



Agenda Item Executive Summary

AGENDA Professional Services Agreement -
ITEM: 2025 Pavement Condition Assessment

BOARD OR Board
COMMITTEE:

BUDGET IMPACT

Amount	\$ 27,959	Budgeted	\$50,000
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Fund: MFT Fund	Corresponding Activity Measure: N/A
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EXECUTIVE SUMMARY

Every 3 years, staff solicit proposals for a pavement condition assessment which aims to objectively assign a rating to each Village owned roadway. These ratings allow staff to monitor roadway deterioration and determine the appropriate general maintenance activities. These general maintenance activities range from crack sealing to a full resurface.

RECOMMENDATION

Staff recommend the approval of the Engineering Services Agreement between the Village of Bartlett and MDS Technologies, Inc. in the not-to-exceed amount of \$27,950. MDS Technologies has successfully completed pavement condition assessments for the Village in the past both on time and within budget.

ATTACHMENTS (PLEASE LIST)

Memo, Pavement Evaluation Proposal/ Agreement, Resolution

RELATIONSHIP TO STRATEGIC PLAN GOAL

Strategic Plan Goal: Continue to Enhance and Improve Efficiency of Service Delivery Methods and Approaches

Short Term (1-3 Years): Routine Complex

Long Term (3-5 Years): Routine Complex

ACTION REQUESTED

- For Discussion Only
- Resolution
- Ordinance
- Motion

MOTION: I MOVE TO APPROVE RESOLUTION # 2025-____-R, A RESOLUTION APPROVING OF A PROFESSIONAL SERVICES AGREEMENT BETWEEN THE VILLAGE OF BARTLETT AND MDS TECHNOLOGIES, INC FOR THE 2025 PAVEMENT CONDITION ASSEMENT.

Staff: Nicholas Talarico, Village Engineer

Date: May 26, 2025

Memo

To: Paula Schumacher, Village Administrator
From: Nicholas Talarico, Village Engineer
Subject: **2025 Pavement Condition Assessment**
Date: May 26, 2025

BACKGROUND

Every 3 years, staff solicit proposals for a pavement condition assessment which aims to objectively assign a rating to each Village owned roadway. This rating, referred to as a Pavement Condition Index (PCI), allows staff to monitor roadway deterioration and determine the appropriate general maintenance activities. In addition to determining maintenance activities, the PCI also plays a large role in determining our resurfacing project areas.

DISCUSSION

After discussions with multiple vendors, staff selected MDS Technologies, Inc. of Park Ridge, IL to provide the condition assessment services for this project. Their proposal, totaling \$27,950, includes both the pavement scan and PCI assignment which will seamlessly integrate into our GIS system. Additionally, we have had success working with MDS in the past and believe this proposal to be the best value.

RECOMMENDATION

Staff recommend the approval of the Engineering Services Agreement between the Village of Bartlett and MDS Technologies, Inc. in the not-to-exceed amount of \$27,950.

MOTION

I MOVE TO APPROVE RESOLUTION # 2025-____-R, A RESOLUTION APPROVING OF A PROFESSIONAL SERVICES AGREEMENT BETWEEN THE VILLAGE OF BARTLETT AND MDS TECHNOLOGIES, INC FOR THE 2025 PAVEMENT CONDITION ASSEMENT.



March 28, 2025

Village of Bartlett
Public Works Department
1150 Bittersweet Drive
Bartlett, IL 60103

Attention: Nicholas Talarico, P.E.
Village Engineer

Re: 2025 Proposal to Assess Pavement Condition for All Village Roads

Dear Sir:

MDS Technologies, Inc. (MDST) is pleased to submit this proposal to provide the above referenced services to the Village of Bartlett (Village). The project entails re-evaluating the condition of the Village's road network, including any new roads added since the previous evaluation. According to the data in the GIS pavement centerline file recently provided by the Village, the Village currently maintains approximately 143.9 centerline miles of paved roads.

The Scope of Work is broken down into a series of tasks which are described below. The work is very similar to the work we performed for the Village in 2015, 2019, and 2022.

Project Initiation Meeting

MDST's Project Manager will meet with Village staff to review/confirm the scope of work, establish project communication channels, review the project schedule, and discuss technical issues of importance to the project. This includes confirming the details of the linkage to GIS and the details regarding how sidewalks are to be evaluated (if the Village opts to include sidewalk condition evaluation in the project). This meeting can take place within one week of our receipt of authorization to proceed with the project.

Modify PAVER Database and Link to 2025 GIS Pavement Centerline File

A comparison of the 2025 GIS pavement centerline file to the 2022 version of this file shows that some new roads have been brought on by the Village. MDST will add new roads to the PAVER database so that it reflects the complete network that is currently maintained by the City. We will also update the linkage between the PAVER database and the City's 2025 GIS pavement centerline file so that the link to the Village's Unique Global ID is maintained.

Field Work

Geo-referenced digital images of Village maintained roads will be captured using MDST's vehicle based technology. A forward looking camera mounted on the roof of the vehicle will capture detailed images of the pavement surface from curblineline to curblineline in a streetscape view. Images 8 MP in size will be captured in JPG format at 0.5 second intervals. Imagery of four-lane roads will be captured in both directions of travel and two lane roads will have imagery captured in one direction. This approach provides full coverage of the surface of each road segment.

If the Village opts to include sidewalk condition evaluation in the project, a second camera will be added to the data collection vehicle. This camera will capture 360 degree images so that a sidewalk area can be viewed from multiple angles. In this case imagery will be collected on all roads with sidewalk in both directions.

Pavement Condition Inspection

The digital imagery will be viewed in an office environment to assess the condition of each road segment. A specially designed software application is used to play back the images and display their location on a map. A trained technician views the images frame by frame and assesses the severity and extent of various distresses that occur on each road segment according to the distress definitions in ASTM D6433 Pavement Condition Index (PCI) method of pavement evaluation.

Load Inspection Data and Calculate PCI Scores

Once acquired, the pavement condition data will be uploaded into the Village's PAVER database and a PCI score will be calculated for each road segment. If desired, MDST will also update the inspection data for the road segments that are already scheduled for rehabilitation this year so that the database reflects the fact that these roads will be free of distress by the end of the 2025 construction season. The PCI score for each road segment will be supplied in Excel and/or GIS format. The updated PAVER database can be provided to the Village.

Optional Pavement Condition Report

If desired by the Village, MDST can write a "State of the Road Network" report that summarizes condition of the road network. The report would include a color coded map showing the condition of each road segment. It would also include a bar chart showing the percentage of the road network that falls into the various PCI categories (i.e., Good, Satisfactory, Fair, Poor, Very Poor, Serious, Failed) along with an example image of a road in each of these categories. Comparisons to the condition of the network from the prior evaluations can also be made to assess the trend in overall pavement condition. The report will be provided in electronic format.

If desired, MDST can provide a sample report that we wrote for another municipal government client to Village staff for review.

Optional Sidewalk Mapping

The Village may opt to include mapping the Village's sidewalk network in GIS in the scope of work. Village staff estimates that it maintains 150 miles of sidewalk. These sidewalks will be mapped using a combination of GIS ortho-imagery (which we assume we can obtain from the Village) and the street level imagery we will capture during the fieldwork. Use of the street level imagery will allow us to determine the existence of sidewalk (or gaps in sidewalk) in areas not visible in the ortho-imagery due to tree canopy, adjacent buildings, etc. It will also allow us to map sidewalks that have been constructed since the ortho-imagery was captured.

The sidewalk line-work will generally be drawn at a scale of 1:300 so that the lines are accurately placed and appear smooth when viewed at this scale or larger. The sidewalk line segments will be associated with the corresponding road segment and the end points of sidewalk segments will correspond to the end points of the corresponding road segment. The data will be provided to the Village in GIS format.

Optional Sidewalk Condition Assessment

MDST can also assess the condition of the Village's sidewalk network. In previous projects for other municipal government clients, this has involved identifying and locating panels that are damaged above a certain threshold. The type of damage evaluated typically includes settlement/heaving, shattered slab, transverse cracking, spalling, scaling, and corner breaking. The types of damage to be evaluated and the threshold for each type of damage will be determined in conjunction with Village staff prior to the condition assessment. As mentioned above, if the Village opts to include this assessment in the project, a second camera will be added to the data collection vehicle. This camera will capture 360 degree images so that a sidewalk area can be viewed from multiple angles. In this case, imagery will be collected on all roads with sidewalk in both directions.

Project Schedule

MDST can initiate the project immediately upon receipt of Notice to Proceed. Fieldwork will be performed in early May and all data can be delivered to the Village by July 15, 2025.

Fee Schedule

MDST's all-inclusive, lump sum fee to provide these services is shown below. MDST will submit an invoice to the Village upon completion of the fieldwork and on a monthly basis thereafter. Invoiced amounts will be pro-rated based on percent complete by Task. Payment terms are Net Thirty (30) days. The figures in the table below are valid for ninety (90) days.

Project Fee Schedule

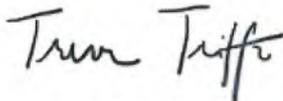
Task Description	Fee
<u>Core Tasks</u>	
Project Initiation	\$500
Add New Roads and Modify GIS Linkage	\$2,050
Field Work	\$7,650
Pavement Condition Evaluation	\$16,250
Upload Inspection Data and Calculate PCI Scores	\$1,500
Total:	\$27,950
<u>Optional Tasks</u>	
Pavement Condition Report	\$2,000
Map Sidewalks in GIS	\$9,950
Sidewalk Condition Assessment ¹	\$9,850

¹ Includes additional fieldwork needed for sidewalk assessment.

Closing

Thank you for providing us with the opportunity to submit this proposal. If you have any questions, please contact me at your convenience.

Sincerely,
MDS Technologies, Inc.



Trevor T. Triffo
Principal

Proposal Accepted By:



Name: Nicholas Talarico **Date:** 5/7/2025
Title: Village Engineer
Entity: Village of Bartlett

RESOLUTION 2025 - ___ - R

A RESOLUTION APPROVING OF A PROFESSIONAL SERVICES AGREEMENT BETWEEN THE VILLAGE OF BARTLETT AND MDS TECHNOLOGIES, INC FOR THE 2025 PAVEMENT CONDITION ASSEMENT.

BE IT RESOLVED by the President and Board of Trustees of the Village of Bartlett, Cook, DuPage and Kane Counties, Illinois, as follows:

SECTION ONE: The agreement between the Village of Bartlett and MDS Technoligies, Inc. dated June 3, 2025 (the "Agreement"), a copy of which is appended hereto and expressly incorporated herein by this reference, is hereby approved.

SECTION TWO: That the Village President is hereby authorized and directed to sign the Amendment to the Agreement on behalf of the Village of Bartlett.

SECTION THREE: SEVERABILITY. The various provision of this Resolution are to be considered as severable, and of any part or portion of this Resolution shall be held invalid by any Court of competent jurisdiction, such decision shall not affect the validity of the remaining provisions of this Resolution.

SECTION FOUR: REPEAL OF PRIOR RESOLUTIONS. All prior Ordinances and Resolutions in conflict or inconsistent herewith are hereby expressly repealed only to the extent of such conflict or inconsistency.

SECTION FIVE: EFFECTIVE DATE. This Resolution shall be in full force and effect upon its passage and approval.

ROLL CALL VOTE:

AYES:

NAYS:

ABSENT:

PASSED JUNE 3, 2025

APPROVED JUNE 3, 2025

Daniel H. Gunsteen, Village President

ATTEST:

Lorna Giles, Village Clerk

CERTIFICATION

I, the undersigned, do hereby certify that I am the Village Clerk of the Village of Bartlett, Cook, DuPage, and Kane Counties, Illinois, and that the foregoing is a true, complete and exact copy of Resolution 2025 - ___-R, enacted on June 3, 2025, and approved on June 3, 2025, as the same appears from the official records of the Village of Bartlett.

Lorna Giles, Village Clerk