BIDDING DOCUMENTS

PREPARED FOR

EFFINGHAM COUNTY BOARD OF COMMISSIONERS For FULL DEPTH RECLAMATION OF ASH

ROADS



ITB NO. 22-25-008 February 2022

Effingham County Board of Commissioners Full Depth Reclamation of Ash Roads ITB NO. 22-25-008

TABLE OF CONTENTS

SECTION	<u>DESCRIPTION</u>	PAGES
01100	Notice to Contractors	1 - 3
01150	Instructions for Bidders	1 - 14
01160	General Conditions	1 - 7
01200	Supplemental Conditions	1 - 2
01210	Scope of Work	1 - 1
01250	Bid Form	1 - 9
01300	Bid Bond	1 - 1
01350	Agreement	1 - 11
01400	Notice to Proceed	1 - 1
Appendix A	FDRE Specifications and Mix Designs	1 - 22

NOTICE TO CONTRACTORS

EFFINGHAM COUNTY BOARD OF COMMISIONERS

Sealed BIDS will be received by the **Effingham County Board of Commissioners** at the office of the **Purchasing Agent** until **11.00am** (Eastern Time) on **Monday, April 18, 2022** and then at said office publicly opened and read aloud.

The Work to be bid consists of furnishing all materials, labor and equipment for:

Full Depth Reclamation of Ash Roads

The Work is generally described as follows: Full Depth Reclamation with Emulsion (FDRE) of the top six (6") inches of existing road surface and base material on approximately twenty- two (22) miles of prescribed project roads in Effingham County, Georgia, and related driving surface, signage, and drainage improvements.

The Effingham County Purchasing Agent for this Project shall be Ms. Alison Bruton.

A <u>MANDATORY</u> pre-bid conference will be held <u>Monday</u>, <u>March 21</u>, <u>2022 at 11:00 am</u> via Zoom (information available upon request). Vendors are welcome to attend in person in the large conference room of the new Effingham County Administrative Complex located at <u>804 S. Laurel St.</u>, <u>Springfield</u>, <u>GA. 31329</u>.

Proposals will not be accepted from any firm that did not attend the pre-bid meeting for ITB 22-25-008 - Full Depth Reclamation of Ash Roads.

Any questions that arise after the pre-proposal conference <u>must</u> be made in writing and must be received at the office of the Purchasing Agent no later than <u>5:00pm</u> (Eastern Time) on <u>Thursday, March 24, 2022</u> No response will be given to any questions received after <u>5.00pm</u> (Eastern Time) on <u>Thursday, March 24, 2022</u>. Questions may be faxed to 912-754-8413; emailed to <u>abruton@effinghamcounty.org</u> or mailed to the address above. If questions are mailed, please DO NOT put the bid number on the outside of the envelope.

The response to all questions will be in the form of an addendum and will be posted on the Effingham County website www.effinghamcounty.org before **5:00pm** (Eastern Time) on **Thursday, March 31, 2022.**

All proposals shall be accompanied by a BID BOND in favor of the **Effingham County Board of Commissioners** in the amount of at least five percent (5%) of the BID for the complete work. The BID BOND shall be forfeited to the **Effingham County Board of Commissioners** as liquidated damages if the BIDDER fails to execute the CONTRACT and provide PERFORMANCE BOND and PAYMENT BOND within ten (10) calendar days after being notified that he has been awarded the Contract.

Payment will be made on a monthly basis for work performed the previous month, less retainage. Until 50% of the value of the contract (including change orders and additions), or if the Contractor fails to maintain his construction schedule to the satisfaction of the Engineer, the County will retain 10% of the gross value of the completed work as indicated by the current estimate approved by the Engineer. After the contract (including change orders and additions) is 50% complete, there shall be no additional retainage withheld unless the work is determined to be unsatisfactory or has fallen behind schedule.

The BIDDER is expected to examine the sites of the proposed work, the BIDDERS CHECKLIST, INSTRUCTIONS TO BIDDERS, GENERAL CONDITIONS, SPECIFICATIONS and AGREEMENT forms before submitting a BID.

The **Effingham County Board of Commissioners** reserves the right to reject any and all Bids and to waive any informality in the bidding. Additionally Effingham County may issue change orders altering the original scope of work to address changes or unforeseen conditions necessary for the project completion. No Bids shall be withdrawn within 60 days after the actual date of the opening thereof. Bids from noncertified Bidders will not be considered.

The CONTRACT DOCUMENTS may be examined at the following location: Effingham County Board of Commissioners, 804 South Laurel Street, Springfield GA, 31329.

Copies of the CONTRACT DOCUMENTS may be obtained at: http://www.effinghamcounty.org/279/Purchasing-Procurement

Contractor shall engage immediately upon receipt of the NTP, to submit the specified Submittals within seven (7) calendar days of NTP receipt, to conduct the Preconstruction Personnel Training (PPT) within fourteen (14) calendar days of NTP receipt, to commence physical work on the first road within twenty- one (21) calendar days of NTP receipt, and to complete the work within one hundred fifty- two (152) calendar days of NTP receipt

Bids shall be submitted in a sealed envelope, marked with the Purchasing Bid Number and Title, as well as the BIDDER'S name, and shall be addressed to the **Effingham County Board of Commissioners.**

ATTENTION: Effingham County Purchasing Agent

804 S. Laurel Street Springfield, GA 31329

The BID must be submitted in duplicate and will include the following signed documents:

- 1. DOCUMENT CHECK LIST
- 2. DRUG FREE WORKPLACE CERTIFICATION. Attachment A
- 3. PROMISE OF NON-DISCRIMINATION STATEMENT, Attachment B
- 4. DISCLOSURE OF RESPONSIBILITY STATEMENT Bidders Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion, Attachment C
- 5. NON COLLUSION AFFIDAVIT, Attachment D
- 6. GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT (E-VERIFY) CONTRACTOR, Attachment E
- 7. GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT (E-VERIFY) SUBCONTRACTOR (if applicable), Attachment F
- 8. LIST OF SUBCONTRACTORS, Attachment H
- 9. GENERAL CONDITIONS
- 10. COMPLETED BID FORM
- 11. BID BOND, CERTIFIED CHECK OR CASHIER'S CHECK
- 12. CERTIFICATE OF INSURANCE
- 13. COMPLETED W-9

EFFINGHAM COUNTY, GEORGIA DOCUMENT CHECK LIST

Company Name: _____

COMPLETED	ITEM DESCRIPTION
	INSTRUCTIONS TO BIDDERS
	REQUEST FOR QUOTE
	BID/QUOTE SUBMITTAL FORM
	SURETY REQUIREMENTS (Certified check or other security of 5% required with BID SUBMITTAL – BID BOND FORM PROVIDED)
	PERFORMANCE BOND- UPON AWARD OF CONTRACT
	PAYMENT BOND- UPON AWARD OF CONTRACT
	CERTIFICATE OF INSURANCE
	W-9
	LEGAL NOTICE
	CONTRACTOR AFFIDAVIT & AGREEMENT (E-VERIFY)
	SUB-CONTRACTOR AFFIDAVIT & AGREEMENT (E-VERIFY)
	GEORGIA PROFESSIONAL LICENCE CERTIFICATIONS
	LIST OF SUB-CONTRACTORS
	ATTACHMENTS
	RECEIPT OF ADDENDA IF ANY
ature	Title
	ature

THIS PAGE MUST BE COMPLETED AND SUBMITTED AS PART OF YOUR PROPOSAL INSTRUCTIONS TO BIDDERS

INSTRUCTIONS TO BIDDERS

1.1 PURPOSE: The purpose of this document is to provide general and specific information for use in submitting a Bid to supply Effingham County with construction, equipment, supplies and/or services as described herein. All Bids/proposals are governed by the Code of Effingham County, and the laws of the State of Georgia.

1.2 HOW TO SUBMIT BIDS: All bids shall be:

- **A.** Submitted in sealed opaque package (envelope or box as necessary), plainly marked with the bid number and title, date and time of submission, and company name.
- **B.** Mailed or delivered in sufficient time to ensure receipt by the Purchasing Agent on or before the time and date specified above.

Hand Delivery and Mailing Address:

Effingham County Purchasing Agent, 804 South Laurel Street, Springfield, Georgia, 31329.

BIDS NOT RECEIVED BY THE TIME AND DATE SPECIFIED WILL NOT BE OPENED OR CONSIDERED.

- **HOW TO SUBMIT AN OBJECTION:** Objections from Bidders to this invitation to bid and/or these specifications should be brought to the attention of the County Purchasing Agent in writing. The objections contemplated may pertain to form and/or substance of the invitation to bid documents. Failure to object in accordance with the above procedure will constitute **a** waiver on the part of the business to protest this invitation to bid
- **1.4 QUESTIONS:** Any questions pertaining to the bid **must** be made in writing and must be received at the office of the Purchasing Agent no later than **5:00pm** (Eastern Time) on **Thursday, March 24, 2022**. Questions may be faxed to 912-754-8413; emailed to **abruton@effinghamcounty.org** or hand delivered/mailed to Effingham County Board of Commissioners, Purchasing Office, 804 S Laurel Street, Springfield, GA 31329. The response to all questions will be in the form of an addendum and will be posted on the Effingham County website www.effinghamcounty.org before **5:00pm** (Eastern Time) on **Thursday, March 31, 2022.** If hand delivering or mailing questions, please DO NOT mark the outside of the envelope with the bid number.

The only official answer or position of Effingham County will be the one stated in writing.

- **1.5 ERRORS IN BIDS:** Bidders or their authorized representatives are expected to fully inform themselves as to the conditions, requirements, and specifications before submitting Bids. Failure to do so will be at the Bidders own risk. In case of error in extension of prices in the Bid, the unit price will govern.
- 1.6 STANDARDS FOR ACCEPTANCE OF BID FOR CONTRACT AWARD: The County reserves the right to reject any or all Bids and to waive any irregularities or technicalities in Bids received whenever such rejection or waiver is in the best interest of the County. The County reserves the right to reject the Bid of a Bidder who has previously failed to perform properly or complete on time contracts of a similar nature, or a Bid from a Bidder whom investigation shows is not in a position to perform the contract. Contracts shall be awarded to the lowest responsible and responsive bidder whose combined bid meets the requirements and criteria set forth in the advertisement for bids; provided, however, that if the bid from the lowest responsible and responsive bidder exceeds funds budgeted for the contract, the county may negotiate with such apparent low bidder to obtain a contract price within the budgeted amount. Such negotiations may include changes in the scope of work and other bid requirements. Effingham County reserves the right to reject any or all bids, and to waive formalities.

- **1.7 CONFIDENTIALITY OF DOCUMENTS:** Upon receipt of a bid by the County the bid shall become the property of the County without compensation to the Contractor, for disposition or usage by the County at its discretion. The particulars of the bid documents will remain confidential until final award of the contract.
- **1.8 BIDDER:** Whenever the term "Bidder" is used it shall encompass the "person," "business," "firm," "contractor" or other party submitting a bid to Effingham County in such capacity before a contract has been entered into between such party and the County. At times throughout this Invitation to Bid the term "contractor" may be used interchangeably with the term "bidder".
- **1.9** CONTRACT: Whenever the term "Contract" is used it shall encompass "purchase order" and "agreement."
- **1.10 COMPLIANCE WITH LAWS:** The Proposer shall obtain and maintain all licenses, permits, liability insurance, workman's compensation insurance and comply with any and all other standards or regulations required by Federal, State or County statute, ordinances and rules during the performance of any contract between the Proposer and the County. Any such requirement specifically set forth in any contract document between the Proposer and the County shall be supplementary to this section and not in substitution thereof.
- **1.11** <u>COUNTY:</u> Whenever the term "County" or "Owner" is used it is to refer to the Effingham County Board of Commissioners.
- **1.12 DEBARRED FIRMS AND PENDING LITIGATION:** Any potential bidder/firm listed on the Federal or State of Georgia Parties Listing (barred from doing business) **will not** be considered for contract award. Bidders **shall disclose** any record of pending criminal violations (indictment) and/or convictions, pending lawsuits, etc., and any actions that may be a conflict of interest occurring within the past five (5) years.

Bids will not be accepted from any company, firm, person, party or parent subsidiary, against which Effingham County has an outstanding claim, or financial dispute relating to prior contract performance. If the County, at any time, discovers such a dispute during any point of evaluation, the bid will not be considered further. Any bidder/firm previously defaulting or terminating a contract with the County will not be considered

Bidder acknowledges that in performing contract work for the County, Bidder shall not utilize any firms that have been a party to any of the above actions. If Bidder has engaged any firm to work on this contract or project that is later debarred, Bidder shall sever its relationship with the firm with respect to County contract.

- ** All Bidders are to read and complete the Bidders certification regarding debarment, suspension, ineligibility, and voluntary exclusion enclosed as Attachment C to be returned with response. Failure to do so may result in your proposal being rejected as non-responsive.
- **1.13 IMMIGRATION:** On 1 July 2009, the Georgia Security and Immigration Compliance Act (SB 529, Section 2) became effective. All employers, contractors and subcontractors entering into a contract or performing work must sign an affidavit that he/she has used the E-Verify System. E-Verify is a no-cost federal employment verification system to insure employment eligibility. Affidavits are enclosed in this solicitation. You may download M-274 Handbook for Employers at http://www.dol.state.ga.us/spotlight/employment/rules. You may go to http://www.uscis.gov to find the E-Verify information.
 - ** All Proposers are to read and complete the E-Verify affidavit enclosed as Attachment E to be returned with response. Failure to do so may result in your solicitation response being rejected as non-responsive

- **1.14 PROTECTION OF RESIDENT WORKERS:** Effingham County Board of Commissioners actively supports the Immigration and Nationality Act (INA) which includes provisions addressing employment eligibility, employment verification, and nondiscrimination. Under the INA, employers may hire only persons who may legally work in the Unites States (i.e., citizens and nationals of the U.S.) and aliens authorized to work in the U.S. The employer must verify the identity and employment eligibility of anyone to be hired, which includes completing the Employment Eligibility Verification Form (I-9). The Contractor shall establish appropriate procedures and controls so no services or products under the Contract Documents will be performed or manufactured by any worker who is not legally eligible to perform such services or employment.
- **1.15 <u>STATEMENT OF DISCLOSURE</u>**: All Vendors must provide a statement of disclosure which will allow the County to evaluate possible conflicts of interest.(Attachment C)

Interests of Public Officials.

The vendor warrants for itself and any subcontractor that no elected or appointed official or employee of Effingham County, Georgia, has any interest in their bid or the proceeds of any contract/agreement which may result thereof. In the event that an elected or appointed official or employee acquires any interest in any contract/agreement which may result from this bid, or the proceeds thereof, the vendor agrees to disclose such interest to the BOARD immediately by written notice. For breach or violation of this clause, the BOARD may annul any contract/agreement resulting from this bid without liability, terminate any contract/agreement resulting from this bid for default, or take other remedial measures. "Interest" as used herein means direct or indirect pecuniary or material benefit accruing to a county commissioner, official or employee as a result of a matter which is or which is expected to become the subject of an official action by or with the county, except for such actions which, by their terms and by the substance of their provisions, confer the opportunity and right to realize the accrual of similar benefits to all other persons and/or property similarly situated. The term "interest" shall not include any remote interest. For purposes of this bid, a county commissioner, official or employee shall be deemed to have an interest in the affairs of: (1) his or her family; (2) any business entity in which the county commissioner, official or employee is a member, officer, director, employee, or prospective employee; and (3) any business entity as to which the stock, legal ownership, or beneficial ownership of a county commissioner, official or employee is in excess of five percent of the total stock or total legal and beneficial ownership, or which is controlled or owned directly or indirectly by the county commissioner, official or employee. Remote interest as used herein means the interest of (1) a volunteer director, officer, or employee of a nonprofit corporation; (2) a holder of less than 5 percent of the legal or beneficial ownership of the total shares of a business; (3) any person in a representative capacity, such as a receiver, trustee, or administrator. Family as used herein means the spouse, parents, children, and siblings, related by blood, marriage, or adoption, of a county official or employee.

1.16 ITB NO. 22-25-008 SCHEDULE:

Invitation to Bid	Date/ Time
Owner issues advertisement of ITB	Wednesday, February 23, 2022
MANDATORY Pre-bid Meeting (zoom)	11:00am (EST) Monday, March 21, 2022
Deadline for submission of written questions:	5:00pm (EST) Thursday, March 24, 2022
Addendum issued to answer questions (if any) and posted online at www.effinghamcounty.org	5:00pm (EST) Thursday, March 31, 2022
Deadline for submission of Bids	11:00am (EST) Monday, April 18, 2022

ATTACHMENT A

DRUG FREE WORKPLACE CERTIFICATION

The undersigned certifies that the provisions of Code Sections 50-24-1 through 50-24-6 of the Official Code to Georgia Annotated, related to the Drug Free Workplace have been complied with full.

- 1. A drug-free workplace will be provided for the employees during the performance of the contract; and;
- 2. Each Sub-Contractor under the direction of the Contractor shall secure the following written certification:

(Contractor) certifies to Effingham County that a drug-free workplace will be provided for the employees during the performance of this contract known as **ITB 22-25-008 - Full Depth Reclamation of Ash Roads** pursuant to paragraph (7) of subsection (B) of Code Section 50-24-3. Also, the undersigned further certifies that he/she will not engage in the unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the contract.

CONTRACTOR	DATE	
SUBSCRIBED AND SWORM	N BEFORE ME ON THIS THE	
DAY OF	20	
Notary Public		
My Commission Expires:	, 20	

ATTACHMENT B

PROMISE OF NON-DISCRIMINATION STATEMENT

Know all men by this present	ce, that I (We)
Name	, (herein after "Company"), Title
•	ege to Bid on the following Effingham County Procurement titled ITB NO. 22- amation of Ash Roads hereby consent, covenant, and agree as follows:
	ed from participation in, denied the benefit of, or otherwise discriminated against cional origin or gender in connection with the Bid submitted to Effingham County stract resulting there from;
	e policy of this Company to provide equal opportunity to all business persons se interested with the Company, including those companies owned and controlled en; and
C. That the promises of non-duration of this contract with	discrimination as made and set forth herein shall be continuing throughout the Effingham County.
•	discrimination as made and set forth herein shall be and are hereby deemed to be by reference in the contract which this Company may be awarded;
made and set forth above m	ompany to satisfactorily discharge any of the promises of non-discrimination as ay constitute a material breach of contract entitling the County to declare the cise appropriate remedies including but not limited to termination of the contract.
SIGNATURE	DATE:
SUBSCRIBED AND SWORN	BEFORE ME ON THIS THE
DAY OF	, 20
Notary Public	
My Commission Expires:	, 20

ATTACHMENT C

DISCLOSURE OF RESPONSIBILITY STATEMENT - Bidders Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion (page 1)

Failure to complete and return this information will result in your bid/offer/proposal being disqualified from further competition as non-responsive.

- 1. List any convictions of any person, subsidiary, or affiliate of the company, arising out of obtaining, or attempting to obtain a public or private contract or subcontract, or in the performance of such contract or subcontract.
- 2. List any indictments or convictions of any person, subsidiary, or affiliate of this company for offenses such as embezzlement, theft, fraudulent schemes, etc. or any other offenses indicating a lack of business integrity or business honesty which affects the responsibility of the contractor.
- 3. List any convictions or civil judgments under states or federal antitrust statutes.
- 4. List any violations of contract provisions such as knowingly failing (without good cause) failing to perform, or unsatisfactory performance, in accordance with the specifications of a contract.
- 5. List any prior suspensions or debarments by any governmental agency.
- 6. List any contracts not completed on time.
- 7. List any penalties imposed for time delays and/or quality of materials and workmanship.
- 8. List any documented violations of federal or any state labor laws, regulations, or standards, and any occupational safety and health rules.

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001

DISCLOSURE OF RESPONSIBILITY STATEMENT - Bidders Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion (page 2)

I hereby certify that I am the	and duly authorized
representative of	(Contractor) whose address is
and I certify that I have read and und	derstand the attached instructions and that to the best of my knowledge and es:
excluded from covered tra	red, suspended, proposed for debarment, declared ineligible, or voluntarily ansactions by the Georgia Department of Transportation, any Federal ard of Education or local municipality.
Part 29 and that this firm misrepresentation that wo Agreement and other rem	s certification is provided pursuant to Executive Order 12549 and 49 CFR agrees to abide by the rules and conditions set forth therein for any ould render this certification erroneous, including termination of this nedies available to the Georgia Department of Transportation, Federal cation or local municipality.
transactions, solicitations, p	hat this firm will include this clause without modification in all lower tier proposals, contracts and subcontracts. Where the Bidder or any lower tier rtify to this statement, that participant shall attach an explanation to this
Ĭ	, as
Name of individual	, as Title & Authority
of Company Name	, declare under oath that the above statements,
including any supplemental respons	ses attached hereto, are true.
Signature	
State of:	
County of :	

DISCLOSURE OF RESPONSIBILITY STATEMENT (page 3)

SUBSCRIBED AND SWORN BEFO	ORE ME ON THIS TI	HE
DAY OF	, 20	
by		representing him/herself to be
		of the company named.
Notary Public		
My Commission Expires:		, 20

THIS SECTION INTENTIONALLY LEFT BLANK

ATTACHMENT D NON-COLLUSIVE AFFIDAVIT OF SUBCONTRACTOR

I,	cer	tify that purs	uant to Effii	ngham
County Board of Commissioner's policies, this bid or proposal i or connection with any corporation, firm or person submitting		•		
service to be done or the supplies, materials or equipment to be				
collusion or fraud of any type. I understand collusive bidding				
result in fines, prison sentences and civil damages awards. I				
proposal and certify that I am authorized by my employer to sign				
Affiant further states that pursuant to O.C.G.	A. Section	36-91-21	(d) and	(e),
Contractor				
has not, by itself or with any others, directly or indirectly, pre	vented or att	empted to pre	vent competi	tion in
such bidding or proposals by any means whatsoever. Affiant				
endeavored to prevent anyone from making a bid or offer on t		• •		
Affiant caused or induced another to withdraw a bid or offer for	or the work a	and/or to subm	iit an invalid	and or
incorrect bid or offer for the work.				
Affiant further states that the said offer of				is a
bona fide offer, and that no one has contacted any supplier an	d attempted	to get such pe	rson or comp	any to
furnish the materials to the bidder only, or if furnished to other	bidders, to d	o so at a highe	er prices.	
Company's Name				
President / Vice President / Principal / Owner				
Consequence and archaeolibe discourse with		20		
Sworn to and subscribed before me this day of		, 20		
Secretary / Assistant Secretary				
Affix corporate seal here, if a corporation				
SUBSCRIBED AND SWORN BEFORE ME ON THIS THE _	day of _		20	
Notary Public				
My Commission Expires	, 20			

NOTE: If the contractor is a partnership, all of the partners and officers, agents, or other persons who may have represented or acted on behalf of the partnership in bidding for or procuring this contract shall also make this oath. If the subcontractor is a corporation, all of the officers, agents, or other persons who may have represented or acted on behalf of the corporation in bidding for or procuring this contract shall also make this oath.

ATTACHMENT E CONTRACTOR AFFIDAVIT AND AGREEMENT (E-VERIFY)

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.GA § 13-10-91, stating affirmatively that the individual, firm, or corporation that is contracting with Effingham County has registered with and is participating in a federal work authorization program* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91, and shall agree to use this program for any newly hired employees throughout the duration of the contract.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with Effingham County, contractor will secure from such subcontractors) similar verification of compliance with O.C.G.A. § 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 or a substantially similar form. The contractor further agrees to provide notice to the County of the identity of each subcontractor hired under the contract within five (5) business days of entering into a contract for hire. Such notice shall include a copy of the Subcontractor Affidavit for each subsequent subcontractor attesting to the subcontractor's name, address, user identification number, and date of authorization to use the federal work authorization program. Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the Effingham County within five (5) days of the time the subcontractor(s) is retained to perform such service.

EEV/ Basic Pilot Program* User Identification Nu	ımber
BY: Authorized Officer or Agent (Contractor Nam	ne) Date
Title of Authorized Officer or Agent of Contractor	
Printed Name of Authorized Officer or Agent	
SUBSCRIBED AND SWORN BEFORE ME ON	THIS THE
DAY OF20	_
Notary Public	
My Commission Expires: - 20	

^{*} As of the effective date of O.C.G.A. § 13-10-91, the applicable federal work authorization program is the "EEV/ Basic Pilot Program" operated by the U.S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

ATTACHMENT F

SUBCONTRACTOR AFFIDAVIT (E-VERIFY)

By executing this affidavit, the undersigned subcontractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm or corporation that is engaged in the physical performance of services under a contract with (name of contractor) on behalf of Effingham County has registered with and is participating in a federal work authorization program* [any of the electronic verification of work authorization programs operated by the United States Department of Homeland Security or any equivalent federal work authorization program operated by the United States Department of Homeland Security to verify information of newly hired employees, pursuant to the Immigration Reform and Control Act of 1986 (IRCA), P.L. 99-603], in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91 and will agree to use this program for any newly hired employees throughout the duration of the contract. The subcontractor further agrees to provide a copy of the executed Subcontractor Affidavit to the Contractor in order to be provided to the County within five (5) days entering into the contract for hire.

EEV / Basic Pilot Program* User Identif	fication Number	
Date of E-Verify Authorization		
Address		
BY: Authorized Officer or Agent (Subco	ontractor Name) Date	
Title of Authorized Officer or Agent of S	Subcontractor	
Printed Name of Authorized Officer or A	Agent	
SUBSCRIBED AND SWORN BEFORE	E ME ON THIS THE	
DAY OF	, 20	
Notary Public		
My Commission Evniros	20	

^{*} As of the effective date of O.C.G.A. 13-10-91, the applicable federal work authorization program is the "EEV/ Basic Pilot Program" operated by the U. S. Citizenship and Immigration Services Bureau of the U.S. Department of Homeland Security, in conjunction with the Social Security Administration (SSA).

ATTACHMENT G NO-BID STATEMENT

In an effort to make the procurement of construction, goods and services for Effingham County as competitive as possible, we are soliciting information from contractors and or vendors who cannot Bid. Your "responsiveness" and "constructive" comments will be appreciated. Completion of this form will assist us in evaluating factors which relate to the competitiveness of our Bids. Please check any of the boxes below which may apply.

	Specifications - Restrictive, too "tight", unclear, specialty item, geared toward one (1) brand or manufacturer only. (Explain below)
	Manufacturing - Unique item, production time for model or item has expired, etc.
	Bid Time - Insufficient time to properly respond to Bid or proposal.
	Delivery Time - Specified delivery time cannot be met.
	Payment - Delay in payment terms. Please be specific.
	Bonding - We are unable to meet bonding requirements.
	Insurance -We are unable to meet insurance requirements.
	Removal - From Bidders list for this particular commodity or service.
	Keep - Our Company on your Bidders list for future reference.
	Project is - Too Large Too Small
	Site Location Too Distant.
	Miscellaneous - Do not wish to Bid, do not handle this type of item (s), unable to compete, contract clause (s) not acceptable, etc. Please be specific.
CONS	TRUCTION PROJECTS: Please provide reason for obtaining a Bid package. Check one below
Interes	st in this project as a:
	rime Contractor
	ub-Contractor
Sı	applier
ITB 2	2-25-008 - Full Depth Reclamation of Ash Roads
Signat	rure: Telephone Number:

Firm Name: ____

ATTACHMENT H LIST OF SUBCONTRACTORS

I	/DO,	/DO NOT, propose to subcontract some of the work on this project. I pr	opose
to subcont	ract work to the fo	ollowing contractors/firms:	

CONTRACTOR/FIRM NAME:	ADDRESS:	DESCRIPTION OF WORK/SERVICES TO BE PERFORMED:	CONTRACT AMOUNT

ATTACHMENT I

Legal Notice

Invitation to Bid

ITB 22-25-008 - Full Depth Reclamation of Ash Roads

Effingham County, Georgia is seeking bids from contractors interested in ITB 22-25-008 - Full Depth Reclamation of Ash Roads

Sealed proposals are due by <u>11:00am</u> (Eastern Time) on <u>Monday, April 18, 2022</u> and must be mailed or hand delivered to the Effingham County Purchasing Office, 804 S. Laurel Street, Springfield, GA 31329.

A copy of this Invitation to Bid is available at the address listed above or online at www.effinghamcounty.org - Purchasing tab. For additional information please contact, Alison Bruton at (912) 754-2159 or via email: abruton@effinghamcounty.org

EFFINGHAM COUNTY RESERVES THE RIGHT TO REJECT ANY/AND ALL BIDS AND TO WAIVE ALL FORMALITIES. "EFFINGHAM COUNTY IS AN EQUAL OPPORTUNITY EMPLOYER, M/F/H, ALL BIDDERS ARE TO BE EQUAL OPPORTUNITY EMPLOYERS".

GENERAL CONDITIONS

- **1.1 SPECIFICATIONS:** Any obvious error or omission in the specifications shall not inure to the benefit of the Bidder but shall put the Bidder on notice to inquire of or identify the same to the County.
- **1.2 GEORGIA OPEN RECORDS ACT:** The responses will become part of the County's official files without any obligation on the County's part. Ownership of all data, materials, and documentation prepared for and submitted to Effingham County in response to a solicitation, regardless of type, shall belong exclusively to Effingham County and will be considered a record prepared, maintained or received in the course of operations of public office or agency and is subject to public inspection in accordance with the *Georgia Open Records Act. Official Code of Georgia Annotated, Section 50-18-070, et.Seq.* unless otherwise provided by law. The Georgia Open Records Act is applicable to the records of all contractors and subcontractors under contract with the County. This applies to those specific contracts currently in effect and those which have been completed or closed up to three (3) years following completion.
- **1.3 GEORGIA TRADE SECRET ACT OF 1990:** In the event that a Bidder submits secret information to the County, the information must be clearly labeled as a "Trade Secret". The County will maintain the confidentiality of such trade secrets to the extent provided by law.
- **1.4 PRICES TO BE FIRM:** The Bidder **warrants** that Bid prices, terms and conditions quoted in his Bid will be firm for acceptance for a period of sixty (60) days from Bid opening date, unless otherwise stated in the Bid.
- 1.5 <u>COMPLETENESS:</u> All information required by the Invitation to Bid must be completed and submitted to constitute a proper bid. The County shall have sole discretion in evaluating qualifications and responses of Bidders. Bidder acknowledges that in performing a contract for the Board, Bidder shall not utilize any firms that have been a party to any of the actions listed in paragraph 1.12 of section 01150. If Bidder has engaged any firm to work on this contract or project that is later debarred, Bidder shall sever its relationship with that firm with respect to the Board's contract.
- **1.6** MULTIPLE PROPOSALS: No Bidder will be allowed to submit more than one offer. Any alternate proposals must be brought to the Purchasing Agent's attention during the Pre-bid Conference or submitted in writing at least five (5) days preceding the date for submission of bids.
- **1.7 PATENT INDEMNITY:** Except as otherwise provided, the successful Bidder agrees to indemnify Effingham County and its officers, agents and employees against liability.
- **QUALIFICATION OF BUSINESS (RESPONSIBLE BIDDER)**: A responsible Bidder is defined as one who meets, or by the date of the Bid acceptance can meet, all requirements for licensing, insurance, and service contained within this Invitation for Bids. Effingham County has the right to require any or all Proposers to submit documentation of their ability to perform, provide or carry out the service requested and to disqualify the proposal of any Proposer as being unresponsive or un-responsible whenever such Proposer cannot.
- **1.9** CERTIFICATION OF INDEPENDENT PRICE DETERMINATION: By submission of this bid, the Bidder certifies, and in the case of a joint bid each party thereto as to its own organization, that in connection with this procurement.
 - A. The prices in this Bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such price

- with any other bidder or with any competitor;
- B. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening, directly or indirectly to any other competitor; and;
- C. No attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose or restricting competition.
- **1.10 AWARD OF CONTRACT:** The contract, if awarded, shall be awarded to the lowest responsible and responsive bidder whose combined bid meets the requirements and criteria set forth in the advertisement for bids; provided, however, that if the bid from the lowest responsible and responsive bidder exceeds funds budgeted for the contract, the county may negotiate with such apparent low bidder to obtain a contract price within the budgeted amount. Such negotiations may include changes in the scope of work and other bid requirements. Effingham County reserves the right to reject any of all bids, and to waive formalities.
- **1.11 TERM OF THE CONTRACT:** The contract period will be for the period specified in the contract document UNLESS DIRECTED OTHERWISE BY THE BOARD OF COMMISSIONERS.
- 1.12 <u>INSURANCE PROVISIONS:</u> The selected Bidder shall be required to procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Bidder, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Bid. Contract work will not proceed unless Effingham County has in their possession, a current Certificate of Insurance. Effingham County invokes the defense of sovereign immunity. The County is not to be included as an additional insured on insurance contracts.

General Information that shall appear on a Certificate of Insurance:

- A. Name of Producer (Contractor's insurance Broker/Agent).
- B. Companies affording coverage (there may be several).
- C. Name and address of the Insured (this should be the Company or Parent of the firm Effingham County is contracting with).
- D. A Summary of all current insurance for the insured (includes effective dates of coverage).
- E. A brief description of the operations to be performed, the specific job to be performed, or contract number.
- F. Certificate Holder (This is to always include Effingham County).
- **1.13 LIMITS OF INSURANCE**: Effective coverage shall have the following limits:
 - A. Commercial General Liability: Provides protection against bodily injury and property damage claims arising from operations of a Contractor or Tenant. Minimum limits: \$1,000,000 bodily injury and property damage per occurrence and annual aggregate.
 - B. Worker's Compensation and Employer's Liability: Provides statutory protection against bodily injury, sickness or disease sustained by employees of the Contractor while performing within the scope of duties. Minimum limits: \$500,000 for each accident, disease policy limit, and disease each employee and Statutory Worker's Compensation limit.
 - C. **Business Automobile Liability:** Coverage insures against liability claims arising out of the Contractor's use of automobiles. Minimum limit: \$1,000,000 combined single limit per accident for bodily injury, property damage, and should be written on an "Any Auto" basis.

1.14 SPECIAL REQUIREMENTS:

- A. Claims-Made Coverage: The limits of liability shall remain the same as the occurrence basis, however, the Retroactive date shall be prior to or coincident with the date of any contract, and the Certificate of Insurance shall state the retroactive date and the coverage is claims-made.
- B. **Extended Reporting Periods:** The Contractor shall provide the County with a notice of the election to initiate any Supplemental Extended Reporting Period and the reason(s) for invoking this option.
- C. **Reporting Provisions:** Any failure to comply with reporting provisions of the policies shall not affect coverage provided in relation to this request.
- D. Cancellation/Non-Renewal Notification: Each insurance policy supplied in response to this request shall be endorsed to state that it shall not be suspended, voided, or canceled, except after thirty (30) days prior to written notice by certified mail, return receipt requested, has been given to the County.
- E. **Proof of Insurance:** Effingham County shall be furnished with certificates of insurance and original endorsements affecting coverage required by this request. The certificates and endorsements are to be signed by a person authorized by the insurer to bind coverage on its behalf. All certificates of insurance are to be submitted prior to, and approved by, the County before services are rendered. The Proposer must ensure Certificates of Insurance are updated for the entire term of the Contract.
- F. **Insurer Acceptability:** Insurance is to be placed with an insurer having an A.M. Best's rating of A and a five (5) year average financial rating of not less than V. If an insurer does not qualify for averaging on a five year basis, the current total Best's rating will be used to evaluate insurer acceptability.
- G. **Lapse in Coverage:** A lapse in coverage shall constitute grounds for contract termination by Effingham County Board of Commissioners.
- H. Deductible and Self-Insured Retention: Any deductibles or self-insured retention must be declared to, and approved by, the County. At the option of the County, either: the insurer shall reduce or eliminate such deductibles or self-insured retention as related to the County, its officials, officers, employees, and volunteers; or the Proposer shall procure a bond guaranteeing payment of related suits, losses, claims and related investigation, claim administration and defense expenses

1.15 ADDITIONAL COVERAGE FOR SPECIFIC PROCUREMENT PROJECTS:

Professional Liability: Insure errors or omission on behalf of architects, engineers, attorneys, medical professionals, and consultants.

Minimum Limits: \$1,000,000 per claim/occurrence.

Coverage Requirement: If "claims made," retroactive date must precede or coincide with the contract effective date or the date of the Notice to Proceed. The professional must state if "tail" coverage has been purchased and the duration of the coverage.

Builder's Risk: (for Construction or Installation Contracts) Covers against insured perils while in the course of construction.

Minimum Limits: All-risk coverage equal 100% of contract value.

Coverage requirements: Occupancy clause – permits Effingham County Board of Commissioners to use the facility prior to issuance of Notice of Substantial Completion.

1.16 INDEMNIFICATION: The CONTRACTOR agrees to protect, defend, indemnify, and hold harmless Effingham County, Georgia, its commissioners, officers, agents, and employees from and against any and all liability, damages, claims, suits, liens, and judgments, of whatever nature, including claims for contribution and/or indemnification, for injuries to or death of any person or persons, or damage to the property or other rights of any person or persons caused by the CONTRACTOR or its subcontractors.

The CONTRACTOR'S obligation to protect, defend, indemnify, and hold harmless, as set forth herein above shall include, but not be limited to, any matter arising out of any actual or alleged infringement of any patent, trademark, copyright, or service mark, or any actual or alleged unfair competition, disparagement of product or service, or other business tort of any type whatsoever, or any actual or alleged violation of trade regulations. CONTRACTOR further agrees to investigate, handle, respond to, provide defense for, and to protect, defend, indemnify, and hold harmless Effingham County, Georgia, at his sole expense, and agrees to bear all other costs and expenses related thereto, even if such claims, suits, etc., are groundless, false, or fraudulent, including any and all claims or liability for compensation under the Worker's Compensation Act arising out of injuries sustained by any employee of the CONTRACTOR or his subcontractors or anyone directly or indirectly employed by any of them. The CONTRACTOR'S obligation to indemnify Effingham County under this Section shall not be limited in any way by the agreed-upon contract price, or to the scope and amount of coverage provided by any insurance maintained by the CONTRACTOR.

- 1.17 INTERPRETING SPECIFICATION: The specifications or scope of services contained herein are intended to be descriptive rather than restrictive. The County is soliciting a bid to provide a complete product or service package which meets all requirements. Specific equipment and system references may be included in the ITB for guidance, but they are not intended to preclude bidders from recommending alternative solutions for offering comparable or better performance or value to the County. Changes in the scope of services, specifications, or terms and conditions of the ITB will be made in writing by the County prior to the bid opening or due date. Results of informal meetings between a potential Bidder and a County official or employee may not be used as a basis for deviations from the requirements contained in this solicitation.
- **1.18 SIGNED RESPONSE CONSIDERED AN OFFER:** The signed Bid shall be considered an offer on the part of the Bidder, which offer shall be deemed accepted upon approval by the Effingham County Board of Commissioners, or their designee. In case of a default on the part of the Bidder after such acceptance, Effingham County may take such action as it deems appropriate, including legal action for damages or lack of required performance.
- **1.19 NOTICE TO PROCEED:** The successful bidder shall not commence work under this Invitation to Bid until a written contract is awarded and a Notice to Proceed is issued by the Purchasing Agent or his designee. If the successful Bidder does commence any work or deliver items prior to receiving official notification, he does so at his own risk.
- **1.20 PAYMENT TO CONTRACTORS:** Instructions for invoicing the County for services delivered to the County are specified in the contract document.
 - A. Questions regarding payment may be directed to the Effingham County Finance Department, at (912) 754-8057.
 - B. Contractors will be paid the agreed upon compensation upon satisfactory progress or completion of the work as more fully described in the contract document.
 - C. Effingham County is a tax exempt entity. Every contractor, vendor, business or person under contract with Effingham County is required by Georgia law to pay State sales or use taxes for products purchased in Georgia or transported into Georgia and sold to Effingham County by contract. Please consult the State of Georgia, Department of Revenue, Sales and Use Tax Unit in Atlanta (404) 656-4065 for additional information.

- **1.21 CONTRACT COST ADJUSTMENTS:** Prices quoted shall be firm for the contract term.
- **1.22 VENDOR DEFAULT:** In case of vendor default, the County will provide a letter of official notice of non-performance. If the issue(s) are not remedied 30 days from receipt of said notice, the County reserves the right to procure services from other sources.
- 1.23 METHOD OF COMPENSATION: The successful Contractor will be compensated in accordance with the approved compensation schedule. Should the Project begin within any one month, the first invoice shall cover the partial period from the beginning date of the project through the last day of the month (or a mutually agreeable time). All invoices shall be submitted on a monthly basis until the project is completed. Invoices shall be itemized to reflect actual expenses for each individual task and will be accompanied by a summary progress report which outlines the work accomplished during the billing period and shall identify any problems which may be inhibiting project execution. The terms of the resulting contract are intended to supersede all provisions of the Georgia Prompt Pay Act. As long as the gross value of work is less than 50% of the total contract amount, or if the Contractor fails to maintain his construction schedule to the satisfaction of the Engineer, the County will retain 10% of the gross value of the completed work as indicated by the current estimate approved by the Engineer. After the gross value of completed work meets or exceeds 50% of the total contract amount within a time period satisfactory to the County, there shall be no additional retainage withheld unless the work is determined to be unsatisfactory or has fallen behind schedule. The contractor may submit a final invoice to the County for the remaining retainage upon the County's acceptance of the Certificate of Substantial Completion. Final payment constituting the entire unpaid balance due shall be paid by the County to the Contractor when work has been fully completed and the contract fully performed, except for the responsibilities of the Contractor which survive final payment. The making of final payment shall constitute a waiver of all claims by Effingham County except those arising from unsettled liens, faulty or defective work appearing after substantial completion, failure of the work to comply with the requirements of the contract document, or the terms of any warranties required by the contract document or items previously made in writing and identified by the County as unsettled at the time of final application for payment. Acceptance of final payment shall constitute a waiver of all claims by the Contractor, except for those previously made in writing and identified by the Contractor as unsettled at the time of final application for payment.
- **1.24 GUARANTEE:** Unless otherwise specified by County, the Bidder shall unconditionally guarantee the materials and workmanship on all material and/or services for a period of not less than one year. If, within the guarantee period any defects occur which are due to faulty material and or services, the contractor at his expense, shall repair or adjust the condition, or replace the material and/or services to the complete satisfaction of the County. These repairs, replacement or adjustments shall be made only at such time as will be signed by the County as being least detrimental to the operation of County business.

1.25 SURETY BOND REQUIREMENTS (CHECKED WHERE APPLICABLE):

- X A. Bidder shall post a Bid Bond, Certified Check, or Money Order made payable to the Effingham County Finance Department in the amount of 5% of the Bid price. Contractor(s) shall post a Payment/Performance Bond, Certified Check, or Money Order made payable to the Effingham County Board of Commissioners, in the amount of 100% of the Bid price if awarded the contract or purchase. Bond(s) are due prior to contract execution as a guarantee that goods meet specifications and will be delivered in accordance with the contract document. Bond(s) will also guarantee quality performance of services and timely payment of invoices due any subcontractors. C. Whenever a Bond is provided, it shall be executed by a surety authorized to do business in the State of Georgia and approved by Effingham County. Bidder acknowledges Effingham County's right to require a Performance Bond of specific kind and origin. Forfeit in the amount of the Bid Bond as liquidated damages if he/she fails to enter into a contract with Effingham County to do and/or furnish everything necessary to provide service and/or accomplish the work stated and/or specified in this Bid Proposal for the Bid amount, and; Forfeit the amount of the Performance Bond as liquidated damages if he/she fails to execute and fulfill the terms of the contract entered. The amount of forfeiture shall be:
 - 1. The difference between his/her Bid and the next lowest, responsible Bid that has not expired or been withdrawn, or;
 - 2. The difference between his/her Bid and the lowest, responsible Bid received as a result of re-Bidding, including all costs related to re-Bidding.

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The undersigned Bidder certifies that he/she has carefully read the preceding list of instructions and all other data applicable hereto and made a part of this invitation to Bid; and, further certifies that the prices shown in his/her bid are in accordance with all documents contained in this Invitation to Bid package, and that any exception taken thereto may disqualify his/her proposal.

This is to certify that I, the undersigned Bidder, have read the instructions to Bidder and agree to be bound by the provisions of the same.

This	day of		_20
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RV.			
υ1.	SIGNATURE		
	PRINTED NAME A	AND TITLE	
	TRIITED NAME A	and fille	
	COMPANY		
	ADDRESS		
	ADDRESS		
	PHONE NUMBER		

SUPPLEMENTAL CONDITIONS

PROJECT: ITB 22-25-008 - Full Depth Reclamation of Ash Roads

DESCRIPTION OF WORK:

The Effingham County roads to be reclaimed within this Project shall include the following:

- **Archer Road**, from the intersection with Highway 119 to the intersection with Brittingham Road (approximately 1.03 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- **Bird Road**, from the intersection with Ingram Road to the intersection with Corinth Church Road (approximately 1.18 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- **Bethany Road**, from the intersection with Stillwell- Clyo Road to the intersection with Union Springs Road (approximately 1.58 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- **Clark Road**, from the intersection with SR17 to the intersection with Oakwood Drive (approximately 1.03 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- **Corinth Church Road**, from the intersection with Springfield Road to the intersection with Clyo-Kildare Road (approximately 4.09 long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- **Courthouse Road**, from the intersection with SR17 to the intersection with Midland Road (approximately 1.30 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- **Floyd Avenue**, from the intersection with Honey Ridge Road to the intersection with Central Avenue (approximately 1.47 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- **Mt. Pleasant Road** (a loop road), from the 1st intersection with Old Augusta Road to the 2nd intersection with Old Augusta Road (approximately 1.66 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- Old Augusta Road (both paved and unpaved portions), from the intersection with Clyo-Kildare Road to the end of the unpaved portion (approximately 5.56 miles, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- Old Dixie Highway, from the intersection with Shawnee Road to the intersection with Wes Edwards Road (approximately 1.14 miles long, twenty- five (25) foot FDRE width, twenty- four (24) foot final road surface width).
- **Scuffletown Road**, from the intersection with Pecan Lane to the intersection with Hodgeville Road (approximately 0.90 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).
- Whitaker Road, from the intersection with Stillwell- Clyo Road to the end of the current pavement (approximately 1.06 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Generally, the Scope of Work for reclaiming the roads within this Project shall include, but not be limited to, the following elements:

- Full Depth Reclamation with Emulsion (FDRE) of the top six (6") inches of existing road surface and base material on approximately twenty- two (22) miles of prescribed project roads, in accordance with the Specifications and Mix Designs.
- Installation of one half (1/2") inch of double Bituminous Surface Treatment (BST, or commonly called "Chip Seal") on approximately sixteen and six- tenths (16.6) miles of newly reclaimed road base as specified.
- Installation of one half (1/2") inch single Bituminous Surface Treatment (BST, or commonly called "Chip Seal") and two (2") inches of Hot Mix Asphalt (HMA) on approximately five and four-tenths (5.4) miles of newly reclaimed road base as specified.
- Full Depth Reclamation with Emulsion (FDRE) of the top six (6") inches of existing road surface and base material at approximately nineteen (19) road intersections.
- Full Depth Reclamation with Emulsion (FDRE) of the top six (6") inches of existing base material at approximately four hundred two (402) driveway intersections.
- Providing, leading, and documenting PreConstruction Personnel Training (PPT).

- Providing daily Construction Materials Testing (CMT) and Quality Control (QC) sampling, testing, and documentation, in accordance with the Specifications and Mix Designs.
- Installation of new road surface transitions at existing intersecting roads.
- Installation of new center- line and road- edge striping.
- Installation of new pavement markings at stop signs.
- Installation of new stop signs and speed limit signs.
- Installation of new subsurface cross-road precast concrete pipe drainage lines, as shown.
- Removal and disposal of old subsurface cross-road pipe drainage lines.
- Installation of new subsurface cross- driveway precast concrete pipe drainage lines, as shown.
- Flushing and cleaning of existing subsurface cross-driveway pipe drainage lines (to include disposal of debris/waste material).
- Installation of new driveway transitions at existing driveways.
- Installation of new sixteen (16") inch minimum deep drainage ditches (measured from the top surface of the newly reclaimed road base, to include disposal of debris/ waste material).
- Deepening of existing drainage ditches to sixteen (16") inches minimum (measured from the top surface of the newly reclaimed road base, to include disposal of debris/ waste material).
- Mowing and clearing of existing drainage ditches (to include disposal of debris/ waste material).
- Clipping road shoulders (to include disposal of debris/ waste material).
- Seeding shoulders.
- Providing timely Neighborhood Notifications.
- Providing daily onsite Traffic and Safety Control.
- Protecting adjacent neighbor driveways, mail boxes, etc.
- Providing onsite Sanitary Facilities for Contractor Personnel.
- Providing miscellaneous services or tasks necessary to the performance of the work.

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SCOPE OF WORK

GENERAL INFORMATION:

The purpose of this solicitation is to describe the requirements for:

All tools, materials, labor, supervision, and equipment to complete construction and site work including clearing. grubbing, paving, grading, drainage, and site utilities as specified on the plans for the Full Depth Reclamation of Ash Roads in Effingham County, Georgia.

Safety:

The Contractor shall provide all necessary barricades and signage and take necessary precautions to protect buildings, general public and Contractor personnel. The Contractor shall at all times guard against damage or loss of Effingham County property or the general public and shall be held responsible for replacing or repairing any loss or damage to the satisfaction of The Effingham County Board of Commissioners.

GENERAL CONSTRUCTION GUIDELINES

- 1. The contractor shall be required to coordinate his work schedule with the A/E and County during the course of the project
- 2. Survey Construction staking and testing of materials will be the contractor's responsibility for all aspects of the work including, but not limited to, compaction, proof-rolling, asphalt mix, gradations, and concrete testing. The cost of such testing shall be included in the Contractors bid, and no additional compensation will be made.
- 3. Effingham County does not commit to furnishing full-time inspection or testing of the work in progress or at material sources. Lack of inspection and/or testing by the County or A/E will in no way relieve the Contractor of his responsibility to provide quality workmanship in accordance with the Contract Documents.
- 4. The Contractor is required to submit shop drawings and material submittals to the A/E for review and approval prior to delivery and installation.

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BID FORM

ARTICLE 1 - BID RECIPIENT

1.01 This Bid is submitted to:

Effingham County Board of Commissioners

1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

ARTICLE 2 - BIDDER'S ACKNOWLEDGEMENTS

2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

ARTICLE 3 - BIDDER'S REPRESENTATIONS

- 3.01 In submitting this Bid, Bidder represents that:
 - A. Bidder has examined and carefully studied the Bidding Documents, other related data identified in the Bidding Documents, and the following Addenda, receipt of which is hereby acknowledged:

Addendum No.	Addendum Date

- B. Bidder has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Bidder is familiar with and is satisfied as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has considered the information known to Bidder; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; and the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder, including applying the specific means, methods, techniques, sequences, and procedures of construction expressly required by the Bidding Documents; and (3) Bidder's safety precautions and programs.
- E. Based on the information and observations referred to in Paragraph 3.01.D above, Bidder does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price(s) bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.

- F. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- G. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and the written resolution thereof by Engineer is acceptable to Bidder.
- H. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance of the Work for which this Bid is submitted.

ARTICLE 4 - BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

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ARTICLE 5 – CONTRACT PRICE

5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 5.01.A, below:

For all Unit Price Work, an amount equal to the sum of the established unit price for each separately identified item of Unit Price Work times the actual quantity of that item:

BASELINE SCOPE BID						
ITEM NO.	GDOT Ref. No.	ITEM DESCRIPTION	TOTAL QTY	UNIT	UNIT PRICE	PRICE
1		Submittals	1	LS		
2		PreConstruction Personnel Training (PPT)	1	LS		
3	150	Traffic and Safety Control	1	LS		
4	151	Mobilization and Demobilization	1	LS		
5	550	24" RCP Cross Drain (LF)	1,611	LF		
6	550	18" RCP Driveway drain (LF)	3,392	LF		
7		6" FDR Treatment Mix 1	174,226	SY		
8		FDR Emulsion Mix 1 (3.4 gal/SY)	604,215	GAL		
9		6" FDR Treatment Mix 2	50,910	SY		
10		FDR Emulsion Mix 2 (3.7 gal/SY)	192,134	GAL		
11		6" FDR Treatment Mix 3	53,198	SY		
12		FDR Emulsion Mix 3 (4.3 gal/SY)	233,325	GAL		
13		Construction Material Testing (CMT) and Quality Control (QC)	1	LS		
1.4	424	Single Surface Treatment (Chip Seal), stone size #7 (crack relief interlayer) on Corinth Church	64.140	cv		
14	424	Road and Courthouse Road only 2" Asphalt Surface Course 12.5 mm Superpave on Corinth Church Dead and Courthouse Boad only	64,149	SY		
15	402	Road and Courthouse Road only Double Surface Treatment w/ #7, 89 and sand seal (Chip Seal) on all	7,056	TN		
16	424	other Roads	201,243	SY		

ITB 22-25-008 - Full Depth Reclamation of Ash Roads

		Cut New Ditch (to include hauling			
17	205	and removal of waste)	633	CY	
		Deepen Existing Ditch (to include			
18	205	hauling and removal of waste)	226	CY	
19	205	Clear/Mow Ditches	1	LS	
20	201	Tree/stump Removal	29	EA	
	201				
21	201	Shoulder Clipping and Grading	26	AC	
	650	5" Solid Traffic Stripe- Yellow	445450		
22	652	(High Build)	116,472	LF	
	650	5" Solid Traffic Stripe- White (High	222 0 4 4		
23	652	Build)	232,944	LF	
	650	5" Skip Traffic Stripe- Yellow (High	445450	GY 77	
24	652	Build)	116,472	GLF	
25	652	24" Stop Bar (High Build)	21	EA	
23	032	• • • • • • • • • • • • • • • • • • • •	21	EA	
26	706	Turf Establishment	32	AC	
	, , , ,	- G		110	
27	163	Temporary Grassing	32	AC	
		Ston Sign to include nost			
28	R1-1	Stop Sign to include post	21	EA	
29	R2-1	Speed Limit Sign to include post	28	EA	
20		Conitomy Facilities	1	1.0	
30		Sanitary Facilities	1	LS	
31	205	Removal of Unsuitable Subgrade	500	CY	
31	203	removal of Chautable Buograde	500	C1	
32	303	Imported Structural Fill	500	CY	
		<u> </u>		1	
33		Flush Driveway Pipes	212	EA	
34		Property Protection	1	LS	

Baseline Scope Bid TOTAL:

Estimated quantities provided by the Owner for bidding purposes are not guaranteed, and payment for Unit Price elements will be based upon the agreed- upon Unit Price times the documented and verified quantities actually provided. Unit Price shall be used as the basis for calculating the value of additive or deductive changes in Scope. Unit Price shall include, but not be limited to, Labor (Salaried and Hourly, Field and Office), Benefits, Materials, Tools, Equipment, Travel Expense, Material and Equipment Delivery, Construction Materials Testing, Permits, Insurance, Taxes (other than Sales Tax), Bonds, Field Overhead, Office Overhead, and Profit. Unit Price shall exclude the cost of Sales Tax, as this Project is Sales Tax exempt.

	ALTERNATE SCOPE BID					
ITEM NO.	GDOT Ref. No.	ITEM DESCRIPTION	TOTAL QTY	UNIT	UNIT PRICE	PRICE
1		Submittals	1	LS		
2		PreConstruction Personnel Training (PPT)	1	LS		
3	150	Traffic and Safety Control	1	LS		
4	151	Mobilization and Demobilization	1	LS		
5	550	24" RCP Cross Drain (LF)	1,611	LF		
6	550	18" RCP Driveway drain (LF)	3,392	LF		
7		6" FDR Treatment Mix 1	174,226	SY		
8		FDR Emulsion Mix 1 (3.4 gal/SY)	604,215	GAL		
9		6" FDR Treatment Mix 2	50,910	SY		
10		FDR Emulsion Mix 2 (3.7 gal/SY)	192,134	GAL		
11		6" FDR Treatment Mix 3	53,198	SY		
12		FDR Emulsion Mix 3 (4.3 gal/SY)	233,325	GAL		
13		Construction Material Testing (CMT) and Quality Control (QC)	1	LS		
14	424	Single Surface Treatment (Chip Seal), stone size #7 (crack relief interlayer) on All Roads	265,392	SY		
15	402	2" Asphalt Surface Course 12.5 mm Superpave on All Roads	29,193	TN		
		Double Surface Treatment w/ #7,				
16	424	The state of the s	DELETE	SY	N/A	N/A
17	205	Cut New Ditch (to include hauling and removal of waste)	633	CY		
18	205	Deepen Existing Ditch (to include hauling and removal of waste)	226	CY		
19	205	Clear/Mow Ditches	1	LS		
20	201	Tree/stump Removal	29	EA		
21	201	Shoulder Clipping and Grading	26	AC		
22	652	5" Solid Traffic Stripe- Yellow (High Build)	116,472	LF		
23	652	5" Solid Traffic Stripe- White (High Build)	232,944	LF		

ITB 22-25-008 - Full Depth Reclamation of Ash Roads

		5" Skip Traffic Stripe- Yellow (High			
24	652	Build)	116,472	GLF	
25	652	24" Stop Bar (High Build)	21	EA	
26	706	Turf Establishment	32	AC	
27	163	Temporary Grassing	32	AC	
28	R1-1	Stop Sign to include post	21	EA	
29	R2-1	Speed Limit Sign to include post	28	EA	
30		Sanitary Facilities	1	LS	
31	205	Removal of Unsuitable Subgrade	500	CY	
32	303	Imported Structural Fill	500	CY	
33		Flush Driveway Pipes	212	EA	
34		Property Protection	1	LS	

Alternate Scope Bid TOTAL:	
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Estimated quantities provided by the Owner for bidding purposes are not guaranteed, and payment for Unit Price elements will be based upon the agreed- upon Unit Price times the documented and verified quantities actually provided. Unit Price shall be used as the basis for calculating the value of additive or deductive changes in Scope. Unit Price shall include, but not be limited to, Labor (Salaried and Hourly, Field and Office), Benefits, Materials, Tools, Equipment, Travel Expense, Material and Equipment Delivery, Construction Materials Testing, Permits, Insurance, Taxes (other than Sales Tax), Bonds, Field Overhead, Office Overhead, and Profit. Unit Price shall exclude the cost of Sales Tax, as this Project is Sales Tax exempt.

THIS SECTION INTENTIONALLY LEFT BLANK

ARTICLE 6 - TIME OF COMPLETION

- Bidder agrees to engage immediately upon receipt of the Notice to Proceed, to submit the specified Submittals within seven (7) calendar days of NTP receipt, to conduct the preconstruction Personnel Training (PPT) within fourteen (14) calendar days of NTP receipt, to commence physical work on the first road within twenty- one (21) calendar days of NTP receipt, and to complete the work within one hundred fifty- two (152) calendar days of NTP receipt.
- 6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

ARTIC	CLE 7 - ATTACHMENTS TO THIS BID
7.01	The following documents are submitted with and made a condition of this Bid:
	A. Required Bid security in the form of;
	B . Evidence of authority to do business in the state of the Project;
	C. Drug Free Workplace Certification (Attachment A);
	D . Promise of Non Discrimination Statement (Attachment B);
	E. Disclosure of Responsibility Statement - Bidders Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion (Attachment C);
	F. Non Collusion Affidavit - (Attachment D);
	G. Contractor Affidavit and Agreement (E-VERIFY) (Attachment E);
	H . Subcontractor Affidavit if applicable (E-VERIFY) (Attachment F);
	I. List of Proposed Subcontractors (Attachment H);
ARTIC	CLE 8 - DEFINED TERMS
8.01	The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.
ARTIC	CLE 9 - BID SUBMITTAL
9.01	This Bid is submitted by:
	If Bidder is:
	An Individual
	Name (typed or printed):
	By:
	By: (Individual's signature)
	Doing business as:

ITB 22-25-008 - Full Depth Reclamation of Ash Roads

A Partnership Partnership Name: By: (Signature of general partner -- attach evidence of authority to sign) Name (typed or printed): A Corporation Corporation Name: _____ (SEAL) State of Incorporation: Type (General Business, Professional, Service, Limited Liability):_____ (Signature -- attach evidence of authority to sign) Name (typed or printed): Title: _____ (CORPORATE SEAL) Date of Qualification to do business in Georgia is ____/____. A Joint Venture Name of Joint Venture: First Joint Venturer Name: (SEAL) (Signature of first joint venture partner -- attach evidence of authority to sign) Name (typed or printed): Title: Second Joint Venturer Name: ______(SEAL) (Signature of second joint venture partner -- attach evidence of authority to sign) Name (typed or printed):

ITB 22-25-008 - Full Depth Reclamation of Ash Roads

Title:	
(Each joint venturer must sign. The manner o corporation that is a party to the joint venture	of signing for each individual, partnership, and should be in the manner indicated above.)
Bidder's Business Address	
Phone No	Fax No
E-mail	
SUBMITTED on,	, 20
State Contractor License No.	

THIS SECTION INTENTIONALLY LEFT BLANK

BID BOND

KNOW ALL MEN BY THESE PRESE	ENTS THAT WE	[Insert contractor's
name], as Principal, hereinafter called	the Principal, and (Surety)	a corporation duly
organized under the laws of the State of _	as Surety, he	ereinafter called the Surety, and
held and firmly bound unto		
Effingham County Board	of Commissioners	
804 S. Laurel Street,	or commissioners	
Springfield, Georgia 3132	29	
as Obligee, hereinafter called Oblige	ee, in the sum of	Dollars
(\$), or percent (5 %) of the		
well and truly to be made, the said Prince	_	
administrators, successors and assigns, jo	ointly and severally, firmly by the	ese presents.
WHEREAS, the Principal has submitted	a bid for:	
ITB 22-25-008 - Full Depth Reclamation of	of Ash Roads	
NOW, THEREFORE, if the Obligee shall	l accept the bid of the Principal a	and the Principal shall enter into
a Contract with the Obligee in accordance	e with the terms of such bid and g	give such bonds or bond as may
be specified in the bidding or Contract	_	
performance of such Contract and for		
prosecution thereof, or in the event of the	•	· ·
bond or bonds, if the Principal shall pay between the amount specified in said bid	_	
contract with another party to perform the	_	
and void, otherwise to remain in full force	· · · · · · · · · · · · · · · · · · ·	C
Circulard Code Iddia	20	
Signed and Sealed this day of	, 20	
(Principal)		
By:		
(Witness) (Title)		

AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT

THIS AGREEMENT is by and between Effingham County Boar	ard of Commissioners ("Owner") and
	("Contractor").

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

Full Depth Reclamation with Emulsion (FDRE) of the top six (6") inches of existing road surface and base material on approximately twenty- two (22) miles of prescribed project roads in Effingham County, Georgia, and related driving surface, signage, and drainage improvements.

The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows: ITB 22-25-008 - Full Depth Reclamation of Ash Roads

ARTICLE 2 – OWNER'S REPRESENTATIVES

- 2.01 The Effingham County Contract Technical Representative and Project Manager for this Project shall be Roberts Civil Engineering (RCE). Following the issuance of the Notice to Proceed, RCE will be the main point of contact for the Contractor, and shall advise the County Contract Administrator on issues related to the performance of the Contractor's work. The RCE Project Manager for this Project shall be Mr. Rip Graham.
- 2.02 The Effingham County Contract Administrator for this Project shall be Mr. Eric Larson. Mr. Larson will act on behalf of the Effingham County Board of Commissioners.

ARTICLE 3 – CONTRACT TIMES

3.01 Time of the Essence

All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

- 3.02 Contractor shall engage immediately upon receipt of the NTP, to submit the specified Submittals within seven (7) calendar days of NTP receipt, to conduct the PreConstruction Personnel Training (PPT) within fourteen (14) calendar days of NTP receipt, to commence physical work on the first road within twenty- one (21) calendar days of NTP receipt, and to complete the work within one hundred fifty- two (152) calendar days of NTP receipt.
- 3.03 The Work will be completed no later than: To be determined.

ARTICLE 4 – LIQUIDATED DAMAGES

4.01 Contractor and Owner recognize that time is of the essence as stated in Paragraph 3.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 3.02 above, plus any extensions thereof allowed. The parties also recognize the delays, expense, and difficulties involved in proving in a legal or arbitration preceding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$500 for each day that expires after the time specified in Paragraph 4.02 above for Completion until the Work is complete.

ARTICLE 5 – CONTRACT PRICE

Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 5.01.A, below:

	BASELINE SCOPE BID					
ITEM NO.	GDOT Ref. No.	ITEM DESCRIPTION	TOTAL QTY	UNIT	UNIT PRICE	PRICE
1		Submittals	1	LS		
2		PreConstruction Personnel Training (PPT)	1	LS		
3	150	Traffic and Safety Control	1	LS		
4	151	Mobilization and Demobilization	1	LS		
5	550	24" RCP Cross Drain (LF)	1,611	LF		
6	550	18" RCP Driveway drain (LF)	3,392	LF		
7		6" FDR Treatment Mix 1	174,226	SY		
8		FDR Emulsion Mix 1 (3.4 gal/SY)	604,215	GAL		
9		6" FDR Treatment Mix 2	50,910	SY		
10		FDR Emulsion Mix 2 (3.7 gal/SY)	192,134	GAL		
11		6" FDR Treatment Mix 3	53,198	SY		
12		FDR Emulsion Mix 3 (4.3 gal/SY)	233,325	GAL		
13		Construction Material Testing (CMT) and Quality Control (QC)	1	LS		

ITB 22-25-008 - Full Depth Reclamation of Ash Roads

		Circle Carefo on Treatment (Chir	1		
		Single Surface Treatment (Chip Seal), stone size #7 (crack relief			
		interlayer) on Corinth Church			
14	424		64,149	SY	
14	727	2" Asphalt Surface Course 12.5	04,149	31	
		mm Superpave on Corinth Church			
15	402	Road and Courthouse Road only	7,056	TN	
13	702	Double Surface Treatment w/ #7,	7,030	111	
		89 and sand seal (Chip Seal) on all			
16	424	other Roads	201,243	SY	
10	121		201,243	51	
1.7	205	Cut New Ditch (to include hauling	622	CV	
17	205	and removal of waste)	633	CY	
		Deepen Existing Ditch (to include			
18	205	hauling and removal of waste)	226	CY	
10	205	Clear/Mary Ditalas	1		
19	205	Clear/Mow Ditches	1	LS	
20	201	Tree/stump Removal	29	EA	
20	201	1100/Stump Removal	2)	LA	
21	201	Shoulder Clipping and Grading	26	AC	
		5" Solid Traffic Stripe- Yellow (High			
22	652	Build)	116,472	LF	
		5" Solid Traffic Stripe- White (High	,		
23	652	Build)	232,944	LF	
		5" Skip Traffic Stripe- Yellow (High			
24	652	Build)	116,472	GLF	
25	652	24" Stop Bar (High Build)	21	EA	
2.5	706	Turf Establishment	22		
26	706		32	AC	
27	163	Temporary Grassing	32	AC	
21	103		34	AC	
28	R1-1	Stop Sign to include post	21	EA	
29	R2-1	Speed Limit Sign to include post	28	EA	
30		Sanitary Facilities	1	LS	
21	205	D 1 - 6 I I	500		
31	205	Removal of Unsuitable Subgrade	500	CY	
32	303	Imported Structural Fill	500	CY	
32	303	Imported Structural I III	300		
33		Flush Driveway Pipes	212	EA	
		• •			
34		Property Protection	1	LS	

Baseline Scope Bid TOTAL:	
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Estimated quantities provided by the Owner for bidding purposes are not guaranteed, and payment for Unit Price elements will be based upon the agreed- upon Unit Price times the documented and verified quantities actually provided. Unit Price shall be used as the basis for calculating the value of additive or deductive changes in Scope. Unit Price shall include, but not be limited to, Labor (Salaried and Hourly, Field and Office), Benefits, Materials, Tools, Equipment, Travel Expense, Material and Equipment Delivery, Construction Materials Testing, Permits, Insurance, Taxes (other than Sales Tax), Bonds, Field Overhead, Office Overhead, and Profit. Unit Price shall exclude the cost of Sales Tax, as this Project is Sales Tax exempt.

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ARTICLE 6 – PAYMENT PROCEDURES

- 6.01 Submittal and Processing of Payments
 - A. Contractor shall submit Applications for Payment in accordance with Section 1.30 of the General Conditions. Applications for Payment will be processed by A/E as provided in the General Conditions.
- 6.02 Progress Payments; Retainage
 - A. Owner shall make progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment on or about the <u>25th</u> day of each month during performance of the Work as provided in Paragraph 6.02.A.1 below as long as the pay request is received by the <u>1st</u> of the month. All such payments will be measured based on the number of units completed times the unit price of each completed unit.
 - 1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as A/E may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 4.01 above.
 - a. <u>90</u> percent of Work completed (with the balance being retainage). Until 50% of the value of the contract (including change orders and additions), or if the Contractor fails to maintain his construction schedule to the satisfaction of the A/E, the County will retain 10% of the gross value of the completed work as indicated by the current estimate approved by the A/E. After the contract (including change orders and additions) is 50% complete, there shall be no additional retainage withheld unless the work is determined to be unsatisfactory or has fallen behind schedule; and
 - b. <u>90</u> percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
 - B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to <u>100</u> percent of the Work completed, less such amounts as Engineer shall determine and less <u>150</u> percent of A/E's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected.
- 6.03 Final Payment
 - A. Upon final completion and acceptance of the Work, Owner shall pay the remainder of the Contract Price as recommended by A/E.

ARTICLE 7 – INTEREST

7.01 All moneys not paid when due as provided in Section 1.30 of The General Conditions and Paragraph 6.02 above, shall bear interest at the rate of **1** percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:
 - A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
 - B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
 - C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
 - D. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Contractor's safety precautions and programs. Based on the information and observations referred to in Paragraph 8.01.D above, Contractor does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
 - E. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
 - F. Contractor has given A/E written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by A/E is acceptable to Contractor.
 - G. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 9 – COUNTY'S RIGHT TO SUSPEND OR TERMINATE WORK

A. Termination for Convenience. County may, for its own convenience and at its sole option, without cause and without prejudice to any other right or remedy of County, elect to terminate the Contract by delivering to the Contractor, at the address listed for giving notices in this Contract, a written notice of termination specifying the effective date of termination. Such notice shall be delivered to Contractor at least seven (7) days prior to the effective date of termination.

- B. Termination for Default. If the Contractor is adjudged 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 fails to supply sufficient skilled workers or suitable materials or equipment, make payments to Subcontractors or for labor, materials or equipment, or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction of the Work, or if he otherwise violates any provision of the Contract, then the County may, without prejudice to any other right or remedy, and after giving the Contractor and his surety a maximum of seven (7) days from delivery of a written notice, declare the Contract in default and terminate this Contract. In that event, the County may take possession of the Project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor. The County may cause the Work to be completed and corrected by whatever method it deems expedient. If called upon by the County to finish the Work, the Contractor's surety shall promptly do so. In any case, the Contractor and its surety shall be liable to the County for any and all damages and costs incurred by the County as a result of any default by the Contractor, including without limitation all costs of completion or correction of the Work, liquidated damages, attorneys' fees, expert fees, and other costs of dispute resolution. Termination of this Contract pursuant to this paragraph may result in disqualification of the Contractor from bidding on future County contracts for a period of time not to exceed five (5) years.
- C. If Contractor's services are terminated by the County pursuant to paragraph A or B above, the termination will not affect any rights or remedies of the County then existing or which may thereafter accrue against Contractor or its surety. Any retention or payment of moneys due Contractor by County will not release Contractor from liability. If it is determined that the Contractor was not in default or that the failure to perform is excusable, a termination for default will be considered to have been a termination for the convenience of the County, and the rights and obligations of the parties shall be governed accordingly.
- D. In case of termination of this Contract before completion of the Work, Contractor will be paid only for materials and equipment accepted by the County and the portion of the Work satisfactorily performed through the effective date of termination as determined by the County.
- E. Except as otherwise provided in this Contract, neither party shall be entitled to recover lost profits, special, consequential or punitive damages, attorney's fees or costs from the other party to this Contract for any reason whatsoever.
- F. The parties' obligations pursuant to this Contract shall survive any Acceptance of Work, or expiration or termination of this Contract.

ARTICLE 10 – INDEMNIFICATION

The CONTRACTOR agrees to protect, defend, indemnify, and hold harmless the County, its commissioners, officers, agents, and employees from and against any and all liability, damages, claims, suits, liens, and judgments, of whatever nature, including claims for contribution and/or

indemnification, for injuries to or death of any person or persons, or damage to the property or other rights of any person or persons caused by the negligence of the CONTRACTOR or its subcontractors.

The CONTRACTOR'S obligation to protect, defend, indemnify, and hold harmless, as set forth herein above shall include, but not be limited to, any matter arising out of any actual or alleged infringement of any patent, trademark, copyright, or service mark, or any actual or alleged unfair competition, disparagement of product or service, or other business tort of any type whatsoever, or any actual or alleged violation of trade regulations.

CONTRACTOR further agrees to investigate, handle, respond to, provide defense for, and to protect, defend, indemnify, and hold harmless County, at its sole expense, and agrees to bear all other costs and expenses related thereto, even if such claims, suits, etc., are groundless, false, or fraudulent, including any and all claims or liability for compensation under the Worker's Compensation Act arising out of injuries sustained by any employee of the CONTRACTOR or his subcontractors or anyone directly or indirectly employed by any of them.

The CONTRACTOR'S obligation to indemnify the County under this Section shall not be limited in any way by the agreed-upon contract price, or to the scope and amount of coverage provided by any insurance maintained by the CONTRACTOR.

ARTICLE 11 – INDEPENDENT CONTRACTOR

Contractor hereby covenants and declares that it is an independent business and agrees to perform the Work as an independent contractor and not as the agent or employee of the County. The Contractor agrees to be solely responsible for its own matters relating to the time and place the services are performed; the instrumentalities, tools, supplies, and/or materials necessary to complete the Work; hiring of consultants, agents, or employees to complete the Work; and the payment of employees, including compliance with Social Security, withholding, and all other regulations governing such matters. The Contractor agrees to be solely responsible for its own acts and those of its subordinates and subcontractors during the life of this Contract. Any provisions of this Contract that may appear to give the County the right to direct Contractor as to the details of the services to be performed by Contractor or to exercise control over such services will be deemed to mean that Contractor shall follow the directions of the County with regard to the results of such services.

ARTICLE 12 – CONTRACT DOCUMENTS

12.01 Contents

- A. The Contract Documents consist of the following:
 - 1. This Agreement (pages 1 to 11, inclusive).
 - 2. General Conditions (pages 1 to 7, inclusive).
 - 3. Supplemental Conditions (pages 1 to 2 inclusive).
 - 4. Specifications as listed in the table of contents of the Project Manual.
 - 5. Addenda (numbers _____ to ____, inclusive).

ITB 22-25-008 - Full Depth Reclamation of Ash Roads

6. Exhibits to this Agreement (enumerated as follows):

a. Contractor's Bid (pages_1_to 9 inclusive).

		 b. Documentation submitted by Contractor prior to Notice of Award (pages to, inclusive).
		7. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
		a. Notice to Proceed (pages <u>1</u> to <u>1</u> , inclusive).
		b. Work Change Directives.
		c. Change Orders.
	В.	The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
	C.	There are no Contract Documents other than those listed above in this Article 9.
	D.	The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
	E.	The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:
		A Field Order;
		1. A/E's approval of a Shop Drawing or Sample; or
		2. A/E's written interpretation or clarification.
ARTI	CLI	E 13 – MISCELLANEOUS
13.01	Te	rms
	A.	Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.
13.02	Ass	signment of Contract

A. No assignment by a party hereto of any rights under or interests in the Contract will be binding on another party hereto without the written consent of the party sought to be bound; and, specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

13.03 Successors and Assigns

A. County and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

13.04 Severability

A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon County and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

13.05 Contractor's Certifications

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of County, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive County of the benefits of free and open competition;
 - 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of County, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 - 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

ITB 22-25-008 - Full Depth Reclamation of Ash Roads

IN WITNESS WHEREOF, County and Contractor have signed this Agreement. Counterparts have been delivered to County and Contractor. All portions of the Contract Documents have been signed or have been identified by County and Contractor or on their behalf.

This Agreement will be effective on	(which is the Effective Date of the Agreement		
COUNTY:	CONTRACTOR:		
Effingham County Board of Commissioners			
By:	By:		
Title: Chairman	Title:		
	(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)		
Attest:	Attest:		
Title: County Clerk	Title:		
Address for giving notices:	Address for giving notices:		
804 S. Laurel Street			
Springfield, GA 31329			

NOTICE TO PROCEED

TO:

RE: NOTICE TO PROCEED – CONS	TRUCTION		
ITB 22-25-008 - I	Full Depth Rec	lamation of Ash R	oads
Please consider this your NOTICE TO accordance with the terms of the contract NTP, to submit the specified Submittals the PreConstruction Personnel Training to commence physical work on the first and to complete the work within one hus to complete the work by this time/date was "liquated" damages in an amount extensions shall be documented and management of the contract of the co	ct, Contractor s within seven g (PPT) within road within two ndred fifty-twwill result in dequal to \$50	shall engage imme (7) calendar days a fourteen (14) cale venty- one (21) cale to (152) calendar deductions from the 0.00 per calendar	ediately upon receipt of the of NTP receipt, to conduct endar days of NTP receipt, lendar days of NTP receipt, ays of NTP receipt. Failure e monies due the contractor day. Requests for time
D	ated this	day of	, 2022
E	ffingham Coun	ty Board of Commi	ssioners
W	Vesley Corbitt, (Chairman	
ACCEPTANCE OF NOTICE:			
Receipt of the above Notice to Proceed is a	acknowledged.		
Contractor:			
Ву:			
Title:			
Date of Acceptance:			



Specification for Full Depth Reclamation using Asphalt Emulsion (FDRE) Effingham County, Georgia

1. General

The Effingham County roads to be reclaimed within this Project shall include the following:

Archer Road, from the intersection with Highway 119 to the intersection with Brittingham Road (approximately 1.03 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Bird Road, from the intersection with Ingram Road to the intersection with Corinth Church Road (approximately 1.18 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Bethany Road, from the intersection with Stillwell- Clyo Road to the intersection with Union Springs Road (approximately 1.58 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Clark Road, from the intersection with SR17 to the intersection with Oakwood Drive (approximately 1.03 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Corinth Church Road, from the intersection with Springfield Road to the intersection with Clyo-Kildare Road (approximately 4.09 long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Courthouse Road, from the intersection with SR17 to the intersection with Midland Road (approximately 1.30 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Floyd Avenue, from the intersection with Honey Ridge Road to the intersection with Central Avenue (approximately 1.47 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Mt. Pleasant Road (a loop road), from the 1st intersection with Old Augusta Road to the 2nd intersection with Old Augusta Road (approximately 1.66 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Old Augusta Road (both paved and unpaved portions), from the intersection with Clyo- Kildare Road to the end of the unpaved portion (approximately 5.56 miles, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Old Dixie Highway, from the intersection with Shawnee Road to the intersection with Wes Edwards Road (approximately 1.14 miles long, twenty- five (25) foot FDRE width, twenty- four (24) foot final road surface width).

Scuffletown Road, from the intersection with Pecan Lane to the intersection with Hodgeville Road (approximately 0.90 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Whitaker Road, from the intersection with Stillwell-Clyo Road to the end of the current pavement (approximately 1.06 miles long, twenty- one (21) foot FDRE width, twenty (20) foot final road surface width).

Full Depth Reclamation (FDRE) shall consist of pre- pulverizing the existing asphalt pavement and underlying Fly Ash or sand/ soil base materials to the length, depth, and width specified, and blending with an emulsified asphalt stabilizing agent and water as required by the Mix Designs, to produce a flexible, bituminous stabilized base for new paved asphalt and/ or chip- sealed driving surfaces. The stabilized FDRE base must be paved and/ or chip- sealed within fourteen (14) calendar days of reclamation of each road.

The existing flexible pavement and base material shall be pre- pulverized and blended to a total depth of six (6) inches in accordance with the Mix Designs. The pulverized section shall then be re- graded, with excess material hauled away and disposed of as necessary, so as to allow for the later placement of between one half (1/2") inches and two and one half (2.5") inches of new pavement material.

Roberts Civil Engineering consultants Paragon Technical Services and Whitaker Labs have prepared and certified three (3) FDRE Mix Designs for this Project, and these are attached to this Specification. Mix Design #1 is intended for reclaiming residential and/ or rural Archer Road, Bird Road, Bethany Road, Clark Road, Courthouse Road, Floyd Road, Mt. Pleasant Road, the paved portion of Old Augusta Road, Old Dixie Highway, Scuffletown Road, and Whitaker Road. Mix Design #2 is intended for reclaiming the more heavily traveled Corinth Church Road. Mix Design #3 in intended for reclaiming the unpaved sand/ soil road portion of Old Augusta Road.

Within fourteen (14) calendar days following reclamation, the baseline driving surface scope for the more heavily traveled Corinth Church Road and Courthouse Road will place a new driving surface consisting of a single one half (1/2") inch of chip- seal leveling and two (2") inches of hot mixed asphalt in accordance with GDOT Design Number 424 and 402, respectively.

Within fourteen (14) calendar days following reclamation, the baseline driving surface scope for all other roads in this Project (other than Corinth Church Road and Courthouse Road) will place a one half (1/2") inch double chip- seal driving surface in accordance with GDOT Design Number 424.

The Owner wishes to consider a separate Alternate Scope Bid to the baseline scope for all of the Project roads to substitute a new driving surface consisting of a single one half (1/2") inch of chip-seal leveling and two (2") inches of hot mixed asphalt in accordance with GDOT Design Number 424 and 402, respectively.

2. PreConstruction Product and Procedure Submittals

Within seven (7) calendar days of receipt of the Notice to Proceed and prior to the PreConstruction Personnel Training (PPT), the Contractor will submit documentation of his proposed equipment, materials, and processes for review by the Owner's Representatives. The Owner's Representatives will generally review the Contractors submittals for conformance with the Specifications and Mix Designs.

1. Equipment Submittals

Contractor shall submit Manufacturer's Information for each major piece of proposed Equipment, demonstrating conformance with the Specifications. Contractor shall submit current Calibration documentation for the reclaimer/ mixer fluid injection system.

2. Asphalt Emulsion Submittals

Contractor shall submit Manufacturer's Product Information, demonstrating conformance with the Specifications and Mix Designs.

3. FDRE and Paving Construction Process Submittals

Contractor will submit a description of his proposed processes, means, and methods. Submittals shall include descriptions for his proposed FDRE and Paving construction, quality control plan, safety plan, and traffic control plan. The Contractor will generate a traffic control plan that safely maintains single lane traffic access during his FDRE and Paving construction on each road, and outlines how the Contractor will provide timely neighborhood notifications intended to minimize neighborhood inconvenience.

4. Paving Firm Submittals

Contractor will submit the qualifications of his proposed Paving Subcontractor (if not self-performed by the Contractor), including Resumes and qualifications for key staff.

5. Construction Materials Testing and Inspection Firm Submittals

Contractor will submit the qualifications of his proposed independent CMTI Firm, including Resumes and qualifications for key CMTI staff.

3. PreConstruction Personnel Training

Within fourteen (14) calendar days of receipt of the Notice to Proceed, personnel involved with the Construction and Construction Materials Testing and Inspection of the FDRE from both the Contractor and the Owner's Representatives shall have successfully completed PreConstruction Personnel Training (PPT) to ensure that proper quality procedures are followed to construct a high quality FDRE stabilized base. The PPT shall be conducted at a location convenient for the Contractor and the Owner's Representatives. The PPT shall be completed not more than ten (10) days, not including Weekends and Holidays, prior to the start of the FDRE operation. The PPT Trainer shall be provided by the Contractor. The PPT Trainer shall be experienced in FDRE construction methods, materials, and test methods. The Contractor and the Owner's Representatives shall mutually agree to the PPT Trainer, course content, and course location.

4. Materials

The bituminous stabilized FDRE base shall consist of a homogeneous six (6") inch deep blend of reclaimed existing asphalt pavement (RAP) and base material (Fly Ash, or sand/ soil), and added emulsified asphalt stabilizing agent and water. The blend of materials and their respective usage rates shall be in accordance with the Mix Designs.

1. Reclaimed Asphalt Paving Material

RAP shall be free of trash or similar materials that are incompatible with the Mix Designs.

2. Reclaimed Base Material

The existing Base Material beneath most of the Effingham County project roads is compacted Fly Ash. Alternatively, on one four (4+) mile portion of one project road (Old Augusta Road) the existing Base Material is loosely compacted sand/soil.

3. Asphalt Emulsion

Provide an emulsion that meets the requirements of Table 1. Ergon Asphalt & Emulsions, Inc. engineered emulsion FDR- EE has been used as the basis of the Mix Designs for this Project.

Table 1
Emulsified Asphalt Properties

Test	Method	Min	Max
Residue from distillation, %	AASHTO T 59	60	-
Oil distillate by distillation, %	AASHTO T 59	-	0.5
Sieve Test, %	AASHTO T 59	-	0.1
Penetration, 25°C, dmm	AASHTO T 49	40	90

4. Water

Furnish water free from deleterious concentrations of oils, acids, alkalis, salts, sugars, vegetation, or similar substances. If the water is of questionable quality, it shall be tested in accordance with ASTM C1602.

5. SubGrade Base Material

The existing SubGrade Base Material beneath most of the Effingham County project roads is compacted Fly Ash, observed at depths between eight (8") and twelve (12") below the current road surface, with loosely compacted sand below. Alternatively, on one four (4+) mile portion of one project road (Old Augusta Road) the existing SubGrade Base Material is loosely compacted sand/ soil. The existing deeper SubGrade Base Material shall remain in place.

5. Equipment

The FDRE Equipment shall be capable of pulverizing the existing asphalt pavement and underlying base materials, and for blending/ mixing the pulverized materials with asphalt emulsion stabilizing agent and water into a homogeneous and uniformly blended mixture. The FDRE Equipment shall be capable of placing the FDRE stabilized base to the same lines and grades as the original road edges and driving surface.

1. Reclaiming/ Mixing Equipment

Only self- propelled, high- powered, minimum four hundred (400) HP, rotary reclaimers/ mixers capable of pulverizing and blending/ mixing in- place to at least a width of eight (8') feet and a depth of twelve (12") inches in each pass shall be used. The cutting drum shall fitted with cutting teeth designed to be accurately adjusted vertically and held in place. The reclaimer/ mixer shall not weigh less than twenty- five thousand (25,000#) pounds, and shall be of sufficient strength and rigidity to maintain a center deflection of no more than one eighth (1/8") inch deflection. The reclaimer/ mixer shall be fitted with an integrated additive injection system capable of introducing water and asphalt emulsion stabilizing agent into the cutting drum during the pulverizing and blending/ mixing process. This injection system shall have the capacity to inject up to seven (7) gallons of asphalt per one (1SY) square yard of FDRE. This injection system shall have individual valves on the spray bar that can be turned off as necessary to minimize emulsion overlap on subsequent passes. This injection system

shall contain a metering device capable of automatically adjusting the flow of emulsion to compensate for any variation in the reclaimer/ mixer speed and/ or in the amount of reclaimed material introduced into the blending/ mixing chamber. The injection rate of the asphalt emulsion shall be calculated on a volumetric basis tied to a foot per minute gauge using a calibrated meter that is capable of accurately measuring the amount of asphalt emulsion to within two (2.0%) per cent of the rate specified in the Mix Designs. Automatic digital readings shall be displayed for both the emulsion flow rate and total amount of reclaimed material and asphalt emulsion in appropriate units of weight and time.

2. Motor Grader

A motor grader for pre- shaping, aerating, spreading, and final shaping of the FDRE material shall be provided. The motor grader shall have cross- slope indicator.

3. Rollers

Compacting of the reclaimed and blended FDRE material shall be completed using self-propelled rollers, complete with properly operating scrapers and water spray systems. The number, weight, and type of rollers be as necessary to obtain the required compaction throughout the entire FDRE thickness. A ten (10) ton minimum pneumatic roller, a twenty (20) ton minimum vibratory padfoot roller with an eighty-four (84") inch wide drum equipped with a knock- down blade, and a twenty (20) ton minimum single or double drum vibratory steel roller may be used in any combination to achieve the required density.

4. Water Truck

Water trucks for supplying water to the reclaimer/ mixer, to the FDRE for additional moisture, and for curing the FDRE shall be provided. Water trucks shall be capable of providing a controlled and consistent spray with out eroding or otherwise damaging the compacted FDRE base.

6. FDRE Construction

At the start of FDRE construction, key employees of the Contractor and Owner's Representatives will submit documentation of PreConstruction Personnel Training (PPT).

1. Cross- Road and Cross- Driveway Drainage

Within twenty- one (21) calendar days of receipt of the Notice to Proceed, the Contractor will commence preparatory drainage improvement work on the first road to be reclaimed. As located in the Documents, added new and replacement cross- road and cross- driveway drainage pipes shall be installed, backfilled, and compacted before the roadways are prepared for the FDRE stabilization process.

2. Weather Limitations on FDRE Construction

FDRE construction shall not be conducted when the Base or SubGrade is frozen, or when the ambient temperature is below forty- five (45) degrees Fahrenheit, or when freezing temperatures are predicted within seven (7) days of FDRE placement. The stabilized FDRE base must be paved or sealed within fourteen (14) days of reclamation. Paving and sealing FDRE stabilized base involves Bituminous Surface Treatments (BST, commonly known as chipsealing), so the commencement of the FDRE construction shall be coordinated with the seasonal and weather limitations outlined in GDOT Section 424.

3. Control Strip

Prior to the start of the FDRE Construction, the Contractor, the CMTI Firm, and the Owner's Representatives will select a portion of one of the project roads to serve as a Control Strip of sufficient size for the Contractor to demonstrate that the equipment, materials, and processes employed can produce an FDRE product that conforms to the requirements of the Specifications and the Mix Designs.

4. Roadway Preparation

Before the FDRE stabilization process begins, the first six (6") inches of the existing asphalt and base materials shall be pre- pulverized into a homogeneous mixture and shall be brought to within one (1%) percent of the moisture content required by the Mix Designs. Pre-pulverization shall extend six (6") inches beyond the planned road surface edges, and shall be graded and shaped to the lines, grades, and elevations of the original roads. During this process any unanticipated unsuitable soil or materials found within the top six (6") inches shall be removed and replaced with new materials meeting the requirements of the project. The exposed SubGrade Base shall be firm and able to support, without yielding or subsequent settlement, the FDRE construction equipment and the compaction of the FDRE stabilized base. Soft or yielding SubGrade shall be made stable before FDRE construction proceeds. Longitudinal joints between successive cuts shall overlap a minimum of six (6") inches and transverse joints shall overlap a minimum of two (2') feet. After this first pass of the reclaimer/ mixer, the pulverized mixture shall be shaped with a motor grader and compacted with a steel wheel roller to facilitate depth control during the second pass.

5. Bituminous Asphalt Emulsion Stabilization

Following pre- pulverization and shaping, and just prior to introducing the asphalt emulsion, the moisture content of the pulverized mixture shall be confirmed to meet the requirements of the Mix Designs. Aerate if too wet, add water if too dry. The asphalt emulsion shall be introduced and mixed into the pulverized mixture in a second pass using the reclaimer/mixer's internal fluid injection system at the rate required by the Mix Designs. Stabilization shall extend six (6") inches beyond the planned road surface edges. Longitudinal joints between successive passes shall overlap a minimum of six (6") inches and transverse joints shall overlap a minimum of two (2') feet.

6. Compaction

The processed FDRE material shall be uniformly compacted in one layer to a minimum of ninety- five (95%) percent of a field compacted modified Proctor (AASHTO 180 or ASTM D1557). Field density of compacted material can be determined by nuclear method in direct transmission mode (AASHTO 310, or ASTM D6938) or sand cone method (AASHTO 191 or ASTM D1556). At the start of compaction for all materials, the moisture content shall be within one (1%) percent of the specified optimum moisture for compaction. Initial compaction shall be performed with a heavy twenty (20) ton minimum break down padfoot roller which shall stay within five hundred (500') feet of the moving reclaimer/ mixer. Initial compaction with the pad foot roller shall begin at the road sides longitudinally, and progress toward the center, overlapping on successive trips by at least one half width of the roller drum. Offset alternate passes. Operate the padfoot roller between two (2) and six (6) miles per hour, applying high amplitude and low frequency. The pad foot roller shall perform initial compaction with a sufficient number of passes until it "walks out" of the material. "Walking out" for a padfoot roller is defined by light being clearly evident between all of the pads at the material to padfoot roller drum interface and indentations in the material being no more than three sixteenths (3/16") inch deep. After completion of padfoot rolling, any remaining padfoot marks shall be removed and the material spread using a motor grader blade- cutting no deeper than necessary to remove the padfoot marks. When motor grader blading is completed, a ten (10) ton minimum pneumatic roller shall be used to compact the bladed materials. Final compaction shall be performed with a heavy twenty (20) ton smooth drum roller. Finish rolling shall not be performed in vibratory mode. A light spray of water may aid in final compaction and appearance. The combination of number of passes and the order of the rollers shall be used to meet compaction and finish requirements. The finished surface shall be free of compaction planes, cracks, ridges, dips, and loose material, and shall not vary more than one- half (1/2") inch in ten (10") feet. Construction joints shall have vertical faces and shall be made in thoroughly compacted material. Additional mixture shall not be placed against the construction joint until the joint has been accepted by the Owner's Representatives. The face of the cut joint shall be free of deleterious material and shall be kept moist until the placement of the adjacent material.

7. Rework

FDRE material that fails to meet or loses the required moisture, density, stability, or finish within twenty- four (24) hours of final compaction must be reworked. Rework may include loosening and removing unacceptable materials, grinding, adding material, re- mixing, recompacting, and re- finishing. Financial responsibility for rework will be reviewed by the Owner's Representatives on a case- by- case basis.

8. Traffic

Single lane traffic shall be safely maintained at all times during the stabilization process, and dual lane traffic shall be safely re- opened at the end of each day. The Mix Designs for this project anticipate light residential traffic being allowed on the stabilized FDRE material shortly after the completion of the compacting process, and before full curing is complete. Prior to traffic being allowed on the stabilized FDRE surface, the CMTI Firm will confirm that the required FDRE density has been achieved. Prior to traffic being allowed, the Contractor will use a tandem- axle dump truck (or equivalent vehicle) to proof- roll the FDRE material under the observation of the CMTI Firm. Traffic will be allowed upon confirmation that density requirements have been met, and upon observation that proof- rolling successfully exhibits no surface deformation.

8. Quality Control

1. General

The Contractor shall hold the overall responsibility for delivering and documenting a successful FDRE product in conformance with the Specifications and the Mix Designs. The Contractor shall employ the services of an independent Construction Materials Testing and Inspection (CMTI) Firm holding AASHTO accreditation, and being prequalified as a GDOT consultant for roadway construction materials. The Owner's Representatives will play a quality control role through independent submittal review, observation, monitoring, and testing, with intent to supplementally document Contractor conformance with the Specifications and Mix Designs. The Owner's Representatives' supplemental quality control role shall not relieve the Contractor from responsibility for his own quality control and documentation.

2. Control Strip

Prior to the start of the FDRE Construction, the Contractor, the CMTI Firm, and the Owner's Representatives will select a portion of one of the project roads to serve as a Control Strip of sufficient size for the Contractor to demonstrate that the equipment, materials, and processes employed can produce an FDRE product that conforms to the requirements of the

Specifications and the Mix Designs. The Contractor will demonstrate that his layout and sequencing will minimize the number and extent of the longitudinal and transverse joints. During the first day of FDRE Construction, the Contractor will complete the Control Strip. The Contractor's CMTI Firm shall observe, monitor, test, and document the Construction. Before moving forward, acceptance of the Control Strip by the Owner's Representatives shall be required. Upon acceptance of the Control Strip, the Contractor shall use all the same equipment, material, and processes for the remainder of the FDRE operations. In the event that the Control Strip does not conform to the Specifications and the Mix Designs, and is not accepted by the Owner's Representatives, the Contractor will propose a correction plan and will reconstruct the Control Strip at his expense. Before moving forward, acceptance of the reconstructed Control Strip by the Owner's Representatives shall be required.

3. Mixing Equipment Calibration

Prior to the start of the Control Strip FDRE construction, the reclaimer/ mixer fluid injection system shall be calibrated and documented by the CMTI Firm, and calibration documentation provided to the Owner's Representative. If during construction the actual injection rate, determined by volumetric distribution, varies from the required injection rate, the fluid injection system shall be re- calibrated.

4. Asphalt Emulsion Compliance

The properties of the asphalt emulsion shall meet the requirements defined in Table 1 of the Specifications and Mix Designs, and the exact emulsion product selected during the Submittal review and approval process shall be used. The Contractor shall make no substitutions from the approved emulsion product without prior approval by the Owner's Representatives. During the FDRE construction of the Control Strip, an emulsion sample will be taken from the first tanker and tested by the CMTI Firm for conformance with the requirements of Table 1. During the remaining FDRE construction, the Contractor will provide the Owner's Representative with a Manufacturer's Certificate of Analysis (COA) for each tanker delivery. The temperature of each tanker load of emulsion will be taken and recorded upon delivery by the CMTI Firm.

5. Asphalt Emulsion Injection Rate

The asphalt emulsion injection rates shall be based upon the targeted emulsion content percentages defined in the Mix Designs, and shall be maintained within specified tolerances. Mix Design #1 targets an average injection rate of 3.390 gallons per square yard at six (6") inch depth, Mix Design #2 targets an average injection rate of 3.681 gallons per square yard, and Mix Design #3 targets an average injection rate of 4.302 gallons per square yard. The emulsion shall be transported to the site in bulk tankers of known capacity, equipped with metering devices. The injection rate shall be confirmed by the CMTI Firm by evaluating the mass of reclaimed material against the volume of emulsion used from a single tanker. The meter shall be read and findings recorded on an hourly basis by the CMTI Firm during injection mixing, and at the emptying of each tanker.

6. Water

Water provided shall be free of deleterious materials in conformance with the Specifications. Water of questionable quality shall be tested by the CMTI Firm in accordance with ASTM C1602. Moisture content within the FDRE mixture shall be controlled to ensure adequate dispersion of the asphalt emulsion, and to ensure optimum compaction of the FDRE mixture. Moisture content is defined by the Mix Designs, and shall be maintained within one (1%) per cent of specified tolerances. Moisture content of the pulverized material shall be tested and

documented by the CMTI Firm in accordance with AASHTO T329 or ASTM D2216 at each one half (1/2) mile minimum prior to FDRE injection and mixing. Aerate if too wet, add water if too dry. Moisture content of the injected and mixed FDRE material shall be tested and documented by the CMTI Firm prior to compaction in accordance with AASHTO T168 or ASTM D979 at one half (1/2) mile minimum intervals. Aerate if too wet, add water if too dry.

7. Pre-pulverization Depth

The depth of the initial pre- pulverization shall be checked and documented by the CMTI Firm at five hundred (500') foot minimum intervals to confirm conformance with the Specifications and Mix Designs.

8. Uncompacted FDRE Depth

Prior to compaction, the depth of the injected and mixed FDRE material shall be checked and recorded by the CMTI Firm at five hundred (500') foot minimum intervals to confirm thorough full-depth mixing of the pulverized material in conformance with the Specifications and Mix Designs.

9. Uncompacted FDRE Density

The CMTI Firm shall obtain samples of the FDRE material prior to compaction and store in a sealed container for no more than two (2) hours. The CMTI Firm shall compact per ASTM 1557 Method C to confirm conformance with the Specifications and Mix Designs. The uncompacted density shall be tested and recorded at one quarter (1/4) mile minimum intervals.

10. Compacted FDRE Depth

The depth of the compacted FDRE material shall be checked and recorded by the CMTI Firm at five hundred (500') foot intervals to confirm conformance with the Specifications and Mix Designs.

11. Compaction Density

Compacted density shall be determined and recorded by the CMTI Firm by evaluating the achieved density in relation to the maximum density obtained from a field compacted, modified Proctor, determined in accordance with AASHTO T199 or ASTM D1556. The FDRE material shall be compacted to a minimum of ninety- five (95%) percent of the field compacted, modified Proctor density. The compacted FDRE material shall be tested and recorded by the CMTI Firm using a nuclear gauge in accordance with AASHTO T355 or ASTM D2950 at one quarter (1/4) mile minimum intervals, and in accordance with ASTM D3665 for random sampling.

9. Measurement and Payment

1. Asphalt Emulsion

Emulsion will be measured and paid for on an all-inclusive Unit Price per Gallon basis for the gallons properly injected into project roads in accordance with the Specifications and Mix Designs. Estimated quantities provided by the Owner for bidding purposes are not guaranteed, and payment for Emulsions will be based upon the agreed-upon Unit Price times the documented and verified number of Gallons actually injected. Unit Price shall be used as the basis for calculating the value of additive or deductive changes in Scope. Unit Price shall include, but not be limited to, Labor (Salaried and Hourly, Field and Office), Materials, Tools, Equipment, Travel Expense, Material Delivery, Construction Materials Testing, Permits, Insurance, Taxes (other than Sales Tax), Bonds, Field Overhead, Office Overhead, and Profit.

ITB 22-25-008 - Full Depth Reclamation of Ash Roads

Unit Price shall exclude the cost of the FDRE Treatment, which will be measured and paid for separately. Unit Price shall exclude the cost of Sales Tax, as this Project is Sales Tax exempt.

2. FDRE Treatment

FDRE Treatment will be measured and paid for on an all-inclusive Unit Price per Square Yard basis for project roads successfully pre- pulverized and stabilized in accordance with the Specifications and Mix Designs. Estimated quantities provided by the Owner for bidding purposes are not guaranteed, and payment for FDRE Treatment will be based upon the agreed- upon Unit Price times the documented and verified number of Square Yards actually treated. Unit Price shall be used as the basis for calculating the value of additive or deductive changes in Scope. Unit Price shall include, but not be limited to, Labor (Salaried and Hourly, Field and Office), Benefits, Materials, Tools, Equipment, Travel Expense, Material and Equipment Delivery, Construction Materials Testing, Permits, Insurance, Taxes (other than Sales Tax), Bonds, Field Overhead, Office Overhead, and Profit. Unit Price shall exclude the cost of Asphalt Emulsion, which will be measured and paid for separately. Unit Price shall exclude the cost of Sales Tax, as this Project is Sales Tax exempt.



2500 Tremont Road • Savannah, Georgia 31405

912.234.0696 • www.whitakerlab.net

Report No:

11/04/21-167

Client:

Roberts Civil Engineering

Project:

Development of Full Depth Reclamation (FDR) for Ash Roads

Design and CM for TSPLOST Effingham County, GA

FDR DESIGN CERTIFICATIONS FOR (6") THICKNESS OF BASE

1 - FDR Project: Bird, Whitaker, Clark, Floyd and Archer Roads

2 - FDR Project: Corinth Church Road

In preparation of evaluating the designated roads as listed above for FDR, a total of (177) roadway cores of the existing CFBC ash surface were obtained. These cores were collected to evaluate existing conditions and so that typical representative specimens could be analyzed during the design process.

As part of the design process for these two (2) FDR projects, and designated roadways, the following factors were considered:

- The continued swell potential of any unhydrated calcium oxide (CaO) within the CFBC ash which has been placed across the roads. Any unhydrated (CaO) which remains has the potential to combine with moisture and carbon dioxide in the air to cause swelling. To try and evaluate the future swell potential of the existing CFBC ash roads, ASTM-D-4546 swell tests were performed on random field specimens. No swelling could be measured within the tested random samples.
- A bituminous asphalt emulsion design was selected for the FDR due to the high percentage presence
 of calcium sulfate (CaSO4) in the CFBC ash. A more common cementitious based FDR design was
 discounted because of poor durability. In general, the presence of sulfates can cause the degradation
 of cement-based components over a period of time.
- The poor freeze/thaw durability of the existing CFBC ash surfaces. The emulsion-based FDR design
 was selected to densify the ash to limit absorption during periods of rain combined with freezing
 temperatures.
- The poor bond characteristics of the existing CFBC ash roads with respect to typical asphaltic concrete paving.
- The satisfactory performance of Indigo Road which was placed as an (FDR) test section over a year
 ago. This road has had significant loading and has not demonstrated any evidence of swelling or
 long term cracking since its construction.

Page:

2 of 2

Report No:

11/04/21-167

Client:

Roberts Civil Engineering

Project:

Development of Full Depth Reclamation (FDR) for Ash Roads

Design and CM for TSPLOST Effingham County, GA

Attached are the recommended FDR mix designs for the two projects identified above as prepared by Paragon Services Inc. See the job mix formulations on the signature page of each design for criteria to be used during construction (See the designs dated 9/16/21 & 10/26/21).

Please note, as with any roadway base component it will be extremely important to establish and maintain proper perimeter drainage of the FDR roadways after construction. In this instance, maintaining drainage will be important to reduce any chance of future swelling and/or common pavement issues associated with a saturated subgrade.

Thickness of any chip seal or other bituminous wearing surface will likely vary with traffic and loading,

In conclusion, this letter serves as certification of the attached FDR base designs for the above designated roadways.

We thank you for the opportunity to be of service on this project. We appreciate your trust and look forward to a continuing relationship in the future. If you should have any questions, please do not hesitate to contact our office.

Respectfully submitted,

WHITAKER LABORATORY, INC.

Joseph F. Whitaker, P.E.

1 cc:

rgraham@robertscivilengineering.com

1 cc:

File



Date: 10 - 26 - 21

To:

Rip Graham; Bill Evans; Larry Tomkins; Scott Watson

Subject:

Fly Ash FDR Effingham Co, GA

PTSi Project Number: FDR21-237-380

Paragon Technical Services, Inc. (PTSI) received base materials from Corinth Church Rd. All the cores from this road were evaluated and judged to be the same general material and similar to the materials in the previous design. Twenty (20) samples from the road were combined for the design. These cores were then crushed and evaluated. The samples used were:

Road	ID#	Cores used						
Corinth Church Rd	21-1688	C-89	C-91	C-94	C-95	C-97	C-99	C-101
		C-102	C-106	C-110	C-112	C-114	C-115	C-116
		C-117	C-120	C-122	C-124	C-125	C-128	

The Corinth Church Roadway core set was given a unique ID#, listed in the table above. The cores used in the design were from the "0" to 6" sample. There were no cores/samples used from the "6" to 12" layer (samples also provided to Paragon). All cores were submitted by Whitaker Labs on behalf of Roberts Civil Engineering. A sample of FDR-ee emulsion was also provided for the design by the Ergon Asphalt and Emulsions facility in Garden City, GA.

The material was supplied mostly as 6" diameter cores that were all approximately 6" in height. The core samples were crushed and evaluated. A Bulk Gradation was measured and then samples prepared for gradation, Ignition Oven, and moisture content. The material evaluations are listed in Table 1 and represented in Figure 1.

Table 1: Gradations & Asphalt Contents

Sieve Size	After Ignition	Washed
1"	100	100
3/4"	98	98
1/2"	87	83
3/8"	77	75
No 4	54	59
No 8	40	49
No 16	31	41
No 30	24	35
No 50	17	26
No 100	12	20
No 200	6.0	11.7
Water %		27.2%
Loss on Ignition Oven	17.2	

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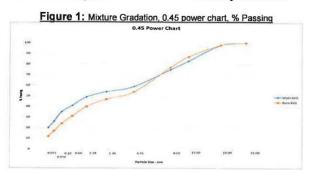
Appendix A



Ergon A&E - Garden City, GA

PTSi Project Number:

FDR21-237-380



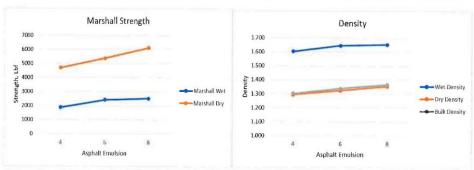
The materials were batched, mixed, and evaluated. An added water content of 1% was used and was based on the total water in previous work. The materials were batched, mixed and compacted according to the requirements. Four (4) inch diameter samples were prepared and evaluated. The Optimization was conducted using the Marshall Stability, Retained Marshall Stability, Indirect Tensile Strength, and Specimen Density. The mixture data and graphs used in the determination are presented in Tables 2 through 4, and Figures 2 through 4.

% Emulsion	4.0	6.0	8.0
% Water (Added)	1.0	1.0	1.0
% Total Water	29.6	30.3	31.0
Bulk Gravity	1.302	1.338	1.365
Dry Density, pcf	81	83	84
Wet Density, pcf	100	103	103
Dry Marshall Stability, lb-f	4710	5394	6124
Wet Marshal Stability, lb-f	1879	2426	2524
% Retained Marshall, %	40	45	41
Dry TSR, Ib-f	208	254	262
Wet TSR, lb-f	502	646	628
IDT, psi (dry)	29	37	37
Raveling, % @ 77F	50000	0.13*	

At 6.25% emulsion

Fig 2: Density vs % Emulsion

Fig 3: Marshall Strength vs % Emulsion



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Ergon A&E - Garden City, GA

PTSi Project Number:

FDR21-237-380

Figure 4: IDT Strength vs % Emulsion

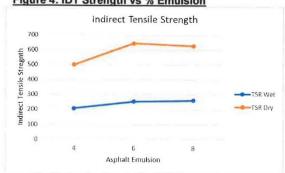


Table 3: Emulsion Data

Property	Test Method	Spec	Result
Residue	ASTM D-244		62.5
Oil Distillate	ASTM D-244		0

Job Mix Formulation:

Based upon our evaluation of the supplied materials and consideration of the materials, equipment and field conditions, the following contents will pass the criteria:

Base Material 100% **Total Water** 30.3%

Based on dry wt of aggregate **Asphalt Emulsion** 6.25% ± 0.25% Based on dry wt of aggregate

Table 4: Properties at Recommended Job Mix Formulation

Property	Method	Criteria	Result
Sample Size, in		4 inch	4
Compactive effort		30 Gyrations	30
Density, Wet	AASHTO T312	Report, lb/ft3	103
Gradation	AASHTO T27	Report	See Table 1
Dry TSR, psi	AASHTO T283	Report	37
Dry Marshall Stability, lbf	AASHTO T245	Report	5485
Retained Stability, %		Report	45
Raveling, % *	ASTM D 7196	Report	0.13

*6" SCG sample

The above target contents should be used as starting points and field adjustments should be made and dictated by materials and conditions at the time of the project inception.

Total water is determined with moisture from emulsion included in the calculations.

Respectfully Submitted

Mike Hemsley

mike.hemsley@ptsilab.com

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8.1.2006



Date: 9 - 16 - 21

To:

Rip Graham; Bill Evans; Larry Tomkins; Scott Watson

Subject:

Fly Ash FDR Effingham Co, GA

PTSi Project Number: FDR21-237-376

Paragon Technical Services, Inc. (PTSI) received base materials from 5 different roads. All the cores from those roads were evaluated and judged to be the same general material. Five (5) samples from each road were combined for 1 design. These cores were then crushed and evaluated. The 5 roads that were sampled were:

Ro	ad	ID#	Core 1	Core 2	Core 3	Core 4	Core 5
1)	Bird Rd	21-1400	C-1		C-3		C-7
2)	Whitaker Rd	21-1399	C-17	C-18	C-19	C-20	C-23
3)	Clark Rd	21-1401	C-13	C-14	C-43	C-42	C-40
4)	Floyd Rd	21-1440	C-28	C-29	C-31	C-33	C-36
5)	Archer Rd	21-1439	C-44	C-45	C-47	C-49	C-52

Each Roadway core set was given a unique ID#, listed in the table above. The cores used in the design were from the "0" to 6" sample. There were no cores/samples used from the "6" to 12" layer (samples also provided to Paragon). All cores were submitted by Whitaker Labs on behalf of Roberts Civil Engineering. A sample of FDR-ee emulsion was also provided for the design by the Ergon Asphalt and Emulsions facility in Garden City, GA.

The material was supplied mostly as 6" diameter cores that were all approximately 6" in height. The core samples were crushed and evaluated. A Bulk Gradation was measured and then samples prepared for gradation, Ignition Oven, and moisture content. The material evaluations are listed in Table 1 and represented in Figure 1.

Table 1: Gradations & Asphalt Contents

Sieve Size	After Ignition	Washed
1"	100	100
3/4"	99	96
1/2"	90	81
3/8"	83	74
No 4	66	59
No 8	52	48
No 16	39	39
No 30	30	32
No 50	21	24
No 100	14	18
No 200	7.9	11.0
Water %		16.5%
Loss on Ignition Oven	8.8	

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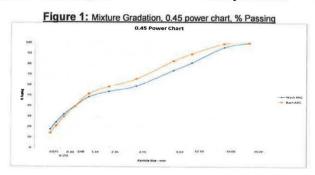
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PTSi Project Number:

FDR21-237-376



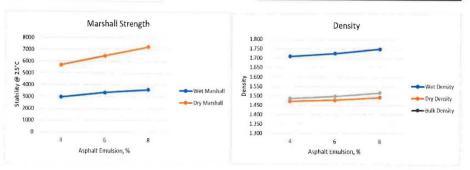
The materials were batched, mixed, and evaluated. An added water content of 8% was used and was based on previous work from Indigo Rd. The materials were batched, mixed and compacted according to the requirements. Four (4) inch diameter samples were prepared and evaluated. The Optimization was conducted using the Marshall Stability, Retained Marshall Stability, Indirect Tensile Strength, and Specimen Density. The mixture data and graphs used in the determination are presented in Tables 2 through 4, and Figures 2 through 4.

Table 2: Mixture Data, data reported is the average of 3 specimens % Emulsion 8.0 % Water (Added) 8.0 8.0 8.0 % Total Water 26.0 26.8 27.5 **Bulk Gravity** 1.485 1.497 1.571 Dry Density, pcf 92 92 93 Wet Density, pcf 107 108 109 Dry Marshall Stability, lb-f 5705 6475 7236 Wet Marshal Stability, Ib-f 2973 3367 3608 % Retained Marshall, % 52 52 50 Dry TSR, lb-f 478 843 695 Wet TSR, lb-f 270 339 354 IDT, psi (dry) 39 48 Raveling, % @ 77F 1.3*

At 5.75% emulsion

Fig 2: Density vs % Emulsion

Fig 3: Marshall Strength vs % Emulsion



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Ergon A&E - Garden City, GA

PTSi Project Number:

FDR21-237-376

OR

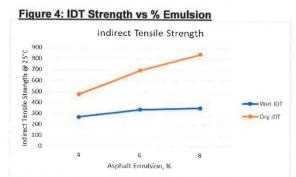


Table 3: Emulsion Data

Property	Test Method	Spec	Result
Residue	ASTM D-244		62.5
Oil Distillate	ASTM D-244		0

Job Mix Formulation:

Based upon our evaluation of the supplied materials and consideration of the materials, equipment and field conditions, the following contents will pass the criteria:

Base Material 100% **Total Water** 26.6% Based on dry wt of aggregate **Asphalt Emulsion** 5.75% ± 0.25% Based on dry wt of aggregate

Table 4: Properties at Recommended Job Mix Formulation

Property	Method	Criteria	Result
Sample Size, in	The state of the s	4 inch	4
Compactive effort		30 Gyrations	30
Density, Wet	AASHTO T312	Report, lb/ft3	108
Gradation	AASHTO T27	Report	See Table 1
Dry TSR, psi	AASHTO T283	Report	37
Dry Marshall Stability, lbf	AASHTO T245	Report	6379
Retained Stability, %		Report	52
Raveling, % *	ASTM D 7196	Report	1.3

*6" SCG sample

The above target contents should be used as starting points and field adjustments should be made and dictated by materials and conditions at the time of the project inception.

Total water is determined with moisture from emulsion included in the calculations.

Respectfully Submitted

Mike Hemsley

I. Will

mike.hemsley@ptsilab.com

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2500 Tremont Road • Savannah, Georgia 31405

912.234.0696 • www.whitakerlab.net

Report No: 12/01/21-150

Client: Roberts Civil Engineering

Project: Development of Full Depth Reclamation (FDR) for

Design and CM for TSPLOST Effingham County, GA

FDR DESIGN CERTIFICATIONS FOR (6") THICKNESS OF BASE

3 - FDR Project: Old Augusta Road

In preparation of evaluating the above referenced road for FDR, a total of (18) roadway cores of the existing sand/silt surface were obtained. These cores were collected to evaluate existing conditions and so that typical representative specimens could be analyzed during the design process.

Attached is the recommended FDR mix design for Old Augusta Road as prepared by Paragon Services Inc. See the job mix formulation on the signature page of the design for criteria to be used during construction (See the attached design dated 11/29/21).

Please note, as with any roadway base component it will be extremely important to establish and maintain proper perimeter drainage of the FDR roadway after construction.

Thickness of any chip seal or other bituminous wearing surface will likely vary with traffic and loading.

In conclusion, this letter serves as certification of the attached FDR base design for Old Augusta Road.

We thank you for the opportunity to be of service on this project. We appreciate your trust and look forward to a continuing relationship in the future. If you should have any questions, please do not hesitate to contact our office.

Respectfully submitted, WHITAKER LABORATORY, INC.

to of

Joseph F. Whitaker, P.E.

1 cc: rgraham@robertscivilengineering.com

1 cc: File



Date: 11 - 29 - 21

To:

Rip Graham; Bill Evans; Larry Tomkins; Scott Watson

Subject:

Sand/Soil FDR Effingham Co, GA

PTSi Project Number: FDR21-288-455

Paragon Technical Services, Inc. (PTSI) received base materials from Old Augusta Rd. All the cores from this road were evaluated and judged to be the same general material, a sand/soil combination. Eighteen (18) samples from the road were combined for the design. These cores were then processed and evaluated. Since the materials were loose, there was no need for crushing them. The samples used were:

Road	ID#	Cores	/sample	pits use	d			
Old Augusta Rd	21-1771	C-2	C-4	C-6	C-8	C-10	C-12	
		C-14	C-16	C-18	C-20	C-22	C-24	
		C-26	C-28	C-30	C-32	C-34	C-36	

The Old Augusta Roadway core set was given a unique ID#, listed in the table above. The cores used in the design were from the "0" to 6" sample. All cores were submitted by Whitaker Labs on behalf of Roberts Civil Engineering. A sample of FDR-ee emulsion was also provided for the design by the Ergon Asphalt and Emulsions facility in Garden City, GA.

The material was supplied mostly as bags of sand/soil that were all approximately 10 lbs of material. The samples were loose so no crushing was needed. The samples were processed and evaluated. A Bulk Gradation was measured and then samples prepared for gradation, Ignition Oven, and moisture content. The material evaluations are listed in Table 1 and represented in Figure 1.

Table 1: Gradations & Asphalt Contents

Sieve Size	After Ignition	Washed
1"	100	100
3/4"	100	100
1/2"	100	100
3/8"	100	100
No 4	99	100
No 8	98	99
No 16	96	98
No 30	89	92
No 50	71	74
No 100	30	23
No 200	18.5	10.1
Water %		8.4%
Loss on Ignition Oven	1.1%	
PI		non plastic
Sand Equivalency		20%

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Ergon A&E - Garden City, GA

PTSi Project Number:

FDR21-288-455



The material was dried out to a total moisture content of 2% and 3% water was added back to the material for a total of 5% total water. The material was then batched, mixed, and evaluated. The optimum moisture content was determined from a density curve and that optimum was used for all subsequent mixes. The materials were batched, mixed and compacted according to the requirements. Four (4) inch diameter samples were prepared and evaluated. The Optimization was conducted using the Marshall Stability, Retained Marshall Stability, Indirect Tensile Strength, and Specimen Density. The mixture data and graphs used in the determination are presented in Tables 2 through 4, and Figures 2 through 4.

Table 2: Mixture Data, data reported is the average of 3 specimens

% Emulsion	4.0	6.0	7.3	8.0
% Water (Added)	3.0	3.0	3.0	3.0
% Total Water	5.0	5.0	5.0	5.0
Bulk Gravity	1.846	1.918	2.015	2.068
Dry Density, pcf	115	117	118	119
Wet Density, pcf	124	127	128	129
Dry Marshall Stability, Ib-f	2462	3876	4425	4720
Wet Marshal Stability, lb-f	836	2777	3832	4400
% Retained Marshall, %	34	72	86	93
Dry TSR, Ib-f	195	565	694	763
Wet TSR, Ib-f	132	419	595	689
IDT, psi (dry)	11	32	40	44
Raveling, % @ 77F	28522	8 4/8 18	4.88%	



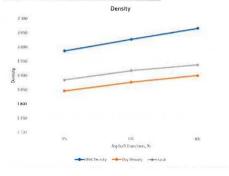
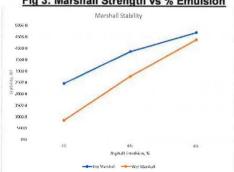


Fig 3: Marshall Strength vs % Emulsion



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Ergon A&E - Garden City, GA

PTSi Project Number:

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Figure 4: IDT Strength vs % Emulsion

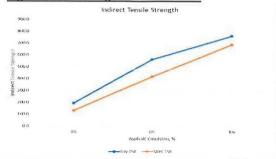


Table 3: Emulsion Data

Property	Test Method	Spec	Result
Residue	ASTM D-244		62.5
Oil Distillate	ASTM D-244		0

Job Mix Formulation:

Based upon our evaluation of the supplied materials and consideration of the materials, equipment and field conditions, the following contents will pass the criteria:

Base Material 100%

Total Water5.0%Based on dry wt of aggregateAsphalt Emulsion7.3% ± 0.25%Based on dry wt of aggregate

Table 4: Properties at Recommended Job Mix Formulation

Property	Method	Criteria	Result
Sample Size, in		4 inch	4
Compactive effort		30 Gyrations	30
Density, Wet	AASHTO T312	Report, lb/ft3	128
Gradation	AASHTO T27	Report	See Table 1
Dry TSR, psi	AASHTO T283	Report	40
Dry Marshall Stability, Ibf	AASHTO T245	Report	4425
Retained Stability, %		Report	86
Raveling, % *	ASTM D 7196	Report	4.88%
to" 000	710111111111111111111111111111111111111	report	4.0070

*6" SCG sample

The above target contents should be used as starting points and field adjustments should be made and dictated by materials and conditions at the time of the project inception.

Total water is determined with moisture from emulsion included in the calculations.

Respectfully Submitted

Mike Hemsley

mike.hemsley@ptsilab.com

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