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#### **Professional Services Fee Proposal**

April 2022

Mr. Eric Larson Assistant County Manager Effingham County Board of Commissioners 804 South Laurel Street Springfield, GA 31329 Effingham County, Georgia
Pavement Condition Assessment

The University of Arkansas' Technology Transfer Program, Ergon Asphalts and Emulsions, Inc., and DataStream is pleased to work with Effingham County, Georgia to initiate First Step Pavement Management.

First Step Pavement Management is designed to incorporate all roadways maintained by Effingham County and address the following immediate goals:

- Utilize the current inventory of roadways Maintained by the County
- Perform a video patrol and condition assessment of all County maintained roadways

Additional Goals may include:

- Review the County's current practices and techniques
- Extend the functional life of roadways maintained by the County

#### PROJECT SCOPE OF WORK

## 1.0 Pavement Management – Inventory

### **Pavement Inventory**

- Create an inventory and associated map of all maintained roadways
- Receive known roadway information (construction history, work history, maintenance cost history, etc.)

## 2.0 Pavement Management – Inventory Condition Assessment / Distress Patrol

## 2.1 Pavement Condition Assessment (Network-Level)

- · Roadway pavements patrolled by trained inspectors using geolocated video cameras (1080p; 30fps)
- · Visual, non-destructive assessment of facility pavements
- · Pavement health is illustrated as:

## EXCELLENT

- A pavement in condition EXCELLENT is in perfect condition
- No corrective maintenance or preventive maintenance is recommended

### ➢ GOOD

- Preventive maintenance may be recommended
- Corrective maintenance is typically not recommended
- Pavement distress is limited to oxidation, weathering, and minor climate-related damage
- Structural distress (if present) is both localized and low density (<5%)</li>

#### > FAIR

- Preventive maintenance may be recommended
- Corrective maintenance may be recommended
- A variety of pavement distresses may be present
- Structural distress may be localized as well as global
- Global Structural damage is low severity / low density

### CRITICAL

- · A pavement in condition CRITICAL is likely to be LOST (and require reconstruction) within 2 years
- A variety of pavement distresses may be present
- · Surface and Structural distress are typically global
- A combination of corrective and preventive maintenance may be recommended

#### LOST

- A LOST pavement requires major M&R (Maintenance and Repair/Reconstruction)
- Shallow, Deep, and/or Full-Depth Reconstruction may be recommended

### 2.2 Pavement Distress Assessment (Network Level Assessment)

Observed pavement attributes and distress are illustrated as follows:

Su - Surface Distress – Low Density



Su - Surface Distress – Medium to High Density

Climate (non-structural) related distress including:

Surface Cracking, Longitudinal and Transverse Cracking, Block Cracking, Edge Cracking
Severe Weathering, Raveling, Bleeding, Scaling (PCC), Durability Cracking (PCC)



- Structural Distress and



- Mass Structural Distress

- Evidence of structural/durability distress present
- Depth of structural damage (shallow, deep) is not indicated
- · Distresses include Alligator Cracking, Rutting (High Severity), Depression (High Severity), Utility Cuts



Pothole 01



- Pothole 02

- Observed Pothole 01 is of higher importance than observed Pothole 02
- Pothole 01 is a Major Pothole and is typically structural
- Pothole 02 is a minor pothole and may consist of edge conditions / small popouts



- Drainage / Water Issue
- Observed drainage issues present on the pavement surface may be a variety of causes

# 2.3 Reporting - Dynamic Roadway Condition Map



Figure 1 – Dynamic Condition Map with Road Condition and Distress Toggle Buttons

# 2.4 Geolocated Video, Road Book, Project Planner



Figure 2 - Condition Map with Video (1080p / 30fps)

NTORY				Lineal Feet Per Condition Category					Priority			
D Full Street Name	Length (ft)	Width (ft)	- Area (sq yd)	- Lanes	Priority	- EXCELLENT -	GOOD 🔻	FAIR 🔻	CRITICAL	LOST	PCI	Project
336 NE 11TH ST	2,967	22	7,253	2			1,514	112	1,135	346	69.0	Yes
532 SE 8TH ST	9,061	22	22,149	2		1	2,439	6,050	1,017		74.7	Yes
800 PEACH ORCHARD RD	4,249	22	10,386	2		637	1,117	2,921	828		76.2	
389 WATER TOWER RD	4,293	22	10,493	2			1,895	1,561	821	129	74.8	Yes
526 VAUGHN RD	3,740	22	9,143	2			42	2,927	763	1	69.6	Yes
675 WINDSONG CIR	914	22	2,235	2	_			175	675	67	58.0	Yes
154 N WATER TOWER RD	2,448	22	5,985	2			131	872	607	911	52.5	Yes
458 NE WILDCAT WAY	2,073	22	5,067	2	_		1,097	310	417	183	73.2	Yes
218 SW DUKE AVE	1,311	22	3,204	2		1	190	758	415		70.0	Yes
19 WINDSONG LN	461	22	1,127	2	_			67	404		59.6	Yes
827 JEFFERSON ST	1,350	22	3,299	2		1	778	281	373		76.7	
273 SW MAIDSTONE AVE	826	22	2,020	2	_			313	361	80	60.3	Yes
73 TOWN VU RD	5,118	22	12,510	2		971	1,030	2,835	348	97	78.2	
235 E BATTLEFIELD BLVD	4,823	22	11,791	2		143	3,790	448	330	127	82.7	

Figure 3 - Workbook and Project Planner

# 3.0 Compensation

	2022 Pavement Condition Assessment	Method	Fee
1.0	Effingham County, Georgia Complete Roadway Network Inventory and Evaluation To include all identified roadways maintained by Effingham County, Georgia. Hard Surfaced and 'Unpaved' Roadway Inventory and Evaluation	Lump-Sum	\$57,000.00
		Total	\$57,000.00

<sup>\*</sup> Based on A Roadway Network of approximately 600 centerline miles.

### 4.0 Additional Services

Services requested by the Owner falling outside the Scope of Basic Services described above shall be considered Additional Services. Additional Service requests will be completed at our standard hourly rates effective at the time of contract execution plus reimbursable expenses or on a fixed fee basis where a substantial scope of work can be clearly defined Custom Patrols / User-Defined Patrols

- Enhanced Site Assessments, Patrols, and Reports
  - o 360 Degree Video Patrol, Street View Update
  - Street Sign Inventory and Assessment
  - o Street / Roadway Striping Inventory and Assessment
  - Unpaved Roadway Inventory and Assessment
  - o Public Sidewalk Inventory and Assessment
  - Private Roadways / Parking Lots / Boat Ramps
  - o Drainage / Ditch Patrol
  - Night Patrol
  - o Perimeter Fences and Exterior Drives
  - Building / Facility Patrol
  - Building Interior / Product Patrol
- Additional site visits at the request of the owner

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# 5.0 Method of Payment

The method of payment is anticipated to be a single invoice unless otherwise specified.

We appreciate the opportunity to be of service in the development of your pavement management plan.

Please indicate your acceptance of the terms, the scope of work and fee by signing and returning a copy to our office. A facsimile signature is sufficient to indicate your understanding of the proposed agreement. If you have any questions or concerns, please do not hesitate to call. This proposal is valid for 120 days from receipt. Additionally, the proposal may become null and void 12 months from the date of acceptance by the client, if the work has not been authorized to begin within that time.

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Michael G. Morgan Senior Project Manager

Agreed to and accepted this date:	Agreed to and accepted this date:
Signature	 Signature
Printed Name	 Printed Name
	 Title / Authorizing Agent