

# VILLAGE OF DEER PARK

## PAVEMENT MANAGEMENT REPORT

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### **Submitted To:**

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# VILLAGE OF DEER PARK PAVEMENT MANAGEMENT PROGRAM

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## **EXECUTIVE SUMMARY**

Christopher B. Burke Engineering, Ltd. organized an extensive pavement maintenance program for the Village of Deer Park and has scheduled a program of various construction maintenance techniques to most efficiently maintain the integrity of the Village Streets.

As part of this program, annual pavement evaluations and adjustments to the program will be required. Maintenance strategies will need to be reviewed and evaluated with the possible elimination or addition of different strategies. Pavement maintenance is a dynamic, but essential, part of maintaining one of the largest Village investments. With the data collected, the database developed, and a 20-year proposed program the Village is well on its way to a cost-effective pavement maintenance program for many years to come.

The Village's current pavement condition index (PCI) value of 8.0 (Very Good) emphasizes the dedication and attention the Village has made to their street network investment to this point. The Village of Deer Park should institute a number of pavement maintenance strategies recommended by CBBEL described within this report. The willingness to implement various maintenance techniques illustrates the Village's dedication to their street network and the importance of a high level of service of Village streets.

In order for the Village to keep the high standard of roadway conditions the community has come to expect and keep costs down, preventive maintenance is a must. Without preventive maintenance, the Village will not extend the full life of the pavement and costly rehabilitation treatments, such as resurfacing or reconstruction, will be necessary before the pavement's useful life has been met. A pavement management program will allow Village staff to manage and protect a valuable asset and prolong the street system's useful life. The Village will be able to budget for the future and analyze its street system on an annual basis and make the necessary appropriations and adjustments. A proactive pavement management program will provide the residents of the Village with a high level of service and safety that they have come to expect.

Pavement maintenance can be summarized as the application of the right procedures and materials, at the right time, using the appropriate construction practices. Cost-effective preventative maintenance is largely dependant on the timing of the activity and the quality of the work performed. For a preventative maintenance strategy to be successful, it must be recognized that it is cyclic and requires scheduling. It must be properly funded over a period of years to be effective. Deferring preventive maintenance only increases reactive (or routine) maintenance and accelerates deterioration. "Do it right" performance on routine and preventive maintenance activities is a key element in the durability of repairs and their cost effectiveness.

The following are key items for consideration:

1. Several pavement distresses were observed, including alligator cracking, clock cracking, edge cracking, joint reflective cracking, weathering, and base failure.
2. The Village's average Pavement Condition Index (PCI) equals 8.0. The PCI value of 8.0 represents a pavement that is showing little signs of aging and still is maintaining a sound structural condition. Even with this 8.0 pavement rating and very good condition, it still is necessary to continue some type of routine preventive pavement maintenance to maximize the pavement's useful life.
3. As with any investment a community makes, whether it is vehicles, office equipment, or buildings, preventive maintenance becomes a key component of extending the life of the investment. The same holds true for pavements. Preventive maintenance will extend the life of the pavement and be less extensive and disruptive to the community if performed within the early stages of the life cycle curve. If properly scheduled and implemented, preventative maintenance can extend the pavement's useful life and maintain the level of service that the Village has come to expect.
4. The physical and environmental forces at work on the pavements and our geographical region are dynamic. The need to maintain safety on the Village's roadways during inclement weather, influencing the use of de-icing materials, compounded by other factors of nature, promote the deterioration of the roadways. It is for these reasons that the Village must employ a comprehensive street maintenance program annually.
5. Twenty-three percent of the total street pavement area has a PCI value of 5, 6, or 7. Without a preventive maintenance program, these streets will come due for pavement resurfacing at approximately the same time, which will cause a tremendous cost spike in the Village's Pavement Maintenance Program. CBBEL and the Village estimate these streets will deteriorate to a condition in which resurfacing will be the recommended treatment in approximately 5-6 years. The pavement management program will help flatten out this potential spike and extend the life of the pavement.
6. The total cost to the Village of Deer Park for a pavement management program of this magnitude averages approximately 640 thousand dollars annually in 2020 dollars (for resurfacing and maintenance) and inflation for future years has not been added.
7. Without this funding and the opportunity to maintain a valuable Village investment, the Village will begin experiencing a drop in the pavement's condition sooner and the deterioration rate will become increasingly faster as each year passes. A well-maintained management program will help

prevent the commonly used “worst first” or reactive approach to pavement maintenance.

8. CBBEL recommends that the Village submit resurfacing projects to the Lake County Council of Managers. These projects could be simple grind and overlay or full reconstruction at a 20% local match. The construction costs and Phase III Engineering are eligible for funding.

Conclusion: We recommend that the Village move from a reactive mode to a proactive approach and adopt a road maintenance program, a cost-effective way of protecting the Village’s major investment in streets and pavement.

It should be noted that the 15 Year Program average budget per year (for resurfacing and maintenance) was approximately \$813,000, and the 20 Year average budget per year (for resurfacing and maintenance) is approximately \$640,000 per year.

## **INTRODUCTION**

The Village of Deer Park has requested that Christopher B. Burke Engineering, Ltd. (CBBEL) to complete a Village-wide street database and maintenance improvement program. As part of this program, a pavement evaluation rating system was created to determine the condition of each street segment. This document will give the measurements of streets in the program, provide the existing pavement condition, give the year of previous construction maintenance, and define various pavement maintenance strategies and costs associated with each segment. Finally, this report will summarize the anticipated costs to maintain the Village's street system and extend the pavement life.

The Village's system is a major community investment. To protect this investment and maximize its performance, pavement maintenance plays a crucial role in the Village's annual program. Pavements in this part of the country are exposed to extreme weather conditions. These weather conditions coupled with the pavement being exposed to more and more loads over time, necessitate the need for a pavement management program. This program will allow the pavement system to perform at acceptable levels of service and maximize the useful life of the pavement.

Routine pavement maintenance postpones the need for more costly pavement rehabilitation and reconstruction. One example of how routine pavement maintenance can alleviate the need for expensive pavement repairs is crack filling. Routine crack fill treatments to the Village's street system will reduce the moisture infiltration that is typically experienced and postpone the need for pothole repairs through pavement patching. In general, failure to perform routine maintenance results in a pavement that deteriorates faster and requires expensive pavement repairs.

Another effect of routine pavement maintenance is an increase in the pavement's level of service to the motoring public. A well-maintained pavement has fewer problems noticed by the motorist and a better skid resistance contributing to a safer roadway. Some of these factors do not directly measure into the pavement's overall rating, but do not go unnoticed by the motoring public.

The benefits of developing, programming and performing a routine pavement maintenance program may be summarized as follows:

- Maximizing the pavements' useful life.
- Postponing expensive pavement rehabilitation and reconstruction.
- Improving the ride quality and safety of the motoring public.
- Developing a cost-effective way of protecting the Village's pavement investment.

## **PAVEMENT HISTORY**

The Village's street system, as shown in Exhibit 1 – PCI Map, consists of approximately 24 centerline miles of streets currently maintained by the Village. In addition to the 24 miles in the street system, the Village's pavement maintenance program also includes maintaining the Village Hall, Chapel Hill Park, Charles Brown Park, Dover Pond Park, and Town Center Park Parking Lots with a total area of 8,250 Square Yards. The street system has been broken up into individual segments as listed in Exhibit 3, 3A, 3B – Pavement Evaluation Database Spreadsheet. The pavement database lists each segment in alphabetical order and includes its location, length, width, area, and the Pavement Condition Index (PCI) value identified by CBBEL per the field reconnaissance performed on November 21, 2019.

Maximizing the Village's funds allocated to street maintenance and postponing the high cost of street reconstruction is the base to a solid pavement maintenance program. A high level of service and budgetary constraints also factors in a pavement management program.

Throughout this report the theme is to extend the pavement's useful life through the use of routine pavement maintenance techniques. The Life Cycle Curve illustrates the need for preventive maintenance. As shown on Exhibit 5 – Typical Pavement Life Cycle Curve the Village will continue to experience a gradual drop in an individual street's quality until approximately Year 12 (60% of the pavement's useful life). The quality of the street at this point drops significantly the next 3-5 years reducing the pavement's useful life.

## **PAVEMENT CONDITION INDEX**

The Pavement Condition Index (PCI) can be defined as the current condition of each individual street segment. This index has been developed as a number between 1 and 10, with 10 as the best condition. The rating system is a modified version of the current PASER rating system as developed by the Transportation Information Center at the University of Wisconsin – Madison. A PCI value of 10 denotes a distress free pavement, where as a 1 implies a failed pavement. The following is a chart that defines the PCI value, visible pavement distress and general pavement treatment associated with the PCI value.

<b>PCI</b>	<b>Visible Distress</b>	<b>General Condition/ Treatment Measures</b>
10 New	<ul style="list-style-type: none"> <li>• None</li> </ul>	New or current construction. New overlay.
9 Excellent	<ul style="list-style-type: none"> <li>• Little to none</li> </ul>	Recent construction.
8 Very Good	<ul style="list-style-type: none"> <li>• No longitudinal cracks, expect reflection of paving joints.</li> <li>• Occasional transverse cracks, widely spaced (40' or greater).</li> </ul>	Recent overlay. Little or no maintenance required.
7 Good	<ul style="list-style-type: none"> <li>• Very slight or no raveling, surface shows some traffic wear.</li> <li>• Longitudinal cracks (open 1/4") spaced due to reflection or paving joints.</li> <li>• Transverse crack (open 1/4") spaced 10 feet or more apart, little or slight crack raveling.</li> <li>• No patching or very few patches in excellent condition.</li> </ul>	First signs of aging. Maintain with routine crack filling.
6 Fair	<ul style="list-style-type: none"> <li>• Slight raveling (loss of lines) and traffic wear.</li> <li>• Longitudinal cracks (open 1/4" – 1/2") due to reflection and paving joints.</li> <li>• Transverse cracking (open 1/4"-1/2") some spaced less than 10 feet.</li> <li>• Slight to moderate flushing or polishing.</li> <li>• Occasional patching in good condition.</li> </ul>	Show signs of aging, sound structural condition. Could extend life with rejuvenators, micro surfacing or overlay.
5 Fair	<ul style="list-style-type: none"> <li>• Moderate to severe raveling (loss of lines and coarse aggregate).</li> <li>• Longitudinal cracks (open 1/2:") show some slight raveling and secondary cracks. First signs of longitudinal cracks near wheel path or edge.</li> <li>• Transverse cracking and first signs of block cracking. Slight crack raveling (open 1/2").</li> <li>• Extensive to severe flushing or polishing.</li> <li>• Some patching or edge wedging in good condition.</li> </ul>	Surface aging. Needs micro surfacing or overlay. May need strengthening from patching or overlay.

<b>PCI</b>	<b>Visible Distress</b>	<b>General Condition/ Treatment Measures</b>
4 Poor	<ul style="list-style-type: none"> <li>• Severe surface raveling.</li> <li>• Multiple longitudinal and transverse cracking with slight raveling.</li> <li>• Block cracking (over 25 – 50%) of surface).</li> <li>• Patching in fair condition.</li> <li>• Slight rutting or distortions (1" deep or less).</li> </ul>	Significant aging and first signs of need for strengthening. Would benefit from patching and overlay. Consider partial reconstruction.
3 Poor	<ul style="list-style-type: none"> <li>• Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion.</li> <li>• Block cracking over 50% of surface.</li> <li>• Some alligator cracking (less than 25% or surface).</li> <li>• Patches in fair to poor condition.</li> <li>• Moderate rutting or distortion.</li> <li>• Occasional potholes.</li> </ul>	Need patching and overlay. Consider partial reconstruction.
2 Very Poor	<ul style="list-style-type: none"> <li>• Alligator cracking (over 25% of surface).</li> <li>• Severe distortions (over 2" deep).</li> <li>• Extensive patching in poor condition.</li> <li>• Potholes.</li> </ul>	Severe deterioration. Need partial reconstruction with extensive base repair.
1 Failed	<ul style="list-style-type: none"> <li>• Severe distress with extensive loss of surface integrity.</li> </ul>	Failed. Needs total reconstruction.

This chart describes the rating system in detail and provides a description of all the rating levels from 1 to 10 and what can be expected for each rating level. Note that individual pavements sections will not have all of the types of distress listed for any particular rating, but one or more examples of distress associated with that rating.

Exhibit 6 provides visual examples of the ratings. This type of rating system has been utilized by other local communities and has proven to be a simple way to evaluate, plan, budget and implement a pavement management system that fits the communities' needs and expectations.

The pavement evaluation process was made up of three distinctive features:

1. Visual inspection.
2. Performance.
3. Pavement type and history.

CBBEL's evaluators first reviewed the various pavement stresses that would be encountered in the field and assigned a rating to these stresses and pavement conditions. CBBEL calibrated itself in the field by taking a sample of each pavement distress and assigning to it the appropriate rating. Several pavement distresses were observed, including alligator cracking, block cracking, edge cracking, joint reflective cracking, weathering, and base failure.

Alligator cracking is a series of interconnecting cracks caused by failure of the asphalt surface under repeated traffic loadings or poor drainage conditions. The interconnecting cracks form many-sided, sharp angled pieces which develop a pattern similar to chicken wire or alligator skin. These areas need to be excavated and have their base and surface replaced. Large areas require reconstruction.

Block cracking is a series of interconnecting cracks, which divide the pavement into approximately rectangular pieces. Block cracking is not load related; it is caused primarily by shrinkage of the asphalt concrete and daily temperature cycling. Repair with sealcoat or overlay. In severe cases, reconstruction may be necessary.

Edge cracks are parallel to and adjacent to the outer edge of the pavement. Edge cracking is caused by frost weakened base or subgrade near the pavement edge, and can be accelerated by traffic loadings. In the advanced stage, edge cracking causes breakup of the pavement along the edge. Crack fill to prevent further deterioration. Overlay or reconstruction may be required.

Rutting, due to garbage trucks, is the displacement of roadway material creating channels in wheel paths. It is caused by traffic compaction or displacement of unsuitable material. Minor ruttings can be repaired with overlay. Severe Rutting (2" or greater) spots must have the old surface milled or reconstructed before resurfacing.

Raveling is progressive loss of pavement from the surface down. This is caused by stripping of the bituminous film from the aggregate, asphalt hardening from aging, poor compaction in cold weather construction, or inadequate asphalt content. Protect with sealcoat or thin overlay when required.

Weathering is the wearing away of the pavement surface due to the loss of bitumin. Weathering tends to occur over time as the bitumin in the surface oxidizes, the aggregate becomes loose, and the pavement becomes brittle. Protect with sealcoat or thin overlay when required.

Joint reflective cracking occurs in asphalt pavements which have been laid over portland cement concrete pavements. Such cracks are a reflection of the joints in the underlying concrete pavement and are caused by thermal and moisture induced movements of the concrete slab. Thick overlay or reconstruction may be necessary.

Base failure is the structural damage to the pavement base and sub-base caused by continuous traffic loadings and temperature change cycles over time. Poor drainage, inadequate base materials and sub-standard design can also cause base failures.

Once the calibration process was complete, the evaluation process was performed throughout the Village until the entire street system was evaluated and ultimately given a PCI value. As part of the PCI value, performance, pavement type and expectant pavement life was included in the rating process. Performance, pavement type and history are critical elements to the pavement's overall ratings. The pavement may appear to be in satisfactory condition on the surface (Visual inspection); but through CBBEL's use of pavement cores on some of the streets provided by the Village, data from the previous Village road programs, and previous construction information, knowledge of the pavement type, performance, and pavement history are used to get a true rating of the pavement.

Upon the completion of this evaluation process the PCI ratings were entered into the pavement database, Exhibit 3, 3A, 3B – Pavement Evaluation Database Spreadsheet. The Village's average Pavement Condition Index (PCI) equals 8.0. This PCI value is considered good and illustrates the Village's diligence to their street system, the Village's commitment to pavement maintenance and up keeping the Level of Service (LOS) the community has come to expect. Shown on Exhibit 1 – Pavement Condition Index Map are each individual PCI values for the Village's roadway network. The PCI value of 8.0 represents a pavement that is showing signs of aging, but still is maintaining a sound structural condition. Even with this 8.0 pavement rating and very good condition, it still is necessary to continue some type of routine preventive pavement maintenance to maximize the pavement's useful life.

As with any investment a community makes, whether it is vehicles, office equipment, or buildings, preventive maintenance becomes a key component of extending the life of the investment. The same holds true for pavements. Preventive maintenance will extend the life of the pavement and be less extensive and disruptive to the community if performed within the early stages of the life cycle curve. If properly scheduled and implemented, preventive maintenance can extend the pavement's useful life and maintain the level of service that the Village has come to expect. Once the pavement reaches 75% of its useful life the quality of the pavement rapidly decreases and pavement treatments become more expensive, severe, and disruptive. One aspect that is typically forgotten when discussing pavement maintenance is the disruption to the motoring public and homeowners. Typically, the more expensive pavement treatments cause major disruption with road closures, travel delays, etc. Preventive maintenance prolongs the pavement life, ultimately reducing the overall disturbance to the motoring public and homeowners.

## **PAVEMENT MAINTENANCE TECHNIQUES**

The Village of Deer Park pavement management program consists of different categories of work intended to address a variety of maintenance considerations on different pavement types, ages and conditions. These programs generally fall into four major forms of work, 1) preventive maintenance, 2) resurfacing, 3) partial reconstruction, or 4) reconstruction. The method selected to be utilized on individual portions or sections of street within the Village are tailored to implement the most cost-effective treatment, which will gain the greatest enhancement and extension of the useful life of the pavement.

The physical and environmental forces at work on the pavements and our geographical region are dynamic. The need to maintain safety on the Village's roadways during inclement weather, influencing the use of de-icing materials, compounded by other factors of nature, promote the deterioration of the roadways. It is for these reasons that the Village must employ a comprehensive street maintenance program annually.

The following is a brief summary of each of the programs involved in the maintenance improvement program, the phases of work involved in each of these programs, and discussion on the positive benefits gained by using a particular technique.

### **Preventive Maintenance Projects:**

Preventive maintenance treatment options are intended to preserve a Village's asphalt roadways. The preventive maintenance treatments work to extend the service life of bituminous pavements beyond the normal life expectancy of an untreated pavement. The various maintenance treatments serve to lengthen the intervals between the replacements of the deteriorated pavement. The treatment selected will depend on the age, volume of traffic, and condition of the pavement. Preventive maintenance has proven to be an extremely cost-effective way of preserving the Village's roadway network.

### **Years 1-3**

#### **Preservative Rejuvenating Agent:**

#### **\$1.10 / Square Yard**

A Preservative Rejuvenating Agent Program (i.e. GSB88) involves the application of a sprayed-on petroleum base product which provides an environmental seal of existing asphalt pavements in order to improve the durability and thus achieve longer service life between more extensive rehabilitation projects. The function of the rejuvenating agent is to replace the volatile components of the asphalt cement that are lost during the manufacturing process of the aggregate asphalt mixture and through the normal aging and oxidation processes caused by nature.

### **Years 3-8**

#### **Joint and Crack Filling Program:**

**\$1.50 / Square Yard**

The Joint and Crackfilling Program involves the cleaning and sealing of any cracks, voids or joints in the street pavement two inches (2") in width or less, with asphalt cement reinforced by polypropylene fibers. A companion contract to this work is the cleaning and sealing of selected pavement, utilizing a rubberized crackfilling product. The use of the rubberized product allows greater flexibility in managing cracks and joints on sections of pavement that experience a high degree of vehicular turning movement or pedestrian traffic. Crackfilling is a very cost-effective measure and is performed routinely to keep water from getting into the pavement. It helps to keep pavement in good condition and interrupts the propagation of more cracking.

### **Years 6-10**

#### **5% Bituminous Surface Patching (2"):**

**\$10 / Square Yard**

This program will provide various size and 2" thick finished contracted patches on various asphalt streets. Some streets have a moderate condition rating due to isolated defects on an otherwise good pavement. They do not warrant resurfacing but can be substantially up-graded by patching the problem areas. Additional life expectancy and a better ride will be the result.

### **Years 9-12**

#### **Micro-Surfacing:**

**\$1.75 / Square Yard**

A Micro-Surfacing Program involves the installation of a thin, latex modified, asphalt wearing course. The use of this product involves greater flexibility addressing pavement defects on streets which conventional overlays would not be cost effective at the time. This method is also beneficial on pavements which require work due to surface imperfections without causing excessive build up of additional material on the pavement cross section.

#### **Resurfacing Projects:**

When a pavement has deteriorated beyond the point of preventive maintenance, the pavement will then need to be resurfaced. Pavements beyond their service life without signs of extensive roadway base failure will fall into the resurfacing category. With any of the resurfacing programs curb and gutter repairs, and sidewalk repairs (if applicable) are included as part of the improvements. Resurfacing projects are used to compliment the preventive maintenance type projects. Programs in the resurfacing category generally serve to extend the life of the pavement by repairing and rehabilitating the top layers of the existing asphalt pavements. By repairing and resurfacing the existing pavement the service life is extended and thus postponing the costly replacement of that pavement.

### **Years 12-15**

#### **Mill and Overlay:**

**\$25.00 - \$30.00 / Square Yard**

In general, the mill and overlay program involves the renovation of streets by grinding off the top layer of pavement and relaying a new asphalt surface. The mill and overlay programs include a percentage of the existing roadway base to be patched with a more substantial asphalt base patch. The amount of the patching will depend on the depth of the existing pavement structure, the condition of the existing pavement and the roadway base. The grind and overlay program would include spot repairs to the curb and gutter. Spot repair of sidewalks would also be included to repair trip hazards and upgrade the crosswalk sidewalk ramps to current ADA requirements (if applicable). Spot repairs of driveways have not been included in the cost of this work.

### **Years 15+**

#### **Full Depth Pavement Removal & Replacement**

**\$40.00 – \$50.00 / Square Yard**

The full depth asphalt removal and replacement include the removing all existing hot-mix asphalt, aggregate base repair and preparation of base (to improve the cross slope of the roadway where needed), and resurfacing the roadway with 2 ½ inches of binder course and 1 ½ inches of surface course. The full depth rehabilitation would include spot repairs to the curb and gutter. Spot repair of sidewalks would also be included to repair trip hazards and upgrade the crosswalk sidewalk ramps to current ADA requirements (if applicable). Lastly a percentage of the pavement area will require undercutting and replacement with porous granular embankment to repair areas of unsuitable stone and/or soil bases beneath the asphalt pavement. Spot repairs of driveways have not been included in the cost of this work.

### **Years 20+**

#### **Reconstruction Projects**

**\$120.00 - \$150.00 / Square Yard**

Pavements beyond their service life showing signs of extensive roadway base failure or those requiring the complete replacement of the asphalt or concrete pavement will fall into the reconstructive project category. This is the most costly and disruptive form of roadway maintenance. These projects will include the complete removal of the existing roadway and the construction of a new curb and gutter, aggregate base and asphalt layers, extensive sidewalk replacements, and parkway restoration. Repairs of driveways have not been included in the cost of this work.

## **TYPICAL PAVEMENT MANAGEMENT PROGRAM**

The Village's pavement management program has been developed with every street evaluated and appropriately programmed for various pavement maintenance techniques. These programs extend the useful life of the pavement. For budgeting, planning and discussion purposes this report will derive a typical 20-year pavement maintenance program. Exhibit 2 – 20-year Plan Map shows the 20-year program broken-up year-by-year on the Village Map. Since conditions in this region are extreme it will be necessary to evaluate and verify the street maintenance program annually. This annual inspection will move streets up and push streets back for the more extensive pavement treatments creating a dynamic pavement management program.

Exhibit 7 – 2019 Area Percentages of PCI Values, shows approximately 23% of the total street pavement area has a PCI value of 5, 6, or 7. These are significant numbers due to the fact that without a preventive maintenance program these large areas of streets will all come due for pavement resurfacing at approximately the same time, which will cause a tremendous cost spike in the Village's Pavement Maintenance Program. CBBEL and the Village estimate these streets will deteriorate to a condition in which resurfacing will be the recommended treatment in approximately 5-6 years. The pavement management program will help flatten out this potential spike and extend the life of the pavement.

The total cost to the Village of Deer Park for a pavement management program of this magnitude averages 640 thousand dollars annually in 2020 dollars (for resurfacing and maintenance) and inflation for future years has not been added. The 20-year Plan was developed per the budget provided by the Village and the 2019 pavement condition inventory, rating, history, number of miles of pavements to be maintained, type of maintenance construction, and maintaining a level of service that the residents of the Village have come to expect. Considerations in scheduling the streets in the 20-year included their PCI value based on visual inspection, historic data, and pavement information, grouping of close by locations to cut down construction costs associated with transportation, minimizing traffic disturbance, and minimizing construction traffic over repaired streets.

With any pavement management program, the need to balance the program years as it pertains to both amount of pavement and dollars spent is a key element to the program's success. Every program will experience fluctuations in dollars, maintenance techniques and number of pavements maintained. If the pavements perform better than expected, the program can expect to have less reconstruction projects and more preventive maintenance and light resurface projects. The goal is to maximize the pavement life without compromising the level of service and safety of the roadway network.

A 93-thousand-dollar annual maintenance program will maintain the level of surface to an approximately pavement condition index of 8.0, but most importantly, it will extend the life of each pavement allowing the Village to maintain its street network of 24 miles annually. Without this funding and the opportunity to maintain a valuable Village investment, the Village will begin experiencing a drop in the pavements condition sooner and the deterioration rate will become increasingly faster as each year passes. A well-maintained management program will help prevent the commonly used “worst first” or reactive approach to pavement maintenance. The reactive approach to pavement maintenance limits the number of pavements that can be maintained annually. This approach typically requires more expensive pavement treatments such as partial reconstruction or reconstruction before the useful life of the pavement is maximized.

Below is a table depicting the cost per year for maintenance and resurfacing of the Village streets.

<b>ROUTINE MAINTENANCE TYPES</b>	<b>APPROXIMATE PER YEAR COST</b>
PRESERVATIVE REJUVENATING AGENT	\$20,955
JOINT AND CRACK FILLING	\$28,575
BITUMINOUS SURFACE PATCHING (2")	\$9,525
MICRO-SURFACING	\$33,338
<b>TOTAL =</b>	<b>\$92,393</b>

\*Note: Routine maintenance programs shall follow order of 20 Year Road Program.

<b>CALENDAR YEAR</b>	<b>RESURFACING COST</b>	<b>ROUTINE MAINTENANCE COST</b>	<b>TOTAL BUDGET</b>
YEAR 1	\$614,000	\$94,000	\$708,000
YEAR 2	\$558,000	\$94,000	\$652,000
YEAR 3	\$569,000	\$94,000	\$663,000
YEAR 4	\$583,000	\$94,000	\$677,000
YEAR 5	\$587,000	\$94,000	\$681,000
YEAR 6	\$529,000	\$94,000	\$623,000
YEAR 7	\$531,000	\$94,000	\$625,000
YEAR 8	\$521,000	\$94,000	\$615,000
YEAR 9	\$541,000	\$94,000	\$635,000
YEAR 10	\$531,000	\$94,000	\$625,000
YEAR 11	\$523,000	\$94,000	\$617,000
YEAR 12	\$554,000	\$94,000	\$648,000
YEAR 13	\$538,000	\$94,000	\$632,000
YEAR 14	\$560,000	\$94,000	\$654,000
YEAR 15	\$544,000	\$94,000	\$638,000
YEAR 16	\$512,000	\$94,000	\$606,000
YEAR 17	\$543,000	\$94,000	\$637,000
YEAR 18	\$524,000	\$94,000	\$618,000
YEAR 19	\$528,000	\$94,000	\$622,000
YEAR 20	\$548,000	\$94,000	\$642,000
<b>TOTALS:</b>	<b>\$10,938,000</b>	<b>\$1,880,000</b>	<b>\$12,818,000</b>

## **POSSIBLE FUNDING GRANT**

CBBEL recommends that the Village submit resurfacing projects to the Lake County Council of Managers. These projects would be simple grind and overlay at a 20% local match. The construction costs and Phase III Engineering are eligible for funding. Projects that are eligible are as follows:

1. Current V/C – Current Volume/Capacity of a roadway/intersection on a peak-hour basis.
2. Emission Reduction – Decrease in vehicle emissions by increasing traffic speed or decreasing vehicle miles of travel.
3. Fund Source Criteria – Prioritization and selection of proposed transportation projects to receive funding from various federal sources.
4. Road Condition – Condition of the roadway surface (CRS rating).

The following streets within the Village may be applicable for funding:

- Deer Park Boulevard (Lake Cook Road to Rand Road): FAU 0-0015
- Deerpath Road (Long Grove to North Village Limit): FAU 9-2572
- Field Parkway (Quentin Road to Deer Park Boulevard): FAU 0-0014
- Plum Grove Road (Lake Cook Road to Rand Road): FAU 0-0016

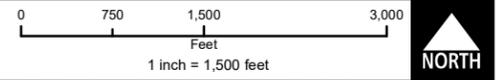
## **MISCELLANEOUS NOTES**

The following streets within the Village right-of-way were not included in the report:

- Orchard Lane
  - Private driveway; maintained by adjacent homeowners
- Lake Zurich Road
  - Village transferred jurisdiction and maintenance to Cuba Township per IGA dated August 31, 2009 (Resolution No. 1182)
- Erika Lane
  - Private driveway; maintained by adjacent homeowners
- Rosalie Lane
  - Private driveway; maintained by adjacent homeowners
- Hamilton Parkway
  - Private roadway owned by Hamilton Partners
  - Village transferred jurisdiction and maintenance to Cuba Township

Note: It is our understanding that Wooded Ridge Drive is split with the Village of Kildeer (50/50).

**EXHIBIT #1**  
**PAVEMENT CONDITION INDEX MAP**



VILLAGE OF NORTH BARRINGTON

VILLAGE OF LAKE ZURICH

VILLAGE OF LONG GROVE

VILLAGE OF KILDEER

Cuba Marsh Forest Preserve

Cuba Marsh Forest Preserve

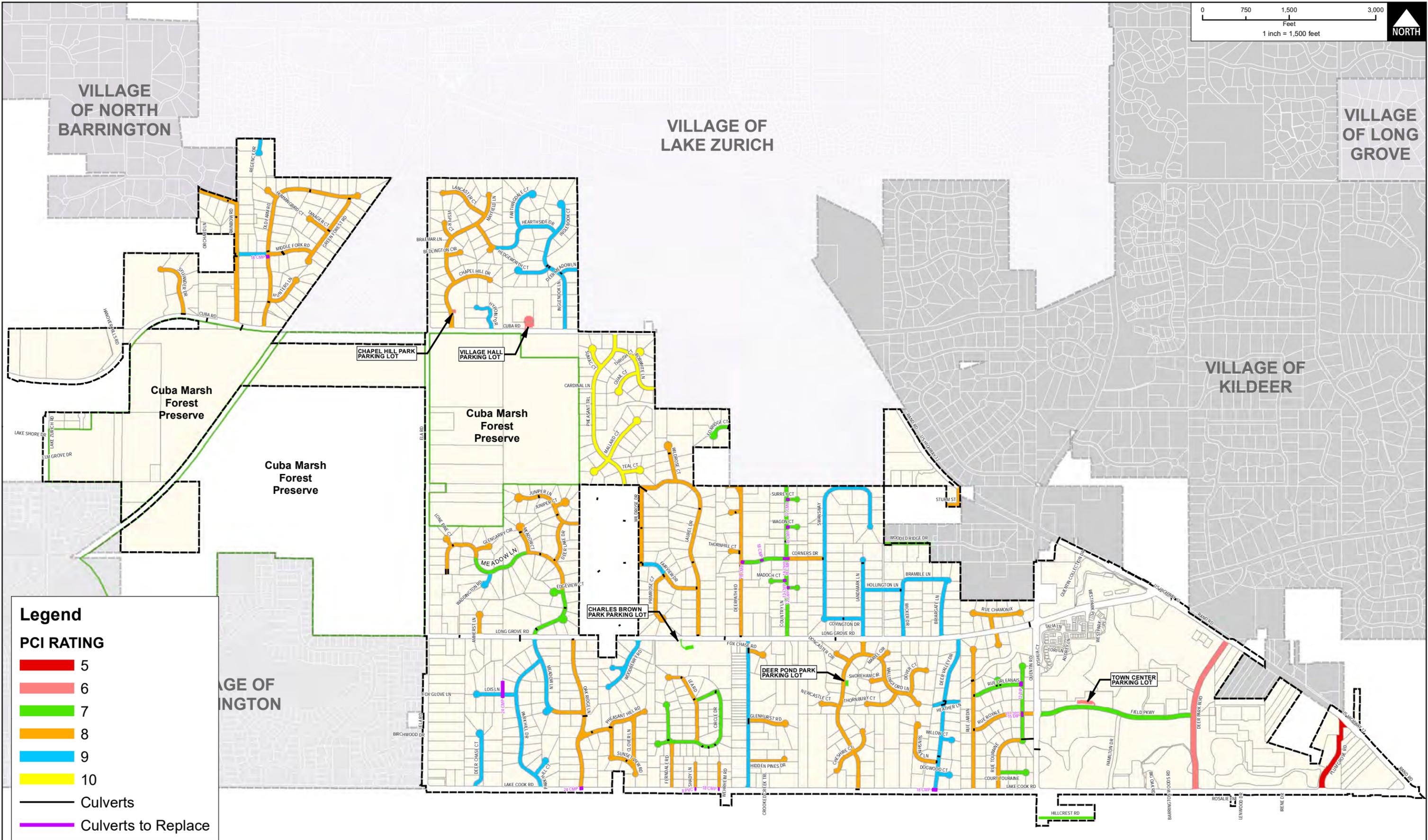
VILLAGE OF BARRINGTON

**Legend**

**PCI RATING**

- 5
- 6
- 7
- 8
- 9
- 10

- Culverts
- Culverts to Replace



**BCB** **CHRISTOPHER B. BURKE** ENGINEERING LTD.  
 9575 West Higgins Road, Suite 600  
 Rosemont, Illinois 60018  
 (847) 823-0500

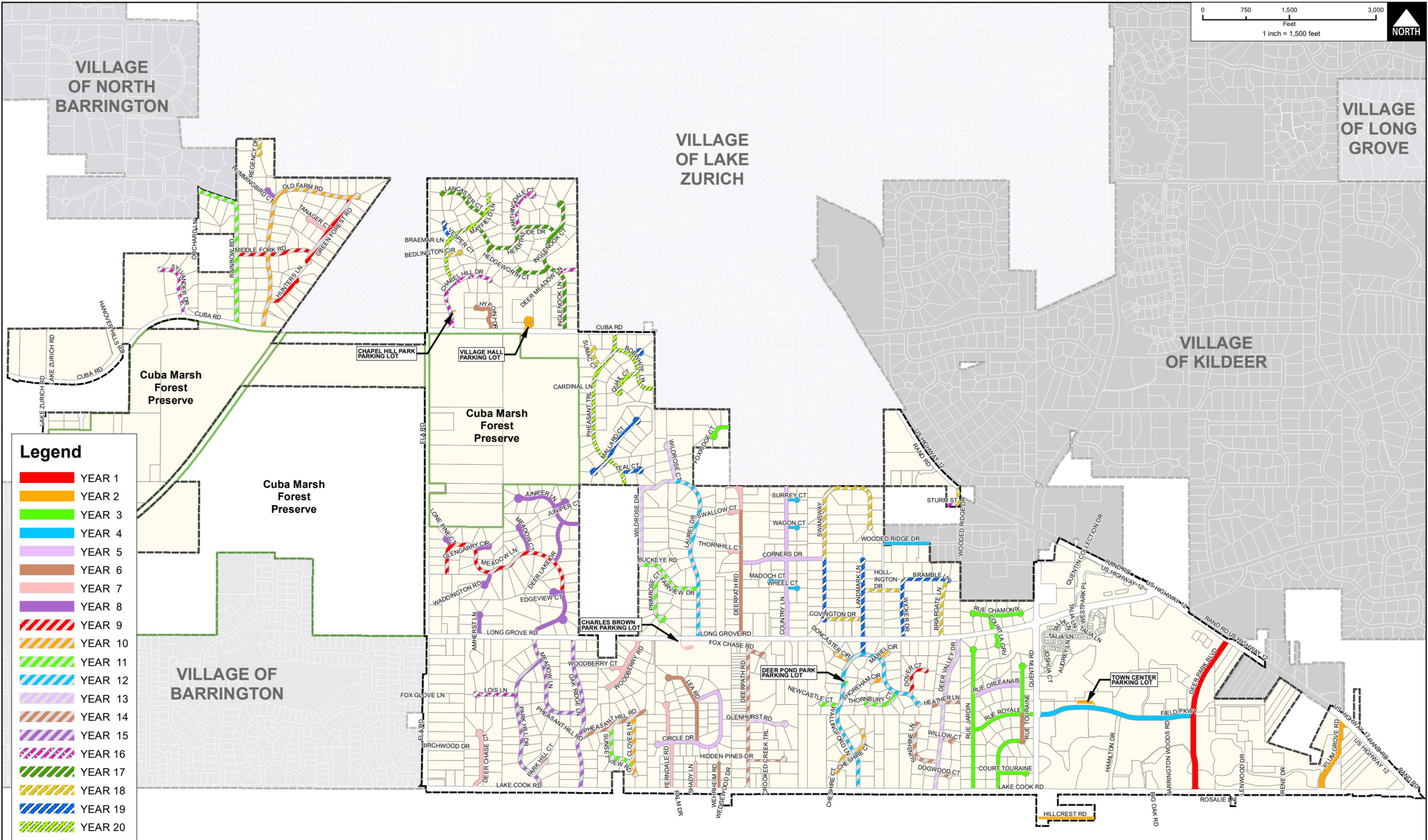
CLIENT: **DEER PARK**  
 VILLAGE OF DEER PARK  
 ESTABLISHED 1957

NO.	DATE	NATURE OF REVISION	CHKD.	SCALE:	1:18,000
FILE NAME	Roadway Pavement Condition		MODEL:	ArcGIS 10.4.1	
PATH	N:\DEERPARK\160491.00051\GIS\Exhibits\Roadway Pavement Condition.mxd		PLOT DATE	12/31/2019	

TITLE: **ROADWAY PAVEMENT CONDITION INDEX (PCI) MAP**

PROJ. NO. 160491.00051  
 DATE: 11/13/2019  
 SHEET 0 OF 0  
 DRAWING NO. EXH

**EXHIBIT #2**  
**20-YEAR ROADWAY PROGRAM MAP**



- Legend**
- YEAR 1
  - YEAR 2
  - YEAR 3
  - YEAR 4
  - YEAR 5
  - YEAR 6
  - YEAR 7
  - YEAR 8
  - YEAR 9
  - YEAR 10
  - YEAR 11
  - YEAR 12
  - YEAR 13
  - YEAR 14
  - YEAR 15
  - YEAR 16
  - YEAR 17
  - YEAR 18
  - YEAR 19
  - YEAR 20

NO.	DATE	NATURE OF REVISION	CHKD.	SCALE:
				1:18,000
				ArcGIS 10.4.1
FILE NAME	Roadway 20 Year Program		PLOT DATE	12/21/2020
PATH	N:\DEER PARK\160491.0005\GIS\EXHIBITS\Roadway 20 Year Program.mxd			

**EXHIBIT #3**  
**PAVEMENT EVALUATION DATABASE SPREADSHEET**  
**(IN ORDER BY PROGRAM YEAR)**

VILLAGE OF DEER PARK  
 PAVEMENT MANAGEMENT REPORT  
 (CBBEL PROJECT NO. 16-0491.00051)

DATE: February 8, 2021

VILLAGE OF DEER PARK - PAVEMENT MANAGEMENT REPORT: ORDER BASED ON PROGRAM YEAR (20-YEAR ROAD PROGRAM)												
STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SY)	PCI	PROGRAM CALENDAR YEAR	SURFACE TYPE	LAST RESURFACING YEAR	CURB AND GUTTER	FAU ROUTE	
											CLASS	#
DEER PARK BOULEVARD	LAKE COOK ROAD	RAND ROAD	2,750	60	19,250	6	YEAR 1	HMA	N/A	✓	MINOR COLLECTOR	0015
HILLCREST ROAD	QUENTIN ROAD	VILLAGE LIMIT	950	20	2,217	7	YEAR 2	HMA	2009	-	-	-
PLUM GROVE ROAD	LAKE COOK ROAD	RAND ROAD	1,300	57	8,645	5	YEAR 2	HMA	2019 (PARTIAL N/A)	✓	MINOR COLLECTOR	0016
TOWN CENTER PARKING LOT					2,300	6	YEAR 2	HMA	N/A	✓	-	-
VILLAGE HALL PARKING LOT					3,800	6	YEAR 2	HMA	N/A	-	-	-
FOX RIDGE COURT	DEERPATH ROAD	END	550	22	1,412	7	YEAR 3	HMA	N/A	-	-	-
COURT LA GROV	LONG GROVE ROAD	END	350	24	980	8	YEAR 3	HMA	2008	-	-	-
RUE CHAMONIX	LONG GROVE ROAD	CUL-DE-SACS	1,425	24	3,990	8	YEAR 3	HMA	2008	-	-	-
COURT TOURAINE	RUE TOURAINE	END	450	24	1,835	7	YEAR 3	HMA	2011	-	-	-
RUE JARDIN	LAKE COOK ROAD	END	2,450	25	7,146	8	YEAR 3	HMA	2011	-	-	-
RUE ROYALE	RUE JARDIN	QUENTIN ROAD	1,100	24	3,080	8	YEAR 3	HMA	2010	-	-	-
RUE TOURAINE	RUE ROYALE	NORTH VILLAGE LIMIT	875	24	2,450	7	YEAR 3	HMA	2010	-	-	-
FIELD PARKWAY	QUENTIN ROAD	DEER PARK BOULEVARD	2,800	38	12,414	7	YEAR 4	HMA	2020	✓	MINOR COLLECTOR	0014
SURREY COURT	COUNTRY LANE	END	150	22	760	7	YEAR 4	HMA	2008	-	-	-
WAGON COURT	COUNTRY LANE	END	150	22	760	7	YEAR 4	HMA	2008	-	-	-
WHEEL COURT	COUNTRY LANE	END	250	22	642	7	YEAR 4	HMA	2008	-	-	-
MADOCH COURT	COUNTRY LANE	END	350	22	899	7	YEAR 4	HMA	2008	-	-	-
WOODED RIDGE DRIVE	22463 WOODED RIDGE DRIVE	22365 WOODED RIDGE DRIVE	660	11	847	7	YEAR 4	HMA	2010	-	-	-
CORNERS DRIVE	DEERPATH ROAD	COUNTRY LANE	800	22	2,054	7	YEAR 5	HMA	2008	-	-	-
CORNERS DRIVE	COUNTRY LANE	SWANSWAY ROAD	700	22	1,797	8	YEAR 5	HMA	2008	-	-	-
COUNTRY LANE	LONG GROVE ROAD	CORNERS DRIVE	1,400	22	3,594	7	YEAR 5	HMA	2008	-	-	-
COUNTRY LANE	CORNERS DRIVE	END	1,350	22	3,465	7	YEAR 5	HMA	2008	-	-	-
CIRCLE DRIVE	LEA ROAD	END	2,500	22	6,417	7	YEAR 5	HMA	2009	-	-	-
RUE ORLEANAIS	RUE JARDIN	RUE TOURAINE	925	24	2,590	7	YEAR 5	HMA	2010	-	-	-
HYPOINT DRIVE	CUBA ROAD	END	550	24	2,040	9	YEAR 6	HMA	2016	-	-	-
RUE TOURAINE	LAKE COOK ROAD	1,100' NORTH	1,100	24	3,080	8	YEAR 6	HMA	2011	-	-	-
RUE TOURAINE	1,100' NORTH OF LAKE COOK	RUE ROYALE	625	24	1,750	7	YEAR 6	HMA	2011	-	-	-
WEHRHEIM ROAD	LAKE COOK ROAD	END	550	22	1,412	8	YEAR 6	HMA	2011	-	-	-
LEA ROAD	CIRCLE DRIVE	END	1,550	22	3,979	8	YEAR 6	HMA	2009	-	-	-
DEERPATH ROAD	LONG GROVE ROAD	CORNERS DRIVE	1,325	24	3,710	8	YEAR 6	HMA	2010	-	MAJOR COLLECTOR	2572
DEERPATH ROAD	CORNERS DRIVE	SWALLOW COURT	750	22	1,925	8	YEAR 6	HMA	2010	-	MAJOR COLLECTOR	2572
DEERPATH ROAD	SWALLOW COURT	VILLAGE LIMIT	600	22	1,540	8	YEAR 7	HMA	2020	-	MAJOR COLLECTOR	2572
SWALLOW COURT	DEERPATH ROAD	END	150	22	760	8	YEAR 7	HMA	2012	-	-	-
THORNHILL COURT	DEERPATH ROAD	END	150	24	795	8	YEAR 7	HMA	2012	-	-	-
DEER CHASE COURT	LAKE COOK ROAD	END	1,000	22	3,567	9	YEAR 7	HMA	2016	-	-	-
FERNDAL ROAD	LAKE COOK ROAD	CIRCLE DRIVE	800	22	2,054	8	YEAR 7	HMA	2014	-	-	-
FERNDAL ROAD	CIRCLE DRIVE	END	825	22	2,118	7	YEAR 7	HMA	2009	-	-	-
SHADY LANE	LAKE COOK ROAD	END	550	22	1,412	8	YEAR 7	HMA	2011	-	-	-
TANAGER COURT	GREEN FOREST ROAD	END	575	22	1,476	8	YEAR 7	HMA	2012	-	-	-
WOODBERRY COURT	WOODBERRY ROAD	END	350	22	899	9	YEAR 7	HMA	2018	-	-	-
WOODBERRY ROAD	LONG GROVE ROAD	END	1,200	22	3,080	9	YEAR 7	HMA	2018	-	-	-
CHARLES BROWN PARK PARKING LOT					1,600	7	YEAR 7	HMA	N/A	-	-	-
AMHERST LANE	LONG GROVE ROAD	END	700	24	1,960	8	YEAR 8	HMA	N/A	✓	-	-
DEER LAKE DRIVE	JUNIPER LANE	MEADOW LANE	800	24	2,240	8	YEAR 8	HMA	2012	-	-	-
EDGEVIEW COURT	MEADOW LANE	END	350	23	940	7	YEAR 8	HMA	2011	-	-	-
GLENGARRY CIRCLE	MEADOW LANE	END	250	22	1,392	8	YEAR 8	HMA	N/A	-	-	-
HUMMINGBIRD COURT	OLD FARM ROAD	END	400	22	1,027	8	YEAR 8	HMA	2011	-	-	-
JUNIPER COURT	JUNIPER LANE	END	300	24	840	8	YEAR 8	HMA	2012	-	-	-
JUNIPER LANE	DEER LAKE DRIVE	END	1,550	24	4,340	8	YEAR 8	HMA	2012	-	-	-
LONE PINE COURT	MEADOW LANE	END	100	22	932	8	YEAR 8	HMA	N/A	-	-	-
MEADOW COURT	MEADOW LANE	END	675	22	1,733	8	YEAR 8	HMA	2012	-	-	-
MEADOW LANE	LONG GROVE ROAD	EDGEVIEW COURT	1,150	22	2,952	7	YEAR 8	HMA	2011	-	-	-
WADDINGTON COURT	MEADOW LANE	END	425	22	1,091	9	YEAR 8	HMA	2018	-	-	-
MEADOW LANE	EDGEVIEW COURT	MEADOW COURT	1,050	22	2,695	8	YEAR 9	HMA	2011	-	-	-
MEADOW LANE	MEADOW COURT	20793 MEADOW LANE	1,250	22	3,209	7	YEAR 9	HMA	2011	-	-	-
MEADOW LANE	20793 MEADOW LANE	END	1,100	22	2,824	8	YEAR 9	HMA	2011	-	-	-
GREEN FOREST ROAD	OLD FARM ROAD	MIDDLE FORK ROAD	1,500	22	3,850	8	YEAR 9	HMA	2012	-	-	-
HUNTERS LANE	OLD FARM ROAD	END	600	24	1,995	8	YEAR 9	HMA	2011	-	-	-
MIDDLE FORK ROAD	RAINBOW ROAD	OLD FARM ROAD	550	24	1,540	9	YEAR 9	HMA	2013	-	-	-
MIDDLE FORK ROAD	OLD FARM ROAD	GREEN FOREST ROAD	775	22	1,990	8	YEAR 9	HMA	2012	-	-	-
DOVER COURT	WALLINGFORD LANE	END	725	22	1,861	8	YEAR 9	HMA	2014	✓	-	-

STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SY)	PCI	PROGRAM CALENDAR YEAR	SURFACE TYPE	LAST RESURFACING YEAR	CURB AND GUTTER	FAU ROUTE		
											CLASS	#	
OLD FARM RD	CUBA ROAD	GREEN FOREST ROAD	3,750	24	10,500	8	YEAR 10	HMA	2011	-	-	-	
CHESHIRE COURT	WALLINGFORD LANE	END	1,025	22	2,631	8	YEAR 10	HMA	2014	✓	-	-	
CLOVER LANE	PHEASANT HILL	END	1,300	22	3,337	8	YEAR 10	HMA	2016	-	-	-	
DONCASTER CIRCLE	WALLINGFORD LANE	END	325	22	835	8	YEAR 10	HMA	2014	✓	-	-	
MARIEL CIRCLE	WALLINGFORD LANE	END	225	22	578	8	YEAR 10	HMA	2014	✓	-	-	
SHOREHAM CIRCLE	WALLINGFORD LANE	END	275	22	706	8	YEAR 10	HMA	2014	✓	-	-	
RAINBOW ROAD	CUBA ROAD	VILLAGE LIMIT	2,800	24	7,840	8	YEAR 11	HMA	2013	-	-	-	
NEWCASTLE COURT	WALLINGFORD LANE	END	375	22	963	8	YEAR 11	HMA	2014	✓	-	-	
THORNBURY COURT	WALLINGFORD LANE	END	700	22	1,797	8	YEAR 11	HMA	2014	✓	-	-	
DEER POND PARK PARKING LOT						150	7	YEAR 11	HMA	N/A	-	-	-
FAIRVIEW DRIVE	WILDROSE DRIVE	PRIMROSE COURT	500	24	1,400	9	YEAR 11	HMA	2013	-	-	-	
FAIRVIEW DRIVE	PRIMROSE COURT	LAUREL DRIVE	675	24	1,890	8	YEAR 11	HMA	2013	-	-	-	
PRIMROSE COURT	FAIRVIEW DRIVE	END	925	24	2,590	8	YEAR 11	HMA	2013	-	-	-	
SUNSET VIEW ROAD	PHEASANT HILL	CLOVER LANE	900	22	2,310	8	YEAR 11	HMA	2016	-	-	-	
WALLINGFORD LANE	LAKE COOK ROAD	END	4,200	22	10,780	8	YEAR 12	HMA	2014	✓	-	-	
LAUREL DRIVE	LONG GROVE ROAD	WILDROSE COURT	3,025	24	8,470	8	YEAR 12	HMA	2013	-	-	-	
WILDROSE COURT	LAUREL DRIVE	END	550	24	2,290	8	YEAR 13	HMA	N/A	-	-	-	
WILDROSE DRIVE	FAIRVIEW DRIVE	WILDROSE COURT	2,600	24	7,280	8	YEAR 13	HMA	2013	-	-	-	
DEER VALLEY DRIVE	LAKE COOK ROAD	LONG GROVE ROAD	2,600	23	6,977	9	YEAR 13	HMA	N/A	-	-	-	
GLENHURST ROAD	DEERPATH ROAD	END	600	22	2,590	8	YEAR 13	HMA	2014	✓	-	-	
DEERPATH ROAD	LAKE COOK ROAD	LONG GROVE ROAD	2,650	22	6,802	9	YEAR 14	HMA	2018	-	MINOR COLLECTOR	2572	
DOGWOOD COURT	DEER VALLEY ROAD	END	150	22	760	9	YEAR 14	HMA	N/A	-	-	-	
FOX CHASE ROAD	DEERPATH ROAD	END	200	22	1,514	8	YEAR 14	HMA	2014	✓	-	-	
HEATHER LANE	DEER VALLEY ROAD	END	350	22	899	9	YEAR 14	HMA	N/A	-	-	-	
HIDDEN PINES DRIVE	DEERPATH ROAD	END	550	22	1,962	8	YEAR 14	HMA	2014	-	-	-	
PARK HILL COURT	PARK HILL DRIVE	END	275	22	1,331	9	YEAR 14	HMA	2017	-	-	-	
SUNSHINE LANE	DEER VALLEY ROAD	END	1,200	22	3,080	8	YEAR 14	HMA	2012	-	-	-	
WILLOW COURT	DEER VALLEY ROAD	END	150	22	760	9	YEAR 14	HMA	N/A	-	-	-	
PHEASANT HILL	OAK RIDGE LANE	END	1,350	22	3,465	8	YEAR 14	HMA	2016	-	-	-	
MEADOW LANE	LONG GROVE ROAD	20250 MEADOW LANE	1,600	22	4,107	9	YEAR 15	HMA	2017	-	-	-	
MEADOW LANE	20250 MEADOW LANE	OAK RIDGE LANE	600	22	1,540	8	YEAR 15	HMA	2017	-	-	-	
OAK RIDGE LANE	LAKE COOK ROAD	LONG GROVE ROAD	2,900	22	7,444	8	YEAR 15	HMA	2016	-	-	-	
PARK HILL DRIVE	LAKE COOK ROAD	MEADOW LANE	2,600	22	6,674	9	YEAR 15	HMA	2017	-	-	-	
LOIS LANE	PARK HILL DRIVE	END	800	22	2,054	9	YEAR 16	HMA	2017	-	-	-	
CHAPEL HILL DRIVE	CUBA ROAD	END	2,000	24	5,600	8	YEAR 16	HMA	2012	✓	-	-	
STURM STREET	WOODED RIDGE DRIVE	VILLAGE LIMIT	400	23	1,074	8	YEAR 16	HMA	2020	-	-	-	
SYLVANDER DRIVE	CUBA ROAD	END	1,100	24	3,395	8	YEAR 16	HMA	2012	-	-	-	
DEER MEADOW LANE	INGLENOOK COURT	END	250	24	1,200	9	YEAR 16	HMA	2016	-	-	-	
FARTHINGDALE COURT	HEARTHSIDE DRIVE	END	925	24	3,205	9	YEAR 16	HMA	2016	-	-	-	
HEARTHSIDE DRIVE	MAYFIELD LANE	FARTHINGDALE COURT	1,300	24	3,640	8	YEAR 17	HMA	2012 / 2016	✓	-	-	
HEARTHSIDE DRIVE	FARTHINGDALE COURT	INGLENOOK COURT	1,200	24	3,360	9	YEAR 17	HMA	2016	-	-	-	
HEDGWORTH COURT	INGLENOOK COURT	END	500	24	2,110	9	YEAR 17	HMA	2016	-	-	-	
INGLENOOK LANE	CUBA ROAD	END	2,600	24	7,990	9	YEAR 17	HMA	2016	-	-	-	
LANCASTER COURT	MAYFIELD LANE	END	950	24	2,660	8	YEAR 17	HMA	2012	✓	-	-	
BEDLINGTON CIRCLE	MAYFIELD LANE	END	350	23	940	8	YEAR 18	HMA	2012	✓	-	-	
BRIARGATE LANE	LONG GROVE ROAD	BRAMBLE LANE	1,100	22	2,824	9	YEAR 18	HMA	2017	-	-	-	
WOODED RIDGE DRIVE	RAND ROAD	STURM STREET	250	22	642	8	YEAR 18	HMA	2020	-	-	-	
COVINGTON DRIVE	LANDMARK LANE	SWANSWAY ROAD	675	22	1,733	9	YEAR 18	HMA	N/A	-	-	-	
HOLLINGTON DRIVE	LANDMARK LANE	WICKER DRIVE	675	22	1,733	9	YEAR 18	HMA	N/A	-	-	-	
REGENCY DRIVE	VILLAGE LIMIT	END	500	24	2,350	9	YEAR 18	HMA	N/A	✓	-	-	
CHAPEL HILL PARKING LOT						400	6	YEAR 18	HMA	N/A	-	-	-
SWANSWAY ROAD	CORNERS DRIVE	END	2,500	22	7,117	9	YEAR 18	HMA	2017	-	-	-	
SUMAC COURT	PHEASANT TRAIL	END	550	22	1,412	10	YEAR 18	HMA	2019	-	-	-	
VESPER COURT	MAYFIELD LANE	END	350	24	980	8	YEAR 19	HMA	2012	✓	-	-	
BRAMBLE LANE	BRIARGATE LANE	WICKER DRIVE	800	22	2,054	9	YEAR 19	HMA	2017	-	-	-	
LANDMARK LANE	LONG GROVE ROAD	END	1,600	22	4,107	9	YEAR 19	HMA	N/A	-	-	-	
SWANSWAY ROAD	COVINGTON DRIVE	CORNERS DRIVE	1,050	22	2,695	9	YEAR 19	HMA	2008 / 2017	-	-	-	
WICKER DRIVE	LONG GROVE ROAD	BRAMBLE LANE	1,050	22	2,695	9	YEAR 19	HMA	2017	-	-	-	
MALLARD COURT	PHEASANT TRAIL	END	1,500	22	3,850	10	YEAR 19	HMA	2019	-	-	-	
TEAL COURT	PHEASANT TRAIL	END	500	22	1,284	10	YEAR 19	HMA	2019	-	-	-	
THRUSH COURT	PHEASANT TRAIL	END	350	22	899	10	YEAR 19	HMA	2019	-	-	-	
BOBWHITE LANE	PHEASANT TRAIL	END	975	22	3,118	10	YEAR 20	HMA	2019	-	-	-	
MAYFIELD LANE	CHAPEL HILL DRIVE	END	2,000	24	5,600	8	YEAR 20	HMA	2012	✓	-	-	
PHEASANT TRAIL	CUBA ROAD	21005 PHEASANT TRAIL	3,875	22	9,946	10	YEAR 20	HMA	2019	-	-	-	
QUAIL COURT	PHEASANT TRAIL	END	675	22	1,733	10	YEAR 20	HMA	2019	-	-	-	

DENOTES ROADS REEUFACED SINCE 2010

**EXHIBIT #3A**  
**PAVEMENT EVALUATION DATABASE SPREADSHEET**  
**(IN ORDER BY PCI FROM 1-10)**

VILLAGE OF DEER PARK  
 PAVEMENT MANAGEMENT REPORT  
 (CBBEL PROJECT NO. 16-0491.00051)

DATE: February 8, 2021

VILLAGE OF DEER PARK - PAVEMENT MANAGEMENT REPORT: ORDER BASED ON PCI RANKING (20-YEAR ROAD PROGRAM)												
STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SY)	PCI	PROGRAM CALENDAR YEAR	SURFACE TYPE	LAST RESURFACING YEAR	CURB AND GUTTER	FAU ROUTE	
											CLASS	#
PLUM GROVE ROAD	LAKE COOK ROAD	RAND ROAD	1,300	57	8,645	5	YEAR 2	HMA	2019 (PARTIAL N/A)	✓	MINOR COLLECTOR	0016
DEER PARK BOULEVARD	LAKE COOK ROAD	RAND ROAD	2,750	60	19,250	6	YEAR 1	HMA	N/A	✓	MINOR COLLECTOR	0015
CHAPEL HILL PARKING LOT					400	6	YEAR 18	HMA	N/A	-	-	-
TOWN CENTER PARKING LOT					2,300	6	YEAR 2	HMA	N/A	✓	-	-
VILLAGE HALL PARKING LOT					3,800	6	YEAR 2	HMA	N/A	-	-	-
CIRCLE DRIVE	LEA ROAD	END	2,500	22	6,417	7	YEAR 5	HMA	2009	-	-	-
CORNERS DRIVE	DEERPATH ROAD	COUNTRY LANE	800	22	2,054	7	YEAR 5	HMA	2008	-	-	-
COUNTRY LANE	LONG GROVE ROAD	CORNERS DRIVE	1,400	22	3,594	7	YEAR 5	HMA	2008	-	-	-
COUNTRY LANE	CORNERS DRIVE	END	1,350	22	3,465	7	YEAR 5	HMA	2008	-	-	-
COURT TOURAINE	RUE TOURAINE	END	450	24	1,835	7	YEAR 3	HMA	2011	-	-	-
EDGEVIEW COURT	MEADOW LANE	END	350	23	940	7	YEAR 8	HMA	2011	-	-	-
FERNDAL ROAD	CIRCLE DRIVE	END	825	22	2,118	7	YEAR 7	HMA	2009	-	-	-
FIELD PARKWAY	QUENTIN ROAD	DEER PARK BOULEVARD	2,800	38	12,414	7	YEAR 4	HMA	2020	✓	MINOR COLLECTOR	0014
FOX RIDGE COURT	DEERPATH ROAD	END	550	22	1,412	7	YEAR 3	HMA	N/A	-	-	-
HILLCREST ROAD	QUENTIN ROAD	VILLAGE LIMIT	950	20	2,217	7	YEAR 2	HMA	2009	-	-	-
MADOCH COURT	COUNTRY LANE	END	350	22	899	7	YEAR 4	HMA	2008	-	-	-
MEADOW LANE	LONG GROVE ROAD	EDGEVIEW COURT	1,150	22	2,952	7	YEAR 8	HMA	2011	-	-	-
MEADOW LANE	MEADOW COURT	20793 MEADOW LANE	1,250	22	3,209	7	YEAR 9	HMA	2011	-	-	-
RUE ORLEANAIS	RUE JARDIN	RUE TOURAINE	925	24	2,590	7	YEAR 5	HMA	2010	-	-	-
RUE TOURAINE	RUE ROYALE	NORTH VILLAGE LIMIT	875	24	2,450	7	YEAR 3	HMA	2010	-	-	-
RUE TOURAINE	1,100' NORTH OF LAKE COOK	RUE ROYALE	625	24	1,750	7	YEAR 6	HMA	2011	-	-	-
SURREY COURT	COUNTRY LANE	END	150	22	760	7	YEAR 4	HMA	2008	-	-	-
WAGON COURT	COUNTRY LANE	END	150	22	760	7	YEAR 4	HMA	2008	-	-	-
WHEEL COURT	COUNTRY LANE	END	250	22	642	7	YEAR 4	HMA	2008	-	-	-
WOODED RIDGE DRIVE	22463 WOODED RIDGE DRIVE	22365 WOODED RIDGE DRIVE	660	11	847	7	YEAR 4	HMA	2010	-	-	-
CHARLES BROWN PARK PARKING LOT					1,600	7	YEAR 7	HMA	N/A	-	-	-
DEER POND PARK PARKING LOT					150	7	YEAR 11	HMA	N/A	-	-	-
AMHERST LANE	LONG GROVE ROAD	END	700	24	1,960	8	YEAR 8	HMA	N/A	✓	-	-
BEDLINGTON CIRCLE	MAYFIELD LANE	END	350	23	940	8	YEAR 18	HMA	2012	✓	-	-
CHAPEL HILL DRIVE	CUBA ROAD	END	2,000	24	5,600	8	YEAR 16	HMA	2012	✓	-	-
CHESHIRE COURT	WALLINGFORD LANE	END	1,025	22	2,631	8	YEAR 10	HMA	2014	✓	-	-
CLOVER LANE	PHEASANT HILL	END	1,300	22	3,337	8	YEAR 10	HMA	2016	-	-	-
CORNERS DRIVE	COUNTRY LANE	SWANSWAY ROAD	700	22	1,797	8	YEAR 5	HMA	2008	-	-	-
COURT LA GROV	LONG GROVE ROAD	END	350	24	980	8	YEAR 3	HMA	2008	-	-	-
DEER LAKE DRIVE	JUNIPER LANE	MEADOW LANE	800	24	2,240	8	YEAR 8	HMA	2012	-	-	-
DEERPATH ROAD	LONG GROVE ROAD	CORNERS DRIVE	1,325	24	3,710	8	YEAR 6	HMA	2010	-	MAJOR COLLECTOR	2572
DEERPATH ROAD	CORNERS DRIVE	SWALLOW COURT	750	22	1,925	8	YEAR 6	HMA	2010	-	MAJOR COLLECTOR	2572
DEERPATH ROAD	SWALLOW COURT	VILLAGE LIMIT	600	22	1,540	8	YEAR 7	HMA	2020	-	MAJOR COLLECTOR	2572
DONCASTER CIRCLE	WALLINGFORD LANE	END	325	22	835	8	YEAR 10	HMA	2014	✓	-	-
DOVER COURT	WALLINGFORD LANE	END	725	22	1,861	8	YEAR 9	HMA	2014	✓	-	-
FAIRVIEW DRIVE	PRIMROSE COURT	LAUREL DRIVE	675	24	1,890	8	YEAR 11	HMA	2013	-	-	-
FERNDAL ROAD	LAKE COOK ROAD	CIRCLE DRIVE	800	22	2,054	8	YEAR 7	HMA	2014	-	-	-
FOX CHASE ROAD	DEERPATH ROAD	END	200	22	1,514	8	YEAR 14	HMA	2014	✓	-	-
GLENGARRY CIRCLE	MEADOW LANE	END	250	22	1,392	8	YEAR 8	HMA	N/A	-	-	-
GLENHURST ROAD	DEERPATH ROAD	END	600	22	2,590	8	YEAR 13	HMA	2014	✓	-	-
GREEN FOREST ROAD	OLD FARM ROAD	MIDDLE FORK ROAD	1,500	22	3,850	8	YEAR 13	HMA	2012	-	-	-
HEARTHSDRIVE DRIVE	MAYFIELD LANE	FARTHINGDALE COURT	1,300	24	3,640	8	YEAR 14	HMA	2012 / 2016	✓	-	-
HIDDEN PINES DRIVE	DEERPATH ROAD	END	550	22	1,962	8	YEAR 14	HMA	2014	-	-	-
HUMMINGBIRD COURT	OLD FARM ROAD	END	400	22	1,027	8	YEAR 8	HMA	2011	-	-	-
HUNTERS LANE	OLD FARM ROAD	END	600	24	1,995	8	YEAR 9	HMA	2011	-	-	-
JUNIPER COURT	JUNIPER LANE	END	300	24	840	8	YEAR 8	HMA	2012	-	-	-
JUNIPER LANE	DEER LAKE DRIVE	END	1,550	24	4,340	8	YEAR 8	HMA	2012	-	-	-
LANCASTER COURT	MAYFIELD LANE	END	950	24	2,660	8	YEAR 17	HMA	2012	✓	-	-
LAUREL DRIVE	LONG GROVE ROAD	WILDROSE COURT	3,025	24	8,470	8	YEAR 12	HMA	2013	-	-	-
LEA ROAD	CIRCLE DRIVE	END	1,550	22	3,979	8	YEAR 6	HMA	2009	-	-	-
LONE PINE COURT	MEADOW LANE	END	100	22	932	8	YEAR 8	HMA	N/A	-	-	-
MARIEL CIRCLE	WALLINGFORD LANE	END	225	22	578	8	YEAR 10	HMA	2014	✓	-	-
MAYFIELD LANE	CHAPEL HILL DRIVE	END	2,000	24	5,600	8	YEAR 20	HMA	2012	✓	-	-
MEADOW COURT	MEADOW LANE	END	675	22	1,733	8	YEAR 8	HMA	2012	-	-	-

STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SY)	PCI	PROGRAM CALENDAR YEAR	SURFACE TYPE	LAST RESURFACING YEAR	CURB AND GUTTER	FAU ROUTE	
											CLASS	#
MEADOW LANE	20250 MEADOW LANE	OAK RIDGE LANE	600	22	1,540	8	YEAR 15	HMA	2017	-	-	-
MEADOW LANE	EDGEVIEW COURT	MEADOW COURT	1,050	22	2,695	8	YEAR 9	HMA	2011	-	-	-
MEADOW LANE	20793 MEADOW LANE	END	1,100	22	2,824	8	YEAR 9	HMA	2011	-	-	-
MIDDLE FORK ROAD	OLD FARM ROAD	GREEN FOREST ROAD	775	22	1,990	8	YEAR 9	HMA	2012	-	-	-
NEWCASTLE COURT	WALLINGFORD LANE	END	375	22	963	8	YEAR 11	HMA	2014	✓	-	-
OAK RIDGE LANE	LAKE COOK ROAD	LONG GROVE ROAD	2,900	22	7,444	8	YEAR 14	HMA	2016	-	-	-
OLD FARM RD	CUBA ROAD	GREEN FOREST ROAD	3,750	24	10,500	8	YEAR 10	HMA	2011	-	-	-
PHEASANT HILL	OAK RIDGE LANE	END	1,350	22	3,465	8	YEAR 14	HMA	2016	-	-	-
PRIMROSE COURT	FAIRVIEW DRIVE	END	925	24	2,590	8	YEAR 11	HMA	2013	-	-	-
RAINBOW ROAD	CUBA ROAD	VILLAGE LIMIT	2,800	24	7,840	8	YEAR 11	HMA	2013	-	-	-
RUE CHAMONIX	LONG GROVE ROAD	CUL-DE-SACS	1,425	24	3,990	8	YEAR 3	HMA	2008	-	-	-
RUE JARDIN	LAKE COOK ROAD	END	2,450	25	7,146	8	YEAR 3	HMA	2011	-	-	-
RUE ROYALE	RUE JARDIN	QUENTIN ROAD	1,100	24	3,080	8	YEAR 3	HMA	2010	-	-	-
RUE TOURAINNE	LAKE COOK ROAD	1,100' NORTH	1,100	24	3,080	8	YEAR 3	HMA	2011	-	-	-
SHADY LANE	LAKE COOK ROAD	END	550	22	1,412	8	YEAR 7	HMA	2011	-	-	-
SHOREHAM CIRCLE	WALLINGFORD LANE	END	275	22	706	8	YEAR 10	HMA	2014	✓	-	-
STURM STREET	WOODED RIDGE DRIVE	VILLAGE LIMIT	400	23	1,074	8	YEAR 16	HMA	2020	-	-	-
SUNSET VIEW ROAD	PHEASANT HILL	CLOVER LANE	900	22	2,310	8	YEAR 11	HMA	2016	-	-	-
SUNSHINE LANE	DEER VALLEY ROAD	END	1,200	22	3,080	8	YEAR 14	HMA	2012	-	-	-
SWALLOW COURT	DEERPATH ROAD	END	150	22	760	8	YEAR 7	HMA	2012	-	-	-
SYLVANDER DRIVE	CUBA ROAD	END	1,100	24	3,395	8	YEAR 16	HMA	2012	-	-	-
TANAGER COURT	GREEN FOREST ROAD	END	575	22	1,476	8	YEAR 7	HMA	2012	-	-	-
THORNBURY COURT	WALLINGFORD LANE	END	700	22	1,797	8	YEAR 11	HMA	2014	✓	-	-
THORNHILL COURT	DEERPATH ROAD	END	150	24	795	8	YEAR 7	HMA	2012	-	-	-
VESPER COURT	MAYFIELD LANE	END	350	24	980	8	YEAR 19	HMA	2012	✓	-	-
WALLINGFORD LANE	LAKE COOK ROAD	END	4,200	22	10,780	8	YEAR 12	HMA	2014	✓	-	-
WEHRHEIM ROAD	LAKE COOK ROAD	END	550	22	1,412	8	YEAR 6	HMA	2011	-	-	-
WILDROSE COURT	LAUREL DRIVE	END	550	24	2,290	8	YEAR 13	HMA	N/A	-	-	-
WILDROSE DRIVE	FAIRVIEW DRIVE	WILDROSE COURT	2,600	24	7,280	8	YEAR 13	HMA	2013	-	-	-
WOODED RIDGE DRIVE	RAND ROAD	STURM STREET	250	22	642	8	YEAR 18	HMA	2020	-	-	-
BRAMBLE LANE	BRIARGATE LANE	WICKER DRIVE	800	22	2,054	9	YEAR 19	HMA	2017	-	-	-
BRIARGATE LANE	LONG GROVE ROAD	BRAMBLE LANE	1,100	22	2,824	9	YEAR 18	HMA	2017	-	-	-
COVINGTON DRIVE	LANDMARK LANE	SWANSWAY ROAD	675	22	1,733	9	YEAR 18	HMA	N/A	-	-	-
DEER CHASE COURT	LAKE COOK ROAD	END	1,000	22	3,567	9	YEAR 7	HMA	2016	-	-	-
DEER MEADOW LANE	INGLENOOK COURT	END	250	24	1,200	9	YEAR 16	HMA	2016	-	-	-
DEER VALLEY DRIVE	LAKE COOK ROAD	LONG GROVE ROAD	2,600	23	6,977	9	YEAR 13	HMA	N/A	-	-	-
DEERPATH ROAD	LAKE COOK ROAD	LONG GROVE ROAD	2,650	22	6,802	9	YEAR 14	HMA	2018	-	MINOR COLLECTOR	2572
DOGWOOD COURT	DEER VALLEY ROAD	END	150	22	760	9	YEAR 14	HMA	N/A	-	-	-
FAIRVIEW DRIVE	WILDROSE DRIVE	PRIMROSE COURT	500	24	1,400	9	YEAR 11	HMA	2013	-	-	-
FARTHINGDALE COURT	HEARTHSIDE DRIVE	END	925	24	3,205	9	YEAR 16	HMA	2016	-	-	-
HEARTHSIDE DRIVE	FARTHINGDALE COURT	INGLENOOK COURT	1,200	24	3,360	9	YEAR 17	HMA	2016	-	-	-
HEATHER LANE	DEER VALLEY ROAD	END	350	22	899	9	YEAR 9	HMA	N/A	-	-	-
HEDGWORTH COURT	INGLENOOK COURT	END	500	24	2,110	9	YEAR 17	HMA	2016	-	-	-
HOLLINGTON DRIVE	LANDMARK LANE	WICKER DRIVE	675	22	1,733	9	YEAR 18	HMA	N/A	-	-	-
HYPOINT DRIVE	CUBA ROAD	END	550	24	2,040	9	YEAR 6	HMA	2016	-	-	-
INGLENOOK LANE	CUBA ROAD	END	2,600	24	7,990	9	YEAR 17	HMA	2016	-	-	-
LANDMARK LANE	LONG GROVE ROAD	END	1,600	22	4,107	9	YEAR 19	HMA	N/A	-	-	-
LOIS LANE	PARK HILL DRIVE	END	800	22	2,054	9	YEAR 16	HMA	2017	-	-	-
MEADOW LANE	LONG GROVE ROAD	20250 MEADOW LANE	1,600	22	4,107	9	YEAR 15	HMA	2017	-	-	-
MIDDLE FORK ROAD	RAINBOW ROAD	OLD FARM ROAD	550	24	1,540	9	YEAR 9	HMA	2013	-	-	-
PARK HILL COURT	PARK HILL DRIVE	END	275	22	1,331	9	YEAR 14	HMA	2017	-	-	-
PARK HILL DRIVE	LAKE COOK ROAD	MEADOW LANE	2,600	22	6,674	9	YEAR 15	HMA	2017	-	-	-
REGENCY DRIVE	VILLAGE LIMIT	END	500	24	2,350	9	YEAR 18	HMA	N/A	✓	-	-
SWANSWAY ROAD	CORNERS DRIVE	END	2,500	22	7,117	9	YEAR 18	HMA	2017	-	-	-
SWANSWAY ROAD	COVINGTON DRIVE	CORNERS DRIVE	1,050	22	2,695	9	YEAR 19	HMA	2008 / 2017	-	-	-
WADDINGTON COURT	MEADOW LANE	END	425	22	1,091	9	YEAR 8	HMA	2018	-	-	-
WICKER DRIVE	LONG GROVE ROAD	BRAMBLE LANE	1,050	22	2,695	9	YEAR 19	HMA	2017	-	-	-
WILLOW COURT	DEER VALLEY ROAD	END	150	22	760	9	YEAR 14	HMA	N/A	-	-	-
WOODBERRY COURT	WOODBERRY ROAD	END	350	22	899	9	YEAR 7	HMA	2018	-	-	-
WOODBERRY ROAD	LONG GROVE ROAD	END	1,200	22	3,080	9	YEAR 7	HMA	2018	-	-	-
BOBWHITE LANE	PHEASANT TRAIL	END	975	22	3,118	10	YEAR 20	HMA	2019	-	-	-
MALLARD COURT	PHEASANT TRAIL	END	1,500	22	3,850	10	YEAR 19	HMA	2019	-	-	-
PHEASANT TRAIL	CUBA ROAD	21005 PHEASANT TRAIL	3,875	22	9,946	10	YEAR 20	HMA	2019	-	-	-
QUAIL COURT	PHEASANT TRAIL	END	675	22	1,733	10	YEAR 20	HMA	2019	-	-	-
SUMAC COURT	PHEASANT TRAIL	END	550	22	1,412	10	YEAR 18	HMA	2019	-	-	-
TEAL COURT	PHEASANT TRAIL	END	500	22	1,284	10	YEAR 19	HMA	2019	-	-	-
THRUSH COURT	PHEASANT TRAIL	END	350	22	899	10	YEAR 19	HMA	2019	-	-	-

**EXHIBIT #3B**  
**PAVEMENT EVALUATION DATABASE SPREADSHEET**  
**(IN ALPHABETICAL ORDER BY STREET NAME)**

VILLAGE OF DEER PARK  
 PAVEMENT MANAGEMENT REPORT  
 (CBBEL PROJECT NO. 16-0491.00051)

DATE: February 8, 2021

VILLAGE OF DEER PARK - PAVEMENT MANAGEMENT REPORT: ORDER BASED ON PCI RANKING (20-YEAR ROAD PROGRAM)												
STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SY)	PCI	PROGRAM CALENDAR YEAR	SURFACE TYPE	LAST RESURFACING YEAR	CURB AND GUTTER	FAU ROUTE	
											CLASS	#
AMHERST LANE	LONG GROVE ROAD	END	700	24	1,960	8	YEAR 8	HMA	N/A	✓	-	-
BEDLINGTON CIRCLE	MAYFIELD LANE	END	350	23	940	8	YEAR 18	HMA	2012	✓	-	-
BOBWHITE LANE	PHEASANT TRAIL	END	975	22	3,118	10	YEAR 20	HMA	2019	-	-	-
BRAMBLE LANE	BRIARGATE LANE	WICKER DRIVE	800	22	2,054	9	YEAR 19	HMA	2017	-	-	-
BRIARGATE LANE	LONG GROVE ROAD	BRAMBLE LANE	1,100	22	2,824	9	YEAR 18	HMA	2017	-	-	-
CHAPEL HILL DRIVE	CUBA ROAD	END	2,000	24	5,600	8	YEAR 16	HMA	2012	✓	-	-
CHAPEL HILL PARKING LOT					400	6	YEAR 18	HMA	N/A	-	-	-
CHARLES BROWN PARK PARKING LOT					1,600	7	YEAR 7	HMA	N/A	-	-	-
CHESHIRE COURT	WALLINGFORD LANE	END	1,025	22	2,631	8	YEAR 10	HMA	2014	✓	-	-
CIRCLE DRIVE	LEA ROAD	END	2,500	22	6,417	7	YEAR 5	HMA	2009	-	-	-
CLOVER LANE	PHEASANT HILL	END	1,300	22	3,337	8	YEAR 10	HMA	2016	-	-	-
CORNERS DRIVE	DEERPATH ROAD	COUNTRY LANE	800	22	2,054	7	YEAR 5	HMA	2008	-	-	-
CORNERS DRIVE	COUNTRY LANE	SWANSWAY ROAD	700	22	1,797	8	YEAR 5	HMA	2008	-	-	-
COUNTRY LANE	LONG GROVE ROAD	CORNERS DRIVE	1,400	22	3,594	7	YEAR 5	HMA	2008	-	-	-
COUNTRY LANE	CORNERS DRIVE	END	1,350	22	3,465	7	YEAR 5	HMA	2008	-	-	-
COURT LA GROV	LONG GROVE ROAD	END	350	24	980	8	YEAR 3	HMA	2008	-	-	-
COURT TOURAINE	RUE TOURAINE	END	450	24	1,835	7	YEAR 3	HMA	2011	-	-	-
COVINGTON DRIVE	LANDMARK LANE	SWANSWAY ROAD	675	22	1,733	9	YEAR 18	HMA	N/A	-	-	-
DEER CHASE COURT	LAKE COOK ROAD	END	1,000	22	3,567	9	YEAR 7	HMA	2016	-	-	-
DEER LAKE DRIVE	JUNIPER LANE	MEADOW LANE	800	24	2,240	8	YEAR 8	HMA	2012	-	-	-
DEER MEADOW LANE	INGLENOOK COURT	END	250	24	1,200	9	YEAR 16	HMA	2016	-	-	-
DEER PARK BOULEVARD	LAKE COOK ROAD	RAND ROAD	2,750	60	19,250	6	YEAR 1	HMA	N/A	✓	MINOR COLLECTOR	0015
DEER POND PARK PARKING LOT					150	7	YEAR 11	HMA	N/A	-	-	-
DEER VALLEY DRIVE	LAKE COOK ROAD	LONG GROVE ROAD	2,600	23	6,977	9	YEAR 13	HMA	N/A	-	-	-
DEERPATH ROAD	LONG GROVE ROAD	CORNERS DRIVE	1,325	24	3,710	8	YEAR 6	HMA	2010	-	MAJOR COLLECTOR	2572
DEERPATH ROAD	CORNERS DRIVE	SWALLOW COURT	750	22	1,925	8	YEAR 6	HMA	2010	-	MAJOR COLLECTOR	2572
DEERPATH ROAD	SWALLOW COURT	VILLAGE LIMIT	600	22	1,540	8	YEAR 7	HMA	2020	-	MAJOR COLLECTOR	2572
DEERPATH ROAD	LAKE COOK ROAD	LONG GROVE ROAD	2,650	22	6,802	9	YEAR 14	HMA	2018	-	MINOR COLLECTOR	2572
DOGWOOD COURT	DEER VALLEY ROAD	END	150	22	760	9	YEAR 14	HMA	N/A	-	-	-
DONCASTER CIRCLE	WALLINGFORD LANE	END	325	22	835	8	YEAR 10	HMA	2014	✓	-	-
DOVER COURT	WALLINGFORD LANE	END	725	22	1,861	8	YEAR 9	HMA	2014	✓	-	-
EDGEVIEW COURT	MEADOW LANE	END	350	23	940	7	YEAR 8	HMA	2011	-	-	-
FAIRVIEW DRIVE	PRIMROSE COURT	LAUREL DRIVE	675	24	1,890	8	YEAR 11	HMA	2013	-	-	-
FAIRVIEW DRIVE	WILDROSE DRIVE	PRIMROSE COURT	500	24	1,400	9	YEAR 11	HMA	2013	-	-	-
FARTHINGDALE COURT	HEARTHSIDE DRIVE	END	925	24	3,205	9	YEAR 16	HMA	2016	-	-	-
FERNDALE ROAD	CIRCLE DRIVE	END	825	22	2,118	7	YEAR 7	HMA	2009	-	-	-
FERNDALE ROAD	LAKE COOK ROAD	CIRCLE DRIVE	800	22	2,054	8	YEAR 7	HMA	2014	-	-	-
FIELD PARKWAY	QUENTIN ROAD	DEER PARK BOULEVARD	2,800	38	12,414	7	YEAR 4	HMA	2020	✓	MINOR COLLECTOR	0014
FOX CHASE ROAD	DEERPATH ROAD	END	200	22	1,514	8	YEAR 14	HMA	2014	✓	-	-
FOX RIDGE COURT	DEERPATH ROAD	END	550	22	1,412	7	YEAR 3	HMA	N/A	-	-	-
GLENGARRY CIRCLE	MEADOW LANE	END	250	22	1,392	8	YEAR 8	HMA	N/A	-	-	-
GLENHURST ROAD	DEERPATH ROAD	END	600	22	2,590	8	YEAR 13	HMA	2014	✓	-	-
GREEN FOREST ROAD	OLD FARM ROAD	MIDDLE FORK ROAD	1,500	22	3,850	8	YEAR 13	HMA	2012	-	-	-
HEARTHSIDE DRIVE	MAYFIELD LANE	FARTHINGDALE COURT	1,300	24	3,640	8	YEAR 14	HMA	2012 / 2016	✓	-	-
HEARTHSIDE DRIVE	FARTHINGDALE COURT	INGLENOOK COURT	1,200	24	3,360	9	YEAR 17	HMA	2016	-	-	-
HEATHER LANE	DEER VALLEY ROAD	END	350	22	899	9	YEAR 9	HMA	N/A	-	-	-
HEDGWORTH COURT	INGLENOOK COURT	END	500	24	2,110	9	YEAR 17	HMA	2016	-	-	-
HIDDEN PINES DRIVE	DEERPATH ROAD	END	550	22	1,962	8	YEAR 14	HMA	2014	-	-	-
HILLCREST ROAD	QUENTIN ROAD	VILLAGE LIMIT	950	20	2,217	7	YEAR 2	HMA	2009	-	-	-
HOLLINGTON DRIVE	LANDMARK LANE	WICKER DRIVE	675	22	1,733	9	YEAR 18	HMA	N/A	-	-	-
HUMMINGBIRD COURT	OLD FARM ROAD	END	400	22	1,027	8	YEAR 8	HMA	2011	-	-	-
HUNTERS LANE	OLD FARM ROAD	END	600	24	1,995	8	YEAR 9	HMA	2011	-	-	-
HYPPOINT DRIVE	CUBA ROAD	END	550	24	2,040	9	YEAR 6	HMA	2016	-	-	-
INGLENOOK LANE	CUBA ROAD	END	2,600	24	7,990	9	YEAR 17	HMA	2016	-	-	-
JUNIPER COURT	JUNIPER LANE	END	300	24	840	8	YEAR 8	HMA	2012	-	-	-
JUNIPER LANE	DEER LAKE DRIVE	END	1,550	24	4,340	8	YEAR 8	HMA	2012	-	-	-
LANCASTER COURT	MAYFIELD LANE	END	950	24	2,660	8	YEAR 17	HMA	2012	✓	-	-
LANDMARK LANE	LONG GROVE ROAD	END	1,600	22	4,107	9	YEAR 19	HMA	N/A	-	-	-

STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SY)	PCI	PROGRAM CALENDAR YEAR	SURFACE TYPE	LAST RESURFACING YEAR	CURB AND GUTTER	FAU ROUTE	
											CLASS	#
LAUREL DRIVE	LONG GROVE ROAD	WILDROSE COURT	3,025	24	8,470	8	YEAR 12	HMA	2013	-	-	-
LEA ROAD	CIRCLE DRIVE	END	1,550	22	3,979	8	YEAR 6	HMA	2009	-	-	-
LOIS LANE	PARK HILL DRIVE	END	800	22	2,054	9	YEAR 16	HMA	2017	-	-	-
LONE PINE COURT	MEADOW LANE	END	100	22	932	8	YEAR 8	HMA	N/A	-	-	-
MADOCH COURT	COUNTRY LANE	END	350	22	899	7	YEAR 4	HMA	2008	-	-	-
MALLARD COURT	PHEASANT TRAIL	END	1,500	22	3,850	10	YEAR 19	HMA	2019	-	-	-
MARIEL CIRCLE	WALLINGFORD LANE	END	225	22	578	8	YEAR 10	HMA	2014	✓	-	-
MAYFIELD LANE	CHAPEL HILL DRIVE	END	2,000	24	5,600	8	YEAR 20	HMA	2012	✓	-	-
MEADOW COURT	MEADOW LANE	END	675	22	1,733	8	YEAR 8	HMA	2012	-	-	-
MEADOW LANE	LONG GROVE ROAD	EDGEVIEW COURT	1,150	22	2,952	7	YEAR 8	HMA	2011	-	-	-
MEADOW LANE	MEADOW COURT	20793 MEADOW LANE	1,250	22	3,209	7	YEAR 9	HMA	2011	-	-	-
MEADOW LANE	20250 MEADOW LANE	OAK RIDGE LANE	600	22	1,540	8	YEAR 15	HMA	2017	-	-	-
MEADOW LANE	EDGEVIEW COURT	MEADOW COURT	1,050	22	2,695	8	YEAR 9	HMA	2011	-	-	-
MEADOW LANE	20793 MEADOW LANE	END	1,100	22	2,824	8	YEAR 9	HMA	2011	-	-	-
MEADOW LANE	LONG GROVE ROAD	20250 MEADOW LANE	1,600	22	4,107	9	YEAR 15	HMA	2017	-	-	-
MIDDLE FORK ROAD	OLD FARM ROAD	GREEN FOREST ROAD	775	22	1,990	8	YEAR 9	HMA	2012	-	-	-
MIDDLE FORK ROAD	RAINBOW ROAD	OLD FARM ROAD	550	24	1,540	9	YEAR 9	HMA	2013	-	-	-
NEWCASTLE COURT	WALLINGFORD LANE	END	375	22	963	8	YEAR 11	HMA	2014	✓	-	-
OAK RIDGE LANE	LAKE COOK ROAD	LONG GROVE ROAD	2,900	22	7,444	8	YEAR 14	HMA	2016	-	-	-
OLD FARM RD	CUBA ROAD	GREEN FOREST ROAD	3,750	24	10,500	8	YEAR 10	HMA	2011	-	-	-
PARK HILL COURT	PARK HILL DRIVE	END	275	22	1,331	9	YEAR 14	HMA	2017	-	-	-
PARK HILL DRIVE	LAKE COOK ROAD	MEADOW LANE	2,600	22	6,674	9	YEAR 15	HMA	2017	-	-	-
PHEASANT HILL	OAK RIDGE LANE	END	1,350	22	3,465	8	YEAR 14	HMA	2016	-	-	-
PHEASANT TRAIL	CUBA ROAD	21005 PHEASANT TRAIL	3,875	22	9,946	10	YEAR 20	HMA	2019	-	-	-
PLUM GROVE ROAD	LAKE COOK ROAD	RAND ROAD	1,300	57	8,645	5	YEAR 2	HMA	2019 (PARTIAL N/A)	✓	MINOR COLLECTOR	0016
PRIMROSE COURT	FAIRVIEW DRIVE	END	925	24	2,590	8	YEAR 11	HMA	2013	-	-	-
QUAIL COURT	PHEASANT TRAIL	END	675	22	1,733	10	YEAR 20	HMA	2019	-	-	-
RAINBOW ROAD	CUBA ROAD	VILLAGE LIMIT	2,800	24	7,840	8	YEAR 11	HMA	2013	-	-	-
REGENCY DRIVE	VILLAGE LIMIT	END	500	24	2,350	9	YEAR 18	HMA	N/A	✓	-	-
RUE CHAMONIX	LONG GROVE ROAD	CUL-DE-SACS	1,425	24	3,990	8	YEAR 3	HMA	2008	-	-	-
RUE JARDIN	LAKE COOK ROAD	END	2,450	25	7,146	8	YEAR 3	HMA	2011	-	-	-
RUE ORLEANAIS	RUE JARDIN	RUE TOURAINE	925	24	2,590	7	YEAR 5	HMA	2010	-	-	-
RUE ROYALE	RUE JARDIN	QUENTIN ROAD	1,100	24	3,080	8	YEAR 3	HMA	2010	-	-	-
RUE TOURAINE	RUE ROYALE	NORTH VILLAGE LIMIT	875	24	2,450	7	YEAR 3	HMA	2010	-	-	-
RUE TOURAINE	1,100' NORTH OF LAKE COOK	RUE ROYALE	625	24	1,750	7	YEAR 6	HMA	2011	-	-	-
RUE TOURAINE	LAKE COOK ROAD	1,100' NORTH	1,100	24	3,080	8	YEAR 3	HMA	2011	-	-	-
SHADY LANE	LAKE COOK ROAD	END	550	22	1,412	8	YEAR 7	HMA	2011	-	-	-
SHOREHAM CIRCLE	WALLINGFORD LANE	END	275	22	706	8	YEAR 10	HMA	2014	✓	-	-
STURM STREET	WOODED RIDGE DRIVE	VILLAGE LIMIT	400	23	1,074	8	YEAR 16	HMA	2020	-	-	-
SUMAC COURT	PHEASANT TRAIL	END	550	22	1,412	10	YEAR 18	HMA	2019	-	-	-
SUNSET VIEW ROAD	PHEASANT HILL	CLOVER LANE	900	22	2,310	8	YEAR 11	HMA	2016	-	-	-
SUNSHINE LANE	DEER VALLEY ROAD	END	1,200	22	3,080	8	YEAR 14	HMA	2012	-	-	-
SURREY COURT	COUNTRY LANE	END	150	22	760	7	YEAR 4	HMA	2008	-	-	-
SWALLOW COURT	DEERPATH ROAD	END	150	22	760	8	YEAR 7	HMA	2012	-	-	-
SWANSWAY ROAD	CORNERS DRIVE	END	2,500	22	7,117	9	YEAR 18	HMA	2017	-	-	-
SWANSWAY ROAD	COVINGTON DRIVE	CORNERS DRIVE	1,050	22	2,695	9	YEAR 19	HMA	2008 / 2017	-	-	-
SYLVANDER DRIVE	CUBA ROAD	END	1,100	24	3,395	8	YEAR 16	HMA	2012	-	-	-
TANAGER COURT	GREEN FOREST ROAD	END	575	22	1,476	8	YEAR 7	HMA	2012	-	-	-
TEAL COURT	PHEASANT TRAIL	END	500	22	1,284	10	YEAR 19	HMA	2019	-	-	-
THORNBURY COURT	WALLINGFORD LANE	END	700	22	1,797	8	YEAR 11	HMA	2014	✓	-	-
THORNHILL COURT	DEERPATH ROAD	END	150	24	795	8	YEAR 7	HMA	2012	-	-	-
THRUSH COURT	PHEASANT TRAIL	END	350	22	899	10	YEAR 19	HMA	2019	-	-	-
	TOWN CENTER PARKING LOT				2,300	6	YEAR 2	HMA	N/A	✓	-	-
VESPER COURT	MAYFIELD LANE	END	350	24	980	8	YEAR 19	HMA	2012	✓	-	-
	VILLAGE HALL PARKING LOT				3,800	6	YEAR 2	HMA	N/A	-	-	-
WADDINGTON COURT	MEADOW LANE	END	425	22	1,091	9	YEAR 8	HMA	2018	-	-	-
WAGON COURT	COUNTRY LANE	END	150	22	760	7	YEAR 4	HMA	2008	-	-	-
WALLINGFORD LANE	LAKE COOK ROAD	END	4,200	22	10,780	8	YEAR 12	HMA	2014	✓	-	-
WEHRHEIM ROAD	LAKE COOK ROAD	END	550	22	1,412	8	YEAR 6	HMA	2011	-	-	-
WHEEL COURT	COUNTRY LANE	END	250	22	642	7	YEAR 4	HMA	2008	-	-	-
WICKER DRIVE	LONG GROVE ROAD	BRAMBLE LANE	1,050	22	2,695	9	YEAR 19	HMA	2017	-	-	-
WILDROSE COURT	LAUREL DRIVE	END	550	24	2,290	8	YEAR 13	HMA	N/A	-	-	-
WILDROSE DRIVE	FAIRVIEW DRIVE	WILDROSE COURT	2,600	24	7,280	8	YEAR 13	HMA	2013	-	-	-
WILLOW COURT	DEER VALLEY ROAD	END	150	22	760	9	YEAR 14	HMA	N/A	-	-	-
WOODBERRY COURT	WOODBERRY ROAD	END	350	22	899	9	YEAR 7	HMA	2018	-	-	-
WOODBERRY ROAD	LONG GROVE ROAD	END	1,200	22	3,080	9	YEAR 7	HMA	2018	-	-	-
WOODED RIDGE DRIVE	22463 WOODED RIDGE DRIVE	22365 WOODED RIDGE DRIVE	660	11	847	7	YEAR 4	HMA	2010	-	-	-
WOODED RIDGE DRIVE	RAND ROAD	STURM STREET	250	22	642	8	YEAR 18	HMA	2020	-	-	-

**EXHIBIT #4**  
**COST ESTIMATE AND SCHEDULE**

20-YEAR ROAD PROGRAM TOTAL = \$ 10,938,645.26  
 COST PER YEAR = \$ 546,932.26

YEAR 1	
LENGTH =	2,750
AVERAGE WIDTH =	60
TOTAL SQ YD =	16,250
EXISTING CURB AND GUTTER:	YES

ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
20801150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	13,644	\$ 13,644.00
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	809	\$ 80,900.00
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	1,817	\$ 145,360.00
4400157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	19,250	\$ 48,125.00
*44201723	CLASS D PATCHES, #1 (SPECIAL)	SG YD	\$ 40.00	1,925	\$ 77,000.00
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	850	\$ 29,750.00
67100100	MOBILIZATION	L. SUM		1	\$ 30,000.00
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	\$ 15,000.00
*20013798	CONSTRUCTION LAYOUT	L. SUM		1	\$ 15,000.00
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L. SUM		1	\$ 40,000.00
*NA	PAVEMENT STRIPING	L. SUM		1	\$ 30,000.00

- ASSUMPTIONS:  
 1. GRIND & OVERLAY RESURFACING + 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.  
 2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.  
 3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).

CONSTRUCTION SUBTOTAL =	\$ 498,279.00	CONSTRUCTION SUBTOTAL =	\$ 498,279.00
CONTINGENCY (10%) =	\$ 49,827.90	CONTINGENCY (10%) =	\$ 49,827.90
<b>CONSTRUCTION TOTAL =</b>	<b>\$ 548,106.90</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 548,106.90</b>
ENGINEERING (12%) =	\$ 65,772.83	ENGINEERING (12%) =	\$ 65,772.83
<b>ROADWAY TOTAL =</b>	<b>\$ 613,879.73</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 613,879.73</b>

YEAR 2			
LENGTH =	950	LENGTH =	1,300
AVERAGE WIDTH =	20	AVERAGE WIDTH =	67
TOTAL SQ YD =	2,217	TOTAL SQ YD =	8,645
EXISTING CURB AND GUTTER:	NO	EXISTING CURB AND GUTTER:	YES

ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
20801150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	1,572	\$ 1,572.00
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	94	\$ 9,400.00
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	187	\$ 14,960.00
4400157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	2,217	\$ 5,542.50
*44201723	CLASS D PATCHES, #1 (SPECIAL)	SG YD	\$ 40.00	222	\$ 8,880.00
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ -
67100100	MOBILIZATION	L. SUM		1	\$ 3,500.00
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	\$ 1,750.00
*20013798	CONSTRUCTION LAYOUT	L. SUM		1	\$ 1,750.00
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L. SUM		0	\$ -
*NA	PAVEMENT STRIPING	L. SUM		1	\$ 500.00

- ASSUMPTIONS:  
 1. GRIND & OVERLAY RESURFACING + 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.  
 2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.  
 3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).

CONSTRUCTION SUBTOTAL =	\$ 47,854.50	CONSTRUCTION SUBTOTAL =	\$ 258,000.50	CONSTRUCTION SUBTOTAL =	\$ 59,301.00	CONSTRUCTION SUBTOTAL =	\$ 89,494.00
CONTINGENCY (10%) =	\$ 4,785.45	CONTINGENCY (10%) =	\$ 25,800.05	CONTINGENCY (10%) =	\$ 5,930.10	CONTINGENCY (10%) =	\$ 8,949.40
<b>CONSTRUCTION TOTAL =</b>	<b>\$ 52,639.95</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 283,800.55</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 65,231.10</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 98,443.40</b>
ENGINEERING (12%) =	\$ 6,316.79	ENGINEERING (12%) =	\$ 33,720.07	ENGINEERING (12%) =	\$ 7,127.73	ENGINEERING (12%) =	\$ 10,633.21
<b>ROADWAY TOTAL =</b>	<b>\$ 58,956.74</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 315,392.62</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 73,688.83</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 110,286.61</b>

YEAR 3											
LENGTH =	350	LENGTH =	1,425	LENGTH =	560	LENGTH =	450	LENGTH =	2,450	LENGTH =	1,100
AVERAGE WIDTH =	24	AVERAGE WIDTH =	24	AVERAGE WIDTH =	22	AVERAGE WIDTH =	24	AVERAGE WIDTH =	25	AVERAGE WIDTH =	24
TOTAL SQ YD =	840	TOTAL SQ YD =	3,420	TOTAL SQ YD =	1,232	TOTAL SQ YD =	1,080	TOTAL SQ YD =	6,125	TOTAL SQ YD =	2,640
EXISTING CURB AND GUTTER:	NO	EXISTING CURB AND GUTTER:	NO	EXISTING CURB AND GUTTER:	NO	EXISTING CURB AND GUTTER:	NO	EXISTING CURB AND GUTTER:	NO	EXISTING CURB AND GUTTER:	NO

ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
20801150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	695	\$ 695.00
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	42	\$ 4,200.00
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	83	\$ 6,640.00
4400157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	880	\$ 2,200.00
*44201723	CLASS D PATCHES, #1 (SPECIAL)	SG YD	\$ 40.00	98	\$ 3,920.00
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ -
67100100	MOBILIZATION	L. SUM		1	\$ 2,000.00
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	\$ 1,000.00
*20013798	CONSTRUCTION LAYOUT	L. SUM		1	\$ 1,000.00
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L. SUM		0	\$ -
*NA	PAVEMENT STRIPING	L. SUM		1	\$ 500.00

- ASSUMPTIONS:  
 1. GRIND & OVERLAY RESURFACING + 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.  
 2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.  
 3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).

CONSTRUCTION SUBTOTAL =	\$ 22,405.00	CONSTRUCTION SUBTOTAL =	\$ 86,843.00	CONSTRUCTION SUBTOTAL =	\$ 31,231.00	CONSTRUCTION SUBTOTAL =	\$ 38,848.50	CONSTRUCTION SUBTOTAL =	\$ 154,210.00	CONSTRUCTION SUBTOTAL =	\$ 67,423.00	CONSTRUCTION SUBTOTAL =	\$ 61,052.00
CONTINGENCY (10%) =	\$ 2,240.50	CONTINGENCY (10%) =	\$ 8,684.30	CONTINGENCY (10%) =	\$ 3,123.10	CONTINGENCY (10%) =	\$ 3,884.85	CONTINGENCY (10%) =	\$ 15,421.00	CONTINGENCY (10%) =	\$ 6,742.30	CONTINGENCY (10%) =	\$ 6,105.20
<b>CONSTRUCTION TOTAL =</b>	<b>\$ 24,645.50</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 95,527.30</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 34,354.10</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 42,733.35</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 169,631.00</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 74,165.30</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 67,157.20</b>
ENGINEERING (12%) =	\$ 2,957.46	ENGINEERING (12%) =	\$ 11,478.48	ENGINEERING (12%) =	\$ 4,122.49	ENGINEERING (12%) =	\$ 5,141.20	ENGINEERING (12%) =	\$ 20,355.72	ENGINEERING (12%) =	\$ 8,099.84	ENGINEERING (12%) =	\$ 7,338.86
<b>ROADWAY TOTAL =</b>	<b>\$ 27,602.96</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 107,005.78</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 38,476.59</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 47,874.55</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 189,986.72</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 82,265.14</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 74,496.06</b>

YEAR 4					
LENGTH =	2,800	LENGTH =	150	LENGTH =	275
AVERAGE WIDTH =	38	AVERAGE WIDTH =	22	AVERAGE WIDTH =	22
TOTAL SQ YD =	12,414	TOTAL SQ YD =	760	TOTAL SQ YD =	706
EXISTING CURB AND GUTTER:	YES	EXISTING CURB AND GUTTER:	NO	EXISTING CURB AND GUTTER:	NO

ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
20801150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	879	\$ 879.00
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	922	\$ 92,200.00
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	1,043	\$ 83,440.00
4400157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	12,414	\$ 31,035.00
*44201723	CLASS D PATCHES, #1 (SPECIAL)	SG YD	\$ 40.00	1,242	\$ 49,680.00
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	560	\$ 19,600.00
67100100	MOBILIZATION	L. SUM		1	\$ 25,000.00
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	\$ 12,500.00
*20013798	CONSTRUCTION LAYOUT	L. SUM		1	\$ 12,500.00
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L. SUM		0	\$ -
*NA	PAVEMENT STRIPING	L. SUM		1	\$ 30,000.00

- ASSUMPTIONS:  
 1. GRIND & OVERLAY RESURFACING + 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.  
 2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.  
 3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).

CONSTRUCTION SUBTOTAL =	\$ 344,754.00	CONSTRUCTION SUBTOTAL =	\$ 28,269.00	CONSTRUCTION SUBTOTAL =	\$ 25,881.00	CONSTRUCTION SUBTOTAL =	\$ 23,988.00	CONSTRUCTION SUBTOTAL =	\$ 30,475.50	CONSTRUCTION SUBTOTAL =	\$ 21,978.50
CONTINGENCY (10%) =	\$ 34,475.40	CONTINGENCY (10%) =	\$ 2,826.90	CONTINGENCY (10%) =	\$ 2,588.10	CONTINGENCY (10%) =	\$ 2,398.80	CONTINGENCY (10%) =	\$ 3,047.55	CONTINGENCY (10%) =	\$ 2,197.85
<b>CONSTRUCTION TOTAL =</b>	<b>\$ 379,229.40</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 31,095.90</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 28,469.10</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 26,386.80</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 33,523.05</b>	<b>CONSTRUCTION TOTAL =</b>	<b>\$ 24,176.35</b>
ENGINEERING (12%) =	\$ 45,507.53	ENGINEERING (12%) =	\$ 3,461.51	ENGINEERING (12%) =	\$ 3,117.61	ENGINEERING (12%) =	\$ 3,188.15	ENGINEERING (12%) =	\$ 4,022.77	ENGINEERING (12%) =	\$ 2,916.16
<b>ROADWAY TOTAL =</b>	<b>\$ 424,736.93</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 34,557.41</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 31,586.71</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 29,574.95</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 37,545.82</b>	<b>ROADWAY TOTAL =</b>	<b>\$ 27,092.51</b>

YEAR 5																											
LENGTH = 800			LENGTH = 700			LENGTH = 1,400			LENGTH = 1,350			LENGTH = 2,500			LENGTH = 925												
AVERAGE WIDTH = 22			AVERAGE WIDTH = 22			AVERAGE WIDTH = 22			AVERAGE WIDTH = 22			AVERAGE WIDTH = 22			AVERAGE WIDTH = 24												
TOTAL SQ YD = 2,054			TOTAL SQ YD = 1,797			TOTAL SQ YD = 3,594			TOTAL SQ YD = 3,465			TOTAL SQ YD = 6,417			TOTAL SQ YD = 2,590												
EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER												
CORNERS DRIVE			CORNERS DRIVE			COUNTRY LANE			COUNTRY LANE			LEA ROAD TO END			RUE ORLEANS												
DEERPATH ROAD TO COUNTRY LANE			COUNTRY LANE TO SWANSWAY ROAD			LONG GROVE ROAD TO CORNERS DRIVE			CORNERS DRIVE TO END			LEA ROAD TO END			RUE JARDIN TO RUE TOURNAINE												
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST										
*2080150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	59	\$ 1,770.00	21	\$ 630.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00										
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	1,458	\$ 1,458.00	1,274	\$ 1,274.00	2,548	\$ 2,548.00	2,458	\$ 2,458.00	4,549	\$ 4,549.00	1,836	\$ 1,836.00	1,836	\$ 1,836.00										
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	87	\$ 8,700.00	76	\$ 7,600.00	151	\$ 15,100.00	148	\$ 14,800.00	270	\$ 27,000.00	109	\$ 10,900.00	109	\$ 10,900.00										
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	173	\$ 13,840.00	151	\$ 12,080.00	302	\$ 24,160.00	292	\$ 23,360.00	540	\$ 43,200.00	218	\$ 17,440.00	218	\$ 17,440.00										
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	2,054	\$ 5,135.00	1,797	\$ 4,492.50	3,594	\$ 8,985.00	3,465	\$ 8,662.50	6,417	\$ 16,042.50	2,590	\$ 6,475.00	2,590	\$ 6,475.00										
*44201723	CLASS 0 PATCHES, 6" (SPECIAL)	SG YD	\$ 40.00	267	\$ 10,680.00	209	\$ 8,360.00	369	\$ 14,760.00	347	\$ 13,880.00	642	\$ 25,680.00	308	\$ 12,320.00	308	\$ 12,320.00										
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	146	\$ 3,650.00	51	\$ 1,275.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	84	\$ 2,100.00										
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	146	\$ 14,600.00	51	\$ 5,100.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	84	\$ 8,400.00										
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	2,630	\$ 92,050.00	0	\$ 0.00	0	\$ 0.00										
67100100	MOBILIZATION	L.SUM		1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00										
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L.SUM		1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00										
*20013798	CONSTRUCTION LAYOUT	L.SUM		1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00										
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L.SUM		0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00										
*NA	PAVEMENT STRIPPING	L.SUM		1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00										
ASSUMPTIONS:				CONSTRUCTION SUBTOTAL = \$ 73,131.00				CONSTRUCTION SUBTOTAL = \$ 49,311.50				CONSTRUCTION SUBTOTAL = \$ 77,893.00				CONSTRUCTION SUBTOTAL = \$ 75,458.50				CONSTRUCTION SUBTOTAL = \$ 128,971.50				CONSTRUCTION SUBTOTAL = \$ 71,911.00			
CONTINGENCY (10%) = \$ 7,313.10				CONTINGENCY (10%) = \$ 4,931.15				CONTINGENCY (10%) = \$ 7,789.30				CONTINGENCY (10%) = \$ 7,545.85				CONTINGENCY (10%) = \$ 12,897.15				CONTINGENCY (10%) = \$ 7,191.10							
CONSTRUCTION TOTAL = \$ 80,444.10				CONSTRUCTION TOTAL = \$ 54,242.65				CONSTRUCTION TOTAL = \$ 85,682.30				CONSTRUCTION TOTAL = \$ 83,004.35				CONSTRUCTION TOTAL = \$ 141,868.65				CONSTRUCTION TOTAL = \$ 79,102.10							
ENGINEERING (12%) = \$ 9,653.29				ENGINEERING (12%) = \$ 6,509.12				ENGINEERING (12%) = \$ 10,252.48				ENGINEERING (12%) = \$ 9,960.52				ENGINEERING (12%) = \$ 17,024.24				ENGINEERING (12%) = \$ 8,492.23							
ROADWAY TOTAL = \$ 90,097.39				ROADWAY TOTAL = \$ 60,751.77				ROADWAY TOTAL = \$ 95,934.78				ROADWAY TOTAL = \$ 92,964.87				ROADWAY TOTAL = \$ 158,892.89				ROADWAY TOTAL = \$ 87,594.33							
YEAR 5 TOTAL = \$ 587,019.05																											

YEAR 6																															
LENGTH = 625			LENGTH = 550			LENGTH = 1,100			LENGTH = 550			LENGTH = 1,325			LENGTH = 750			LENGTH = 1,550													
AVERAGE WIDTH = 24			AVERAGE WIDTH = 22			AVERAGE WIDTH = 24			AVERAGE WIDTH = 24			AVERAGE WIDTH = 24			AVERAGE WIDTH = 24			AVERAGE WIDTH = 22													
TOTAL SQ YD = 1,750			TOTAL SQ YD = 1,412			TOTAL SQ YD = 3,080			TOTAL SQ YD = 2,040			TOTAL SQ YD = 3,710			TOTAL SQ YD = 1,925			TOTAL SQ YD = 3,979													
EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER													
RUE TOURNAINE			WEHREHM ROAD			LAKE COOK ROAD TO RUE ROYALE			LAKE COOK ROAD TO RUE ROYALE			RUE TOURNAINE			HYPOINT DRIVE			DEERPATH ROAD			DEERPATH ROAD			LEA ROAD							
1,100' N OF LAKE COOK ROAD TO RUE ROYALE			LAKE COOK ROAD TO RUE ROYALE			LAKE COOK ROAD TO RUE ROYALE			LAKE COOK ROAD TO RUE ROYALE			CUBA ROAD TO END			LONG GROVE ROAD TO CORNERS DRIVE			CORNERS DRIVE TO SWALLOW COURT			CORNERS DRIVE TO SWALLOW COURT			CORNERS DRIVE TO SWALLOW COURT							
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST								
*2080150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	17	\$ 510.00	13	\$ 390.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00								
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	1,241	\$ 1,241.00	1,001	\$ 1,001.00	2,183	\$ 2,183.00	1,448	\$ 1,448.00	2,630	\$ 2,630.00	1,365	\$ 1,365.00	2,821	\$ 2,821.00	1,365	\$ 1,365.00	2,821	\$ 2,821.00	1,365	\$ 1,365.00								
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	74	\$ 7,400.00	60	\$ 6,000.00	130	\$ 13,000.00	86	\$ 8,600.00	156	\$ 15,600.00	81	\$ 8,100.00	168	\$ 16,800.00	168	\$ 16,800.00	168	\$ 16,800.00	168	\$ 16,800.00								
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	147	\$ 11,760.00	119	\$ 9,520.00	259	\$ 20,720.00	172	\$ 13,760.00	312	\$ 24,960.00	162	\$ 12,960.00	335	\$ 26,800.00	162	\$ 12,960.00	335	\$ 26,800.00	162	\$ 12,960.00								
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	1,750	\$ 4,375.00	1,412	\$ 3,530.00	3,080	\$ 7,700.00	2,040	\$ 5,100.00	3,710	\$ 9,275.00	1,925	\$ 4,812.50	3,979	\$ 9,947.50	1,925	\$ 4,812.50	3,979	\$ 9,947.50	1,925	\$ 4,812.50								
*44201723	CLASS 0 PATCHES, 6" (SPECIAL)	SG YD	\$ 40.00	198	\$ 7,920.00	159	\$ 6,360.00	308	\$ 12,320.00	294	\$ 11,760.00	571	\$ 22,840.00	288	\$ 11,520.00	598	\$ 23,920.00	288	\$ 11,520.00	598	\$ 23,920.00	288	\$ 11,520.00								
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	41	\$ 1,025.00	32	\$ 800.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00								
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	41	\$ 4,100.00	32	\$ 3,200.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00								
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00								
67100100	MOBILIZATION	L.SUM		1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00								
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L.SUM		1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00								
*20013798	CONSTRUCTION LAYOUT	L.SUM		1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00								
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L.SUM		0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00								
*NA	PAVEMENT STRIPPING	L.SUM		1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00								
ASSUMPTIONS:				CONSTRUCTION SUBTOTAL = \$ 45,831.00				CONSTRUCTION SUBTOTAL = \$ 37,301.00				CONSTRUCTION SUBTOTAL = \$ 67,423.00				CONSTRUCTION SUBTOTAL = \$ 44,568.00				CONSTRUCTION SUBTOTAL = \$ 103,305.00				CONSTRUCTION SUBTOTAL = \$ 46,957.50				CONSTRUCTION SUBTOTAL = \$ 84,288.50			
CONTINGENCY (10%) = \$ 4,583.10				CONTINGENCY (10%) = \$ 3,730.10				CONTINGENCY (10%) = \$ 6,742.30				CONTINGENCY (10%) = \$ 4,456.80				CONTINGENCY (10%) = \$ 10,330.50				CONTINGENCY (10%) = \$ 4,695.75				CONTINGENCY (10%) = \$ 8,428.85							
CONSTRUCTION TOTAL = \$ 50,414.10				CONSTRUCTION TOTAL = \$ 41,031.10				CONSTRUCTION TOTAL = \$ 74,165.30				CONSTRUCTION TOTAL = \$ 49,024.80				CONSTRUCTION TOTAL = \$ 113,635.50				CONSTRUCTION TOTAL = \$ 51,653.25				CONSTRUCTION TOTAL = \$ 92,717.35							
ENGINEERING (12%) = \$ 6,049.69				ENGINEERING (12%) = \$ 4,923.73				ENGINEERING (12%) = \$ 8,899.84				ENGINEERING (12%) = \$ 5,882.71				ENGINEERING (12%) = \$ 13,596.26				ENGINEERING (12%) = \$ 5,602.88				ENGINEERING (12%) = \$ 11,128.08							
ROADWAY TOTAL = \$ 56,463.79				ROADWAY TOTAL = \$ 45,954.83				ROADWAY TOTAL = \$ 83,065.14				ROADWAY TOTAL = \$ 54,907.51				ROADWAY TOTAL = \$ 127,231.76				ROADWAY TOTAL = \$ 57,256.13				ROADWAY TOTAL = \$ 103,845.43							
YEAR 6 TOTAL = \$ 529,356.90																															

YEAR 7																	
LENGTH = 350			LENGTH = 1,200			LENGTH = 150			LENGTH = 150			LENGTH = 600			LENGTH = 1,000		
AVERAGE WIDTH = 22			AVERAGE WIDTH = 22			AVERAGE WIDTH = 22			AVERAGE WIDTH = 24			AVERAGE WIDTH = 24			AVERAGE WIDTH = 22		
TOTAL SQ YD = 899			TOTAL SQ YD = 3,080			TOTAL SQ YD = 780			TOTAL SQ YD = 795			TOTAL SQ YD = 1,540			TOTAL SQ YD = 3,587		
EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER		
WOODBERRY COURT			WOODBERRY COURT			SWALLOW COURT			THORNHILL COURT			DEERPATH ROAD			DEER CHASE COURT		
WOODBERRY ROAD TO END			LONG GROVE ROAD TO END			DEERPATH ROAD TO END			DEERPATH ROAD TO END			SWALLOW COURT TO VILLAGE LIMIT			LAKE COOK ROAD TO END		
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
*2080150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00	0	\$ 0.00
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	638	\$ 638.00	2,183	\$ 2,183.00	539	\$ 539.00	664	\$ 664.00	1,092	\$ 1,092.00	2,630	\$ 2,630.00	1,365	\$ 1,365.00
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	38	\$ 3,800.00	130	\$ 13,000.00	32	\$ 3,200.00	34	\$ 3,400.00	65	\$ 6,500.00	150	\$ 15,000.00	150	\$ 15,000.00
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	76	\$ 6,080.00	259	\$ 20,720.00	64	\$ 5,120.00	67	\$ 5,360.00	130	\$ 10,400.00	300	\$ 24,000.00	300	\$ 24,000.00
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	899	\$ 2,247.50	3,080	\$ 7,700										



YEAR 11																	
		LENGTH = 2,800		LENGTH = 375		LENGTH = 700		TOTAL SQ YD = 150		LENGTH = 500		LENGTH = 675		LENGTH = 925		LENGTH = 900	
		AVERAGE WIDTH = 24		AVERAGE WIDTH = 22		AVERAGE WIDTH = 22		TOTAL SQ YD = 150		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 22	
		TOTAL SQ YD = 7,840		TOTAL SQ YD = 963		TOTAL SQ YD = 1,797		TOTAL SQ YD = 1,400		TOTAL SQ YD = 1,690		TOTAL SQ YD = 2,590		TOTAL SQ YD = 2,310		TOTAL SQ YD = 2,310	
		EXISTING CURB AND GUTTER = NO		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = NO		EXISTING CURB AND GUTTER = NO		EXISTING CURB AND GUTTER = NO		EXISTING CURB AND GUTTER = NO		EXISTING CURB AND GUTTER = NO	
		NEWCASTLE COURT		THORNBURY COURT		DEER POND PARK		FAIRVIEW DRIVE		FAIRVIEW DRIVE		PRIMROSE COURT		PRIMROSE COURT		SUNSET VIEW ROAD	
		CUBA ROAD TO VILLAGE LIMIT		WALLINGFORD LANE TO END		WALLINGFORD LANE TO END		PARKING LOT		WILDROSE DRIVE TO PRIMROSE COURT		PRIMROSE COURT TO LAUREL DRIVE		FAIRVIEW DRIVE TO END		PHEASANT HILL TO CLOVER LANE	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
*2080150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	5,557	\$ 5,557.00	683	\$ 683.00	1,274	\$ 1,274.00	107	\$ 107.00	993	\$ 993.00	1,340	\$ 1,340.00	1,838	\$ 1,838.00
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	330	\$ 33,000.00	41	\$ 4,100.00	76	\$ 7,600.00	7	\$ 700.00	59	\$ 5,900.00	80	\$ 8,000.00	109	\$ 10,900.00
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	859	\$ 68,720.00	81	\$ 6,480.00	151	\$ 12,080.00	13	\$ 1,040.00	118	\$ 9,440.00	159	\$ 12,720.00	218	\$ 17,440.00
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	7,840	\$ 19,600.00	963	\$ 2,407.50	1,797	\$ 4,492.50	150	\$ 375.00	1,400	\$ 3,500.00	1,690	\$ 4,225.00	2,590	\$ 6,475.00
*14201723	CLASS D PATCHES, 6" (SPECIAL)	SG YD	\$ 40.00	794	\$ 31,760.00	97	\$ 3,880.00	180	\$ 7,200.00	15	\$ 600.00	149	\$ 5,960.00	189	\$ 7,560.00	259	\$ 10,360.00
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ -	75	\$ 2,625.00	140	\$ 4,900.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -
87100100	MOBILIZATION	L.SUM		1	\$ 14,000.00	1	\$ 2,000.00	1	\$ 3,500.00	1	\$ 500.00	1	\$ 2,500.00	1	\$ 3,000.00	1	\$ 4,000.00
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L.SUM		1	\$ 7,000.00	1	\$ 1,000.00	1	\$ 1,750.00	1	\$ 250.00	1	\$ 1,250.00	1	\$ 2,500.00	1	\$ 2,000.00
*22013798	CONSTRUCTION LAYOUT	L.SUM		1	\$ 7,000.00	1	\$ 1,000.00	1	\$ 1,750.00	1	\$ 250.00	1	\$ 1,250.00	1	\$ 2,500.00	1	\$ 2,000.00
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L.SUM		0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
*NA	PAVEMENT STRIPPING	L.SUM		1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00
ASSUMPTIONS:																	
1. GRIND & OVERLAY RESURFACING + 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.																	
2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.																	
3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).																	
CONSTRUCTION SUBTOTAL = \$ 170,737.00		CONSTRUCTION SUBTOTAL = \$ 24,675.50		CONSTRUCTION SUBTOTAL = \$ 45,046.50		CONSTRUCTION SUBTOTAL = \$ 4,322.00		CONSTRUCTION SUBTOTAL = \$ 30,933.00		CONSTRUCTION SUBTOTAL = \$ 40,845.00		CONSTRUCTION SUBTOTAL = \$ 57,511.00		CONSTRUCTION SUBTOTAL = \$ 60,563.00		CONSTRUCTION SUBTOTAL = \$ 60,563.00	
CONTINGENCY (10%) = \$ 17,073.70		CONTINGENCY (10%) = \$ 2,467.55		CONTINGENCY (10%) = \$ 4,504.65		CONTINGENCY (10%) = \$ 432.20		CONTINGENCY (10%) = \$ 3,093.30		CONTINGENCY (10%) = \$ 4,084.50		CONTINGENCY (10%) = \$ 5,751.10		CONTINGENCY (10%) = \$ 6,056.30		CONTINGENCY (10%) = \$ 6,056.30	
CONSTRUCTION TOTAL = \$ 187,810.70		CONSTRUCTION TOTAL = \$ 27,143.05		CONSTRUCTION TOTAL = \$ 49,551.15		CONSTRUCTION TOTAL = \$ 4,754.20		CONSTRUCTION TOTAL = \$ 34,026.30		CONSTRUCTION TOTAL = \$ 44,929.50		CONSTRUCTION TOTAL = \$ 63,262.10		CONSTRUCTION TOTAL = \$ 66,619.30		CONSTRUCTION TOTAL = \$ 66,619.30	
ENGINEERING (12%) = \$ 22,537.28		ENGINEERING (12%) = \$ 3,257.17		ENGINEERING (12%) = \$ 5,946.14		ENGINEERING (12%) = \$ 570.50		ENGINEERING (12%) = \$ 4,083.15		ENGINEERING (12%) = \$ 5,391.54		ENGINEERING (12%) = \$ 7,591.45		ENGINEERING (12%) = \$ 8,013.52		ENGINEERING (12%) = \$ 8,013.52	
ROADWAY TOTAL = \$ 210,347.98		ROADWAY TOTAL = \$ 30,400.22		ROADWAY TOTAL = \$ 55,497.29		ROADWAY TOTAL = \$ 5,324.70		ROADWAY TOTAL = \$ 38,109.45		ROADWAY TOTAL = \$ 50,321.04		ROADWAY TOTAL = \$ 70,853.55		ROADWAY TOTAL = \$ 74,632.82		ROADWAY TOTAL = \$ 74,632.82	
YEAR 11 TOTAL = \$ 523,135.54																	

YEAR 12																	
		LENGTH = 4,200		LENGTH = 3,025		LENGTH = 2,800		LENGTH = 2,800		LENGTH = 2,800		LENGTH = 2,800		LENGTH = 2,800		LENGTH = 2,800	
		AVERAGE WIDTH = 22		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24	
		TOTAL SQ YD = 10,780		TOTAL SQ YD = 8,470		TOTAL SQ YD = 6,720		TOTAL SQ YD = 6,720		TOTAL SQ YD = 6,720		TOTAL SQ YD = 6,720		TOTAL SQ YD = 6,720		TOTAL SQ YD = 6,720	
		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = NO		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES	
		WALLINGFORD LANE		LAUREL DRIVE		LAKE COOK ROAD TO END		LONG GROVE ROAD TO WILDROSE COURT		LAKE COOK ROAD TO WILDROSE COURT		LAKE COOK ROAD TO WILDROSE COURT		LAKE COOK ROAD TO WILDROSE COURT		LAKE COOK ROAD TO WILDROSE COURT	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
*2080150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	7,841	\$ 7,841.00	6,004	\$ 6,004.00	5,160	\$ 5,160.00	4,905	\$ 4,905.00	4,905	\$ 4,905.00	4,905	\$ 4,905.00	4,905	\$ 4,905.00
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	453	\$ 45,300.00	356	\$ 35,600.00	306	\$ 30,600.00	294	\$ 29,400.00	109	\$ 10,900.00	109	\$ 10,900.00	109	\$ 10,900.00
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	806	\$ 64,480.00	712	\$ 56,960.00	612	\$ 48,960.00	587	\$ 46,960.00	218	\$ 17,440.00	218	\$ 17,440.00	218	\$ 17,440.00
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	10,780	\$ 26,950.00	8,470	\$ 21,175.00	6,720	\$ 16,800.00	6,720	\$ 16,800.00	6,720	\$ 16,800.00	6,720	\$ 16,800.00	6,720	\$ 16,800.00
*14201723	CLASS D PATCHES, 6" (SPECIAL)	SG YD	\$ 40.00	1,078	\$ 43,120.00	847	\$ 33,880.00	728	\$ 29,120.00	753	\$ 30,120.00	259	\$ 10,360.00	259	\$ 10,360.00	259	\$ 10,360.00
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -	0	\$ -	0	\$ -	99	\$ 9,900.00	0	\$ -	0	\$ -	0	\$ -
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	840	\$ 29,400.00	0	\$ -	0	\$ -	0	\$ -	120	\$ 4,200.00	0	\$ -	0	\$ -
87100100	MOBILIZATION	L.SUM		1	\$ 20,000.00	1	\$ 15,000.00	1	\$ 10,000.00	1	\$ 7,500.00	1	\$ 5,000.00	1	\$ 3,750.00	1	\$ 2,500.00
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L.SUM		1	\$ 10,000.00	1	\$ 1,500.00	1	\$ 2,250.00	1	\$ 337.50	1	\$ 506.25	1	\$ 759.38	1	\$ 1,139.06
*22013798	CONSTRUCTION LAYOUT	L.SUM		1	\$ 10,000.00	1	\$ 1,500.00	1	\$ 2,250.00	1	\$ 337.50	1	\$ 506.25	1	\$ 759.38	1	\$ 1,139.06
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L.SUM		0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
*NA	PAVEMENT STRIPPING	L.SUM		1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00
ASSUMPTIONS:																	
1. GRIND & OVERLAY RESURFACING + 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.																	
2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.																	
3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).																	
CONSTRUCTION SUBTOTAL = \$ 283,391.00		CONSTRUCTION SUBTOTAL = \$ 184,119.00		CONSTRUCTION SUBTOTAL = \$ 156,540.00		CONSTRUCTION SUBTOTAL = \$ 170,942.50		CONSTRUCTION SUBTOTAL = \$ 59,711.00		CONSTRUCTION SUBTOTAL = \$ 74,632.82		CONSTRUCTION SUBTOTAL = \$ 97,511.00		CONSTRUCTION SUBTOTAL = \$ 126,853.00		CONSTRUCTION SUBTOTAL = \$ 156,540.00	
CONTINGENCY (10%) = \$ 28,339.10		CONTINGENCY (10%) = \$ 18,411.90		CONTINGENCY (10%) = \$ 15,654.00		CONTINGENCY (10%) = \$ 17,094.25		CONTINGENCY (10%) = \$ 5,971.10		CONTINGENCY (10%) = \$ 7,463.28		CONTINGENCY (10%) = \$ 9,751.10		CONTINGENCY (10%) = \$ 12,685.30		CONTINGENCY (10%) = \$ 15,654.00	
CONSTRUCTION TOTAL = \$ 311,730.10		CONSTRUCTION TOTAL = \$ 202,530.90		CONSTRUCTION TOTAL = \$ 172,194.00		CONSTRUCTION TOTAL = \$ 188,036.75		CONSTRUCTION TOTAL = \$ 65,682.10		CONSTRUCTION TOTAL = \$ 82,095.52		CONSTRUCTION TOTAL = \$ 107,262.10		CONSTRUCTION TOTAL = \$ 139,538.30		CONSTRUCTION TOTAL = \$ 172,194.00	
ENGINEERING (12%) = \$ 35,031.61		ENGINEERING (12%) = \$ 24,303.71		ENGINEERING (12%) = \$ 20,663.28		ENGINEERING (12%) = \$ 22,564.41		ENGINEERING (12%) = \$ 7,881.85		ENGINEERING (12%) = \$ 9,851.46		ENGINEERING (12%) = \$ 12,871.46		ENGINEERING (12%) = \$ 16,671.72		ENGINEERING (12%) = \$ 20,663.28	
ROADWAY TOTAL = \$ 346,761.71		ROADWAY TOTAL = \$ 226,834.61		ROADWAY TOTAL = \$ 192,857.28		ROADWAY TOTAL = \$ 210,601.16		ROADWAY TOTAL = \$ 73,563.95		ROADWAY TOTAL = \$ 91,946.98		ROADWAY TOTAL = \$ 120,133.56		ROADWAY TOTAL = \$ 156,209.82		ROADWAY TOTAL = \$ 192,857.28	
YEAR 12 TOTAL = \$ 553,796.32																	

YEAR 13																	
		LENGTH = 500		LENGTH = 2,600		LENGTH = 2,600		LENGTH = 2,600		LENGTH = 2,600		LENGTH = 2,600		LENGTH = 2,600		LENGTH = 2,600	
		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24		AVERAGE WIDTH = 24	
		TOTAL SQ YD = 2,290		TOTAL SQ YD = 7,280		TOTAL SQ YD = 6,977		TOTAL SQ YD = 6,977		TOTAL SQ YD = 6,977		TOTAL SQ YD = 6,977		TOTAL SQ YD = 6,977		TOTAL SQ YD = 6,977	
		EXISTING CURB AND GUTTER = NO		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES		EXISTING CURB AND GUTTER = YES	
		WILDROSE DRIVE		FAIRVIEW DRIVE		LAKE COOK ROAD TO LONG GROVE ROAD		DEER VALLEY DRIVE		GLENHURST ROAD		LAKE COOK ROAD TO LONG GROVE ROAD		LAKE COOK ROAD TO LONG GROVE ROAD		LAKE COOK ROAD TO LONG GROVE ROAD	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
*2080150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	1,624	\$ 1,624.00	5,160	\$ 5,160.00	4,905	\$ 4,905.00	4,905	\$ 4,905.00	4,905	\$ 4,905.00	4,905	\$ 4,905.00	4,905	\$ 4,905.00
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	97	\$ 9,700.00	306	\$										

YEAR 15																			
LENGTH = 1,800			LENGTH = 800			LENGTH = 2,900			LENGTH = 2,800										
AVERAGE WIDTH = 22			AVERAGE WIDTH = 22			AVERAGE WIDTH = 22			AVERAGE WIDTH = 22										
TOTAL SQ YD = 4,107			TOTAL SQ YD = 1,940			TOTAL SQ YD = 7,444			TOTAL SQ YD = 6,874										
EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER										
MEADOW LANE			MEADOW LANE			OAK RIDGE LANE			PARK HILL DRIVE										
LONG GROVE ROAD TO 20250 MEADOW LANE			20250 MEADOW LANE TO OAK RIDGE LANE			LAKE COOK ROAD TO LONG GROVE ROAD			LAKE COOK ROAD TO MEADOW LANE										
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST								
*2080150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -								
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	2,911	\$ 2,911.00	1,092	\$ 1,092.00	5,276	\$ 5,276.00	4,731	\$ 4,731.00								
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	173	\$ 17,300.00	65	\$ 6,500.00	313	\$ 31,300.00	281	\$ 28,100.00								
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	345	\$ 27,600.00	130	\$ 10,400.00	628	\$ 50,240.00	561	\$ 44,880.00								
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	4,107	\$ 10,267.50	1,940	\$ 4,850.00	7,444	\$ 18,610.00	6,874	\$ 17,185.00								
*14201723	CLASS D PATCHES, 6" (SPECIAL)	SG YD	\$ 40.00	411	\$ 16,440.00	154	\$ 6,160.00	793	\$ 31,320.00	668	\$ 26,720.00								
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -	0	\$ -	68	\$ 1,700.00	0	\$ -								
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -	0	\$ -	68	\$ 6,800.00	0	\$ -								
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -								
87100100	MOBILIZATION	L.SUM		1	\$ 7,000.00	1	\$ 3,000.00	1	\$ 14,000.00	1	\$ 11,000.00								
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L.SUM		1	\$ 3,500.00	1	\$ 1,500.00	1	\$ 7,000.00	1	\$ 5,500.00								
*20013798	CONSTRUCTION LAYOUT	L.SUM		1	\$ 3,500.00	1	\$ 1,500.00	1	\$ 7,000.00	1	\$ 5,500.00								
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L.SUM		0	\$ -	0	\$ -	0	\$ -	0	\$ -								
*NA	PAVEMENT STRIPPING	L.SUM		1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00								
ASSUMPTIONS:				CONSTRUCTION SUBTOTAL = \$ 89,018.50				CONSTRUCTION SUBTOTAL = \$ 34,502.00				CONSTRUCTION SUBTOTAL = \$ 174,428.00				CONSTRUCTION SUBTOTAL = \$ 143,616.00			
1. GRIND & OVERLAY RESURFACING = 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.				CONTINGENCY (10%) = \$ 8,901.85				CONTINGENCY (10%) = \$ 3,450.20				CONTINGENCY (10%) = \$ 17,442.80				CONTINGENCY (10%) = \$ 14,361.60			
2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.				CONSTRUCTION TOTAL = \$ 97,920.35				CONSTRUCTION TOTAL = \$ 37,952.20				CONSTRUCTION TOTAL = \$ 191,886.80				CONSTRUCTION TOTAL = \$ 157,977.60			
3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).				ENGINEERING (12%) = \$ 11,750.44				ENGINEERING (12%) = \$ 4,254.24				ENGINEERING (12%) = \$ 23,224.23				ENGINEERING (12%) = \$ 18,857.31			
ROADWAY TOTAL = \$ 109,670.79				ROADWAY TOTAL = \$ 42,206.44				ROADWAY TOTAL = \$ 214,892.83				ROADWAY TOTAL = \$ 176,834.91				YEAR 15 TOTAL = \$ 544,005.00			

YEAR 16																											
LENGTH = 800			LENGTH = 1,100			LENGTH = 2,000			LENGTH = 400			LENGTH = 250			LENGTH = 925												
AVERAGE WIDTH = 22			AVERAGE WIDTH = 24			AVERAGE WIDTH = 24			AVERAGE WIDTH = 23			AVERAGE WIDTH = 24			AVERAGE WIDTH = 24												
TOTAL SQ YD = 2,054			TOTAL SQ YD = 3,395			TOTAL SQ YD = 5,600			TOTAL SQ YD = 1,074			TOTAL SQ YD = 1,200			TOTAL SQ YD = 2,590												
EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER												
LOIS LANE			SYLVANDER DRIVE			CHAPEL HILL DRIVE			STURM STREET			DEER MEADOW LANE			FARTHINGDALE COURT												
PARK HILL DRIVE TO END			CUBA ROAD TO END			CUBA ROAD TO END			WOODED RIDGE DRIVE TO VILLAGE LIMIT			INGLENOOK COURT TO END			HEARTSIDE DRIVE TO END												
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST										
*2080150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	117	\$ 3,510.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -										
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	1,458	\$ 1,458.00	2,407	\$ 2,407.00	3,969	\$ 3,969.00	762	\$ 762.00	851	\$ 851.00	1,836	\$ 1,836.00	1,836	\$ 1,836.00										
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	87	\$ 8,700.00	143	\$ 14,300.00	236	\$ 23,600.00	46	\$ 4,600.00	51	\$ 5,100.00	109	\$ 10,900.00	109	\$ 10,900.00										
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	173	\$ 13,840.00	286	\$ 22,880.00	471	\$ 37,680.00	91	\$ 7,280.00	101	\$ 8,080.00	218	\$ 17,440.00	218	\$ 17,440.00										
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	2,054	\$ 5,135.00	3,395	\$ 8,487.50	5,600	\$ 14,000.00	1,074	\$ 2,685.00	1,200	\$ 3,000.00	2,590	\$ 6,475.00	2,590	\$ 6,475.00										
*14201723	CLASS D PATCHES, 6" (SPECIAL)	SG YD	\$ 40.00	369	\$ 14,760.00	340	\$ 13,600.00	560	\$ 22,400.00	109	\$ 4,320.00	129	\$ 4,800.00	299	\$ 11,960.00	299	\$ 11,960.00										
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	291	\$ 7,275.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -										
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	291	\$ 29,100.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -										
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ -	0	\$ -	400	\$ 14,000.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -										
87100100	MOBILIZATION	L.SUM		1	\$ 7,000.00	1	\$ 5,000.00	1	\$ 10,000.00	1	\$ 2,000.00	1	\$ 2,000.00	1	\$ 5,000.00	1	\$ 5,000.00										
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L.SUM		1	\$ 3,500.00	1	\$ 2,750.00	1	\$ 5,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 2,500.00	1	\$ 2,500.00										
*20013798	CONSTRUCTION LAYOUT	L.SUM		1	\$ 3,500.00	1	\$ 2,750.00	1	\$ 5,000.00	1	\$ 1,000.00	1	\$ 1,000.00	1	\$ 2,500.00	1	\$ 2,500.00										
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L.SUM		0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -										
*NA	PAVEMENT STRIPPING	L.SUM		1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00										
ASSUMPTIONS:				CONSTRUCTION SUBTOTAL = \$ 88,238.00				CONSTRUCTION SUBTOTAL = \$ 73,174.50				CONSTRUCTION SUBTOTAL = \$ 136,149.00				CONSTRUCTION SUBTOTAL = \$ 24,147.00				CONSTRUCTION SUBTOTAL = \$ 26,331.00				CONSTRUCTION SUBTOTAL = \$ 57,511.00			
1. GRIND & OVERLAY RESURFACING = 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.				CONTINGENCY (10%) = \$ 8,823.80				CONTINGENCY (10%) = \$ 7,317.45				CONTINGENCY (10%) = \$ 13,614.90				CONTINGENCY (10%) = \$ 2,414.70				CONTINGENCY (10%) = \$ 2,633.10				CONTINGENCY (10%) = \$ 5,751.10			
2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.				CONSTRUCTION TOTAL = \$ 106,061.80				CONSTRUCTION TOTAL = \$ 80,491.95				CONSTRUCTION TOTAL = \$ 149,763.90				CONSTRUCTION TOTAL = \$ 26,561.70				CONSTRUCTION TOTAL = \$ 28,964.10				CONSTRUCTION TOTAL = \$ 63,262.10			
3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).				ENGINEERING (12%) = \$ 12,907.15				ENGINEERING (12%) = \$ 8,659.03				ENGINEERING (12%) = \$ 17,971.67				ENGINEERING (12%) = \$ 3,187.40				ENGINEERING (12%) = \$ 3,475.69				ENGINEERING (12%) = \$ 7,291.45			
ROADWAY TOTAL = \$ 121,968.95				ROADWAY TOTAL = \$ 89,150.98				ROADWAY TOTAL = \$ 167,735.57				ROADWAY TOTAL = \$ 29,749.10				ROADWAY TOTAL = \$ 32,439.79				ROADWAY TOTAL = \$ 70,553.55				YEAR 16 TOTAL = \$ 511,955.75			

YEAR 17																							
LENGTH = 2,800			LENGTH = 950			LENGTH = 1,300			LENGTH = 1,200			LENGTH = 500											
AVERAGE WIDTH = 24			AVERAGE WIDTH = 24			AVERAGE WIDTH = 24			AVERAGE WIDTH = 24			AVERAGE WIDTH = 24											
TOTAL SQ YD = 7,990			TOTAL SQ YD = 2,660			TOTAL SQ YD = 3,640			TOTAL SQ YD = 3,360			TOTAL SQ YD = 2,110											
EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER			EXISTING CURB AND GUTTER											
INGLENOOK LANE			LANCASTER COURT			HEARTSIDE DRIVE			HEARTSIDE DRIVE			HEDGECOURT COURT											
CUBA ROAD TO END			MAYFIELD LANE TO END			FARTHINGDALE COURT TO MAYFIELD LANE			INGLENOOK COURT TO FARTHINGDALE COURT			INGLENOOK COURT TO END											
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST								
*2080150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -								
4060290	BITUMINOUS MATERIALS (TACK COAT)	POUND	\$ 1.00	1,463	\$ 1,463.00	1,896	\$ 1,896.00	2,960	\$ 2,960.00	3,182	\$ 3,182.00	1,496	\$ 1,496.00	1,496	\$ 1,496.00								
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	336	\$ 33,600.00	112	\$ 11,200.00	153	\$ 15,300.00	142	\$ 14,200.00	89	\$ 8,900.00	89	\$ 8,900.00								
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	672	\$ 53,760.00	224	\$ 17,920.00	306	\$ 24,480.00	283	\$ 22,640.00	178	\$ 14,240.00	178	\$ 14,240.00								
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	7,990	\$ 19,975.00	2,660	\$ 6,650.00	3,640	\$ 9,100.00	3,360	\$ 8,400.00	2,110	\$ 5,275.00	2,110	\$ 5,275.00								
*14201723	CLASS D PATCHES, 6" (SPECIAL)	SG YD	\$ 40.00	799	\$ 31,960.00	266	\$ 10,640.00	364	\$ 14,560.00	336	\$ 13,440.00	211	\$ 8,440.00	211	\$ 8,440.00								
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -								
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -								
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ -	190	\$ 6,650.00	260	\$ 9,100.00	0	\$ -	0	\$ -	0	\$ -								
87100100	MOBILIZATION	L.SUM		1	\$ 7,000.00	1	\$ 5,000.00	1	\$ 7,000.00	1	\$ 5,000.00	1	\$ 5,000.00	1	\$ 5,000.00								
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L.SUM		1	\$ 3,500.00	1	\$ 2,625.00	1	\$ 3,500.00	1	\$ 2,500.00	1	\$ 2,500.00	1	\$ 2,500.00								
*20013798	CONSTRUCTION LAYOUT	L.SUM		1	\$ 3,500.00	1	\$ 2,625.00	1	\$ 3,500.00	1	\$ 2,500.00	1	\$ 2,500.00	1	\$ 2,500.00								
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L.SUM		0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -								
*NA	PAVEMENT STRIPPING	L.SUM		1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00								
ASSUMPTIONS:				CONSTRUCTION SUBTOTAL = \$ 169,458.00				CONSTRUCTION SUBTOTAL = \$ 65,446.00				CONSTRUCTION SUBTOTAL = \$ 89,620.00				CONSTRUCTION SUBTOTAL = \$ 71,562.00				CONSTRUCTION SUBTOTAL = \$ 44,851.00			
1. GRIND & OVERLAY RESURFACING = 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.				CONTINGENCY (10%) = \$ 16,945.80				CONTINGENCY (10%) = \$ 6,544.60				CONTINGENCY (10%) = \$ 8,962.00				CONTINGENCY (10%) = \$ 7,156.20				CONTINGENCY (10%) = \$ 4,485.10			
2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.				CONSTRUCTION TOTAL = \$ 186,403.80				CONSTRUCTION TOTAL = \$ 71,990.60				CONSTRUCTION TOTAL = \$ 98,582.00				CONSTRUCTION TOTAL = \$ 78,718.20				CONSTRUCTION TOTAL = \$ 49,336.10			
3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).				ENGINEERING (12%) = \$ 22,368.46				ENGINEERING (12%) = \$ 8,638.67				ENGINEERING (12%) = \$ 11,829.84				ENGINEERING (12%) = \$ 9,446.18				ENGINEERING (12%) = \$ 5,920.33			
ROADWAY TOTAL = \$ 208,772.26				ROADWAY TOTAL = \$ 80,629.27				ROADWAY TOTAL = \$ 110,411.84				ROADWAY TOTAL = \$ 88,164.38				ROADWAY TOTAL = \$ 55,256.43				YEAR 17 TOTAL = \$ 543,234.36			

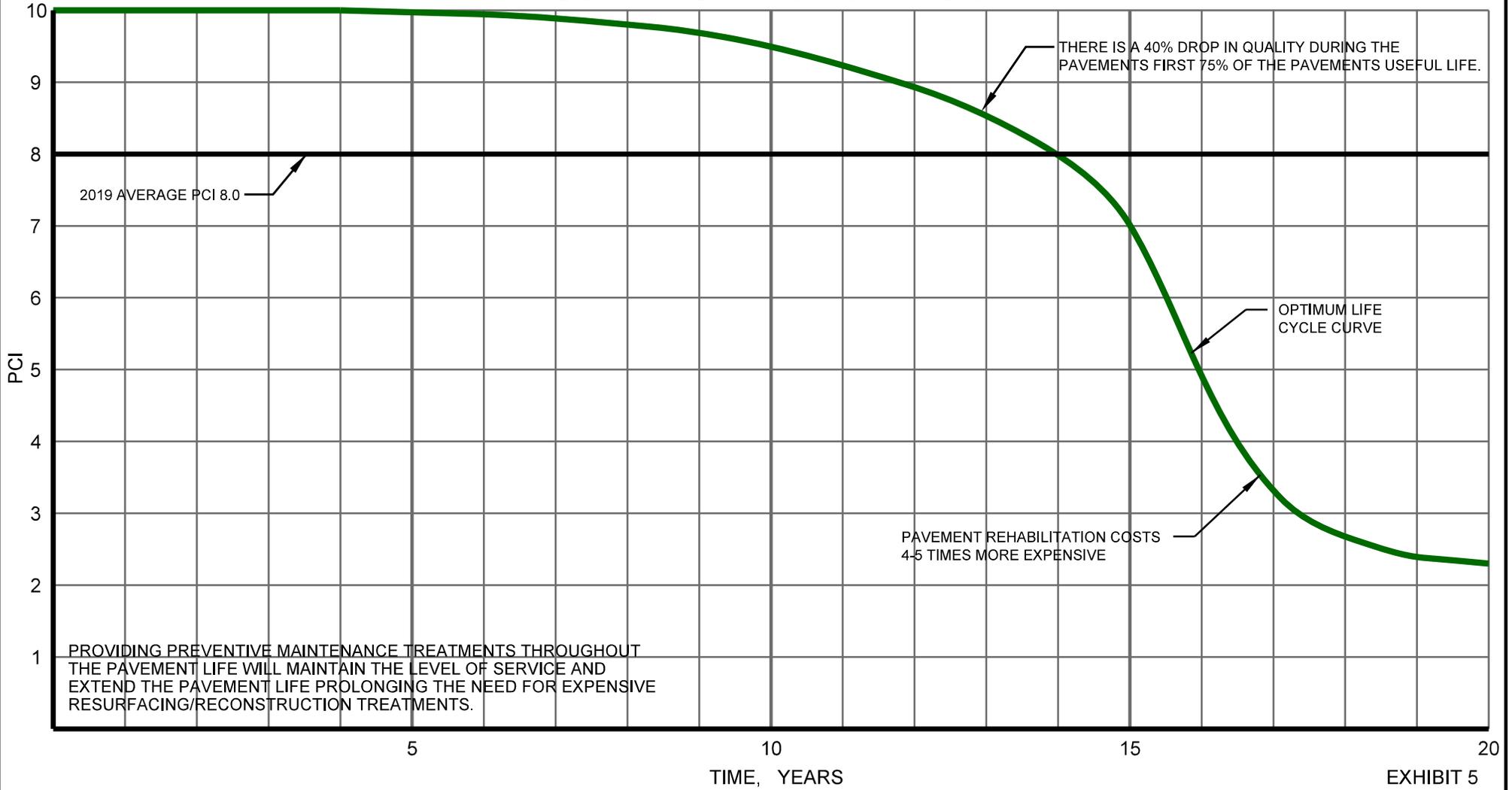
YEAR 18																							
LENGTH = 350			LENGTH = 2,800			LENGTH = 1,100			LENGTH = 675			LENGTH = 675			LENGTH = 250			LENGTH = 500			LENGTH = 500		
AVERAGE WIDTH = 23			AVERAGE WIDTH = 22			AVERAGE WIDTH = 22			AVERAGE WIDTH = 24			AVERAGE WIDTH = 22											
TOTAL SQ YD = 940			TOTAL SQ YD = 7,315			TOTAL SQ YD = 2,824			TOTAL SQ YD = 1,733			TOTAL SQ YD = 1,733			TOTAL SQ YD = 642			TOTAL SQ YD = 2,350			TOTAL SQ YD = 1,412		

YEAR 19															
		LENGTH = 800	LENGTH = 800	LENGTH = 350	LENGTH = 1,600	LENGTH = 1,050	LENGTH = 1,050	LENGTH = 1,500	LENGTH = 350						
		AVERAGE WIDTH = 22	AVERAGE WIDTH = 22	AVERAGE WIDTH = 24	AVERAGE WIDTH = 22										
		TOTAL SQ YD = 2,084	TOTAL SQ YD = 1,284	TOTAL SQ YD = 980	TOTAL SQ YD = 4,107	TOTAL SQ YD = 2,695	TOTAL SQ YD = 2,695	TOTAL SQ YD = 3,850	TOTAL SQ YD = 699						
		EXISTING CURB AND GUTTER = NO	EXISTING CURB AND GUTTER = NO	EXISTING CURB AND GUTTER = YES	EXISTING CURB AND GUTTER = NO										
		BRAMBLE LANE	TEAL COURT	YESPER COURT	LANDMARK LANE	SWANSWAY ROAD	WICKER DRIVE	MALLARD COURT	THRUSH COURT						
		BRIARGATE LANE TO WICKER DRIVE	PHEASANT TRAIL TO END	MAYFIELD LANE TO END	LONG GROVE ROAD TO END	COVINGTON DRIVE TO CORNERS DRIVE	LONG GROVE ROAD TO BRAMBLE LANE	PHEASANT TRAIL TO END	PHEASANT TRAIL TO END						
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
*2060150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
4050290	BITUMINOUS MATERIALS (TACK COAT)	POLY	\$ 1.00	1,458	\$ 1,458.00	913	\$ 911.00	895	\$ 895.00	2,911	\$ 2,911.00	1,911	\$ 1,911.00	2,729	\$ 2,729.00
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	87	\$ 8,700.00	54	\$ 5,400.00	42	\$ 4,200.00	173	\$ 17,300.00	114	\$ 11,400.00	162	\$ 16,200.00
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	173	\$ 13,840.00	108	\$ 8,640.00	83	\$ 6,640.00	345	\$ 27,600.00	227	\$ 18,160.00	324	\$ 25,920.00
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	2,054	\$ 5,135.00	1,284	\$ 3,210.00	980	\$ 2,450.00	4,107	\$ 10,267.50	2,695	\$ 6,737.50	3,850	\$ 9,625.00
*14201723	CLASS D PATCHES, (F) (SPECIAL)	SG YD	\$ 40.00	206	\$ 8,240.00	129	\$ 5,160.00	98	\$ 3,920.00	411	\$ 16,440.00	279	\$ 11,160.00	385	\$ 15,400.00
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ -	0	\$ -	70	\$ 2,450.00	0	\$ -	0	\$ -	0	\$ -
67100100	MOBILIZATION	L.SUM		1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L.SUM		1	\$ 1,750.00	1	\$ 1,750.00	1	\$ 1,750.00	1	\$ 1,750.00	1	\$ 1,750.00	1	\$ 1,750.00
*20013798	CONSTRUCTION LAYOUT	L.SUM		1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00	1	\$ 3,000.00
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L.SUM		0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -	0	\$ -
*NA	PAVEMENT STRIPING	L.SUM		1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00
ASSUMPTIONS:															
1. GRIND & OVERLAY RESURFACING @ 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.															
2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.															
3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).															
		CONSTRUCTION SUBTOTAL = \$ 44,871.00	CONSTRUCTION SUBTOTAL = \$ 35,821.00	CONSTRUCTION SUBTOTAL = \$ 24,855.00	CONSTRUCTION SUBTOTAL = \$ 89,018.50	CONSTRUCTION SUBTOTAL = \$ 61,508.50	CONSTRUCTION SUBTOTAL = \$ 61,508.50	CONSTRUCTION SUBTOTAL = \$ 82,374.00	CONSTRUCTION SUBTOTAL = \$ 28,865.50						
		CONTINGENCY (10%) = \$ 4,487.10	CONTINGENCY (10%) = \$ 3,582.10	CONTINGENCY (10%) = \$ 2,485.50	CONTINGENCY (10%) = \$ 8,901.85	CONTINGENCY (10%) = \$ 6,150.85	CONTINGENCY (10%) = \$ 6,150.85	CONTINGENCY (10%) = \$ 8,237.40	CONTINGENCY (10%) = \$ 2,886.55						
		<b>CONSTRUCTION TOTAL = \$ 49,358.10</b>	<b>CONSTRUCTION TOTAL = \$ 39,403.10</b>	<b>CONSTRUCTION TOTAL = \$ 27,340.50</b>	<b>CONSTRUCTION TOTAL = \$ 97,920.35</b>	<b>CONSTRUCTION TOTAL = \$ 67,659.35</b>	<b>CONSTRUCTION TOTAL = \$ 90,611.40</b>	<b>CONSTRUCTION TOTAL = \$ 31,752.05</b>	<b>CONSTRUCTION TOTAL = \$ 31,752.05</b>						
		ENGINEERING (12%) = \$ 5,922.37	ENGINEERING (12%) = \$ 4,728.37	ENGINEERING (12%) = \$ 3,280.86	ENGINEERING (12%) = \$ 11,750.44	ENGINEERING (12%) = \$ 8,119.12	ENGINEERING (12%) = \$ 8,119.12	ENGINEERING (12%) = \$ 10,873.37	ENGINEERING (12%) = \$ 3,810.25						
		<b>ROADWAY TOTAL = \$ 55,280.47</b>	<b>ROADWAY TOTAL = \$ 44,131.47</b>	<b>ROADWAY TOTAL = \$ 30,621.36</b>	<b>ROADWAY TOTAL = \$ 109,670.79</b>	<b>ROADWAY TOTAL = \$ 75,778.47</b>	<b>ROADWAY TOTAL = \$ 75,778.47</b>	<b>ROADWAY TOTAL = \$ 91,484.77</b>	<b>ROADWAY TOTAL = \$ 35,562.30</b>	<b>YEAR 19 TOTAL = \$ 528,308.70</b>					

YEAR 20															
		LENGTH = 975	LENGTH = 2,000	LENGTH = 3,875	LENGTH = 675										
		AVERAGE WIDTH = 22	AVERAGE WIDTH = 24	AVERAGE WIDTH = 22	AVERAGE WIDTH = 22										
		TOTAL SQ YD = 3,118	TOTAL SQ YD = 5,600	TOTAL SQ YD = 9,946	TOTAL SQ YD = 1,733										
		EXISTING CURB AND GUTTER = NO	EXISTING CURB AND GUTTER = YES	EXISTING CURB AND GUTTER = NO	EXISTING CURB AND GUTTER = NO										
		BOBWHITE LANE	MAYFIELD LANE	PHEASANT TRAIL	QUAIL COURT										
		PHEASANT TRAIL TO END	CHAPEL HILL DRIVE TO END	CUBA ROAD TO 21065 PHEASANT TRAIL	PHEASANT TRAIL TO END										
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST				
*2060150	TRENCH BACKFILL, SPECIAL	CU YD	\$ 30.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -				
4050290	BITUMINOUS MATERIALS (TACK COAT)	POLY	\$ 1.00	2,210	\$ 2,210.00	3,969	\$ 3,969.00	7,050	\$ 7,050.00	1,229	\$ 1,229.00				
4060825	POLYMERIZED LEVELING BINDER (MACHINE METHOD), N50	TON	\$ 100.00	131	\$ 13,100.00	236	\$ 23,600.00	418	\$ 41,800.00	73	\$ 7,300.00				
4060335	HOT MIX ASPHALT SURFACE COURSE, MIX D, N50	TON	\$ 80.00	262	\$ 20,960.00	471	\$ 37,680.00	836	\$ 66,880.00	146	\$ 11,680.00				
44000157	HOT MIX ASPHALT SURFACE REMOVAL, 2"	SG YD	\$ 2.50	3,118	\$ 7,795.00	5,600	\$ 14,000.00	9,946	\$ 24,865.00	1,733	\$ 4,332.50				
*14201723	CLASS D PATCHES, (F) (SPECIAL)	SG YD	\$ 40.00	312	\$ 12,480.00	560	\$ 22,400.00	995	\$ 39,800.00	174	\$ 6,960.00				
50105220	PIPE CULVERT REMOVAL (NON-RCP)	FOOT	\$ 25.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -				
542A0217	PIPE CULVERT, CLASS A (RCP)	FOOT	\$ 100.00	0	\$ -	0	\$ -	0	\$ -	0	\$ -				
*60603800	COMBINATION CONCRETE CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	\$ 35.00	0	\$ -	400	\$ 14,000.00	0	\$ -	0	\$ -				
67100100	MOBILIZATION	L.SUM		1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00	1	\$ 3,500.00				
*70100100	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L.SUM		1	\$ 2,500.00	1	\$ 2,500.00	1	\$ 2,500.00	1	\$ 2,500.00				
*20013798	CONSTRUCTION LAYOUT	L.SUM		1	\$ 5,000.00	1	\$ 5,000.00	1	\$ 5,000.00	1	\$ 5,000.00				
*NA	DETECTOR LOOP REPLACEMENT/MAINTENANCE OF TRAFFIC SIGNAL	L.SUM		0	\$ -	0	\$ -	0	\$ -	0	\$ -				
*NA	PAVEMENT STRIPING	L.SUM		1	\$ 500.00	1	\$ 500.00	1	\$ 500.00	1	\$ 500.00				
ASSUMPTIONS:															
1. GRIND & OVERLAY RESURFACING @ 0.75" POLY LEVELING BINDER, 1.5" SURFACE WITH 10% PATCHING.															
2. 10% CURB AND GUTTER REPLACEMENT FOR ROADWAYS WITH EXISTING CURB AND GUTTER.															
3. MOBILIZATION IS 6%, TC&P AND LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).															
		CONSTRUCTION SUBTOTAL = \$ 67,045.00	CONSTRUCTION SUBTOTAL = \$ 127,149.00	CONSTRUCTION SUBTOTAL = \$ 212,895.00	CONSTRUCTION SUBTOTAL = \$ 38,001.50										
		CONTINGENCY (10%) = \$ 6,704.50	CONTINGENCY (10%) = \$ 12,714.90	CONTINGENCY (10%) = \$ 21,289.50	CONTINGENCY (10%) = \$ 3,800.15										
		<b>CONSTRUCTION TOTAL = \$ 73,749.50</b>	<b>CONSTRUCTION TOTAL = \$ 139,863.90</b>	<b>CONSTRUCTION TOTAL = \$ 234,184.50</b>	<b>CONSTRUCTION TOTAL = \$ 41,801.65</b>										
		ENGINEERING (12%) = \$ 8,849.94	ENGINEERING (12%) = \$ 18,783.67	ENGINEERING (12%) = \$ 28,102.14	ENGINEERING (12%) = \$ 5,016.20										
		<b>ROADWAY TOTAL = \$ 82,599.44</b>	<b>ROADWAY TOTAL = \$ 158,647.57</b>	<b>ROADWAY TOTAL = \$ 262,286.64</b>	<b>ROADWAY TOTAL = \$ 46,817.85</b>	<b>YEAR 20 TOTAL = \$ 548,351.50</b>									

**EXHIBIT #5**  
**TYPICAL PAVEMENT LIFE CYCLE CURVE**

# TYPICAL LIFE CYCLE CURVE



PROVIDING PREVENTIVE MAINTENANCE TREATMENTS THROUGHOUT THE PAVEMENT LIFE WILL MAINTAIN THE LEVEL OF SERVICE AND EXTEND THE PAVEMENT LIFE PROLONGING THE NEED FOR EXPENSIVE RESURFACING/RECONSTRUCTION TREATMENTS.

**EXHIBIT #6**  
**TYPICAL VISUAL PAVEMENT DISTRESSES**

# PCI = 5; Plum Grove Road



Exhibit 6 - Typical Visual Pavement Distresses

# PCI = 6; Rosalie Lane



Exhibit 6 - Typical Visual Pavement Distresses

# PCI = 7; Circle Drive east of Ferndale Road



Exhibit 6 - Typical Visual Pavement Distresses

# PCI = 8; Hearthside Drive near CDS



Exhibit 6 - Typical Visual Pavement Distresses

# PCI = 9; Park Hill Drive north of Park Hill Court



Exhibit 6 - Typical Visual Pavement Distresses

# PCI = 10; Pheasant Trail south of Cuba Road



Exhibit 6 - Typical Visual Pavement Distresses

**EXHIBIT #7**  
**PCI VALUES OF ROADWAY AREA PERCENTAGES**  
**GRAPH**

# Village of Deer Park Pavement Evaluation Report 2019 PCI Values Based on Roadway Area Percentages

Exhibit 7

