



August 4, 2017

Mr. John Ingram  
Infrastructure Maintenance Director  
Department of Public Works  
15655 Ravinia Av  
Orland Park, IL 60462  
(708) 403-6350  
publicworks@orlandpark.org

Subject: **Proposal for Parking Lot Evaluations and Rehabilitation  
Recommendations for the Village of Orland Park, Illinois**

Dear Mr. Ingram:

Applied Research Associates, Inc. (ARA) appreciates the opportunity to submit this proposal for the evaluation and rehabilitation recommendations for 28 parking lots in the Village of Orland Park.

Please feel free to review the attached proposal at your convenience. If you have any questions or need additional information, please do not hesitate to contact us.

Sincerely,

Handwritten signature of Joseph A. Stefanski in black ink.

Joseph A. Stefanski, P.E.  
Senior Engineer

Handwritten signature of William R. Vavrik in black ink.

William R. Vavrik, Ph.D., P.E.  
Vice President, Transportation

cc: Doug Steele, ARA

**TRANSPORTATION SECTOR**

100 TRADE CENTRE DRIVE, SUITE 200 ■ CHAMPAIGN, IL 61820-7322  
(217) 356-4500 ■ FAX: (217) 356-3088 ■ WWW.ARA.COM/TRANSPORTATION

## PROJECT UNDERSTANDING

The Village of Orland Park maintains 28 parking lots varying in size, use, age, and condition. The parking lots total over 2.3 million square feet of pavement area and provide 5,049 parking spaces. Historically, the Village has preserved pavement condition by performing crack sealing, patching, and sealcoating of the pavement surface approximately every 2 to 3 years. These preventive treatments are effective in rejuvenating the asphalt concrete (AC) surface and limiting infiltration of surface runoff and debris, but they do not restore the pavement's structural capacity, eventually reducing their effectiveness and feasibility. Many of the Village's parking lots are reaching an age and condition where more extensive rehabilitation is required, such as milling and replacement of the AC surface (figure 1).

Applied Research Associates, Inc. (ARA) specializes in pavement services and is submitting this proposal for pavement evaluation and rehabilitation services for the Village's parking lots. ARA proposes a condition assessment program based on a pavement distress survey to assess current pavement functional and structural conditions, and to identify the proper timing and rehabilitation strategy for each facility. This study will provide an objective plan for the Village to use in programming their parking lot rehabilitation activities and funding for the next 5 to 10 years. It does not include project-level activities, such as nondestructive deflection testing and pavement coring, which are typically performed as part of a comprehensive rehabilitation design.

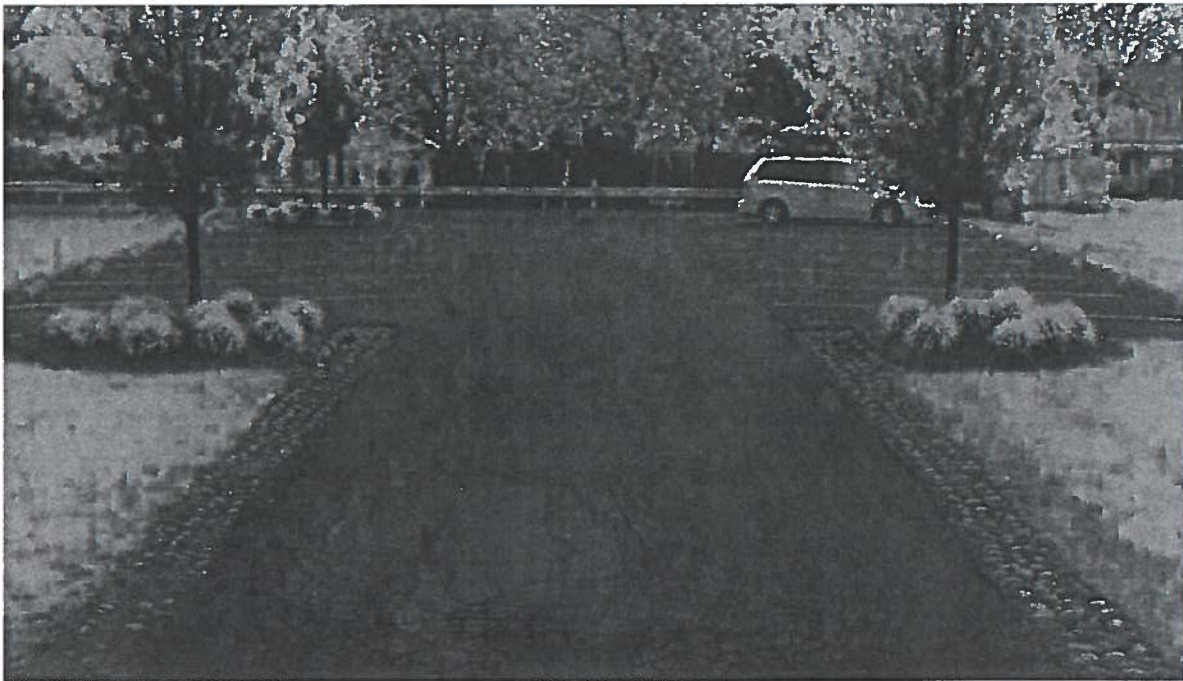


Figure 1. Example of a Village parking lot rehabilitation candidate.

Figure 2 shows example of parking lot layouts for 2 of the 25 parking lots included in the study.



Figure 2. Sample parking lot layouts—108<sup>th</sup> and 153<sup>rd</sup> Street Metra parking lots.

## SCOPE OF SERVICES

The following sections provide a task-by-task summary of ARA's proposed scope of work.

### Task 1. Pavement Condition Survey

ARA will perform a condition survey using the Pavement Condition Index (PCI) methodology for AC-surfaced streets and parking lots (ASTM D6433-11). The PCI method is a foot-on-ground survey of visual pavement distress, such as cracking, rutting, and defects in the pavement surface. ARA will sample representative areas of each parking lot to quantify the type, severity, and extent of each distress type. Each sample unit will contain an area of approximately 2,500 sf and have its location documented, such that the same area can be located for future revisiting. An experienced, two-person field crew will perform the surveys and take all necessary precautions to insure the safety and convenience of the parking lot users, as well as their own personal safety. Following field data collection, ARA will enter raw data in

our RoadCare pavement management program to calculate a PCI index value, which is a 100 to 0 rating of the overall pavement condition (100=very good, 0=very poor), as shown in figure 2.

The PCI method takes into account both functional and structural distresses and allows a direct comparison of all parking lots on a common scale. The PCI rating is significant to the selection of treatment type and timing, as well, as the unit costs for rehabilitation increase at a greater rate for lower PCI scores.

ARA anticipates surveying approximately 114 sample units, covering approximately 10 percent of the total pavement area. We estimate that all parking lots can be surveyed within 4 working days and that we may need to survey some locations outside of normal use hours when fewer vehicles are present.

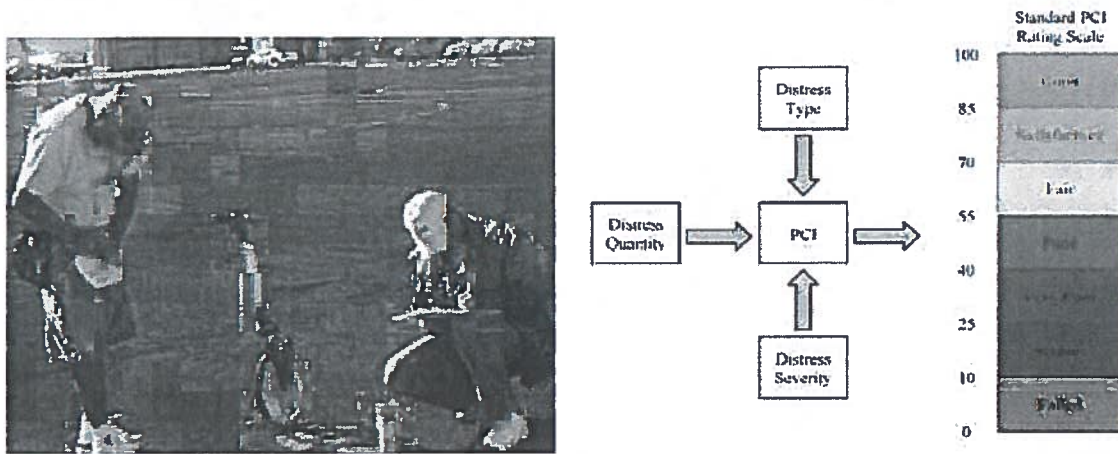


Figure 3. ARA will record pavement distresses and calculate a condition index on a 100 to 0 scale.

### Task 2: Rehabilitation Planning

Figure 4 demonstrates the pavement performance concept and the importance of selecting the correct treatment at the correct time in the pavement deterioration cycle. As shown in the figure, pavement deterioration, and therefore rehabilitation costs, increases rapidly in the second half of the pavement life cycle. While preventive maintenance treatments are effective in the early stages of pavement deterioration, their benefit and performance decreases over time, making rehabilitation necessary.

ARA will review the PCI results for each parking lot in light of its age and traffic use to estimate the timing of its next rehabilitation. This will likely be reported in terms of remaining service years until rehabilitation, such as 1 to 2, 3 to 5, 5 to 10, and greater than 10 years. ARA will work with Village personnel to determine what types of treatments are feasible based on their experience and local capabilities.

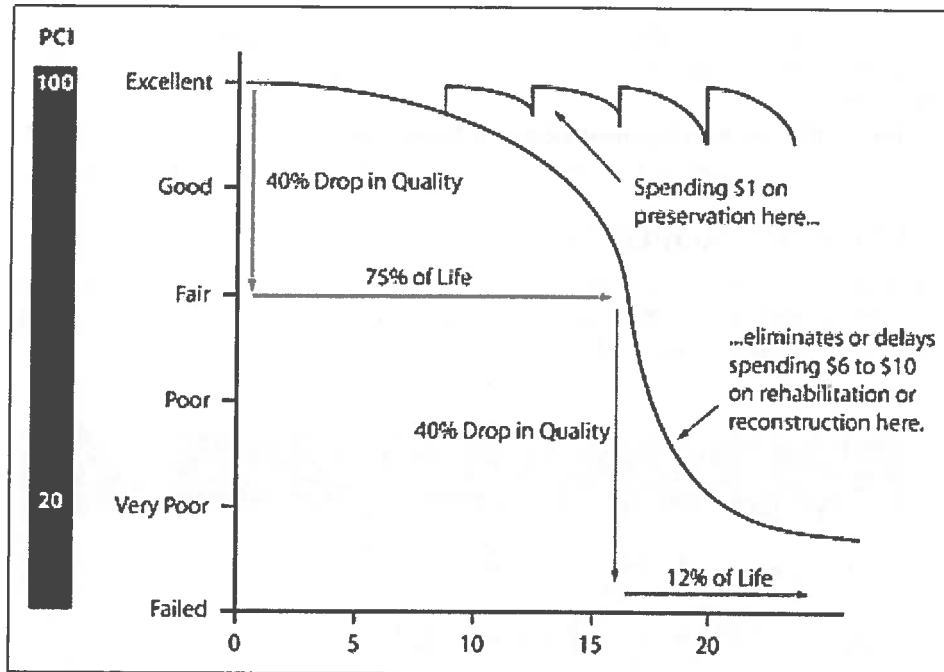


Figure 4. Rehabilitation timing is important to the optimization of limited construction funds.

### Task 3: Report and Recommendations

ARA will summarize our data collection methodology, results, and rehabilitation recommendations in a report to the Village.

### PROJECT SCHEDULE

ARA is typically available to mobilize within two weeks receipt of written notice to proceed and will coordinate with the Village to determine a mutually agreeable testing schedule. ARA anticipates that field data collection will require 4 days, if no delays due to weather or access. We will deliver the recommendations and draft report within 4 weeks completion of data collection.

### PROJECT COSTS

ARA's estimated firm fixed price to complete this work is \$38,400. These costs include labor, overhead, equipment charges, travel, and other direct costs. These costs do not include any fees for traffic control, as we anticipate none will be required. We invoice monthly on a percent complete basis for payment to be made within 30 days receipt of invoice.

### REQUESTED SUPPORT

ARA kindly requests the following support to complete this project:



- Pertinent records, when available, regarding the individual parking lots, such as construction history information, year constructed, traffic and pavement structure (e.g., layer types and thicknesses)
- Electronic GIS files showing the parking lot boundaries
- Written authorized access to each parking facility to perform pavement condition surveys

### ACCEPTANCE OF PROPOSAL

To accept this proposal as an agreement to provide professional services in accord with the scope, cost, schedule, required support, and terms & conditions, please sign this proposal in the space below. This acceptance will act as a notice to proceed.

ACCEPTANCE AND AUTHORIZATION	
Name (print)	Joseph S. LaMare
Title	Village Manager
Signature:	
Date:	2/13/18



## Terms & Conditions

Applied Research Associates, Inc. (ARA) agrees to perform the specified work with the professional skill and care ordinarily provided by firms practicing in the same or similar locality under the same or similar circumstances. The parties acknowledge that there has been an opportunity to negotiate the terms and conditions of this Agreement and agree to be bound accordingly.

### 1. INDEPENDENT CONTRACTOR

ARA will act as an independent contractor and not as Client's agent for any purpose whatsoever, and will have no authority to make any commitments on behalf of Client or to bind Client in any way whatsoever.

### 2. PROJECT SUPERVISION AND ASSIGNMENT

ARA shall have wide discretion in the methods used to perform any assigned tasks unless specified otherwise. ARA will cooperate with the Client to the extent possible to arrange for consultations between the Client, ARA personnel, and others engaged in rendering services to the Client related to ARA's performance under this agreement. ARA agrees that no tasks shall be performed or expenses incurred without specific authorization of the Client.

### 3. OWNERSHIP OF DOCUMENTS

All data, information, software, hardware, and documents produced by ARA under this agreement shall remain the property of ARA and may not be used by the Client for any endeavor outside of the scope of this agreement without the written consent of ARA, unless otherwise noted in this agreement.

### 4. ACCESS TO PROJECT SITE

If required for the performance of this effort, ARA will be granted timely access to the project site as needed. If traffic control or protection is required, it shall be provided by the Client or specific provisions will be made for ARA to provide traffic control or protection at an additional price. ARA will take precautions to minimize damage when performing its work, but ARA is not responsible for any items destroyed as a necessary part of the work.

### 5. PAYMENT

ARA will invoice monthly and at the completion of the project, with payment due net 30 days. Interest will be charged on amounts outstanding more than 30 days. The interest rate will be 1½ percent per month, compounded until paid. In the event of late payment, the Client agrees to pay all collection costs, legal expenses and attorneys' fees incurred by ARA in collecting payment, including interest. In the event that some portion of the invoice is disputed, payment for the undisputed portion of the invoice will be made within 30 days. If the Parties are unable to reach agreement regarding the disposition of the disputed portions of the invoice within 21 days, the matter will be resolved according to the Dispute Resolution clause of this agreement.

### 6. HIDDEN CONDITIONS OR HAZARDOUS MATERIALS:

If ARA has reason to believe that a hidden condition may exist, ARA shall notify the client who shall authorize and pay for all costs associated with the investigation of such condition and if necessary, all costs necessary to correct such condition. If (a) the client fails to authorize such investigation of the correction after due notification, or (b) ARA has no reason to believe that such condition exists, the Client is responsible for all risks associated with this condition, and ARA shall not be responsible for the existing condition nor any resulting damages to persons or property. ARA shall have no responsibility for the discovery, presence, handling, removal, disposal or exposure of persons to hazardous materials of any form.

### 7. TERMINATION OF SERVICES:

This agreement may be terminated upon 10 days written notice by either party. In the event of termination, the Client shall pay ARA for all services performed to the date of termination, all reimbursable expenses and reasonable termination expenses.

### 8. CONFIDENTIALITY

Each party agrees not to use the other's proprietary information for any purpose other than for the performance of this Agreement. Proprietary information is defined as information concerning techniques, processes, inventions, research and development, and cost data in written form with each sheet thereof marked with an appropriate legend indicating its proprietary



nature and delivered by one party to another. Any other use of such proprietary information by the recipient shall be made only upon receipt of the prior written consent from an authorized representative of the other party.

#### 9. INDEMNIFICATION

Client (indemnitor) shall indemnify and hold harmless ARA (indemnitee) from and against any and all (including third party) claims, damages, losses and expenses (including reasonable attorney's fees) arising out of or resulting from the performance of services, provided that any such claims, damage, loss or expense is caused in whole or in part by the negligent act or omission and/or liability of the indemnitor, or anyone directly or indirectly employed by the indemnitor.

#### 10. CONSEQUENTIAL DAMAGES

Neither Party shall be liable to the other for consequential damages, including, without limitation, loss of use or loss of profits, incurred by one another or their subsidiaries or successors, regardless of whether such damages are caused by breach of contract, willful misconduct, negligent act or omission, or other wrongful act of either of them.

#### 11. FORCE MAJEURE

Neither party shall be liable for any failure of or delay in performance of its obligations under this Subcontract to the extent such failure or delay is due to circumstances beyond its reasonable control, including, without limitation, acts of God, acts of a public enemy, fires, floods, wars, civil disturbances, sabotage, accidents, insurrections, blockades, embargoes, storms, explosions, labor disputes, acts of any governmental body, failure or delay of third parties or governmental bodies from whom a party is obtaining or must obtain approvals, authorizations, licenses, franchises or permits, or inability to obtain labor, materials, power, equipment, or transportation (collectively referred to herein as "Force Majeure"). Each party shall use its reasonable efforts to minimize the duration and consequences of any failure of or delay in performance resulting from a Force Majeure event.

#### 12. GOVERNING LAW

This Agreement shall be governed by and construed in accordance with the laws of the State of New Mexico, excluding its principles of conflicts of laws. The United Nations Convention for the International Sale of Goods is expressly excluded from this Agreement, and shall have no force or effect on the parties.

#### 13. DISPUTE RESOLUTION

Any controversy or claim arising out of or relating to this agreement, or breach thereof, which may be properly submitted to arbitration, shall be settled by arbitration. The substantially prevailing party shall be entitled to recover from the non-prevailing party all costs and expenses and attorney's fees it incurred in connection with any suit or legal or administrative action or appeal with respect to this order or the transaction under it.

#### 14. NO THIRD PARTY RIGHTS

This Agreement shall not create any rights or benefits to parties other than Client and ARA. No third party shall have the right to rely on ARA opinions rendered in connection with the Services without ARA written consent and the third party's agreement to be bound to the same conditions and limitations as Client.

#### 16. COMPLETE AGREEMENT; MODIFICATIONS

This Agreement constitutes the entire Agreement of the parties hereto, and all previous communications between the parties, whether written or oral with reference to the subject matter of this Agreement, are hereby canceled and superseded. No modification of this Agreement shall be binding upon the parties hereto, unless such is in writing and duly signed by the respective parties hereto.