amendment to the original Agreement dated February 27, 2006, and agree to payments to be made to DAC for past work.

NOW, THEREFORE, in consideration of their mutual promises made herein, and for other good and valuable consideration, receipt of which is hereby acknowledged by each party, the parties, intending to be legally bound, hereby agree to the amendment as follows:

- 1. Recitals. The parties agree that the foregoing recitals are true and correct and incorporated herein by this reference.
- 2. <u>Payment for Prior Work.</u> Within two (2) days of approval of this <del>agreement</del> amendment, Owner will issue a check in the amount of \$937,036.66, which check shall be made payable to DAC and to The Miller Group, representing invoices for applications numbered 5 and 6 in connection with the Agreement.
- 3. <u>Additional Work.</u> DAC will perform additional repair, milling, and paving work on approximately 19.2 miles of County Road 121 in Nassau County, Florida, in accordance with the quotation dated 10/13/2006 attached hereto and marked as Exhibit A. DAC will commence work on the job no later than five (5) weeks from the date of this Agreement,

and shall complete work within 120 working days of commencement. DAC agrees to use a crew or crews on this work consisting principally of its most experienced and competent employees. The work described in Exhibit A shall be referred to as the "Repair Work". The parties will hold a pre-construction meeting after execution of this agreement and at that time the County, after approval by the Board of County Commissioners, shall determine the scope of work and the portions of the Florida Department of Transportation Red or Green Book, which shall govern the conduct of the job, and any other technical requirements. The exact specification shall be set forth as an exhibit to be attached to this contract as Exhibit "C", and there shall be no increase in cost or expense to the County, based upon the scope set forth in Exhibit "C".

4. Contract Price and Manner of Payment for Repair Work. The total cost for the Repair Work will be \$2,685,016.73. DAC will be paid \$1,342,508.37 for performance of the work but will be obligated to perform all the work described in Exhibit A.

#### Payments to DAC will be made as follows:

- a. The first invoice will be submitted to the Owner on the first (1st) or fifteenth (15th) of the month after commencement of work by DAC. Copies of invoices for payment shall be simultaneously sent to the Contract Manager for review and recommendation for payment or nonpayment. The Contract Manager shall submit the recommendation to the engineering services director, who shall review the invoice and make a recommendation to the county administrator, who shall review said invoice and make a recommendation and forward same to the Clerk of the Court for review and submission to the Board of County Commissioners. If there is a dispute as to a payment, and if it is not addressed by the contractor and the county's representative, the dispute resolution shall be utilized.
- b. The first invoice will be submitted to Owner on the first (1st) or fifteenth (15th) of the month after commencement of work by DAC. Upon approval of the initial invoice as described in a. above, Owner shall pay 100% of the amount of said invoice to DAC, within the time required by law.
- c. Subsequent invoices for payment shall be made on a twice monthly basis, as of the first (1st) and fifteenth (15th) of each month subsequent to the initial invoice. Upon approval of all invoices subsequent to the initial invoice, as described in a. above, Owner shall pay to DAC an amount representing 50% of the invoice submitted. DAC shall leave un-invoiced an amount of work representing 50% of the initial invoice, at the conclusion of the job and, upon submission of said invoice, owner shall have no obligation

to pay, with the intent being that out of the total contract price of \$2,685,016.73, DAC be paid \$1,342,508.37. Owner shall not be obligated to pay an amount greater than 50% of the contract price to DAC.

- 5. Second Lift to Achieve Rideability. The parties agree that in order to achieve rideability standards set forth in the Florida Department of Transportation ("FDOT") Manual, a second lift of asphalt be placed upon the roadway. DAC agrees to perform the work required by the second lift in accordance with the quotation attached hereto as Exhibit B. The contract price for performance of this work shall be \$1,892,211.12 and Owner will be responsible for payment of the full amount of this contract price.
- 6. Payment for Second Lift of Asphalt. Payment for the work described in paragraph 5 above shall follow the procedure described in paragraph 4a. above, except that Owner shall pay to DAC 100% of the amount of each such invoice, upon approval of same. Invoices for the "Repair Work" shall be designated as such and paid in accordance with paragraph 4 above. Invoices for the "Second Lift" work shall be designated as such and paid in accordance with this paragraph.
- 7. Quality Control. DAC agrees that the work described under this Contract Amendment will be subject to a DAC-imposed quality control program. DAC will designate a "quality control officer" who will be responsible for insuring the quality of the materials used on this entire job. DAC shall submit quality control reports to Owner on a two-week basis, covering the prior two (2) weeks of performance of this Contract, and the Quality Control Officer will be available for consultation with officials of the Owner at all times.
- 8. Payment of Retainage. Upon completion of the work described in this Contract Amendment (in the opinion of the owner and its third party consultant), Owner shall pay to DAC the sum (approximately \$373,207.14 presently), which sum has been retained out of payments previously made to DAC in connection with prior performance of the February 27, 2006, Agreement. Such payment will be within the time required by law.
- 9. <u>Performance Remaining Under 2/27/06 Agreement.</u> DAC and Owner agree that there are aspects of the Agreement remaining to be performed, including, but not limited to, sodding and guardrail work. DAC and Owner remain obligated, under the terms of the Agreement, to performance of and payment for any such aspects of the Agreement.

With regard to the remaining reciprocal obligations of the parties to each other under the Agreement, they agree that this <u>Amendment One to the</u> Agreement <u>dated February 27, 2006</u>, is substituted and the obligations of the parties to each other are limited to the obligations contained in this Agreement.

10. <u>Miscellaneous</u>. This <del>Agreement</del> amendment is made in the State of Florida and should be governed by Florida law. This is the entire agreement between the parties and may not be modified or amended except by a written document signed by the party

against whom enforcement is sought. This Agreement may be signed in more than one counterpart, in which case each counterpart shall constitute an original of this Agreement.

Headings are for convenience only and are not intended to expand or restrict the scope or substance of the provisions of this Agreement. Wherever used, the singular shall include the plural, the plural shall include the singular, and pronouns shall be read as masculine, feminine, or neuter as the context requires. The parties agree to submit any dispute regarding the terms of this Agreement to mediation and, if unsuccessful, to arbitration. Nassau County, Florida, will be the proper venue for any litigation or arbitration involving this Agreement. This Agreement may not be assigned or delegated by either party without the prior written consent of the other party.

In witness whereof, the parties have signed this Agreement as of the day and year first above written.

OWNER:

BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA

THOMAS D. BRANAN, JŔ.

Its: Chairman

ATTEST:

JOHN A. CRAWFORD

Its. Ex-Officio Clerk

Approved as to form by the

Nassau County Attorney

MICHAELS. MULYIN, Esquire

CONTRACTOR:

DOUGLAS ASPHALI COMPANY

RAYMOND R. GRODE

Its: Division Manager



## Douglas Asphalt Company

Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

To: NASSAU COUNTY B.O.C.C.

96430 NASSAU PLACE

YULEE, FL 32097

Project:

19.2 MILES REPAIR - MILL & PAVE

ALTERATE QUOTATION - PAGE 1

Location:

Attn: MIKE MULLIN / B.O.C.C.

CR 121, NASSAU COUNTY, FL

QUOTATION

Date:

10/13/2006

Item#	Description of Work	Quantity	Units	Rate	Amount
1	MOBILIZATION / TESTING	1.0	L.S.	\$ 70,150.00	\$ 70,150.00
2	MAINTENANCE OF TRAFFIC	1.0	L.S.	\$ 113,346.88	\$ 113,346.88
3	MILLING 2" AVE. DEPTH	269,912.0	S.Y.	\$ 2.43	\$ 655,886.16
4	PRIME COAT W/ SAND	88,894.0	GALS	\$ 1.50	\$ 133,341.00
5	ASPH 1 1/2" SP 12.5 W/TACK	23,617.0	TONS	\$ 71.78	\$ 1,695,228.26
6	STRIPING TEMPORARY ONLY	100,379.0	L.F	\$ .0.17	\$ 17,064.43

NOTES: \* All milling /asphalt work to parrallel the Test Strip Section performed at SR 2.

- \* Douglas Asphalt Company to have ownership of milled materials; a portion of the milled material will be negotiated for use by Nassau Co. Road Dept.
- \* D.A.C.'s Work and schedule not subject to damages for delays to the project.
- \* Striping to be performed with LATEX PAINT (no thermoplastic paint).

TOTAL AMOUNT =	\$ 2,685,016.73
50% AGREEMENT CONTRIBUTION =	<b>\$ 1</b> ,342,508.37

#### INCLUDES:

- 1. 2 Asphalt Mobilization(s), each additional at \$1,500.00
  - 2 Milling Mobilization(s), each additional at \$750.00

#### **EXCLUSIONS:**

- 1. Performance and payment bonds (Add 1%).
- 2. Provision of Traffic Officers.

Sincerely,

May Grode, Division Manager

Douglas Asphalt Company

ACCEPTED:

NASSAU COUNTY B.O.C.C.

RY.

Name/Title DATE

**EXHIBIT** 



## Douglas Asphalt Company

Joel Spivey, President Kyle Spivey, Vice President & Operations Manager

To: NASSAU COUNTY B.O.C.C.

96430 NASSAU PLACE

YULEE, FL 32097

Project:

19.2 MILES REPAIR - MILL & PAVE

ALTERATE QUOTATION - PAGE 2

Location:

Attn: MIKE MULLIN / B.O.C.C.

CR 121, NASSAU COUNTY, FL

Date:

10/13/2006

7000±00000000000				(B)************************************			*********	
J(sem #	Description of Work					Rate		Amount
	1 1/2" SURFAC	E C	OURSE - SE	COND	LIFT			
1	MOBILIZATION / TESTING		1.0	L.S.	\$	61,410.00	\$	61,410.00
2	MAINTENANCE OF TRAFFIC		. 1.0	L.S.	\$	97,056.25	\$	97,056.25
3	ASPH 1 1/2" SP 12.5 W/TACK		23,617.0	TONS	\$	70.89	\$	1,674,209.13
1	CTDIDING W/DDMs		1.0	T. S	\$	59 535 79	¢	50 535 70

NOTES: \* D.A.C.'s Work and schedule not subject to damages for delays to the project.

- \* Striping to be performed with LATEX PAINT (no thermoplastic paint); RPMs placed only on final surface.
- \* Guardrail (\$212,546.94) and Sodding (\$106,413.00) to be removed from work items (per Nassau County).
- \* 1 1/2" Surface Course Second Lift is not subject to 50% contibution to county.

TOTAL AMOUNT =

\$ 1,892,211,17

#### INCLUDES:

1. 2 Asphalt Mobilization(s), each additional at \$1,500.00

(O)11(O)17(A/T)(O)11(O)

2 Milling Mobilization(s), each additional at \$750.00

#### EXCLUSIONS:

- 1. Performance and payment bonds (Add 1%).
- 2. Provision of Traffic Officers.

Sincerely,

Ray Grode, Division Manager

Douglas Asphalt Company

ACCEPTED:

NASSAU COUNTY B.O.C.C.

BY:

Name/Title

**EXHIBIT** 

B

MR. MIKE MULLIN, P. A. Nassau County Capital Projects 96161 Nassau Place Yulee, FL 32097

10/27/2006

Re: Authorization for Contract Signature CR 121 19.2 Mile Repair Work

Dear Mr. Mullin:

On behalf of Douglas Asphalt Company, I would like authorize Raymond Grode, Division Manager, Florida Operations, to sign the contract agreement between Nassau County and Douglas Asphalt Company concerning the remedial work contract for the project captioned above.

Thank you (and Nassau Co. Staff) for all of your efforts to expedite this agreement and the draw remittance subsequent to it's approval.

Sincerely

President DAC

## **Payment Bond**

Conforms with the American Institute of Architects, AIA Document A312.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address): DOUGLAS ASPHALT COMPANY 10010 NORTH MAIN STREET JACKSONVILLE, FLORIDA 32218 SURETY (Name and Principal Place of Business): ARCH INSURANCE COMPANY 3 PARKWAY, SUITE 1500 PHILADELPHIA, PA 19102

OWNER (Name and Address):

BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA - P. O. BOX 1010 FERNANDINA BEACH, FLORIDA 32035-1010

CONSTRUCTION CONTRACT

Date:

Amount: SIX MILLION EIGHT HUNDRED NINETY SEVEN THOUSAND NINE HUNDRED FIFTY FOUR AND 56/100 DOLLARS (\$6,897,954.56)

Description (Name and Location): Full Depth Reconstruction of CR 121 from US 1 to the Duval County Line, Nassau County, Florida (35 miles of Roadway, Widening of existing Roadway to a 25 foot wide base typical section, etc)

BOND

Date( Not earlier than Construction Contract Date):

Amount: SIX MILLION EIGHT HUNDRED NINETY SEVEN THOUSAND NINE HUNDRED FIFTY FOUR AND 56/100 DOLLARS (\$6,897,954.56)

Modifications to this Bond:

CONTRACTOR AS PRINCIPAL

Company: DOUGLAS ASPHALT COMPANY

(Corporate Seal)

Signature:

Name and Title: Kyl Solvey, Vice (Any additional signatures appear on page 2.)

(FOR INFORMATION ONLY Name, Address and

Telephone) AGENT or BROKER: H & H INSURANCE SERVICES, INC. - 3160 CAMPUS DRIVE, SUITE 100 NORCROSS, GEORGIA 30071 (770) 409-0014

- 1 The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.
- 2 With respect to the Owner, this obligation shall be null and void if the Contractor:
  - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimants, and
  - **2.2** Defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity whose claim, demand, lien or suit is for the payment for labor, materials or equipment furnished for use in the performance of the Construction Contract, provided the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 12) of any claims, demands, liens or suits and tendered defense of such claims, demands, liens or suits to the Contractor and the Surety, and provided there is no Owner Default.

None

See Page 2

SURETY

Company: ARCH INSURANCE COMPANY (Corporate Seal)

Name and Title: JERRY BOUTWELL

ATTORNEY-IN-FACT

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

- 3 With respect to Claimants, this obligation shall be null and void if the Contractor promptly makes payment, directly or indirectly, for all sums due.
- 4 The Surety shall have no obligation to Claimants under this Bond until:
  - **4.1** Claimants who are employed by or have a direct contract with the Contractor have given notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner, stating that a claim is being made under this Bond and with substantial accuracy, the amount of the claim.
  - **4.2** Claimants who do not have a direct contract with the Contractor:
    - .1 Have furnished written notice to the Contractor and sent a copy, or notice thereof, to the Owner, within 90 days after having last performed labor or last furnished materials or equipment included in the claim stating, with substantial accuracy, the amount of the claim and the name of the party to whom the materials were furnished or supplied or for whom the labor was done or performed; and



- .2 Have either received a rejection in whole or in part from the Contractor, or not received within 30 days of furnishing the above notice any communication from the Contractor by which the Contractor has indicated the claim will be paid directly or indirectly; and
- .3 Not having been paid within the above 30 days, have sent a written notice to the Surety (at the address described in Paragraph 12) and sent a copy, or notice thereof, to the Owner stating that a claim is being made under this Bond and enclosing a copy of the previous written notice furnished to the Contractor.
- 5 If a notice required by paragraph 4 is given by Owner to the Contractor or to the Surety, that is sufficient compliance.
- **6** When the Claimant has satisfied the conditions of Paragraph 4, the Surety shall promptly and at the Surety's expense take the following actions:
  - **6.1** Send an answer to the Claimant, with a copy to the Owner, within 45 days after receipt of the claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed.
  - **6.2** Pay or arrange for payment of any undisputed amounts.
- 7 The Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
- 8 Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any Construction Performance Bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and the Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
- 9 The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for payment of any costs or expenses of any Claimant under this Bond, and shall have under this bond no obligations to make payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
- 10 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- 11 No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the location in which

the work or part of the work is located or after the expiration of one yea from the date (l) on which the Claimant gave the notice required by Subparagraph 4. 1 or Clause 4.2.3, or (2) on which the last labor or servic was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (l) or (2) first occurs. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

- 12 Notice to the Surety, the Owner or the Contractor shall be mailed o delivered to the address shown on the signature page. Actual receipt c notice by Surety, the Owner or the Contractor, however accomplished, shall be sufficient compliance as of the date received at the address shown on the signature page.
- 13 When this Bond has been furnished to comply with a statutory or othe legal requirement in the location where the construction was to b performed, any provision in this Bond conflicting with said statutory c legal requirement shall be deemed deleted herefrom and provision conforming to such statutory or other legal requirement shall be deeme incorporated herein. The intent is that this Bond shall be construed as statutory bond and not as a common law bond.
- 14 Upon request by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.

#### 15 DEFINITIONS

- 15.1 Claimant: An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor t furnish labor, materials or equipment for use in the performance of the Contract. The intent of this Bond shall be to include without limitation in terms "labor, materials or equipment" that part of wate gas, power, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural an engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials or equipment were furnished.
- **15.2** Construction Contract: The agreement between the Owne and the Contractor identified on the signature page, including al Contract Documents and changes thereto.
- **15.3** Owner Default: Failure of the Owner, which has neither beer remedied nor waived, to pay the Contractor as required by th Construction Contract or to perform and complete or comply with th other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional signature	es of added parties, oth	er than those appearing on the cove	er page.)
CONTRACTOR AS PRINCIPAL		SURETY	
Company:	(Corporate Seal)	Company:	(Corporate Sea
Signature:		Signature:	
Name and Title:		Name and Title:	
Address:		Address:	

In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this <u>1st</u> day of <u>February</u> , 2006 .
Arch Insurance Company  Attested and Certified
Allested and Octuned
Martin J. Nifsen, Secretary  CORPORATE SEAL 1971  MISSOUTI  Edward M. Titus, Vice President
STATE OF NEW YORK SS
COUNTY OF NEW YORK SS
I Peter J. Calleo, a Notary Public, do hereby certify that Edward M. Titus and Martin J. Nilsen personally known to me to be the same persons whose names are respectively as Vice President and Secretary of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument, appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.
Notary Public, State of New York Peter J. Calleo, Notary Public No. 02CA6109336  My commission over 5, 03, 2000
CERTIFICATION Qualified in New York County Commission Expires May 3, 2008
I, Martin J. Nilsen, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect since the date thereof and is in full force and effect on the date of this certificate; and I do further certify that the said Edward M. Titus, who executed the Power of Attorney as Vice President, was on the date of execution of the attached Power of Attorney the duly elected Vice President of the Arch Insurance Company.
IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on thisday of, 20
This Power of Attorney limits the acts of those named therein to the bonds and undertakings specifically named therein
and they have no authority to bind the Company except in the manner and to the extent herein stated.
PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:
Arch Surety 3 Parkway, Suite 1500 Philadelphia, PA 19102
wance of

#### AIA Document A312

## **Performance Bond**

BOND NO. SU1016646

Conforms with the American Institute of Architects, AIA Document A312.

Any singular reference to Contractor, Surety, Owner or other party shall be considered plural where applicable.

CONTRACTOR (Name and Address): DOUGLAS ASPHALT COMPANY 10010 NORTH MAIN STREET JACKSONVILLE, FLORIDA 32218

CONSTRUCTION CONTRACT

SURETY (Name and Principal Place of Business): ARCH INSURANCE COMPANY 3 PARKWAY, SUITE 1500 PHILADELPHIA, PA 19102

OWNER (Name and Address): BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA - P. O. BOX 1010 FERNANDINA BEACH, FLORIDA 32035-1010

Date:

Amount: SIX MILLION EIGHT HUNDRED NINETY SEVEN THOUSAND NINE HUNDRED FIFTY FOUR AND 56/100 DOLLARS (\$6,897,954,56)

Description (Name and Location): Full Depth Reconstruction of CR 121 from US 1 to the Duval County Line, Nassau County, Florida (35 miles of Roadway, Widening of existing Roadway to a 25 foot wide base typical section, etc)

BOND

Date (Not earlier than Construction Contract Date):

Amount: SIX MILLION EIGHT HUNDRED NINETY SEVEN THOUSAND NINE HUNDRED FIFTY FOUR AND 56/100 DOLLARS (\$6,897,954.56)

Modifications to this Bond:

CONTRACTOR AS PRINCIPAL

Company: DOUGLAS ASPHALT COMPANY

(Corporate Seal)

None

Company: ARCH INSURANCE COMPANY (Corporate Seal)

Signature:

Name and Title

(Any additional signatures appear on page 2.)

(FOR INFORMATION ONLY - Name, Address and Telephone) AGENT or BROKER: H & H INSURANCE SERVICES, INC. - 3160 CAMPUS DRIVE, SUITE 100 NORCROSS, GEORGIA 30071 (770) 409-0014

- The Contractor and the Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.
- If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except to participate in conferences as provided in Subparagraph 3.1.
- If there is no Owner Default, the Surety's obligation under this Bond shall arise after:
  - 3.1 The Owner has notified the Contractor and the Surety at its address described in Paragraph 10 below that the Owner is considering declaring a Contractor Default and has requested and attempted to arrange a conference with the Contractor and the Surety to be held not later than fifteen days after receipt of such notice to discuss methods of performing the Construction Contract. If the Owner, the Contractor and the Surety agree, the Contractor shall be allowed a reasonable time to

Signature Name and Title: JERRY BOUTWELL

ATTORNEY-IN-FACT

OWNER'S REPRESENTATIVE (Architect, Engineer or other party):

perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default; and

- 3.2 The Owner has declared a Contractor Default and formally terminated the Contractor's right to complete the contract. Such Contractor Default shall not be declared earlier than twenty days after the Contractor and the Surety have received notice as provided in Subparagraph 3.1; and
- 3.3 The Owner has agreed to pay the Balance of the Contract Price to the Surety in accordance with the terms of the Construction Contract or to a contractor selected to perform the Construction Contract in accordance with the terms of the contract with the Owner.
- When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

orisinal in

See Page 2

- **4.1** Arrange for the Contractor, with consent of the Owner, to perform and complete the Construction Contract; or
- **4.2** Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or
- **4.3** Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and the contractor selected with the Owner's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 6 in excess of the Balance of the Contract Price incurred by the Owner resulting from the Contractor's default; or
- 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances:
  - After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, tender payment therefor to the Owner; or
  - .2 Deny liability in whole or in part and notify the Owner citing reasons therefor.
- 5 If the Surety does not proceed as provided in Paragraph 4 with reasonable promptness, the Surety shall be deemed to be in default on this Bond fifteen days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Subparagraph 4.4, and the Owner refuses the payment tendered or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.
- After the Owner has terminated the Contractor's right to complete the Construction Contract, and if the Surety elects to act under Subparagraph 4.1, 4.2, or 4.3 above, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. To the limit of the amount of this Bond, but subject to commitment by the Owner of the Balance of the Contract Price to mitigation of costs and damages on the Construction Contract, the Surety is obligated without duplication for:
  - **6.1** The responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;
  - **6.2** Additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 4; and
  - **6.3** Liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

- 7 The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bonc to any person or entity other than the Owner or its heirs, executors administrators or successors.
- 8 The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders and other obligations.
- Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after Contractor Default or within two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this Paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.
- 10 Notice to the Surety, the Owner or the Contractor shall be mailed of delivered to the address shown on the signature page.
- 11 When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

#### 12 DEFINITIONS

- 12.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after al proper adjustments have been made, including allowance to the Contractor of any amounts received or to be received by the Owner ir settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.
- **12.2** Construction Contract: The agreement between the Owner and the Contractor identified on the signature page, including all Contrac Documents and changes thereto.
- 12.3 Contractor Default: Failure of the Contractor, which has neithe been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract.
- 12.4 Owner Default: Failure of the Owner, which has neither beer remedied nor waived, to pay the Contractor as required by the Construction Contract or to perform and complete or comply with the other terms thereof.

MODIFICATIONS TO THIS BOND ARE AS FOLLOWS:

(Space is provided below for additional sig CONTRACTOR AS PRINCIPAL	natures of added parties, oth	er than those appearing on the cover SURETY	page.)
Company:	(Corporate Seal)	Company:	(Corporate Seal)
Signature:		Signature:	
Name and Title:		Name and Title:	
Address:		Address:	

### **CHANGE RIDER**

* , a		
Rider to be attached to and a part of Bond Number	er SU 1016646 , dated the 27th	day of
February , 2006 , executed by Are	ch Insurance Company	
(the "Surety") on behalf of Douglas Asphalt Company in favor of Nassau County Board of Commissioners  The Principal and the Surety hereby consent to c 1). Increase the penal sum of the bond to \$6,966,790. 2). Revise the original contract dated February 27, 20  This change is effective 8th	.88; formerly \$6,897,944.56	(the "Principal") (the "Obligee") ember 8, 2006.
The attached bond shall be subject to all of its ter		
Signed, sealed and dated this 8th  WITNESS or ATTEST:  John A. Crawford, Ex-Officio Clerk	Douglas Asphalt Company  (Principal)  By  Name: Kyle Spiley  Title: Vice - President  Arch Insurance Comp  By  Jerry Boutwell, Att	(Seal)
Nassau County Board of Commissioners  Name: Thomas D. Branan. Jr. Title: Chairman  Date:	ligee)	

8/94 Rev.

500

#### POWER OF ATTORNEY

Know All Men By These Presents:

That the Arch Insurance Company, a corporation organized and existing under the laws of the State of Missouri, having its principal office in Kansas City, Missouri (hereinafter referred to as the "Company") does hereby appoint

Leslie A. Paulsen, Christopher B. Wortham, Shirley A. Coleman, Derek Wortham, Jerry Boutwell and Michael A. Jones of Norcross, GA (EACH)

its true and lawful Attomey(s)-in-Fact, to make, execute, seal, and deliver from the date of issuance of this power for and on its behalf as surety, and as its act and deed:

Any and all bonds and undertakings

EXCEPTION: NO AUTHORITY is granted to make, execute, seal and deliver bonds or undertakings that guarantee the payment or collection of any promissory note, check, draft or letter of credit. 14 ...

This authority does not permit the same obligation to be split into two or more bonds in order to bring each such bond within the dollar limit of authority as set forth herein. a halfin in

The Company may revoke this appointment at any time: . . . .

The execution of such bonds and undertakings in pursuance of these presents shall be as binding upon the said Company as fully and amply to all intents and purposes, as if the same had been duly executed and acknowledged by its regularly elected officers at its principal office in Kansas City, Missouri.

2 4 W 16 7 . 11.

1. 13

This Power of Attorney is executed by authority of resolutions adopted by unanimous consent of the Board of Directors of the Company on March 3, 2003, true and accurate copies of which are hereinafter set forth and are hereby certified to by the undersigned Secretary as being in full force and effect TO MENT IN SHARE

"VOTED. That the Chairman of the Board, the President, or any Vice President, or their appointees designated in writing and filed with the Secretary or the Secretary shall have the power and authority to appoint agents and attorneys in fact and to authorize them to execute on behalf of the Company, and attach the seal of the Company thereto, bonds and undertakings, recognizances, contracts of indemnity and other writings, obligatory in the nature thereof, and any such officers of the Company may appoint agents for acceptance of process."

This Power of Attorney is signed, sealed and certified by facsimile under and by authority of the following resolution adopted by the unanimous consent of the Board of Directors of the Company on March 3, 2003;

VOTED. That the signature of the Chairman of the Board, the President, or any, Vice President, or their appointees designated in writing and filed with the Secretary, and the signature of the Secretary, the seal of the Company, and certifications by the Secretary, may be affixed by facsimile on any power of attorney or bond executed pursuant to the resolution adopted by the Board of Directors on March 3, 2003, and any such power so executed, sealed and certified with respect to any bond or undertaking to which it is attached, shall continue to be valid and binding upon the Company.

In Testimony Whereof, the Company has caused this instrument to be signed and its corporate seal to be affixed by their authorized officers, this <u>1st</u> day of <u>February</u> , 2006
Arch Insurance Company Attested and Certified
Controller Service Construction Service Constructio
Must Vert Missouri (1 1 m 1 f)
Martin J. Nilsen, Secretary  Edward M. Titus, Vice President
Weight of those, observed
STATE OF NEW YORK SS
COUNTY OF NEW YORK SS
Peter J. Calleo, a Notary Public, do hereby certify that Edward M. Titus and Martin J. Nilsen personally known to me to be the same persons whose names are respectively as Vice President and Secretary of the Arch Insurance Company, a Corporation organized and existing under the laws of the State of Missouri, subscribed to the foregoing instrument appeared before me this day in person and severally acknowledged that they being thereunto duly authorized signed, sealed with the corporate seal and delivered the said instrument as the free and voluntary act of said corporation and as their own free and voluntary acts for the uses and purposes therein set forth.  PETER J. CALLEG, ESG.  Notary Public, State, of New York, No. 02CA8108336  Out Iffied in New York County  Commission, Expires May 3, 2008.  I, Martin J. Nilsen, Secretary of the Arch Insurance Company, do hereby certify that the attached Power of Attorney dated on behalf of the person(s) as listed above is a true and correct copy and that the same has been in full force and effect on the date of this certificate; and I do further certify that the said Edward M. Titus, who executed the Power of Attorney as Vice President, was on the date of execution of the attached Power of Attorney the delivered Vice President of the Arch Insurance Company.
IN TESTIMONY WHEREOF, I have hereunto subscribed my name and affixed the corporate seal of the Arch Insurance Company on this
Martin J. Nilsen, Secretary
This Power of Attorney limits the acts of those named therein to the bonds and undertakings specifically named therein and they have no authority to bind the Company except in the manner and to the extent herein stated.

PLEASE SEND ALL CLAIM INQUIRIES RELATING TO THIS BOND TO THE FOLLOWING ADDRESS:

Arch Surety 3 Parkway, Suite 1500 Philadelphia, PA 19102





### Florida Department of Transportation

CHARLIE CRIST GOVERNOR 1109 South Marion Avenue – MS 2014 Lake City, Florida 32025-5874

January 4, 2007

STEPHANIE KOPELOUSOS INTERIM SECRETARY

The Honorable Tom Brannan, Jr., Chairman Nassau County Board of County Commissioners Post Office Box 456 Fernandina Beach, FL 32035

Subject:

**SUPPLEMENTAL AGREEMENT NO: 1** 

Small County Outreach Program
Widening and Resurfacing of CR-121

From the Duval County Line to CR 108 (Carroll's Corner)

Financial Project ID: 418643-6-58-01

Dear Chairman Brannan:

Enclosed for your files is a fully executed copy of the Supplemental Agreement for CR 121 from the Duval County Line to CR 108 (Carroll's Comer) in Nassau County, Florida. This agreement is to change the limits of project from CR 121 from the Duval County Line to SR 15/US 1/US 301 to the new limits of CR 121 from Duval County Line to CR 108 (Carroll's Corner) which is a distance of approximately 19.2 miles due to the unprecedented increase in material and fuel costs as well as construction problems. There will be no change in money only a change in limits.

Your assistance in securing execution is appreciated. Should you have questions or need additional information, I can be reached at 1-800-749-2967, Extension 7745.

Sincerely,

Katrina Sadler

**Planning Programs Administrator** 

KS:ke Enclosures

CC:

Mr. Michael Mahaney, County Administrator

Ms. Leena Patil, Work Program Administrator

Ms. Linda Green, Financial Services Administrator

file

02/01

SUPPLEMENT NO.	STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION SUPPLEMENTAL AGREEMENT	FIN NO. 418643-6-58-01
1	SST TEMENTAL ASKELINETT	CONTRACT NO. ANZ55

#### PROJECT DESCRIPTION

The <u>Florida Department of Transportation</u> desires to supplement the Agreement entered into and executed on <u>May 13, 2005</u> as identified above. All provisions in the basic Agreement remain in effect except as expressly modified by this Supplement. The changes to the Agreement are described as follows:

Name: CR 121		Length: Approx. 35 miles	
Termini:	Duval County Line to SR 15/US 1		

Description of Work: Widen and Resurface

Reason for Supplement: Change limits of the project from the original agreement of CR 121 from the Duval County Line to SR 15/US1/US 301 to CR 121 from Duval County Line to CR 108 (Carroll's Corner) a distance of approximately 19.2 miles due to the unprecedented increase in material and fuel costs as well as construction problems. (No change in money – change limits only)

These funds are contingent upon Federal Authorization and the adoption of this project phase in the Department of Transportations Work Program. Any work begun prior to the execution of this agreement will not be eligible for reimbursement of federal funds.

		FUNDING		
TYPE OF WORK By Fiscal Year		(1) TOTAL PROJECT FUNDS	(2) AGENCY FUNDS	(3) STATE & FEDERAL FUNDS
P.E.	2004-2005 2005-2006 2006-2007 Total PE Cost			
Right-of-Way	2004-2005 2005-2006 2006-2007 Total Right of Way Cost			
Construction	2004-2005 2005-2006 2006-2007 2007-2008 Total Contract Costs	\$6,027,150.00 \$6,027,150.00		\$6,027,150.00
Construction	Engineering and Inspection 2004-2005 2005-2006 2006-2007 Total Construction Engineering Total Construction Cost			
ESTIMATED	TOTAL COST OF THE PROJECT	\$6,027,150.00		\$6,027,150.00

IN WITNESS WHEREOF, the parties have caused these presents to be executed the day and year first above written. NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS STATE OF FLORIDADEPARTMENT OF TRANSPORTATION Ву: Ву: Title: Title: Chairman Attest: Attest Fitte: John A. Crawford Ex-Officio Clerk Title: XIE 00 Date: December 11, Date: 2006 As to form: As to form: Approved as to form by the Nassay County Mickael S. Mullin Office of District 2 General Counsel

See attached Encumbrance Form for date of funding approval by Comptroller.





# Florida Department of Transportation

JEB BUSH GOVERNOR Planning and Environmental Office 1109 South Marion Avenue Lake City, Florida 32025-5874 DENVER J. STUTLER, JR. SECRETARY

September 19, 2006

Mr. Michael Mahaney, Nassau County Administrator 96160 Nassau Place Yulee, FL 32097

Subject:

Financial ID: 418643-6-58-01

Contract No.: ANZ55

County Road 121 from Duval County Line to US 1

**TIME EXTENSION NO.: 1** 

Dear Mr. Mahaney:

Time allotted for completion of the subject Agreement dated May 13, 2005, expires November 30, 2006. The Department recognizes that delays in completing services within the time allotted resulted in whole or, in part, from delays due to circumstances which were beyond your control.

In accordance with the Joint Participation Agreement, the Department hereby extends the time until June 30, 2007 for completion of all services required by the original Agreement and any Supplements and Amendments thereto. It is noted that this letter does not include any additional compensation, nor does it imply that Clay County is obligated to perform any additional services without additional compensation.

Please acknowledge receipt of this letter and agreement to the extension of time with your signature below. Keep one (1) original for your files and return three (3) signed originals to:

Kim Evans, JPA/LAP Coordinator District Planning Office 1109 South Marion Avenue Mail Station 2014 Lake City, Florida 32025-5874

Sincerely,

Jordan L. Green, P.E.

Rural Area Transportation Development Engineer

Agency Head: Michael Mahaney

Title: County Administrator

AGENCY: Capital Projects Administration

BY: Charlotte J. Young Charlotte Jyoung

TITLE: Contract Manager

DATE: -10/06/06- 11/29/06

JLG:le

CC: Fiscal (2 originals)

File

( to s ms





# Florida Department of Transportation

JEB BUSH GOVERNOR 1109 South Marion Avenue • MS-2014 Lake City, Florida 32025-5874

JOSÉ ABREU SECRETARY

May 18, 2005

The Honorable Ansley N. Acree, Chair Nassau County Commission Post Office Box 1010 Fernandina Beach, Florida 32035

Subject:

**Small County Outreach Program** REIMBURSEMENT AGREEMENT

Widen and Resurface County Road 121 Financial Project ID: 418643-6-58-01

#### Dear Chair Acree:

Enclosed for your files is a fully executed copy of the Reimbursement Agreement to widen and resurface County Road 121 from the Duval County Line to SR 15/US 1/US 301 in Nassau County. This Agreement details the terms and conditions for construction of the subject improvements which Nassau County will undertake. This letter serves as your Notice to Proceed. The contract beginning date is May 13, 2005 with an ending date of November 30, 2006. Any work performed prior to May 13, 2005 is not eligible for reimbursement.

To expedite reimbursement, invoices should be sent directly to Ms. Katrina Sadler at 1109 South Marjon Avenue, Lake City, Florida, 32025-5874. Invoices should be submitted in detail sufficient for a proper pre-audit and post-audit. Please remember that Nassau County is responsible for bearing all expenses in excess of the amount the Department agrees to participate (\$6,027,150.00).

Should you have questions or need additional information, I can be reached at 1-800-749-2967, Extension 7745.

Sincerely

District LAP/JPA/REDI Coordinator

KJS:ks **Enclosures** 

CC:

Ms. Leena Patil, Work Program Administrator

Ms. Linda Reeves, District Construction

Ms. Linda Green, District Financial Services Administrator

Financial Project No.: 418643-6-58-01

Catalog of State Financial Assistance No.: 55009

#### STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

#### SMALL COUNTY OUTREACH PROGRAM AGREEMENT

(Project Administered by County)

This is an Agreement by and between the STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION, hereinafter referred to as the "DEPARTMENT", and Nassau County, hereinafter referred to as the "COUNTY".

#### WITNESSETH

WHEREAS, the DEPARTMENT has the authority, under Section 334.044, Florida Statutes, to enter into this Agreement; and

WHEREAS, the Small County Outreach Program has been created by Section 339.2818, Florida Statutes, to provide funds to counties to assist small governments in resurfacing or reconstructing county roads or in constructing capacity or safety improvements to county roads; and

WHEREAS, the COUNTY has certified to the DEPARTMENT that it has met the eligibility requirements of said Section 339.2818, Florida Statutes; and

WHEREAS, the DEPARTMENT is willing to provide the COUNTY with financial assistance under Financial Project No. 418643-6-58-01 for the widening and resurfacing of County Road 121 from the Duval County Line to SR 15/US1/US301, hereinafter referred to as the "PROJECT," in accordance with Section 339.2818, Florida Statutes; and

WHEREAS, the COUNTY by Resolution No. 2005-33 dated the 9th day of March, 2005, a copy of which is attached hereto and made a part hereof, has authorized the Chairman of its Board of Commissioners to enter into this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants, promises, and representations contained herein, the parties agree as follows:

#### 1. SERVICES AND PERFORMANCE

- A. The COUNTY shall furnish the services with which to construct the PROJECT. Said PROJECT consists of: widening and resurfacing County Road 121, and as further described in Exhibit A, attached hereto and made a part hereof.
- B. The COUNTY shall be responsible for the construction of the PROJECT in accordance with all applicable federal, state and local statutes, rules and regulations, including COUNTY'S standards

Form: 625-060-01 Pavement Management Office Page 2 of 11 03/2002

and specifications. The COUNTY shall be responsible for obtaining clearances/permits required for the construction of the PROJECT from the appropriate permitting authorities. Upon completion of the PROJECT, the COUNTY shall certify to the DEPARTMENT that the PROJECT has been completed in accordance with the COUNTY'S standards and specifications.

- C. The DEPARTMENT will be entitled at all times to be advised, at its request, as to the status of work being done by the COUNTY and of the details thereof. Coordination shall be maintained by the COUNTY with representatives of the DEPARTMENT.
- D. The DEPARTMENT must approve any consultant and/or contractor scope of services prior to advertising by the COUNTY. The DEPARTMENT'S approval must be obtained before selecting any consultant and/or contractor for the PROJECT. The COUNTY must certify that the consultant has been selected in accordance with the Consultants' Competitive Negotiation Act (Section 287.055, Florida Statutes). Contractor must be prequalified by the DEPARTMENT as required by Section 2 of the Standard Specification for Road and Bridge Construction (2000), as amended.
- E. The COUNTY shall not sublet, assign or transfer any work under this Agreement without prior written consent of the DEPARTMENT.
- F. All notices under this Agreement shall be directed to the following addresses:

#### TO DEPARTMENT:

#### TO COUNTY:

Mr. Jordan L. Green, P.E.	The Honorable Ansley N. Acree, Chair
District Transportation Engineer	Nassau County Commission
1109 South Marion Avenue	Post Office Box 1010
Lake City, Florida 32025	Fernandina Beach, Florida 32035
Ms. Katrina Sadler, District JPA/LAP Coordinator	Mike Mahaney, County Administrator
1109 South Marion Avenue	Post Office 1010
Lake City, Florida 32025	Fernandina Beach, Florida 32035

#### 2. TERM

- A. The COUNTY shall commence the PROJECT activities subsequent to the execution of this Agreement and shall perform in accordance with the following schedule:
  - a) Design to be completed on or before June 30, 2005.
  - b) Construction to begin on or before June 30, 2005.
  - c) Construction to be completed on or before November 30, 2006.
- B. This Agreement shall not be renewed. Any extension shall be in writing and executed by both parties, and shall be subject to the same terms and conditions set forth in this Agreement.

#### 3. COMPENSATION AND PAYMENT

A. The DEPARTMENT agrees to a maximum participation in the PROJECT [design, construction and construction engineering inspection services (CEI)] in the amount of Six million twenty seven thousand one hundred fifty dollars and no/100 (\$6,027,150.00). The COUNTY agrees to bear all expenses in excess of the DEPARTMENT'S participation.

The COLDITY of all submit and invoice (2 applies) also given action do support the

D.	The COOM 1.1 shan submit one invoice (3 copies) plus supporting documentation required by
the DE	PARTMENT to the Project Manager for approval and processing:
	X monthly, or
	once the PROJECT has been accepted by the COUNTY and approved by the
	DEPARTMENT.
C.	The COUNTY'S matching participation is in the form of:
	Funds equal to 25% of the project costs plus the remaining portion of the accepted bid
	amount exceeding the DEPARTMENT'S participation.
	In-kind services equivalent to 25% of the project costs plus the remaining portion of
	the accepted bid amount exceeding the DEPARTMENT'S participation as detailed in
	Exhibit .
	Combination of funds and in-kind services equivalent to 25% of the project costs plus
	the remaining portion of the accepted bid amount exceeding the DEPARTMENT'S
	participation as detailed in Exhibit .
	X The County has requested a waiver and waiver has been granted.

- D. Payment shall be made only after receipt and approval of goods and services unless advance payments are authorized by the DEPARTMENT'S Comptroller under Section 334.044 (29), Florida Statutes. Any provisions for an advance payment are provided in Exhibit B, attached and made a part of this Agreement.
- E. The COUNTY will only be reimbursed for direct costs (this excludes general and administrative overhead). All costs charged to the PROJECT shall be supported by properly executed payrolls, time records, invoices, contracts or vouchers evidencing in proper detail the nature and propriety of the charges. Bills for fees or other compensation for services or expenses shall be submitted in detail sufficient for a proper preaudit and postaudit therof. Bills for travel expenses specifically authorized by this Agreement shall be submitted and paid in accordance with Section 112.061, Florida Statues.
- F. The DEPARTMENT shall have the right to retain out of any payment due the COUNTY under this Agreement an amount sufficient to satisfy any amount due and owing to the DEPARTMENT by the COUNTY on any other Agreement between the COUNTY and the DEPARTMENT.

- G. The COUNTY must submit the final invoice to the DEPARTMENT within 180 days after the final acceptance of the project. Invoices submitted after the 180-day time period will not be paid.
- H. The DEPARTMENT'S obligation to pay under this Agreement is contingent upon an annual appropriation by the Legislature.
- I. A Vendor Ombudsman has been established within the Department of Financial Services. The duties of this individual include acting as an advocate for contractors/vendors who may be experiencing problems in obtaining timely payments(s) from a state agency. The Vendor Ombudsman may be contacted at (850) 410-9724 or by calling the Department of Financial Services Hotline, 1-800-848-3792.
- J. Records of costs incurred under terms of this Agreement shall be maintained and made available upon request to the DEPARTMENT at all times during the period of this Agreement and for five years after final payment is made. Copies of these documents and records shall be furnished to the DEPARTMENT upon request. Records of costs incurred include the COUNTY'S general accounting records and the project records, together with supporting documents and records of the COUNTY and all subcontractors performing work on the project, and all other records of the COUNTY and subcontractors considered necessary by the DEPARTMENT for a proper audit of costs.
- K. The DEPARTMENT, during any fiscal year, shall not expend money, incur any liability, or enter into any contract which, by its terms, involves the expenditure of money in excess of the amounts budgeted as available for expenditure during such fiscal year. Any contract, verbal or written, made in violation of this subsection is null and void, and no money may be paid on such contract. The DEPARTMENT shall require a statement from the Comptroller of the DEPARTMENT that funds are available prior to entering into any such contract or other binding commitment of funds. Nothing herein contained shall prevent the making of contracts for periods exceeding one year, but any contract so made shall be executory only for the value of the services to be rendered or agreed to be paid for in succeeding fiscal years.
- L. A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, Florida Statutes, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

M. An entity or affiliate who has been placed on the discriminatory vendor list may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity.

#### 4. INDEMNITY AND INSURANCE

- A. a) To the extent allowed by Section 768.28, Florida Statutes, the COUNTY hereby agrees to indemnify, defend, save and hold harmless the DEPARTMENT and all of its officers, agents or employees from all suits, actions, claims, demands, liabilities of any nature whatsoever arising out of, because of, or due to breach of this Agreement by the COUNTY, its officers, agents, employees, contractors/subcontractors, consultants/subconsultants or due to any negligent act or occurrence of omission or commission of the COUNTY, its officers, agents, employees, contractors/subconsultants. Neither COUNTY nor any of its officers, agents, employees, contractors/subcontractors, consultants/subconsultants will be liable under this section for the negligence of the DEPARTMENT or any of its officers, agents or employees.
- b) The COUNTY agrees to include the following indemnification in all contracts with contractors/subcontractors, consultants/subconsultants, who perform work in connection with this Agreement:

"The contractor/consultant shall indemnify, defend, save and hold harmless the DEPARTMENT and all of its officers, agents or employees from all suits, actions, claims, demands, liability of any nature whatsoever arising out of, because of, or due to any negligent act or occurrence of omission or commission of the contractor, its officers, agents or employees. Neither the contractor/consultant, nor any of its officers, agents or employees will be liable under this section for damages arising out of injury or damage to persons or property directly caused or resulting from the sole negligence of the DEPARTMENT or any of its officers, agents or employees."

- B. LIABILITY INSURANCE: The COUNTY shall carry and keep in force during the period of this Agreement a general liability insurance policy or policies with a company or companies authorized to do business in Florida, affording public liability insurance with combined bodily injury limits of at least \$100,000 per person and \$300,000 each occurrence, and property damage insurance of at least \$50,000 each occurrence, for the services to be rendered in accordance with this Agreement. In addition to any other forms of insurance or bonds required under the terms of the agreement, when it includes construction within the limits of a railroad right-of-way, the COUNTY must provide or cause its contractor to provide insurance coverage in accordance with Section 7-13 of the DEPARTMENT'S Standard Specification for Road and Bridge Construction (2000), as amended.
- C. WORKER'S COMPENSATION: The COUNTY shall also carry and keep in force Worker's Compensation insurance as required for the State of Florida under the Worker's Compensation Law.

### 5. COMPLIANCE WITH LAWS

- A. The COUNTY shall allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, and made or received by the COUNTY in conjunction with this Agreement. Failure by the COUNTY to grant such public access shall be grounds for immediate unilateral cancellation of this Agreement by the DEPARTMENT.
- B. The COUNTY shall comply with all federal, state and local laws and ordinances applicable to the work or payment for work thereof, and shall not discriminate on the grounds of race, color, religion, sex or national origin in the performance of work under this Agreement.
- C. No funds received pursuant to this Agreement may be expended for lobbying the Legislature, the judicial branch, or a state agency.
- D. The COUNTY and the DEPARTMENT agree that the COUNTY, its employees, and subcontractors are not agents of the DEPARTMENT as a result of this Agreement for purposes other than those set out in Section 337.274, Florida Statutes.
- E. Recipients of state funds are to have audits done annually using the following criteria.

State awards will be identified using the Catalog of State Financial Assistance (CSFA) title and number, award number and year, and name of the awarding state agency.

In the event that a recipient expends \$300,000 or more in State awards during its fiscal year, the recipient must have a state single or program specific audit conducted in accordance with Section 215.97, Florida Statutes, and Chapter 10.600, Rules of the Auditor General.

If a recipient expends less than \$300,000 in State awards during its fiscal year, an audit conducted in accordance with Section 215.97, Florida Statutes, and Chapter 10.600, Rules of the Auditor General is not required. If a recipient expends less than \$300,000 in State awards during its fiscal year and elects to have an audit conducted in accordance with Section 215.97, Florida Statutes, and Chapter 10.600, Rules of the Auditor General, the cost of the audit must be paid from non-State funds.

Reporting Packages and management letters generated from audits conducted in accordance with Section 215.97, Florida Statutes, and Chapter 10.600, Rules of the Auditor General shall be submitted to the awarding DEPARTMENT office, by the recipient, within 30 days of receiving it. The afore mentioned items are to be received by the appropriate DEPARTMENT office no later than 9 months after the end of the recipient's fiscal year.

The recipient shall follow up and take corrective action on audit findings. Preparation of a summary schedule of prior year audit findings, including corrective action and current status of the audit finding is required. Current year audit findings require corrective action and status of finding.

Form: 625-060-01 Pavement Management Office Page 7 of 11 03/2002

Project records shall be retained and available for at least 3 years from the date the audit report is issued. Records related to unresolved audit findings, appeals, or litigation shall be retained until the action is completed or the dispute is resolved. Access to project records and audit workpapers shall be given to the DEPARTMENT, the Office of the Comptroller, and the Office of the Auditor General.

The recipient shall submit required audit documentation as follows:

A Financial Reporting Package of audits conducted in accordance with Section 215.97, Florida Statutes, and Chapter 10.600, Rules of the Auditor General shall be sent to:

State of Florida Auditor General Attn: Ted J. Sauerbeck Room 574, Claude Pepper Building 111 West Madison Street Tallahassee, FL 32302-1450

#### 6. TERMINATION AND DEFAULT

- A. This Agreement may be terminated by either party upon default by the other party. Further, this Agreement may be terminated by the DEPARTMENT in whole or in part at any time the interest of the DEPARTMENT requires such termination. The DEPARTMENT also reserves the right to seek termination or cancellation of this Agreement in the event the COUNTY shall be placed in either voluntary or involuntary bankruptcy. The DEPARTMENT further reserves the right to terminate or cancel this Agreement in the event an assignment is made for the benefit of creditors.
- B. If the Agreement is terminated before performance is completed, the COUNTY shall be paid 75% of the work satisfactorily performed for which costs can be substantiated. Within \_\_\_\_ days, the COUNTY shall refund to the DEPARTMENT the amount of payment received for the PROJECT which exceeds 75% of the COUNTY'S costs for the portion of the PROJECT completed.

#### 7. MISCELLANEOUS

- A. All words used herein in the singular form shall extend to and include the plural. All words used in the plural form shall extend to and include the singular. All words used in any gender shall extend to and include all genders.
- B. The DEPARTMENT shall not be obligated or liable hereunder to any party not a party to this Agreement.
- C. In no event shall the making by the DEPARTMENT of any payment to the COUNTY constitute or be construed as a waiver by the DEPARTMENT of any breach of covenant or any default which may then exist, on the part of the COUNTY, and the making of such payment by the DEPARTMENT while any such breach or default shall exist shall in no way impair or prejudice any right or remedy available to the DEPARTMENT with respect to such breach or default.

Form: 625-060-01 Pavement Management Office Page 8 of 11 03/2002

- D. This document incorporates and includes all prior negotiations, correspondence, conversations, agreements, or understandings applicable to the matters contained herein, and the parties agree that there are no commitments, agreements or understandings concerning the subject matter of this Agreement that are not contained in this document. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior representation or agreements whether oral or written. It is further agreed that no modification, amendment or alteration in the terms or conditions contained herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.
- E. If any part of this Agreement shall be determined to be invalid or unenforceable by a court of competent jurisdiction or by any other legally constituted body having the jurisdiction to make such determination, the remainder of this Agreement shall remain in full force and effect provided that the part of this Agreement thus invalidated or declared unenforceable is not material to the intended operation of this Agreement.
- F. This Agreement shall be governed by and construed in accordance with the laws of the State of Florida. Venue of any judicial proceedings arising out of this Agreement shall be in Leon County, Florida, or as otherwise agreed to by the parties.
- G. This Agreement shall be effective upon execution by both parties and shall continue in effect and be binding on the parties until the PROJECT is completed and accepted and payment made by the DEPARTMENT.

IN WITNESS WHEREOF, the COUNTY has caused this Agreement to be executed in its behalf this 9th day of march, 2005, by the Chairman of the Board of Commissioners, authorized to enter into and execute same by Resolution Number 2005-33 of the Board on the 9th day of Much, 2005, and the DEPARTMENT has executed this Agreement through its District Secretary for District Two, Florida Department of Transportation, this \_\_\_\_\_\_ day of \_\_\_\_ 2005 NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS BY: ATTES S. MOLLIN, ESQUIRE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION DISTRICT TWO NAME: District Construction/Maintenance Legal Review: Engineer Approval: Availability of Funds Approval:

(Date)

Financial Project No.: 418643-6-58-01

Catalog of State Financial Assistance No.: 55009

Financial Project No.: 418643-6-58-01

Catalog of State Financial Assistance No.: 55009

# EXHIBIT "A" PROJECT DESCRIPTION AND RESPONSIBILITIES

This exhibit forms an integral part of that certain Joint Participation Agreement between the State of Florida Department of Transportation and the Nassau County Board of County Commissioners dated Transportation 43, 2005.

### PROJECT LOCATION:

The project is referred to as the widening and resurfacing of County Road 121 from the Duval County Line to SR 15/US1/US 301 in Nassau County, Florida.

#### PROJECT DESCRIPTION:

The project consists of widening and resurfacing the existing roadway as follows:

- Development of design plans;
- Bid and award;
- Construction;
- Construction Engineering and Inspection; and
- Contingency 10% for unforseen work.

## **AGENCY RESPONSIBILITIES:**

The Agency is required to use Type S asphalt.

The Agency is required to provide a copy of the design plans for the Department's file.

If Right-of-Way activities become apparent, begin coordination with the Department at once.

The Department's maximum participation is not to exceed \$6,027,150.00

Financial Project No.: 418643-6-58-01

Catalog of State Financial Assistance No.: 55009

# EXHIBIT "B" Advance Payment Financial Provisions

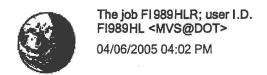
This exhibit forms an integral part of that certain Joint Participation Agreement between the State of Florida Department of Transportation and the Nassau County Board of County Commissioners.

The Department may advance an amount of \$904,072.00 (Nine hundred four thousand seventy two dollars and no/100) which is equal to 15% (fifteen percent) of the Department's participation in the estimated cost of the project.

The amount advanced after execution shall be deducted from latter month's payment(s) or the final payment.

The Nassau County Board of County Commissioners will submit an invoice for the advance.

Any unexpended funds remaining at the conclusion/termination of the Agreement shall be returned to the Department within 90 days of the completion/termination of the project.



To PL230KS@dot.state.fl.us

CC

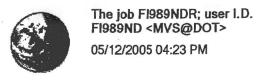
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Subject FUNDS APPROVAL/REVIEWED FOR CONTRACT ANZ55

# STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FUNDS APPROVAL

Contract #ANZ55 Contract Type: AK Method of Procurement: G Vendor Name: NASSAU COUNTY BOCC Vendor ID: VF591863042004 Beginning date of this Agmt: 04/08/05 Ending date of this Agmt: 11/30/06 \* Description: CR 121 \* ORG-CODE \*EO \*OBJECT \*AMOUNT \*FIN PROJECT \*FCT \*CFDA (FISCAL YEAR) \*BUDGET ENTITY \*CATEGORY/CAT YEAR AMENDMENT ID \*SEQ. \*USER ASSIGNED ID \*ENC LINE(6S)/STATUS \* Funds have been: APPROVED Action: ORIGINAL 55 024010206 \*HC \*750087 \* 6027150.00 \*41864365801 \*215 \* 2005 \*55100100 \*085576/05 0001 \*00 \*0001/04 TOTAL AMOUNT: \*\$ 6,027,150.00 \*

FUNDS APPROVED/REVIEWED FOR ROBIN M. NAITOVE, CPA, COMPTROLLER DATE: 04/06/2005



To PL230KS@dot.state.fl.us

CC

bcc

Subject FUNDS APPROVAL/REVIEWED FOR CONTRACT ANZ55

#### STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION FUNDS APPROVAL

Contract #ANZ55 Contract Type: Vendor Name: NASSAU COUNTY BOCC

Vendor ID: VF591863042004

Beginning date of this Agmt: 04/08/05 Ending date of this Agmt: 11/30/06

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ORG-CODE \*EO \*OBJECT \*AMOUNT

\*FIN PROJECT \*FCT \*CFDA

Method of Procurement:

(FISCAL YEAR) AMENDMENT ID

\*BUDGET ENTITY

\*CATEGORY/CAT YEAR

\*SEQ. \*USER ASSIGNED ID \*ENC LINE(6S)/STATUS

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

Action: ORIGINAL

55 024010206 \*HC

\*750080 \*

.00 \*41864365801 \*215 \*

2005

\*55100100

\*085576/05

0001

\*0001/04

TOTAL AMOUNT: \*\$

.00 \*

A change to the encumbrance line has processed successfully through

FLAIR

DATE: 05/12/2005

#### RESOLUTION NO. 2005-33

A RESOLUTION AUTHORIZING THE EXECUTION OF THE AGREEMENT BETWEEN THE STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION AND THE BOARD OF COUNTY COMMISSIONERS OF NASSAU COUNTY, FLORIDA.

WHEREAS, the Engineering Services Director has recommended that the Board of County Commissioners of Nassau County, Florida, execute a Small County Outreach Program Agreement between the State of Florida Department of Transportation and Nassau County regarding widening and resurfacing of County Road 121 from the Duval County Line to SR 15/US1/US301 in Nassau County, Florida (Financial Project No. 418643-6-58-01).

NOW, THEREFORE, BE IT RESOLVED this 9th day of February 2005, by the Board of County Commissioners of Nassau County, Florida as follows:

1. The State of Florida Small County Outreach Program Agreement is hereby approved and the Chairman of the Board of County Commissioners of Nassau County, Florida, is hereby authorized to sign said agreement.

BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA

ANSLEY N ACREE

Its: Chairman

ATTEST:

JOHN A. CRAWFORD

Ats: Ex-Officio Aerk

Approved as to form by the

Nassau County Attorney:

MICHAEL S MULLIN



## NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS CR121 WIDENING & RESURFACING PROJECT-19.2 miles 62456541 STATUS AS OF 02/01/07

Approved Funding Plan (BOCC 12/21/06)	\$ 7,682,842.99
Expenditures:	
2004/2005	\$ (27,366.17)
2005/2006	\$ (2,440,602.88)
2006/2007	\$ (937,036.66)
	\$ (3,405,005.71)
Current Balance:	\$ 4,277,837.28
PROPOSED EXPENDITURES - REPAIR WORK (19.2 MILES)	
Douglas Asphalt Company	
Balance due (5-6)	\$ (0.10)
Milling/Asphalt - 1st lift (50%) - Exhibit A	\$ (1,342,508.37)
Asphalt - 2nd lift (1.5") - Exhibit B	\$ (1,892,211.17)
Retainage (1-6)	\$ (373,207.13)
	\$ (3,607,926.77)
ADDITIONAL EXPENSES:	
PBS&J - CEI Services	\$ (168, 367.50)
Testing Services (Nordarse)	\$ (14,610.00)
Guardrail - R&B	\$ (212,546.94)
	\$ (395,524.44)
TOTAL AVAILABLE/UNENCUMBERED:	\$ 274,386.07

01:31 Jose Deliz, the Director of Engineering Services, introduced Jeff Pruett and Dan Turner, with Universal Engineering Services, consultants for the County, who were present to answer any questions regarding the CR121 widening and resurfacing project. Mr. Deliz reviewed the history of the project, the existing conditions of the road, design objectives and construction processes, alternatives and estimated costs, not including contingencies, for the Board □ s consideration. He also explained a significant increase in the unit price for asphalt in the contract with Douglas Asphalt. Mr. Deliz requested the Board to consider the following: (1) a full depth reclamation process to the extent allowed by budget with a leveling overlay over the remaining road; (2) use of additional County funds to cover any amounts above the FDOT allocation; (3) re-negotiate the asphalt contract with Douglas Asphalt; (4) use of a different stabilizer; (5) reduce the project limits; (6) and/or remove the guardrails from the contract. As discussed in a previous meeting, Mr. Deliz recommended the Board consider a sole source contract with E.J. Breneman, L.P. for full depth reclamation. In addition, he recommended the Board to consider utilizing a different asphalt contractor; using latex with glass beads instead of thermoplastic striping; using District 4 impact fees; and establishing a contingency budget to cover any shortfalls over the Small County Outreach Program (SCOP) funds. The group commenced a long discussion of their options with the consultants and representatives of Douglas Asphalt; and the County Attorney explained that he could not sign off on sole source. Upon the recommendation of the Director of Engineering Services and following much discussion, it was moved by Commissioner Higginbotham and seconded by Commissioner Marshall to authorize the Director of Engineering Services to solicit bids for the CR121 widening and resurfacing project for the full depth reclamation, and provide asphalt paving, guardrail, and striping as options for the Board to consider. It was noted that the engineering consultants and Director of Engineering Services would determine the level of experience needed for the work. The Board continued to discuss their options and cost estimates. The motion and second were amended for the bids to include a comparison using lime rock and cement. The vote on the motion, as amended, carried unanimously.

02:49 It was moved by Commissioner Higginbotham, seconded by Commissioner Branan and unanimously carried to authorize the Director of Engineering Services to prepare a task order to the continuing contract with Universal Engineering Services for the CR121 project and bring back to the Board for approval.

02:51 Commissioner Marshall requested the Director of Engineering Services to contact CSX regarding the proposed improvements to CR121 as it relates to the railroad crossing.



:00 Jos造Deliz addressed the Board regarding the CR 121 widening and resurfacing project bid award and funding plan. Mr. Deliz stated that the \$6.2 million from the Florida Department of Transportation (FDOT) is for resurfacing CR 121. Mr. Deliz explained that FDOT does not have any limitation on the use of the money as long as the County improves the conditions of CR 121. Mr. Deliz also explained the two options for CR 121 improvements and the issues with these options. The County Administrator reviewed the funding sources as recommended by staff and the Clerk□ s office. The County Attorney clarified for the record that if the vote is to accept the total funding set forth on the report dated December 12, 2005 in the amount of \$7,682,842.99, then it will need to be confined to that before moving on to the second aspect. After further discussion and upon the recommendation of the County Administrator, it was moved by Commissioner Vanzant, seconded by Commissioner Higginbotham and unanimously carried to approve the funding for CR 121 widening and resurfacing project as follows:

**SCOP-FDOT** 

\$6,027,150.00

.25 Designation

\$ 567,323.99

One Cent Surtax Reserves

\$1,088,369.00

**Total Funding Sources** 

\$7,682,842,99

It was moved by Commissioner Vanzant, seconded by Commissioner Marshall and unanimously carried to approve to award the bid to the low bidder Douglas Asphalt Company for the CR 121 widening and resurfacing project as follows: Bid item #1, Base Project-Full Depth Reclamation (FDR) \$3,726,959.92; Bid item #3, Option bid #2-Paving of Reclaimed Base, \$2,732,358.76; Bid item #4, Option bid item #3-Gurardrail Installation, \$212,546.94; Bid item #6, Option bid item #5-Latex Lane Striping, \$119,665.94; and Bid item #7, Option bid item #6-Bermuda sod installation, \$106,413.00 for a total of \$6,897,944.56, and subject to a contract being negotiated and brought back to the Board.

9:05 Upon the recommendation of the County Attorney, it was moved by Commissioner Vanzant, seconded by Commissioner Marshall and unanimously carried to approve and authorize the Chairman to sign the Agreement between the Nassau County Board of County Commissioners of Nassau County, Florida and Douglas Asphalt Company in the amount of \$6,897,944.56 for the Full Depth Reconstruction of CR 121 from US 1 to the Duval County line. It was moved by Commissioner Acree, seconded by Commissioner Marshall and unanimously carried to approve and authorize the Chairman to sign the Notice of Award. It was moved by Commissioner Higginbotham, seconded by Commissioner Marshall and unanimously carried to approve and authorize the Chairman to sign the Notice to Proceed. It was moved by Commissioner Marshall, seconded by Commissioner Vanzant and unanimously carried to approve the following funding source for the CR 121 Project:

SCOP-FDOT

\$6,027,150.00

.25 MIL Designation

\$ 567,324.00

One Cent Surtax Reserves

\$1,088,369.00

Total Funding

\$7,682,843.00

Commissioner Marshall inquired if the deadline for the completion of CR 121 was included in the Contract. Mr. Mullin acknowledged that it was included in the contract.

09:57 Upon review of the proposals and recommendation from the Director of Engineering Services, Commissioner Higginbotham moved to award geotechnical services in support of CR 121 widening and resurfacing project to Universal Engineering Sciences, Task Order No. 2 to the continuing contract. Commissioner Acree seconded the motion and the vote carried unanimously.

11:37 Vice Chairman inquired about pictures of CR 121 construction. Mr. Deliz stated that he would bring pictures at the next Board meeting. Mr. Deliz stated that three miles of CR 121 have been paved from the Duval County line

09:10 The County Attorney remarked that there had been a series of meetings between the County Administrator, Director of Engineering Services and representatives of Douglas Asphalt Company (DAC) regarding the CR121 road improvement project. Mr. Mullin reported that he did not attend a meeting of the group held yesterday at the request of DAC because their attorney was not present. Mr. Mullin recommended that the Board not take comment from DAC representatives at this time due to DAC□ s position as stated in their letter dated June 6, 2006. Mr. Deliz interjected that Joel Spivey, DAC□ s President, had submitted a follow up letter to him today, and he distributed copies to the Board. The County Attorney then read the letter dated June 7, 2006 into the record:

☐ RE: Our letter and meeting yesterday at 4:00 p.m. concerning Contract Inclusion Item, County Road 121, Nassau County, Florida.

#### Dear Mr. Deliz:

Thank you for the captioned meeting at which we offered to remove and replace certain areas of asphalt paving which have been identified as of this date as having slipped and caused rutting and cracking in the pavement. In our opinion that is all that can be done at this time to remedy this condition. You will recall that we also offered to continue to work on the base and paving operation with our suggested changes in the construction methods, which are crucial and essential to the success of this project.

In the event that you have your own suggested changes in construction methods, which you would prefer to be put in place instead of ours, we will be pleased to consider the implementation of those changes as well. The project should be monitored in accordance with the contract in case future failures are evident, at which time such issues will be addressed.

Your consideration of additional open dialogue until a resolution can be reached will be much appreciated. Please let me know about your decision in this important matter at your earliest convenience. This letter is being hand-delivered to you this date. With best personal regards, I remain,

Joel Spivey, President Douglas Asphalt Company □

Mr. Mullin was unsure of the letter □ s meaning in light of the DAC □ s position outlined in the other letter dated June 6, 2006. Because of the letter dated June 6, 2006, Mr. Mullin had planned to recommend the Board authorize him to contact the bonding company to place them on notice; however, because of the letter dated June 7, 2006 he decided to withhold that recommendation at this time. Instead, he suggested the County Administrator, Director of Engineering Services and representatives of DAC to continue a dialogue.

During the early negotiation sessions with DAC, Mr. Mullin had stressed and clearly instructed DAC that if they could not perform based on their own determination they should not proceed. Upon their understanding and agreement, DAC was to proceed with their own due diligence. Mr. Mullin explained that he was advised by the County Administrator and Director of Engineering Services on June 5, 2006 of the current status of the project and received the letter from DAC dated June 6, 2006.

The County Attorney urged the Board to be mindful of the record and proceed with caution, noting that the judicial system may be the next step in this process, unless DAC resumes the work as the contract requires.

09:18 Jose Deliz noted that consultants for the project were in the audience to answer any questions. The County Attorney clarified that questions of a general nature would be appropriate; but perhaps the commissioners could meet individually with the consultants after the meeting.

09:20 Mr. Deliz had prepared packets of information, including minutes of meetings and e-mails, and Mr. Mahaney had prepared a summary timeline of events, all related to the CR121 road project that

were made available to the Board and to the public.

The Director of Engineering Services commented that there had been uncertainty regarding how well the road base would perform using the full depth reclamation method; however, the method has performed better than expected. Two problems have surfaced: (1) undulation and (2) defects in which the asphalt is slipping off the base. It was Mr. Deliz opinion that the undulation was caused by a failure to smooth out the asphalt mat before it was rolled. The FDOT manual, Section 330-9, specifies that those surface imperfections must be corrected before it is rolled. Steps have been taken to correct this problem. It was also Mr. Deliz observation that the base is intact; however, the asphalt is not adhering to the surface. In consultation with experts, Mr. Deliz feels that adhesion measures (Tack Coat) should be applied. Mr. Deliz recommended the Board allow him and the County Administrator to continue discussions with DAC representatives to resolve these issues.

09:26 Instead of continuing with a question and answer period, because of the County Attorney □ s earlier comments, it was suggested to recess the meeting in order for the County Administrator and Director of Engineering Services to meet with DAC representatives to arrange a meeting date to continue their discussion and then the Board could schedule a special meeting to continue their review of the matter. This would also give the commissioners adequate time to review all of the documents provided today.

Following a brief review of the issues, the meeting recessed at 9:31 a.m.

The meeting reconvened at 10:41 a.m. and Mr. Mahaney announced that during the break the parties met and reached a tentative agreement. A draft document will be prepared for approval by all parties no later than June 20, 2006. Following further discussion and noting time would be needed for legal review by both parties as well as the Board, it was moved by Commissioner Marshall, seconded by Commissioner Acree and unanimously carried to place on the agenda for June 14, 2006 at 1:30 p.m. a discussion of the draft agreement with DAC regarding the CR121 road improvement project. If additional time is needed, a special meeting may be required.

3:20 The County Attorney distributed for the Board □ s review a letter from Douglas Asphalt Company (DAC) and the e-mail from Mr. Deliz to Douglas Asphalt Company. Mr. Mullin suggested that the Commissioners meet individually with the County Administrator and Mr. Deliz to address aspects of the letter from DAC. Mr. Mullin stressed that a letter should be sent to DAC to reiterate that there has not been a stop work order issued by the County nor any indication given that they should stop work. A copy of said letter should be sent to the County Attorney. Mr. Mullin also clarified that there has not been a stop payment order either. Mr. Deliz stated that there are two letters that have gone out to the contractor advising them of that. The County Attorney suggested that Mr. Deliz and the County Administrator insist on meeting with DAC before Friday, June 16, 2006 for the purpose of addressing these items and to get a clear understanding of where DAC stands. Mr. Mullin stated that the Clerk□ s office would need to be notified to post the meeting notice and take minutes of the meeting. It was moved by Commissioner Acree, seconded by Commissioner Vanzant to schedule a special meeting for June 19, 2006 at 9:00 a.m. to discuss a tentative agreement with Douglas Asphalt Company related to the CR121 widening and resurfacing project. In the interim, the County Administrator and the Engineering Service Director are to meet with representatives from Douglas Asphalt Company to discuss contractual issues and concerns related to the project. Mr. Mullin requested that the County Administrator or the Engineering Services Director notify DAC about the meeting on June 19, 2006 at 9:00 a.m. The motion carried unanimously.

The purpose of the meeting is to discuss a tentative agreement with the Douglas Asphalt Company (DAC), the contractor, related to issues associated with the County Road 121 Widening and Resurfacing Project, and any other items that may come before the Board.

Chairman Branan called the meeting to order and Commissioner Vanzant led the Invocation and Pledge of Allegiance to the American Flag.

9:09 It was moved by Commissioner Vanzant, seconded by

Commissioner Higginbotham and unanimously carried to expand the meeting to approve estimates from South Georgia Scales, Inc., to repair sections #4 and #5 on the west end in-bound scales at the West Nassau Landfill. Mr. Mahaney explained that the Board had approved on June 12, 2006 to appropriate a not to exceed \$5,000.00 on the in-bound scales east end, and on Friday June 16, 2006 the west end of the same in-bound scales broke. Upon the recommendation of the County Administrator, it was moved by Commissioner Acree, seconded by Commissioner Higginbotham and unanimously carried to approve repairs on section #4 and #5 on the west end of the in-bound scales by South Georgia Scales, Inc., with a not to exceed amount of \$5,000.00. Funding source: 70341534-546000.

9:10 Jos造Deliz, Engineering Services Director, came forward to present an update on the status of contract negotiations with DAC and address the problems that have occurred (rippling and adhesion) on a portion of the project that has been completed. Mr. Deliz summarized that the contractor has agreed to perform all the repairs to defects at no additional cost to Nassau County, and to employ a revised construction method on the balance of the project. Mr. Deliz then described the method that would be used on the remainder of the project. One of the concerns of the County is to minimize the patchwork, and DAC has agreed to use the Florida Department of Transportation so (FDOT) standard criteria for the length of individual patches, including a minimum distance of 400 ft. between patches, subject to the Board sagreement. In-field determinations by the CEI would still need to be made, and Mr. Deliz wanted some time to see how the work might deteriorate before patching.

Mr. Deliz mentioned that no agreement has been reached regarding an extended warranty for the project. The contractor has requested an extension of the contract deadline in order to address the following: (1) the availability of limerock was curtailed for several days, which caused the project to shut down operations; (2) time to analyze the conditions in the field; and (3) for the contractor and County to negotiate an agreement. He recommended that the Board agree to a one-month extension of the contract completion date in order for DAC to complete their analysis.

Mr. Deliz stated that he would organize a meeting this week with multiple paving experts to try to reach a consensus that will give a satisfactory result to address the adhesion problem.

In response to a question raised by Chairman Branan, Mr. Deliz reviewed the tentative repair methodology as proposed by the contractor to address rippling.

Commissioner Marshall expressed concern that a primer was not used on the first sixteen miles of the CR121 project, and that it may deteriorate faster than the portion that is now being primed. Mr. Deliz explained the priming and tacking process and why it was not used.

In response to a question raised by Chairman Branan, Mr. Deliz will identify the specific problems and bring back to the Board for approval recommendations regarding how to address corrective measures and who will determine whether or not the road should be redone completely.

Commissioner Marshall read from the minutes of the negotiation meeting held January 6, 2006 with the contractor regarding the rideability specification.

Mr. Deliz acknowledged that he is the Engineer of record for the project; it was designed in-house. Commissioner Vanzant mentioned that the approach was tried on CR108 improvements, but it did not work. Mr. Deliz clarified that it did not work because the contractor was unfamiliar with the technique, and the equipment was not calibrated correctly. In addition, soil conditions were not conducive to this type of treatment. CR108 utilized a full depth reclamation approach using asphalt as a stabilizing material.

To mitigate some of the Board  $\square$  s concerns, Mr. Deliz suggested the Board seek an extension of the warranty from DAC.

Upon the request of the County Attorney, Ray Grode, Division Manager for DAC, came forward to

address the representation made by Mr. Deliz regarding the repairs on CR121. Mr. Grode stated that DAC would run a test strip on the area going forward, as well as the area that requires repairs. Mr. Mullin inquired if DAC would accept removing the first sixteen miles, if necessary, and Mr. Grode replied that it would depend on the test results. The tests will be determined during an on-going process in the field and take into consideration environmental factors. Furthermore, a resolution has not yet been agreed to regarding pulling up and redoing the road or on the extended warranty.

Although DAC is working diligently with Mr. Deliz, Mr. Mullin stated that if it is not in writing, it creates problems. The County Attorney recommended that Mr. Deliz and Mr. Grode, with independent expert input as needed, develop a timeframe this week and bring back to the Board. In the interim, Mr. Mullin will commence drafting language for an agreement.

Upon clarification that Mr. Deliz□ s recommendation is to approve the extension for thirty days, it was moved by Commissioner Marshall, seconded by Commissioner Higginbotham and unanimously carried to approve the extension to the contract with Douglas Asphalt Company from August 3, 2006 to September 3, 2006 for the CR121 widening and resurfacing project. It was noted that FDOT□ s deadline was November 30, 2006.

In response to a question raised by Commissioner Marshall, Mr. Deliz confirmed that the road was constructed to FDOT standards, with the exception of the rideability and the binder (primer). The group discussed these exceptions.

Mr. Mullin anticipates meeting within the next several days with the County Administrator and the Engineering Services Director to develop a draft agreement to bring back to the Board. In addition, Commissioner Higginbotham recommended staff and DAC provide the Board with written progress reports every seven to ten days.

Mr. Mullin stressed the importance of Mr. Grode □ s statements that the contractor is awaiting the evaluation of the test strip and direction from the Board before moving forward or backward. A meeting should take place between the County Administrator, Director of Engineering Services, and representatives of Douglas Asphalt over the next two weeks under conditions previously indicated. A recommendation from the County Administrator and Director of Engineering Services for direction should be brought to the Board to ensure that the Board is in agreement with the direction. Facts should be developed and expert witnesses, as needed, should be present or their testimony recorded so that the record is clear.

Mr. Mullin referred to a letter dated July 18, 2006 from Ray Grode, Division Manager with Douglas Asphalt Company (DAC), contractor for the CR121 project, seeking an extension of time to allow for the third-party independent evaluation. He reminded the Board that an extension had been granted on June 19, 2006 extending the contract from August 3, 2006 to September 3, 2006. The County Attorney sought clarification that consideration of the time extension would in no way be considered as a demobilization with any cost affect. Mr. Grode came forward to explain that the intent is to identify (1) that DAC does not have direction from the County to move forward, and (2) there is work to be done that ties into the work going forward, which cannot be accomplished until DAC receives Board direction. Jose Deliz, Director of Engineering Services, commented that when DAC signed the contract for this project they stipulated that there was nothing wrong with the process to be utilized. At this time, the County is hiring a third-party engineering consultant to prove the process wrong. Mr. Deliz did not feel that DAC□ s request was reasonable. Mr. Grode recalled that acceptance of the process was subject to barring unforeseen conditions, and this event is an unforeseen condition. Furthermore, identification of the conditions is required by a third party that DAC cannot control, and work cannot continue without this third-party assessment. Mr. Deliz disagreed and felt that DAC should have had the expertise to do the job according to specifications; DAC has not complied with specifications, such as performancebased factors that have not been achieved. Mr. Grode responded that DAC□ s work completed and tested to date has been pursuant to plans and specifications. Mr. Grode reiterated the intent of the request for an extension and noted that the County has not identified specific action within the plans and specifications that DAC has taken that caused the problems. It was Mr. Grode ☐ s opinion that the third party will provide an independent, well-thought-out process, but DAC cannot control the contract with the third party and subsequent work proposal. Mr. Deliz reminded Mr. Grode that some time ago DAC had agreed to correct old defects and proceed with a revised method of construction at their expense. Failure to take these steps has led to this current position. Mr. Grode responded that test strips were altered because the specific means were not recommended by the County □ s Engineering Services Department.

The County Attorney suggested that he meet with the Director of Engineering Services and the County Administrator and for the Board to consider deferring this item until DAC $\square$  s attorney can be present. Mr. Grode will contact DAC $\square$  s attorney to attempt to arrange an appropriate meeting time before the end of this meeting

03:23 Discussion turned to the CR121 widening and resurfacing road improvement project. The County Attorney explained that yesterday the Board considered a request from Douglas Asphalt Company (DAC) to extend the contract time to allow for an independent evaluation, which the County had discussed bringing in an independent third-party engineering consultant to address the problems. Mr. Mullin explained the importance of completing the project the way it was intended. He recalled several conversations with the contractor, their legal counsel, and the citizens in the area to identify the problems created on the first 20 miles because asphalt is not adhering and other technical issues. DAC□ s position on the cause(s) differs from that of the Director of Engineering Services, Universal Engineering Sciences, Inc. (Universal)(the county □ s engineering consultant), and the County Administrator. A 1,500 □ test strip was evaluated over a two-week period to determine if the test strip would work on the balance of the roadway. Universal and Jose Deliz, Director of Engineering Services, advised that the test strip works. However, DAC □ s engineers have expressed concerns that the test strip will not hold up. A specific resolution has not been reached, and it may not be possible to get to that point, in which case the issue would be addressed in another forum.

DAC has submitted a pay request for approximately \$937,000, with a balance remaining on the contract in the amount of approximately \$3 million. Staff cannot recommend to the Board payment of the invoice because the asphalt is not adhering on the first 20 miles of the project. Mr. Mullin felt that some progress has been made in a conversation with DAC so counsel to discuss the legal issues involved; discussion will continue to attempt an agreement for the engineers from both sides to review. Mr. Mullin did not recommend that the Board consider the third-party engineering services consultant agreements at this time. He felt that Universal, under an amendment to their current contract with the County, could do some core samples on the first 20 miles and provide data for the parties to review. Commissioner Marshall did not agree with utilizing the services of Universal. She mentioned a letter dated July 31, 2006 from Universal indicating that the field technicians who performed tests no longer worked for Universal and the field test data from 4/20/06 to 5/15/06 was missing. She felt that the project was grossly mis-managed. Commissioner Marshall encouraged the County Attorney to move forward with discussions with DAC, and hire another firm, unaffiliated with either party, to perform the core tests to determine if the base is adequate; and resolve the issues.

The County Attorney read the letter from Universal dated July 31, 2006, in part: □ & to provide the County with additional quality assurance data of the reclaimed base in the areas of missing field test reports Universal proposes to perform a series of cores with corresponding compressive strength testing of the base materials. As this work will replace the missing field test reports and support Universal □ s presence at the project site from April 20, 2006 through May 15, 2006, Universal will perform this coring and testing at no extra expense to the County. □

Jeff Pruett with Universal came forward to explain the proposal for additional coring to verify the competency of the base material and identify the test area. He commented that the missing data reports deal with density of the road.

Upon the request of Commissioner Acree, Mr. Mullin clarified that Universal is under contract with the County and is in no way connected with the company that constructed the base (The Miller Group under sub-contract with DAC).

Ray Grode, DAC so Division Manager, came forward to question how core testing results would be affected after the curing period versus concurrent testing at the time the work was performed. Mr. Pruett responded that Universal would look for fractures, rutting, any deformities in the condition of the base. Mr. Grode had concerns regarding how test results might vary, given the differentials in the curing process, in the characteristics of the base at the pre-cured state versus post-cured. Mr. Pruett suggested taking cores in areas where densities have been determined and compare that to other areas. The parties continued to discuss ways to get a good representation of the quality of the base, noting that Universal would be testing only, and not in a position to direct DAC to proceed. Mr. Pruett and Mr. Grode agreed there is a bonding problem and they discussed potential causes and resolutions. On a site visit Commissioner Higginbotham observed that either the asphalt was cold causing a dragging technique or the asphalt mix was not thick enough.

Universal.

Commissioner Marshall felt that (lack of) primer was an issue and perhaps there is another issue with the base. She was not comfortable moving forward using the process that was utilized on the first 20 miles, and she was unsure if the problems associated with the first 20 miles should be rectified first before moving forward. She questioned the costs, design, and how it got to this point. She also pointed out the need for the Board to educate themselves on this subject and in this process in order to evaluate and make sound decisions to move forward.

Commissioner Higginbotham reviewed the core testing process and identified a need to determine if there are any affects on core testing results as it relates to curing time. He did not feel that the County would gain anything by re-testing areas already completed, except for verification and for Universal seconds. He stated that the process utilized works; but this project is missing an unknown element. Later, Commissioner Higginbotham clarified that he felt the base was satisfactory, but many other issues need to be addressed.

John Taylor, attorney for DAC, came forward to express concern related to Universal  $\square$  s letter and some missing data. DAC had previously requested to review Universal  $\square$  s base test results, and upon review every test showed meticulously from the beginning to the end that DAC passed; the base was adequate. He expressed concern about Universal  $\square$  s proposal for re-testing.

Mr. Taylor then reviewed DAC□ s request for a time extension on the contract beyond September 2, 2006, as previously approved by the Board, to allow for an independent evaluation. It was his opinion that DAC had done what they were supposed to have done under the contract, and it did not work. He did not feel DAC should be held to the time in the contract, although he indicated that he would continue conversation with the County Attorney in an attempt to resolve the issues and move forward with completion of the project. Mr. Taylor felt that Commissioner Higginbotham □ s comments would affirm the reports received from Universal through April 19, 2006 that the base was done in an appropriate fashion; however, Commissioner Higginbotham could not prove it.

Mr. Pruett came forward to explain that testing was not for the contractor □ s approval; it was for the County. Universal was not directing DAC. Responding to questions from Commissioner Marshall, Mr. Pruett confirmed that field data reports were done verbally as tests were being performed. Written reports should have been submitted to the County on a weekly basis; this was not done. Commissioner Marshall questioned the County □ s receipt of pay requests from DAC and from

It was the opinion of Commissioner Acree that DAC should have also been performing core testing on work performed by The Miller Group, their sub-contractor, to ensure the work was correct. The County Attorney stated that the operational issues should be addressed by the County Administrator

The County Attorney stated that the operational issues should be addressed by the County Administrator and Director of Engineering Services, and at some point they should present a report to the Board regarding what was done and not done. The focus at this point should be how to resolve the problem with the asphalt not adhering properly. Mr. Mullin will continue with legal discussion with DAC sounsel and other parties, as needed. He advised that if the detail of the technical aspects warrants, the County Attorney indicated that he may contract with a third party.

Commissioners Acree and Marshall questioned how to move forward if DAC and Universal disagree on the process. Mr. Taylor clarified that Universal □ s test results indicate through April 19, 2006 there is nothing wrong with the base, yet that information was not relayed to DAC in the field. Commissioner Acree questioned why DAC □ s subcontractor was not also testing, and Mr. Taylor clarified that during a meeting held January 6, 2006 it was agreed that Universal would do all of the testing. Mr. Pruett came forward to clarify that the tests were to check density; there were no problems with the density at those locations. Furthermore, the contractor is responsible for the construction.

Discussion returned to DAC srequest for a time extension. The Board sought assurances that DAC would not charge the County for demobilization/mobilization should the Board grant the time extension. DAC was not prepared to address that issue at this time. The County Attorney recommended the Board to defer the request for a time extension for one week to allow the attorneys time to address the legal issues, and the County Administrator and Director of Engineering Services to address completion dates related to the project.

DAC must make regarding the balance of the remaining 16 miles.

Mr. Taylor re-appeared to strongly assert that DAC has performed exactly what they were required to do by the plans and specifications. If the plans and specifications were defective DAC is entitled to be paid. It was suggested to request DAC to contact The Miller Group for copies of their field notes, if any, to review. It was also suggested for both parties to review the bid documents to identify areas of disagreement for comparison by all parties in an effort to better understand the issues.

Mr. Mullin summarized that it is DAC□ s engineer□ s position that the base is not sufficient to warrant continuing the project based on the method used on the 1,500□ test strip. Universal, the Director of Engineering Services and County Administrator are convinced that the method will work to finish this project for the remaining 16 miles. DAC disagrees with this process and has stopped work. There is noting that prevents DAC from moving forward based on the technical information being provided by

Mr. Mullin continued that the cause may be in disagreement, but the contract is clear; it contains provisions related to the contractor so responsibilities. The system was thoroughly explained prior to commencing construction, and the process has been successfully utilized in other places. Commissioner Marshall preferred to resolve the issues related to the first 20 miles before moving forward.

Universal, the Director of Engineering Services and the County Administrator. This is the decision that

It was Mr. Deliz□ position that the process is viable, contrary to DAC□ s position. There is no indication in the information collected that the process is flawed. There is nothing to stop DAC from proceeding with the project in a manner that satisfies the contract requirements using the specifications and methods prescribed.

Mr. Mullin identified ways to proceed. Following further discussion, it was moved by Commissioner Acree and seconded by Commissioner Marshall to schedule a special meeting for August 10, 2006 at 9:00 a.m. to continue discussion of the CR121 widening and resurfacing road improvement project. In the interim, the County Attorney will review the bid package and contract with the appropriate parties and bring back a list of actions taken and disagreements. The vote carried unanimously. 04:36 It was moved by Commissioner Acree, seconded by Commissioner Marshall and unanimously carried to expend \$1,768 from District 2 Discretionary Account to purchase four chairs for Fire/Rescue Station 70.

There being no further business, the special session of the Nassau County Board of County Commissioners adjourned at 4:38 p.m.

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Mr. Mullin identified ways to proceed. Following further discussion, it was moved by Commissioner Acree and seconded by Commissioner Marshall to schedule a special meeting for August 10, 2006 at 9:00 a.m. to continue discussion of the CR121 widening and resurfacing road improvement project. In the interim, the County Attorney will review the bid package and contract with the appropriate parties and bring back a list of actions taken and disagreements. The vote carried unanimously.

02:19 For clarification purposes, it was moved by Commissioner Higginbotham, seconded by Commissioner Vanzant and unanimously carried to approve Change Order No. 1 to the contract with Douglas Asphalt Company for CR121 widening and resurfacing road improvement project for extension of the contract from August 3 to September 3, 2006.

The Nassau County Board of County Commissioners met in special session this 14th day of August 2006 at 4:30 p.m. to continue discussion of issues related to the CR121 widening and resurfacing road project. Present were Chairman Thomas D. Branan, Jr., Commissioners Jim B. Higginbotham, Ansley N. Acree, Floyd L. Vanzant, and Marianne Marshall. Also present were Michael Mullin, County Attorney; Michael Mahaney, County Administrator; and representing the Clerk □s office Connie Arthur, Deputy Clerk.

Chris Lacambra, the Clerk□ s Deputy Comptroller, was also present.

04:32 Chairman Branan called the meeting to order.

The County Attorney reported that he met with Douglas Asphalt Company □ s (DAC) legal representative on three occasions, in addition to several telephone conversations, over the past two weeks to discuss the legal issues. Mr. Mullin explained that some progress has been made. He will continue to address the issues in order to complete the project as it was originally intended. In addition, Mr. Mullin reported that he would retain Woods Engineering for third party consulting engineering servicesHe (estimated at \$13,000) to look at all of the issues including litigation, if needed. He would also enlist the services of FDOT because it is an FDOT funded project. Mr. Mullin declined to discuss specifics of conversations thus far related to legal issues, weighing legal constraints against the public wanting to know. The County Attorney indicated that the Board and County Administrator should address operational issues separately.

The group discussed mediation efforts, should it be deemed necessary.

Mr. Mullin hopes to bring back a proposal within five days after one or two additional meetings with DAC s legal representative. Woods Engineering will need approximately two weeks to address some of the engineering items. The Chairman may need to call a special meeting at that time.

04:45 In reply to a question from Commissioner Marshall, Mr. Mullin indicated that he would provide information related to Woods Engineering to the commissioners later tonight.

It was the consensus of the Board for the County Attorney to move forward with discussions with DAC $\square$  s legal representative.

04:49 Opening the floor to public discussion, Darryl Giddens, Bryceville area, came forward to question whether or not a performance bond was required for this project. Mr. Mullin responded that there is a performance bond and there is a provision in the bond that would allow the County to pursue the matter once DAC is placed on notice. This option will not be exercised until the Board makes a determination as to whether or not a satisfactory tentative approach can be reached. Mr. Mullin then explained the process to pursue this option.

There being no further business, the special session of the Nassau County Board of County Commissioners adjourned at 4:52 p.m.

08:27 The County Administrator requested the Board to consider setting a public hearing to amend the emergency purchase procedures to allow approval up to a certain dollar amount without Board approval. It was suggested to bring back this item when the full Board is present along with a suggested dollar amount.

08:30 The County Attorney provided an update on the CR121 widening and resurfacing project. Following discussion and upon the recommendation of the County Attorney, it was moved by Commissioner Marshall, seconded by Commissioner Vanzant and unanimously carried to approve to extend the contract with Douglas Asphalt Company for 30 days; and approve to send a letter to FDOT seeking an extension of the November 2006 deadline for the SCOP Agreement

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resurfacing road project. Mr. Mullin advised that in response to a letter he sent to John Taylor, DAC $\square$  s legal counsel, he met with him. Mr. Taylor expressed a willingness to address the matter on a 50/50 basis as suggested by Mr. Mullin several weeks ago as a starting point. If DAC decides to pursue this option, and upon receipt of DAC $\square$  s written proposal, Mr. Mullin will schedule individual meetings with the commissioners and Mr. Mahaney and any other parties as deemed necessary to determine if there is interest in pursuing this option, and make a determination in an open meeting.

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11:13 The County Attorney provided an update on CR121, noting receipt of FDOT□ s report. Mr. Woods with Woods Engineering is finalizing his report as well. Mr. Mullin explained one approach would be to take John Taylor□ s letter, as legal representative for Douglas Asphalt Company, and set a time limit for the County Attorney and Mr. Taylor to bring back a specific amendment to the current contract for the Board□ s consideration, if possible.

Commissioner Acree sought input from FDOT; however, it was noted that several FDOT representatives that the County has contacted are not available for various reasons. The group reviewed their options and suggested Mr. Mahaney and Butch Hartman, Road and Bridge Superintendent, to attempt to contact Mr. Green with FDOT and bring back an update on October 4, 2006.

John Taylor came forward to urge the Board to work out the details as quickly as possible; and if the Board agrees in principle with Mr. Taylor □ s letter dated September 18, 2006 to approve payment to Douglas Asphalt in the amount of \$937,000 for work performed.

Commissioner Marshall stated that she does not support paying money to Douglas Asphalt.

Mr. Mullin indicated that any discussions on the record would be included in settlement negotiations, not used in court.

It was moved by Commissioner Marshall, seconded by Commissioner Acree and unanimously carried to approve for the County Attorney to meet with John Taylor, counsel for Douglas Asphalt Company, over the next two weeks to work out some issues related to CR121 and bring back to the Board

about:blank 2/12/2007

The meeting recessed at 10:58 a.m. for lunch and reconvened at 1:20 p.m. to discuss the contractual negotiations with Douglas Asphalt Company (DAC) regarding remediation and completion of CR 121. The County Attorney distributed revisions to the proposed contract with DAC.

Mr. Mullin reported that the technical aspects of the re-work on the first 19.2 miles of the project would be addressed by a number of individuals: Butch Hartman, Superintendent of Road and Bridge, Clyde Sikes, Road and Bridge Department, Pat Gilroy, CEI, Charlotte Young, Contract Manager, Ray Grode with DAC, a representative of FDOT, and Mr. Mullin sexpert consultant Ron Woods, Woods Engineering. The group will meet to develop the technical aspects, such as identify which sections of FDOT s Red Book would be incorporated, and any changes would need to be identified and agreed to by the parties.

Mr. Mullin recalled that the Board previously agreed to utilize the balance of the funds towards the first 19.2 miles, and FDOT would seek and support new funding pursuant to the SCOP program for the remaining 14 miles of the project. The County □ s Lobbyist has agreed to assist in this task as well. The process may take one to one and a half years to accomplish. He stated that FDOT □ s report indicated basically there was a lack of prime.

Mr. Mullin explained that the goal is to get the 19.2 miles completed and set up methods of payments for DAC. He advised that The Miller Group, DAC□ s sub-contractor, attended the last meeting, and it was Mr. Mullin□ s understanding that DAC and The Miller Group have agreed on an outstanding amount due to The Miller Group. The Miller Group will not be involved in the re-work of the 19.2 miles.

Mr. Mullin distributed and reviewed Exhibit A showing the breakdown of 19.2 miles to repair (mill and pave) in the total amount of \$2,685,016.73, split equally between the two parties at \$1,342,508.37 each. Exhibit B shows the breakdown for the additional one and one half inch surface course, as recommended by FDOT and staff, in the total amount of \$1,892,211.17 to be paid by the County. Mr. Mullin pointed out that the costs of materials being charged by DAC are below current market price. He advised the Board that suggestions made by Ron Woods regarding the second lift of asphalt are not acceptable to DAC. Mr. Mullin reminded the Board that if the parties cannot reach an agreement, there is an alternate course of action through the court system. He sought direction from the Board as to how to proceed.

Ray Grode, DAC, and Butch Hartman, Superintendent of Road and Bridge, came forward to explain the milling process. Funds remaining in the project would be used to take up the existing two inches of asphalt (to the base) over the first 19.2 miles of road. A percentage of the millings will be returned to DAC splant, reprocessed with other components, brought back to the site, and re-laid one and one-half inches thick over the 19.2 miles as the first lift.

Commissioner Marshall questioned the cost of the existing two inches of asphalt laid over the 19.2 miles (and labor) and expressed concern because the County has already paid for this material. Vice Chairman Higginbotham felt that there should be a credit. Gene Bennett, a concerned citizen, also questioned who owns the millings. Commissioner Acree echoed Commissioner Marshall □ s concerns as well. Commissioner Marshall also questioned the fluctuation in the base thickness; however, Mr. Woods has indicated that the base is sufficient. FDOT□ s report indicated, □ the average thickness of the reclaimed base was 5.3 inches, six to eight inches is specified. The reclaimed based looked to be well-mixed and cohesive. □ It was Vice Chairman Higginbotham □ s understanding that the base was strong and adequate.

The group discussed various aspects and costs associated with the original contract.

John Taylor, legal counsel for DAC, came forward to review some of the history of the dispute. He observed that no one in the County has indicated what DAC did anything wrong. He reviewed the negotiation process that has led to this agreement. Chairman Higginbotham questioned Mr. Taylor as to whether or not the County created the rideability problem. Mr. Taylor supposed that if DAC put the

Responding to a question posed by Commissioner Marshall, Mr. Grode clarified that DAC was augmenting the roadway, not altering the roadway; as-built drawings sealed by a professional surveyor

asphalt down DAC caused the rideability problem, but it was waived.

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do not come into play in augmentation.

As mentioned earlier, Mr. Taylor reiterated that the prices submitted are far less than the current market, and a potential savings to the County of approximately \$803,000. He felt that, in addition to agreeing to be responsible for 50 percent, it is a good offer.

The group discussed the percentage of the millings to be used in the new mix. It was estimated that approximately 29 percent of the old asphalt (pursuant to State requirements) would be used in the new mix for the first lift; a similar percentage used in the second lift; and approximately 25 percent or more (up to 30 to 35 percent) of the old asphalt, upon confirmation with SJRWMD, could be used on nearby County dirt roads. Mr. Hartman clarified that because this is newer asphalt that will be milled, it must be carefully coordinated in order to re-apply it quickly on nearby roads because it will re-bond immediately; it cannot be stockpiled. Mr. Grode clarified that all of the additional asphalt (both lifts) has been credited to the County.

It was the consensus of the Board to wait for a full Board to be present before addressing any payment to DAC. Mr. Mullin suggested commissioners meet with staff to address any other concerns prior to calling the meeting. However, Mr. Taylor expressed concern for any further delay and the subsequent impact on their sub-contractor, The Miller Group. Following further discussion, it was moved by Commissioner Acree and seconded by Commissioner Marshall to schedule a special meeting for October 25, 2006 at 9:00 a.m. to continue discussing the contractual negotiations regarding remediation and completion of CR121. Commissioner Acree requested DAC to provide the Board with a breakdown of the original figures paid for labor and materials. The vote on the motion carried unanimously.

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09:22 The County Attorney provided an update on CR121 and discussions with Douglas Asphalt Company (DAC). Mr. Mullin distributed copies of minutes of a meeting held October 24, 2006 in which Butch Hartman, Superintendent of Road and Bridge, Pat Gilroy, CEI, Bob Rowland, Engineering Services, Charlotte Young, Contract Manager, Gene Knaga, Clerk S Deputy Comptroller, Mike Mahaney, and Mike Mullin had a phone conference with Ron Woods, Mr. Mullin S expert consultant. The meeting dealt primarily with e-mails from Mr. Gilroy regarding specific aspects of the work done on CR121. He explained that some of the work was described as problematic and probably would be dealt with differently if the parties were addressing CR121 in another forum.

Mr. Knaga explained Mr. Woods□ suggestion that there should be a deduction to DAC□ s proposal. The proposal is for the County to pay fifty percent of the cost of the first one and one-half inch lift and all of the cost of the one and one-half inch second lift. Mr. Woods□ suggested that the County should be credited for one-half inch of the second lift totaling \$279,034.85. Mr. Knaga participated in determining the dollar amount and explained his calculation methodology for quantifying the dollar amount in question. Mr. Woods concurred with Mr. Knaga□ s logic, and Mr. Knaga concurred with negotiating that amount with DAC.

John Taylor, legal counsel for DAC, came forward to state that their negotiation is final, and noting the charge per ton for asphalt is well below the market price.

Mr. Hartman suggested that the parties participating in finalizing the technical aspects (procedures) should meet perhaps five more times, but later he reduced the number of meetings to two or three. Mr. Mullin suggested if the Board wanted to move forward with the concept or terms of the agreement, the procedures would be attached as an addendum to the agreement as well as portions of FDOT  $\square$  s  $\square$  Red Book  $\square$  of regulations.

Responding to questions from the Board, Mr. Mullin indicated that at some point the Board would need to obtain quotes from outside consultants for third-party oversight of the re-work. Cathy Lewis, Administrative Services, reported that approximately \$480,000 would be available in the project account for such fees, based upon the contract, proposal, and prior approvals.

The Board weighed the options with safety issues and facts as presented.

Discussion turned to procedures to accomplish the job and the percentage of millings required for each application. Mr. Hartman came forward to explain that DAC has now agreed to provide County staff with a minimum of 33 percent of the millings and as much as County staff can haul. He distributed a list of roads and driveways maintained by the County accessing CR121 between Carroll□ s Corner to Duval County line. The list also included roads Mr. Hartman recommends that would require a Class D permit for improvements. (The list also includes a recommendation to install guardrails.) He calculated the number of loads that would be required to make the improvements. Additionally, he contacted St. John River Water Management District (SJRWMD), and requested the Board consider expediting these permits through the Road and Bridge Department to accomplish these road improvements in a timely manner. The Board suggested adding to the list two volunteer fire stations in order to access water. Commissioner Marshall suggested adding Hathaway Road to the list as well; Mr. Hartman will bring back consideration of adding Hathaway Road at a later date.

Mr. Hartman reviewed the timeframe to accomplish the tasks associated with the 19.2 miles of re-work on CR121. He advised that DAC has prior commitments, which would delay commencing the work on CR121 to early to mid-December. Additionally, asphalt companies traditionally shut down during the Christmas holidays for plant maintenance, which would further delay the project until January 2007. Mr. Grode came forward to confirm this timeline.

Mr. Mullin directed the Board □ s attention to the draft contract, provision two, regarding payments for prior work. Mr. Mullin felt that the technical aspects were crucial to the contract as well as FDOT □ s requirements before moving forward. However, Ray Grode, DAC, came forward to explain the financial hardship incurred because of the delays. He and Mr. Taylor urged the Board to approve the agreement and release the payment so that they could pay their sub-contractor, The Miller Group.

Following much discussion, it was moved by Commissioner Vanzant, seconded by Commissioner Marshall and unanimously carried to (1) approve the concept of the agreement between the County and

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Douglas Asphalt Company, following FDOT specifications; and (2) schedule a special meeting for October 30, 2006 at 4:30 p.m. to continue discussion of the contractual negotiations regarding remediation and completion of CR121 (specifically an addendum related to an understanding with FDOT and the technical aspects). In the interim, Mr. Hartman and other interested parties were requested to meet with FDOT officials to get an understanding as to the technical aspects and bring back in writing form for the Board to consider.

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4:35 Butch Hartman, Road and Bridge Superintendent, appeared before the Board and distributed a letter he sent to Henry Haggerty, P.E. with the State of Florida Department of Transportation regarding the overview, scope of work, and summary regarding CR121. Mr. Hartman has not yet received a reply from Mr. Haggerty. Commissioner Marshall felt that the expert engineering consultant for the project, Ron Woods, with Woods Engineering, should have signed off on the letter or the Florida Department of Transportation (FDOT) should have put the language in letter form to the County advising that this is what they would require, along with any additional information. Mr. Mullin recalled the Board □s direction was for Mr. Hartman to go to Lake City to meet with FDOT officials to get an understanding as to the technical aspects. Mr. Hartman responded that FDOT was unable to fit a meeting into their schedule on short notice; therefore, the letter was prepared.

Mr. Mullin did not feel that the Board could proceed until Douglas Asphalt Company (DAC) accepts the procedures and FDOT, Mr. Woods, Clyde Sikes and Butch Hartman, Road and Bridge Department, sign off on the technical aspects so that the County would have something definitive as to the manner in which the work is going to be done. Mr. Mullin stated that John Taylor, legal counsel for DAC, would have to address the Board regarding how to proceed with payment and the technical aspects, which would be attached as an addendum to the contract, and any language should reflect same. A motion for approval would be subject to an addendum. As an alternative, Vice Chairman Higginbotham suggested calling a special meeting once everything is agreed to in writing.

4:42 Mr. Taylor appeared before the Board to state that DAC agrees with everything stated in the letter; an alternative would be to sign the agreement and make the payment in order for DAC to pay The Miller Group (their sub-contractor). Mr. Taylor suggested signing the agreement today, subject to approval in some fashion by the FDOT and/or Mr. Woods, and paying the invoice.

Commissioner Marshall was not comfortable moving forward until Mr. Woods and FDOT sign off on the procedures.

Mr. Mullin responded to a question from Vice Chairman Higginbotham stating that the addendum is important and that there should be a definitive answer from FDOT. He suggested some revised language related to the FDOT  $\square$  Red Book $\square$  and the pre-construction meeting. He indicated that FDOT would provide an opinion based on what has been provided to them, and Mr. Woods would have input as well. It would come back to the Board in writing.

The Board reviewed their options. Mr. Taylor had added an Exhibit C, a description of the technical aspects of the work. Mr. Mullin expressed concern that any changes at this stage may affect completion of the balance of the 19.2 miles.

Upon the request of Commissioner Marshall, Mr. Mullin will schedule a meeting with FDOT to address the letter sent by Mr. Hartman. She recommended that Mr. Woods participate in that meeting as well.

The group also discussed which portions of the FDOT  $\square$  Red Book  $\square$  would apply; however, Mr. Taylor clarified that DAC would not be concerned if the entire  $\square$  Red Book  $\square$  would apply. DAC agrees to the scope of the work as described in the documents. Mr. Taylor did not feel that DAC should have to wait for the agreement to be signed in order to be paid the outstanding invoice.

Following discussion of the options, Mr. Mullin suggested Mr. Hartman discuss with FDOT the manner in which FDOT recommends that the job be done. Mr. Woods would then sign off indicating that he agrees with that, making any additions or deletions as necessary. He questioned whether Mr. Woods, as a consultant, would be prepared to sign off as the Engineer of Record on the new 19.2 miles.

Mr. Mullin suggested some further changes in the language.

Mr. Hartman commented that during a meeting of all parties, Mr. Woods stated that he did not have an issue with the scope of work that the State had recommended, but was concerned with the second half inch of asphalt. Again, Mr. Mullin questioned whether or not Mr. Woods would sign off as the Engineer of Record, and, as an alternative, Commissioner Acree suggested that he sign off as a consultant as to the technical aspects.

Mr. Mullin indicated further revisions in the proposed language would set the manner in which the approval is done; Mr. Woods, FDOT, Butch Hartman, and Clyde Sikes would sign off as to the

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procedures to address the 19.2 miles. If the Board approves the contract, then the County would need to hire a third party to perform the oversight, and the cost would need to be established.

Mr. Taylor came forward to respond affirmatively to Mr. Mullin s questions: (1) DAC does have the manpower to accomplish the job; (2) DAC can accomplish the job within the timeframe set forth; (3) DAC has the financial ability to undertake and complete the job; and (4) DAC has done their due diligent and is prepared to proceed.

Mr. Mullin indicated that the language as proposed addresses the specification that must be developed, and that there is no increase in cost. Mr. Taylor commented that if DAC could get paid immediately, they would have no objections to the language that the County Attorney has recommended as an amendment to the agreement.

Mr. Mahaney updated the Board regarding a conference call he had with FDOT and Mr. Woods. He
reviewed Mr. Woods□ availability to meet with the Board to review FDOT standards as outlined in the
☐ Red Book☐ and the ☐ Green Book,☐ which is a manual of uniform standards for counties. Mr.
Mahaney stated that FDOT□ s position is that it is the County□ s project and they would not be put into
a position to sign off on the technical specifications. The Board requested Mr. Mahaney to again contact
FDOT to provide a written statement to that effect.
Mr. Mullin commented that he added under Additional Work, the $\square$ FDOT Green Book $\square$ . The
language proposed would allow Exhibit □ C□ to be an addendum to the contract, but Mr. Woods would
need to sign off for the Board. The group discussed the approval process. Acknowledging
Commissioner Marshall ☐ s concern that Mr. Hartman is not an engineer, Mr. Hartman clarified that the
letter sent to FDOT was only to advise the scope of work. Mr. Mullin continued that Exhibit □ C□
would be definitive with Mr. Woods signing off and determining which of FDOT□ s technical books is
more appropriate for the project.
In order for the Board to consider approving the contract, Mr. Mullin reviewed the following
revisions: page 1, Additional Work, fifth sentence:   The parties would hold a pre-construction meeting

In order for the Board to consider approving the contract, Mr. Mullin reviewed the following revisions: page 1, Additional Work, fifth sentence:  $\Box$  The parties would hold a pre-construction meeting after execution of this agreement and at that time the County, after approval by the Board of County Commissioners, shall determine the scope of work and the portions of the Florida Department of Transportation Red or Green Book which shall govern the conduct of the job, and any other technical requirements. The exact specifications shall be set forth as an exhibit to be attached to this contract as Exhibit  $\Box$  C. $\Box$  There shall be no increase in cost or expenses to the County based upon the scope set forth in Exhibit  $\Box$  C $\Box$  . $\Box$  In addition, the questions that Mr. Taylor answered on behalf of his client would be entered into the record. Mr. Mullin stated that the Board $\Box$  s other option would be to wait until the meeting with Mr. Woods, perhaps on Thursday, acknowledging Mr. Taylor $\Box$  s concerns for any further delays.

Gene Knaga recommended that the Board use the exact number as reconciled by Board staff on the retention, \$373,207.14. For compliance, he also sought clarification of fixed and unit prices. Ray Grode, DAC Division Manager, reviewed the fixed and unit price items with Mr. Knaga.

After further discussion, it was moved by Commissioner Acree and seconded by Commissioner Marshall to approve the contract with DAC with the changes as stated by the County Attorney; and all other details to come back to the Board. After further discussion, the motion and second were amended to authorize the Chairman or Vice Chairman to sign the contract. The vote on the motion, as amended, carried unanimously.

5:37 Mr. Hartman came forward to address citizens □ concerns regarding the old slag section (Carroll □ s Corner) on CR121. He will bring back prices

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1:12 The County Attorney distributed the current and amended contract with DAC. He explained that after the execution of the contract, the Bonding Company had indicated that they would feel more comfortable if the contract was entitled an amendment to the current contract. Mr. Mullin briefly reviewed the contract, stating that the agreement was intended to be an amendment, but was inadvertently entitled a new contract. He also stated that the Clerk soffice is holding the payment to DAC until the matter is resolved. Mr. Mullin responded to a question from Commissioner Marshall regarding signing off on invoices. He referenced page two, paragraph 4A, which states: 

The Contract Manager submits the recommendation to the Engineering Services Director who shall review the invoice and make a recommendation to the County Administrator, who in turn will review the invoice . He also stated that Mr. Woods has agreed to work with the County Engineering Services Director, and he would sign off upon the completion of the 19.2 miles. He commented that Ms. Young has sent out information in order to get a response from those companies that were recommended to do the third party oversight. Upon the recommendation of the County Attorney, it was moved by Commissioner Acree, seconded by Commissioner Vanzant and unanimously carried to rescind the motion on October 30, 2006 approving the contract between Nassau County and DAC regarding CR121. It was then moved by Commissioner Acree, seconded by Commissioner Higginbotham and unanimously carried to approve Amendment #1 to the original contract between Nassau County and DAC regarding CR121, all other terms remain the same.

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## Douglas Asphalt Company

Quality Control
Plan
C.R. 121
Nassau County

#### Douglas Asphalt Company Nassau County C.R. 121

Asphalt:

HMA-3.2 Personnel
HMA-3.2.1 Qualifications

Paving Level 1 Personnel - Jimmie Nelms-N45243269

James Roach-R20045878

Neal Meeks-M20062176

Chris Meeks-M20010575

Donny Johnson-J52517666

Greg Kendall-K53428571

Paving Level 2 Personnel - Jimmie Nelms-N45243269

Richard Robertson- R16374161

Neal Meeks-M20062176

Greg Kendall-K53428571

Chris Meeks-M20010575

In the event the above listed personnel are not available, CTQP qualified personnel will be utilized and the Engineer will be notified within 24 hours with the name and TIN.

Mix Designer - Quality Assurance Testing Labs, L.L.C.

360 North Seagrave St.

Daytona Beach, FL 32114

William Loyed TIN: L30093066

HMA-3.2.2 Level of Responsibility - The primary contact for the Department will be Tommy Peake. Per 330-2.3.1 Personnel Qualifications, personnel will be provided for the respective areas. Paving Level 1 Technician will be responsible for the pavement infrared temperature, verifying density with a density measuring device, and monitoring the pavement smoothness with a 15 foot rolling straightedge. Paving Level 2 Technician will be in responsible charge of the paving operations. This individual will also be responsible for monitoring the mix spread rate, monitoring the pavement cross slope, all required reports and documentation, cutting of cores, transporting cores to asphalt lab, and mix temperature of the first five loads and every fifth load thereafter.

#### **HMA-3.3 Raw Materials**

HMA-3.3.1 Source - The following plant will be used to provide Hot Mix Asphalt for the project:

Douglas Asphalt Company, Inc. 10010 North Main Street Jacksonville, FL 32218 Plant Number A0-734

#### Douglas Asphalt Company Nassau County C.R. 121

#### **Asphalt**

HMA-3.3.2 Certification - Mixtures and products incorporated into project will be in conformance to specifications, load tickets will bear approved mix design number and/or producer certification.

HMA-3.4 Storage Facilities for Raw Materials - Hot Mix Storage addressed in Producer's Quality Control Plan and 330-6.4. Other materials, such as ARMI cover stone will be stockpiled and loaded to prevent segregation and contamination. Asphalt Rubber Binder will per 336-5. Prime and tack per section 300.

HMA-3.5 Production Equipment - Refer to Producer's QC Plan.
HMA-3.6 Plant Requirements

HMA-3.6.1 Plant Identification - Refer to Producer's QC Plan.

HMA-3.6.2 Process Control System - Refer to Producer's QC Plan.

HMA-3.6.3 Loading and Shipping Control - Refer to Producer's QC Plan.

HMA-3.6.4 Types of Products Generated - Refer to Producer's QC Plan.

#### **HMA-3.7** Other Requirements

HMA-3.7.1 Copy of Certification - Attached are examples of certifications issued by the plant/Contractor for the products approved by the Department. (Example of: Tack delivery ticket, ARMI Binder, Asphalt mix delivery tickets, ARMI Cover Stone).

HMA-3.7.2 Statement of Compliance - The materials and processes used in the construction of this project will comply with all quality requirements set forth by the Department including Contract Documents and other Department manuals.

HMA-3.7.3 Information on Producer's Quality Control Plan - See section 3.3.1 for list of approved producers.

**HMA-3.7.4 Documentation Procedure:** All testing reports, cross-slope measurement forms, etc. will be stored at the production facility, and will be made available to Department personnel for review, upon request. These documents will be available for review during normal business hours.

# Douglas Asphalt Company Nassau County C.R. 121 Asphalt

HMA-3.8 Final Manufactured Product - Plant Operations
HMA-3.8.1 Storage - Not Applicable. See Producer's QC Plan.
HMA-3.8.2 Disposition of Failing Materials - Not Applicable. See
Producer's QC Plan.

HMA-3.9 Final Manufactured Product - Field Operations
HMA-3.9.1 Transportation - Trucks hauling Hot Mix will be of tight
construction which prevents the loss of material, and will be
equipped with a tarpaulin or waterproof cover mounted in such a
manner it can cover the entire load. The trucks will be cleaned of
all foreign material, and coated with a soapy solution or release
agent. The bed of the truck will be equipped with a hole for
measuring the temperature of the mix.

HMA-3.9.2 Storage - Not Applicable.

Maintenance of Traffic: The traffic control will include provision of signage at both ends of the 19.2 mile project. In association with the moving lane closure, appropriate construction activity signage will be provided as outlined in FDOT Standard Design Index, Section 600. Each lane closure operation will be setup to maintain a single lane of traffic, and it will include flagmen (at each end) with paddles, radios, and other devices as required by Section 600 of the FDOT Standard Design Index.

HMA-3.9.3 Placement: See HMA-3.9.3.5(In addition the following will be the parameters for paving in non-density areas: Immediately cease transportation of asphalt mixtures from the plant when the rain begins at the roadway. Do not place asphalt mixtures while the rain is falling, or when there is water on the surface to be covered. Once the rain has stopped and water has been removed from the tack surface to the satisfaction of the Engineer and the temperature of the mixture caught in transit still meets the requirements as specified in 330-9.1.2, the Contractor may then place the mixture caught in transit.)

HMA-3.9.3.1 Milling - Will be accomplished with equipment per 327-2 and monitored per sections 327-3 & 327-4. The milled cross slope will be verified at a frequency of at least every 250 feet unless modified in writing by the Department. Emphasis will be made for proper texture and ride wherever necessary. The milling of the newly placed 2" asphalt lift (including the scoring of the reclaimed roadway base) will be controlled by the roadway centerline, utilizing a 2% slope from the crown of the road.

### Douglas Asphalt Company Nassau County C.R. 121

**HMA-3.9.3.2 ARMI** - Monitor per 341-4,5 and 6 and adjust as necessary to maintain application rates.

HMA-3.9.3.3 Preparation - Prior to application of tack material, the existing surface will be cleaned of all foreign material, which might prevent proper bond over the full width of the application. Attempts will be made to minimize tack drop-off coming from truck tires, or mix droppings on the pavement surface prior to paving.

HMA-3.9.3.4 Prime and Tack —Once the milled roadway segment is properly cleaned, the roadway will be primed (per FDOT Specifications, Section 300) using RS-1 or equal. Subsequent to the prime application, a sand cover will be provided, and a temporary centerline stripe will be applied in order to allow vehicular traffic use of the milled roadway segment. Tack material will be verified by verifying the spread rate for each application. Adjustments to the application will be made to maintain the spread rate within the specified range. Monitor per Specification 330-4.

HMA-3.9.3.5 Paving - Use properly maintained equipment per 320-5 and monitor paving operations per 330-2.2 (temperature, slope, mix spread rate), and placement requirements per section 330-3, 9, 11, 12, 13 with emphasis on uniformity and smoothness. Reasonable attempts will be made to make smooth transitions at bridge approaches, manholes, and joints. In the event of rain (standing water or otherwise agreed to), paving will cease and trucks in route will be fully tarped as soon as possible. Once rain ceases and the pavement is mechanically swept of standing water, paving will continue on the tacked surface using mixtures meeting temperature requirements.

HMA-3.9.3.6 Compaction: After the prime coat is allowed sufficient curing time (1 – 2 days), the milled roadway will be cleaned, tacked, and the first lift of 1 ½", SP 12.5 TL-C asphalt will be applied to the milled roadway surface, followed by a temporary centerline stripe. The asphalt application will follow in sequence with the milling operation throughout the entire (northbound & southbound) 19.2 mile project. As the initial asphalt lift is being placed, mix testing will be performed. After the lift placement, rideability straight edge testing will be performed and the first asphalt lift corrections will be made. After corrections are accomplished, the tack coat and surface lift (1 ½" SP 12.5 TL-C) will be placed. In sequence with

#### Douglas Asphalt Company Nassau County C.R. 121

the surface lift placement, the final surface striping will be applied. The operation will be performed in a continuous effort throughout the 19.2 mile northbound and southbound lanes. Compaction will be achieved using an adequate number of properly maintained rollers meeting applicable sections of 320-5.3. The compactive effort will be adjusted to control and achieve density as referenced in 330-10. Specification 330-10.1.2 is not applicable in SuperPave asphalt paving. Care will be taken not to over compact the pavement layer or use no more force than necessary to achieve density.

In areas where density testing is not required, the following rolling pattern is proposed to be done using the following equipment and coverages:

Roller 1: Ingersol Rand DD-90 Coverages: 5 passes
Roller 2: Ingersol Rand DD-90 Coverages: 5 passes
Roller 3: Ingersol Rand DD-110 Coverages: 5 passes

This proposed rolling pattern will then be documented immediately after completion and reviewed with the Engineer for approval. Informational cores will be taken as directed by the Engineer to determine the initial optimal density in these areas. If density of the process control cores varies by more than three

PCF from the initial cores that were taken when the rolling pattern was established, then a new pattern will be established. When Process Control Cores are required the Paving level 2 technician will ensure that these cores are taken in the appropriate locations. Changes in rolling procedure shall require modifications to the QCP as approved by the Engineer. In the event that the rolling procedure deviates from the approved procedure, placement of the mix shall be stopped.

**HMA-3.9.3.7 Friction Courses** - Meet requirements for various Friction Courses listed in 337, including process control per 337-5 and roadway acceptance per 337-7, with emphasis on uniformity, smoothness, and density as required. Care to be taken not to over compact mixes and crush aggregate particles in final surface.

## Douglas Asphalt Company Nassau County C.R. 121 Asphalt

HMA-3.9.4 Disposition of Failing Materials - Per 334-9 Low Pay Factor Material, 330-6.3 Mix Temperature, 330-6.5 Contractors Responsibility of Mixture Requirements, and 330-12 Surface Requirements. If mix, determined by the Paving Level 2 Technician, appears to be out of specification, the following steps will be taken.

HMA-3.9.4.1 - Rechecking and/or retesting sample to validate test result and/or calculations. (As deemed

validate test result and/or calculations. (As deemed necessary, an additional sample may be taken and tested to compare results). At the roadway, should nuclear density tests indicate we are not getting optimum density, we will stop paving operations and determine what the problem may be. We will then change the rolling pattern to achieve the required optimum density. The Project Administrator will be notified so that he can document the change in the rolling pattern.)

HMA-3.9.4.2 - Investigation to determine cause and potential solutions, including discussions with roadway and plant personnel. Depending on results of materials the Contractor may initiate and submit to the Project Engineer for approval an Engineering Analysis Report (EAR) along with a request for the material to be left in place. If the Composite Pay Factor is between 0.75 and 0.80 and upon approval of the Engineer, an Engineering Analysis Report (EAR) may be initiated. This evaluation will be in accordance with 334-9.4. The lab selected to perform the EAR will not be working on this project for the FDOT performing verification or working for (Douglas Asphalt Company, Inc.) performing CQC testing. The name of the lab chosen to perform the analysis will be submitted to the Engineer for approval prior to engaging their services. The lab will be accredited and approved to do the testing procedure required for the EAR.

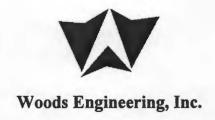
**HMA-3.9.4.3** - Implementing remedial action (if necessary) to correct the problem - include notation on daily reports of any changes in process.

HMA-3.9.4.4 - Notification of the QC Manager if necessary.

HMA-3.9.4.5 - Notification of the Engineer if results exceed limits described in section 334-7 or 334-9.

**HMA-3.10 Testing Laboratories** - Douglas Asphalt Company, Inc., Lab will perform all quality control related testing. Contacts for this lab will be:

Tommy Peake-P20055877
Ryan Smith-S53079678
James Roach-R20045878
Floyd "Bucky" McDaniel- M23524571



February 12, 2007

Ms. Charlotte Young County Attorney's Office Nassau County Government 96160 Nassau Place Yulee, Florida 32097

Subject:

Exhibit/Appendix C to Douglas Asphalt Contract

WEI Project 06-938

Dear Ms. Young:

Attached is a document intended to be attached as Exhibit/Appendix "C" to the Nassau County-Douglas Asphalt Contract for remediation of the defects for County Road 121. This document represents our recommendations for specific items of remediation.

We appreciate this opportunity to be of assistance. If you have any questions regarding this matter, please contact us.

Sincerely,

Woods Engineering, Inc.

X. Ronald Woods, P.E.

Consulting Engineer Licensed, Florida 23122

This is an electronic transmission to expedite the delivery of the information contained herein. A signed and sealed copy of this report is maintained on file and will be submitted separately.

### Exhibit C to the Contract for Corrective Action Required for the Contractor on Nassau County Road 121

#### I. Reference Documents

- A. The reference documents, unless otherwise noted shall be included in their entirety and shall be considered a part of this contract as it is written herein. In the event of a conflict between reference documents, the Engineer, as designated by Nassau County, shall decide and provide a written statement resolving such conflict or apparent conflict. The following are the reference documents for this project:
- 1. The Florida Department of Transportation, "Standard Specifications for Road and Bridge Construction", 2004 Edition (further known as "The Red Book").
- 2. The Florida Department of Transportation, "Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Street and Highways", May 2005 Edition (further known as :The Green Book").
- 3. The Florida Department of Transportation, "Roadway and Traffic Standards for Design, Construction, Maintenance and Utility Operations" (Design Standards). July 2004 Edition, Index 600.
- 4. "Widening and Improvement Plans for County Road 121, Nassau County, Florida" dated February 18, 2005.
- 5. Typical Section provided by the Engineer prior to or Subsequent to the start of work on this project.

#### II. Quality Process (QC, VT, IA)

- A. The Contractor shall submit for review by the Engineer and approval by Nassau County, a comprehensive Quality Control (QC) Plan in accordance with FDOT Requirements that specifically addresses the construction activities for County Road 121. The QC plan shall include the resumes of all personnel to be used on this project.
- B. The Contractor shall provide Quality Control (QC) for the project through the use of internal personnel or the hiring of an independent testing laboratory for the purposes of providing full-time quality assurance of the construction activities at no additional cost to Nassau County. Sufficient numbers of personnel shall be provided to assure coverage of all construction activities. The duties of the QC personnel shall be clearly outlined in the QC plan and shall include the following minimum activities:

#### **Duties of the Contractor QC**

- 1. Documentation of Plant Asphalt production and delivery to the jobsite of all asphaltic concrete materials and mixes.
- 2. Measuring and documentation of asphaltic concrete temperatures at the time of delivery and at laydown. Temperature shall be measured with a calibrated thermometer while in the delivery truck and in the hopper of the paving machine. Surface thermometers shall not be used.
- 3. Measuring and documentation of pavement machine settings to achieve the required layer thicknesses after compaction.
- 4. Measuring and documentation of pavement layer thicknesses by coring on a daily basis for the area covered that day.

- 5. Measuring and documentation of a control strip compaction process in accordance with FDOT requirements. The control strip compaction process shall be normalized to temperature and verified by laboratory density measurement of cores prior to continuing production.
- 6. Measurement and documentation of rolling straightedge to comply with surface flatness requirements.
- 7. Measurement and documentation of day's production using station numbers and GPS.
- 8. Daily submittal of all documentation to Nassau County and its designated Engineer for review.
- C. Nassau County will hire an independent testing laboratory for the purpose of Verification Testing (VT). The VT firm will "Spot check" the QC activities of the contractor and will make independent measurements of quality parameters on a random basis.
- D. The Contractor shall provide sufficient personnel, equipment and materials to assure a continuous operation for the work periods.

#### III. Maintenance of Traffic

- A. The Contractor shall be responsible to provide all maintenance of traffic and shall submit a Maintenance of Traffic Plan (MOTP) prior to beginning work. Maintenance of Traffic shall apply 24 hours per day, 7 days per week throughout the term of construction and until the project is accepted by Nassau County as complete. FDOT Design Standards Index 600 shall be followed for MOT.
- B. The appropriate subindex of Index 600 shall be used for the conditions on the roadway at the time. For example, if equipment is stored off the roadway, and the roadway lanes are clear during non-work hours, the appropriate warnings and signage such as found in subindex 602 shall be used. During daylight work activities when lanes are not clear and traffic must be interrupted or detoured per lane, subindex 603 shall be used. Other subindexes may be applicable depending on work activities or workflow.

#### IV. Milling

- A. All existing asphaltic concrete above the base material shall be milled to remove the asphaltic concrete in its entirety, so as to expose and scarify the top surface of the base material.
- B. Milling shall be done so as to achieve a two percent (2%) cross slope defined from the centerline to the pavement edge and to minimize the amount of base material removed.
- C. In areas where coring has shown the base course thickness to be at or less than 6 inches, and to achieve the proper cross slope additional base course must be milled. The Contractor shall provide a thickened asphalt section top compensate for the removed or deficient base at no additional cost to Nassau County. The thickened asphaltic section shall be transitioned into and out of deficient base area for a minimum of 50 linear feet beyond the limits of the deficiency or the length to achieve a transition of not more than ¼ inch in 10 feet, whichever is greater. This additional asphalt shall not include in the required thickness of the asphalt of the asphaltic concrete layer to be applied over the base.

#### V. Prime Coat Application

- A. After proper milling and cleaning of the milled surface to remove dust, debris or laitance, apply a prime coat of RS-1 or approved equivalent material at the rate of not less than 0.15 gallons per square yard (gal/SY). Prime coat shall be applied uniformly by spraybar application to a surface that has a moisture content ranging from a minimum of 8 percent by weight to 11 percent by weight. The surface might require light dampening with a uniform water spray, followed by rolling with a traffic roller. Roller application is not acceptable. VT will be responsible for the verification testing of the Prime Coat. Immediately after application of the prime coat, embed 3 strips of canvas fabric, each 12 inches long, randomly into the first 10 feet of wet prime coat, leaving a 2-inch dry "tail" of canvas to allow gripping the test strip. After 15 minutes of dwell time, pull the canvas "tails". If the prime coat pulls cleanly from the surface of the base material in this "peel test", the prime coat application shall be rejected
- B. The prime coat shall be covered with a cover material coated with 2 to 4 percent asphalt cement and applied at a rate of 10 lb/SY. After application of the cover material, roll the surface with a traffic roller to produce a dense mat of priming material over the base material.
- C. Provide temporary centerline striping using acrylic striping paint.

#### VI. Tack Coat Application

- A. Prior to the application of the tack coat, clean surface of any loose material, debris, dust or loose cover material. Tack coat to be applied to the primed surface and on the surface of asphalt course prior to placement of the next asphalt course.
- B. Apply a uniform spray bar coating of RA-500 tack coat heated to 250F-300F. (Douglas Asphalt has indicated that 0.05 gal/SY is at the high end of the requirement. Douglas Asphalt has indicated there should be two rates, (1) a fogging application at a target rate of 0.02 0.05 gal/SY on the prime surface and; (2) tack coat at a target rate of 0.05 gal/SY on asphalt surface.)
- C. Allow the tack coat to dry but remain tacky prior to application of the asphalt pavement layer. Do not allow traffic onto the tack coated surface prior to paving. Paving may be done when the tack coat is sufficiently dry that when a full hand pressure is applied to the surface and pulled away, there is noticeable adhesion but no material is pulled away on the hand or from the primed surface.

#### VII. Pavement Application

A. To the milled, primed and tacked base surface, apply the first lift consisting of one layer, 1-1/2 inches thick, of SP12.5 asphalt designed in accordance with FDOT requirements. The SP12.5 mix shall be a recent design mix, not more than 90 days old, and shall not contain more than 25 percent recycled asphalt from millings. Roll and compact to a consistent surface texture and density of at least 96 percent of the theoretical maximum density of the mix. All asphalt placements shall be at the temperatures recommended by FDOT.

- B. After proper rolling and compaction of the lift, a rolling straightedge and prior to the second lift of asphalt course the Contractor shall be used to check the surface flatness and tolerance. Corrections to the surface flatness shall be made at no additional cost to Nassau County, prior to continuing with the second lift of asphalt.
- C. After a correction of surface irregularities in the first lift of asphalt, place the second lift in a continuous layer of 1-1/2 inches, properly rolled and compacted to achieve a density of at least 96 percent of the theoretical maximum density of the mix.
- D. Vertical joints in the lifts shall be offset by a t least 6 six inches.
- E. If more than 48 hours elapses between the placements of asphalt lifts, the surface shall be tack coated with 0.02 gal/SY of RA-500 or approved equivalent tack coat prior to placement of the second lift. All lane joint edges shall be tack coated and cross rolled.
- F. The final surface of the pavement shall achieve density, surface texture and ride quality acceptable to Nassau County.

#### VIII. Pavement Striping

A. Final striping and placement of the RPM on the pavement shall be acrylic as contained in the original contract.

#### IX. Inclusion

A. The inclusion of certain provisions of the pavement specifications herein is intended to reiterate those items of specific contention between the Contractor and Nassau County in the original contract and to make clear such provisions. This inclusion does not reduce the effect of any provisions of pavement construction or control contained in the reference documents.

## AGREEMENT FOR CONSTRUCTION ENGINEERING INSPECTION (CEI) SERVICES CR 121 - REPAIR WORK NASSAU COUNTY, FLORIDA

THIS	THIS AGREEMENT		tered	into this			day	
		2007 b	y and	betwee	n the	BOARD	OF C	OUNTY
COMMISSIONER	RS OF	NASSAU CO	OUNTY,	FLORIDA,	a po	olitical	subdiv	ision
of the Stat	e of	Florida,	(herei	nafter	referi	red to a	as "Cou	nty")
and POST, B	UCKLE	Y, SCHUH	& JERNI	GAN, IN	IC. (E	PBS&J),	(herein	after
referred t	o as	"the	Consult	ant"),	a F	lorida	Corpor	ation
authorized	to do	business	in the	State	of F	lorida a	t 5300	West
Cypress Stre	eet, S	Suite 200,	Tampa,	Florid	a 3360	07.		

WITNESSETH: NOW, THEREFORE, in consideration of mutual terms and conditions, promises, covenants and payments herein set forth, the County and the Consultant agree as follows:

#### ARTICLE 1 - PROJECT SUMMARY

- 1.1 PBS&J responded to the County's Request for Qualifications (RFQ) to provide quality assurance activities for the corrective action required of the contractor on Nassau County Road 121, which extends 19.2 miles from the Duval County line north in Nassau County, Florida. The Scope of work for the corrective action project is as follows:
  - Milling existing asphaltic concrete (2") above the base material
  - Prime coat application on milled surface
  - Temporary centerline striping using acrylic striping paint
  - Pavement Application with tack coat Two lifts consisting of one layer, 1-1/2 inches thick of SP12.5 asphalt.
  - Permanent centerline striping using latex paint with glass beads and reflective pavement markers

Proposed Timeframe:

Milling and first lift: 60 days

Second lift: 60 days Total Project: 120 days

#### ARTICLE 2 - SCOPE OF SERVICES/CONFORMANCE WITH PROPOSAL

- 2.1 PBS&J have indicated that their firm has the qualifications and experience in providing construction management and inspection services to Nassau County. PBS&J further states that their firm has the ability to perform the work set forth in the RFQ. PBS&J shall perform for or furnish to the County professional construction engineering inspection services in all phases of the project to which this Agreement applies as hereafter provided.
- 2.2 It is understood that the work required herein is in accordance with the proposal made by PBS&J, pursuant to the Request for Qualifications, See Exhibit "A". All documents submitted by PBS&J in relation to said proposal, see Exhibits "B" and Exhibit "C", by reference, are made a part hereof, as if set forth herein in full.

#### ARTICLE 3 - PERSONNEL

- 3.1 The Consultant represents that it has, or will secure at its own expense, all necessary personnel required to perform the services under this Agreement. Such personnel shall not be employees of or have any contractual relationship with the County.
- 3.2 All of the services required hereunder shall be performed by the Consultant or under its supervision, and all personnel engaged in performing the services shall be fully qualified and, if required, authorized, permitted, or certified under State and local law to perform such services.

#### ARTICLE 4 - SUBCONTRACTING

4.1 The Consultant may utilize subcontractors that are skilled and competent personnel consistent with sound engineering practices and shall incorporate those Federal,

State, and local laws, regulations, codes, and standards that are applicable at the time Consultant renders services.

4.2 The Consultant is solely responsible and liable for the work of the subcontractor(s). The Consultant shall not award work to subcontractors in excess of fifty percent (50%) of the contract price without prior written approval of the Owner.

#### ARTICLE 5 - PAYMENTS

- **5.1** The County shall pay the consultant for services rendered, a fee not to exceed \$168,367.50 for all services as outlined in Exhibit "C".
- 5.2 As an option, the County, at the discretion of the Board of County Commissioners, small approve additional core testing to locate any problems with asphalt content. The additional core testing will be performed by Nodarse & Associates, Inc., a sub-consultant for PBS&J. The fees to provide the additional core testing are set forth in Exhibit "D", Attachment "A", Option "B", (based on a reduced frequency of one (1) mile core intervals).
- <u>5.25.3</u> The Consultant will bill the County on a monthly basis at the rates set forth in Exhibit "C" for services rendered toward completion of the Scope of Work.
- 5.35.4 Invoices shall be paid within forty five (45) days and pursuant to Section 218.70, Florida Statutes, the Florida Prompt Payment Act.
- 5.45.5 Invoices received from the Consultant pursuant to this Contract will be sent to Charlotte Young, Contract Manager, 96135 Nassau Place, Suite 6, Yulee, Florida 32097, indicating that services have been rendered in conformity with this Contract. The Contract Manager will provide the invoice to the appropriate County Department(s) for review and

recommendation(s) as to payment. Invoices must reference this Agreement.

- 5.55.6 Final Invoice: In order for both parties herein to close their books and records, the Consultant will clearly state "final invoice" on the Consultant's final/last billing to the County, this indicates that all services have been performed and all charges and costs have been invoiced to the County and that there is no further work to be performed on this Agreement.
- 5.65.7 Acceptance of Services Invoice: Receipt of service constitute invoice shall not acceptance acceptance authorization for payment. Final acceptance and authorization of payment shall be given only after a thorough inspection review by the County -indicating that the performance meets specifications and or all conditions. Should the delivered service differ in any respect from specifications, County determine that the work set forth in Exhibit C has not been performed, payment will be withheld pursuant to Statutes, Section 218.70, until such time as the Consultant takes necessary corrective action. If the proposed corrective action is not acceptable to the County, the County Administrator may authorize the recipient to refuse final acceptance of the service.

#### ARTICLE 6 - TERMINATION

- 6.1 This Contract may be terminated by the County upon thirty (30) days' prior written notice to the Consultant.
- 6.2 Unless the Consultant is in breach of this Contract, the Consultant shall be paid for services rendered to the County's satisfaction through the date of termination. After receipt of a Termination Notice and, except as otherwise directed by the County, the Consultant shall:
  - A. Stop work on the date to the extent specified.

- B. Terminate and settle all orders and subcontracts relating to the performance of the terminated work.
- C. Transfer all work in process, completed work, and other material related to the terminated work to the County
- D. Continue and complete all parts of the work that has not been terminated.

#### ARTICLE 7 - FEDERAL AND STATE TAX

- 7.1 The County is exempt from payment of Florida State Sales and Use Taxes. The County will sign an exemption certificate submitted by the Consultant. The Consultant shall not be exempt from paying tax to their suppliers for materials used to fulfill contractual obligations with the County, nor is the Consultant authorized to use the County's Tax Exemption Number in securing such materials.
- 7.2 The Consultant shall be responsible for payment of his/her own FICA and Social Security benefits with respect to this Contract.

#### ARTICLE 8 - AVAILABILITY OF FUNDS

8.1 The obligations of the County under this Contract are subject to the availability of funds appropriated for its purpose by the Board of County Commissioners of Nassau County. Non-appropriation by the County will cause the Agreement to terminate.

#### ARTICLE 9 - INSURANCE

9.1 The Consultant shall not commence work under this Agreement until he/she has obtained all insurance required under this Paragraph, and such insurance has been approved by the County.

- 9.2 All insurance policies shall be issued by companies authorized to do business under the laws of the State of Florida. The Consultant shall furnish Certificates of Insurance to the County prior to the commencement of operations. The Certificates shall clearly indicate that the Consultant has obtained insurance of the type, amount, and classification as required for strict compliance with the Paragraph, and that no material change or cancellation of the insurance shall be effective without thirty (30) days' prior written notice to the County. Compliance with the foregoing requirements shall not relieve the Consultant of this liability and obligations under this Agreement.
- 9.3 The Consultant shall maintain, during the term of this Agreement, standard Professional Liability Insurance in the Amount of \$1,000,000.00 on a claims made basis.
- 9.4 The Consultant shall maintain, during the term of this Agreement, Comprehensive General Liability Insurance in the amount of \$1,000,000.00 per occurrence to protect the firm from claims for damages for bodily injury, including wrongful death, as well as from claims of property damages, which may arise from any operations under this Agreement, whether such operations be by the Consultant or by anyone directly employed by or contracting with the Consultant.
- 9.5 The Consultant shall maintain, during the term of this Agreement, Comprehensive Automobile Liability Insurance in the amount of \$100,000.00 combined single limit for bodily injury and property damage liability to protect the Consultant from claims for damages for Bodily injury, including the ownership, use, or maintenance of owned and non-owned automobiles, including rented automobiles whether such operations be by the Consultant or by anyone directly or indirectly employed by the Consultant.

- 9.6 The Consultant shall maintain, during the term of this Agreement, adequate Workers' Compensation Insurance and Employers' Liability Insurance in at least such amounts as are required by law for all of its employees pursuant to Florida Statutes, Section 440.02.
- 9.7 All insurance, other than Professional Liability and Workers' Compensation, maintained by the Consultant, shall specifically include the County as an "Additional Insured".

#### ARTICLE 10 - INDEMNIFICATION

10.1 Consultant shall indemnify and hold harmless the County, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorney's fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Consultant and other persons employed or utilized by the Consultant in the performance of this Agreement.

#### ARTICLE 11 - SUCCESSORS AND ASSIGNS

11.1 The consultant binds itself and its partners, successors, executors, administrators, and assigns, in respect to all covenants of this Agreement. The Consultant shall not assign, sublet, convey, or transfer its interest in this Agreement without the written consent of the County.

#### ARTICLE 12 - CONFLICT OF INTEREST

- 12.1 The Consultant represents that it presently has no interest and shall acquire no interest, either direct or indirect, which would conflict in any manner with the performance of services under this Agreement.
- 12.2 The Consultant shall promptly notify the County in writing by certified mail of any potential conflicts of interest

for any prospective business association, interest, or other circumstances, which may influence or appear to influence the consultant's judgment or quality of services being provided hereunder. Such written notification shall identify the prospective business association, interest or circumstance, the nature of work that the consultant may undertake and request an opinion of the County, whether such association, interest, or circumstance constitutes a conflict of interest if entered into by the Consultant.

12.3 The County agrees to notify the Consultant of its opinion by certified mail within thirty (30) days of receipt of notification by the Consultant. If, in the opinion of the County, the prospective business association, interest, or circumstance would not constitute a conflict of interest by the Consultant, the County shall so state in the notification, and the Consultant shall, at his/her option enter into said association, interest, or circumstance, and it shall be deemed not in conflict of interest with respect to services provided to the County by the consultant under the terms of this Agreement.

#### ARTICLE 13 - RULES, REGULATIONS, LAWS, ORDINANCES, & LICENSES

13.1 The Consultant shall observe and obey all laws, ordinances, rules, and regulations of the federal, state, and County Government, which may be applicable to the service being provided. The Consultant shall have or be responsible for obtaining all necessary permits or licenses required in order to provide this service.

#### ARTICLE 14 - FINANCIALS

14.1 The Consultant shall not pledge the County's credit or make it a guarantor of payment or surety for any contract, debt, obligation, judgment, lien, or any form of indebtedness. The

Consultant further warrants and represents that it has no obligation or indebtedness that would impair its ability to fulfill the terms of this Agreement.

#### ARTICLE 15 - DISCLOSURE AND OWNERSHIP OF DOCUMENTS

15.1 All preliminary and final documentation and records shall become and remain the sole property of the County. The Consultant shall maintain original documents thereof for its records and for its future professional endeavors and provide reproducible copies to the County. In the event of termination of the agreement the Consultant shall cease work and deliver to the County all documents (including reports and all other data and material prepared or obtained by the awarded firm in connection with the project), including all documents bearing the professional seal of the firm. The County shall, upon delivery of the aforesaid documents, pay the firm and the firm shall accept as full payment for its services thereunder, a sum of money equal to the percentage of the work done by the firm and accepted as satisfactory to the County.

#### ARTICLE 16 - INDEPENDENT CONTRACTOR RELATIONSHIP

- 16.1 The Consultant is, and shall be, in the performance of all work services and activities under this Agreement, an Independent Contractor, and not an employee, agent, or servant of the County. All persons engaged in any of the work or services performed pursuant to this Agreement shall at all times and in all places be subject to the Consultant's sole direction, supervision, and control.
- 16.2 The Consultant shall exercise control over the means and manner in which it and its employees perform the work, and, in all respects the Consultant's relationship and the relationship of its employees to the County, shall be that of an

Independent Contractor and not as employees or agents of the County. The Consultant does not have the power or authority to bind the County in any promise, agreement, or representation other than specifically provided for in this Agreement.

#### ARTICLE 17 - CONTINGENT FEES

17.1 The Consultant warrants that it has not employed or retained a company or person, other than a bona fide employee working solely for the consultant to solicit or secure this Agreement, and that is has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee, working solely for the Consultant, any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the award or making of this Agreement.

#### ARTICLE 18 - ACCESS AND AUDITS

18.1 The Consultant shall maintain adequate records to justify all charges, expenses, and costs incurred in performing the Work for at least three (3) years after completion of this Agreement. The County and the Clerk shall have access to such books, records, and documents as required in this Section for the purpose of inspection or audit during normal business hours, at the County's or the Clerk's cost, upon five (5) days' written notice.

#### ARTICLE 19 - NONDISCRIMINATION

19.1 The Consultant warrants and represents that all of its employees are treated equally during employment without regard to race, color, religion, physical handicap, sex, age, or national origin.

#### ARTICLE 20 - GOVERNING LAWS/VENUE

20.1 Any contractual arrangement between Nassau County and the Consultant shall be consistent with, and be governed by, the ordinances of Nassau County, the laws of the State of Florida, both procedural and substantive, and applicable federal statutes, rules and regulations. Any and all litigation arising under any contractual arrangement shall be brought in the appropriate court in Nassau County, Florida.

#### ARTICLE 21 - RETENTION OF RECORDS

- 21.1 All records in any manner whatsoever to the assigned project, or any designated portion thereof, which are in the possession of the Consultant or sub-consultants, shall be made available, upon request by the County, for inspection and copying upon written request of the County. Additionally, said records shall be made available, upon request by the County to any state, federal or other regulatory authorities and any such authority may review. Said records include, but are not limited to, all submittals, correspondence, minutes, memoranda, tape recordings, videos, or other writings which document the project. Said records expressly include those documents reflecting the time expended by the proposing firm and its personnel in performing the obligations of this Agreement and the record of expenses incurred by the proposing firm in its performance under said Agreement.
- 21.2 The Consultant shall maintain and protect those records for no less than three (3) years after final completion of the Contract, or for any longer period of time as may be required by applicable law.

#### ARTICLE 22 - AUDITABLE RECORDS

22.1 The Consultant shall maintain auditable records concerning the procurement adequate to account for all receipts and expenditures, document and to compliance specifications. These records shall be kept in accordance with generally accepted account principles, and the County reserves the right to determine record-keeping method in the event of non-conformity. These records shall be maintained for three (3) years after final payment has been made and shall be readily available to the County personnel with reasonable notice, and to other persons in accordance with the Florida Public Disclosure Statutes.

#### ARTICLE 23 - WAIVER OF CLAIMS

23.1 Consultant's acceptance of final payment shall constitute a full waiver of any and all claims, by it against the county arising out of this Agreement or otherwise related to any task, except those previously made in writing and identified by the Consultant as unsettled at the time of the final payment. Neither the acceptance of the Consultant's services nor payment by the County shall be deemed to be a waiver of any of the County's rights against the Consultant.

#### ARTICLE 24 - SEVERABILITY

24.1 If any term or provision of this Agreement, or the application thereof to any person or circumstance, shall, to any extent, be held invalid or unenforceable, the remainder of this Agreement, or the application of such item(s) or provision(s), to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected, and every other item and provision of this Agreement shall be deemed valid and enforceable to the extent permitted by law.

#### ARTICLE 25 - AMENDMENTS AND MODIFICATIONS

- 25.1 No modification of this Agreement shall be valid unless in writing and signed by each of the parties. All amendments and modifications shall be in the form of a change order.
- 25.2 The County reserves the right to make changes in the work, including alterations, reductions therein or additions thereto. Upon receipt by the Consultant of the County's notification of a contemplated change, the Consultant shall: (1) if requested by the County, provide an estimate for the increase or decrease in costs due to the contemplated change; (2) notify the county of any estimated change in the completion date; and (3) advise the County in writing if the contemplated change shall effect the Consultant's ability to meet the completion dates or schedules of this Agreement.
- 25.3 If the County so instructs in writing, the Consultant shall suspend work on that portion of the work affected by a contemplated change, pending the County's decision to proceed with the change.
- 25.4 If the County elects to make the change, the County shall issue a change order for changes to the Scope of Service in progress, and the Consultant shall not commence work on any such change until such written change order has been issued and signed by each of the parties.

#### ARTICLE 26 - DISPUTES

26.1 Any dispute arising under this Agreement shall be addressed by the representatives of the County and the Consultant as set forth herein. Disputes shall be set forth in writing to the County Administrator with a copy to the Project Manager and provided by overnight mail, UPS, FedEx, or certified mail, with a response provided in the same manner prior to any meetings of representatives. The initial meeting shall be with

the County Administrator and the Project Manager or their designee and the Contract Manager and a representative of the Consultant. If the dispute is not settled at that level, the County Attorney shall be notified in writing by the Project Manager or his/her designee, and the County Attorney and the County Administrator and the Project or their Manager designee(s) shall meet with the Consultant's representative(s). Said meeting shall occur within sixty (60) days of the notification by the County Administrator. If there is no satisfactory resolution, the claims disputes, or other matters in question between the parties to this Agreement arising out of or relating to this Agreement or breach thereof, if not disposed of by agreement as set forth herein, shall be submitted to mediation in accordance with mediation rules as established by the Florida Supreme Court. Mediators shall be chosen by the County and the cost of mediation shall be borne by the If either party initiates a Court proceeding, and Contractor. the Court orders, or the parties agree to, mediation, the cost of mediation shall be borne by the Consultant. Consultant shall not stop work during the pendency of mediation or dispute resolution. No litigation shall be initiated unless and until the procedures set forth herein are followed.

#### ARTICLE 27 - NOTICE

27.1 All notices required in this Agreement shall be sent via certified mail, email, or facsimile, in which an acknowledgement of receipt is provided, and, if sent to the County shall be mailed to:

Charlotte J. Young, Contract Manager Capital Projects Administration 96135 Nassau Place, Suite 6 Yulee, FL 32097

And, if sent to the Consultant, shall be mailed to:

Harry L. Wood, Program Manager PBS&J
1901 Commonwealth lane
Tallahassee, FL 32303-3196

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in two (2) copies, each of which shall be deemed an original on the date first above written.

BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA



Jim B. Higginbotham Its: Chairman

ATTEST:

John A. Crawford
Its: Ex-Officio Clerk

Approved as to form by the Nassau County Attorney:

Michael S. Mullin

CONSULTANT:

PBS&J



Harry L. Wood Its: Program Manager







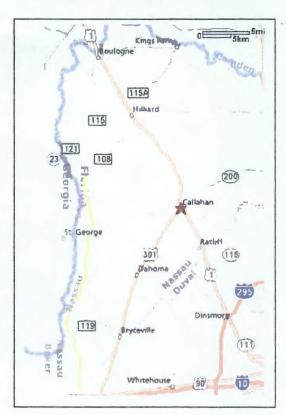




# **Engineering Evaluation of County Road 121**

for the

# Nassau County Board of Commissioners Nassau County, Florida





Woods Engineering, Inc. January 2007



January 31, 2007

Mr. Michael S. Mullin County Attorney Nassau County Government 96160 Nassau Place Yulee, Florida 32097

Subject:

Report of Engineering Evaluation of Pavement Issues

County Road 121, Nassau County

WEI Project 06-938

Dear Mr. Mullin:

As authorized by your acceptance of our proposal dated September 24, 2006 we have completed an evaluation into the issues resulting in the observed failure of County Road 121, recently constructed by Douglas Asphalt Company. The purpose of this report is to summarize the background of the project, provide an assessment of the observed conditions on the roadway, provide a probable cause of the observed failure, and to offer recommendations as to an appropriate remediation of the roadway.

The attached report includes our observations, test results, a discussion of the issues, and our recommendations.

We appreciate this opportunity to be of assistance. If you have any questions, please contact us.

Sincerely,

WOODS ENGINEERING, INC.

Certificate of Authorization 26428

W. Ronald Woods, P.E.

Principal Engineer

Licensed, Florida 23122

## TABLE OF CONTENTS

1.0	Executive Summary
2.0	Background Information       3         2.1 General Information       3         2.2 Design       3         2.3 Construction       3         2.4 Issues       4         2.5 Items Reviewed for Evaluation       5
3.0	Design Issues
4.0	Construction Issues
5.0	Testing and Observations
6.0	Analysis of Pavement 8 6.1 Elastic Layer Analysis of Bond Interface 8 6.2 Structural Analysis of Pavement Section 8
7.0	Discussion 9
8.0	Recommendations 10
Appe	<u>ndices</u>
A1 A2 A3 A4 A5	Notice to Proceed to Douglas Asphalt Company Asphalt Mix Design Used in Construction Core Measurement and Test Results Elastic Layer Analysis Results Structural Analysis of Pavement Section Results
A6	Representative Photographs



## 1.0 Executive Summary

Nassau County Government entered into an agreement with Douglas Asphalt Company on February 27, 2006 for the full depth reclamation construction of existing County Road 121, covering its entire length within Nassau County. Construction on the roadway rehabilitation began on March 13, 2006. The understood purpose of this construction project was to provide a roadway surface that was wider than the existing roadway for safety purposes and to provide better rideability and longevity with the new asphalt surface course. The length of the project was 34.9 miles starting from the intersection of CR 121 and US Highway 1, proceeding south-southwest to the termination of Nassau County 121 at the Duval County line, located just north of the intersection of CR 121 with US Highway 90, just west of Baldwin, Florida.

Approximately 17.5 miles of the project was constructed from the southern limit of the project to just north of County Road 108. Shortly after the "completion" of the construction, problematic conditions of shoving, cracking, and poor rideability were observed with the construction.

Subsequent testing revealed that the bond between the asphalt surface course and the reclaimed base material was poor or non-existent. This condition was deemed to be a result of the deletion of the prime coat, by the contractor, of asphalt primer generally placed on base materials prior to the placement of wearing and surface courses of asphalt.

Further testing revealed a significant variation in the placed thickness of the asphalt wearing course, ranging from less than one inch to over three inches in some locations. This variation in thickness and the apparent poor control of the base grading, contributed to the poor rideability. Testing also revealed the base material had some variation in thickness; however, its strength was found to be good, and in some instances, compensatory for the reduced thickness of the base.

Analysis of the pavement structural section shows that the design was responsive to local traffic but would not accommodate long term use by heavy truck traffic as has been commonly seen on the roadway. Even with a well-constructed pavement section, the continued use of the roadway by such truck traffic will result in a significantly reduced performance life when compared to the local traffic condition.

The reasons for the failure were disputed by both parties and negotiation of a settlement ensued, with an agreement for remediation completed and accepted by both parties. The remediation is to include the milling of the existing asphalt surface to the base material, establishment of cross-flow drainage, and the placement of three inches of asphalt surface course.



## 2.0 Background Information

#### 2.1 General Information

The purpose of this reconstruction project was to provide safety enhancements such as widening and guardrails on the roadway, and to restore rideability due to existing surface deterioration. County Road 121 is approximately 35 miles long and has not been resurfaced for over 20 years. The roadway, when compared to current traffic standards, had insufficient width, deteriorating surface, and the shoulders and edge conditions of the roadway were not conducive to safe operation of local vehicles, particularly given the relatively high incidence of truck traffic on the roadway. The decision to provide remediation of County Road 121 was made by Nassau County Government in 2005 and the process of remediation was headed by Mr. José Deliz, P.E., Director of Engineering Services for Nassau County government. Mr. Deliz provided a roadway geometric and structural design, with plans produced construction in February 2006. The entire design of the roadway was done by Nassau County government staff. The design included the widening of the existing roadway utilizing full depth reclamation of the existing asphalt surfacing and base material, supplemented by the addition of approximately two feet on either side of the roadway of select added base material combined with the recycled or reclaimed asphalt and base material of the original pavement.

## 2.2 Design

Full-depth reclamation was selected as the method of construction for the remediation of the roadway. This method generally offers a cost savings over the full-depth reconstruction of a roadway structural section; however, since this method only addresses the upper two layers of a multi-layer pavement system, the strength and variability of those two upper layers becomes very important.

The design of the base material was to achieve a total thickness across the entire width of the pavement of six to eight inches. In addition, portland cement was added during the mixing of the base material to achieve a cement treated base (CTB) as designed by Universal Engineering Sciences, Inc. The addition of two percent cement by weight was to provide additional strength and stability to the base, as well as offer some mitigation of the expected variability of the base material. This additional strength in the base material, when coupled with the asphalt surfacing, was intended to provide a substantial structural pavement section responsive to the local needs of the roadway. The surface course/structural course was to be two inches of Florida Department of Transportation (FDOT) SP 12.5 mix, a dense-graded Superpave<sup>TM</sup> hot mix asphalt that would be used to provide the wearing surface and structural course of the roadway.

### 2.3 Construction

The limits of the project included the entire length of County Road 121 from U.S. 1 north of Hilliard southwestward to the end of County Road 121 at the Nassau/Duval County line located just north of U.S. 90 west of Baldwin, Florida. The total length of the project is approximately 34.9 miles and the first 17.5 miles had been reclaimed, widened and paved when significant problems were noted with the construction of the roadway.



Douglas Asphalt Company (DAC) was the successful bidder on the project and was awarded a contract for the specified construction. DAC was given a notice to proceed as of March 6, 2006 with a construction term of 90 calendar days to substantial completion. Full completion of the project was to be within 150 days of the date of the Notice to Proceed, with a stated full completion date of August 3, 2006. DAC acknowledged the receipt of the Notice to Proceed on March 13, 2006, which was also the first day of construction activity on the project.

DAC subcontracted the reclamation process to The Miller Group of Atlanta, Georgia; including the pulverizing of the existing asphalt surfacing together with the existing base material, and mixing a two-percent by weight quantity of portland cement. As previously noted, the design for the cement supplementation was provided by Universal Engineering Sciences of Jacksonville. The result of this process was to achieve a competent base material having a specified thickness of 6 to 8 inches.

DAC was to provide the asphalt paving on the prepared base material. The asphalt surfacing was to have a thickness of two inches. All construction was to be done in accordance with the "Standard Specifications for Road and Bridge Construction", 2004 Edition, as prepared by the Florida Department of Transportation (FDOT).

#### 2.4 Issues

At some point early in the construction process, two contentious issues arose and were allowed to go forward without sufficient documentation to determine if specific decisions were made to address the issues or to adequately identify the parties responsible for the decisions. Further, it was not clear that decisions on the issues were made, but more so the momentum of the construction took advantage of indecision or slow decisions and construction proceeded with one issue giving an advantage to the contractor and one issue giving advantage to Nassau County. The issue in advantage of the contractor was whether a prime coat was required to be placed on the prepared base material prior to the placement of the asphalt surfacing. Either by indecision or undocumented allowance by Nassau County, the prime coat requirement was deleted and the contractor proceeded with construction of the roadway without the use of a prime coat as required by specification. The second issue involved the opening of the prepared base material to temporary traffic prior to its anticipated strength gain and the ensuing damage to the base that could result from such action. Again, there is insufficient documentation of a construction directive; however, it is understood that the base surface was opened to traffic within hours of preparation. This action was reportedly required by Nassau County personnel to achieve adequate traffic flow for the roadway.

Both noted issues were ultimately claimed to cause the observed problems with the roadway after construction. Further discussion of the causes of the observed distress is contained in subsequent sections of this report.



#### 2.5 Items Reviewed for Evaluation

In the process of this failure investigation the following items have been provided for review to assist in the evaluation of the existing conditions of the roadway and offer recommendations for remediation. These items were provided for review:

- 1. Plans produced by Nassau County dated February 15, 2006
- 2. Mix design of the asphalt surface course provided by Douglas Asphalt Company
- 3. Test data from Universal Engineering Sciences as provided by Nassau County
- 4. Failure investigation report provided by the Florida Department of Transportation District 2 office.
- 5. Various correspondences from Nassau County regarding the issues and problems with the roadway.

In addition to the items reviewed additional testing was done by Woods Engineering, Incorporated (through MACTEC Engineering and Consulting, Inc.) to provide supplementation to the existing test data provided by the County and to validate some of the data that had been provided. This was accomplished through the taking of approximately 20 full depth cores through the asphalt and base material checking for bond of the asphalt to the base and also checking the unconfined compressive strength of the cement treated base material so that an assessment of the strength of the existing structural section of the pavement could be done.

#### 3.0 Design Issues

The design provided by Nassau County for the roadway was responsive to local road conditions without significant truck traffic. This would have enabled the roadway to provide safe access to local residents and limited truck traffic for local deliveries and for essential county services. This roadway was not designed to handle the amount of truck traffic that has been observed on the roadway in several site visits. The design was done without the benefit of traffic quantity and character for the roadway.

During one of the site visits, the number of trucks in a one-hour period was counted and found to be between eight and ten trucks in the northbound lane. Similar quantities and character of traffic were observed in the southbound lane. It appeared that the trucks in the northbound lane were loaded while those in the southbound lane were perhaps not loaded or not loaded as heavily as those in the northbound lane. This indicates that the roadway is used as a bypass to shorten the route between Baker County to the west and the northern Nassau County/south Georgia area to the north. If this roadway did not exist then trucks would have to travel along U.S. 90 to its intersection with U.S. 1 or Interstate 10 eastward to its intersection with Interstate 95 for northbound access. The presence of County Road 121 cuts off numerous miles of this particular route, and thus becomes a favored bypass of the trucking industry.



Based on the observed number of heavy trucks traveling the roadway and the structural number that is apparent from the structural design of the pavement the expected life of this pavement would be between five and seven years before conditional failure of the pavement section would begin to show. This failure would be expected to show in the form of rutting and longitudinal cracking. This would result in significant maintenance required of the roadway by Nassau County as well as result in somewhat dangerous conditions with the rutting and the impediment to drainage that result from wheel path rutting on roadways. This would decrease the safe use of the roadway by local residents. Further, the number of significantly large trucks traveling along this roadway creates a somewhat dangerous condition for the relatively slow and light local traffic.

When considering the design of the base material, the surface course and in consideration that traffic over the years has provided compaction to the upper level of the sub-grade material the resulting structural number of this pavement section could be considered to be between about 2.1 and 2.5.

#### 4.0 Construction Issues

The allegations of a waiver by Nassau County of the prime coat application as made by DAC resulted in the placement of the structural course of asphalt on top of the cement treated base with no significant bond achieved between the two courses. This lack of bond between the two courses results in significantly higher transverse and longitudinal stresses and strains in the asphalt. The result of the increased lateral and longitudinal strains in the asphalt is the observed shoving and cracking of the asphalt on top of the base material. This condition is intolerable from a rideability and structural function standpoint of the pavement.

The prime coat is intended to serve several purposes, one of which is that it provides a bond between the asphalt surface course and the cement treated base material. This bond is imperative to allow the transfer of lateral stresses and strains in the asphalt to the base material. When the base material shares the lateral strain of the asphalt at the bond interface then reduced cracking and shoving results and the pavement performance is significantly enhanced.

Another issue that reportedly occurred during construction was that of opening the prepared base material to heavy traffic prior to placement of the surface layer of asphalt and perhaps before it had achieved full strength. This reportedly caused surface deterioration of the base material resulting in a undulations of the surface and affecting rideability. While it is possible that this occurred, such conditions can and should be corrected prior to the placement of the surface course. While it might have entailed a change order for additional work, the correction of surface deficiencies in the base material due to traffic erosion could have been accomplished by either re-grading the base surface, by placing a leveling course of asphalt, or by a combination of the two procedures.



## 5.0 Testing and Observation

The pavement surface was observed during site visits to exhibit shoving, cracking, and rutting. The severity of these problems ranged from slight to severe, with the shoving problem being the most prominent, followed by cracking and rutting. Shoving was so severe in some locations that the base material was exposed. This is a clear indication of a lack of bond between the surface course and base course of materials.

Numerous tests were conducted of the pavement to include a significant number of cores removed from the pavement of both the surface and base courses. Most of the testing was done by Universal Engineering Sciences with the primary focus on determining the thickness of the two courses of pavement. Supplementary tests were performed by MACTEC Engineering and Consulting, Inc. as directed by Woods Engineering, Inc. These tests also included taking cores from various locations on the pavement, checking for thicknesses of the respective pavement layers and also checking the mix gradation and asphalt content of the asphalt surface course. The findings of the testing done by MACTEC showed the thicknesses to be consistent with those obtained in the cores taken by Universal and the asphalt mix gradation and asphalt cement content were found to be consistent with an FDOT SP 12.5 mix.

In about 40 percent of the cores taken by MACTEC for Woods, essentially no bond between the surface and base was found. In another 20 percent of the cores, the bond was found to be poor and the surface and base could be easily separated. The remaining 40 percent of the cores showed fair to good bond between the surface and base courses.

Unconfined compressive strength tests were also done by MACTEC on the base material to gain an assessment of the base material integrity. Three tests were done with an average compressive strength of almost 400 psi. This is indicative of good integrity of the base material with adequate strength to provide a good base for the surfacing, provided proper thicknesses of the base and surface are achieved.

Test results by both Universal and MACTEC showed variable thicknesses in the surface and base materials, with higher variation showing in the surface material. Base thicknesses ranged from about 5 inches to over 7 inches, while the asphalt surface thickness ranged from about 1-1/4 inches to about 2-1/2 inches. While it was reported that asphalt thicknesses were as low as ¾ of an inch, this was not observed in the cores taken by MACTEC. There was some indication of thin asphalt in several of the photographs taken of the roadway. An example is shown in the attached photos.

Copies of test results are attached for reference.

In addition to the asphalt surface displacement, there were cracks noted in the asphalt surface. Two types of cracks were observed. These included cracks that developed from displacement of the asphalt adjacent to the primary shoving (asphalt torn apart by movement), and cracks that resulted from drying shrinkage cracking of the CTB. The drying shrinkage cracks, both longitudinal and transverse to the roadway, are normal occurrences in cementitious materials and are caused by the inherent shrinkage of the cementitious material. This phenomenon can be

observed in concrete slabs, masonry, and stucco; as examples of cementitious materials subject to shrinkage. Such cracks are not deleterious to the integrity of the base and do not pose a structural problem for the pavement, but must be maintained where they reflect through the surface course to prevent water from entering the pavement section. Periodic sealing of such cracks is necessary for long term pavement performance.

Initial investigation by others indicated that the observed problems resulted from the alleged waiver of the use of an asphalt cement prime coat over the cement treated base prior to constructing the asphalt surface course. There has been significant discussion between Nassau County and DAC about the waiver of this requirement and the obligation of DAC to provide an equivalent means of bonding between the asphalt surface course and the CTB. Following these discussions there had been attempts to remove and replace sections of asphalt providing an appropriate prime coat to the base material prior to placing the structural course. These areas were replaced to determine if in fact the addition of the prime coat would solve the observed problems. It appears based on the replacement sections that the addition of the prime coat between the surface course and the cement treated base provided significant enhancement to the pavement and reduced the incidence of the noted problems of shoving and cracking.

## 6.0 Analysis of Pavement

The pavement sections from the initial design and from the observed layer thicknesses were analyzed using elastic layer analysis (Everstress 5.0) and empirically-based AASHTO layered section analysis using material layer coefficients (DARWin 3.1) with appropriate analytical software. The purpose of the elastic layer analysis was to determine the levels of stress and strain existing within the pavement layers and at their interfaces, based on the applied loading of a typical 18-kip (18,000 pounds) axle load. The purpose of the AASHTO layered section analysis was to check the given design relative to the expected truck traffic load repetitions over an anticipated 10-year pavement life.

## 6.1 Elastic Layer Analysis

The effect of the bond interface between the asphalt surface course and the cement treated base is shown clearly when elastic layer analysis is applied to the pavement section. The elastic layer analysis as contained in the appendix clearly shows that for a thin section of pavement where the asphalt surface is 0.75 inches thick, the lack of a bond interface causes significant lateral strain increase, on the order of about 475 percent in the lower portion of the asphalt structural course just above the base material. When the thickness of the asphalt is increased to 2.00 inches, the lateral strain increase drops to about 170 percent. This means that in areas of thin asphalt, the potential for shoving between an area that was primed and achieved bond as compared to an unprimed area with no bond is five times as likely. Further, when the asphalt thickness is increased, the potential for shoving is significantly reduced as the differential stress on the interface bond is reduced. This thickness range was chosen for the analysis to show the variation in the effect of the thickness on the properties.

When the asphalt layer thickness is increased, it also attenuates the tensile stress at the bottom of the base layer. In this case, the increase in thickness of the asphalt from 0.75 inches to 2.00 inches, reduces the tensile stress at the bottom of the base by about 35 percent. This is critical for long term fatigue strength of the base under repetitive loads.

Based on these analytical observations, the variability of the placed asphalt thickness was a significant contributor to the observed failures of the pavement.

## 6.2 Structural Analysis of Pavement Section

A structural analysis of the pavement section was done using AASHTO DARWin 3.1 software. This analysis was done using the designed pavement section and based on the observed traffic loading. While it should be noted that the observed traffic loading was only recorded over a short time period, the observed traffic volume and character was consistent with observations of local residents and Nassau County personnel, leading to the assumption of relatively high truck traffic, both loaded and unloaded.

The specified design of the pavement section, while responsive to local rural traffic, was not sufficient to withstand the observed traffic loadings. Using the same base thickness as the design upper limit (8 inches), the asphalt thickness would have to be almost 4 inches to accommodate the observed traffic loading of heavy trucks. The design was for 2 inches of asphalt. Using the lower limit of design for the base (6 inches), would require and even greater thickness of asphalt, about 5 inches.

#### 7.0 Discussion

The observation, testing, and analyses performed on the pavement section reveal that the pavement was not properly constructed to provide a long term, structurally competent pavement section. This is evidenced by poor layer thickness control, lack of achieved interface bond, either through mechanical bond or through a primed surface, and variability in the grade control and flatness of the base material. Any bond that was achieved in the application of the asphalt surface to the base occurred as a result of the asphalt cement in the mix and surface roughness of the base material. Neither of these methods of bonding results in a long-term, viable bond between the pavement layers. Even though a bond might appear to have been achieved, the fatigue loading of the pavement coupled with thermal variations, particularly freezing temperatures, would compromise the tenuous bond in a short period of time, likely less than two years.

The original design of the pavement is inadequate to withstand the observed traffic loading. While the design would be adequate for local rural conditions with light trucks, cars, and delivery vehicles, it cannot be expected to withstand the rigors of high load, repetitive truck traffic. This condition would require a more substantial pavement section.

It should be noted that the selected asphalt that was used for this project, the SP 12.5, has a relatively high asphalt content and can be expected under high temperature conditions such as in the summer to provide greater flowability in the first year or two of its life. This was prior to the



volatilization of the initial asphalt solvent materials that results in a slight hardening and toughening of the asphalt with time. Since the significant truck traffic was applied to the roadway immediately after its completion and applied during relatively warm and then hot weather over the summer the rheology of the asphalt provided for an increase in the amount of shoving and cracking. As can be seen from the pattern of cracks and shoving on the roadway the flowability of the asphalt under load was somewhat high. While this could be expected to decrease with time due to the hardening of the asphalt, its complete removal would not be expected since asphalt tends to have a relatively good malleability even after it has somewhat hardened from weathering.

#### 8.0 Recommendations

In order to remediate the existing roadway conditions and to provide the expected design longevity of the pavement the following recommendations are made:

- 1. Remove the existing asphalt by milling to the top of the existing cement treated base course.
- 2. Provide appropriate cross-flow drainage by profiling the surface of the base material to receive the subsequent asphalt course.
- 3. Provide a prime coat and tack coat in accordance with FDOT standards as contained in the Standards and Specifications for Road and Bridge Construction, 2004 Edition, of the Florida Department of Transportation. After placement of the prime coat and tack coat the original two-inch layer of asphalt surface course should be applied and an additional one-inch layer of asphalt surface course should be applied to accommodate the reduction in thickness required to achieve proper cross-slope drainage. This will result in a structural number of approximately 2.9 for the pavement section and will reduce the amount of strain at the bottom of the asphalt layer by adding the additional asphalt. This additional asphalt helps to mitigate and attenuate the stresses and strains at the bottom of the asphalt, thus reducing the opportunity for lateral strain cracking and shoving in the asphalt.

It should be noted that even with these reconstruction guidelines to be used on the pavement that this pavement will not withstand the observed truck traffic for a long period of time without significant damage to the roadway. Based on this observation and the analysis it is further recommended that the truck traffic on this roadway be limited to a maximum load of 10 tons and that this provision be enforced by Nassau County traffic enforcement so that this roadway does not continue to be used as a trucking bypass. This roadway was not designed to handle the level of truck traffic that was observed and will not withstand this level of truck traffic without significant deterioration.



A1 Notice to Proceed to Douglas Asphalt Company

## NOTICE TO PROCEED

To: Douglas Asphalt Company Date: 02/27/06
10010 N. Main Street Project: Bid No. NC025-05
Jacksonville, FL 32218
You are hereby notified to commence work in accordance
with the Agreement dated the 27th day of February
2006, on or before the <u>6th</u> day of <u>March</u> , 2006,
and you are to substantially complete the Work within
90 consecutive calendar days, and fully complete the
Project in a total of days after the date of
this Notice to Proceed. The Date of Completion of all World
is therefore <u>August 3, 2006</u>
OWNER:
BOARD OF COUNTY COMMISSIONERS NASSAU COUNTY, FLORIDA
THOMAS D. BRANAN, JR.  Its: Chairman
JOHN A. CRAWFORD  Its: Ex-Officio Clerk
Approved as to form by the Nassau County Attorney

## ACCEPTANCE OF NOTICE

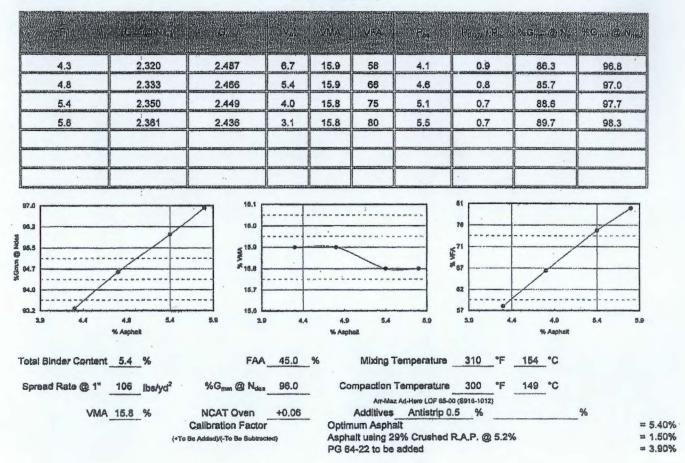
Receipt	of	the	above	Notice	To	Proceed	is	hereby
acknowled	dged	by:						

Douglas Asphalt Company, this 13 day

By. \_\_ Its: **A2** Asphalt Mix Design Used in Construction

#### HOT MIX DESIGN DATA SHEET

#### SP 04-3691B (TL-C)



A3 Core Measurement and Test Results

# Nassau County Road 121 MACTEC Project No. 6736-06-4721 Date Performed: October 2, 2006

Core No.	Depth	Material Description
	0" - 11/2"	Asphalt (bonded with base)
4	1½" - 9"	Soil cement base - light grey-brown cemented sand with limerock
1		and asphalt
	9"	Grey-brown silty fine sand – Sample 1A
	0" - 11/4"	Asphalt (not bonded to base)
2	11/4" - 6"	Soil cement base - light grey-brown cemented sand with limerock
_		and asphalt
(Parts A & B)	6" - 9"	Grey silty fine sand with trace of limerock – Sample 2A
	9"	Grey silty fine sand (sample 2B
	0" - 15/8"	Asphalt (bonded with cement base)
3	15/8" - 9"	Soil cement base – brown sand with limerock and asphalt
	9"	Grey and light grey silty fine sand – Sample 3A
	0" - 11/2"	Asphalt (not bonded to base)
	11/2" - 71/2"	Soil cement base - light grey-brown sand with limerock and
4		asphalt
	71/2" -1'2"	Grey-brown weakly cemented fine sand - Sample 4A (bag)
	1'2"	Grey brown silty fine sand – Sample 4B
	0" - 11/2"	Asphalt (bonded to base)
. 5	11/2" - 8"	Soil cement base – grey-brown sand with limerock and asphalt
	8"	Grey-brown slightly silty fine sand - Sample 5A
	0" - 21/2"	Asphalt (bonded to base)
6	21/2" 101/2"	Soil cement base – grey-brown sand with limerock and asphalt
	101/2"	Brown slightly silty fine sand – Sample 6A
	0"-2"	Asphalt (non bonded to base)
	2" - 8"	Soil cement base - light grey-brown sand with limerock and
7		asphalt
	8"-11"	Grey-brown weakly cemented silty fine sand – Sample 7A (bag)
	11"	Grey-brown silty fine sand –Sample 7B
	0" - 15/8"	Asphalt (bonded to base)
	15/8" - 63/4"	Soil cement base - light grey-brown sand with limerock and
		asphalt
8	63/4" - 10"	Light brown slightly silty fine sand with limerock fragments –
		Sample 8A
	10"	Light brown slightly silty fine sand –Sample 8B

Reviewed By:

Cliff B. Cosby III Construction Services Manager



#### REPORT OF UNCONFINED COMPRESSIVE STRENGTH TESTS

Project: CR-121 Coring

Project Number:

6736-06-4721

Client:

Woods Engineering

Date:

October 4, 2006

As requested by Mr. Ron Woods of Woods Engineering, MACTEC Engineering & Consulting Inc. has completed unconfined compressive strength testing of cored base samples obtained on October 2, 2006 by our field representative. The results are outlined below.

	Sample Number	Sample Diameter (in.)	Sample Height (in.)	Sample Area (sqin)	Height to Diameter Ratio	Correction F	Total Load (lbf)		PSI
	. 1	5.93	6.31	27.62	1.064	0.87	13550	4	427
•	. 3	5.92	5.59	27.53	0.944	0.87	15050	4	476
	7	5.93	5.51	27.62	0.929	0.87	8800	2	277

Respectfully Submitted,

Rajni Sukhwani, E.I.



#### REPORT OF ASPHALT TESTING

PROJECT: CR 121

CLIENT:

Woods Engineering, Inc.

DATE TESTED:

10/4/2006

JOB NUMBER: 6736-06-4721

As requested, MACTEC Engineering and Consulting, Inc. has completed testing of asphalt samples delivered to our laboratory October 2, 2006. The samples were tested for asphalt binder content and particle size distribution of the extracted aggregate in general accordance with AASHTO Methods T-308 and T-30 respectively. The results are outlined below:

Asphalt Type	PERCENT PASSING SIEVE NUMBER												
Job Mix	%AC	3/4	1/2	3/8	#4	#8	#16	#30	#50	#100	#200		
Formula	Not Avail	able									,		
Sample No.													
1	5.17	97.99	87.56	82.20	61.80	43.35	32.65	26.38	21.58	10.37	4.20		
2	5.54	100.00	95.15	89.83	67.43	46.89	35.28	28.16	22,86	10.45	3.99		
3	5.81	100.00	98.91	89.40	64.51	44.48	35.75	30.68	26.39	12.70	5.52		

REVIEWED BY

Rajni ≸ykhwani, E

**A4** Elastic Layer Analysis Results

	L	.ayereu Ela	SUC Analysis	s by Eversti	ess© 5.0		W.
Title: CR121 - Aphalta No of Layers: 3	/Base Interfac	e Stresses - Ca No of	se 1 (with bor Loads: 4	nded interfac	ce) No of X-Y Eva	luation Points:	. 7
	Layer		Poisson's Ratio		Thickness (in)		Moduli(1 (ksi
	1		.35		.750		400.00
	2		.35		6.000	5:	30.00
	. 3		.40				8.00
Load No	Y_E	Position	Y-Position	Loa	ad Pro	ssure	Radius
Load No	Λ-1	(in)	(in)	(Ik		(psi)	(in
1		.00	.00	4500	.0 1	10.00	3.609
2		14.00	.00	4500	.0 1	10.00	3.609
3		.00	48.00	4500		10.00	3.609
4		14.00	48.00	4500	.0 1	10.00	3.609
Location No: 1	K.	X-Posi	ition (in): .000		Y-Position (in):	.000	
			Normal Str				, ,
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sxy
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
.749	1	100.93	97.49	-107.31	02	2.29	.61
.755	2	-45.69	-45.94	-107.29	02	2.29	.05
6.750	2	27.96	34.55	-19.52	.10	1.72	10
Z-Position	Loves	Exx	ormal Strains and	d Deflections	Ux	Uy	Uz
(in)	Layer	(10^-6)	Eyy (10^-6)	(10^-6)	(mils)	(mils)	(mils)
.749	1	260.92	249.31	-441.90	.499	.417	52.821
.755	2	264.68	253.44	-2507.23	.496	.416	52.808
6.750	2	756.68	1053.20	-1380.06	-2.407	352	41.584
		Pi	rincipal Stresses				
Z-Position	Layer	S1	S2	S3	E1	(10A 6)	(10A 63
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6)
.749	1	-107.34	97.39	101.06	-441.99	248.96	261.35
.755	. 2	-107.37	-45.94	-45.60	-2511.05	253.17	268.77
6.750	2	-19.59	28.02	34.55	-1382.87	759.42	1053.27
Location No: 2		X-Posi	tion (in): 7.000		Y-Position (in):	.000	
			Normal Str		-	*	
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sxy
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
.749	1	-150.99	-62.68	.15	02	.00	.00.
.755	2	-11.33	-4.63	.09	02	.00	.00
6.750	2	2.37	24.24	-13.31	.10	.00	.00
Z-Position	Laves		ormal Strains and		Uho	Ulia	LI-
Z-Position (in)	Layer	(10^-6)	Eyy (10^-6)	Ezz (10^-6)	Ux (mils)	Uy (mils)	Uz (mils)
.749	1	-322.76	-24.72	187.34	.000	.424	42.975
.755 6.750	2 2	-324.89 -48.67	-23.06 935.78	189.30 -754.05	.000	.423 369	<b>42.976</b> <b>41.268</b>
		Pi	rincipal Stresses	and Strains			
Z-Position	Layer	S1	S2	S3	E1	E2	E3
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6)
.749	1	-150.99	-62.68	.15	-322.76	-24.72	187.34
.755	- 2	-11.33	-4.63	.09	-324.89	-23.06	189.31
6.750	2	-13.31	- 2.37,	24.25	-754.07	-48.67	935.79

	.000	Y-Position (in):		on (in): 14.000	X-Positi		Location No: 3
			sses	Normal Stre			
S	Sxz	Syz	Szz	Syy	Sxx	Layer	Z-Position
(p	(psi)	(psi)	(psi)	(psi)	(psi)		(in)
	0.00	00	407.04	07.40	100.00	4	740
l l	-2.29 -2.29	02 02	-107.31 -107.29	97.49 -45.94	100.93 -45.69	1 2	.749 .755
'	-1.72	.10	-19.52	34.55	27.96	.2	6.750
•							
ı	Uy	Ux	Deflections Ezz	mal Strains and	Nor	Layer	Z-Position
(mi	(mils)	(mils)	(10^-6)	Eyy (10^-6)	(10^-6)	Layer	(in)
(1111)	(IIIIS)	(111113)	(10'-0)	(10'-0)	(10 -0)		(11)
52.82	.417	499	-441.90	249.31	260.92	1	.749
52.8	.416	496	-2507.23	253.44	264.68	2	.755
41.5	352	2.407	-1380.06	1053.20	756.68	2	6.750
			and Strains	ncipal Stresses	Pri		
E	E2	E1	S3	S2	S1	Layer	<b>Z-Position</b>
(10^-	(10^-6)	(10^-6)	(psi)	(psi)	(psi)		(in)
261.	248.96	-441.99	101.06	97.39	-107.34	1	.749
268.	253.17	-2511.05	-45.60	-45.94	-107.37	2	.755
1053.2	759.42	-1382.87	34.55	28.02	-19.59	2	6.750
	24.000	Y-Position (in):		on (in): 7.000	X-Positio		Location No: 4
			sses	Normal Stre			
S	Sxz	Syz	Szz	Syy	Sxx	Layer	<b>Z-Position</b>
(p:	(psi)	(psi)	(psi)	(psi)	(psi)		(in)
	.00	.00	06	6.36	-18.39	1	.749
.(	.00	.00	10	.42	-1.43	2	.755
	.00	.00	-1.15	-8.57	.58	2	6.750
			Deflections	mal Strains and	Non		
l	Uy	Ux	Ezz	Eyy	Exx	Layer	<b>Z-Position</b>
(mi	(mils)	(mils)	(10^-6)	(10^-6)	(10^-6)		(in)
25.32	.000	.000	10.37	32.05	-51.48	1	.749
25.32	.000	.000	8.49	31.73	-51.28	2	.755
25.5	.000	.000	54.74	-278.79	132.61	2	6.750
			and Strains	cipal Stresses	Drie		
E	E2	E1	S3	S2	S1	Layer	Z-Position
(10^-	(10^-6)	(10^-6)	(psi)	(psi)	(psi)		(in)
20.4	40.07	- 54.40	0.00	00	40.00		740
32.0 31.7	10.37 8.49	-51.48	6.36	06	-18.39	1	.749 .755
132.0	54.74	-51.28 -278.79	.42 .58	10 -1.15	-1.43 -8.57	2 2	6.750
	48.000	Y-Position (in):		on (in): .000	X-Positio		Location No: 5
				Normal Stre			
S	Sxz	Syz	Szz	Syy	Sxx	Layer	<b>Z-Position</b>
(p	(psi)	(psi)	(psi)	(psi)	(psi)		(in)
6	2.29	.02	-107.31	97.49	100.93	1	.749
(	2.29	.02	-107.29	-45.94	-45.69	2	.755
•	1.72	10	-19.52	34.55	27.96	2	6.750
198	20.5			mal Strains and			
(mil	(mile)	(mile)	Ezz (10^-6)	Eyy (10^-6)	(100 6)	Layer	Z-Position (in)
(mil	(mils)	(mils)	(10-0)	(100)	(10^-6)		(11)
52.82	417	.499	-441.90	249.31	260.92	1	.749
52.80	416	.496	-2507.23	253.44	264.68	2	.755
41.58	.352	-2.407	-1380.06	1053.20	756.68	2	6.750

	L	ayered Elas	stic Analysi	s by Everst	ress© 5.0		
Z-Position	Layer	S1	S2	S3	E1	E2	E3
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6)
.749	1	-107.34	97.39	101.06	-441.99	248.96	261.35
.755	2	-107.37	-45.94	-45.60	-2511.05	253.17	268.77
6.750	2	-19.59	28.02	34.55	-1382.87	759.42	1053.27
0.700		10.00	20.02	34.00	-1302.07	133.42	1000.27
Location No: 6		X-Positi	ion (in): 7.000		Y-Position (in	i): 48.000	
			Normal Str			_	
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sxy
(in)	· ·	(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
.749	1	-150.99	-62.68	.15	.02	.00	.00
.755	2	-11.33	-4.63	.09	.02	.00	.00
6.750	2	2.37	24.24	-13.31	10	.00	.00.
			mal Strains an				
Z-Position	Layer	Exx	Еуу	Ezz	Ux	Uy	Uz
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils)
.749	1	-322.76	-24.72	187.34	.000	424	42.975
.755	2	-324.89	-23.06	189.30	.000	423	42.976
6.750	. 2	-48.67	935.78	-754.05	.000	.369	41.268
	- Warren	Pri	ncipal Stresses	s and Strains			
Z-Position	Layer	S1	S2	S3	E1	E2	E3
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6)
.749	1	-150.99	-62.68	.15	-322.76	-24.72	187.34
.755	2	-11.33	-4.63	.09	-324.89	-23.06	189.31
6.750	2	-13.31	2.37	24.25	-754.07	-48.67	935.79
Location No: 7		X-Positi	on (in): 14.000		Y-Position (in	): 48.000	
			Normal Str	esses			
<b>Z-Position</b>	Layer	Sxx	Syy	Szz	Syz .	Sxz	Sxy
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
.749	1	100.93	97.49	-107.31	.02	-2.29	.61
.755	2	-45.69	-45.94	-107.29	.02	-2.29	.05
6.750	2	27.96	34.55	-19.52	10	-1.72	10
		7,000	mal Strains an				i.
Z-Position	Layer	Exx	Еуу	Ezz	Ux	Uy	Uz
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils)
.749	1	260.92	249.31	-441.90	499	417	52.821
.755	2	264.68	253.44	-2507.23	496	416	52.808
6.750	2	756.68	1053.20	-1380.06	2.407	.352	41.584
7 Decition	1		ncipal Stresses		F4	F0	-
Z-Position	Layer	S1	S2	S3	E1	E2	(40A 6
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6)
.749	1	-107.34	97.39	101.06	-441.99	248.96	261.35
.755	2	-107.37	-45.94	-45.60	-2511.05	253.17	268.77
6.750	2	-19.59	28.02	34.55	-1382.87	759.42	1053.27

Title: CR121 - Aphalt/		e Stresses - Ca			ace)		
No of Layers: 3			_oads: 4		No of X-Y Eval	uation Points:	7
	Layer		Poisson's Ratio		Thickness (in)		Moduli(1 (ksi
	1 ·		.35		.750		400.0
	2		.35		6.000		30.00
	3		.40				8.00
Load No	X-F	Position	Y-Position	Loa	nd Pres	ssure	Radiu
		(in)	(in)	(lb	of)	(psi)	(in
1 2		.00	.00	4500		0.00	3.60
3		14.00 .00	.00 48.00	4500 4500		0.00	3.60 3.60
4		14.00	48.00	4500		0.00	3.60
Location No: 1		X-Posi	tion (in): .000		Y-Position (in):	.000	- 1-10-
***************************************		*	Normal Stre	esses			
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sx
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
.749	1	420.20	583.89	-108.73	48	64	20.78
.755	2 2	-158.45	-190.50	-153.22	.00	.01	-3.4
6.750	2	72.69	115.55	-39.68	.00	.00	4.4
Z-Position	Lover	No Exx	rmal Strains and	I Deflections Ezz	Ux	Uy	U:
Z-Position (in)	Layer	(10^-6)	Eyy (10^-6)	(10^-6)	(mils)	(mils)	(mils
.749	1	634.75	1187.18	-1150.40	570	.384	85.63
.755	2	-1271.56	-2714.00	-1036.20	2.907	-1.816	86.32
6.750	2	1538.03	3466.46	-3518.87	-4.463	2.829	70.00
		Pi	rincipal Stresses				
Z-Position (in)	Layer	S1 (psi)	S2 (psi)	S3 (psi)	E1 (10^-6)	E2 (10^-6)	(10^-6
(111)		(psi)	(þsi)	(psi)	(10 -0)	(10 -0)	(10 -0
.749	1	-108.73	417.61	586.49	-1150.41	625.99	1195.9
.755 6.750	2 2	-190.86 -39.68	-158.09 72.25	-153.22 116.00	-2730.12 -3518.87	-1255.44 1517.85	-1036.20 3486.6
0.700		-55.55	12.20	110.00	-3010.07	1017.00	0400.0
Location No: 2		X-Posi	tion (in): 7.000		Y-Position (in):	.000	
			Normal Stre				
Z-Position (in)	Layer	Sxx (psi)	Syy (psi)	Szz (psi)	Syz (psi)	Sxz (psi)	Sx (psi
. (111)		(psi)	(þsi)	(psi)	(psi)	(bai)	(psi
.749	1	-27.44	323.75	. 1.87	3.39	.00	.0.
.755 6.750	2 2	-40.00 16.15	-99.78 92.95	-41.58 -30.77	03 .00	.00 .00	)O.
0.700					.00	.00	.00
Z-Position	Layer	Exx	rmal Strains and	I Deflections Ezz	Ux	Uy	U
(in)	Layer	(10^-6)	Eyy (10^-6)	(10^-6)	(mils)	(mils)	(mils
.749	1	-353.51	831.75	-254.61	.000	.663	75.21
.755	2 2	315.75	-2374.28	244.91	.000	-2.400	75.929
6.750	2	-187.12	3268.98	-2298.54	.000	3.566	69.68
Z-Position	Leves	Pr Pr	rincipal Stresses		F4	F0	p
Z-Position (in)	Layer	S1 (psi)	S2 (psi)	S3 (psi)	E1 (10^-6)	E2 (10^-6)	(10^-6
.749	4		1.83	323.78		-254.73	831.87
.755	1 2	-27.44 -99.78	-41.58	-40.00	-353.51 -2374.28	-254.73 244.91	315.75
		-30.77	16.15	92.95	-2298.55	-187.12	3268.98

Layered	Elastic	Anal	vsis b	y E	verst	ress©	5.0
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cation No: 3		X-Positi	ion (in): 14.000	)	Y-Position (in):	.000	
			Normal Str				
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sx
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(ps
7.40		400.00		100 70	40	0.4	20.7
.749	1	420.20	583.89	-108.73	48	.64	-20.7
.755 6.750	2 2	-158.45 72.69	-190.50	-153.22 -39.68	.00 .00	01 .00	3.4 -4.4
0.750		72.09	115.55	-39.00	.00	.00	-4.4
			mal Strains an				
Z-Position	Layer	Exx	Eyy	Ezz	Ux	Uy	U
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils
.749	1	634.75	1187.18	-1150.40	.570	.384	85.63
.755		-1271.56	-2714.00	-1036.20	-2.907	-1.816	86.32
6.750	2 2	1538.03	3466.46	-3518.87	4.463	2.829	70.00
		D.:	mainal Canana	and Chaine		- 1/2 Maria	***
Z-Position	Layer	S1	ncipal Stresses S2	S3	E1	E2	E
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6
740		400 70	447.04		4450.44	205.00	440= 0
.749	1	-108.73	417.61	586.49	-1150.41	625.99	1195.9
.755	2	-190.86	-158.09	-153.22	-2730.12	-1255.44	-1036.2
6.750	2	-39.68	72.25	116.00	-3518.87	1517.85	3486.6
cation No: 4		X-Positi	on (in): 7.000		Y-Position (in):	24.000	
			Normal Str	20000			
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sx
(in)	Layer	(psi)	(psi)	(psi)	(psi)	(psi)	(ps
(11)		(psi)	(psi)	(psi)	(psi)	(psi)	(þs
.749	1	-89.81	-242.41	72	.00	.00	.0
.755	2	38.75	69.64	44.90	.00	.00	.0
6.750	2 2	-9.81	-52.91	17.36	.00	.00	.00
		Nor	mal Strains an	d Deflections		10 10 10	
Z-Position	Layer	Exx	Еуу	Ezz	Ux	· Uy	U
(in)	,	(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils
.749	1	-11.79	-526.81	288.89	.000	.000	-6.70
.755	2	-44.57	1345.47	232.08	.000	.000	-7.57
6.750	2	87.61	-1851.57	1310.38	.000	.000	-2.31
			ncipal Stresses				
Z-Position	Layer	S1	S2	S3	E1	E2	E
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6
740	4	242.44	90.94	72	E2C 04	11 70	288.89
.749 .755	1	-242.41 38.75	-89.81 44.90	72 69.64	-526.81 -44.57	-11.79 232.08	1345.4
6.750	2 2	-52.91	-9.81	17.36	-1851.57	87.61	1310.3
eation No: 5		X-Positi	on (in): .000		Y-Position (in):	48.000	
			Normal Str				
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sx
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
.749	1	420.20	583.89	-108.73	.48	64	-20.7
.755	2	-158.45	-190.50	-153.22	.00	.01	3.4
6.750	2	72.69	115.55	-39.68	.00	.00	-4.4
		Nor	mal Strains an	d Deflections			
		Exx	Eyy	Ezz	Ux	Uy	U
Z-Position	Layer	LAX					
Z-Position (in)	Layer	(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils
(in)		(10^-6)	(10 <sup>A</sup> -6)				
	Layer 1 2 2		(10 <sup>A</sup> -6) 1187.18 -2714.00	(10^-6) -1150.40 -1036.20	(mils) 570 2.907	(mils) 384 1.816	85.639 86.323

Layered Elastic Analysis by Everstress© 5.0 Z-Position Layer **S1** S2 **S**3 E1 E2 E3 (psi) (psi)  $(10^{4}-6)$  $(10^{4}-6)$  $(10^{-6})$ (in) (psi) .749 1 -108.73586.49 -1150.41 625.99 1195.94 417.61 2 .755 -190.86-158.09 -153.22 -2730.12-1255.44-1036.202 -39.68 1517.85 6.750 -3518.87 3486.64 72.25 116.00 Location No: 6 X-Position (in): 7.000 Y-Position (in): 48.000 **Normal Stresses Z-Position** Layer Sxx Syy Szz Syz Sxz Sxy (in) (psi) (psi) (psi) (psi) (psi) (psi) .749 1 -27.44 323.75 1.87 -3.39 .00 .00 2 .755 -40.00-99.78 41.58 .03 .00 .00 2 6.750 16.15 92.95 -30.77.00 .00 .00 **Normal Strains and Deflections Z-Position** Layer Exx Еуу Ezz Ux Uy Uz  $(10^{-6})$ (in)  $(10^{-6})$  $(10^{-6})$ (mils) (mils) (mils) .749 1 -353.51 831.75 -254.61 .000 -.663 75.219 .755 2 315.75 -2374.28 2.400 244.91 .000 75.929 2 -187.12 6.750 3268.98 -2298.54 .000 -3.56669.685 **Principal Stresses and Strains Z-Position** \$1 Layer E1 E2 **E3** S2 **S3**  $(10^{4}-6)$ (in) (psi) (psi) (psi)  $(10^{4}-6)$  $(10^{4}-6)$ .749 -27.44 1.83 323.78 1 -353.51 -254.73 831.87 2 .755 -99.78 -41.58 -2374.28 244.91 315.75 -40.006.750 2 -30.77 -2298.55 -187.12 16.15 92.95 3268.98 Location No: 7 X-Position (in): 14 000 Y-Position (in): 48 000

Location No. 7		A-Posi	ion (iii): 14.000		r-Position (i	n): 46.000	
			Normal Str	resses			
<b>Z-Position</b>	Layer	Sxx	Syy	Szz	Syz	Sxz	Sxy
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi)
.749	1	420.20	583.89	-108.73	.48	.64	20.78
.755	2	-158.45	-190.50	-153,22	.00	01	-3.41
6.750	2	72.69	115.55	-39.68	.00	.00	4.41
		No	rmal Strains an	d Deflections			
<b>Z-Position</b>	Layer	Exx	Eyy	Ezz	Ux	Uy	Uz
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils)
.749	1	634.75	1187.18	-1150.40	.570	384	85.639
.755	2	-1271.56	-2714.00	-1036.20	-2.907	1.816	86.323
6.750	2	1538.03	3466.46	-3518.87	4.463	-2.829	70.005
		Pr	incipal Stresse	s and Strains			
<b>Z-Position</b>	Layer	S1	S2	S3	E1	E2	E3
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6)
.749	1	-108.73	417.61	586.49	-1150.41	625.99	1195.94
.755	2	-190.86	-158.09	-153.22	-2730.12	-1255.44	-1036.20
6.750	2 2	-39.68	72.25	116.00	-3518.87	1517.85	3486.64

	Le	ayereu Ela	Suc Analysi	s by Eversure	556 5.0		
Title: CR121 - Aphalt/l No of Layers: 3	Base Interface	Stresses - Ca No of I	se 3 (with bo Loads: 4	nded interface		Evaluation Points	: 7
	Layer		Poisson's Ratio		Thickness (in)		Moduli(1 (ks
	1		.35		2.000		400.0
	2		.35	(4)	6.000		30.00
	3		.40				8.00
Load No	Y.D.	osition	Y-Position	Load		Pressure	Radiu
LOAU NO	X-1.0	(in)	(in)	(lbf)		(psi)	(in
1		.00	.00	4500.0		110.00	3.609
2 3		14.00	.00	4500.0		110.00	3.60
3 4		.00 14.00	48.00 48.00	4500.0 4500.0		110.00 110.00	3.60s 3.60s
Location No. 1		Y Pagi	tion (in): 000		V Position (	in): .000	
Location No: 1		A-POSI	tion (in): .000		Y-Position (	in): .000	
Z-Position	Layer	Sxx	Normal Str Syy	esses Szz	Syz	Sxz	Sx
(in)	Layer	(psi)	(psi)	(psi)	(psi)	(psi)	(psi
1.999	1	242.55	264.15	-56.39	01	3.09	30.
2.005	2	-9.83	-8.20	-56.32	.00	3.10	.0
8.000	2	17.49	22.49	-12.94	.14	1.69	14
7.011			ormal Strains an		11		11
Z-Position	Layer	Exx (10^-6)	Eyy (10^-6)	Ezz (10^-6)	Ux (mils)	Uy (mils)	U; (mils)
(in)		(100)	(100)	(10"-0)	(111115)	(IIIIS)	(ITHIS
1.999	1	424.58	497.48	-584.33	268	.140	42.852
2.005	2	425.21	498.33	-1667.07	271	.139	42.843
8.000	2	471.50	696.54	-897.74	-2.423	635	36.199
7.011	Laure	Pr	rincipal Stresses		F4	Г0	Ė
Z-Position (in)	Layer	S1 (psi)	S2 (psi)	S3 (psi)	E1 (10^-6)	E2 (10^-6)	E3 (10^-6
(111)		(psi)	(hai)	(psi)	(10 -0)	(10 -0)	(10 -0
1.999	1	-56.42	242.58	264.15	-584.44	424.69	497.48
2.005	2	-56.53	-9.62	-8.20	-1676.31	434.45	498.33
8.000	2	-13.04	17.58	22.49	-901.96	475.54	696.7
Location No: 2	***************************************	X-Posi	tion (in): 7.000		Y-Position (	in): .000	
			Normal Str				
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sx
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
1.999	1	-99.34	69.38	-13.28	01	.00	.00
2.005	2 2	-14.06	-1.39	-13.30	.00	.00	.00
8.000	2	9.64	20.53	-11.65	.14	.00	.00
Z-Position	Louis		rmal Strains an		Llss	1164	116
Z-Position (in)	Layer	Exx (10^-6)	Eyy (10^-6)	Ezz (10^-6)	Ux (mils)	Uy (mils)	U; (mils)
		(10 -0)	(10 -0)	(10 -0)	(111113)	(11110)	(mile)
1.999	1	-297.42	271.99	-7.00	.000	.141	40.48
2.005	2	-297.38	272.79	-263.00	.000	.140	40.486
8.000	2	217.89	707.86	-740.54	.000	656	37.360
Z-Position	Layer	Pr S1	rincipal Stresses S2	and Strains S3	E1	E2	E3
(in)	Layer	(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6
1.999	1	-99.34	-13.28	69.38	-297.43	-7.00	271.99
2.005	2	-14.06	-13.30	-1.39	-297.43	-263.00	272.78
8.000	2	-11.66	9.64	20.53	-740.57	217.90	707.89

La	vered	Elastic	Analysis	bv	<b>Everstress</b> ©	5.0
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Location No: 3		X-Positi	ion (in): 14.000		Y-Position (in)	.000	
•			Normal Str	esses			
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sx
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
1.999	1	242.55	264.15	-56.39	01	-3.09	08
2.005	2	-9.83	-8.20	-56.32	.00	-3.10	0
8.000	-2	17.49	22.49	-12.94	.14	-1.69	.14
Z-Position	Layer	Exx	mal Strains and Eyy	Deflections Ezz	Ux	Uy	U
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils
1.999	1	424.58	497.48	-584.33	.268	.140	42.852
2.005	2	425.21	498.33	-1667.07	.271	.139	42.843
8.000	2	471.50	696.54	-897.74	2.423	635	36.199
•		Dri	ncipal Stresses	and Strains			
Z-Position	Layer	S1	S2	S3	E1	E2	E3
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6
1.999	1	-56.42	242.58	264.15	-584.44	424.69	497.48
2.005	2	-56.53	-9.62	-8.20	-1676.31	434.45	498.33
8.000	2 2	-13.04	17.58	22.49	-901.96	475.54	696.71
Location No: 4		X-Positi	on (in): 7.000		Y-Position (in):	24.000	
			Normal Str	esses			
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sxy
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
1.999	1	-7.10	-18.63	26	.00	.00	.00
2.005	2	68	-1.55	29	.00	.00	.00
8.000	2	1.69	-7.83	-1.61	.00	.00	.00
		Nor	mal Strains and	d Deflections			
<b>Z-Position</b>	Layer	Exx	Eyy	Ezz	Ux	Uy	Uz
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils)
1.999	1	-1.23	-40.13	21.86	.000	.000	25.534
2.005		-1.04	-40.34	16.24	.000	.000	25.534
8.000	2 2	166.55	-261.91	17.95	.000	.000	25.616
		Pri	ncipal Stresses	and Strains			
<b>Z-Position</b>	Layer	S1	S2	S3	E1	E2	E3
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6)
1.999	1	-18.63	-7.10	26	-40.13	-1.23	21.86
2.005	2	-1.55	68	29	-40.34	-1.04	16.24
8.000	2	-7.83	-1.61	1.69	-261.91	17.95	166.55
Location No: 5		X-Positi	on (in): .000		Y-Position (in):	48.000	
Z-Position	1 01/0-	C	Normal Str		C. –	Cv-	0:-
Z-Position (in)	Layer	Sxx	Syy (psi)	Szz	Syz (psi)	Sxz	Sxy
		(psi)	(psi)	(psi)	(h91)	(psi)	(psi)
1.999	1	242.55	264.15	-56.39	.01	3.09	08
2.005 8.000	2	-9.83	-8.20	-56.32	.00	3.10	01
0.000	2	17.49	22.49	12.94	14	1.69	.14
7 Dosition	15-		mal Strains and				
Z-Position	Layer	Exx	Eyy	(104.6)	Ux (mile)	Uy (mile)	Uz (mile)
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils)
1.999	1	424.58	497.48	-584.33	268	140	42.852
2.005	2	425.21	498.33	-1667.07 -897.74	271 -2.423	139 .635	42.843 36.199
8.000	2	471.50	696.54				

Layered Elastic Analysis by Everstress© 5.0 S3 E1 E2 Layer **S1** S2 E3 Z-Position (psi)  $(10^{-6})$  $(10^{4}-6)$  $(10^{-6})$ (in) (psi) (psi) -584.44 424.69 497.48 1 -56.42 264.15 1.999 242.58 2.005 2 -56.53 -8.20 -1676.31 434,45 498.33 -9.628.000 2 -13.0422.49 -901.96 475.54 696.71 17.58 X-Position (in): 7.000 Y-Position (in): 48.000 Location No: 6 **Normal Stresses Z-Position** Sxx Syz Sxz Sxy Layer Syy Szz (psi) (psi) (psi) (psi) (in) (psi) (psi) -99.34 69.38 .01 .00 .00 1.999 1 -13.282.005 2 2 -14.06-1.39-13.30.00 .00 .00 8.000 9.64 20.53 -11.65 -.14 .00 .00 **Normal Strains and Deflections Z-Position** Exx Layer Ux Uy Uz Еуу Ezz  $(10^{-6})$ (in)  $(10^{4}-6)$  $(10^{-6})$ (mils) (mils) (mils) 1.999 -297.42 271.99 -7.00.000 -.141 40.487 1 2.005 2 -297.38 272.79 -263.00 .000 -.140 40.486 2 707.86 8.000 217.89 -740.54.000 .656 37.360 **Principal Stresses and Strains Z-Position** Layer **S1** S2 E1 E2 **E3 S3**  $(10^{4}-6)$  $(10^{4}-6)$ (in) (psi) (psi) (psi)  $(10^{-6})$ 1.999 -99.34 -13.2869.38 -297.43-7.00271.99 1 2 2.005 -14.06-13.30-1.39-297.38-263.00 272.78 2 20.53 8.000 -11.669.64 -740.57217.90 707.89 Location No: 7 X-Position (in): 14.000 Y-Position (in): 48.000 **Normal Stresses Z-Position** Sxy Layer Sxx Syy Szz Syz Sxz (in) (psi) (psi) (psi) (psi) (psi) (psi) 1.999 242.55 264.15 -56.39 .01 -3.09.08 1 .01 2.005 2 -9.83 -8.20-56.32 .00 -3.108.000 2 22.49 17.49 -12.94-.14 -1.69-.14 **Normal Strains and Deflections Z-Position** Exx Uy Layer Еуу Ezz Ux Uz (in)  $(10^{4}-6)$  $(10^{4}-6)$  $(10^{-6})$ (mils) (mils) (mils) 1.999 1 424.58 497.48 -584.33 .268 -.140 42.852 2.005 2 425.21 498.33 -.139 -1667.07 .271 42.843 2 8.000 471.50 696.54 -897.74 2.423 .635 36,199

**Principal Stresses and Strains** 

**S3** 

(psi)

264.15

-8.20

22.49

E1

 $(10^{4}-6)$ 

-584.44

-901.96

-1676.31

E2

 $(10^{-6})$ 

424.69

434.45

475.54

E3

 $(10^{4}-6)$ 

497.48

498.33

696.71

S2

(psi)

242.58

-9.62

17.58

**Z-Position** 

(in)

1.999

2.005

8.000

Layer

2

2

S<sub>1</sub>

(psi)

-56.42

-56.53

-13.04

Title: CR121 - Aphalt/l				bonded interf			
No of Layers: 3	Dase Interiac		Loads: 4	Donded Incell		Evaluation Points	: 7
	Layer		Poisson's Ratio		Thickness (in)		Moduli(1 (ksi
	1		.35		2.000		400.00
	2		.35		6.000		30.00
	3		.40				8.00
Load No	X-F	osition	Y-Position	Load	•	Pressure	Radius
Load No	χ-1	(in)	(in)	(lbf)		(psi)	(in
1	•	.00	.00	4500.0	) .	110.00	3.609
2 3		14.00	.00	4500.0		110.00	3.60
		.00	48.00	4500.0		110.00	3.609
4		14.00	48.00	4500.0	)	110.00	3.609
Location No: 1		X-Posi	ition (in): .000		Y-Position	(in): .000	
7.0		0	Normal Str		0	à-	0
Z-Position (in)	Layer	Sxx (psi)	Syy (psi)	Szz (psi)	Syz (psi)	Šxz (psi)	Sxy (psi
(111)		(hai)	(hai)	(hai)	(hai)	(hai)	(þsi
1.999	1	407.24	464.72	-55.61	.15	.03	.84
2.005	2	-62.88	-71.48	-56.40	.00	.00	20
8.000	2	33.85	45.50	-20.53	.00	.00	.16
			ormal Strains and				
Z-Position	Layer	Exx	Еуу	Ezz	Ux	Uy	U:
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils
1.999	1	660.14	854.12	-902.00	-1.106	319	52.952
2.005	2	-604.15	-990.90	-312.56	2.075	.335	52.927
8.000	. 2	836.78	1361.43	-1609.99	-3.683	-1.495	46.380
Z-Position	Louis	S1	rincipal Stresses	and Strains	F2		
Z-Position (in)	Layer	(psi)	S2 (psi)	S3 (psi)	E1 (10^-6)	E2 (10^-6)	E3 (10^-6)
()		(poi)	(poi)	(pol)	(10 0)	(10 0)	(.0 0
1.999	1	-55.61	407.23	464.73	-902.00	660.10	854.16
2.005	2	-71.48	-62.88	-56.40	-991.12	-603.93	-312.56
8.000	2	-20.53	33.84	45.51	-1609.99	836.69	1361.52
Location No: 2		X-Posi	tion (in): 7.000		Y-Position	(in): .000	
			Normal Str				
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sxy
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
1.999	1	-43.36	216.26	-14.52	.14	.00	.00
2.005	2	-19.55	-39.58	-15.24	.00	.00	.00
8.000	2 2	14.04	39.06	-18.20	.00	.00	.00
		No	rmal Strains and	d Deflections			
<b>Z-Position</b>	Layer	Exx	Eyy	Ezz	Ux	Uy	Uz
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils
1.999	1	-284.91	591.28	-187.58	.000	310	51.184
2.005	2	-11.99	-913.45	181.75	.000	.304	51.163
8.000	2	224.45	1350.62	-1226.06	.000	-1.472	48.155
7.0 "			rincipal Stresses				
Z-Position	Layer	S1	S2	S3	E1	E2	(404 c
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6)
. 4 000	1	-43.36	-14.52	216.26	-284.91	-187.58	591.28
1.999							
2.005 8.000	2 2	-39.58	-19.55 14.04	-15.24 39.06	-913.45	-11.99	181.75 1350.62

			Normal Str	esses			
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sx
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
4.000		107.01		55.04	45	00	
1.999 2.005	1	407.24 -62.88	464.72	-55.61	.15 .00	03 .00	84
8.000	2 2	33.85	-71.48 45.50	-56.40 -20.53	.00	.00	.20 16
0.000						.00	
7 Desition	Loves	Nor Exx	mal Strains and		Ux	Lhe	U
Z-Position (in)	Layer	(10^-6)	Eyy (10^-6)	Ezz (10^-6)	(mils)	Uy (mils)	(mils
(111)		(10 -0)	(10 -0)	(10 -0)	(111113)	(111113)	(IIIII)
1.999	1	660.14	854.12	-902.00	1.106	319	52.952
2.005	2	-604.15	-990.90	-312.56	-2.075	.335	52.927
8.000	2	836.78	1361.43	-1609.99	3.683	-1.495	46.380
			ncipal Stresses	and Strains			
Z-Position	Layer	S1	S2	S3	E1	E2	E3
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6
1.999	1	-55.61	407.23	464.73	-902.00	660.10	854.16
2.005	2	-71.48	-62.88	-56.40	-991.12	-603.93	-312.56
8.000	2	-20.53	33.84	45.51	-1609.99	836.69	1361.52
ocation No: 4		Y Positi	on (in): 7.000		Y-Position (in	V- 24 000	
.ocauon No. 4		X-PUSIII			1-Position (iii)	). 24.000	
7 D W	Lauren	0	Normal Stre		0 -	0	0
Z-Position	Layer	Sxx	Syy	Szz	Syz	Sxz	Sxy
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
1.999	. 1	01	-48.15	.01	.00	.00	.00
2.005	2	1.48	8.91	13	.00	.00	.00
8.000	2	1.24	-11.59	34	.00	.00	.00
		Nor	mal Strains and	d Deflections			
Z-Position	Layer	Exx	Еуу	Ezz	Ux	Uy	Uz
(in)		(10^-6)	(10^-6)	(10^-6)	(mils)	(mils)	(mils
1.999	1	42.10	-120.37	42.16	.000	.000	25.041
2.005	2	-52.95	281.18	-125.58	.000	.000	25.019
8.000	2	180.51	-396.99	109.60	.000	.000	24.979
		Pri	ncipal Stresses	and Strains			
Z-Position	Layer	S1	S2	S3	E1	E2	E3
(in)		(psi)	(psi)	(psi)	(10^-6)	(10^-6)	(10^-6
1.999	1	-48.15	01	.01	-120.37	42.10	42.16
2.005 8.000	2 2	13	1.48	8.91 1.24	-125.58	-52.95 109.60	281,18 180,51
8.000		-11.59	34	1.24	-396.99	109.00	100.5
ocation No: 5		X-Positi	on (in): .000		Y-Position (in	): 48.000	
			Normal Stre	esses		*****	
<b>Z-Position</b>	Layer	Sxx	Syy	Szz	Syz	Sxz	Sxy
(in)		(psi)	(psi)	(psi)	(psi)	(psi)	(psi
1.999	1	407.24	464.72	-55.61	15	.03	84
2.005	2	-62.88	-71.48	-56.40	.00	.00	.20
8.000	2	33.85	45.50	-20.53	.00	.00	16
7 Docition	Lauren		mal Strains and				
Z-Position (in)	Layer	Exx (10^-6)	Eyy (10^-6)	Ezz (10^-6)	Ux (mils)	Uy (mils)	Uz (mils)
V1							
4 000							
1.999 2.005	1 2	660.14 -604.15	854.12 -990.90	-902.00 -312.56	-1.106 2.075	.319 335	52.952 52.927

**Principal Stresses and Strains** 

E3	E2	E1	S3	S2	S1	Layer	Z-Position
(10^-6	(10^-6)	(10^-6)	(psi)	(psi)	(psi)		(in)
854.16	660.10	-902.00	464.73	407.23	-55.61	1	1.999
-312.56	-603.93	-991.12	-56.40	-62.88	-71.48	2	2.005
1361.52	836.69	-1609.99	45.51	33.84	-20.53	2	8,000
		Y-Position (in):		on (in): 7.000	X-Position		Location No: 6
				Normal Stre		11	
Sxy	Sxz	Syz	Szz	Syy	Sxx	Layer	Z-Position
(psi	(psi)	(psi)	(psi)	(psi)	(psi)		(in)
.00	.00	14	-14.52	216.26	-43.36	1	1.999
.00	.00	.00	-15.24	-39.58	-19.55	2	2.005
.00	.00	.00	-18.20	39.06	14.04	2	8.000
11-	11.	100		mal Strains and		Lauren	7.0
Uz (mile)	Uy (mile)	Ux (mile)	Ezz (10^-6)	Eyy	Exx	Layer	Z-Position
(mils)	(mils)	(mils)	(10*-0)	(10^-6)	(10^-6)		(in)
51.184	.310	.000	-187.58	591.28	-284.91	1	1.999
51.163	304	.000	181.75	-913.45	-11.99	2	2.005
48.155	1.472	.000	-1226.06	1350.62	224.45	2	8.000
	F0	-		ncipal Stresses			7.0
E3	E2	E1	S3	S2	S1	Layer	Z-Position
(10^-6)	(10^-6)	(10^-6)	(psi)	(psi)	(psi)		(in)
591.28	-187.58	-284.91	216.26	-14.52	-43.36	1	1.999
181.75	-11.99	-913.45	-15.24	-19.55	-39.58	2	2.005
1350.62	224.45	-1226.06	39.06	14.04	-18.20	2	8.000
	48.000	Y-Position (in):		on (in): 14.000	X-Positio		Location No: 7
				Normal Stre			
Sxy	Sxz	Syz	Szz	Syy	Sxx	Layer	Z-Position
(psi)	(psi)	(psi)	(psi)	(psi)	(psi)		(in)
.84	03	15	-55.61	464.72	407.24	1	1.999
20	.00	.00	-56.40	-71.48	-62.88	2	2.005
.16	.00	.00	-20.53	45.50	33.85	2	8.000
				mal Strains and			7 Desition
Uz	Uy	Ux	Ezz	Eyy	Exx	Layer	Z-Position
(mils)	(mils)	(mils)	(10^-6)	(10^-6)	(10^-6)		(in)
52.952	.319	1.106	-902.00	854.12	660.14	1	1.999
52.927	335	-2.075	-312.56	-990.90	-604.15	2	2.005
46.380	1.495	3.683	-1609.99	1361.43	836.78	2	8.000
F0	F0	E4		ncipal Stresses		Lavor	Z-Position
(40A C)	E2	E1	S3	S2	S1	Layer	
(10^-6)	(10^-6)	(10^-6)	(psi)	(psi)	(psi)		(in)
		000 00	404.70	407.23	-55.61	1	1.999
854.16	660.10	-902.00	464.73	407.23	00.01		
854.16 -312.56	660.10 -603.93	-902.00 -991.12	-56.40	-62.88	-71.48	2 2	2.005 8.000

**A5** Structural Analysis of Pavement Section Results

## 1993 AASHTO Pavement Design

## DARWin Pavement Design and Analysis System

## A Proprietary AASHTOWare Computer Software Product

Woods Engineering, Inc 5445 Downington Drive Jacksonville, Florida

### Flexible Structural Design Module

County Road 121-Full Depth Reclamation

### Flexible Structural Design

8-kip ESALs Over Initial Performance Period	1,335,902
nitial Serviceability	4
erminal Serviceability	. 2
Peliability Level	60 %
verall Standard Deviation	0.44
oadbed Soil Resilient Modulus	6,000 psi
tage Construction	1
alculated Design Structural Number	3.24 in

### Specified Layer Design

		Struct	Drain			
		Coef.	Coef.	Thickness	Width	Calculated
Layer	Material Description	(Ai)	(Mi)	(Di)(in)	<u>(ft)</u>	SN (in)
Layer 1	Asphalt - SP 12.5	0.43	1	2	12	0.86
2	CTB - Reclamation	0.18	0.8	6	12	0.86
2	Compacted Soil	0.04	0.8	12	12	0.38
Total	-	-	-	20.00	-	2.11

### Layered Thickness Design

hickness	precision			Actua		· ·			
		Struct	Drain	Spec	Min	Elastic		Calculated	
		Coef.	Coef.	Thickness	Thickness	Modulus	Width	Thickness	Calculated
Layer	Material Description	(Ai)	(Mi)	(Di)(in)	(Di)(in)	(psi)	(ft)	<u>(in)</u>	SN (in)
Total	-	-			_	-	-	-	

\*Note: This value is not represented by the inputs or an error occurred in calculation.

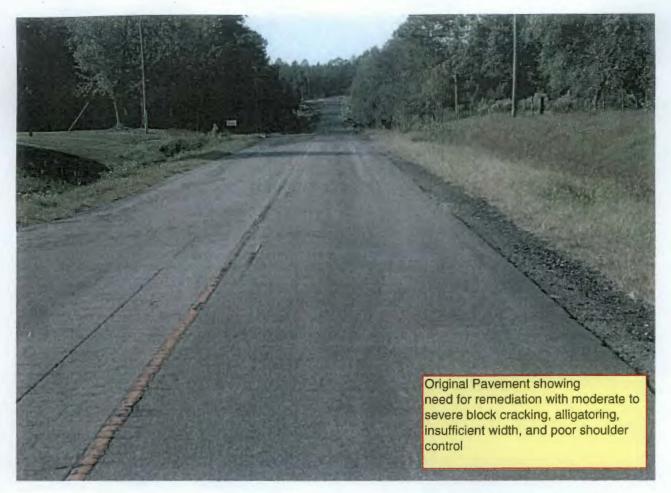
### **Optimized Layer Design**

)		Struct	Drain		Min	Max		Optimum		Calculated
		Coef.	Coef.	Cost	Thick	Thick	Width	Thick	Calculated	Cost
Layer	Material Description	(Ai)	(Mi)	(sq yd/in)	(Di)(in)	(in)	(ft)	(in)	SN (in)	(sq yd)
1	Asphalt - SP 12.5	0.43	1	\$0.00	2.	6	12	3.96	1.70	\$0.4
2	CTB-Reclamation	0.18	0.8	\$0.00	6	8	12	8.00	1.15	\$0.0

Layer 3 Total	Material Description Compacted Soil	Struct Coef. (Ai) 0.04	Drain Coef. (Mi) 0.8	Cost (sq yd/in) \$0.00	Min Thick (Di)(in) 12	Max Thick (in) 12	Width (ft) 12 -	Optimum Thick (in) 12.00 23.96	Calculated <u>SN (in)</u> 0.38 3.24	Calculated Cost (sq yd) \$0.0

.

**A6** Representative Photographs

















Notes of Meeting, June 16, 2006 11:00 a.m., Contracts Manager Conference Room

Purpose: To discuss with representatives of Douglas Asphalt Company (DAC), the contractor for CR121 Widening and Resurfacing Project, contractual issues and concerns related to the project.

Present:

Pat Gilroy, Nassau County CEI

Jose Deliz, Director of Engineering Services for Nassau County

Mike Mahaney, Nassau County Administrator

Charlotte Young, Nassau County Contracts Manager Greg Evans, Statewide Engineering, Inc. for DAC

Joel Spivey, President of DAC

Ray Grode, Division Manager for DAC

Jose Deliz called the meeting to order and the participants introduced themselves. Mr. Deliz noted that some crews were cleaning the shoulders during the past week. Under the contract, DAC is to restore the shoulders, not just pick up the big chunks. Mr. Deliz had been advised that a Gradall was on site scooping up dirt. He advised DAC that a strip of sod should be placed next to the asphalt, pursuant to the contract, and he felt this should be done as soon as possible in order to prevent erosion problems. Additionally, as stated in the contract, there are some guardrails that should be replaced.

Mr. Deliz distributed a letter he wrote dated June 16, 2006 to Mr. Grode re-affirming that the work on CR121 should continue during the current evaluation process and stating that a stop work order has not been issued by the County.

It was Mr. Deliz' understanding that DAC was evaluating some options. As stated in his letter dated June 16, 2006, DAC is free to continue in a manner that delivers a product that satisfies the contract.

During the meeting on June 7, 2006 some agreements were made. Mr. Deliz summarized the items and forwarded the document via e-mail. Ted Madson replied (letter dated June 13, 2006) with some very minor revisions. At this time, Mr. Deliz requested DAC to respond in writing to three issues: (1) if DAC will assume the cost for repairs; (2) propose a strategy to minimize patchwork that would include the length of the patch and the distance between patches; and (3) if DAC would consider an extended warranty.

Mr. Spivey submitted a written document, but quickly noted it was not the correct response and retrieved it. He then distributed another letter dated June 15, 2006 responding to the issues. The meeting paused while copies were being made for distribution to all participants. Mr. Deliz compared Mr. Spivey's response on June 15, 2006 with his letter dated June 13, 2006, and felt that DAC's statement ("Douglas Asphalt Company (DAC) commits to correct construction deficiencies on the captioned project to meet contract specifications and is 90 % sure it could accomplish those corrections at no additional cost to Nassau County") was not a firm commitment. Mr.

Spivey's letter dated June 15, 2006 states, "To reiterate, we agree to proceed with the revised methods for the balance of the work on this contract at no additional cost to Nassau County." Mr. Deliz felt this was a definite decision.

The letter dated June 13, 2006 indicates that DAC agreed to provide a proposal that will minimize the patchwork. Mr. Deliz sought clarification that DAC will utilize FDOT's standards. In addition, DAC has not yet agreed to an extended warranty.

The group discussed the patches. Mr. Evans explained that Florida requires going 50 ft. each side of the disturbed area. Mr. Grode questioned that if there were two problem areas of asphalt with a distance of 120 feet between the two areas, would one leave a 20 ft. gap? Mr. Gilroy replied that perhaps not because there would be too many joints. The group discussed whether Florida provides for a minimum distance between joints; however, Mr. Evans noted that DAC had previously stated that if there were two that were close to each other DAC will consider those as one effort. Mr. Deliz concurred, but indicated that the Board would need to determine the acceptable distance between patches. Mr. Evans commented that it is customary for a representative from each entity, using common sense and construction practices, to make such decisions in the field. Mr. Spivey understood Mr. Deliz' concerns related to patches being too close together and indicated that DAC would not do so. The group considered agreeing to a minimum distance of 400 ft. between joints; however, Mr. Spivey preferred to work it out in the field, and sought clarification that the 400 ft. would be applicable to areas that have slipped. Mr. Deliz clarified that it would be applicable to any areas that needed replacement for whatever reason. Mr. Grode felt that was too broad. Mr. Deliz further clarified that if a section needed to be renewed, create a patch, whether it was for slippage, cracking, unraveling, etc. Mr. Grode felt that making a determination on actual detrimental conditions versus an opinion was too difficult to answer on such a broad basis. Mr. Spivey was agreeable, if it is required in accordance with the contract. Mr. Deliz reminded the group that FDOT standards for road and bridge construction were incorporated by reference into the contract. Mr. Spivey concurred that if removal and replacement is required in accordance with the contract it was not unreasonable.

Mr. Mahaney requested DAC to provide a response in writing to provide the Board at the special meeting on June 19, 2006 at 9:00 a.m.

Discussing other FDOT standards, Mr. Mahaney questioned that after injecting the soft cement it should have been primed. Mr. Grode indicated that DAC had made numerous requests for a copy of the audio recording of the January 6, 2006 meeting in which Mr. Grode remembered Dan Turner waived the priming requirement.

Following a brief recess, Mr. Spivey sought assurances that it was OK to continue working under the revised method of construction as discussed during the previous meeting. He clarified for Mr. Mahaney that the revised method includes priming. The group discussed the method to be utilized.

Mr. Deliz reviewed the minutes of the meeting held January 6, 2006 in which there was no mention of priming. A copy of the audio tape will be provided to Mr. Grode. The group continued discussing the priming method, and Mr. Grode suggested Mr. Deliz contact Mr. Turner to discuss how the asphalt would adhere to the base without priming.

Mr. Deliz indicated that he was satisfied with the proposal for work forward, but he questioned the areas that have been paved to date without the treatment (not primed or tacked). He questioned if DAC was confident that scarifying the base to promote mechanical adhesion would prevent slippage. Mr. Grode, not being an engineer, indicated it was a suggestion only. Mr. Evans agreed with using the typical section (layer surface treatment) alternative, but indicated he would visit the project site later today.

Noting that Mr. Evans was not present at the last meeting, Mr. Deliz explained that it was proposed for those areas where the asphalt has been placed already without priming and tacking and where mechanical adhesion has proved to be insufficient, to remove the layer of asphalt (2 inches), scarify the surface with a milling machine to the depth of roughly one quarter inch, tack the vertical edges of the patch, and replace two inches of compacted asphalt. He wanted to avoid agreeing on a suggested method that ultimately does not work. Mr. Spivey felt it was the best alternative at this time; but if it doesn't work, he'll try another method. A tack coat was not in the proposal. Mr. Deliz noted that FDOT requires priming and tacking. He did not want to put the County into a position if a proposal didn't work the contractor disclaims any liability for the failure. Furthermore, once all parties agree on a method, he did not want DAC to come back, if, for whatever reason it should fail, and not take responsibility.

Mr. Deliz explained that once he receives a proposal, he consults with trusted experts and if found to be acceptable he will proceed; but he cautioned that that would not imply that the County would assume any liability for not meeting the project specifications.

Mr. Spivey explained that DAC is required to maintain the project.

Mr. Deliz explained that the asphalt started slipping three to four weeks ago and now more areas are starting to slip. He felt the Board would need to approve a time estimate before DAC commences repairs. Once the repairs are authorized, he suggested starting at SR2 to the bridge, approximately 2.5 miles. Mr. Evans cautioned that summer temperature variations would affect the timeframe. He suggested a sample typical section repair to show the affects.

Mr. Deliz suggested DAC consider an alternative to tack the outside edge only. Although priming is required by FDOT, the traffic would make it lose its adhesive properties; perhaps consider tacking first and then priming to minimize the affect.

The group continued discussing various methods and potential affects.

Mr. Deliz advised that Pat Gilroy would be the CEI for the project and to maintain communications with him.

Mr. Mahaney requested DAC to clarify in writing the items as discussed and agreed to today, and e-mail their response to Mr. Deliz and follow up with a hard copy in the mail. DAC's response will be distributed to the Board on June 19, 2006.

Mr. Gilroy departed the meeting at 12:08 p.m.

Mr. Spivey indicated that he would visit the site this afternoon and clarified that work will proceed on the project.

The group discussed a time extension to the completion deadline. Mr. Grode suggested utilizing the May 24 date, as previously preliminarily agreed, through the process of the test strip approval (once determined by the County that no unforeseen conditions exist throughout the process). Mr. Deliz would recommend the Board consider the extension.

Mr. Spivey clarified that DAC would proceed with the balance of the project in which no work had been done previously with the revised method, and wait for a response from the Board regarding the corrective work.

Mr. Grode suggested visiting the site and monitoring the ripples for a few days and see what other corrective work needs to be done before addressing the ripples.

There being no further discussion, the meeting adjourned at 12:15 p.m.



### Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

José Deliz, Director

June 16, 2006

Mr. Raymond Grode Division Manager Douglas Asphalt Company 10010 N. Main Street Jacksonville, FL 32218

RE: CR121 Progress

Dear Mr. Grode,

This is to state that work on CR121 should continue during the current evaluation process and a stop work order has not been issued by Nassau County.

Regards,

José R. Deliz, P.E.

Cc: Commissioner Floyd Vanzant, District 5
Michael Mahaney, County Administrator
Michael S. Mullin, County Attorney
Charlotte Young, Contract Manager
Pat Gilroy, Construction Engineering Inspector



YULEE (904) 491-3609

TOLL FREE 1 800-948-3364

FAX (904) 491-3611

#### RE: Draft Letter to Jose Deliz. - Message (HTML)

File Edit View Insert Format Tools Actions Help

Reply Reply Reply to Al 60 Forward

Jose Deliz From:

Sent: Tue 6/13/2006 5:41 PM

'Ted Madson' To:

Tammie Chancey; Charlotte Young; Michael Mahaney; Mike Mullin Cc:

Subject: RE: Draft Letter to Jose Deliz.

#### Mr. Madson,

I reviewed the letter and it does not seem to contain any other information except to re-iterate our agreement of June 7. I will advise the BOCC tomorrow that we have yet to receive a commitment from DAC that DAC will correct all defects and employ a revised paving strategy for the balance of the project at no additional cost to Nassau County. Furthermore we are still waiting for the proposed patch length and frequency (to minimize patchwork) as well as terms for extended warranty. Please note that Mr. Turner is a consultant with Universal Engineering who is under contract with Nassau County to provide professional services.

I will recommend tomorrow to the BOCC that they setup a special meeting to discuss your forthcoming response pursuant to our June 7 meeting. Please let us know of a reasonable date to schedule this special meeting.

VR. José

--Original Message

From: Ted Madson [mailto:ted.madson@surveyors.org]

Sent: Tuesday, June 13, 2006 2:02 PM To: Jose Deliz; Michael Mahaney; Mike Mullin

Cc: Tammie Chancey

Subject: Draft Letter to Jose Deliz.

Jose:

Attached please find a draft copy of the letter which Joel proposes to publish. Please edit and give us

vour commente se coon se noccible

















**Douglas Asphalt Company** 101 North Peterson Ave. Suite 201 P.O. Box 2320 Douglas, Ga. 31534 Ph. 912-384-8114 Fax 912-384-9665

Tuesday, June 13, 2006

Mr. José R. Deliz, P.E., Director Nassau County Engineering Services 96161 Nassau Place Yulee, Florida 32097

Phone: (904) 491-3609 - Office

(800) 948-3364 - Toll-Free

(904) 491-3611 - FAX

Email: jdeliz@nassaucountyfl.com

Re: Proposed letter of agreement pursuant to the "Verbal Agreement or Tentative Commitment" (as described by you and Mr. Mike Mahaney) reached during our meeting on June 7, 2006, regarding Contract Inclusion Item, County Road 121, Nassau County, Florida.

Dear Mr. Deliz:

The following is a summary of the "Verbal Agreement of Tentative Commitment" reached at the captioned meeting.

- 1. Douglas Asphalt Company ("DAC") commits to correct construction deficiencies on the captioned project to meet contract specifications and is 90% sure it could accomplish those corrections at no additional cost to Nassau County. We are currently working out some figures to help us achieve this result.
- 2. Specific correction strategies are as follows:
  - a. The group agreed that DAC would continue the paving portion of the project northbound from County Road #108 to the Georgia border using the following methods:
    - i. Reclaim base, profile and compact the same way as Work has heretofore been performed;
    - ii. Prime base with MC-70 bituminous asphaltic cement and wait for cure for a period of three to five days;
    - iii. Apply a single surface treatment similar to ARMI layer using stone +/- 1/2" inch size using AC or CRS-2 as a binder for the stone at the rate of approximately 0.25 gallons per square yard; and
    - iv. Install 11/2" of SP12.5 Hot Mix Asphalt (HMA) course.

The above described process will be employed as a test for one mile and, if found to be acceptable, continued throughout the project. This process is intended to prevent slippage and undulation for the balance of the project.

DAC also agreed to correct deficiencies in the portion of the project already paved. These deficiencies can be summarized into two general defects:

- Undulating pavement. DAC agreed to correct the undulation, but requests time for data collection to determine the cause before determining the specifics of the correction method.
- 2. <u>Slipping asphalt.</u> DAC agreed to remove the pavement sections where asphalt is slipping off the base. The exposed base will be scarified to an approximate depth of 1/6" to 1/4" using a milling machine or similar method. Vertical surfaces will be tacked and 2" of SP12.5 HMA installed. The patches will be for the full width of the affected lane. After discussion of the minimum acceptable length and distance between patches, DAC agreed to provide a proposal that will minimize the patchwork.

In addition, *DAC* agrees to propose terms for an extended warranty beyond the first year after project completion. To facilitate the project, we respectfully request that Mr. Daniel R. Turner of *Universal Engineering Sciences, Inc.*, have more involvement in the project since he has extensive experience with this type work. Such increased involvement would be an asset to the project and the county.

We understand that *DAC* is cleared to proceed with the project in a manner that satisfies the project specifications and we will proceed at once with that work. If you have any further questions, comments, or corrections, please let me know. We are pleased to work out these problems in the best interest of the citizens of Nassau County. With best personal regards, I remain,

Sincerely, Douglas Asphalt Company

Joel Spivey, President

cc. Hon. Tom Branan, Chairman, District Three Commissioner

Hon. Jim B. Higginbotham, District One Commissioner

Hon. Ansley Acree, District Two Commissioner

Hon. Floyd Vanzant, District Four Commissioner

Hon. Marianne Marshall, District Five Commissioner

Mr. Nc. Michael Mahaney, Nassau County Administrator

Mr. Michael S. Mullin, Nassau County Attorney

Ms. Charlotte Young, Nassau County Capital Projects Administrator

Mr. Rick Miller, Engineer

Ms. Tina Clark, Engineer

Mr. Daniel R. Turner, Universal Engineering Services, Inc.



Douglas Asphalt Company 101 North Peterson Ave. Suite 201 P.O. Box 2320 Douglas, Ga. 31534 Ph. 912-384-8114 Fax 912-384-9665

# Douglas Asphalt Company

Thursday, June 15, 2006

Mr. José R. Deliz, *P.E., Director*Nassau County Engineering Services
96161 Nassau Place
Yulee, Florida 32097

Phone: (904) 491-3609 - Office

(800) 948-3364 - Toll-Free (904) 491-3611 - FAX

Email: jdeliz@nassaucountyfl.com

Re: Response to your emails of June 7, 2006, and June 13, 2006, regarding our codification of our "Verbal Agreement or Tentative Commitment" (as described by you and Mr. Mike Mahaney) reached during our meeting on June 7, 2006, regarding Contract Inclusion Item, County Road 121, Nassau County, Florida.

Dear Mr. Deliz:

We are confused about your email of June 13, 2006. In it you state that, "I reviewed the letter and it does not seem to contain any other information except to re-iterate [sic] our agreement of June 7." You are correct, we did our best in our letter to confirm that "Verbal Agreement or Tentative Commitment." In your email of June 7, 2006, you state that, "Finally, I want to clarify that Douglas is cleared to proceed with the project in a manner that satisfies the project specifications." We understand this to mean that your email authorizes us to restart work on the project immediately.

Further, in your email of June 13, 2006, you state that, "I will advise the BOCC < Board of County Commissioners > tomorrow that we have yet to receive a commitment from DAC that DAC will correct all defects and employ a revised paving strategy for the balance of the project at no additional cost to Nassau County." We are of the opinion that our letter provides exactly those commitments.

Despite our best efforts in communication we apparently failed to make a few things clear to you in our letter to you of June 13, 2006. For clarification, please recall that although we are not engineers we made all of the suggestions for the revised methods described in that letter, none of which were included in our original contract. Further, all of these suggestions were agreed upon in principle by Nassau County, *Universal Engineering Sciences, Inc.*, *Douglas Asphalt Company*, and all of the engineers present. To reiterate, we agree to proceed with the revised methods for the balance of the work on this contract at no additional cost to Nassau County.



You go on to say in your email of June 13, 2006, that, "Furthermore we are still waiting for the proposed patch length and frequency (to minimize patchwork) as well as terms for extended warranty." Regarding the proposed patch length and frequency we understand that we are to conform to the standards promulgated by the *Florida Department of Transportation* which addresses these matters. Further, as regards your request for an extended warranty of five years instead of the contractual warranty of one year, we agreed to consider your request at the meeting on June 7, 2006; however, before we can agree to any such extended warranty, we must first monitor and collect the data as agreed at that meeting.

We have bent over backwards in making concessions to you and to your county to resolve the issues. Although the revised methods described in our June 7, 2006, letter should have been made a part of our original contract, we still feel that by working together we can make this project the success you desire.

Finally, at your request, I look forward to meeting with you on Friday, June 16, 2006, at 11:00 a.m. If you have any questions or comments regarding this letter, please feel free to call me at once at (912) 384-8114, extension 20. With best personal regards, I remain,

Sincerely,

Douglas Asphalt Company

Joel Spivey, President

cc. Hon. Tom Branan, Chairman, District Three Commissioner

Hon. Jim B. Higginbotham, District One Commissioner

Hon. Ansley Acree, District Two Commissioner

Hon. Floyd Vanzant, District Four Commissioner

Hon. Marianne Marshall, District Five Commissioner

Mr. N. Michael Mahaney, Nassau County Administrator

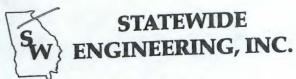
Mr. Michael S. Mullin, Nassau County Attorney

Ms. Charlotte Young, Nassau County Capital Projects Administrator

Mr. Rick Miller, Engineer

Ms. Tina Clark, Engineer

Mr. Daniel R. Turner, Universal Engineering Services, Inc.



Greg C. Evans

220 S. Gaskin Avenue P. O. Box 971 Douglas, Georgia 31534 Phone: 912-384-7723 Fax: 912-383-6895

Home: 912-384-2523

with Representatives of Douglas Contractor for CR121 Widening Dject, to discuss contractual rns related to the project.

oune 10, 2006, 11:00 a.m.

County Attorney Conference Room

County	Attorney Conferen	ice Room	
NAME	COMPANY	Phone/E-Mail	
Pat GilRoy	NC Engineen	vg 753-2332	
Jose Deliz	NC Epgibien		
MIKE MAHA	מנץ		
Charlot E Young	NASSAU	491.7377 greg.evans@statewide	
GREG EVANS	STATEWIDE ENGINEER	912-384-7723	ecng, ag
Joel Spivey	Douglas Asphalt Co	(904) 751-2240	
RAY GRODE	N N N	(904) 751-2240	



Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard Dist. No. 5 Callahan

> JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY County Administrator

CK121

July 17, 2006

#### VIA E-MAIL & REGULAR MAIL

John C. Taylor, Jr., Esquire 50 North Laura Street Suite 3500 Jacksonville, FL 32202

Dear John:

I am in receipt of your letter along with a copy of the Spearin case.

At this point, I agree with your points on Page 1 as to issues that need to be discussed. I do not agree with your total analysis as set forth in the letter. Your client assumes that the basis for the alleged problems are as stated in the letter, and, at this point, I do not agree.

I look forward to meeting with you as we address solutions. I might also add that I am advised that this process has been successfully utilized in northeast Florida, and Douglas' representative, at a meeting in Bryceville, indicated that the subcontractor was at fault.

y yours

MICHAEL S. MULLIN

Sincere

MSM/am

cc: Michael Mahaney
Jose Deliz

Charlotte Young

z/amyers/road-projects/taylor-cr121-jul-17-2006

#### YULEE, FLORIDA JANUARY 6, 2006

An advertised negotiation session was held this 6<sup>th</sup> day of January, 2006 at 9:00 AM at the Office of the County Attorney, Conference Room, Nassau County Governmental Complex, 96135 Nassau Place, Yulee, Florida, to discuss technical and contractual issues with the firm who was awarded the bid for the CR 121 widening and resurfacing project. Present were: Charlotte Young, Contract Manager; Michael S. Mullin, County Attorney; Jose Deliz, Engineering Services Director; Rick Miller of the Engineering Services Department; Jeff Pruett and Dan Turner of Universal Engineering Services; Randy Maloy and Ray Grode of Douglas Asphalt Company; and Joyce Bradley, Recording Secretary.

A list of the issues that the company desired to discuss with the county was provided. The first issue on the list was the discussion of determination of cement percentage for reclaimed base. Mr. Grode stated that he understands from individuals he has spoken to that the consensus is that the three percent waterproofing will support immediate traffic with the assumption of the 116.9 pounds per cubic foot base at the depth prescribed, if there were no traffic on the roadway for an extended time. Mr. Grode stated that the problem is the timeframe and specifications of the job does not allow this. Therefore, he understands that if traffic is placed on the roadway, the base will be broken down. Mr. Grode stated that he felt this issue needs to be addressed and that there are cost

considerations that could potentially be extended to the county based on this situation. This will also have an affect on alternatives under a failing condition while the company is working. Mr. Grode stated that additionally he will need information on differentials not only on the base considerations but the surface. Mr. Grode stated that there is the possibility of the proctor being adjusted on the order of seventy five to eighty times during the life of this project. Mr. Deliz stated that he did not understand this statement. Mr. Grode stated that, for example, if the base does not change but there is a pocket of asphalt that varies from the other, it was indicated to him that if that condition exists that will halt the project and require a proctor adjustment.

Mr. Dan Turner addressed the points that Mr. Grode had presented thus far. Mr. Turner stated that the addition of cement is to waterproof the materials, stating that limerock is very susceptible to moisture attack and stated that the goal is to waterproof the limerock so that once it is put in the moisture will not attack it. Mr. Grode referred to shock value and stated that this is based on conditions that are adjacent to it, i.e. water table, subgrade, and inquired how this shock value is kept at a minimum so that these conditions will not have a tendency to fail. Mr. Turner stated that if the company gets down to the subgrade they have overmixed, and stated that there will probably be a small amount of the base left in place as it is today. Secondly, the surface will be put back in through a method that

has been used throughout the country. The shock value is the base itself and the bonds are being disturbed and they are not being replaced with anything. In this case, there is mechanic stabilization being given of ground-up asphalt. Mr. Turner stated that the specifications do not specify a density for the material and stated that eighteen pounds is the target and there is a swing between fifteen to twenty-one pounds. Mr. Turner stated that this project is being done as a county road and to county standards. Mr. Turner stated that as far as the proctor timing, that is specified that it is to be run that day and when the material is being mixed a field proctor will likely be run and stated that, after a brief explanation of same, proctors should not be a problem. Mr. Deliz stated that as the concerns expressed about the ability to place traffic immediately on the roadway, that immediately would be defined as "at the end of the day". Mr. Turner added that when the project is being shut down for the day, the first vehicle should be able to chase the last piece of equipment off the roadway. Mr. Deliz stated that he felt that within eight hours traffic could be placed back on the reclaimed base.

The County Attorney expressed a concern, in listening to this discussion, that it appears the company has never done this type of work before. Mr. Grode stated that he has been speaking with subcontractors, which are those that actually do the work. Mr. Mullin stated that his concern is that this road is crucial because of the funding and stated that he did not want the

company to rely on the information the county representatives are giving here about the process. Mr. Mullin stated that the company should know the process and does not want there to be an claim for extra compensation because the company is relying on what the county told them. Mr. Grode explained that there are "hidden elements" to this job under the surface of the asphalt that the company has no control over. Mr. Mullin stated that if the company must rely on Nassau County, then he felt it best if this project did not proceed with this company. Mr. Grode stated that he needs assurances before entering into this contract with regard to a starting point, and that the specifications that were dictated by Universal Engineering for Nassau County that the company will adhere to. Mr. Grode stated that coming into this meeting there are variables that he cannot control that are in and of the abilities for method and materials and procedures that have been specified that may meet with problems during the operation itself that will tangible effects not only on the contractor but on the workers, the timing of the project and the ultimate cost to the county. The County Attorney stated that the county cannot give explanations to the point that the company indicates they have relied on what Mr. Turner or what Mr. Deliz has said or indicated. Mr. Mullin stated that if the company feels that they cannot meet the timeline or the specifications, they need to now so indicate that. Mr. Mullin stated that if the company is seeking answers to questions such as the amount of time to keep traffic off the road, that is acceptable to ask;

however, he does not want any specific questions as to how the process works. Mr. Grode assured the group that the company can do the work, but there was no pre-bid conference which is the forum to ask the type of questions he feels he is asking. Grode stated that there are issues that will be arising as to timing, safety, and situations that need to be addressed so that when the company tells the workers how to proceed, that they do it in the right way for the county and everyone involved. Grode further stated that if there is a way to address some unforeseen condition now, it is much more beneficial to address it now then to not be able to address it in the field. Mullin stated that the terms need to be refined in the contract to reflect that so that it is clear. Mr. Mullin added that this road is crucial to the state and to the citizens of Nassau County. Mr. Grode stated that the firm is desirous of looking at a total scope of protection and the firm does not want to fail and the company does not want the county as being the vehicle of having them fail. Mr. Mullin thanked Mr. Grode and departed the meeting.

Mr. Deliz summarized the typical daily activities that include establishing the work zone, proceeding with the milling, taking a sample and turn in the optimal proctor, and rolling it once. Mr. Turner stated that for the strip that is started on from the time the mixing is started until the time to get off it with the heavy equipment, is a four-hour time frame.

Mr. Deliz stated that the decision as to the detouring of traffic would be up to the company, stating that he would provide them with the county's minimum standards.

There was discussion among the group as to four hours of processing and four hours of setting with the cement on it. Once the cement is done, then the hydration process needs to commence.

Mr. Turner inquired the length of the project, and it was stated that the project is thirty three (33) miles.

As to the question of rain delays, Mr. Grode will meet with the subcontractors on this issue; however, it was stated that the rain delay time frame may be approximately thirty days.

The group discussed the rideability specification. Mr. Turner stated that this is a non-issue, stating that the standard is there, but the company is not required to achieve FDOT rideability on one lift on the surface of the asphalt. Mr. Deliz stated that he understands there are adjustments that can be made on the second lift provided the base is properly graded. There should not be rideability issues.

The group discussed the issue of acidity of the water. Mr. Turner stated that if potable water is used, the problem is eliminated, including intrusion of the water table. Mr. Turner stated that if potable water is used in the mix water any later intrusion will not affect it, and once the cement meets that water and hydrate that is the water that it holds. Mr. Turner suggested that water not be pumped from any local ponds. Mr. Deliz stated that he did not think this would be an issue for the

company. Mr. Deliz stated that if the concrete does not cure because of acidity and it is determined that the cause is something that is not within the company's responsibility or is outside the scope that is out of their control, then this would have to be addressed.

As to the question for access to emergency vehicles in the event they had to get into an area to respond and several hundred feet of the base were destroyed, there would be considerations for compensation from county for the lost time. Mr. Turner suggested that in the event this happened, that Mr. Deliz should be notified immediately.

Mr. Turner stated that there is nothing the county can do to guarantee that the company will not lose money, but to address the things that could go wrong the county has tried to address this in the preparation of the specifications, and as Mr. Deliz stated, any issue that is out of the scope that is out of their control will be looked at.

Mr. Deliz stated that there are two issues that he wants to express: 1. Douglas Asphalt to submit a proposal regarding the allowed time frame and that before the contract is issued that the adjustments be incorporated into the project schedule of the contract; and 2. An assurance from the company that they can buy off on the Turner's Treatment and assurance that they can employ this. As to the issue of qualified rain delays, the county will grant extensions and have granted adjustments in the past. Mr. Deliz stated that the county also makes allowances for acts of

God, emergency vehicles, and any matter beyond the company's control.

Mr. Grode stated that the company simply wishes to ensure that there is nothing in the contract that would impede him from signing it. Mr. Deliz stated he needs the two items that he requested before he will recommend that the county sign off on the contract. Additionally, Mr. Grode stated that he has been in contact with two responsive bidders regarding cement pricing and they have not been able to commit on pricing. Mr. Grode stated that cement is a volatile product and stated it is a negative situation for a subcontractor to be placed in an initial project when it does not have the potential to have that happen. Deliz stated that he understands this and suggested that Mr. Grode incorporate the risk factor. Mr. Turner and Mr. Deliz both indicated that the prices of cement have not increased. Deliz also stated that gas prices have dropped. Mr. Grode stated that he would talk to the bidders and stated that he would look into the ability of working with the company and this ability may be the determining factor of which he chooses.

There being no further business, the meeting adjourned at 10:40 AM.

#### YULEE, FLORIDA FEBRUARY 1, 2006

An advertised negotiation session was held this 1<sup>st</sup> day of February, 2006 at 3:00 PM at the Office of the County Attorney, Conference Room, Nassau County Governmental Complex, 96135 Nassau Place, Yulee, Florida, to discuss contractual issues with the firm who was awarded the bid for the CR 121 widening and resurfacing project. Present were: Charlotte Young, Contract Manager; Michael S. Mullin, County Attorney; Jose Deliz, Engineering Services Director; Rick Miller of the Engineering Services Department; Ray Grode of Douglas Asphalt Company; and Joyce Bradley, Recording Secretary.

Mr. Grode presented a list of issues that he would like to address with the county that need to be included in the draft contract that he had reviewed. The issues that need to be included are as follows:

- 1. Assurances of an 8 hour traffic use on the Reclaimed Roadway Base presented by Dan Turner, as part of his "Waterproofing System". The assurance was that the reclaimed base would hold up to traffic after this curing period.
- Nassau County agreed to issue Rain Days based on the "Effects of" Inclement Weather.
- 3. Nassau County agreed to waive FDOT Rideability Specifications to the asphalt surface.
- 4. Testing by Nassau County as required for the Reclaimed Roadway Base and Widening would be performed on a "daily

basis" (per Dan Turner) to assure proctor/density consistency.

5. Time - Douglas Asphalt has never agreed to 90 day time allotment for Substantial Completion. The 60 days requested for time extension is based on 150 days for Substantial Completion bringing the total contract days to 210 days.

The group discussed the issues presented. As to Item on No. 2 regarding rain delays, this item was addressed in the Bid Specification through an Addendum. It was determined that, within the contract, with the term of General Conditions that the language "Including Addendums" will be added.

As to the Item No. 3 - the following language will be added to the contract, under the fifth paragraph on Page 1: "Florida Department of Transportation Rideability standards shall not apply to this project." The County Attorney requested that the Director of Engineering Services explain this to the Board when this contract comes before the Board for approval. Mr. Grode had no objection to this language being added.

As to Item No. 4 regarding Testing, the following language shall be added to the Contract: "The Contractor will provide all required testing and assurances per Florida Department of Transportation except proctor/density tests and these will be performed by the Owner or Owner's representative at Owner's

cost". Mr. Grode had no objection to this language being added.

Mr. Grode addressed the issue as to the timing requirements for the project. Mr. Grode stated that the length of the road is thirty three miles and includes widening, reclaiming and repaving. Mr. Grode stated that he could be satisfied with a 150 day substantial completion requirement as long as there is sixty (60) days after that to reign in the project for a total of 210 days. Mr. Deliz stated that the timeframe is aggressive but stated that there is a FDOT deadline and stated that he would not want to jeopardize any future funding consideration from them because a deadline was not met. Deliz also stated that the 150 days was arrived at from discussions with other industry personnel, and stated that once the project is commenced it may be possible to do a lane mile a day. Mr. Deliz also stated that it would not be fair to the other bidders to grant a time extension through the contract, as the bidders may have compensated for that in The County Attorney stated that if the bid specifications called for ninety days substantial completion and the bids were based on ninety days, he would need to give some thought to that stating that his hesitation is that the bid specifications are being changed that a bidder would have anticipated and included in his bid. Mr. Grode stated that he did not feel the job was doable in that time frame.

Mullin stated that the county would need to consider this in the fact as to whether the county would need to go back out for bid on the project.

Mr. Mullin departed the meeting to attend another engagement.

Mr. Deliz stated that he understood what Mr. Grode was saying regarding the time line. Mr. Grode stated that his interpretation of substantial completion is that the work is done. Mr. Grode stated that the meaning of substantial completion to the Department of Transportation usually means the public has the ability to use the highway as a finished Mr. Grode suggested that a change order be devised wherein no liquidated damages will be enacted until after day 210. Mr. Deliz stated that this would have to be addressed by the County Attorney. Mr. Deliz stated that he has no objection to a change order extending the deadline provided that the county has observed a continued productive effort. Mr. Grode stated that this is relative to the establishment of the contract. Mr. Deliz stated that if the County Attorney determines that there is no problem with issuing a change order stipulating that the county will not commence liquidated damages until after day 210, he would have no objection.

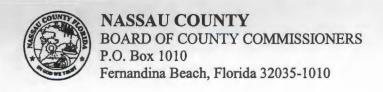
Mr. Grode will provide a schedule with the categories by item and dollar value assessed to each item. Mr. Grode stated that this will be helpful to the county as to what will need to be paid out.

The group returned to the discussion regarding the eight hour traffic use on the roadway. Mr. Deliz explained that Mr. Turner has what is referred to as a five hour road, and that the beginning of the project is by doing the grinding of the existing asphalt and base and adding the dry cement and adding the water to achieve a certain moisture content from the dry side and then mixing it, that is what starts the clock ticking and from that point there is a five hour time to get it set up. Mr. Deliz stated that traffic should be able to be placed on the roadway at the end of that five hour period. Mr. Deliz stated that the contractor will be compensated for unforeseen events and stated that the county will be reasonable on that issue.

Mr. Deliz inquired the process from this point. Ms. Young stated that another contract would be drafted incorporating the items discussed today, pending review by the County Attorney, and sent to Mr. Grode for execution and return of same to the county. The contract will need to be reviewed and approved by the Board of County Commissioners. Ms. Young reminded Mr. Grode of the requirement for the submittal of the performance and payment bonds after the execution of the agreement.

Mr. Grode also stated that he wanted to have a chain of command for the county in the event a question needs to be addressed or a problem arises.

There being no further business, the meeting adjourned at  $4\!:\!05~\text{PM}$ 



Jim B. Higginbotham Ansley Acree Tom Branan Floyd L. Vanzant Marianne Marshall

Dist. No. 1 Fernandina Beach Dist. No. 2 Fernandina Beach Dist. No. 3 Yulee Dist. No. 4 Hilliard

Dist. No. 5 Callahan

JOHN A. CRAWFORD Ex-Officio Clerk

MICHAEL S. MULLIN County Attorney

MIKE MAHANEY County Administrator

### MEMORANDUM

TO:

BOARD OF COUNTY COMMISSIONERS

FROM:

MICHAEL S. MULLIN

Dictated but not proof read by Mr. Mullin. - Mailed in his absence to avoid delay.

SUBJECT: CR 121

DATE:

July 20, 2006

\*\*\*\*\*\*\*\*\*\*\*\*\*\*

As I had indicated, Keith and Schnars has a potential conflict and, therefore, cannot provide any assistance on CR 121.

I am checking with other firms. Pat Gilroy had recommended Earth Tech, and I spoke with a Bryan Thompson at Earth Tech. He advises that his firm is certainly familiar with the "Turner Process" and will provide to me a proposal within forty-eight (48) hours of today's date. I advised him to contact Pat Gilroy and/or Jose Deliz in order to obtain preliminary information, and he will do so and provide a response to me by late Friday afternoon.

/am

cc: Michael Mahaney
Jose Deliz
Charlotte Young
Pat Gilroy

z/amyers/road-projects/cr121-memo-jul-20-2006

#### BID FORM

#### FOR Widening/Resurfacing of

### CR 121 from US 1 to the Duval County Line

FOR

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS

SUBMITTED BY:

CALLAWAY CONTRACTING, INC. 10950 NEW BERLIN RD. JACKSONVILLE, FL 32226 DATE 11/2/05

The undersigned, as Bidder, hereby declares that the only person or persons interested in the proposal as Principal(s) is, or are, named herein and that no other person that herein mentioned has any interest in this proposal or in the contract to be entered into; that this proposal is made without connection with any other person, company, or parties making a bid or proposal; and that it is in all respects fair and in good faith, without collusion or fraud.

The Bidder further declares that he has examined the site of the Work and informed himself fully in regard to all conditions pertaining to the places where the Work is to be done; that he has examined the Plans and Specifications for the Work and the Contract Documents relative thereto, and has read all special provisions furnished prior to the opening of Bids, that he has satisfied himself relative to the Work to be performed.

The Bidder proposes and agrees, if this proposal is accepted, to contract with Nassau County, Florida, in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, and labor necessary to complete the contract in full and complete in accordance with the shown, noted, described, and reasonably intended requirements of the Plans and Specifications and Contract Documents to the full satisfaction of the Contract with Nassau County, Florida, with a definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and Contract Documents.

LISTING OF SUBCONTRACTORS AND EQUIPMENT MANUFACTURERS

In the space below, the Bidder shall list all proposed subcontractors and their addresses for approval by the Owner.

The Bidder-shall-also describe that portion of the Work he proposes to sublet to each subcontractor listed.

Equipment Manufacturers shall be listed for each item of major equipment herein. No changes shall be allowed after acceptance by the Owner. Any blanks shall be filled in by the Owner and provided by the Contractor at no additional cost.

Use additional sheets as required.

NAME

ADDRESS

DESCRIPTION OF WORK TO BE PERFORMED

1. ROSE SURVICES, INC. 170 COMPRESEDONS
PARK DRIVE
STUBBLETINE, A. 38095

2. SAFIETY CONTRACTORS 5307 Wacissa Ave. Jacksonville

GUADOPAIL

3. Duval Asphalt 7544 Philips Hwy Jacksonville, Fl.

#### BID FORM

### FOR Widening/Resurfacing of

### CR 121 from US 1 to the Duval County Line

FOR

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS

SUBMITTED BY: DOUGLAS ASPHALT COMPANY DATE 11/2/05

10010 N. MAIN STREET

JACKSONVILLE, FL 32218

The undersigned, as Bidder, hereby declares that the only person or persons interested in the proposal as Principal(s) is, or are, named herein and that no other person that herein mentioned has any interest in this proposal or in the contract to be entered into; that this proposal is made without connection with any other person, company, or parties making a bid or proposal; and that it is in all respects fair and in good faith, without collusion or fraud.

The Bidder further declares that he has examined the site of the Work and informed himself fully in regard to all conditions pertaining to the places where the Work is to be done; that he has examined the Plans and Specifications for the Work and the Contract Documents relative thereto, and has read all special provisions furnished prior to the opening of Bids, that he has satisfied himself relative to the Work to be performed.

The Bidder proposes and agrees, if this proposal is accepted, to contract with Nassau County, Florida, in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, and labor necessary to complete the contract in full and complete in accordance with the shown, noted, described, and reasonably intended requirements of the Plans and Specifications and Contract Documents to the full satisfaction of the Contract with Nassau County, Florida, with a definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and Contract Documents.

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Use additional sheets as required.

NAME	ADDRESS	DESCRIPTION OF WORK TO BE PERFORMED
and the second s	es and Park Dr. ne, FL 32095	Striping / R.P.M.s
Belcorp, In 11530 Phill Jacksonvill		Sodding
5066 Lucill	Fence Company Le, Dr. Le, FL 32254	Guardrail
Acme Barrio 9798 Normar Jacksonvill		Signs - MOT Devices

### BID FORM

Original

## FOR Widening/Resurfacing of

## CR 121 from US 1 to the Duval County I

FOR

NASSAU COUNTY BOARD OF COUNTY COMMISSIONERS

SUBMITTED BY: E ..

E.J. BRENEMAN L.P.

DATE NOVEMBER 2, 2005

1117 SNYDER ROAD

WEST LAWN, PA 19609

The undersigned, as Bidder, hereby declares that the only person or persons interested in the proposal as Principal(s) is, or are, named herein and that no other person that herein mentioned has any interest in this proposal or in the contract to be entered into; that this proposal is made without connection with any other person, company, or parties making a bid or proposal; and that it is in all respects fair and in good faith, without collusion or fraud.

The Bidder further declares that he has examined the site of the Work and informed himself fully in regard to all conditions pertaining to the places where the Work is to be done; that he has examined the Plans and Specifications for the Work and the Contract Documents relative thereto, and has read all special provisions furnished prior to the opening of Bids, that he has satisfied himself relative to the Work to be performed.

The Bidder proposes and agrees, if this proposal is accepted, to contract with Nassau County, Florida, in the form of contract specified, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, and labor necessary to complete the contract in full and complete in accordance with the shown, noted, described, and reasonably intended requirements of the Plans and Specifications and Contract Documents to the full satisfaction of the Contract with Nassau County, Florida, with a definite understanding that no money will be allowed for extra work except as set forth in the attached General Conditions and Contract Documents.

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Equipment Manufacturers shall be listed for each item of major equipment herein. No changes shall be allowed after acceptance by the Owner. Any blanks shall be filled in by the Owner and provided by the Contractor at no additional cost.

Use additional sheets as required.

TROSOLONIS TAL LES

NAME .	ADDRESS	DESCRIPTION OF WORK TO BE PERFORMED
	10010 N. MAIN ST. JACKSONVILLE, FL 32218	ASPHALT PAVING, PRIME COAT
	170 CUMBERLAND PARK DR. ST. AUGUSTINE, FL 32095	LINE PAINTING, RPM INSTALLATION
	5066 LUCILLE DR. JACKSONVILLE, FL 32205	GUARDRAIL INSTALLATION
	7600 NOTTY BUDDY LANE GLEN SAINT MARY, FL 32040	SOD PLACEMENT, SILT FENCE
ENGINEERING SCIENCES	5561 FLORIDA MINING BLVD. SOUTH JACKSONVILLE, FL 32257	DENSITY TESTING
	9800 NORMANDY BLVD. JACKSONVILLE, PL 32221	TRAFFIC CONTROL, SIGNS

SEE ATTACHED EQUIPMENT LIST



# John A. Crawford Clerk of Circuit and County Courts Nassau County

Post Office Box 456 Fernandina Beach, Florida 32035-0456 Phones: (904) 548-4600 (800) 958-3496 Callahan-Hilliard (904) 879-1029



# FACSIMILE TRANSMITTAL SHEET

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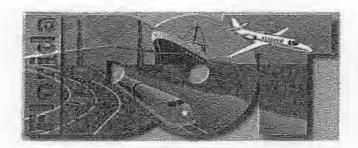
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D : DETAIL
+ : ROUTING

S:TRANSFER P:POLLING
E:FORWARDING E:ECM
F:FINE > :REDUCTION
Q:RECEPT, NOTICE REQ. A:RECEPT. NOTICE

# STATE OF FLORIDA



# Failure Investigation of CR 121 in Nassau County

Howard L. Moseley, P.E. Henry H. Haggerty, P.E. Stephen C. Sedwick, P.E. Daniel C. Cobb, P.E.

September 2006

**DISTRICT 2 MATERIALS OFFICE** 

### TABLE OF CONTENTS

List of Figures
List of Tablesiii
Background and Problem Statement
Field Observations and Test Results
Laboratory Test Results
Summary and Conclusions
Figures6
Tables9
Appendix A-1 – SP 04-3691B
Appendix A-2 – Summary of CR 121 Production Data14
Appendix A-3 – Typical Section Core
Appendix A-4 – Transverse Crack Originating in Base
Appendix A-5 – Thin Asphalt Layer
Appendix A-6 - Suggested Specifications for Soil-Cement Base Course Construction

# LIST OF FIGURES

Figure 1 – Typical Section	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Elevire 1 - Tynical Socion	
rigute 1 1)Promise	.7
Figure 2 – Shoving	
CIL and CIL	
Figure 2 - Shoying	
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- a Danasasses	990 1020 0 642 0 002 200 0 2 2 4 4 4 4 4 4 4 4 4 4 4
Figure 3 – More Shoving	
Figure 3 – More Bus Ambarra	
A ~ D	

# LIST OF TABLES

Table A – Asphalt and Base Thicknesses	9
Table B – Laboratory Results	10
Table C - Reclaimed Base Unit Weight and Strength Data	11

#### BACKGROUND AND PROBLEM STATEMENT

In the spring of 2006, work began on Nassau County Road 121 (CR 121) that included base reclamation, widening, and resurfacing. The existing pavement varied from 18 to 21 feet in width. The plans called for the project to be widened to a standard 24 feet. The project limits stretched from US 1 in the northwest part of Nassau County (STA 0+10.00) to the intersection of Balderdash Place in the southwest corner of the county (STA 1843+29.87). The total length of the project was 34.9 miles. The standard typical section called for a full depth reclamation of the existing pavement. The existing pavement and base were milled, mixed, and chemically stabilized six to eight inches deep according to field determination. A new layer of asphalt pavement, two inches of Superpave type SP 12.5, was placed on top of the full depth reclamation. The typical section is shown in Figure 1.

The Prime Contractor on the project is Douglas Asphalt Company. The mixture produced and placed by Douglas was a FDOT SP-12.5 mm structure course, designated mix design number SP 04-3691B. A copy of the mix design can be found in Appendix A-1. This mix design has been successfully used on five state projects between September 2005 and May 2006. The production data has acceptable quality air voids, ranging from 2.53 to 4.84 over 79 samples, as well as acceptable asphalt content and reasonable variation in gradation.

The District Two Materials Office was requested in September 2006 to perform field testing and review design and production information to help ascertain any assignable causes to the premature failure.

The Department requested daily construction reports from Nassau County that would document the daily activities of the work. CEI notes are available for review at the County offices. County personnel indicated that a prime coat was not used on the project except for a small test section located just north of County Road 2. Some laboratory production data was provided by Nassau County for this report and is summarized in Appendix A-2.

#### FIELD OBSERVATIONS AND TEST RESULTS

Three sections on CR 121 were investigated, sampled, and tested. A summary of the sections can be found in Table A. The first two sections were in areas where shoving occurred. The third section was in an area that exhibited no shoving or other pavement distress. There are also exception areas contained within the project limits that were previously reconstructed with accompanying bridge work several years ago. The exception areas are performing quite well.

For location A, three cores were taken between the wheel paths (a non-distressed location) adjacent to the shoved area. A fourth core was taken in the shoved area. Each of the cores had an asphalt thickness of at least two inches and an average thickness of 2.1 inches. The reclaimed based looked to be well mixed, cohesive, and had an average thickness of 6.2 inches.

Four cores were also taken from location B. Similar to the first section, three cores were taken in a non-distressed area between the wheel paths next to the shoved area. A fourth core was taken in the shoved area. The average asphalt thickness in this section was 2.2 inches. The average thickness of the reclaimed base was 5.4 inches (6 – 8 inches is specified). The reclaimed base looked to be well mixed and cohesive. For location C, which exhibited no distress, two cores

were taken between the wheel paths of each lane. The average asphalt thickness was 2.2 inches. The average thickness of the reclaimed base was 6.3 inches.

Some of the cores taken from the two distressed locations A and B sheared apart under the stress of the coring operation at the interface between the asphalt and the reclaimed base layers. During the coring at location C, no shearing occurred at the interface. A picture of a core from location C is shown in Appendix A-3. A bituminous coat at the interface of the asphalt pavement and the reclaimed base can be seen on the cores obtained from location C. The bituminous coat is noticeably absent on the cores obtained from locations A and B.

A fourth section (location D) was also investigated. A couple of visual irregularities were noticed in this area. The first issue was a small transverse crack between the wheel paths. A core was taken which showed that the crack had originated in the base and reflected to the surface. The thickness of the asphalt pavement in this area was 1.4 inches while the thickness of the reclaimed base was 6.8 inches. A picture of this core is shown in Appendix A-4. A thin area was also noticed near this crack. A core was taken in the thin area in the inside wheel path. The thickness of the asphalt pavement was 0.5 inches. The thickness of the reclaimed base was 6.8 inches. A picture of this core is shown in Appendix A-5. A summary of the asphalt pavement and reclaimed base thicknesses for each section is provided in Table A.

#### LABORATORY TEST RESULTS

Laboratory tests were performed on the asphalt pavement layer of the cores taken from sections A, B, and C. Only the asphalt pavement of undamaged cores was tested. The cores taken from

the actual shoved areas were not tested and were used for observations. The in place air voids, maximum theoretical density, AC content, and gradation were determined for each area. A summary of the test results can be found in Table B. The AC content was a little high in sections A and B, 6.0 and 5.8 percent respectively with a target of 5.4 percent. The asphalt content in section C was 5.5 percent. The average in place air voids for sections A, B, and C were 5.6, 4.6, and 5.7 percent respectively. These values indicate that the asphalt pavement is performing similarly with respect to densification between the three sections.

A total of 15 cores were selected for further analysis and testing of the reclaimed base. The cores included samples of the base materials at locations A, B, and C discussed above, as well as three additional locations also believed to be representative of the base materials supporting the pavement wearing surface. The cores were trimmed to remove the overlying asphalt pavement and the rough and irregularly shaped bottom of the reclaimed base layer. In all cases, the interface between the asphalt pavement and the reclaimed base were observed to be distinct and with no zone of loose or otherwise weak materials apparent at the top of the reclaimed base. The purpose of the testing was to determine the variability of the strength and unit weight of the reclaimed base. The data is summarized in Table C.

The unit weight of the cores ranged from a high of 123 pounds per cubic foot (pcf) to a low of 112 pcf and averaged 117 pcf. Unconfined compressive strength ranged from about 820 pounds per square inch (psi) to about 410 psi. Given the age of the specimens (time since initial mixing and compaction), the range and magnitude of the strength results appears to be compatible with published research data for cement treated pavement base layers. The test data from the base

cores generally support a visual impression that the reclaimed base is uniformly mixed and appears to possess suitable strength to support the overlying pavement wearing surface.

#### SUMMARY AND CONCLUSIONS

Reclaimed base has been used as an option by numerous state and local governments. A literature review quickly identified an article of interest titled, "Suggested Specifications for Soil-Cement Base Course Construction", written by the Portland Cement Association. This article is attached as Appendix A-6.

Several areas of the newly resurfaced CR 121 in Nassau County are experiencing premature shoving. Records show that the base did not receive a prime coat or other curing compound nor any other means by which to assure adequate bond between the asphalt pavement and reclaimed base interface layer for the areas that are shoving. Further, after discussions with Nassau County staff, they informed us location C, which did not exhibit any premature distress, did receive a prime coat, a bituminous tack coat, and sand to be used as a blotter material. This area is performing well. Cores were sampled and tested in areas that experienced shoving and the small area that had a prime coat. Based on field observations, laboratory testing, and facts obtained from Nassau County staff that witnessed the project construction, the premature pavement distress is most likely the result of a poor bond between the asphalt pavement and reclaimed base.

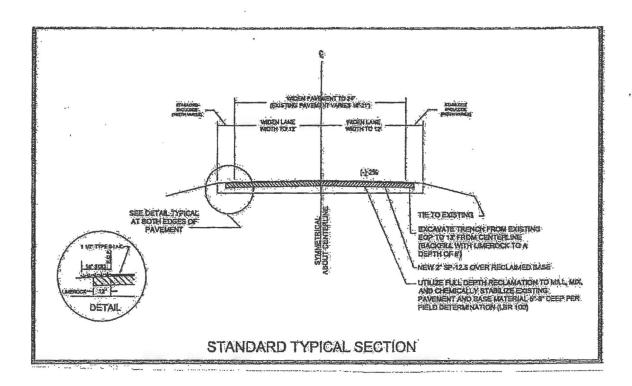


Figure 1 - Typical Section

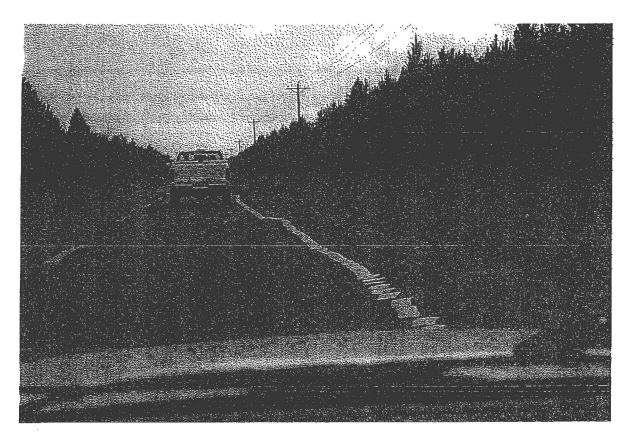


Figure 2 – Shoving

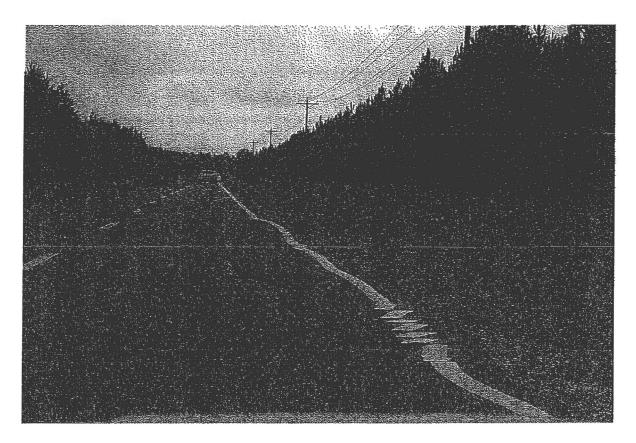


Figure 3 – More Shoving

Table A - Asphalt and Base Thicknesses

					Thickness			
Section	Lane	Station	Core	Location	Asphalt	Base	Descriiption	
A			1 .	BWP	2.2	6.1	Shoving	
Α	L-1	1063+30	2	BWP	2.2	6.1	Shoving	
A		1003+30	3	BWP	2.1	6.1	Shoving	
A			4	OWP	2.0	6.4	Shoving	
В	L-l		1	BWP	2.2	5.2	Shoving	
В		975+66	2	BWP	2.3	5.4	Shoving	
В		LrI		3	BWP	. 2.2	5.5	Shoving
В		975+84	4	OWP	2.2	5.5	Shoving	
C	R-1	995+00	1	BWP	2.3	7.0	Good	
С	K-1	1000+00	2	BWP	1.8	6.3	Good	
С	T 1	1000+00	3	BWP	2.3	5.5	Good	
С	L-1	995+00	4	BWP	2.2	6.3	Good	
D	D 1	1697120		BWP	1.4	6.8	Cracked	
D	R-1	1687+20		IWP	0.5	6.8	Thin	

Table B - Laboratory Data

				Percent Passing																	
		In place	Maximum  Density (Gmm)	AC content	1/2" sieve	3/8" sieve	#4 sieve	#8	#200 sieve												
Target			2.449	5.4	5.4 92 85 64	45	3.7														
FDOT I	Limits			± 0.55				± 5.5	± 1.5												
A	1	5.4																			
A	2	5.4	2.463	2.463	2.463	2.463	2.463	6.0	96.2	91.4	67.1	49.0	5.4								
A	3	5.9																			
В	1	4.7																			
В	2	4.6	4.6     2.450     5.8       4.7	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	2.450	5.8	95.8	91.3	68.1	49.0	5.1
В	3	4.7																			
С	1	6.1																			
С	2	5.4	2.405	5.5	04.6			47.0	4.2												
С	3	6.9	2.495	5.5	94.6	89.6	68.5	47.2	4.3												
С	4	4.5																			

Table C - Reclaimed Base Unit Weight and Strength Data

Section	Lane	Station	Core	Base thickness (in.)	Unit weight (pcf)	Compressive strength (psi)
A			1	6.1	117	561
A	7.1	1002120	2	6.1	120	639
Α	L-1	1063+30	3	6.1	119	484
A			4	6.4	120	607
В			I	5.2	115	610
В		975+66	2	5.4	115	710
В	L-1		3	5.5	112	733
В		975+84	4	5.5	114	450
С	D 1	995+00	1	7.0	116	529
С	R-1	1000+00	2	6.3	122	457
С	7.1	1000+00	3	5.5	116	413
С	L-I	995+00	4	6.3	117	415
D	R-I	1687+20	143	6.8	114	427
-	R-1	732+67	145	6.1	123	606
- 1	R-1	971+82	137	6.4	122	818
	Ave	rage		6.0	117	564

# Appendix A-1 SP 04-3691B

## STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

#### STATEMENT OF SOURCE OF MATERIALS AND JOB MIX FORMULA FOR BITUMINOUS CONCRETE

SUBMIT TO THE STATE MATERIALS ENGINEER, CENTRAL BITUMINOUS LABORATORY, 5007 NORTHEAST 39TH AVENUE, GAINESVILLE, FLA. 32609

Contractor	actor Douglas Asp			лу	Address	100	10 N. Main Str	set, Jackson	ille, FL. 32218	
Phone No.	(904)	751-2240	Fax No.	(904) 75	1-2502	E-mail	ryan.smith@dougla		sasphalt.com	
3.1 M 15.						ne				
Submitted By		Q.A.T.L., L.L.	.C.	_ Type Mix	SP-12.5	Recycle	Intended U	se of Mix	Structural	
Design Traffic Le	vel	С	Gyratio	ns @ Ndes	75					
			F.D.O.T.							
TYPE	MATERIA	AL.	CODE	F	PRODUCER		PIT NO.	DAT	E SAMPLED	
1. Crushed R.A.	P.		1-05	Douglas Aspl	nalt Company	,	A0734	02	/04/2003	
2. #67 Stone			42	Martin Mariet			TM-579 NS-315	02	/04/2003	
3. #89 Stone			54	Martin Mariet	a Aggregate	8	TM-579 NS-315	02/04/2003		
4. W-10 Screeni	ngs		23	Martin Mariett	a Aggregate	s	TM-579 NS-315	02 / 04 / 2003		
5. Local Sand				Douglas Asphalt Company			A0734	. 02/04/2003		
6. PG 64-22			916-PG							
		PER	CENTAGE E	BY WEIGHT TO	TAL AGGRI	EGATE PAS	SSING SIEVES			
Blend	29%	21%	15%	25%	10%		JOB MIX	CONTROL	. PRIMARY	
Number	1	2	3	4	5	8	FORMULA	POINTS	CONTROL SIEVE	
3/4" 19.0mm	100	100	100	100	100		100	100		
1/2" 12.5mm	98	· 64	100	100	100		92	90 - 10		
N 3/8" 9.5mm	91	44	95	100	100		85	- 90		
No. 4 4.75mm	78	8	43	92	100		64			
70 No. 8 2.36mm	59	2	12	61	100		45	28 - 58	39	
No. 16 1.18mm	48	2	4	- 38	100		34			
No. 30 800µm	• 43	2	2	23	100		29	•		
No. 50 300µm	37	2	2	15	85		24			
No. 100 150um	19	2	2	8	35		12			
	8.8	1.0	1.0	3.8			3.7	2 - 10		
- No. 200 75µm	0.0			3.8 0.1 2.610 2.630						

The mix properties of the Job Mix Formula have been conditionally verified, pending successful final verification during production at the assigned plant, the nix design is approved subject to F.D.O.T. specifications.

JMF reflects aggregate changes expected during production

SP 04-3691B (TL-C)

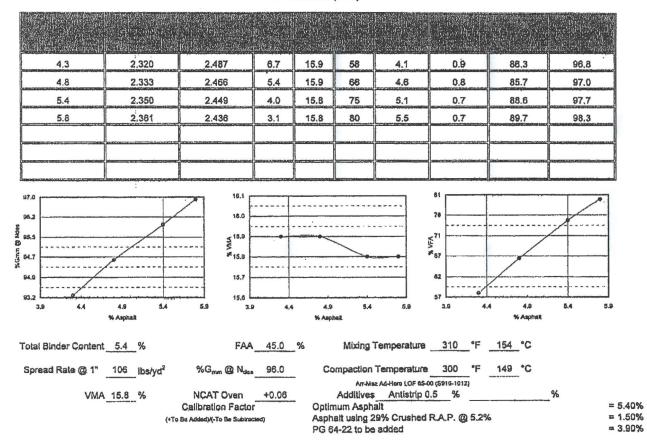
SP 04-3691A revised to reflect change in No.200 sleve.

Director, Office of Materials		Thomas O. Malerk, P.E.	
	Effective Date	Original cocument related at the State Materials Dates 08 / 12 / 2005	
	Expiration Date	11/02/2007	

http://meterials.dot.state.fl.us/Smo/Bituminous/CentralBitLab/CentralBituminousLab.htm

#### HOT MIX DESIGN DATA SHEET

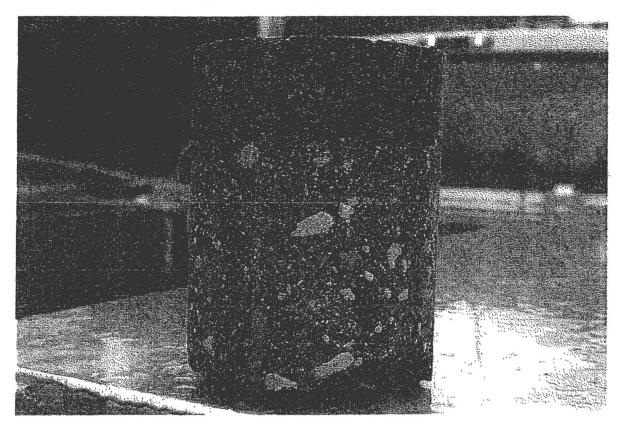
#### SP 04-3691B (TL-C)



Appendix A-2 - Summary of CR 121 Production Data

Date	Air voids	AC content	#8 sieve	#200 sieve
4/7/06	2.5	5.6	44.7	4.2
4/8/06	2.8	5.7	46.4	3.1
4/13/06	3.0	5.5	47.1	3.7
4/14/06	2.6	5.7	44.0	3.9
4/20/06	3.5	5.3	42.4	3.3
4/21/06	2.9	5.4	41.6	3.5
5/1/06	3.3	5.3	45.7	3.2
4/22/06	3.0	5.9	46.5	3.2
4/24/06	3.5	5.6	45.9	3.3
4/25/06	4.3	5.3	41.7	3.7
4/26/06	2.8	5.3	45.0	3.8
4/26/06	2.9	5.4	46.4	3.7
5/5/06	3.8	5.6	45.7	3.3
5/6/06	3.4	5.4	45.4	3.6
5/8/06	4.2	5.1	42.8	3.3
5/9/06	3.7	5.4	44.7	3.4
5/10/06	3.8	5.5	46.0	3.9
5/11/06	3.6	5.4	44.7	3.6
5/12/06	3.6	5.4	45.8	3.8
5/13/06	3.2	5.3	43.7	3.0
5/15/06	3.1	5.4	44.0	3.4
5/16/06	2.5	5,2	41.7	3.4
5/17/06	3.3	4.9	37.9	3.0
5/18/06	3.6	5.4	45.7	3.7
5/19/06	4.3	5.2	43.5	3.3
Average	3.3	5.4	44.4	3.5

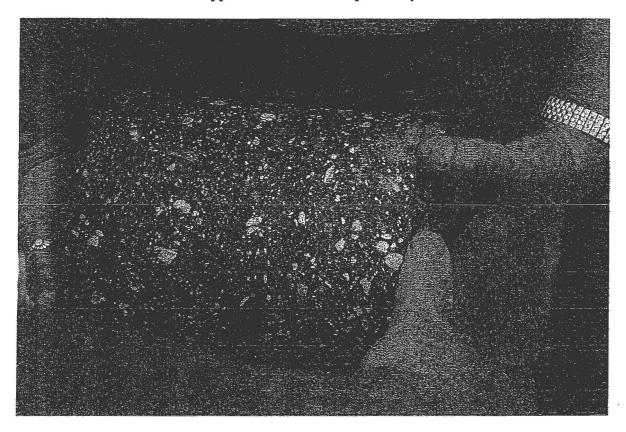
Appendix A-3 – Typical Section Core



Appendix A-4 – Transverse Crack Originating in Base



Appendix A-5 - Thin Asphalt Layer



PORTLAND CEMENT ASSOCIATION

# SOIL-CEMENT

# Suggested Specifications for Soil-Cement Base Course Construction

#### 1. GENERAL

1.1 Description. Soil-cement shall consist of soil, portland cement, and water proportioned, mixed, placed, compacted, and cured in accordance with these specifications; and shall conform to the lines, grades, thicknesses, and typical cross-sections shown in the plans.

These suggested specifications cover construction of soll-cement base course, also referred to in some areas as cement-treated based, cement-treated aggregate base, full depth recycling of flexible pavements, cement-recycled asohalt and base, and other names.

These specifications are intended to serve as a guide to format and content for normal soil-cement construction. Most projects have special features or requirements that should be incorporated in the project documents.

#### 2. MATERIALS

2.1 Soll. "Soil" may consist of (1) any combination of gravel, stone, sand, silt, and clay; (2) miscellaneous material such as caliche, scoria, slag, sand-shell, cinders, and ash; (3) waste material from aggregate production plants; (4) hilgh-quality crushed stone and gravel base course aggregates; or (5) old flexible pavements, including the bituminous surface and stone or gravel base course.

The soil shall not contain roots, topsoil, or any material deleterious to its reaction with cement. The soil as processed for construction shall not contain material retained on a 2-in. (50-mm) sleve except for bituminous surface recycling work, which can contain up to 5% of the total mixed material retained on a 2-in (50-mm) sieve.

2.2 Portland Cement, Portland cement shall compty with the latest specifications for portland cement (ASTM C 150, ASTM C 1157, CSA A-23.5, or AASHTO M 85) or blended hydraulic cements (ASTM C 595, ASTM C 1157, CSA A-362, or AASHTO M 240).

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- **2.3** Water. Water shall be free from substances deleterious to the hardening of the soil-cernent.
- 2.4 Pozzotans. If used, pozzotans including fly ash, stag, and stilica fume shall compty with the appropriate specifications (ASTM C 618, AASHTO M 295 for fly ash; ASTM C 989, AASHTO M 302 for stag; ASTM C 1240 for silica fume; or CSA A-23.5 for all).
- 2.5 Curing Compounds, Curing compounds shall comply with the latest specifications for emulsified asphalt (ASTM D 9773) or liquid membrane-forming compounds for curing concrete (ASTM C 309).
- 2.6 Sand Blotter. Sand used for the prevention of pickup of curing materials shalf be clean, dry, and non-plastic.

#### a. Equipment

- 3.1 Description. Soil-cement may be constructed with any machine or combination of machines or equipment that will produce completed soil-cement meeting the requirements for soil pulverization, cement and water application, mixing, transporting, placing, compacting, finishing, and curing as provided in these specifications.
- 3.2 Mixing Methods. Mixing shall be accomplished in a central mixing plant or in place, using single-shaft or multiple-shaft mixers. Agricultural disks or motor graders are not acceptable mixing equipment.
- 3.3 Cement Proportioning. The cement meter for central-plant mixing and the cement spreader for in-place mixing shall be capable of uniformly distributing the cement at the specified rate. Cement may be added in a dry or a slurry form. If applied in slurry form, the slurry mixer and truck shall be capable of completely dispersing the cement in the water to produce a uniform slurry, and shall continuously agitate the slurry once mixed.

PORTLAND CEMENT ASSOCIATION

# SOIL-CEMENT

# Suggested Specifications for Soil-Cement Base Course Construction

#### 1. GENERAL

1.1 Description. Soil-cement shall consist of soil, portland cement, and water proportioned, mixed, placed, compected, and cured in accordance with these specifications; and shall conform to the lines, grades, thicknesses, and typical cross-sections shown in the plans.

These suggested specifications cover construction of soft-cement base course, also referred to in some areas as cement-treated based, cement-treated aggregate base, full depth recycling of flexible pavements, cement-recycled asphalt and base, and other names.

These specifications are intended to serve as a guide to format and content for normal solf-cement construction. Most projects have special features or requirements that should be incorporated in the project documents.

#### 2. MATERIALS

2.1 Soil. "Soil" may consist of (1) any combination of gravel, stone, sand, silt, and clay; (2) miscelfaneous material such as calliche, scoria, stag, sand-shell, cinders, and ash; (3) waste material from aggregate production plants; (4) high-quality crushed stone and gravel base course aggregates; or (5) old flexible pevements, including the bituminous surface and stone or gravel base course.

The soil shall not contain roots, topsoil, or any material deleterious to its reaction with cement. The soil as processed for construction shall not contain material retained on a 2-in. (50-mm) sleve except for bituminous surface recycling work, which can contain up to 5% of the total mixed material retained on a 2-in (50-mm) sleve.

2.2 Portland Cement. Portland cement shall compty with the latest specifications for portland cement (ASTM C 150, ASTM C 1157, CSA A-23.5, or AASHTO M 85) or blended hydraulic cements (ASTM C 595, ASTM C 1157, CSA A-362, or AASHTO M 240).

© 2001 Portland Cament Association All rights reserved. 2.3 Water, Water shall be free from substances deleterious to the hardening of the soil-cement.

2.4 Pozzolare, if used, pozzolars including fly ash, stag, and silica furne shall comply with the appropriete specifications (ASTM C 618, AASHTO M 295 for fly ash; ASTM C 989, AASHTO M 302 for stag; ASTM C 1240 for silice furne; or CSA A-23.5 for ell).

2.5 Curing Compounds. Curing compounds shall comply with the latest specifications for emulsified asphalt (ASTM D 9773) or liquid membrane-forming compounds for curing concrete (ASTM C 309).

2.6 Sand Blotter. Sand used for the prevention of pickup of curing materials shall be clean, dry, and non-plastic.

#### 3. EQUIPMENT

- 3.1 Description. Soil-cement may be constructed with any machine or combination of machines or equipment that will produce completed soil-cement meeting the requirements for soil pulverization, cement and water application, mixing, transporting, placing, compacting, finishing, and curing as provided in these specifications.
- 3.2 Mixing Methods. Mixing shall be accomplished in a central mixing plant or in place, using single-shalt or multiple-shalt mixers. Agricultural disks or motor graders are not acceptable mixing equipment.
- 3.3 Cement Proportioning. The cement meter for central-plant mixing and the cement spreader for in-place mixing shall be capable of uniformly distributing the cement at the specified rate. Cement may be added in a dry or a slurry form. If applied in slurry form, the slurry mixer and truck shall be capable of completely dispersing the cement in the water to produce a uniform slurry, and shall continuously agitate the slurry once mixed.

3.4 Application of Water, Water may be applied through the mixer or with water trucks equipped with pressure-spray bars.

1.5 Compaction. Soil-cement shall be compacted with one or a combination of the following: tamping or grid roller, pneumatic-tire roller, steel-wheel noter, vibratory roller, or vibrating-plate compactor.

#### 4. CONSTRUCTION REQUIREMENTS

#### 4.1 Genera

4.1.1 Preparation of Subgrade. Before soil-cement processing begins, the area to be paved shall be graded and shaped to tines and grades as shown in the plans or as directed by the engineer. During this process any unsuitable soil or material shall be removed and replaced with acceptable material. The subgrade shall be firm and able to support without yielding or subsequent settlement the construction equipment and the compection of the soil-cement hereinafter specified. Soft or yielding subgrade shall be corrected and made stable before construction proceeds.

4.1.2 Mixing and Placing. Soil-cement shall not be mixed or placed when the soil aggregate or subgrade is frozen, or when the air temperature is below 40 °F (4 °C). Moisture in the soil at the time of cement application shall not exceed the quantity that will permit a uniform and intimate mixture of the soil and cement during mixing operations, and shall be within 2% of the optimum moisture content for the soil-cement mixture at start of compaction.

The operation of cement application, mixing, spreading, compacting and finishing shall be continuous and completed within 4 hours from the start of mixing. Any soft-cement mixture that has not been compacted and finished shall not be left undisturbed for longer that 30 minutes.

#### 4.2 Central-Plant-Mixed Method

4.2.1 Mixing. Soil-cement shall be central-plant mixed in an epproved continuous-flow or betch-type pugntill, or rotary-drum mixer. The plant shall be equipped with metering and feeding devices that will add the soil, cement, and water into the mixer in the specified quantities. If necessary, a screening device shall be used to remove oversized material greater than 2 in (50 mm) from the raw soil feed prior to mixing. Soil and cement shall be mixed sufficiently to prevent cement balls from forming when water is added. The maximum plasticity index of the soil shall be eight.

The mixing time shall be that which is required to secure an intimate, uniform mixture of the soil, cement, and water.

Free access to the plant must be provided to the engineer at all times for inspection of the plant's operation and for sampling the soil-cement mixture and its components. If the actual quantities of the mix vary more than 3% by weight of the specified quantities, the engineer may require such changes in the plant operation as will provide the required accuracy.

4.2.2 Hamilling. The soil-cement mixture shall be transported from the mixing plant to the paving area in trucks or other equipment having beds that are smooth, clean, and tight. Truck bed covers shall be provided and used at the engineer's discretion to protect the soil-cement during transport from moissure variations due to weather conditions. Any soil-cement wet excessively by rain, whether during transport or after it has been spread, will be subject to rejection.

The total elapsed time between the addition of water to the mixture and the start of compaction shall be the minimum possible. Haut time shall not exceed 30 minutes, and compaction shall start as soon as possible after spreading. In no case shall the total elapsed time exceed 45 minutes between the addition of water to the soil and cement and the start of compaction.

The contractor shall take all necessary precautions to avoid damage to completed solf-cement by the equipment.

4.2.3 Placing, Immediately prior to placement of the soil-cement, the receiving surface shall be in a moist condition. The mixture shall be placed without segregation at a quarkity per linear foot (meter) that will produce a uniformly compacted layer conforming to the required grade and cross section. The mixture shall be spread by one or more approved spreading devices. Not more than 60 minutes shall elapse between placement of soil-cement in adjacent lanes at any location except at longitudinal and transverse construction joints.

#### 4.3 Mixed-in-Place Method

4.3.1 Preparation. The surface of the soil to be processed into soil-cement shall be at an elevation so that, when mixed with cement and water and recompacted to the required density, the final elevation will be as shown in the plans or as directed by the engineer. The material in place and surface conditions shall be approved by the engineer before the next phase of construction is begun.

4.3.2 Scarifying. Before cement is applied, the soil to be processed may be scariffed to the full depth of mixing. Scarification and prepulverization are required for the following conditions:

(1) For cohesive soils with a plasticity index greater than 20, the soil shall be damp at the time of scarifying to reduce dust and old in pul-

(2) For full depth recycling of flexible pavements where the bituminous surface is incorporated into the mixture, the pulverization to final specified gradation, as noted in Section 4.3.4, shall be accomplished prior to cement application.

(3) For slumy application of cement, initial scarification shall be done to provide a method to uniformly distribute the slumy over the soll without excessive nunoff or conding.

4.3.3 Application of Cement. The specified quantity of cement shall be applied uniformly in a manner that minimizes dust and is satisfactory to the engineer. If cement is applied as a stury, the time from first contact of cement with water to application on the soil shall not exceed 60 minutes. The time from sturry placement on the soil to start of mixing shall not exceed 30 minutes.

4.3.4 Mixing. Mixing shall begin as soon as possible after the cement

2

has been spread and shall continue until a uniform mixture is produced. The mixed material shall meet the following gradation conditions:

(1) For soils, 100% of the soil-cement mixture shall pass a 1-in. (25-mm) Sieve and a minimum of 80% shall pass a No. 4 (4.75-mm) sieve, exclusive of any gravel or stone. Gravel or stone shall be no more than 2-in. (50-mm) nominal maximum size.

(2) For full-depth recycling, the final mixture (bituminous surface, granular base, and subgrade soil) shall be pulverized such that 95% passes the 2-in. (50-mm) sieve and at least 55% passes the No. 4 (4.75-mm) sieve. No more than 50% of the final mixed material shall be made of the existing bituminous material unless approved by the engineer and included in a mixture design. Additional material may be added to the top or from the subgrade to improve the mixture gradation, as long as this material was included in the mixture design.

The final pulverization test shall be made at the conclusion of mixing operations. Mixing shall be continued until the product is uniform in color, meets gradation requirements, and is at the required moisture content throughout. The entire operation of cement spreading, water application, and mixing shall result in a uniform soil, cement, and water mixture for the full design depth and width.

4.4 Compaction. Soll-cement shall be uniformly compacted to a minimum of 98% of maximum density based on a moving average of five consecutive tests with no individual test below 96%. Field density of compacted soil-centent can be determined by the 1) nuclear method in the direct transmission mode (ASTM D 2922, AASHTO T 238); 2) sand cone method (ASTM D 1556, AASHTO T 191); or rubber balloon method (ASTM D 2167 or AASHTO T 205). Optimum moisture and maximum density shall be determined prior to start of construction and also in the field during construction by a moisture density test (ASTM D 558 or AASHTO T 134).

At the start of compaction whether central-plant mixed or mixed-inplace, the moisture content shall be within 2% of the specified optimum moisture. No section shall be left undisturbed for longer than 30 minutes during compaction operations. All compaction operations shall be completed within 2 hours from the start of mixing.

4.5 Finishing. As compaction nears completion, the surface of the soil-cement shall be shaped to the specified lines, grades, and cross sections. If necessary or as required by the engineer, the surface shall be lightly starifled or broom-dragged to remove imprints left by equipment or to prevent compaction planes. Compaction shall then be continued until uniform and adequate density is obtained. During the finishing process the surface shall be kept moist by means of fogtype sprayers. Compaction and finishing shall be done in such a manner as to produce dense surface free of compaction planes, cracks, ridges, or loose material. All finishing operations shall be completed within 4 hours from start of mixing.

4.6 Curing. Finished portions of soil-cement that are traveled on by equipment used in constructing an adjoining section shall be protected in such a manner as to prevent equipment from marring or damaging completed work. After completion of final finishing, the surface shall be cured by application of a bituminous or other approved sealing membrane, or by being kept continuously most for a period of 7 days with a fog-type water spray that will not erode the surface of the soil-cement. If curing material is used, it shall be applied as soon as possible, but not later than 24 hours after completing finishing operations. The surface shall be kept continuously most prior to application of curing material.

For bituminous curing material, the soil-cement surface shall be dense, free of all loose and extraneous materials, and shall contain sufficient moisture to prevent excessive penetration of the bituminous material. The bituminous material shall be uniformly applied to the sterice of the completed soil-cement. The exact rate and temperature of application for complete coverage, without undue runoff, shall be specified by the engineer.

Should it be necessary for construction equipment or other traffic to use the bituminous-covered surface before the bituminous material has dried sufficiently to prevent pickup, sufficient sand biotter cover shall be applied before such use.

Sufficient protection from freezing shall be given the soil-cement for at least 7 days after its construction or as approved by the engineer.

4.7 Construction Joints. At the end of each day's construction a straight transverse construction joint shall be formed by cutting back into the completed work to form a true vertical face.

Soil-cement for large, wide areas shall be built in a series of parallel lanes of convenient length and width meeting approval of the engineer. Straight longitudinal joints shall be formed at the end of each day's construction by cutting back into completed work to form a true vertical face free of loose or shared material.

Special attention shall be given to Joint construction to ensure a vertical Joint, adequately mixed material, and compaction up against the joint. On mixed-in-place construction using transverse shalt mixers, a longitudinal joint constructed adjacent to partially hardened solfcement built the preceding day may be formed by cutting back into the previously constructed area during mixing operations. Guide stakes shall be set for cement spreading and mixing.

4.8 Traffie. Completed portions of soil-cement can be opened Immediately to low-speed local traffic and to construction equipment provided the curing material or moist curing operations are not impaired, and provided the soil-cement is sufficiently stable to withstand marring or permanent deformation. The section can be opened up to all traffic after the soil-cement has received a curing compound or subsequent surface, and is sufficiently stable to withstand marring or permanent deformation. If continuous moist curing is employed in Ileu of a curing compound, the soil-cement can be opened to all traffic after the 7-day moist curing period, provided the soil-cement has hardened sufficiently to prevent marring or permanent deformation.

4.9 Surfacing. Subsequent pavement layers (asphalt, chip-seal, or concrete) can be placed any time after finishing, as long as the soil-cement is sufficiently stable to support the required construction equipment without marring or permanent distortion of the surface.

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4.16 Maintenance. The contractor shall maintain the solf-cement in good condition until all work is completed and accepted. Such maintenance shall be done by the contractor at his own expense.

Maintenance shall include immediate repairs of any defects that may occur. If it is necessary to replace any soil-cement, the replacement shall be for the full-depth, with vertical cuts, using either soil-cement or concrete. No skin patches will be permitted.

#### 5. INSPECTION AND TESTING

5.1 Description. The engineer, with the assistance and cooperation of the contractor, shall make such inspections and tests as deemed necessary to ensure the conformance of the work to the contract documents. These inspections and tests may include, but shall not be limited to. (1) the taking of test samples of the soil-cement and is individual components at all stages of processing and after completion and (2) the close observation of the operation of all equipment used on the work. Only those materials, machines, and methods meeting the requirements of the contract documents shall be approved by the engineer.

All testing of soil-cement or its individual components, unless otherwise provided specifically in the contract documents, shall be in accordance with the tetest applicable ASTM, AASHTO, or CSA specifications in effect as of the date of advertisement for bids on the project.

#### 8. MEASUREMENT AND PAYMENT

6.1 Measurement. This work will be measured (1) in square yards (square meters) of completed and accepted soil-cement base course as determined by the specified lines, grades, and cross sections shown on the plans and (2) in tons (tonnes) or cwt of cement incorporated into the soil-cement base course in accordance with the instructions of the engineer.

6.2 Payment. This work will be paid for at the contract unit price per square yant (square meter) of soil-cement base course and at the contract unit price per ton (sonne) or cwt of cement furnished, multiplied by the quantities obtained in accordance with Section 6.1. Such payment shall constitute full reimbursement for all work necessary to complete the soil-cement, including watering, curing, inspection and testing assistance, and all other inclidental operations.

KEYWORDS: compacting, curing, density, finishes, Inspection, joints, maintenance, measurement, soils, soil-cement, specifications, subgrades.

ABSTRACT: Specifies materials to use and construction methods needed to produce soil-cement base courses. A résumé of preparation; pulverization; cement application, mixing and spreading (mixed-in-place and central-plant-mixed methods); comapction; finishing; curing; jointing; maintenance; measurements; and basis of payment for a soil-cement base course.

REFERENCE: Suggested Specifications for Soil-Cement Base Course (Soil-Cement, Cement-Treated Base, Cament-Treated-Aggregate Base), ISO08.11, Portland Cement Association, 2001.

CALITICAL: Avoid prolonged contact between unhardened (wet) cement or coment-treated arbatures and skin surfaces. To prevent such contact, it is advisable to wear protective closhing. Skin areas that have been exposed to wet cement or cement-tensed mistures, either directly or indirectly or through saturated clothing, should be thoroughly washed with water.

This publication is based on the facts, tests, and authorities stated herein. It is intended for the use of professional personnel competent to evaluate the significance and limitations of the reported findings and who vill accept responsibility for the application of the material It contains. The Postend Cement Association disclaims any and all responsibility for application of the stated principles or for the accuracy of any of the sources other than work performed or information developed by the Association.

THE PORTLAND CEMENT ASSOCIATION

5420 Old Orchard Road Skokle, Blinois 60077-1083 847.966.6200 www.portcement.org

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IS008.12