



City of Jonesboro

300 S. Church Street
Jonesboro, AR 72401

Signature Copy

Ordinance: O-EN-017-2022

File Number: ORD-22:006

Enactment Number: O-EN-017-2022

AN ORDINANCE TO WAIVE COMPETITIVE BIDDING AND AUTHORIZE THE MAYOR TO ENTER INTO AN AGREEMENT WITH FIRST STEP PAVEMENT MANAGEMENT TO DEVELOP AN INVENTORY OF HARD-SURFACED ROADWAYS MAINTAINED BY THE CITY OF JONESBORO

WHEREAS, the City of Jonesboro has a need to inventory all the maintained hard-surfaced roadways and sidewalks,

WHEREAS, the assessment of the condition of the all hard-surfaced roadways and sidewalks, and the development of an inventory will be based on the criteria listed in the attached agreement,

WHEREAS, the inventory is needed for planning and maintenance to extend the functional life of hard-surfaced roadways and sidewalks maintained by the City of Jonesboro, and;

WHEREAS, First Step Pavement Management is the sole source provider of the bulk data collection and presentation required to complete the inventory.

THEREFORE BE IT ORDAINED by the City Council for the City of Jonesboro, Arkansas that:

Section 1: That the City Council in accord with the terms of A.C.A. Section 14-58-303 hereby waives the requirement of competitive bidding as First Step Pavement Management is the sole source provider of this hard-surfaced inventory system.

Section 2: The Mayor and City Clerk are hereby authorized to execute such documents as are necessary to effectuate the agreement.

PASSED AND APPROVED THIS 15TH DAY OF MARCH 2022.



Professional Services Fee Proposal

January 2022

Mr. Craig Light P.E.
Engineering Director
City of Jonesboro, Arkansas
300 S Church
Jonesboro, AR 72401

Re **City of Jonesboro, Arkansas**
2022 Street Conditions
360-Degree Patrol - Option
Sidewalk Inventory - Option

The University of Arkansas' Technology Transfer Program, Ergon Asphalts and Emulsions, Inc., and DataStream are pleased to work with Jonesboro, Arkansas Public Works Department to develop First Step Pavement Management. First Step Pavement Management is designed to incorporate all hard-surfaced roadways maintained by the City and address the following immediate goals:

- Develop an Inventory of hard-surfaced roadways under the authority of the City
- Perform a condition patrol of all inventoried, hard-surface roadways
- Perform the condition patrol with optional 360-Degree Cameras
- Develop and Inventory of existing, city-maintained sidewalks

Additional Goals may include:

- Review the Department's current street maintenance practices and techniques
- Extend the functional life of hard-surfaced roadways maintained by the City

PROJECT SCOPE OF WORK

1.0 Pavement Management – Inventory

Pavement Inventory

- Create an inventory and associated map of all public, hard-surfaced roadways
- Receive known roadway information (construction history, work history, maintenance cost history, etc.)
- Quickly review maintained roadway inventory with the client
- Export Google Earth (KMZ) files for the client's immediate use



Figure 1 - Pavement Inventory

2.0 Pavement Management – Inventory Condition Assessment / Distress Patrol

- Pavement health is illustrated as:

EXCELLENT

- A pavement in condition EXCELLENT is in perfect condition
- No corrective maintenance or preventive maintenance is recommended
- Distress should be both localized and isolated

GOOD

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

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


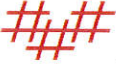
- A pavement in condition CRITICAL is likely to be LOST (and require reconstruction) within 2 years
- A variety of pavement distresses may be present
- Surface and Structural distresses are typically global in nature
- A combination of corrective and preventive maintenance may be recommended

LOST


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

-  - Surface Distress – Low Density  - 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 and  - Pothole 02
- Observed Pothole 01 is of higher importance than observed Pothole 02
- Pothole 01 is a Major Pothole and is typically structural in nature
- 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
- Depression, rutting, drainage (or lack of drainage), condensate lines, roof drains, etc

2.3 Reporting – Dynamic Roadway Condition Map

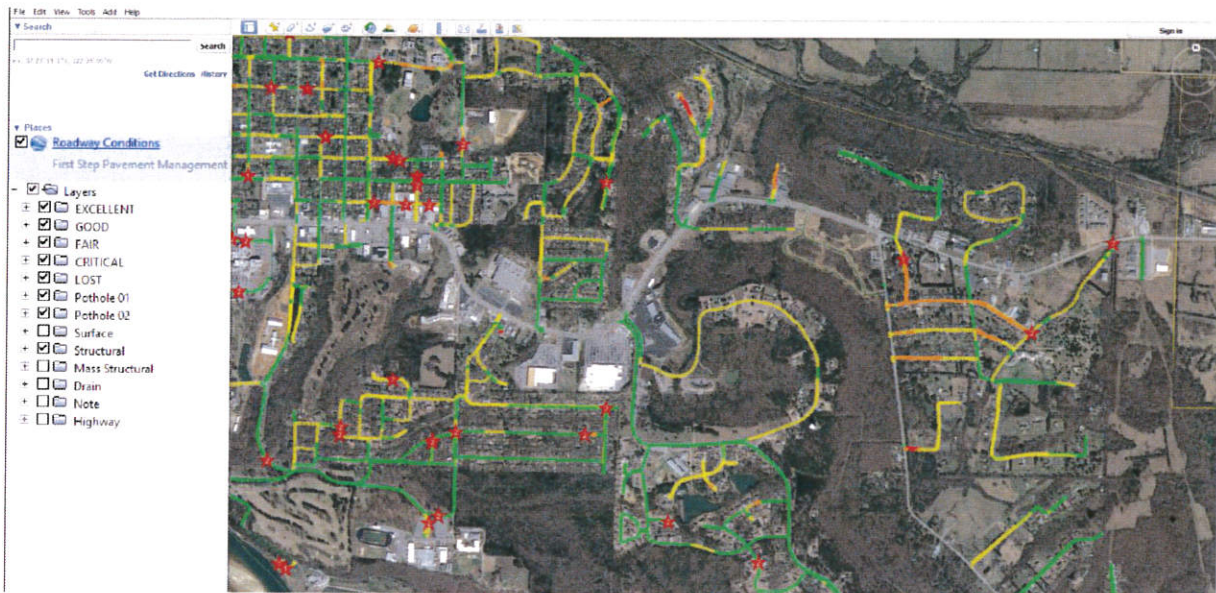


Figure 2 – Dynamic Condition Map with Road Condition and Distress Toggle Buttons

2.4 Geolocated Video, Road Book, Project Planner



Figure 3 - Condition Map with Video (1080p / 30fp)

SHERWOOD 2020 PAVEMENT INVENTORY, CONDITION, & PROJECT WORKBOOK											FIRSTSTEP						
INVENTORY											Lineal Feet Per Condition Category					PCI	Priority Project
ID	Pre	Street Name	Type	Length (mi)	Length (ft)	Width (ft)	Area (sq ft)	Area (sq yd)	Lanes	Priority	EXCEL	GOOD	FAIR	CRITICAL	LOST		
788		BROCKINGTON	RD	3.98	21,010	20	420,207	46,690	2	1 Arterial	0	0	10,906	0	0	79.6	
3133		LANDERS	RD	3.35	17,666	20	353,312	39,257	2	2 Collector	1,778	0	746	0	0	83.1	
3786		WARDEN	RD	3.21	16,939	20	338,787	37,643	2	2 Collector	0	0	108	0	0	72.5	
3823		JACKSONVILLE	CTF	2.10	11,105	20	222,102	24,678	2	1 Arterial	0	0	2,966	0	47	82.3	
3557	E	MARYLAND	AVE	2.07	10,942	20	218,836	24,315	2	1 Arterial	4	0	2,934	0	171	80.4	
6072	E	WOODRUFF	AVE	1.72	9,096	20	181,921	20,213	2	2 Collector	0	0	19,094	0	389	86.9	
1431		COUNTRY CLUB	RD	1.61	8,513	20	170,269	18,919	2	1 Arterial	0	0	8,650	0	0	72.9	Yes
2824		JACKSONVILLE CATO	RD	1.61	8,500	20	169,991	18,888	2	1 Arterial	0	0	381	0	228	88.1	
3206	E	LEE	AVE	1.60	8,450	20	169,006	18,778	2	2 Collector	0	0	5,370	0	192	77.4	
3981		OAKDALE	RD	1.57	8,278	20	165,565	18,396	2	1 Arterial	413	0	198	0	0	87.6	
6029		JOHNSON	DR	1.56	8,244	20	164,884	18,320	2	2 Collector	0	0	1,001	0	73	85.5	
5054		TRAMMEL	RD	1.48	7,792	20	155,841	17,316	2	1 Arterial	0	0	3,149	0	620	78.7	
2987		KELLOGG ACRES	RD	1.22	6,464	20	129,284	14,365	2	1 Arterial	0	0	5,080	0	0	76.5	
2465		HATCHER	RD	1.07	5,638	20	112,768	12,530	2	2 Collector	0	0	4,873	0	7	75.3	
2230		GIBSON	RD	0.98	5,166	20	103,325	11,481	2	3 Residential	0	0	4,178	0	906	70.8	
6261		GAP CREEK	DR	0.95	5,001	20	100,015	11,113	2	2 Collector	0	0	598	0	465	80.6	
1285		CLUB	RD	0.92	4,882	20	97,650	10,850	2	2 Collector	0	0	722	0	64	93.0	
5937		WILDWOOD	AVE	0.92	4,859	20	97,170	10,797	2	2 Collector	13	0	1,114	0	123	86.1	
3725		MILLER	RD	0.89	4,698	20	93,962	10,440	2	3 Residential	0	0	3,334	0	1,222	69.9	
7067		TRAMMEL ESTATES	DR	0.89	4,675	20	93,494	10,388	2	3 Residential	0	0	3,077	0	1,074	60.3	
666		BOBBITT	LN	0.85	4,472	20	89,433	9,937	2	2 Collector	0	0	743	0	0	85.2	

Figure 4 - Road Book and Project Planner

3.0 360-Degree Camera

- In addition to Standard Patrol Video Cameras, professional 360-Degree Spherical Cameras will be utilized
- Completed 360-Degree Data will be uploaded to Google Maps for the Street View™ Program
- Completed 360-Degree Data will be utilized to develop 4.0 Public Sidewalk Network Inventory

4.0 Public Sidewalk Network Inventory

- Will build upon existing sidewalk data (if available)
- Receive known sidewalk information (construction history, work history, maintenance cost history, etc.)
- Refine sidewalk inventory linework:
 - Identify existing hard surfaced, publicly maintained sidewalks



Figure 5 - Example Sidewalk Inventory

5.0 Compensation

Jonesboro, Arkansas	Method	Fee
FirstStep Pavement Management		\$33,225.00
Optional 360-Camera Patrol		\$8,500.00
Sidewalk Network Inventory		\$7,775.00
TOTAL:	Lump Sum	\$49,500.00

6.0 Additional Services

Services requested by the Owner falling outside the Scope of Basic Services described above shall be considered Additional Services.

- Enhanced Site Assessments, Patrols and Reports
 - 360 Degree Camera Data Collection (Option Proposed)
 - Google Earth Street View™ Patrol (Option Proposed)
 - Sidewalk Inventory and Patrol (Option Proposed)
 - Striping Inventory and Patrol
 - Sign Patrol
 - Drainage / Ditch Patrol
 - Private Roadways / Parking Lots / Boat Ramps
 - Night Patrol
 - Sanitary / Storm Sewer Inventory and Patrol
 - Mapping of existing subsurface video inspections
 - Perimeter Fences and Exterior Drives
 - Building / Facility Patrol

- Building Interior / Product Patrol
- Geotechnical Investigations and reports
- Contract administration, bidding and negotiation
- Construction administration
- Additional site visits at the request of the owner

7.0 Method of Payment

Method of payment shall be a monthly invoice or one single invoice per patrol. Hourly tasks or services approved by the Client are invoiced monthly based upon time spent performing the task or service outlined above. Invoices are due and payable upon receipt and within 30 days.

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

Please indicate your acceptance of the terms, 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.

Sincerely,



Michael G. Morgan
Senior Project Manager

Agreed to and accepted this date:

Agreed to and accepted this date:

Signature

Printed Name

Title / Authorizing Agent



Statement of Proprietary Technology

January 26, 2022

Engineering Department
City of Jonesboro, Arkansas
300 S Church
Jonesboro, AR 72401

Re FirstStep Pavement Management
Statement of Proprietary Technology

Allow this letter to certify that the methods of bulk data collection and presentation utilized by the FirstStep Pavement Management technique is a proprietary technology and protected currently as both Registered Trademark and Assigned Patent by the United States Patent and Trademark Office. Unauthorized use in any form is a violation of the American Inventors Protection Act of 1999.

Sincerely,

A handwritten signature in blue ink, appearing to read "Michael G. Morgan", with a long horizontal flourish extending to the right.

Michael G. Morgan
Owner