VILLAGE OF HAWTHORN WOODS

STREET MAINTENANCE IMPROVEMENT REPORT

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Submitted To:

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EXECUTIVE SUMMARY

Christopher B. Burke Engineering, Ltd. organized an extensive pavement maintenance program for the Village of Hawthorn Woods 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 15-year proposed program the Village is well on its way to a cost-effective pavement maintenance program for many years to come.

Roadway conditions are quantified by Pavement Condition Index (PCI), where a PCI of 1 is the best possible condition and a PCI of 10 is the worst possible condition. The Village's current average PCI value of 5.0 (Fair) is lower than the average of 3.9 (Good) from the March 8, 2013 report. The Village of Hawthorn Woods should institute a number of pavement maintenance strategies recommended by CBBEL described within this report. If the Village follows this pavement plan and implements various maintenance techniques, the roadway system will last longer and overall pavement management costs will decrease.

In order for the Village to keep the high standard of roadway conditions the community expects 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 reconstruction will be necessary before the pavements useful life has been met. A pavement management program will allow Village staff to manage and protect a valuable asset and prolong the streets 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 5.0 (which does not include the roadways that have not yet been accepted by the Village/do not have surface course placed). The PCI value of 5.0 represents a pavement that is showing signs of aging, but still is maintaining a sound structural condition. Even with this 5.0 pavement rating and fair 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. Seventy-seven percent of the total street pavement area has a PCI value of 5 or 6. 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 reconstruction may be the required treatment in approximately 4-6 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 Hawthorn Woods for a pavement management program of this magnitude averages 1.53 million dollars annually in 2018 dollars. Please note that inflation has not been added for future years.
7. 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.

8. CBBEL recommends that the Village submit resurfacing projects to the Lake County Council of Managers. This is similar to the recently funded Schwerman Road project. These projects would be simple grind and overlay 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 this report assumes that all large-diameter CMP culverts within the Village will be replaced in the first few years of the Program, depending on the availability of funding. All small-diameter CMP culverts will be replaced during their respective roadway’s resurfacing year during construction, with this cost being included in each roadway’s estimate. The existing large-diameter CMP culverts can be seen in Exhibit 2A.

Once this cycle is complete (all roadways within Years 1-15 have been resurfaced or reconstructed), the Village can expect to resurface and maintain the roadways at an approximate total cost of $1,185,000/Year ($955,000/Year of resurfacing and $230,000/Year of maintenance), which includes 10% engineering. This cost assumes grind and overlay resurfacing and preventative maintenance.

Please note that this report identifies the total cost for roadway improvements and CMP culvert replacement and is to be referenced as a guide only; depending on the funding type and availability, the streets and culverts may be completed in different years than stated in this report. There are several unknowns that may affect the timeline for this program.

INTRODUCTION

The Village of Hawthorn Woods 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 street 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 52 centerline miles of streets currently maintained by the Village and approximately 4.7 centerline miles of streets to be transferred into the Village's maintenance program in the future, totaling 56.7 miles to be maintained by the Village. In addition to the 56.7 miles in the street system, the Village's pavement maintenance program also includes maintaining five parking lots with a total area of 33,000 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.

Approximately 39.5 miles of streets within the Village's pavement maintenance program were repaired from 2003-2009; However, no improvements have been completed since, except in 2018 when Schwerman Road was resurfaced. This does not include approximately $110,000 spent annually by the Village on routine maintenance of roads, including pavement patching and crack sealing, in efforts to extend the life of the pavement. 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 factor into 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.

Please note that, of the Village's eleven (11) large-diameter culverts, only Bruce Circle North, Onondaga Drive, and Darlington Drive have been replaced to date. This program will address the remaining eight larger diameter culverts that require replacement within the village.

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 1 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 1 denotes a distress free pavement, where as a 10 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.

PCI	Visible Distress	General Condition/ Treatment Measures
Not Accepted	• Data not collected	Street not included in cost estimate.
1 New	• None	New or current construction. New overlay.
2 Excellent	• Little to none	Recent construction.
3 Very Good	• No longitudinal crack, expect reflection of paving joints. • Occasional transverse cracks, widely spaced (40' or greater).	Recent overlay. Little or no maintenance required.
4 Good	• Very slight or no raveling, surface shows some traffic wear. • Longitudinal cracks (open 1/4") spaced due to reflection or paving joints. • Transverse crack (open 1/4") spaced 10 feet or more apart, little or slight crack raveling. • No patching or very few patches in excellent condition.	First signs of aging. Maintain with routine crack filling.
5 Fair	• Slight raveling (loss of lines) and traffic wear. • Longitudinal cracks (open 1/4" – ½") due to reflection and paving joints. • Transverse cracking (open 1/4"-1/2") some spaced less than 10 feet. • Slight to moderate flushing or polishing. • Occasional patching in good condition.	Show signs of aging, sound structural condition. Could extend life with rejuvenators, micro surfacing or overlay.
6 Fair	• Moderate to severe raveling (loss of lines and coarse aggregate). • Longitudinal cracks (open 1/2:") show some slight raveling and secondary cracks. First signs of longitudinal cracks near wheel path or edge. • Transverse cracking and first signs of block cracking. Slight crack raveling (open 1/2"). • Extensive to severe flushing or polishing. • Some patching or edge wedging in good condition.	Surface aging. Needs micro surfacing or overlay. May need strengthening from patching or overlay

PCI	Visible Distress	General Condition/ Treatment Measures
7 Poor	• Severe surface raveling. • Multiple longitudinal and transverse cracking with slight raveling. • Block cracking (over 25 – 50%) of surface). • Patching in fair condition. • Slight rutting or distortions (1" deep or less).	Significant aging and first signs of need for strengthening. Would benefit from patching and overlay.
8 Poor	• Closely spaced longitudinal and transverse cracks often showing raveling and crack erosion. • Block cracking over 50% of surface. • Some alligator cracking (less than 25% or surface). • Patches in fair to poor condition. • Moderate rutting or distortion. • Occasional potholes.	Need patching and overlay. Consider partial reconstruction.
9 Very Poor	• Alligator cracking (over 25% of surface). • Severe distortions (over 2" deep). • Extensive patching in poor condition. • Potholes.	Severe deterioration. Need partial reconstruction with extensive base repair.
10 Failed	• Severe distress with extensive loss of surface integrity.	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 striping 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, data from the SSA 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 5.0. This PCI value is considered fair. Shown on Exhibit 1 – Pavement Condition Index Map are each individual PCI values for the Village's roadway network. The PCI value of 5.0 represents a pavement that is showing signs of aging. Even with this 5.0 pavement rating and fair 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 Hawthorn Woods 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 / Sq Yd

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 Crackfilling Program w/ 5% Surface Patching:
$4.50 / Sq Yd

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
15% Bituminous Surface Patching:
$5 / Sq Yd

This program will provide various size and depths of finish 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
25% Micro-Surfacing:
$8.00 / Sq Yd

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, concrete ribbon or 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 - $35.00 / Sq Yd

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 concrete ribbon or 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 / Sq Yd

The full depth asphalt removal and replacement includes removing all of the 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 includes spot repairs to the concrete ribbon or 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 / Sq Yd

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 concrete ribbon or 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 15-year pavement maintenance program. Exhibit 2 – 15-Year Plan Map shows the 15-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 – 2018 Area Percentages of PCI Values, shows approximately 77% of the total street pavement area has a PCI value of 5 or 6. 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 reconstruction will be the recommended treatment in approximately 4-6 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 Hawthorn Woods for a pavement management program of this magnitude averages 1.53 million dollars annually in 2018 dollars and inflation for future years has not been added. A slightly higher cost is assigned to the first three years of the program. These first three years repair and reconstruct the worst streets in the Village first thus eliminating the expense of more costly routine repairs further down the road and creating a more cost-effective approach in the long term. The 1.53 million dollars was developed based on the 2018 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 – minimum PCI of 4.0. Considerations in scheduling the streets in the 15-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 programs 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 230-thousand-dollar annual maintenance program will help maintain the level of service to an approximate pavement condition index of 4.0 after resurfacing/reconstruction of each roadway. 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 resurfacing and maintenance of the Village streets, as well as the culvert replacement projects.

TOTAL ROAD PROGRAM COSTS			
YEAR	**RESURFACING COST**	***ROUTINE MAINTENANCE COST**	**TOTAL BUDGET**
1	$1,279,000	$230,000	$1,509,000
2	$1,377,000	$230,000	$1,607,000
3	$1,447,000	$230,000	$1,677,000
4	$1,405,000	$230,000	$1,635,000
5	$1,339,000	$230,000	$1,569,000
6	$1,269,000	$230,000	$1,499,000
7	$1,279,000	$230,000	$1,509,000
8	$1,281,000	$230,000	$1,511,000
9	$1,289,000	$230,000	$1,519,000
10	$1,247,000	$230,000	$1,477,000
11	$1,281,000	$230,000	$1,511,000
12	$1,288,000	$230,000	$1,518,000
13	$1,266,000	$230,000	$1,496,000
14	$1,044,000	$230,000	$1,274,000
15	$1,409,000	$230,000	$1,639,000
ROAD PROGRAM TOTALS:	**$19,500,000**	**$3,450,000**	**$22,950,000**

LARGE DIAMETER CULVERT REPLACEMENT TOTAL:	**$2,698,000**

The combined cost of the Total Road Program and Large Diameter Culvert Replacement is $25,648,000.

*ROUTINE MAINTENANCE TYPES	APPROXIMATE PER YEAR COST
PRESERVATIVE REJUVENATING AGENT	$62,000
JOINT AND CRACKFILLING WITH 5% SURFACE PATCHING	$13,000
BITUMINOUS SURFACE PATCHING	$42,000
MICRO-SURFACING	$112,500
TOTAL =	**$230,000**

***Routine Maintenance Types cost breakdown is for reference only for the Total Road Program Costs table above.**

POSSIBLE FUNDING GRANT

In order for a Village roadway to be eligible for federal funding, the Village needs to apply through the Lake County Council of Mayors (LCCOM) to reclassify a road to an FAU Route. This process consists of first submitting a reclassification application with its necessary attachments, which include a location map, an exhibit showing the spacing to the nearest roadway with the same classification as the requested classification, and a traffic count report. After this application is submitted to and approved by LCCOM, LCCOM will submit the application to Springfield (IDOT Headquarters) who will then make the final decision on whether the roadway is a good candidate for reclassification or not. Some reasons that a roadway may not be a good candidate are:

- Excessively low ADT;
- The road is spaced too closely to another roadway of the same type of classification being applied for;
- Too many driveways.

Darlington Road and Owens Road were submitted in 2018 and have been denied reclassification for the reasons listed above.

If a reclassification has been approved, this roadway would be eligible for federal funds which can be utilized for roadway improvements only, such as grind & overlay, full-depth reclamation, and reconstruction projects.

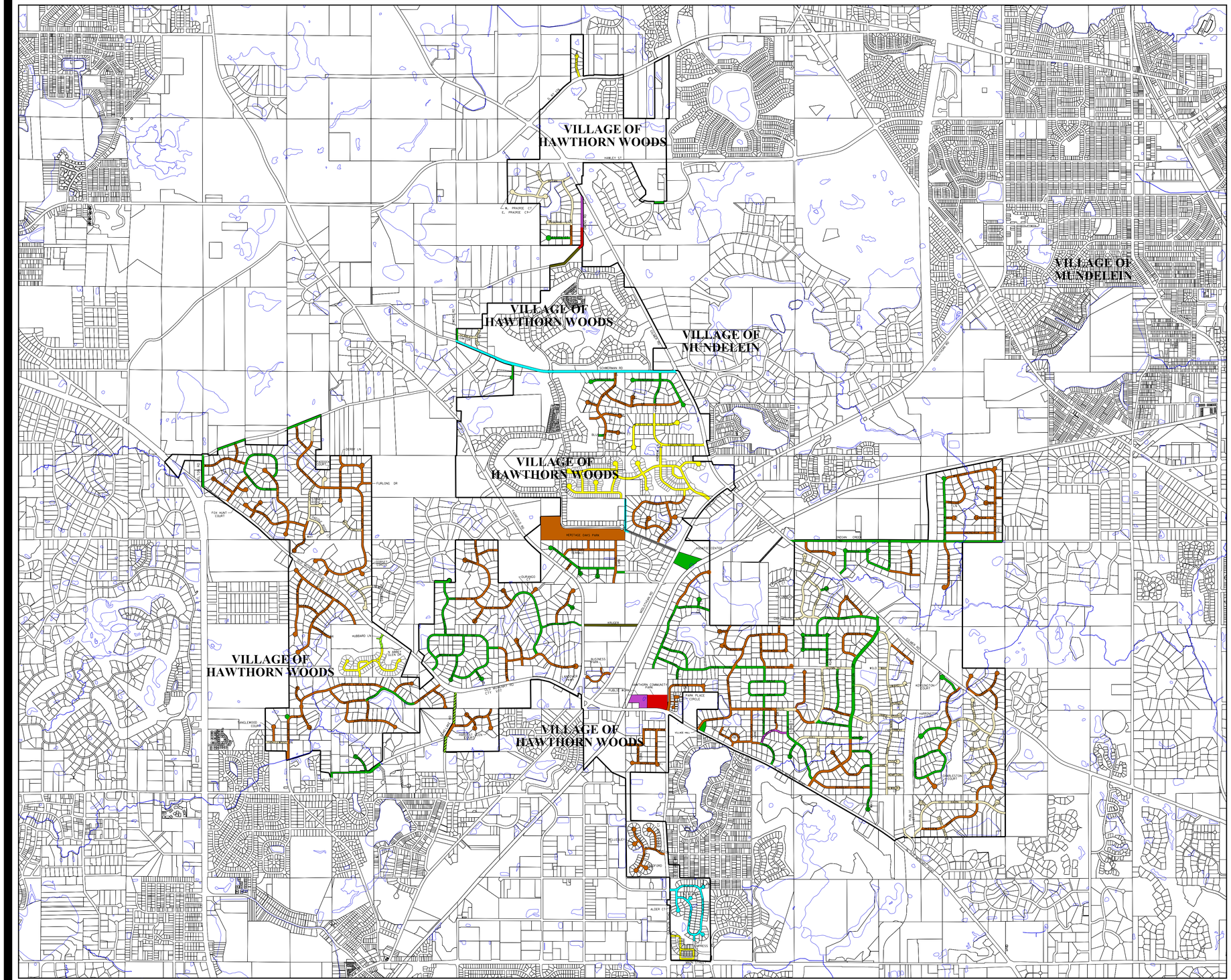
The following local roads are existing FAU routes within the Village from past reclassification submittals:

- Echo Lake Road (Old McHenry Road to Midlothian Road)
- Kruger Road (Fairfield Road to Midlothian Road)
- Miller Road (Rand Road to Echo Lake Road)
- Schwerman Road (Owens Road to Gilmer Road)
- Indian Creek Road (Gilmer Road to Diamond Lake Road)
- Acorn Drive (Bruce Circle to Old McHenry Road)

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. The Council is currently changing eligibility of the projects, but CBBEL sits on the Committee that makes recommendations on the guidelines. Typically, in the past, projects are eligible 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).

EXHIBIT #1
PAVEMENT CONDITION INDEX MAP



Village of Hawthorn Woods

15-Year Pavement Maintenance Program

Hawthorn Woods, Illinois



Pavement Condition Index (PCI) Map

- PCI 1 (BEST)
- PCI 2
- PCI 3
- PCI 4
- PCI 5
- PCI 6
- PCI 7
- PCI 8
- PCI 9
- PCI 10 (WORST)
- NOT ACCEPTED
  NOT SURFACED

EXHIBIT 1
Date: 3/8/2013
REVISED 10/5/2018

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

Base Map Source: Lake County Dept. of Information & Technology, GIS Division

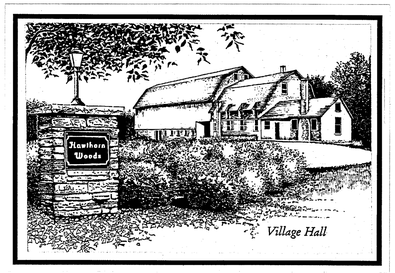
STREET SURVEY

N:\HAWTHORNW00D5\80265 H's\H201-H300\80265H239\Civil\Exhibits\2018_PCI Map.dgn

EXHIBIT #2
15-YEAR PLAN MAP

Village of Hawthorn Woods

15-Year Pavement Maintenance Program Hawthorn Woods, Illinois



15-Year Maintenance Map

- 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

EXHIBIT 2
Date: 3/8/2013
REVISED 10/5/2018

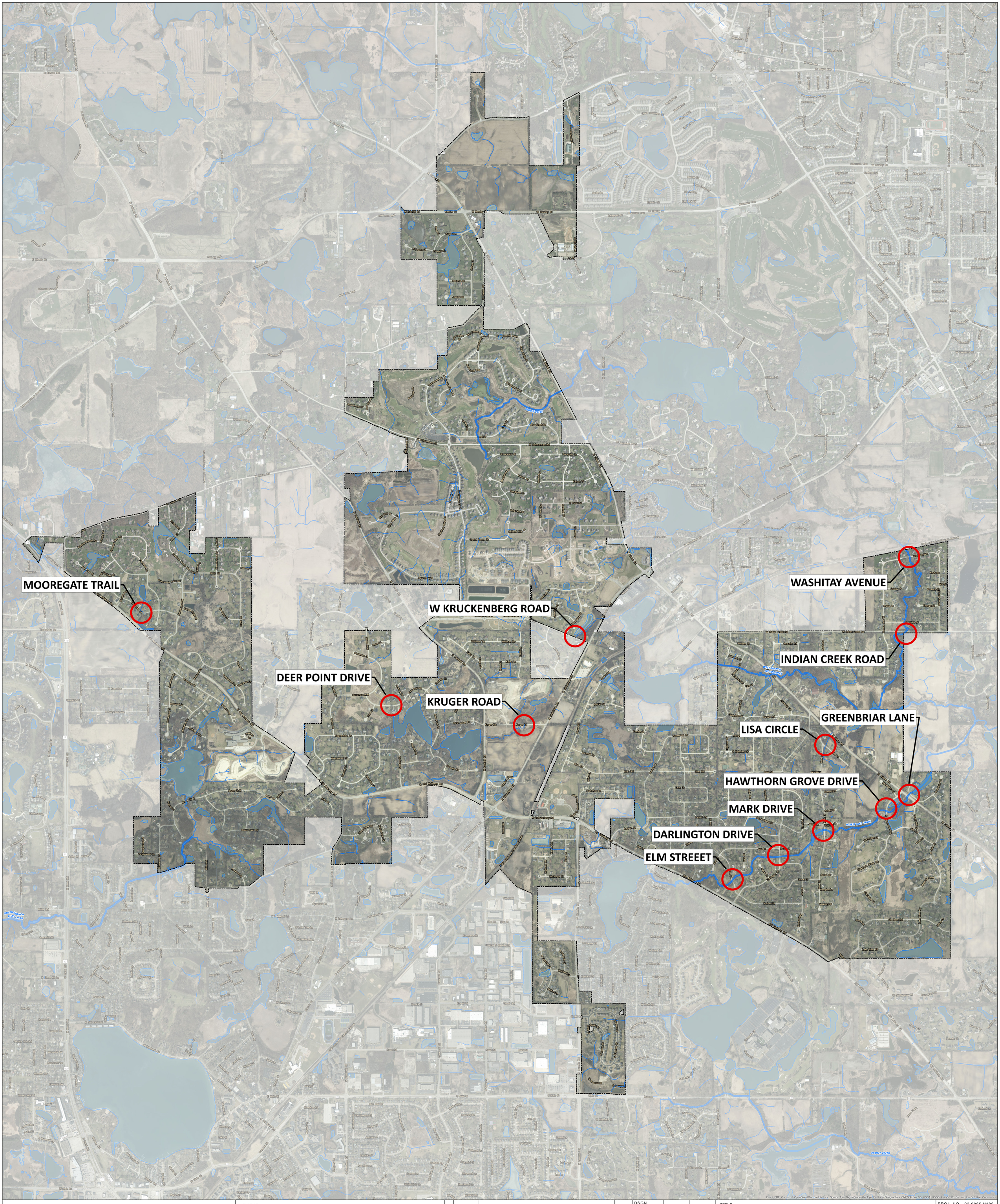
CHRISTOPHER B. BURKE ENGINEERING LTD.
9575 West Higgins Road, Suite 600
Rosemont, Illinois 60018
(847) 823-0500

Base Map Source: Lake County Dept. of Information & Technology, GIS Division

STREET SURVEY

N:\HAWTHORNWOODS\0265 H's\H201-H300\0265H239\Civil\Exhibits\2018_15 Year Plan.dgn

EXHIBIT #2A
EXISTING LARGE-DIAMETER CMP CULVERTS



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

CLIENT:
VILLAGE OF HAWTHORN WOODS
2 Lagoon Drive
Hawthorn Woods, IL 60047

NO.	DATE	NATURE OF REVISION	CHKD.

DSGN.	
DWN:	M.HAYES
CHKD.	
SCALE:	1:0
MODEL:	ArcGIS 10
PLOT DATE	7/23/2018
FILE NAME	Aerial Exhibit - II 2A
PATH	N:\HAWTHORNWOODS\CMP Culvert Presentation - LMF\Aerial Exhibit - II 2A.mxd

TITLE:
VILLAGE OF HAWTHORN WOODS
LOCATION OF CMP CULVERTS

PROJ. NO.	02-0065.H186
DATE:	
SHEET	OF
DRAWING NO.	**EXHIBIT 2A**

EXHIBIT #3
PAVEMENT EVALUATION DATABASE SPREADSHEET
(IN ORDER BY YEAR TO BE REPAIRED)

VILLAGE OF HAWTHORN WOODS
PAVEMENT EVALUATION DATABASE

EXHIBIT 3
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR TO BE REPAIRED	STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)	LAST RESURFACE DATE	2013 PCI	2018 PCI	DESCRIPTION
1	HAWTHORN COMMUNITY PARK			220		5360	UNKNOWN	9	9	LOT WITH CURB AND GUTTER
1	HAWTHORN DR	CIRCLE DR	VICTORIA LN	450	21	1050	2001	5	5	NO RIBBON
1	HAWTHORN DR	VICTORIA LN	HICKORY RD	305	21	712	2001	6	5	NO RIBBON
1	HAWTHORN DR	HICKORY RD	OLD MCHENRY RD	900	22	2200	2001	5	6	NO RIBBON
1	HICKORY LN	HAWTHORN DR	ELM ST	1033	22	2525	2001	8	8	NO RIBBON
1	JAMES CT	DARLINGTON RD	NORTH CDS	489	22	1195	1996	5	5	NO RIBBON
1	JUEL CI	ELM ST	SOUTH CDS	498	22	1217	2001	6	6	NO RIBBON
1	OWENS RD	920' S OF GILMER RD	1355' S OF GILMER RD	435	21	1015	UNKNOWN	9	9	NO RIBBON
1	PUBLIC WORKS FACILITY					2197	UNKNOWN	8	8	LOT
1	VICTORIA LN	HAWTHORN DR	LAGOON DR	1057	21	2466	2005	6	6	RIBBON
1	VILLAGE HALL LOT					2653	UNKNOWN	6	6	LOT
1	WALNUT DR	LAGOON DR	HICKORY RD	656	20	1460	2005	5	5	RIBBON
2	KRUGER RD	FAIRFIELD RD	MIDLOTHIAN RD	1718	22	4200	UNKNOWN	10	10	NO RIBBON
2	OWENS RD	GILMER RD	920' SOUTH OF GILMER RD	920	21	2348	2009	8	8	CURB AND GUTTER / NO RIBBON
2	OWENS RD	1355' S OF GILMER RD	SOUTH VILLAGE LIMIT	1480	21	3453	UNKNOWN	10	10	NO RIBBON
3	ARTHUR CT	SOUTH CDS	GLEN RD	500	22	1222	1999	6	6	NO RIBBON
3	CARLISLE RD	FALKIRK RD	GLEN RD	1729	22	4333	1997	3	4	NO RIBBON
3	CATTAIL CT	FOXTAIL RD	NORTH CDS	268	22	655	2002	6	6	NO RIBBON
3	FALKIRK RD	LAGOON DR	CARLISLE RD	789	22	1929	1997	5	5	NO RIBBON
3	FOXTAIL RD	SQUIRE RD	EAST CDS	1050	22	2567	2002	6	6	NO RIBBON
3	GLEN RD	200' W OF ARTHUR CT	ORCHARD LN	1993	22	4872	1999	6	6	NO RIBBON
3	GLEN RD	SQUIRE RD	200' W OF ARTHUR CT	528	22	1291	1996	6	6	NO RIBBON
3	LANCELOT LN	SQUIRE RD	GLEN RD	1220	22	2982	1999	6	6	NO RIBBON
3	SQUIRE RD	FOXTAIL RD	NORTH CDS	1570	22	3838	2002	3	5	NO RIBBON
3	SQUIRE RD	FOXTAIL RD	SOUTH END	2078	22	5080	2002	6	6	NO RIBBON
4	BAGPIPE CT	LOCHANORA ROAD	EAST CDS	718	18	1465	UNKNOWN	-	5	NO RIBBON
4	BLACKHAWK RD	INDIAN CREEK RD	SEQUOIA RD	857	22	2095	1999	5	6	NO RIBBON
4	CHARLESTON CT	HAWTHORN GROVE CI	SOUTH CDS	430	22	1051	UNKNOWN	4	5	CURB AND GUTTER
4	GENTRY DR	COPPERFIELD DR	BAGPIPE CT	1724	22	4214	2003	5	6	RIBBON
4	GOVERNORS WAY	GENTRY DR	230' EAST OF GENTRY DR	230	22	562	2003	4	6	RIBBON
4	HARRINGTON CT	HAWTHORN GROVE DR	WEST CDS	975	22	2383	UNKNOWN	5	6	CURB AND GUTTER
4	HAWTHORN GROVE CI	HAWTHORN GROVE DR	HAWTHORN GROVE DR	3100	22	7578	UNKNOWN	5	6	CURB AND GUTTER
4	HAWTHORN GROVE DR	GILMER RD	HAWTHORN GROVE CI	2300	22	5622	UNKNOWN	5	5	CURB AND GUTTER
4	KENSINGTON CT	HAWTHORN GROVE DR	NORTH CDS	670	22	1638	UNKNOWN	4	6	CURB AND GUTTER
4	MILTON RD	OLD MCHENRY RD	WINDING BRANCH RD	710	22	1736	2000	6	6	NO RIBBON
4	MILTON RD	VILLAGE LIMIT	VILLAGE LIMIT	1165	22	2848	2000	4	6	NO RIBBON
4	MILTON RD	VILLAGE LIMIT	VILLAGE LIMIT	1550	22	3789	2000	3	6	NO RIBBON
4	MILTON RD	WINDING BRANCH RD	VILLAGE LIMIT	495	22	1210	2000	3	6	NO RIBBON
4	OLIVERS WAY	GOVERNORS WAY	LACHANORA DR	776	26	2242	UNKNOWN	3	5	CURB AND GUTTER
4	ROSE LN	OLIVERS WAY	EAST CDS	543	26	2531	UNKNOWN	3	5	CURB AND GUTTER
4	SEQUOIA RD	BLACKHAWK RD	EAST CDS	945	22	2705	2005	3	5	RIBBON
4	SEQUOIA RD	GILMER RD	BLACKHAWK RD	2384	22	5828	1996	6	6	NO RIBBON
4	SHENANDOAH LN	SEQUOIA RD	NORTH CDS	675	22	2325	2005	3	5	RIBBON
5	ACORN DR	BRUCE CI SOUTH	ROBINCREST DR	580	22	1578	2005	4	5	RIBBON
5	ACORN DR	12 ACORN DR	BRUCE CI SOUTH	1830	21	4270	UNKNOWN	4	6	NO RIBBON
5	BRUCE CI	WAYNE LN	SOUTH CDS	1055	22	2579	2005	4	5	RIBBON
5	BRUCE CI NORTH	WAYNE LN	ACORN DR	2746	22	6712	2005	4	5	RIBBON
5	BRUCE CI SOUTH	BRUCE CI NORTH	ACORN DR	1345	22	3288	2001	4	5	NO RIBBON
5	CARLISLE RD	GLEN RD	N HIGHVIEW CI	983	22	2403	2006	5	6	RIBBON
5	EQUESTRIAN WAY	SOUTH CDS	450' S OF MOOREGATE TR	450	22	1760	UNKNOWN	4	5	NO RIBBON
5	HIGHVIEW CI	CARLISLE RD	CARLISLE RD	1777	22	5757	2003	5	6	RIBBON
5	MOOREGATE TRAIL	WEST CDS	330' W OF EQUESTRIAN WAY	1750	21	4790	2000	3	5	NO RIBBON
5	PHEASANT RUN RD	THORNFIELD LN	THORNFIELD LN	3270	21.5	7850	2004	4	6	RIBBON
5	ROBIN CREST RD	ACORN DR	BRUCE CI SOUTH	1340	21	3130	2005	4	5	RIBBON
5	ROBIN CREST RD	EAST CDS	ACORN DR	370	21	1355	2005	4	5	RIBBON
5	THORNFIELD LN	MOOREGATE TRAIL	SOUTH CDS	424	22	1036	2000	3	5	NO RIBBON
5	THORNFIELD LN	PHEASANT RUN RD	NORTH CDS	725	22	2700	2005	3	5	RIBBON
5	THORNFIELD LN	PHEASANT RUN RD	MOOREGATE TRAIL	1093	22	2429	2009	4	5	RIBBON
5	WAYNE LN	BRUCE CI	NORTH CDS	414	22	1645	2005	4	5	RIBBON
6	BLUE BIRD CT	FALCON DR	NORTH CDS	213	22	1227	2003	5	5	RIBBON
6	CARDINAL DR	SCHWERMAN RD	250' S OF FALCON DR	1275	22	3117	2003	5	6	RIBBON
6	CHANCELLOR CT	COPPERFIELD DR	SOUTH CDS	262	22	1395	2003	4	6	RIBBON
6	CHANTILLY LN	SOUTH CDS	WEDGEWOOD DR	760	22	2596	2003	4	6	RIBBON
6	COPPERFIELD DR	OLD MCHENRY RD	CHANTILLY LN	5011	22 to 36	12799	2003	5	6	RIBBON
6	CROYDEN RD	STONEHAVEN DR	GLEN RD	1358	22	3320	2003	6	6	RIBBON
6	ECHO LAKE RD	MILLER RD	VILLAGE LIMITS	510	22	1247	UNKNOWN	5	3	NO RIBBON
6	ECHO LAKE RD	OLD MCHENRY RD	STONE CREEK RD	1055	25	2931	UNKNOWN	6	3	CURB AND GUTTER
6	ECHO LAKE RD	STONE CREEK RD	MILLER RD	485	23	1239	2000	4	5	NO RIBBON
6	FALCON DR	PEREGRINE LN	MEADOWLARK DR	2490	22	6087	2003	5	5	RIBBON
6	FALKIRK RD	DARLINGTON DR	CARLISLE RD	941	22	2300	2003	6	6	RIBBON
6	HARVEST GLEN CT	STONE CREEK RD	SOUTH CDS	332	22	1833	2009	3	5	RIBBON
6	MEADOW LN NORTH	NORTH CDS	STONE CREEK DR	188	22	1934	2009	4	5	RIBBON
6	MEADOW LN SOUTH	SOUTH CDS	STONE CREEK DR	576	22	1408	2009	4	5	RIBBON
6	MULBERRY DR	COPPERFIELD DR	315' E OF COPPERFIELD DR	295	22	721	2003	5	6	RIBBON
6	PEREGRINE LN	SOUTH CDS	WEST CDS	1890	22	6033	2003	5	6	RIBBON
6	PRINCETON LN	CAMBRIDGE DR	NORTH CDS	708	22	2312	2007	3	4	RIBBON
6	STONE CREEK RD	ECHO LAKE RD	EAST END	1395	22	3100	2009	4	5	RIBBON
6	STONE HAVEN DR	CARLISLE RD	DARLINGTON DR	948	22	2317	2003	5	6	RIBBON
6	TRENT RD	DARLINGTON DR	DARLINGTON DR	2165	21	5055	2005	3	4	RIBBON
6	UNIVERSITY CI	CARLISLE RD	CARLISLE RD	1500	22	4327	2008	3	5	RIBBON
6	WEDGEWOOD DR	COPPERFIELD DR	COPPERFIELD DR	1458	22	3564	2003	5	6	RIBBON
7	AQUATIC CENTER			980		8731	UNKNOWN	3	6	LOT WITH CURB AND GUTTER
7	BLUE JAY LN	MEADOWLARK DR	WEST END	185	22	623	2003	5	6	RIBBON
7	BYRON CT	KATHY LN	SOUTH CDS	199	22	1193	2004	4	6	RIBBON
7	COOPER CT	KATHY LN	SOUTH CDS	120	22	1345	2004	4	6	RIBBON
7	DAVID LN	NORTH END	SOUTH END	1335	22	3565	2004	4	5	RIBBON
7	GOLDFINCH CT	MEADOWLARK DR	EAST CDS	324	22	1596	2003	5	5	RIBBON
7	HERITAGE OAKS PARK			3900		13545	UNKNOWN	3	5	LOT WITH CURB AND GUTTER
7	HOLMES AVE	KATHY LN	FAIRFIELD RD	275	22.5	770	2004	3	5	RIBBON
7	KATHY LN	EAST VILLAGE LIMIT	WEST CDS	2470	22.5	7195	2004	4	6	RIBBON
7	MEADOWLARK DR	SOUTH END	SCHWERMAN	2425	22	5928	2003	5	5	RIBBON
7	ORIOLE CT	MEADOWLARK DR	WEST CDS	274	22	1376	2003	5	5	RIBBON
7	SANDPIPER LN	WEST END	EAST CDS	987	22	3135	2003	5	5	RIBBON
7	SHEARWATER CT	MEADOWLARK DR	WEST CDS	681	22	2387	2003	5	6	RIBBON
7	WHITMAN TERRACE	KATHY LN	DAVID LN	1725	22	4270	2004	4	5	RIBBON
8	AHO DR	SENECA EAST AV	EAST END	190	22	422	2009	3	5	RIBBON
8	BENT TREE CT	FOX HUNT TR	WEST CDS	680	22	2625	2004	4	5	RIBBON
8	BITTERSWEET TR	SCHWERMAN RD	SOUTH CDS	597	24	1624	UNKNOWN	-	6	CURB AND GUTTER
8	BIXTONE LN	OLD MCHENRY RD	NORTH CDS	580	22	2015	2004	4	5	RIBBON
8	CAYUGA CT	SENECA EAST AV	WEST CDS	520	22	1944	2009	3	5	RIBBON
8	CONESUS CT	SENECA EAST AV	WEST CDS	220	22	1244	2009	3	5	RIBBON
8	DORSET CI	NORTH TRAIL	SOUTH CDS	142	22	991	2007	3	5	RIBBON
8	ELMWOOD DR	MILLER RD	NORTH CDS	653	22	1596	2002	6	6	RIBBON
8	ENCLAVE WAY	JOHN DR	SOUTH CDS	407	24	1993	2009	3	6	RIBBON
8	FOX HUNT CT	FOX HUNT TR	EAST CDS	250	22.5	1515	2004	4	5	RIBBON
8	FOX HUNT TR	PHEASANT RUN RD	OLD MCHENRY RD	1000	22	2480	2004	4	5	RIBBON
8	GLEN RD	DARLINGTON DR	CARLISLE RD	878	22	2146	2006	4	4	RIBBON
8	GOLF CREST DR	SOUTH CDS	NORTH CDS	795	25	2208	UNKNOWN	3	4	CURB AND GUTTER
8	JOHN DR	DARLINGTON DR	ENCLAVE WAY	1894	22	4209	2009	3	6	RIBBON
8	KEUKA CT	SENECA EAST AV	WEST CDS	185	22	1134	2009	3	5	RIBBON
8	LAGOON DR	FALKIRK RD	NORTH CDS	1467	22	3586	2003	5	5	RIBBON
8	MILLER RD	VILLAGE LIMIT	CREEK CROSSING NE OF BRECKENRIDGE DR	1983	22	4847	2002	6	6	NO RIBBON
8	ONONDAGA DR	SENECA EAST AV	SENECA WEST AV	1556	22	3804	2006	4	5	RIBBON
8	OWENS RD	SCHWERMAN RD	VILLAGE LIMIT	191	20	424	UNKNOWN	4	6	NO RIBBON
8	RUTGERS CT	INDIAN CREEK RD	EAST CDS	1050	21	3450	2005	4	5	RIBBON
8	SCARLET OAK DR	OWENS DR	GOLF CREST DR	593	25	1647	UNKNOWN	3	4	CURB AND GUTTER
8	SENECA EAST AV	WASHITAY AV	INDIAN CREEK	2095	22	4656	2009	3	6	RIBBON
8	SENECA WEST AVE	SOUTH CDS	INDIAN CREEK RD	1443	22	4234	2003	4	5	RIBBON
8	WINDING BRANCH RD	MILTON RD	PHEASANT RUN RD	1425	21.5	3430	2004	5	5	RIBBON
8	WOODED LN	WINDING BRANCH RD	MILTON RD	525	21.5	1255	2004	4	5	RIBBON
8	HERON CT	DARLINGTON DR	EAST CDS	276	22	1079	2009	3	6	RIBBON
8	JAMES DR	DARLINGTON DR	JOHN DR	1158	22	2573	2009	3	5	RIBBON
8	NORBERT DR	DARLINGTON DR	JOHN DR	1844	22	4098	2009	3	5	RIBBON
9	ACORN DR	OLD MCHENRY RD	12 ACORN DR	1035	22	2665	2005	4	5	RIBBON
9	BRIERWOODS CT	BRIERWOODS LN	NORTH CDS	100	100	875	2005	3	6	RIBBON
9	BRIERWOODS LN	BRUCE CI	VILLAGE LIMIT	1791	22	4378	2005	4	5	RIBBON
9	DARLINGTON DR	OLD MCHENRY RD	JUEL DR	2095	22	5125	2005	4	5	RIBBON
9	ECHO CT	ACORN DR	SOUTH CDS	658	21	1895	2005	4	5	RIBBON
9	ELM ST	DARLINGTON DR	LAGOON DR	2411	22	5894	2001	6	6	NO RIBBON
9	HEATHER LN	QUENTIN RD	WEST CDS	1601	22	3914	2005	3	5	RIBBON
9	HIGHLAND TERRACE	HEATHER LN	MCGREGOR CT	555	22	1395	2005	4	5	RIBBON
9	JANE CT	JEUL DR	SOUTH CDS	478	22	1168	2006	3	4	RIBBON
9	JUEL DR	DARLINGTON DR	ELM ST	1606	22	3926	2006	3	4	RIBBON
9	LYDIA CT	ACORN DR	EAST CDS	582	20	1900	2005	4	5	RIBBON
9	MCGREGOR CT	WEST CDS	PIPER LN	690	22	2510	2005	4	5	RIBBON
9	PIPER LN	MCGREGOR CT	HEATHER LN	1050	21.5	3345	2005	3	5	RIBBON

VILLAGE OF HAWTHORN WOODS
PAVEMENT EVALUATION DATABASE

EXHIBIT 3
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR TO BE REPAIRED	STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)	LAST RESURFACE DATE	2013 PCI	2018 PCI	DESCRIPTION
9	TANGLEWOOD CT	TANGLEWOOD LN	NORTH CDS	426	22	1920	2005	4	5	RIBBON
9	TANGLEWOOD LN	BRIERWOODS LN	WEST END	726	22	1775	2005	4	4	RIBBON
9	ABERDEEN RD	DARLINGTON DR	DARLINGTON DR	1920	22	4267	2009	3	5	RIBBON
9	DARLINGTON DR	JUEL DR	GILMER RD	4265	22	10430	2005	4	6	RIBBON
9	ESSEX CT	MARK DR	EAST CDS	300	22	1390	2008	3	4	RIBBON
9	HAMPTON LN	MARK DR	EAST CDS	295	22	1411	2008	3	4	RIBBON
9	JAMES DR	MARK DR	JOHN DR	480	22	1067	2008	3	4	RIBBON
9	NEWBURY CT	MARK DR	EAST CDS	300	22	1269	2008	3	4	RIBBON
10	BRIGHTON CT	MARK DR	EAST CDS	235	22	1198	2008	3	4	RIBBON
10	CANTERBERY LN	MARK DR	EAST CDS	245	22	1251	2008	3	4	RIBBON
10	CONDOR CT	ROSEWOOD DR	WEST CDS	166	22	1014	2007	3	5	RIBBON
10	EDWARD LN	MARK DR	EAST CDS	500	22	1713	2008	3	4	RIBBON
10	GLEN RD	ORCHARD LN	LYNN DR	1007	22	2462	2006	3	5	RIBBON
10	GLEN RD	LYNN DR	EAST CDS	855	22	2605	2006	4	6	RIBBON
10	IVY LN	ROSEWOOD DR	VILLAGE LIMIT	265	22	589	2007	3	5	RIBBON
10	JAMIE LN	MARK DR	TRENT RD	592	22	1316	2008	3	4	RIBBON
10	LISA LN	MARK DR	EAST CDS	886	22	2473	2008	3	5	RIBBON
10	LYNN DR	GLEN RD	ROSEWOOD DR N	1017	22	2260	2007	3	5	RIBBON
10	LYNN DR	HICKORY RD	LAGOON DR	793	21	1850	2005	3	6	RIBBON
10	LYNN DR	LAGOON DR	GLEN RD	3696	22	8213	2007	4	6	RIBBON
10	ROBERT CT	MARK DR	EAST CDS	284	22	1023	2008	3	4	RIBBON
10	ROSEWOOD DR	LYNN DR	280' W OF LYNN DR	2360	22	6126	2007	3	5	RIBBON
10	WILD WAY	MARK DR	WEST END	270	22	600	2008	3	4	RIBBON
10	BUSINESS PARK			1329	30	4519	UNKNOWN	-	5	CURB AND GUTTER
10	CIRCLE DR	OLD MCHENRY RD	CIRCLE DR	950	21	2220	2005	3	5	RIBBON
10	INDIAN CREEK RD	GILMER RD	VILLAGE LIMIT	6635	21	17520	2004	4	6	RIBBON
10	OAK LN	WEST END	CIRCLE DR	585	21	1365	2005	4	5	RIBBON
10	ONEIDA LN	WASHITAY AV	SENECA WEST AV	1362	22	3027	2009	3	5	RIBBON
10	SENECA WEST AV	INDIAN CREEK RD	WASHITAY AV	1763	22	4310	2006	4	6	RIBBON
10	WAKIA CT	SENECA WEST AV	EAST CDS	195	22	1156	2009	3	5	RIBBON
10	WASHITAY AV	SENECA WEST AV	SENECA EAST AV	1852	22	4527	2006	4	5	RIBBON
11	ANNE CT	SOUTH CDS	DEER POINT DR	446	26	2179	UNKNOWN	3	5	CURB AND GUTTER
11	BARBERRY CT	OLD LAKE RD	NORTH CDS	615	22	1503	2006	3	5	RIBBON
11	BIRCH LAKES DR	DEER POINT DR	FAIRFIELD RD	1301	22	3180	2006	3	6	RIBBON
11	DEER POINT DR	GOVERNORS WAY	BRIDGE E OF ANNE CT	834	26	2409	UNKNOWN	3	5	CURB AND GUTTER
11	DEER POINT DR	BRIDGE E OF ANNE CT	OLD LAKE RD	3281	22	8020	2006	3	6	RIBBON
11	DURANGO CT	DEER POINT DR	NORTH CDS	275	22	672	2006	3	5	RIBBON
11	GOVERNORS CT	OLIVERS WAY	WEST CDS	350	25	1890	UNKNOWN	3	5	CURB AND GUTTER
11	GOVERNORS WAY	230' EAST OF GENTRY DR	OLIVERS WAY	2090	25	5806	UNKNOWN	3	5	CURB AND GUTTER
11	HIGH POINT CI	HIGH POINT DR	EAST CDS	250	22	611	2006	3	6	RIBBON
11	HIGH POINT DR	BIRCH LAKES DR	NORTH CDS	1267	22	3097	2006	3	5	RIBBON
11	MULBERRY DR	315' E OF COPPERFIELD DR	OLD MCHENRY RD	1206	22	2948	2006	3	5	RIBBON
11	OLD LAKE RD	38 OLD LAKE DR	EAST CDS	775	22	2570	2006	1	5	CURB AND GUTTER
11	OLD LAKE RD	MULBERRY DR	38 OLD LAKE DR	1566	22	3828	2006	3	5	RIBBON
11	OVERLOOK DR	DEER POINT DR	NORTH CDS	467	22	1142	2006	3	5	RIBBON
11	CAMBRIDGE DR	CARLISLE RD	GILMER RD	2337	22	5193	2007	3	4	RIBBON
11	CARLISLE RD	DARLINGTON DR	N HIGHVIEW CI	2325	22	5683	2006	6	6	RIBBON
11	DARTMOUTH LN	CAMBRIDGE DR	VILLAGE LIMIT	385	21.5	950	2004	4	4	RIBBON
11	HARVARD LN	CAMBRIDGE DR	CAMBRIDGE DR	1278	22	3124	2008	3	4	RIBBON
11	MARK DR	DARLINGTON DR	SOUTH CDS	5200	22	12232	2008	3	4	RIBBON
11	PARK PLACE CI	PARK VIEW LN	END CDS	1040	25	2889	UNKNOWN	4	5	CURB AND GUTTER
11	PARK VIEW LN	OLD MCHENRY RD	EAST END	2000	21	5232	2007	3	5	CURB AND GUTTER
11	YALE CT	HARVARD LN	EAST CDS	175	21.5	1335	2004	5	6	RIBBON
12	CHERRY HILL CI	GINO LN	NORTH CDS	645	22	2094	2008	3	4	RIBBON
12	GINO LN	360' E OF HAWTHORN GROVE DR	SAINT JOHN RD	1260	22	3080	2008	3	4	RIBBON
12	GINO LN	HAWTHORN GROVE DR	360' E OF HAWTHORN GROVE DR	1000	22	2222	2008	3	4	CURB AND GUTTER
12	HILLCREST DR	VILLAGE LIMIT	LAKEVIEW RD	426	22 to 55	2244	2007	3	4	CURB AND GUTTER
12	HILLTOP CT	OLD BARN RD	NORTH CDS	142	22	902	2007	3	4	RIBBON
12	KAREN CT	GINO LN	SOUTH CDS	215	22	1233	2008	3	4	RIBBON
12	LAKEVIEW RD	HILLCREST DR	OLD BARN RD	2195	22	5366	2007	3	5	RIBBON
12	MAGNOLIA PKWY	SAINT JOHN RD	WEST CDS	797	22	2510	2008	3	4	RIBBON
12	MARY LN	SAINT JOHN RD	WEST CDS	458	22	1694	2008	3	4	RIBBON
12	OLD BARN RD	HILLCREST DR	VILLAGE LIMIT	3302	22	7338	2007	3	4	RIBBON
12	QUAIL HOLLOW CT	SOUTH CDS	NORTH CDS	500	22	1742	2007	3	4	RIBBON
12	SAINT JOHN DR	GILMER RD	GINO LN	752	22	1838	2008	3	4	RIBBON
12	SAINT JOHN DR	GINO LN	OLD BARN RD	2452	22	5449	2008	3	5	RIBBON
12	SUNSET CT	OLD BARN RD	NORTH CDS	120	22	825	2007	3	4	RIBBON
12	COBBLEWOOD LN	NORTH TRAIL	SOUTH CDS	1250	22	3850	2007	3	4	RIBBON
12	DEERFIELD DR	FOREST VIEW DR	NORTH END	3300	22	8067	UNKNOWN	4	5	CURB AND GUTTER
12	EQUESTRIAN WAY	NORTH TRAIL	450' S OF MOOREGATE TR	1825	22	4639	2006	2	4	CURB AND GUTTER
12	FOREST VIEW DR	KRUCKENBERG RD	DEERFIELD DR	1400	22	3422	UNKNOWN	4	5	CURB AND GUTTER
12	GREENBRIAR LN	EAST CDS	WEST CDS	1671	22	5067	2008	3	5	RIBBON
12	GREENFIELD CT	DEERFIELD DR	NORTH CDS	350	22	856	UNKNOWN	4	5	CURB AND GUTTER
12	LA VISTA DR	VILLAGE LIMIT	VILLAGE LIMIT	150	22	374	UNKNOWN	-	6	CURB AND GUTTER
12	MOOREGATE TRAIL	330' W OF EQUESTRIAN WAY	EQUESTRIAN WAY	330	25	917	UNKNOWN	2	5	CURB AND GUTTER
12	NEW HAVEN DR	COBBLEWOOD LN	VILLAGE LIMIT	443	22	984	2007	3	4	RIBBON
12	ROSEWOOD DR	280' W OF LYNN DR	NORTH END	2007	22	5406	2007	3	5	RIBBON
12	SADDLE RIDGE CT	EQUESTRIAN WAY	EAST CDS	650	22	1589	UNKNOWN	2	4	CURB AND GUTTER
12	SAINT JOHN DR	GREENBRIAR LN	GILMER RD	740	22	1644	2008	3	5	RIBBON
12	STONEY RIDGE CT	EQUESTRIAN WAY	END CDS	350	22	856	UNKNOWN	2	4	CURB AND GUTTER
13	BRIDLE PATH	MILTON RD	NORTH TRAIL	853	22	2085	2006	4	5	RIBBON
13	DERBY LN	STEEPLECHASE DR	NORTH END	318	22	777	2006	3	5	RIBBON
13	FURLONG DR	NORTH TRAIL	EAST END	535	22	1308	2006	3	5	RIBBON
13	NORTH TRAIL	NORTH CDS	FURLONG DR	3560	22	8702	2006	3	5	RIBBON
13	NORTH TRAIL	WESTWIND CT	FURLONG DR	1283	22	3136	2006	3	5	RIBBON
13	NORTH TRAIL	WESTWIND CT	SOUTH CDS	2827	22	6974	2007	3	5	RIBBON
13	PADDOCK CT	NORTH TRAIL	NORTH CDS	340	22	831	2006	3	4	RIBBON
13	REDWOOD LN	NORTH TRAIL	OLD MCHENRY RD	231	35	847	2007	3	5	RIBBON
13	SPRING CREEK CT	FOREST VIEW DR	EAST CDS	330	22	807	UNKNOWN	4	5	CURB AND GUTTER
13	STEEPLECHASE DR	FURLONG DR	SOUTH CDS	1790	22	4376	2006	3	5	RIBBON
13	WESTWIND CT	NORTH TRAIL	WEST CDS	595	22	2450	2006	3	4	RIBBON
13	ARROWWOOD DR	SYCAMORE DR	SOUTH CDS	1750	22	4762	2009	3	5	RIBBON
13	BOXWOOD DR	MIDDLETREE LN	ARROWWOOD DR	731	22	1624	2009	3	5	RIBBON
13	ELDERBERRY DR	MIDDLETREE LN	EAST END	722	22	1604	2009	3	5	RIBBON
13	LAGOON DR	WALNUT DR	FALKIRK RD	620	22	1516	2005	4	4	RIBBON
13	LAGOON DR	OLD MCHENRY RD	WALNUT DR	2770	22	6775	2005	4	5	RIBBON
13	MIDDLETREE LN	SYCAMORE DR	SOUTH CDS	2056	22	5532	2009	3	5	RIBBON
13	ORCHARD LN	ROSEWOOD DR	LAGOON DR	1981	22	4402	2007	3	5	RIBBON
13	REDWOOD LN	OLD MCHENRY RD	SYCAMORE DR	330	36	1247	2007	3	4	RIBBON
13	SYCAMORE DR	NORTH CDS	SOUTH CDS	2521	22	6390	2007	3	5	RIBBON
14	BEDFORD CT	CHESTNUT CT	EAST CDS	150	22	1311	2009	3	5	CURB AND GUTTER
14	CHESTNUT CT	NORTH CDS	SOUTH CDS	1345	22	5158	2009	3	5	CURB AND GUTTER
14	DORCHESTER CT	HIGHLAND DR	NORTH CDS	656	22	2548	2009	3	5	CURB AND GUTTER
14	EAST PRAIRE CT	REGAN LN	EAST CDS	253	22	1657	2009	3	4	RIBBON
14	HIGHLAND DR	QUENTIN RD	CHESTNUT CT	704	26	2193	2009	3	5	CURB AND GUTTER
14	JESSICA CT	EAST CDS	JOSHUA DR	642	25	2898	UNKNOWN	3	6	CURB AND GUTTER
14	JOSHUA DR	REGAN LN	RESERVE CT	1445	22	4346	2009	4	4	RIBBON
14	JOSHUA DR	RESERVE CT	SOUTH END	645	22	1577	2009	3	5	CURB AND GUTTER
14	REED CT	REGAN LN	NORTH CDS	314	22	1661	2009	3	4	RIBBON
14	REGAN LN	GILMER RD	W. PRAIRIE CT	1336	22	2969	2009	3	4	RIBBON
14	RESERVE CT	JOSHUA DR	WEST CDS	665	22	2317	2009	3	4	RIBBON
14	W KRUCKENBERG RD	BEND	LIMIT	1050	22	2567	UNKNOWN	7	1	NO RIBBON
14	W KRUCKENBERG RD	MIDLOTHIAN RD	BEND	1790	22	4376	UNKNOWN	7	2	NO RIBBON
14	WELLESEY CT	CHESTNUT CT	WEST CDS	105	22	1220	2009	3	5	CURB AND GUTTER
14	WEST PRAIRIE CT	REGAN LN	WEST CDS	705	22	2440	2009	3	4	RIBBON
14	ACACIA DR	ALDER CT	CATALPA DR	1600	24	4267	UNKNOWN	-	1	CURB AND GUTTER
14	ALDER CT	ENSELL RD	SOUTH CDS	710	24	1893	UNKNOWN	-	1	CURB AND GUTTER
14	EMPRESS DR	ENSELL RD	CATALPA DR	2400	24	6400	UNKNOWN	-	1	CURB AND GUTTER
14	ENSELL RD	QUENTIN RD	ALDER CT	320	40	1422	UNKNOWN	-	1	CURB AND GUTTER
14	ROMAN LANE (HT3)			1800	27	5508	UNKNOWN	-	UNBUILT	CURB AND GUTTER
14	NORTH ACACIA CT	ACACIA DR	ACACIA DR	150	24	400	UNKNOWN	-	1	CURB AND GUTTER
14	NORTH EMPRESS CT	EMPRESS DR	EMPRESS DR	125	25	347	UNKNOWN	-	1	CURB AND GUTTER
14	SOUTH EMPRESS CT	EMPRESS DR	EMPRESS DR	90	24	240	UNKNOWN	-	1	CURB AND GUTTER
14	COSTEKIN COURT	176	NORTH CDS	24	820	2187	UNKNOWN	-	1	CURB AND GUTTER
15	ANDREW LN	375' S OF CARDINAL DR	HAWTHORN HILLS DR	425	24	1133	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	ANDREW LN	CARDINAL DR	375' S OF CARDINAL DR	375	22	917	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	ANDREW LN	HAWTHORN HILLS DR	HAWTHORN HILLS DR	1375	24	3667	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	BRADBURY LN	HAWTHORN HILLS DR	EAST CDS	900	24	2400	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	BRENTWOOD DR	HAWTHORN HILLS DR	HAWTHORN HILLS DR	600	24	1600	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	CARDINAL DR	850' S OF FALCON DR	GILMER RD	1810	22	4424	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	EAST PETER LN	CARDINAL DR	EAST CDS	730	22	1784	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	HAWTHORN HILLS DR	BEVERLY LN	MIDLOTHIAN RD	3450	29	11117	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	HUBBARD LANE	OLD MCHENRY RD	NORTH ABBEY GLEN DRIVE	545	33	2039	UNKNOWN	-	3	CONSTRUCTION TRAFFIC- STONEBRIDGE
15	NORTH ABBEY GLEN DRIVE	200' S OF HUBBARD ROAD	EAST CDS	2000	25	5556	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	SCHWERMAN RD	175' EAST OF MILTON	GILMER RD	4842	22	17451	2018	4	1	UNDER CONSTRUCTION
15	SCHWERMAN RD	OWENS DR	175' EAST OF MILTON	1066	22	2606	2018	3	1	UNDER CONSTRUCTION

VILLAGE OF HAWTHORN WOODS
PAVEMENT EVALUATION DATABASE

YEAR TO BE REPAIRED	STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)	LAST RESURFACE DATE	2013 PCI	2018 PCI	DESCRIPTION
15	SHERMAN CT	HAWTHORN HILLS DR	NORTH CDS	575	24	1533	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	SIERRA PL	HAWTHORN HILLS DR	SOUTH CDS	460	24	1227	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	STONEBRIDGE ROADS			2600	25	7367	UNKNOWN	-	UNBUILT	UNBUILT
15	WEST PETER LN	CARDINAL DR	SOUTH CDS	1315	22	3214	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	WESTERN HALF OF HAWTHORN WOODS			5922	25	16779	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE

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

VILLAGE OF HAWTHORN WOODS
PAVEMENT EVALUATION DATABASE

EXHIBIT 3A
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR TO BE REPAIRED	STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)	2018 PCI	DESCRIPTION
15	STONEBRIDGE ROADS			2600	25	7367	UNBUILT	UNBUILT
14	ROMAN LANE (HT3)			1800	27	5508	UNBUILT	CURB AND GUTTER
15	ANDREW LN	375' S OF CARDINAL DR	HAWTHORN HILLS DR	425	24	1133	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	ANDREW LN	CARDINAL DR	375' S OF CARDINAL DR	375	22	917	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	ANDREW LN	HAWTHORN HILLS DR	HAWTHORN HILLS DR	1375	24	3667	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	BRADBURY LN	HAWTHORN HILLS DR	EAST CDS	900	24	2400	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	BRENTWOOD DR	HAWTHORN HILLS DR	HAWTHORN HILLS DR	600	24	1600	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	CARDINAL DR	850' S OF FALCON DR	GILMER RD	1810	22	4424	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	EAST PETER LN	CARDINAL DR	EAST CDS	730	22	1784	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	HAWTHORN HILLS DR	BEVERLY LN	MIDLOTHIAN RD	3450	29	11117	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	NORTH ABBEY GLEN DRIVE	200' S OF HUBBARD ROAD	EAST CDS	2000	25	5556	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	SHERMAN CT	HAWTHORN HILLS DR	NORTH CDS	575	24	1533	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	SIERRA PL	HAWTHORN HILLS DR	SOUTH CDS	460	24	1227	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	WEST PETER LN	CARDINAL DR	SOUTH CDS	1315	22	3214	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	WESTERN HALF OF HAWTHORN WOODS			5922	25	16779	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
2	KRUGER RD	FAIRFIELD RD	MIDLOTHIAN RD	1718	22	4200	10	NO RIBBON
2	OWENS RD	1355' S OF GILMER RD	SOUTH VILLAGE LIMIT	1480	21	3453	10	NO RIBBON
1	HAWTHORN COMMUNITY PARK			220		5360	9	LOT WITH CURB AND GUTTER
1	OWENS RD	920' S OF GILMER RD	1355' S OF GILMER RD	435	21	1015	9	NO RIBBON
1	HICKORY LN	HAWTHORN DR	ELM ST	1033	22	2525	8	NO RIBBON
1	PUBLIC WORKS FACILITY					2197	8	LOT
2	OWENS RD	GILMER RD	920' SOUTH OF GILMER RD	920	21	2348	8	CURB AND GUTTER / NO RIBBON
1	HAWTHORN DR	HICKORY RD	OLD MCHENRY RD	900	22	2200	6	NO RIBBON
1	JUEL CI	ELM ST	SOUTH CDS	498	22	1217	6	NO RIBBON
1	VICTORIA LN	HAWTHORN DR	LAGOON DR	1057	21	2466	6	RIBBON
1	VILLAGE HALL LOT					2653	6	LOT
3	ARTHUR CT	SOUTH CDS	GLEN RD	500	22	1222	6	NO RIBBON
3	CATTAIL CT	FOXTAIL RD	NORTH CDS	268	22	655	6	NO RIBBON
3	FOXTAIL RD	SQUIRE RD	EAST CDS	1050	22	2567	6	NO RIBBON
3	GLEN RD	200' W OF ARTHUR CT	ORCHARD LN	1993	22	4872	6	NO RIBBON
3	GLEN RD	SQUIRE RD	200' W OF ARTHUR CT	528	22	1291	6	NO RIBBON
3	LANCELOT LN	SQUIRE RD	GLEN RD	1220	22	2982	6	NO RIBBON
3	SQUIRE RD	FOXTAIL RD	SOUTH END	2078	22	5080	6	NO RIBBON
4	BLACKHAWK RD	INDIAN CREEK RD	SEQUOIA RD	857	22	2095	6	NO RIBBON
4	GENTRY DR	COPPERFIELD DR	BAGPIPE CT	1724	22	4214	6	RIBBON
4	GOVERNORS WAY	GENTRY DR	230' EAST OF GENTRY DR	230	22	562	6	RIBBON
4	HARRINGTON CT	HAWTHORN GROVE DR	WEST CDS	975	22	2383	6	CURB AND GUTTER
4	HAWTHORN GROVE CI	HAWTHORN GROVE DR	HAWTHORN GROVE DR	3100	22	7578	6	CURB AND GUTTER
4	KENSINGTON CT	HAWTHORN GROVE DR	NORTH CDS	670	22	1638	6	CURB AND GUTTER
4	MILTON RD	OLD MCHENRY RD	WINDING BRANCH RD	710	22	1736	6	NO RIBBON
4	MILTON RD	VILLAGE LIMIT	VILLAGE LIMIT	1165	22	2848	6	NO RIBBON
4	MILTON RD	VILLAGE LIMIT	VILLAGE LIMIT	1550	22	3789	6	NO RIBBON
4	MILTON RD	WINDING BRANCH RD	VILLAGE LIMIT	495	22	1210	6	NO RIBBON
4	SEQUOIA RD	GILMER RD	BLACKHAWK RD	2384	22	5828	6	NO RIBBON
5	ACORN DR	12 ACORN DR	BRUCE CI SOUTH	1830	21	4270	6	NO RIBBON
5	CARLISLE RD	GLEN RD	N HIGHVIEW CI	983	22	2403	6	RIBBON
5	HIGHVIEW CI	CARLISLE RD	CARLISLE RD	1777	22	5757	6	RIBBON
5	PHEASANT RUN RD	THORNFIELD LN	THORNFIELD LN	3270	21.5	7850	6	RIBBON
6	CARDINAL DR	SCHWERMAN RD	250' S OF FALCON DR	1275	22	3117	6	RIBBON
6	CHANCELLOR CT	COPPERFIELD DR	SOUTH CDS	262	22	1395	6	RIBBON
6	CHANTILLY LN	SOUTH CDS	WEDGEWOOD DR	760	22	2596	6	RIBBON
6	COPPERFIELD DR	OLD MCHENRY RD	CHANTILLY LN	5011	22 to 36	12799	6	RIBBON
6	CROYDEN RD	STONEHAVEN DR	GLEN RD	1358	22	3320	6	RIBBON
6	FALKIRK RD	DARLINGTON DR	CARLISLE RD	941	22	2300	6	RIBBON
6	MULBERRY DR	COPPERFIELD DR	315' E OF COPPERFIELD DR	295	22	721	6	RIBBON
6	PEREGRINE LN	SOUTH CDS	WEST CDS	1890	22	6033	6	RIBBON
6	STONE HAVEN DR	CARLISLE RD	DARLINGTON DR	948	22	2317	6	RIBBON
6	WEDGEWOOD DR	COPPERFIELD DR	COPPERFIELD DR	1458	22	3564	6	RIBBON
7	AQUATIC CENTER			980		8731	6	LOT WITH CURB AND GUTTER
7	BLUE JAY LN	MEADOWLARK DR	WEST END	185	22	623	6	RIBBON
7	BYRON CT	KATHY LN	SOUTH CDS	199	22	1193	6	RIBBON
7	COOPER CT	KATHY LN	SOUTH CDS	120	22	1345	6	RIBBON
7	KATHY LN	EAST VILLAGE LIMIT	WEST CDS	2470	22.5	7195	6	RIBBON
7	SHEARWATER CT	MEADOWLARK DR	WEST CDS	681	22	2387	6	RIBBON
8	BITTERSWEET TR	SCHWERMAN RD	SOUTH CDS	597	24	1624	6	CURB AND GUTTER
8	ELMWOOD DR	MILLER RD	NORTH CDS	653	22	1596	6	RIBBON
8	ENCLAVE WAY	JOHN DR	SOUTH CDS	407	24	1993	6	RIBBON
8	JOHN DR	DARLINGTON DR	ENCLAVE WAY	1894	22	4209	6	RIBBON
8	MILLER RD	VILLAGE LIMIT	CREEK CROSSING NE OF BRECKENRIDGE DR	1983	22	4847	6	NO RIBBON
8	OWENS RD	SCHWERMAN RD	VILLAGE LIMIT	191	20	424	6	NO RIBBON
8	SENECA EAST AV	WASHITAY AV	INDIAN CREEK	2095	22	4656	6	RIBBON
8	HERON CT	DARLINGTON DR	EAST CDS	276	22	1079	6	RIBBON
9	BRIERWOODS CT	BRIERWOODS LN	NORTH CDS	100	100	875	6	RIBBON
9	ELM ST	DARLINGTON DR	LAGOON DR	2411	22	5894	6	NO RIBBON
9	DARLINGTON DR	JUEL DR	GILMER RD	4265	22	10430	6	RIBBON
10	GLEN RD	LYNN DR	EAST CDS	855	22	2605	6	RIBBON
10	LYNN DR	HICKORY RD	LAGOON DR	793	21	1850	6	RIBBON
10	LYNN DR	LAGOON DR	GLEN RD	3696	22	8213	6	RIBBON
10	INDIAN CREEK RD	GILMER RD	VILLAGE LIMIT	6635	21	17520	6	RIBBON
10	SENECA WEST AV	INDIAN CREEK RD	WASHITAY AV	1763	22	4310	6	RIBBON
11	BIRCH LAKES DR	DEER POINT DR	FAIRFIELD RD	1301	22	3180	6	RIBBON
11	DEER POINT DR	BRIDGE E OF ANNE CT	OLD LAKE RD	3281	22	8020	6	RIBBON
11	HIGH POINT CI	HIGH POINT DR	EAST CDS	250	22	611	6	RIBBON
11	CARLISLE RD	DARLINGTON DR	N HIGHVIEW CI	2325	22	5683	6	RIBBON
11	YALE CT	HARVARD LN	EAST CDS	175	21.5	1335	6	RIBBON
12	LA VISTA DR	VILLAGE LIMIT	VILLAGE LIMIT	150	22	374	6	CURB AND GUTTER
14	JESSICA CT	EAST CDS	JOSHUA DR	642	25	2898	6	CURB AND GUTTER
1	HAWTHORN DR	CIRCLE DR	VICTORIA LN	450	21	1050	5	NO RIBBON
1	HAWTHORN DR	VICTORIA LN	HICKORY RD	305	21	712	5	NO RIBBON
1	JAMES CT	DARLINGTON RD	NORTH CDS	489	22	1195	5	NO RIBBON
1	WALNUT DR	LAGOON DR	HICKORY RD	656	20	1460	5	RIBBON
3	FALKIRK RD	LAGOON DR	CARLISLE RD	789	22	1929	5	NO RIBBON
3	SQUIRE RD	FOXTAIL RD	NORTH CDS	1570	22	3838	5	NO RIBBON
4	BAGPIPE CT	LOCHANORA ROAD	EAST CDS	718	18	1465	5	NO RIBBON
4	CHARLESTON CT	HAWTHORN GROVE CI	SOUTH CDS	430	22	1051	5	CURB AND GUTTER
4	HAWTHORN GROVE DR	GILMER RD	HAWTHORN GROVE CI	2300	22	5622	5	CURB AND GUTTER
4	OLIVERS WAY	GOVERNORS WAY	LACHANORA DR	776	26	2242	5	CURB AND GUTTER
4	ROSE LN	OLIVERS WAY	EAST CDS	543	26	2531	5	CURB AND GUTTER
4	SEQUOIA RD	BLACKHAWK RD	EAST CDS	945	22	2705	5	RIBBON
4	SHENANDOAH LN	SEQUOIA RD	NORTH CDS	675	22	2325	5	RIBBON
5	ACORN DR	BRUCE CI SOUTH	ROBINCREST DR	580	22	1578	5	RIBBON
5	BRUCE CI	WAYNE LN	SOUTH CDS	1055	22	2579	5	RIBBON
5	BRUCE CI NORTH	WAYNE LN	ACORN DR	2746	22	6712	5	RIBBON
5	BRUCE CI SOUTH	BRUCE CI NORTH	ACORN DR	1345	22	3288	5	NO RIBBON
5	EQUESTRIAN WAY	SOUTH CDS	450' S OF MOOREGATE TR	450	22	1760	5	NO RIBBON
5	MOOREGATE TRAIL	WEST CDS	330' W OF EQUESTRIAN WAY	1750	21	4790	5	NO RIBBON
5	ROBIN CREST RD	ACORN DR	BRUCE CI SOUTH	1340	21	3130	5	RIBBON
5	ROBIN CREST RD	EAST CDS	ACORN DR	370	21	1355	5	RIBBON
5	THORNFIELD LN	MOOREGATE TRAIL	SOUTH CDS	424	22	1036	5	NO RIBBON
5	THORNFIELD LN	PHEASANT RUN RD	NORTH CDS	725	22	2700	5	RIBBON
5	THORNFIELD LN	PHEASANT RUN RD	MOOREGATE TRAIL	1093	22	2429	5	RIBBON
5	WAYNE LN	BRUCE CI	NORTH CDS	414	22	1645	5	RIBBON
6	BLUE BIRD CT	FALCON DR	NORTH CDS	213	22	1227	5	RIBBON
6	ECHO LAKE RD	STONE CREEK RD	MILLER RD	485	23	1239	5	NO RIBBON
6	FALCON DR	PEREGRINE LN	MEADOWLARK DR	2490	22	6087	5	RIBBON
6	HARVEST GLEN CT	STONE CREEK RD	SOUTH CDS	332	22	1833	5	RIBBON
6	MEADOW LN NORTH	NORTH CDS	STONE CREEK DR	188	22	1934	5	RIBBON
6	MEADOW LN SOUTH	SOUTH CDS	STONE CREEK DR	576	22	1408	5	RIBBON

VILLAGE OF HAWTHORN WOODS
PAVEMENT EVALUATION DATABASE

EXHIBIT 3A
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR TO BE REPAIRED	STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)	2018 PCI	DESCRIPTION
6	STONE CREEK RD	ECHO LAKE RD	EAST END	1395	22	3100	5	RIBBON
6	UNIVERSITY CI	CARLISLE RD	CARLISLE RD	1500	22	4327	5	RIBBON
7	DAVID LN	NORTH END	SOUTH END	1335	22	3565	5	RIBBON
7	GOLDFINCH CT	MEADOWLARK DR	EAST CDS	324	22	1596	5	RIBBON
7	HERITAGE OAKS PARK			3900		13545	5	LOT WITH CURB AND GUTTER
7	HOLMES AVE	KATHY LN	FAIRFIELD RD	275	22.5	770	5	RIBBON
7	MEADOWLARK DR	SOUTH END	SCHWERMAN	2425	22	5928	5	RIBBON
7	ORIOLE CT	MEADOWLARK DR	WEST CDS	274	22	1376	5	RIBBON
7	SANDPIPER LN	WEST END	EAST CDS	987	22	3135	5	RIBBON
7	WHITMAN TERRACE	KATHY LN	DAVID LN	1725	22	4270	5	RIBBON
8	AHO DR	SENECA EAST AV	EAST END	190	22	422	5	RIBBON
8	BENT TREE CT	FOX HUNT TR	WEST CDS	680	22	2625	5	RIBBON
8	BIXTONE LN	OLD MCHENRY RD	NORTH CDS	580	22	2015	5	RIBBON
8	CAYUGA CT	SENECA EAST AV	WEST CDS	520	22	1944	5	RIBBON
8	CONESUS CT	SENECA EAST AV	WEST CDS	220	22	1244	5	RIBBON
8	DORSET CI	NORTH TRAIL	SOUTH CDS	142	22	991	5	RIBBON
8	FOX HUNT CT	FOX HUNT TR	EAST CDS	250	22.5	1515	5	RIBBON
8	FOX HUNT TR	PHEASANT RUN RD	OLD MCHENRY RD	1000	22	2480	5	RIBBON
8	KEUKA CT	SENECA EAST AV	WEST CDS	185	22	1134	5	RIBBON
8	LAGOON DR	FALKIRK RD	NORTH CDS	1467	22	3586	5	RIBBON
8	ONONDAGA DR	SENECA EAST AV	SENECA WEST AV	1556	22	3804	5	RIBBON
8	RUTGERS CT	INDIAN CREEK RD	EAST CDS	1050	21	3450	5	RIBBON
8	SENECA WEST AVE	SOUTH CDS	INDIAN CREEK RD	1443	22	4234	5	RIBBON
8	WINDING BRANCH RD	MILTON RD	PHEASANT RUN RD	1425	21.5	3430	5	RIBBON
8	WOODED LN	WINDING BRANCH RD	MILTON RD	525	21.5	1255	5	RIBBON
8	JAMES DR	DARLINGTON DR	JOHN DR	1158	22	2573	5	RIBBON
8	NORBERT DR	DARLINGTON DR	JOHN DR	1844	22	4098	5	RIBBON
9	ACORN DR	OLD MCHENRY RD	12 ACORN DR	1035	22	2665	5	RIBBON
9	BRIERWOODS LN	BRUCE CI	VILLAGE LIMIT	1791	22	4378	5	RIBBON
9	DARLINGTON DR	OLD MCHENRY RD	JUEL DR	2095	22	5125	5	RIBBON
9	ECHO CT	ACORN DR	SOUTH CDS	658	21	1895	5	RIBBON
9	HEATHER LN	QUENTIN RD	WEST CDS	1601	22	3914	5	RIBBON
9	HIGHLAND TERRACE	HEATHER LN	MCGREGOR CT	555	22	1395	5	RIBBON
9	LYDIA CT	ACORN DR	EAST CDS	582	20	1900	5	RIBBON
9	MCGREGOR CT	WEST CDS	PIPER LN	690	22	2510	5	RIBBON
9	PIPER LN	MCGREGOR CT	HEATHER LN	1050	21.5	3345	5	RIBBON
9	TANGLEWOOD CT	TANGLEWOOD LN	NORTH CDS	426	22	1920	5	RIBBON
9	ABERDEEN RD	DARLINGTON DR	DARLINGTON DR	1920	22	4267	5	RIBBON
10	CONDOR CT	ROSEWOOD DR	WEST CDS	166	22	1014	5	RIBBON
10	GLEN RD	ORCHARD LN	LYNN DR	1007	22	2462	5	RIBBON
10	IVY LN	ROSEWOOD DR	VILLAGE LIMIT	265	22	589	5	RIBBON
10	LISA LN	MARK DR	EAST CDS	886	22	2473	5	RIBBON
10	LYNN DR	GLEN RD	ROSEWOOD DR N	1017	22	2260	5	RIBBON
10	ROSEWOOD DR	LYNN DR	280' W OF LYNN DR	2360	22	6126	5	RIBBON
10	BUSINESS PARK			1329	30	4519	5	CURB AND GUTTER
10	CIRCLE DR	OLD MCHENRY RD	CIRCLE DR	950	21	2220	5	RIBBON
10	OAK LN	WEST END	CIRCLE DR	585	21	1365	5	RIBBON
10	ONEIDA LN	WASHITAY AV	SENECA WEST AV	1362	22	3027	5	RIBBON
10	WAKIA CT	SENECA WEST AV	EAST CDS	195	22	1156	5	RIBBON
10	WASHITAY AV	SENECA WEST AV	SENECA EAST AV	1852	22	4527	5	RIBBON
11	ANNE CT	SOUTH CDS	DEER POINT DR	446	26	2179	5	CURB AND GUTTER
11	BARBERRY CT	OLD LAKE RD	NORTH CDS	615	22	1503	5	RIBBON
11	DEER POINT DR	GOVERNORS WAY	BRIDGE E OF ANNE CT	834	26	2409	5	CURB AND GUTTER
11	DURANGO CT	DEER POINT DR	NORTH CDS	275	22	672	5	RIBBON
11	GOVERNORS CT	OLIVERS WAY	WEST CDS	350	25	1890	5	CURB AND GUTTER
11	GOVERNORS WAY	230' EAST OF GENTRY DR	OLIVERS WAY	2090	25	5806	5	CURB AND GUTTER
11	HIGH POINT DR	BIRCH LAKES DR	NORTH CDS	1267	22	3097	5	RIBBON
11	MULBERRY DR	315' E OF COPPERFIELD DR	OLD MCHENRY RD	1206	22	2948	5	RIBBON
11	OLD LAKE RD	38 OLD LAKE DR	EAST CDS	775	22	2570	5	CURB AND GUTTER
11	OLD LAKE RD	MULBERRY DR	38 OLD LAKE DR	1566	22	3828	5	RIBBON
11	OVERLOOK DR	DEER POINT DR	NORTH CDS	467	22	1142	5	RIBBON
11	PARK PLACE CI	PARK VIEW LN	END CDS	1040	25	2889	5	CURB AND GUTTER
11	PARK VIEW LN	OLD MCHENRY RD	EAST END	2000	21	5232	5	CURB AND GUTTER
12	LAKEVIEW RD	HILLCREST DR	OLD BARN RD	2195	22	5366	5	RIBBON
12	SAINT JOHN DR	GINO LN	OLD BARN RD	2452	22	5449	5	RIBBON
12	DEERFIELD DR	FOREST VIEW DR	NORTH END	3300	22	8067	5	CURB AND GUTTER
12	FOREST VIEW DR	KRUCKENBERG RD	DEERFIELD DR	1400	22	3422	5	CURB AND GUTTER
12	GREENBRIAR LN	EAST CDS	WEST CDS	1671	22	5067	5	RIBBON
12	GREENFIELD CT	DEERFIELD DR	NORTH CDS	350	22	856	5	CURB AND GUTTER
12	MOOREGATE TRAIL	330' W OF EQUESTRIAN WAY	EQUESTRIAN WAY	330	25	917	5	CURB AND GUTTER
12	ROSEWOOD DR	280' W OF LYNN DR	NORTH END	2007	22	5406	5	RIBBON
12	SAINT JOHN DR	GREENBRIAR LN	GILMER RD	740	22	1644	5	RIBBON
13	BRIDLE PATH	MILTON RD	NORTH TRAIL	853	22	2085	5	RIBBON
13	DERBY LN	STEEPLECHASE DR	NORTH END	318	22	777	5	RIBBON
13	FURLONG DR	NORTH TRAIL	EAST END	535	22	1308	5	RIBBON
13	NORTH TRAIL	NORTH CDS	FURLONG DR	3560	22	8702	5	RIBBON
13	NORTH TRAIL	WESTWIND CT	FURLONG DR	1283	22	3136	5	RIBBON
13	NORTH TRAIL	WESTWIND CT	SOUTH CDS	2827	22	6974	5	RIBBON
13	REDWOOD LN	NORTH TRAIL	OLD MCHENRY RD	231	35	847	5	RIBBON
13	SPRING CREEK CT	FOREST VIEW DR	EAST CDS	330	22	807	5	CURB AND GUTTER
13	STEEPLECHASE DR	FURLONG DR	SOUTH CDS	1790	22	4376	5	RIBBON
13	ARROWWOOD DR	SYCAMORE DR	SOUTH CDS	1750	22	4762	5	RIBBON
13	BOXWOOD DR	MIDDLETREE LN	ARROWWOOD DR	731	22	1624	5	RIBBON
13	ELDERBERRY DR	MIDDLETREE LN	EAST END	722	22	1604	5	RIBBON
13	LAGOON DR	OLD MCHENRY RD	WALNUT DR	2770	22	6775	5	RIBBON
13	MIDDLETREE LN	SYCAMORE DR	SOUTH CDS	2056	22	5532	5	RIBBON
13	ORCHARD LN	ROSEWOOD DR	LAGOON DR	1981	22	4402	5	RIBBON
13	SYCAMORE DR	NORTH CDS	SOUTH CDS	2521	22	6390	5	RIBBON
14	BEDFORD CT	CHESTNUT CT	EAST CDS	150	22	1311	5	CURB AND GUTTER
14	CHESTNUT CT	NORTH CDS	SOUTH CDS	1345	22	5158	5	CURB AND GUTTER
14	DORCHESTER CT	HIGHLAND DR	NORTH CDS	656	22	2548	5	CURB AND GUTTER
14	HIGHLAND DR	QUENTIN RD	CHESTNUT CT	704	26	2193	5	CURB AND GUTTER
14	JOSHUA DR	RESERVE CT	SOUTH END	645	22	1577	5	CURB AND GUTTER
14	WELLESEY CT	CHESTNUT CT	WEST CDS	105	22	1220	5	CURB AND GUTTER
3	CARLISLE RD	FALKIRK RD	GLEN RD	1729	22	4333	4	NO RIBBON
6	PRINCETON LN	CAMBRIDGE DR	NORTH CDS	708	22	2312	4	RIBBON
6	TRENT RD	DARLINGTON DR	DARLINGTON DR	2165	21	5055	4	RIBBON
8	GLEN RD	DARLINGTON DR	CARLISLE RD	878	22	2146	4	RIBBON
8	GOLF CREST DR	SOUTH CDS	NORTH CDS	795	25	2208	4	CURB AND GUTTER
8	SCARLET OAK DR	OWENS DR	GOLF CREST DR	593	25	1647	4	CURB AND GUTTER
9	JANE CT	JEUL DR	SOUTH CDS	478	22	1168	4	RIBBON
9	JUEL DR	DARLINGTON DR	ELM ST	1606	22	3926	4	RIBBON
9	TANGLEWOOD LN	BRIERWOODS LN	WEST END	726	22	1775	4	RIBBON
9	ESSEX CT	MARK DR	EAST CDS	300	22	1390	4	RIBBON
9	HAMPTON LN	MARK DR	EAST CDS	295	22	1411	4	RIBBON
9	JAMES DR	MARK DR	JOHN DR	480	22	1067	4	RIBBON
9	NEWBURY CT	MARK DR	EAST CDS	300	22	1269	4	RIBBON
10	BRIGHTON CT	MARK DR	EAST CDS	235	22	1198	4	RIBBON
10	CANTERBERY LN	MARK DR	EAST CDS	245	22	1251	4	RIBBON
10	EDWARD LN	MARK DR	EAST CDS	500	22	1713	4	RIBBON
10	JAMIE LN	MARK DR	TRENT RD	592	22	1316	4	RIBBON
10	ROBERT CT	MARK DR	EAST CDS	284	22	1023	4	RIBBON
10	WILD WAY	MARK DR	WEST END	270	22	600	4	RIBBON
11	CAMBRIDGE DR	CARLISLE RD	GILMER RD	2337	22	5193	4	RIBBON
11	DARTMOUTH LN	CAMBRIDGE DR	VILLAGE LIMIT	385	21.5	950	4	RIBBON
11	HARVARD LN	CAMBRIDGE DR	CAMBRIDGE DR	1278	22	3124	4	RIBBON
11	MARK DR	DARLINGTON DR	SOUTH CDS	5200	22	12232	4	RIBBON
12	CHERRY HILL CI	GINO LN	NORTH CDS	645	22	2094	4	RIBBON

VILLAGE OF HAWTHORN WOODS
PAVEMENT EVALUATION DATABASE

EXHIBIT 3A
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR TO BE REPAIRED	STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)	2018 PCI	DESCRIPTION
12	GINO LN	360' E OF HAWTHORN GROVE DR	SAINT JOHN RD	1260	22	3080	4	RIBBON
12	GINO LN	HAWTHORN GROVE DR	360' E OF HAWTHORN GROVE DR	1000	22	2222	4	CURB AND GUTTER
12	HILLCREST DR	VILLAGE LIMIT	LAKEVIEW RD	426	22 to 55	2244	4	CURB AND GUTTER
12	HILLTOP CT	OLD BARN RD	NORTH CDS	142	22	902	4	RIBBON
12	KAREN CT	GINO LN	SOUTH CDS	215	22	1233	4	RIBBON
12	MAGNOLIA PKWY	SAINT JOHN RD	WEST CDS	797	22	2510	4	RIBBON
12	MARY LN	SAINT JOHN RD	WEST CDS	458	22	1694	4	RIBBON
12	OLD BARN RD	HILLCREST DR	VILLAGE LIMIT	3302	22	7338	4	RIBBON
12	QUAIL HOLLOW CT	SOUTH CDS	NORTH CDS	500	22	1742	4	RIBBON
12	SAINT JOHN DR	GILMER RD	GINO LN	752	22	1838	4	RIBBON
12	SUNSET CT	OLD BARN RD	NORTH CDS	120	22	825	4	RIBBON
12	COBBLEWOOD LN	NORTH TRAIL	SOUTH CDS	1250	22	3850	4	RIBBON
12	EQUESTRIAN WAY	NORTH TRAIL	450' S OF MOOREGATE TR	1825	22	4639	4	CURB AND GUTTER
12	NEW HAVEN DR	COBBLEWOOD LN	VILLAGE LIMIT	443	22	984	4	RIBBON
12	SADDLE RIDGE CT	EQUESTRIAN WAY	EAST CDS	650	22	1589	4	CURB AND GUTTER
12	STONEY RIDGE CT	EQUESTRIAN WAY	END CDS	350	22	856	4	CURB AND GUTTER
13	PADDOCK CT	NORTH TRAIL	NORTH CDS	340	22	831	4	RIBBON
13	WESTWIND CT	NORTH TRAIL	WEST CDS	595	22	2450	4	RIBBON
13	LAGOON DR	WALNUT DR	FALKIRK RD	620	22	1516	4	RIBBON
13	REDWOOD LN	OLD MCHENRY RD	SYCAMORE DR	330	36	1247	4	RIBBON
14	EAST PRAIRE CT	REGAN LN	EAST CDS	253	22	1657	4	RIBBON
14	JOSHUA DR	REGAN LN	RESERVE CT	1445	22	4346	4	RIBBON
14	REED CT	REGAN LN	NORTH CDS	314	22	1661	4	RIBBON
14	REGAN LN	GILMER RD	W. PRAIRIE CT	1336	22	2969	4	RIBBON
14	RESERVE CT	JOSHUA DR	WEST CDS	665	22	2317	4	RIBBON
14	WEST PRAIRIE CT	REGAN LN	WEST CDS	705	22	2440	4	RIBBON
6	ECHO LAKE RD	MILLER RD	VILLAGE LIMITS	510	22	1247	3	NO RIBBON
6	ECHO LAKE RD	OLD MCHENRY RD	STONE CREEK RD	1055	25	2931	3	CURB AND GUTTER
15	HUBBARD LANE	OLD MCHENRY RD	NORTH ABBEY GLEN DRIVE	545	33	2039	3	CONSTRUCTION TRAFFIC- STONEBRIDGE
14	W KRUCKENBERG RD	MIDLOTHIAN RD	BEND	1790	22	4376	2	NO RIBBON
14	W KRUCKENBERG RD	BEND	LIMIT	1050	22	2567	1	NO RIBBON
14	ACACIA DR	ALDER CT	CATALPA DR	1600	24	4267	1	CURB AND GUTTER
14	ALDER CT	ENSELL RD	SOUTH CDS	710	24	1893	1	CURB AND GUTTER
14	EMPRESS DR	ENSELL RD	CATALPA DR	2400	24	6400	1	CURB AND GUTTER
14	ENSELL RD	QUENTIN RD	ALDER CT	320	40	1422	1	CURB AND GUTTER
14	NORTH ACACIA CT	ACACIA DR	ACACIA DR	150	24	400	1	CURB AND GUTTER
14	NORTH EMPRESS CT	EMPRESS DR	EMPRESS DR	125	25	347	1	CURB AND GUTTER
14	SOUTH EMPRESS CT	EMPRESS DR	EMPRESS DR	90	24	240	1	CURB AND GUTTER
14	COSTEKIN COURT	176	NORTH CDS	24	820	2187	1	CURB AND GUTTER
15	SCHWERMAN RD	175' EAST OF MILTON	GILMER RD	4842	22	17451	1	UNDER CONSTRUCTION
15	SCHWERMAN RD	OWENS DR	175' EAST OF MILTON	1066	22	2606	1	UNDER CONSTRUCTION

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

VILLAGE OF HAWTHORN WOODS
PAVEMENT EVALUATION DATABASE

EXHIBIT 3B
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR TO BE REPAIRED	STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)	LAST RESURFACE DATE	2013 PCI	2018 PCI	DESCRIPTION
9	ABERDEEN RD	DARLINGTON DR	DARLINGTON DR	1920	22	4267	2009	3	5	RIBBON
14	ACACIA DR	ALDER CT	CATALPA DR	1600	24	4267	UNKNOWN	-	1	CURB AND GUTTER
5	ACORN DR	BRUCE CI SOUTH	ROBINCREST DR	580	22	1578	2005	4	5	RIBBON
5	ACORN DR	12 ACORN DR	BRUCE CI SOUTH	1830	21	4270	UNKNOWN	4	6	NO RIBBON
9	ACORN DR	OLD MCHENRY RD	12 ACORN DR	1035	22	2665	2005	4	5	RIBBON
8	AHO DR	SENECA EAST AV	EAST END	190	22	422	2009	3	5	RIBBON
14	ALDER CT	ENSELL RD	SOUTH CDS	710	24	1893	UNKNOWN	-	1	CURB AND GUTTER
15	ANDREW LN	375' S OF CARDINAL DR	HAWTHORN HILLS DR	425	24	1133	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	ANDREW LN	CARDINAL DR	375' S OF CARDINAL DR	375	22	917	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	ANDREW LN	HAWTHORN HILLS DR	HAWTHORN HILLS DR	1375	24	3667	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
11	ANNE CT	SOUTH CDS	DEER POINT DR	446	26	2179	UNKNOWN	3	5	CURB AND GUTTER
7	AQUATIC CENTER			980		8731	UNKNOWN	3	6	LOT WITH CURB AND GUTTER
13	ARROWWOOD DR	SYCAMORE DR	SOUTH CDS	1750	22	4762	2009	3	5	RIBBON
3	ARTHUR CT	SOUTH CDS	GLEN RD	500	22	1222	1999	6	6	NO RIBBON
4	BAGPIPE CT	LOCHANORA ROAD	EAST CDS	718	18	1465	UNKNOWN	-	5	NO RIBBON
11	BARBERRY CT	OLD LAKE RD	NORTH CDS	615	22	1503	2006	3	5	RIBBON
14	BEDFORD CT	CHESTNUT CT	EAST CDS	150	22	1311	2009	3	5	CURB AND GUTTER
8	BENT TREE CT	FOX HUNT TR	WEST CDS	680	22	2625	2004	4	5	RIBBON
11	BIRCH LAKES DR	DEER POINT DR	FAIRFIELD RD	1301	22	3180	2006	3	6	RIBBON
8	BITTERSWEET TR	SCHWERMAN RD	SOUTH CDS	597	24	1624	UNKNOWN	-	6	CURB AND GUTTER
8	BIXTONE LN	OLD MCHENRY RD	NORTH CDS	580	22	2015	2004	4	5	RIBBON
4	BLACKHAWK RD	INDIAN CREEK RD	SEQUOIA RD	857	22	2095	1999	5	6	NO RIBBON
6	BLUE BIRD CT	FALCON DR	NORTH CDS	213	22	1227	2003	5	5	RIBBON
7	BLUE JAY LN	MEADOWLARK DR	WEST END	185	22	623	2003	5	6	RIBBON
13	BOXWOOD DR	MIDDLETREE LN	ARROWWOOD DR	731	22	1624	2009	3	5	RIBBON
15	BRADBURY LN	HAWTHORN HILLS DR	EAST CDS	900	24	2400	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	BRENTWOOD DR	HAWTHORN HILLS DR	HAWTHORN HILLS DR	600	24	1600	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
13	BRIDLE PATH	MILTON RD	NORTH TRAIL	853	22	2085	2006	4	5	RIBBON
9	BRIERWOODS CT	BRIERWOODS LN	NORTH CDS	100	100	875	2005	3	6	RIBBON
9	BRIERWOODS LN	BRUCE CI	VILLAGE LIMIT	1791	22	4378	2005	4	5	RIBBON
10	BRIGHTON CT	MARK DR	EAST CDS	235	22	1198	2008	3	4	RIBBON
5	BRUCE CI	WAYNE LN	SOUTH CDS	1055	22	2579	2005	4	5	RIBBON
5	BRUCE CI NORTH	WAYNE LN	ACORN DR	2746	22	6712	2005	4	5	RIBBON
5	BRUCE CI SOUTH	BRUCE CI NORTH	ACORN DR	1345	22	3288	2001	4	5	NO RIBBON
10	BUSINESS PARK			1329	30	4519	UNKNOWN	-	5	CURB AND GUTTER
7	BYRON CT	KATHY LN	SOUTH CDS	199	22	1193	2004	4	6	RIBBON
11	CAMBRIDGE DR	CARLISLE RD	GILMER RD	2337	22	5193	2007	3	4	RIBBON
10	CANTERBERY LN	MARK DR	EAST CDS	245	22	1251	2008	3	4	RIBBON
6	CARDINAL DR	SCHWERMAN RD	250' S OF FALCON DR	1275	22	3117	2003	5	6	RIBBON
15	CARDINAL DR	850' S OF FALCON DR	GILMER RD	1810	22	4424	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
3	CARLISLE RD	FALKIRK RD	GLEN RD	1729	22	4333	1997	3	4	NO RIBBON
5	CARLISLE RD	GLEN RD	N HIGHVIEW CI	983	22	2403	2006	5	6	RIBBON
11	CARLISLE RD	DARLINGTON DR	N HIGHVIEW CI	2325	22	5683	2006	6	6	RIBBON
3	CATTAIL CT	FOXTAIL RD	NORTH CDS	268	22	655	2002	6	6	NO RIBBON
8	CAYUGA CT	SENECA EAST AV	WEST CDS	520	22	1944	2009	3	5	RIBBON
6	CHANCELLOR CT	COPPERFIELD DR	SOUTH CDS	262	22	1395	2003	4	6	RIBBON
6	CHANTILLY LN	SOUTH CDS	WEDGEWOOD DR	760	22	2596	2003	4	6	RIBBON
4	CHARLESTON CT	HAWTHORN GROVE CI	SOUTH CDS	430	22	1051	UNKNOWN	4	5	CURB AND GUTTER
12	CHERRY HILL CI	GINO LN	NORTH CDS	645	22	2094	2008	3	4	RIBBON
14	CHESTNUT CT	NORTH CDS	SOUTH CDS	1345	22	5158	2009	3	5	CURB AND GUTTER
10	CIRCLE DR	OLD MCHENRY RD	CIRCLE DR	950	21	2220	2005	3	5	RIBBON
12	COBBLEWOOD LN	NORTH TRAIL	SOUTH CDS	1250	22	3850	2007	3	4	RIBBON
10	CONDOR CT	ROSEWOOD DR	WEST CDS	166	22	1014	2007	3	5	RIBBON
8	CONESUS CT	SENECA EAST AV	WEST CDS	220	22	1244	2009	3	5	RIBBON
7	COOPER CT	KATHY LN	SOUTH CDS	120	22	1345	2004	4	6	RIBBON
6	COPPERFIELD DR	OLD MCHENRY RD	CHANTILLY LN	5011	22 to 36	12799	2003	5	6	RIBBON
14	COSTEKIN COURT	176	NORTH CDS	24	820	2187	UNKNOWN	-	1	CURB AND GUTTER
6	CROYDEN RD	STONEHAVEN DR	GLEN RD	1358	22	3320	2003	6	6	RIBBON
9	DARLINGTON DR	OLD MCHENRY RD	JUEL DR	2095	22	5125	2005	4	5	RIBBON
9	DARLINGTON DR	JUEL DR	GILMER RD	4265	22	10430	2005	4	6	RIBBON
11	DARTMOUTH LN	CAMBRIDGE DR	VILLAGE LIMIT	385	21.5	950	2004	4	4	RIBBON
7	DAVID LN	NORTH END	SOUTH END	1335	22	3565	2004	4	5	RIBBON
11	DEER POINT DR	GOVERNORS WAY	BRIDGE E OF ANNE CT	834	26	2409	UNKNOWN	3	5	CURB AND GUTTER
11	DEER POINT DR	BRIDGE E OF ANNE CT	OLD LAKE RD	3281	22	8020	2006	3	6	RIBBON
12	DEERFIELD DR	FOREST VIEW DR	NORTH END	3300	22	8067	UNKNOWN	4	5	CURB AND GUTTER
13	DERBY LN	STEEPLECHASE DR	NORTH END	318	22	777	2006	3	5	RIBBON
14	DORCHESTER CT	HIGHLAND DR	NORTH CDS	656	22	2548	2009	3	5	CURB AND GUTTER
8	DORSET CI	NORTH TRAIL	SOUTH CDS	142	22	991	2007	3	5	RIBBON
11	DURANGO CT	DEER POINT DR	NORTH CDS	275	22	672	2006	3	5	RIBBON
15	EAST PETER LN	CARDINAL DR	EAST CDS	730	22	1784	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
14	EAST PRAIRE CT	REGAN LN	EAST CDS	253	22	1657	2009	3	4	RIBBON
9	ECHO CT	ACORN DR	SOUTH CDS	658	21	1895	2005	4	5	RIBBON
6	ECHO LAKE RD	MILLER RD	VILLAGE LIMITS	510	22	1247	UNKNOWN	5	3	NO RIBBON
6	ECHO LAKE RD	OLD MCHENRY RD	STONE CREEK RD	1055	25	2931	UNKNOWN	6	3	CURB AND GUTTER
6	ECHO LAKE RD	STONE CREEK RD	MILLER RD	485	23	1239	2000	4	5	NO RIBBON
10	EDWARD LN	MARK DR	EAST CDS	500	22	1713	2008	3	4	RIBBON
13	ELDERBERRY DR	MIDDLETREE LN	EAST END	722	22	1604	2009	3	5	RIBBON
9	ELM ST	DARLINGTON DR	LAGOON DR	2411	22	5894	2001	6	6	NO RIBBON
8	ELMWOOD DR	MILLER RD	NORTH CDS	653	22	1596	2002	6	6	RIBBON
14	EMPRESS DR	ENSELL RD	CATALPA DR	2400	24	6400	UNKNOWN	-	1	CURB AND GUTTER
8	ENCLAVE WAY	JOHN DR	SOUTH CDS	407	24	1993	2009	3	6	RIBBON
14	ENSELL RD	QUENTIN RD	ALDER CT	320	40	1422	UNKNOWN	-	1	CURB AND GUTTER
5	EQUESTRIAN WAY	SOUTH CDS	450' S OF MOOREGATE TR	450	22	1760	UNKNOWN	4	5	NO RIBBON
12	EQUESTRIAN WAY	NORTH TRAIL	450' S OF MOOREGATE TR	1825	22	4639	2006	2	4	CURB AND GUTTER
9	ESSEX CT	MARK DR	EAST CDS	300	22	1390	2008	3	4	RIBBON
6	FALCON DR	PEREGRINE LN	MEADOWLARK DR	2490	22	6087	2003	5	5	RIBBON
3	FALKIRK RD	LAGOON DR	CARLISLE RD	789	22	1929	1997	5	5	NO RIBBON
6	FALKIRK RD	DARLINGTON DR	CARLISLE RD	941	22	2300	2003	6	6	RIBBON
12	FOREST VIEW DR	KRUCKENBERG RD	DEERFIELD DR	1400	22	3422	UNKNOWN	4	5	CURB AND GUTTER
8	FOX HUNT CT	FOX HUNT TR	EAST CDS	250	22.5	1515	2004	4	5	RIBBON
8	FOX HUNT TR	PHEASANT RUN RD	OLD MCHENRY RD	1000	22	2480	2004	4	5	RIBBON
3	FOXTAIL RD	SQUIRE RD	EAST CDS	1050	22	2567	2002	6	6	NO RIBBON
13	FURLONG DR	NORTH TRAIL	EAST END	535	22	1308	2006	3	5	RIBBON
4	GENTRY DR	COPPERFIELD DR	BAGPIPE CT	1724	22	4214	2003	5	6	RIBBON
12	GINO LN	360' E OF HAWTHORN GROVE DR	SAINT JOHN RD	1260	22	3080	2008	3	4	RIBBON
12	GINO LN	HAWTHORN GROVE DR	360' E OF HAWTHORN GROVE DR	1000	22	2222	2008	3	4	CURB AND GUTTER
3	GLEN RD	200' W OF ARTHUR CT	ORCHARD LN	1993	22	4872	1999	6	6	NO RIBBON
3	GLEN RD	SQUIRE RD	200' W OF ARTHUR CT	528	22	1291	1996	6	6	NO RIBBON
8	GLEN RD	DARLINGTON DR	CARLISLE RD	878	22	2146	2006	4	4	RIBBON
10	GLEN RD	ORCHARD LN	LYNN DR	1007	22	2462	2006	3	5	RIBBON
10	GLEN RD	LYNN DR	EAST CDS	855	22	2605	2006	4	6	RIBBON
7	GOLDFINCH CT	MEADOWLARK DR	EAST CDS	324	22	1596	2003	5	5	RIBBON
8	GOLF CREST DR	SOUTH CDS	NORTH CDS	795	25	2208	UNKNOWN	3	4	CURB AND GUTTER
11	GOVERNORS CT	OLIVERS WAY	WEST CDS	350	25	1890	UNKNOWN	3	5	CURB AND GUTTER
4	GOVERNORS WAY	GENTRY DR	230' EAST OF GENTRY DR	230	22	562	2003	4	6	RIBBON
11	GOVERNORS WAY	230' EAST OF GENTRY DR	OLIVERS WAY	2090	25	5806	UNKNOWN	3	5	CURB AND GUTTER
12	GREENBRIAR LN	EAST CDS	WEST CDS	1671	22	5067	2008	3	5	RIBBON
12	GREENFIELD CT	DEERFIELD DR	NORTH CDS	350	22	856	UNKNOWN	4	5	CURB AND GUTTER
9	HAMPTON LN	MARK DR	EAST CDS	295	22	1411	2008	3	4	RIBBON
4	HARRINGTON CT	HAWTHORN GROVE DR	WEST CDS	975	22	2383	UNKNOWN	5	6	CURB AND GUTTER
11	HARVARD LN	CAMBRIDGE DR	CAMBRIDGE DR	1278	22	3124	2008	3	4	RIBBON
6	HARVEST GLEN CT	STONE CREEK RD	SOUTH CDS	332	22	1833	2009	3	5	RIBBON
1	HAWTHORN COMMUNITY PARK			220		5360	UNKNOWN	9	9	LOT WITH CURB AND GUTTER
1	HAWTHORN DR	CIRCLE DR	VICTORIA LN	450	21	1050	2001	5	5	NO RIBBON
1	HAWTHORN DR	VICTORIA LN	HICKORY RD	305	21	712	2001	6	5	NO RIBBON
1	HAWTHORN DR	HICKORY RD	OLD MCHENRY RD	900	22	2200	2001	5	6	NO RIBBON
4	HAWTHORN GROVE CI	HAWTHORN GROVE DR	HAWTHORN GROVE DR	3100	22	7578	UNKNOWN	5	6	CURB AND GUTTER
4	HAWTHORN GROVE DR	GILMER RD	HAWTHORN GROVE CI	2300	22	5622	UNKNOWN	5	5	CURB AND GUTTER
15	HAWTHORN HILLS DR	BEVERLY LN	MIDLOTHIAN RD	3450	29	11117	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
9	HEATHER LN	QUENTIN RD	WEST CDS	1601	22	3914	2005	3	5	RIBBON
7	HERITAGE OAKS PARK			3900		13545	UNKNOWN	3	5	LOT WITH CURB AND GUTTER
8	HERON CT	DARLINGTON DR	EAST CDS	276	22	1079	2009	3	6	RIBBON
1	HICKORY LN	HAWTHORN DR	ELM ST	1033	22	2525	2001	8	8	NO RIBBON
11	HIGH POINT CI	HIGH POINT DR	EAST CDS	250	22	611	2006	3	6	RIBBON
11	HIGH POINT DR	BIRCH LAKES DR	NORTH CDS	1267	22	3097	2006	3	5	RIBBON
14	HIGHLAND DR	QUENTIN RD	CHESTNUT CT	704	26	2193	2009	3	5	CURB AND GUTTER
9	HIGHLAND TERRACE	HEATHER LN	MCGREGOR CT	555	22	1395	2005	4	5	RIBBON
5	HIGHVIEW CI	CARLISLE RD	CARLISLE RD	1777	22	5757	2003	5	6	RIBBON
12	HILLCREST DR	VILLAGE LIMIT	LAKEVIEW RD	426	22 to 55	2244	2007	3	4	CURB AND GUTTER
12	HILLTOP CT	OLD BARN RD	NORTH CDS	142	22	902	2007	3	4	RIBBON
7	HOLMES AVE	KATHY LN	FAIRFIELD RD	275	22.5	770	2004	3	5	RIBBON
15	HUBBARD LANE	OLD MCHENRY RD	NORTH ABBEY GLEN DRIVE	545	33	2039	UNKNOWN	-	3	CONSTRUCTION TRAFFIC- STONEBRIDGE
10	INDIAN CREEK RD	GILMER RD	VILLAGE LIMIT	6635	21	17520	2004	4	6	RIBBON
10	IVY LN	ROSEWOOD DR	VILLAGE LIMIT	265	22	589	2007	3	5	RIBBON
1	JAMES CT	DARLINGTON RD	NORTH CDS	489	22	1195	1996	5	5	NO RIBBON
8	JAMES DR	DARLINGTON DR	JOHN DR	1158	22	2573	2009	3	5	RIBBON

VILLAGE OF HAWTHORN WOODS
PAVEMENT EVALUATION DATABASE

EXHIBIT 3B
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR TO BE REPAIRED	STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)	LAST RESURFACE DATE	2013 PCI	2018 PCI	DESCRIPTION
9	JAMES DR	MARK DR	JOHN DR	480	22	1067	2008	3	4	RIBBON
10	JAMIE LN	MARK DR	TRENT RD	592	22	1316	2008	3	4	RIBBON
9	JANE CT	JEUL DR	SOUTH CDS	478	22	1168	2006	3	4	RIBBON
14	JESSICA CT	EAST CDS	JOSHUA DR	642	25	2898	UNKNOWN	3	6	CURB AND GUTTER
8	JOHN DR	DARLINGTON DR	ENCLAVE WAY	1894	22	4209	2009	3	6	RIBBON
14	JOSHUA DR	REGAN LN	RESERVE CT	1445	22	4346	2009	4	4	RIBBON
14	JOSHUA DR	RESERVE CT	SOUTH END	645	22	1577	2009	3	5	CURB AND GUTTER
1	JUEL CI	ELM ST	SOUTH CDS	498	22	1217	2001	6	6	NO RIBBON
9	JUEL DR	DARLINGTON DR	ELM ST	1606	22	3926	2006	3	4	RIBBON
12	KAREN CT	GINO LN	SOUTH CDS	215	22	1233	2008	3	4	RIBBON
7	KATHY LN	EAST VILLAGE LIMIT	WEST CDS	2470	22.5	7195	2004	4	6	RIBBON
4	KENSINGTON CT	HAWTHORN GROVE DR	NORTH CDS	670	22	1638	UNKNOWN	4	6	CURB AND GUTTER
8	KEUKA CT	SENECA EAST AV	WEST CDS	185	22	1134	2009	3	5	RIBBON
2	KRUGER RD	FAIRFIELD RD	MIDLOTHIAN RD	1718	22	4200	UNKNOWN	10	10	NO RIBBON
12	LA VISTA DR	VILLAGE LIMIT	VILLAGE LIMIT	150	22	374	UNKNOWN	-	6	CURB AND GUTTER
8	LAGOON DR	FALKIRK RD	NORTH CDS	1467	22	3586	2003	5	5	RIBBON
13	LAGOON DR	WALNUT DR	FALKIRK RD	620	22	1516	2005	4	4	RIBBON
13	LAGOON DR	OLD MCHENRY RD	WALNUT DR	2770	22	6775	2005	4	5	RIBBON
12	LAKEVIEW RD	HILLCREST DR	OLD BARN RD	2195	22	5366	2007	3	5	RIBBON
3	LANCELOT LN	SQUIRE RD	GLEN RD	1220	22	2982	1999	6	6	NO RIBBON
10	LISA LN	MARK DR	EAST CDS	886	22	2473	2008	3	5	RIBBON
9	LYDIA CT	ACORN DR	EAST CDS	582	20	1900	2005	4	5	RIBBON
10	LYNN DR	GLEN RD	ROSEWOOD DR N	1017	22	2260	2007	3	5	RIBBON
10	LYNN DR	HICKORY RD	LAGOON DR	793	21	1850	2005	3	6	RIBBON
10	LYNN DR	LAGOON DR	GLEN RD	3696	22	8213	2007	4	6	RIBBON
12	MAGNOLIA PKWY	SAINT JOHN RD	WEST CDS	797	22	2510	2008	3	4	RIBBON
11	MARK DR	DARLINGTON DR	SOUTH CDS	5200	22	12232	2008	3	4	RIBBON
12	MARY LN	SAINT JOHN RD	WEST CDS	458	22	1694	2008	3	4	RIBBON
9	MCGREGOR CT	WEST CDS	PIPER LN	690	22	2510	2005	4	5	RIBBON
6	MEADOW LN NORTH	NORTH CDS	STONE CREEK DR	188	22	1934	2009	4	5	RIBBON
6	MEADOW LN SOUTH	SOUTH CDS	STONE CREEK DR	576	22	1408	2009	4	5	RIBBON
7	MEADOWLARK DR	SOUTH END	SCHWERMAN	2425	22	5928	2003	5	5	RIBBON
13	MIDDLETREE LN	SYCAMORE DR	SOUTH CDS	2056	22	5532	2009	3	5	RIBBON
8	MILLER RD	VILLAGE LIMIT	CREEK CROSSING NE OF BRECKENRIDGE DR	1983	22	4847	2002	6	6	NO RIBBON
4	MILTON RD	OLD MCHENRY RD	WINDING BRANCH RD	710	22	1736	2000	6	6	NO RIBBON
4	MILTON RD	VILLAGE LIMIT	VILLAGE LIMIT	1165	22	2848	2000	4	6	NO RIBBON
4	MILTON RD	VILLAGE LIMIT	VILLAGE LIMIT	1550	22	3789	2000	3	6	NO RIBBON
4	MILTON RD	WINDING BRANCH RD	VILLAGE LIMIT	495	22	1210	2000	3	6	NO RIBBON
5	MOOREGATE TRAIL	WEST CDS	330' W OF EQUESTRIAN WAY	1750	21	4790	2000	3	5	NO RIBBON
12	MOOREGATE TRAIL	330' W OF EQUESTRIAN WAY	EQUESTRIAN WAY	330	25	917	UNKNOWN	2	5	CURB AND GUTTER
6	MULBERRY DR	COPPERFIELD DR	315' E OF COPPERFIELD DR	295	22	721	2003	5	6	RIBBON
11	MULBERRY DR	315' E OF COPPERFIELD DR	OLD MCHENRY RD	1206	22	2948	2006	3	5	RIBBON
12	NEW HAVEN DR	COBBLEWOOD LN	VILLAGE LIMIT	443	22	984	2007	3	4	RIBBON
9	NEWBURY CT	MARK DR	EAST CDS	300	22	1269	2008	3	4	RIBBON
8	NORBERT DR	DARLINGTON DR	JOHN DR	1844	22	4098	2009	3	5	RIBBON
15	NORTH ABBEY GLEN DRIVE	200' S OF HUBBARD ROAD	EAST CDS	2000	25	5556	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
14	NORTH ACACIA CT	ACACIA DR	ACACIA DR	150	24	400	UNKNOWN	-	1	CURB AND GUTTER
14	NORTH EMPRESS CT	EMPRESS DR	EMPRESS DR	125	25	347	UNKNOWN	-	1	CURB AND GUTTER
13	NORTH TRAIL	NORTH CDS	FURLONG DR	3560	22	8702	2006	3	5	RIBBON
13	NORTH TRAIL	WESTWIND CT	FURLONG DR	1283	22	3136	2006	3	5	RIBBON
13	NORTH TRAIL	WESTWIND CT	SOUTH CDS	2827	22	6974	2007	3	5	RIBBON
10	OAK LN	WEST END	CIRCLE DR	585	21	1365	2005	4	5	RIBBON
12	OLD BARN RD	HILLCREST DR	VILLAGE LIMIT	3302	22	7338	2007	3	4	RIBBON
11	OLD LAKE RD	38 OLD LAKE DR	EAST CDS	775	22	2570	2006	1	5	CURB AND GUTTER
11	OLD LAKE RD	MULBERRY DR	38 OLD LAKE DR	1566	22	3828	2006	3	5	RIBBON
4	OLIVERS WAY	GOVERNORS WAY	LACHANORA DR	776	26	2242	UNKNOWN	3	5	CURB AND GUTTER
10	ONEIDA LN	WASHITAY AV	SENECA WEST AV	1362	22	3027	2009	3	5	RIBBON
8	ONONDAGA DR	SENECA EAST AV	SENECA WEST AV	1556	22	3804	2006	4	5	RIBBON
13	ORCHARD LN	ROSEWOOD DR	LAGOON DR	1981	22	4402	2007	3	5	RIBBON
7	ORIOLE CT	MEADOWLARK DR	WEST CDS	274	22	1376	2003	5	5	RIBBON
11	OVERLOOK DR	DEER POINT DR	NORTH CDS	467	22	1142	2006	3	5	RIBBON
1	OWENS RD	920' S OF GILMER RD	1355' S OF GILMER RD	435	21	1015	UNKNOWN	9	9	NO RIBBON
2	OWENS RD	GILMER RD	920' SOUTH OF GILMER RD	920	21	2348	2009	8	8	CURB AND GUTTER / NO RIBBON
2	OWENS RD	1355' S OF GILMER RD	SOUTH VILLAGE LIMIT	1480	21	3453	UNKNOWN	10	10	NO RIBBON
8	OWENS RD	SCHWERMAN RD	VILLAGE LIMIT	191	20	424	UNKNOWN	4	6	NO RIBBON
13	PADDOCK CT	NORTH TRAIL	NORTH CDS	340	22	831	2006	3	4	RIBBON
11	PARK PLACE CI	PARK VIEW LN	END CDS	1040	25	2889	UNKNOWN	4	5	CURB AND GUTTER
11	PARK VIEW LN	OLD MCHENRY RD	EAST END	2000	21	5232	2007	3	5	CURB AND GUTTER
6	PEREGRINE LN	SOUTH CDS	WEST CDS	1890	22	6033	2003	5	6	RIBBON
5	PHEASANT RUN RD	THORNFIELD LN	THORNFIELD LN	3270	21.5	7850	2004	4	6	RIBBON
9	PIPER LN	MCGREGOR CT	HEATHER LN	1050	21.5	3345	2005	3	5	RIBBON
6	PRINCETON LN	CAMBRIDGE DR	NORTH CDS	708	22	2312	2007	3	4	RIBBON
1	PUBLIC WORKS FACILITY					2197	UNKNOWN	8	8	LOT
12	QUAIL HOLLOW CT	SOUTH CDS	NORTH CDS	500	22	1742	2007	3	4	RIBBON
13	REDWOOD LN	NORTH TRAIL	OLD MCHENRY RD	231	35	847	2007	3	5	RIBBON
13	REDWOOD LN	OLD MCHENRY RD	SYCAMORE DR	330	36	1247	2007	3	4	RIBBON
14	REED CT	REGAN LN	NORTH CDS	314	22	1661	2009	3	4	RIBBON
14	REGAN LN	GILMER RD	W. PRAIRIE CT	1336	22	2969	2009	3	4	RIBBON
14	RESERVE CT	JOSHUA DR	WEST CDS	665	22	2317	2009	3	4	RIBBON
10	ROBERT CT	MARK DR	EAST CDS	284	22	1023	2008	3	4	RIBBON
5	ROBIN CREST RD	ACORN DR	BRUCE CI SOUTH	1340	21	3130	2005	4	5	RIBBON
5	ROBIN CREST RD	EAST CDS	ACORN DR	370	21	1355	2005	4	5	RIBBON
14	ROMAN LANE (HT3)			1800	27	5508	UNKNOWN	-	UNBUILT	CURB AND GUTTER
4	ROSE LN	OLIVERS WAY	EAST CDS	543	26	2531	UNKNOWN	3	5	CURB AND GUTTER
10	ROSEWOOD DR	LYNN DR	280' W OF LYNN DR	2360	22	6126	2007	3	5	RIBBON
12	ROSEWOOD DR	280' W OF LYNN DR	NORTH END	2007	22	5406	2007	3	5	RIBBON
8	RUTGERS CT	INDIAN CREEK RD	EAST CDS	1050	21	3450	2005	4	5	RIBBON
12	SADDLE RIDGE CT	EQUESTRIAN WAY	EAST CDS	650	22	1589	UNKNOWN	2	4	CURB AND GUTTER
12	SAINT JOHN DR	GILMER RD	GINO LN	752	22	1838	2008	3	4	RIBBON
12	SAINT JOHN DR	GINO LN	OLD BARN RD	2452	22	5449	2008	3	5	RIBBON
12	SAINT JOHN DR	GREENBRIAR LN	GILMER RD	740	22	1644	2008	3	5	RIBBON
7	SANDPIPER LN	WEST END	EAST CDS	987	22	3135	2003	5	5	RIBBON
8	SCARLET OAK DR	OWENS DR	GOLF CREST DR	593	25	1647	UNKNOWN	3	4	CURB AND GUTTER
15	SCHWERMAN RD	175' EAST OF MILTON	GILMER RD	4842	22	17451	2018	4	1	UNDER CONSTRUCTION
15	SCHWERMAN RD	OWENS DR	175' EAST OF MILTON	1066	22	2606	2018	3	1	UNDER CONSTRUCTION
8	SENECA EAST AV	WASHITAY AV	INDIAN CREEK	2095	22	4656	2009	3	6	RIBBON
10	SENECA WEST AV	INDIAN CREEK RD	WASHITAY AV	1763	22	4310	2006	4	6	RIBBON
8	SENECA WEST AVE	SOUTH CDS	INDIAN CREEK RD	1443	22	4234	2003	4	5	RIBBON
4	SEQUOIA RD	BLACKHAWK RD	EAST CDS	945	22	2705	2005	3	5	RIBBON
4	SEQUOIA RD	GILMER RD	BLACKHAWK RD	2384	22	5828	1996	6	6	NO RIBBON
7	SHEARWATER CT	MEADOWLARK DR	WEST CDS	681	22	2387	2003	5	6	RIBBON
4	SHENANDOAH LN	SEQUOIA RD	NORTH CDS	675	22	2325	2005	3	5	RIBBON
15	SHERMAN CT	HAWTHORN HILLS DR	NORTH CDS	575	24	1533	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
15	SIERRA PL	HAWTHORN HILLS DR	SOUTH CDS	460	24	1227	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
14	SOUTH EMPRESS CT	EMPRESS DR	EMPRESS DR	90	24	240	UNKNOWN	-	1	CURB AND GUTTER
13	SPRING CREEK CT	FOREST VIEW DR	EAST CDS	330	22	807	UNKNOWN	4	5	CURB AND GUTTER
3	SQUIRE RD	FOXTAIL RD	NORTH CDS	1570	22	3838	2002	3	5	NO RIBBON
3	SQUIRE RD	FOXTAIL RD	SOUTH END	2078	22	5080	2002	6	6	NO RIBBON
13	STEEPLECHASE DR	FURLONG DR	SOUTH CDS	1790	22	4376	2006	3	5	RIBBON
6	STONE CREEK RD	ECHO LAKE RD	EAST END	1395	22	3100	2009	4	5	RIBBON
6	STONE HAVEN DR	CARLISLE RD	DARLINGTON DR	948	22	2317	2003	5	6	RIBBON
15	STONEBRIDGE ROADS			2600	25	7367	UNKNOWN	-	UNBUILT	UNBUILT
12	STONEY RIDGE CT	EQUESTRIAN WAY	END CDS	350	22	856	UNKNOWN	2	4	CURB AND GUTTER
12	SUNSET CT	OLD BARN RD	NORTH CDS	120	22	825	2007	3	4	RIBBON
13	SYCAMORE DR	NORTH CDS	SOUTH CDS	2521	22	6390	2007	3	5	RIBBON
9	TANGLEWOOD CT	TANGLEWOOD LN	NORTH CDS	426	22	1920	2005	4	5	RIBBON
9	TANGLEWOOD LN	BRIERWOODS LN	WEST END	726	22	1775	2005	4	4	RIBBON
5	THORNFIELD LN	MOOREGATE TRAIL	SOUTH CDS	424	22	1036	2000	3	5	NO RIBBON
5	THORNFIELD LN	PHEASANT RUN RD	NORTH CDS	725	22	2700	2005	3	5	RIBBON
5	THORNFIELD LN	PHEASANT RUN RD	MOOREGATE TRAIL	1093	22	2429	2009	4	5	RIBBON
6	TRENT RD	DARLINGTON DR	DARLINGTON DR	2165	21	5055	2005	3	4	RIBBON
6	UNIVERSITY CI	CARLISLE RD	CARLISLE RD	1500	22	4327	2008	3	5	RIBBON
1	VICTORIA LN	HAWTHORN DR	LAGOON DR	1057	21	2466	2005	6	6	RIBBON
1	VILLAGE HALL LOT					2653	UNKNOWN	6	6	LOT
14	W KRUCKENBERG RD	BEND	LIMIT	1050	22	2567	UNKNOWN	7	1	NO RIBBON
14	W KRUCKENBERG RD	MIDLOTHIAN RD	BEND	1790	22	4376	UNKNOWN	7	2	NO RIBBON
10	WAKIA CT	SENECA WEST AV	EAST CDS	195	22	1156	2009	3	5	RIBBON
1	WALNUT DR	LAGOON DR	HICKORY RD	656	20	1460	2005	5	5	RIBBON
10	WASHITAY AV	SENECA WEST AV	SENECA EAST AV	1852	22	4527	2006	4	5	RIBBON
5	WAYNE LN	BRUCE CI	NORTH CDS	414	22	1645	2005	4	5	RIBBON
6	WEDGEWOOD DR	COPPERFIELD DR	COPPERFIELD DR	1458	22	3564	2003	5	6	RIBBON
14	WELLESEY CT	CHESTNUT CT	WEST CDS	105	22	1220	2009	3	5	CURB AND GUTTER
15	WEST PETER LN	CARDINAL DR	SOUTH CDS	1315	22	3214	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
14	WEST PRAIRIE CT	REGAN LN	WEST CDS	705	22	2440	2009	3	4	RIBBON
15	WESTERN HALF OF HAWTHORN WOODS			5922	25	16779	UNKNOWN	-	NOT ACCEPTED	CURB AND GUTTER, NO SURFACE
13	WESTWIND CT	NORTH TRAIL	WEST CDS	595	22	2450	2006	3	4	RIBBON

VILLAGE OF HAWTHORN WOODS
PAVEMENT EVALUATION DATABASE

YEAR TO BE REPAIRED	STREET	TERMINI	TERMINI	LENGTH (FT)	WIDTH (FT)	AREA (SQ YD)	LAST RESURFACE DATE	2013 PCI	2018 PCI	DESCRIPTION
7	WHITMAN TERRACE	KATHY LN	DAVID LN	1725	22	4270	2004	4	5	RIBBON
10	WILD WAY	MARK DR	WEST END	270	22	600	2008	3	4	RIBBON
8	WINDING BRANCH RD	MILTON RD	PHEASANT RUN RD	1425	21.5	3430	2004	5	5	RIBBON
8	WOODED LN	WINDING BRANCH RD	MILTON RD	525	21.5	1255	2004	4	5	RIBBON
11	YALE CT	HARVARD LN	EAST CDS	175	21.5	1335	2004	5	6	RIBBON

EXHIBIT #4
COST ESTIMATE AND SCHEDULE

CHRISTOPHER B. BURKE ENGINEERING LTD
9575 WEST HIGGINS ROAD, SUITE 600
ROSEMONT, IL 60018

VILLAGE OF HAWTHORN WOODS
PAVEMENT MAINTENANCE PROGRAM
(CBBEL PROJECT NO. 02-0065.H239)

PROJECT TOTAL COST OVERVIEW / COMPARISON
DATE: August 8, 2018
REVISED: October 5, 2018

CULVERT COSTS		
CULVERTS	**2017 COST**	**NOTES**
Darlington	$375,000.00	completed in 2018 (see note 1)
Indian Creek	$400,000.00	includes streambank and stabilization
Mark Lane	$445,000.00	
Washitay	$480,000.00	
Greenbriar	$240,000.00	
Lisa Lane	$133,000.00	
Elm	$560,000.00	
Kruckenberg	$134,000.00	
Krueger	$105,000.00	
Mooregate	$102,000.00	
Deer Point	$99,000.00	
TOTAL:	$2,698,000.00	not including Darlington (see note 1)

OVERALL PROJECT COST		
ROADWAYS (YEAR)	**ANNUAL COST**	
CULVERTS *	**$2,698,000.00**	
1	$1,509,000.00	**ROADWAYS ONLY $22,950,000.00**
2	$1,607,000.00	
3	$1,677,000.00	
4	$1,635,000.00	
5	$1,569,000.00	
6	$1,499,000.00	
7	$1,509,000.00	
8	$1,511,000.00	
9	$1,519,000.00	
10	$1,477,000.00	
11	$1,511,000.00	
12	$1,518,000.00	
13	$1,496,000.00	
14	$1,274,000.00	
15	$1,639,000.00	
TOTAL:	**$25,648,000.00**	

NOTES:
1. DARLINGTON CULVERT IS NOT INCLUDED IN COST CALCULATIONS SINCE IT WAS COMPLETED IN 2018.
2. OVERALL PROJECT COST TABLE INCLUDES MAINTENANCE COSTS.
3. * EXACT YEARS OF CULVERT REPLACEMENT PROJECTS TO BE DETERMINED ONCE FUNDING HAS BEEN ALLOCATED.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 1 STREETS

				RECONSTRUCTION		FULL DEPTH		FULL DEPTH		FULL DEPTH		RECONSTRUCTION		FULL DEPTH	
				PCI= 9		PCI= 5		PCI= 5		PCI= 6		PCI= 8		PCI= 5	
				EXISTING RIBBON= LOT, C+G		EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO	
				LENGTH =		LENGTH = 450		LENGTH = 305		LENGTH = 900		LENGTH = 1,033		LENGTH = 489	
				WIDTH =		WIDTH = 21		WIDTH = 21		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 5,468		TOTAL AREA (SQ YD) = 1,071		TOTAL AREA (SQ YD) = 726		TOTAL AREA (SQ YD) = 2,244		TOTAL AREA (SQ YD) = 2,576		TOTAL AREA (SQ YD) = 1,220	
				HAWTHORN COMMUNITY PARK		HAWTHORN DR (CIRCLE TO VICTORIA)		HAWTHORN DR (VICTORIA TO HICKORY)		HAWTHORN DR (HICKORY TO OLD MCHENRY)		HICKORY (HAWTHORN TO ELM)		JAMES CT (DARLINGTON TO N CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	92	$ 2,530.00	18	$ 495.00	13	$ 357.50	38	$ 1,045.00	43	$ 1,182.50	21	$ 577.50
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	274	$ 274.00	54	$ 54.00	37	$ 37.00	113	$ 113.00	129	$ 129.00	61	$ 61.00
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	92	$ 2,530.00	18	$ 495.00	13	$ 357.50	38	$ 1,045.00	43	$ 1,182.50	21	$ 577.50
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	5,468	$ 65,616.00	0	$ -	0	$ -	0	$ -	2,576	$ 30,912.00	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	1,071	$ 1,071.00	726	$ 726.00	2,244	$ 2,244.00	0	$ -	1,220	$ 1,220.00
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	29	$ 507.50	20	$ 350.00	59	$ 1,032.50	0	$ -	33	$ 577.50
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	4,922	$ 2,461.00	964	$ 482.00	654	$ 327.00	2,020	$ 1,010.00	2,319	$ 1,159.50	1,098	$ 549.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	919	$ 68,925.00	150	$ 11,250.00	102	$ 7,650.00	315	$ 23,625.00	433	$ 32,475.00	171	$ 12,825.00
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	613	$ 45,975.00	120	$ 9,000.00	82	$ 6,150.00	252	$ 18,900.00	289	$ 21,675.00	137	$ 10,275.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	5,468	$ 82,020.00	0	$ -	0	$ -	0	$ -	2,576	$ 38,640.00	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	1,071	$ 4,284.00	726	$ 2,904.00	2,244	$ 8,976.00	0	$ -	1,220	$ 4,880.00
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	200	$ 22,000.00	136	$ 14,960.00	400	$ 44,000.00	460	$ 50,600.00	218	$ 23,980.00
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	500	$ 15,000.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	1	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 9,066.68	1	$ 1,563.61	1	$ 1,065.30	1	$ 3,212.70	1	$ 5,605.60	1	$ 1,748.96
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 9,066.68	1	$ 1,563.61	1	$ 1,065.30	1	$ 3,212.70	1	$ 5,605.60	1	$ 1,748.96
				SUBTOTAL =	$ 287,831.00	SUBTOTAL =	$ 49,638.50	SUBTOTAL =	$ 33,819.00	SUBTOTAL =	$ 101,990.50	SUBTOTAL =	$ 177,955.50	SUBTOTAL =	$ 55,522.50
				CONTINGENCY (5%) =	$ 14,391.55	CONTINGENCY (5%) =	$ 2,481.93	CONTINGENCY (5%) =	$ 1,690.95	CONTINGENCY (5%) =	$ 5,099.53	CONTINGENCY (5%) =	$ 8,897.78	CONTINGENCY (5%) =	$ 2,776.13
				SUBTOTAL =	$ 302,222.55	SUBTOTAL =	$ 52,120.43	SUBTOTAL =	$ 35,509.95	SUBTOTAL =	$ 107,090.03	SUBTOTAL =	$ 186,853.28	SUBTOTAL =	$ 58,298.63
				CONSTRUCTION TOTAL =	**$ 320,355.90**	**CONSTRUCTION TOTAL =**	**$ 55,247.65**	**CONSTRUCTION TOTAL =**	**$ 37,640.55**	**CONSTRUCTION TOTAL =**	**$ 113,515.43**	**CONSTRUCTION TOTAL =**	**$ 198,064.47**	**CONSTRUCTION TOTAL =**	**$ 61,796.54**
				ENGINEERING =	$ 48,053.39	ENGINEERING =	$ 5,524.77	ENGINEERING =	$ 3,764.05	ENGINEERING =	$ 11,351.54	ENGINEERING =	$ 29,709.67	ENGINEERING =	$ 6,179.65
				ROADWAY TOTAL =	**$ 368,409.29**	**ROADWAY TOTAL =**	**$ 60,772.42**	**ROADWAY TOTAL =**	**$ 41,404.60**	**ROADWAY TOTAL =**	**$ 124,866.97**	**ROADWAY TOTAL =**	**$ 227,774.14**	**ROADWAY TOTAL =**	**$ 67,976.20**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 1 STREETS

				GRIND & OVERLAY		RECONSTRUCTION		FULL DEPTH		FULL DEPTH		FULL DEPTH		GRIND & OVERLAY	
				PCI= 6		PCI= 9		PCI= 8		PCI= 6		PCI= 6		PCI= 5	
				EXISTING RIBBON= YES		EXISTING RIBBON= NO		EXISTING RIBBON= LOT		EXISTING RIBBON= YES		EXISTING RIBBON= LOT		EXISTING RIBBON= YES	
				LENGTH = 498 WIDTH = 22 TOTAL AREA (SQ YD) = 1,242		LENGTH = 435 WIDTH = 21 TOTAL AREA (SQ YD) = 1,036		LENGTH = WIDTH = TOTAL AREA (SQ YD) = 2,250		LENGTH = 1,057 WIDTH = 21 TOTAL AREA (SQ YD) = 2,516		LENGTH = WIDTH = TOTAL AREA (SQ YD) = 2,720		LENGTH = 656 WIDTH = 20 TOTAL AREA (SQ YD) = 1,487	
				JUEL CIRCLE (ELM TO S CDS)		OWENS RD (920' S/GILMER TO 1355' S/GILMER)		PUBLIC WORKS FACILITY		VICTORIA (HAWTHORN TO LAGOON)		VILLAGE HALL LOT		WALNUT (LAGOON TO HICKORY)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	18	$ 495.00	38	$ 1,045.00	42	$ 1,155.00	46	$ 1,265.00	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	52	$ 52.00	113	$ 113.00	126	$ 126.00	136	$ 136.00	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	18	$ 495.00	38	$ 1,045.00	42	$ 1,155.00	46	$ 1,265.00	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	1,036	$ 12,432.00	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	2,250	$ 2,250.00	2,516	$ 2,516.00	2,720	$ 2,720.00	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	60	$ 1,050.00	67	$ 1,172.50	72	$ 1,260.00	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,118	$ 559.00	933	$ 466.50	2,025	$ 1,012.50	2,265	$ 1,132.50	2,448	$ 1,224.00	1,339	$ 669.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	53	$ 4,240.00	0	$ -	0	$ -	0	$ -	0	$ -	63	$ 5,040.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	175	$ 13,125.00	315	$ 23,625.00	353	$ 26,475.00	381	$ 28,575.00	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	105	$ 7,875.00	117	$ 8,775.00	252	$ 18,900.00	282	$ 21,150.00	305	$ 22,875.00	125	$ 9,375.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	1,036	$ 15,540.00	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,242	$ 2,484.00	0	$ -	0	$ -	0	$ -	0	$ -	1,487	$ 2,974.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	2,250	$ 9,000.00	2,516	$ 10,064.00	2,720	$ 10,880.00	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	25	$ 1,000.00	0	$ -	0	$ -	0	$ -	0	$ -	30	$ 1,200.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	194	$ 21,340.00	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	10	$ 1,200.00	0	$ -	0	$ -	22	$ 2,640.00	0	$ -	3	$ 360.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	1	$ 2,500.00	1	$ 2,500.00	0	$ -	1	$ 2,500.00	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 546.78	1	$ 2,369.45	1	$ 1,907.03	1	$ 2,128.96	1	$ 2,290.05	1	$ 617.98
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 546.78	1	$ 2,369.45	1	$ 1,907.03	1	$ 2,128.96	1	$ 2,290.05	1	$ 617.98
				SUBTOTAL =	$ 17,358.00	SUBTOTAL =	$ 75,220.50	SUBTOTAL =	$ 60,540.50	SUBTOTAL =	$ 67,586.00	SUBTOTAL =	$ 72,700.00	SUBTOTAL =	$ 19,618.50
				CONTINGENCY (5%) =	$ 867.90	CONTINGENCY (5%) =	$ 3,761.03	CONTINGENCY (5%) =	$ 3,027.03	CONTINGENCY (5%) =	$ 3,379.30	CONTINGENCY (5%) =	$ 3,635.00	CONTINGENCY (5%) =	$ 980.93
				SUBTOTAL =	$ 18,225.90	SUBTOTAL =	$ 78,981.53	SUBTOTAL =	$ 63,567.53	SUBTOTAL =	$ 70,965.30	SUBTOTAL =	$ 76,335.00	SUBTOTAL =	$ 20,599.43
				CONSTRUCTION TOTAL =	**$ 19,319.45**	**CONSTRUCTION TOTAL =**	**$ 83,720.42**	**CONSTRUCTION TOTAL =**	**$ 67,381.58**	**CONSTRUCTION TOTAL =**	**$ 75,223.22**	**CONSTRUCTION TOTAL =**	**$ 80,915.10**	**CONSTRUCTION TOTAL =**	**$ 21,835.39**
				ENGINEERING =	$ 1,931.95	ENGINEERING =	$ 12,558.06	ENGINEERING =	$ 6,738.16	ENGINEERING =	$ 7,522.32	ENGINEERING =	$ 8,091.51	ENGINEERING =	$ 2,183.54
				ROADWAY TOTAL =	**$ 21,251.40**	**ROADWAY TOTAL =**	**$ 96,278.48**	**ROADWAY TOTAL =**	**$ 74,119.73**	**ROADWAY TOTAL =**	**$ 82,745.54**	**ROADWAY TOTAL =**	**$ 89,006.61**	**ROADWAY TOTAL =**	**$ 24,018.93**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$ 1,278,624.31**
ROUTINE MAINTENANCE =	**$ 230,000.00**
YEAR 1 TOTAL =	**$ 1,508,624.31**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

				YEAR 2 STREETS					
				RECONSTRUCTION		RECONSTRUCTION		RECONSTRUCTION	
				PCI= 10		PCI= 8		PCI= 10	
				EXISTING RIBBON= NO		EXISTING RIBBON= NO / C+G		EXISTING RIBBON= NO	
				LENGTH = 1,718		LENGTH = 920		LENGTH = 1,480	
				WIDTH = 22		WIDTH = 21		WIDTH = 21	
				TOTAL AREA (SQ YD) = 4,284		TOTAL AREA (SQ YD) = 2,400		TOTAL AREA (SQ YD) = 3,523	
				KRUGER RD (FAIRFIELD TO MIDLOTHIAN)		OWENS RD (GILMER TO 920' S/GILMER)		OWENS RD (1355' S/GILMER TO VILLAGE LIMIT)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50			40	$ 1,100.00	59	$ 1,622.50
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00			120	$ 120.00	177	$ 177.00
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50			40	$ 1,100.00	59	$ 1,622.50
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00			2,400	$ 28,800.00	3,523	$ 42,276.00
35800100	PREPARATION OF BASE	SQ YD	$ 1.00			0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50			0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50			2,160	$ 1,080.00	3,171	$ 1,585.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00			0	$ -	0	$ -
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00			404	$ 30,300.00	592	$ 44,400.00
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00			269	$ 20,175.00	395	$ 29,625.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00			2,400	$ 36,000.00	3,523	$ 52,845.00
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00			0	$ -	0	$ -
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00			0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00			0	$ -	0	$ -
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00			0	$ -	658	$ 72,380.00
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00			0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00			0	$ -	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00			1,840	$ 55,200.00	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00			1	$ 2,500.00	1	$ 2,500.00
*NA	CONSTRUCTION LAYOUT	L. SUM				1	$ 5,555.81	1	$ 7,844.56
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM				1	$ 5,555.81	1	$ 7,844.56
						SUBTOTAL =	$ 176,375.00	SUBTOTAL =	$ 249,033.50
						CONTINGENCY (5%) =	$ 8,818.75	CONTINGENCY (5%) =	$ 12,451.68
						SUBTOTAL =	$ 185,193.75	SUBTOTAL =	$ 261,485.18
						CONSTRUCTION TOTAL =	**$ 196,305.38**	**CONSTRUCTION TOTAL =**	**$ 277,174.29**
						ENGINEERING =	$ 29,445.81	ENGINEERING =	$ 41,576.14
						ROADWAY TOTAL =	**$ 225,751.18**	**ROADWAY TOTAL =**	**$ 318,750.43**

ROADWAY TOTAL =	**$**	**831,600.00**

ASSUMPTIONS:
1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$**	**1,376,101.61**
ROUTINE MAINTENANCE =	**$**	**230,000.00**
YEAR 2 TOTAL =	**$**	**1,606,101.61**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 3 STREETS

				FULL DEPTH		FULL DEPTH		FULL DEPTH		FULL DEPTH		FULL DEPTH		GRIND & OVERLAY	
				PCI= 6		PCI= 4		PCI= 6		PCI= 5		PCI= 6		PCI= 6	
				EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO	
				LENGTH = 500		LENGTH = 1,729		LENGTH = 268		LENGTH = 789		LENGTH = 1,050		LENGTH = 528	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 1,247		TOTAL AREA (SQ YD) = 4,311		TOTAL AREA (SQ YD) = 669		TOTAL AREA (SQ YD) = 1,968		TOTAL AREA (SQ YD) = 2,618		TOTAL AREA (SQ YD) = 1,317	
				ARTHUR CT (GLEN TO S CDS)		CARLISLE (FALKIRK TO GLEN)		CATTAIL CT (FOXTAIL TO N CDS)		FALKIRK (LAGOON TO CARLISLE)		FOXTAIL (SQUIRE TO E CDS)		GLEN RD (SQUIRE TO 200' W. OF ARTHUR)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	21	$ 577.50	72	$ 1,980.00	12	$ 330.00	33	$ 907.50	44	$ 1,210.00	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	63	$ 63.00	216	$ 216.00	34	$ 34.00	99	$ 99.00	131	$ 131.00	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	21	$ 577.50	72	$ 1,980.00	12	$ 330.00	33	$ 907.50	44	$ 1,210.00	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	1,247	$ 1,247.00	4,311	$ 4,311.00	669	$ 669.00	1,968	$ 1,968.00	2,618	$ 2,618.00	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	33	$ 577.50	114	$ 1,995.00	18	$ 315.00	52	$ 910.00	69	$ 1,207.50	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,123	$ 561.50	3,880	$ 1,940.00	603	$ 301.50	1,772	$ 886.00	2,357	$ 1,178.50	1,186	$ 593.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	56	$ 4,480.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	175	$ 13,125.00	604	$ 45,300.00	94	$ 7,050.00	276	$ 20,700.00	367	$ 27,525.00	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	140	$ 10,500.00	483	$ 36,225.00	75	$ 5,625.00	221	$ 16,575.00	294	$ 22,050.00	111	$ 8,325.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	1,317	$ 2,634.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	1,247	$ 4,988.00	4,311	$ 17,244.00	669	$ 2,676.00	1,968	$ 7,872.00	2,618	$ 10,472.00	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	27	$ 1,080.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	223	$ 24,530.00	769	$ 84,590.00	120	$ 13,200.00	351	$ 38,610.00	467	$ 51,370.00	235	$ 25,850.00
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,787.53	1	$ 6,167.10	1	$ 961.71	1	$ 2,817.20	1	$ 3,747.62	1	$ 1,353.30
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,787.53	1	$ 6,167.10	1	$ 961.71	1	$ 2,817.20	1	$ 3,747.62	1	$ 1,353.30
				SUBTOTAL =	$ 56,747.00	SUBTOTAL =	$ 195,781.00	SUBTOTAL =	$ 30,530.50	SUBTOTAL =	$ 89,435.00	SUBTOTAL =	$ 118,972.00	SUBTOTAL =	$ 42,962.00
				CONTINGENCY (5%) =	$ 2,837.35	CONTINGENCY (5%) =	$ 9,789.05	CONTINGENCY (5%) =	$ 1,526.53	CONTINGENCY (5%) =	$ 4,471.75	CONTINGENCY (5%) =	$ 5,948.60	CONTINGENCY (5%) =	$ 2,148.10
				SUBTOTAL =	$ 59,584.35	SUBTOTAL =	$ 205,570.05	SUBTOTAL =	$ 32,057.03	SUBTOTAL =	$ 93,906.75	SUBTOTAL =	$ 124,920.60	SUBTOTAL =	$ 45,110.10
				CONSTRUCTION TOTAL =	**$ 63,159.41**	**CONSTRUCTION TOTAL =**	**$ 217,904.25**	**CONSTRUCTION TOTAL =**	**$ 33,980.45**	**CONSTRUCTION TOTAL =**	**$ 99,541.16**	**CONSTRUCTION TOTAL =**	**$ 132,415.84**	**CONSTRUCTION TOTAL =**	**$ 47,816.71**
				ENGINEERING =	$ 6,315.94	ENGINEERING =	$ 21,790.43	ENGINEERING =	$ 3,398.04	ENGINEERING =	$ 9,954.12	ENGINEERING =	$ 13,241.58	ENGINEERING =	$ 4,781.67
				ROADWAY TOTAL =	**$ 69,475.35**	**ROADWAY TOTAL =**	**$ 239,694.68**	**ROADWAY TOTAL =**	**$ 37,378.49**	**ROADWAY TOTAL =**	**$ 109,495.27**	**ROADWAY TOTAL =**	**$ 145,657.42**	**ROADWAY TOTAL =**	**$ 52,598.38**

ASSUMPTIONS:
1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 3 STREETS

				GRIND & OVERLAY		FULL DEPTH		FULL DEPTH		GRIND & OVERLAY	
				PCI= 6		PCI= 6		PCI= 5		PCI= 6	
				EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO	
				LENGTH = 1,993		LENGTH = 1,220		LENGTH = 1,570		LENGTH = 2,078	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 4,970		TOTAL AREA (SQ YD) = 3,042		TOTAL AREA (SQ YD) = 3,934		TOTAL AREA (SQ YD) = 5,207	
				GLEN RD (200' W. OF ARTHUR CT TO ORCHARD)		LANCELOT LN (SQUIRE TO GLEN)		SQUIRE (FOXTAIL TO N CDS)		SQUIRE (FOXTAIL TO S END)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	51	$ 1,402.50	66	$ 1,815.00	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	153	$ 153.00	197	$ 197.00	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	51	$ 1,402.50	66	$ 1,815.00	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	3,042	$ 3,042.00	3,934	$ 3,934.00	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	80	$ 1,400.00	104	$ 1,820.00	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	4,473	$ 2,236.50	2,738	$ 1,369.00	3,541	$ 1,770.50	4,687	$ 2,343.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	209	$ 16,720.00	0	$ -	0	$ -	219	$ 17,520.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	426	$ 31,950.00	551	$ 41,325.00	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	418	$ 31,350.00	341	$ 25,575.00	441	$ 33,075.00	438	$ 32,850.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	4,970	$ 9,940.00	0	$ -	0	$ -	5,207	$ 10,414.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	3,042	$ 12,168.00	3,934	$ 15,736.00	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	100	$ 4,000.00	0	$ -	0	$ -	105	$ 4,200.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	886	$ 97,460.00	543	$ 59,730.00	698	$ 76,780.00	924	$ 101,640.00
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 5,093.75	1	$ 4,353.05	1	$ 5,615.43	1	$ 5,322.48
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 5,093.75	1	$ 4,353.05	1	$ 5,615.43	1	$ 5,322.48
				SUBTOTAL =	$ 161,706.50	SUBTOTAL =	$ 138,192.00	SUBTOTAL =	$ 178,267.50	SUBTOTAL =	$ 168,967.50
				CONTINGENCY (5%) =	$ 8,085.33	CONTINGENCY (5%) =	$ 6,909.60	CONTINGENCY (5%) =	$ 8,913.38	CONTINGENCY (5%) =	$ 8,448.38
				SUBTOTAL =	$ 169,791.83	SUBTOTAL =	$ 145,101.60	SUBTOTAL =	$ 187,180.88	SUBTOTAL =	$ 177,415.88
				CONSTRUCTION TOTAL =	**$ 179,979.33**	**CONSTRUCTION TOTAL =**	**$ 153,807.70**	**CONSTRUCTION TOTAL =**	**$ 198,411.73**	**CONSTRUCTION TOTAL =**	**$ 188,060.83**
				ENGINEERING =	$ 17,997.93	ENGINEERING =	$ 15,380.77	ENGINEERING =	$ 19,841.17	ENGINEERING =	$ 18,806.08
				ROADWAY TOTAL =	**$ 197,977.27**	**ROADWAY TOTAL =**	**$ 169,188.47**	**ROADWAY TOTAL =**	**$ 218,252.90**	**ROADWAY TOTAL =**	**$ 206,866.91**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$**	**1,446,585.13**
ROUTINE MAINTENANCE =	**$**	**230,000.00**
YEAR 3 TOTAL =	**$**	**1,676,585.13**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 4 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		FULL DEPTH		GRIND & OVERLAY	
				PCI= 6		PCI= 5		PCI= 6		PCI= 6		PCI= 6		PCI= 6	
				EXISTING RIBBON= NO		EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G	
				LENGTH = 857		LENGTH = 430		LENGTH = 1,724		LENGTH = 230		LENGTH = 975		LENGTH = 3,100	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 2,137		TOTAL AREA (SQ YD) = 1,073		TOTAL AREA (SQ YD) = 4,299		TOTAL AREA (SQ YD) = 574		TOTAL AREA (SQ YD) = 2,431		TOTAL AREA (SQ YD) = 7,730	
				BLACKHAWK (INDIAN CREEK TO SEQUOIA)		CHARLESTON CT (HAWTHORN GR TO S CDS)		GENTRY (COPPERFIELD TO BAGPIPE)		GOVERNORS WAY (GENTRY TO 230' E/GENTRY)		HARRINGTON CT (HAWTHORN GROVE TO W CDS)		HAWTHORN GROVE CI (HAWTHORN GR DR TO HAWTHORN GR DR)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	41	$ 1,127.50	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	122	$ 122.00	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	41	$ 1,127.50	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	2,431	$ 2,431.00	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	64	$ 1,120.00	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,924	$ 962.00	966	$ 483.00	3,870	$ 1,935.00	517	$ 258.50	2,188	$ 1,094.00	6,957	$ 3,478.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	90	$ 7,200.00	46	$ 3,680.00	181	$ 14,480.00	25	$ 2,000.00	0	$ -	325	$ 26,000.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	341	$ 25,575.00	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	180	$ 13,500.00	91	$ 6,825.00	362	$ 27,150.00	49	$ 3,675.00	273	$ 20,475.00	650	$ 48,750.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,137	$ 4,274.00	1,073	$ 2,146.00	4,299	$ 8,598.00	574	$ 1,148.00	0	$ -	7,730	$ 15,460.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	2,431	$ 9,724.00	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	43	$ 1,720.00	22	$ 880.00	86	$ 3,440.00	12	$ 480.00	0	$ -	155	$ 6,200.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	381	$ 41,910.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	8	$ 960.00	2	$ 240.00	0	$ -	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	18	$ 540.00	0	$ -	0	$ -	1,950	$ 58,500.00	124	$ 3,720.00
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 2,191.33	1	$ 458.45	1	$ 1,781.73	1	$ 245.75	1	$ 3,820.82	1	$ 3,263.67
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 2,191.33	1	$ 458.45	1	$ 1,781.73	1	$ 245.75	1	$ 3,820.82	1	$ 3,263.67
				SUBTOTAL =	$ 69,566.00	SUBTOTAL =	$ 14,554.00	SUBTOTAL =	$ 56,563.00	SUBTOTAL =	$ 7,801.50	SUBTOTAL =	$ 121,296.00	SUBTOTAL =	$ 103,608.50
				CONTINGENCY (5%) =	$ 3,478.30	CONTINGENCY (5%) =	$ 727.70	CONTINGENCY (5%) =	$ 2,828.15	CONTINGENCY (5%) =	$ 390.08	CONTINGENCY (5%) =	$ 6,064.80	CONTINGENCY (5%) =	$ 5,180.43
				SUBTOTAL =	$ 73,044.30	SUBTOTAL =	$ 15,281.70	SUBTOTAL =	$ 59,391.15	SUBTOTAL =	$ 8,191.58	SUBTOTAL =	$ 127,360.80	SUBTOTAL =	$ 108,788.93
				CONSTRUCTION TOTAL =	**$ 77,426.96**	**CONSTRUCTION TOTAL =**	**$ 16,198.60**	**CONSTRUCTION TOTAL =**	**$ 62,954.62**	**CONSTRUCTION TOTAL =**	**$ 8,683.07**	**CONSTRUCTION TOTAL =**	**$ 135,002.45**	**CONSTRUCTION TOTAL =**	**$ 115,316.26**
				ENGINEERING =	$ 7,742.70	ENGINEERING =	$ 1,619.86	ENGINEERING =	$ 6,295.46	ENGINEERING =	$ 868.31	ENGINEERING =	$ 13,500.24	ENGINEERING =	$ 11,531.63
				ROADWAY TOTAL =	**$ 85,169.65**	**ROADWAY TOTAL =**	**$ 17,818.46**	**ROADWAY TOTAL =**	**$ 69,250.08**	**ROADWAY TOTAL =**	**$ 9,551.38**	**ROADWAY TOTAL =**	**$ 148,502.69**	**ROADWAY TOTAL =**	**$ 126,847.89**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 4 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY					
				PCI= 5		PCI= 6		PCI= 6		PCI= 6		PCI= 6		PCI= 6					
				EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO		EXISTING RIBBON= NO					
				LENGTH = 2,300		LENGTH = 670		LENGTH = 495		LENGTH = 1,165		LENGTH = 1,550		LENGTH = 710					
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22					
				TOTAL AREA (SQ YD) = 5,735		TOTAL AREA (SQ YD) = 1,671		TOTAL AREA (SQ YD) = 1,235		TOTAL AREA (SQ YD) = 2,905		TOTAL AREA (SQ YD) = 3,865		TOTAL AREA (SQ YD) = 1,771					
				HAWTHORN GR DR (GILMER TO HAWTHORN GR CI)		KENSINGTON CT (HAWTHORN GR DR TO N CDS)		MILTON RD (WINDING BRANCH TO VILLAGE LIMIT)		MILTON RD (VILLAGE LIMIT TO VILLAGE LIMIT)		MILTON RD (VILLAGE LIMIT TO VILLAGE LIMIT)		MILTON RD (OLD MCHENRY TO WINDING BRANCH)					
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST				
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	5,162	$ 2,581.00	1,504	$ 752.00	1,112	$ 556.00	2,615	$ 1,307.50	3,479	$ 1,739.50	1,594	$ 797.00				
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	241	$ 19,280.00	71	$ 5,680.00	52	$ 4,160.00	123	$ 9,840.00	163	$ 13,040.00	75	$ 6,000.00				
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	482	$ 36,150.00	141	$ 10,575.00	104	$ 7,800.00	245	$ 18,375.00	325	$ 24,375.00	149	$ 11,175.00				
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	5,735	$ 11,470.00	1,671	$ 3,342.00	1,235	$ 2,470.00	2,905	$ 5,810.00	3,865	$ 7,730.00	1,771	$ 3,542.00				
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	115	$ 4,600.00	34	$ 1,360.00	25	$ 1,000.00	59	$ 2,360.00	78	$ 3,120.00	36	$ 1,440.00				
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	220	$ 24,200.00	518	$ 56,980.00	689	$ 75,790.00	316	$ 34,760.00				
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	92	$ 2,760.00	27	$ 810.00	0	$ -	0	$ -	0	$ -	0	$ -				
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	1	$ 2,500.00	1	$ 2,500.00	1	$ 2,500.00	1	$ 2,500.00				
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 2,420.49	1	$ 709.35	1	$ 1,344.61	1	$ 3,060.93	1	$ 4,041.28	1	$ 1,896.74				
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 2,420.49	1	$ 709.35	1	$ 1,344.61	1	$ 3,060.93	1	$ 4,041.28	1	$ 1,896.74				
				SUBTOTAL =	$ 76,841.00	SUBTOTAL =	$ 22,519.00	SUBTOTAL =	$ 42,686.00	SUBTOTAL =	$ 97,172.50	SUBTOTAL =	$ 128,294.50	SUBTOTAL =	$ 60,214.00				
				CONTINGENCY (5%) =	$ 3,842.05	CONTINGENCY (5%) =	$ 1,125.95	CONTINGENCY (5%) =	$ 2,134.30	CONTINGENCY (5%) =	$ 4,858.63	CONTINGENCY (5%) =	$ 6,414.73	CONTINGENCY (5%) =	$ 3,010.70				
				SUBTOTAL =	$ 80,683.05	SUBTOTAL =	$ 23,644.95	SUBTOTAL =	$ 44,820.30	SUBTOTAL =	$ 102,031.13	SUBTOTAL =	$ 134,709.23	SUBTOTAL =	$ 63,224.70				
				CONSTRUCTION TOTAL =	**$ 85,524.03**	**CONSTRUCTION TOTAL =**	**$ 25,063.65**	**CONSTRUCTION TOTAL =**	**$ 47,509.52**	**CONSTRUCTION TOTAL =**	**$ 108,152.99**	**CONSTRUCTION TOTAL =**	**$ 142,791.78**	**CONSTRUCTION TOTAL =**	**$ 67,018.18**				
				ENGINEERING =	$ 8,552.40	ENGINEERING =	$ 2,506.36	ENGINEERING =	$ 4,750.95	ENGINEERING =	$ 10,815.30	ENGINEERING =	$ 14,279.18	ENGINEERING =	$ 6,701.82				
				ROADWAY TOTAL =	**$ 94,076.44**	**ROADWAY TOTAL =**	**$ 27,570.01**	**ROADWAY TOTAL =**	**$ 52,260.47**	**ROADWAY TOTAL =**	**$ 118,968.29**	**ROADWAY TOTAL =**	**$ 157,070.96**	**ROADWAY TOTAL =**	**$ 73,720.00**				

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 4 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5		PCI= 5		PCI= 6		PCI= 5		PCI= 5	
				EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= NO		EXISTING RIBBON= YES		EXISTING RIBBON= NO	
				LENGTH = 776		LENGTH = 543		LENGTH = 945		LENGTH = 2,384		LENGTH = 675		LENGTH = 718	
				WIDTH = 26		WIDTH = 26		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 18	
				TOTAL AREA (SQ YD) = 2,287		TOTAL AREA (SQ YD) = 2,582		TOTAL AREA (SQ YD) = 2,773		TOTAL AREA (SQ YD) = 5,974		TOTAL AREA (SQ YD) = 2,384		TOTAL AREA (SQ YD) = 1,465	
				OLIVERS WAY (GOVERNORS TO LOCHANORA)		ROSE (OLIVERS TO E CDS)		SEQUOIA RD (BLACKHAWK TO E CDS)		SEQUOIA RD (GILMER TO E SIDE BLACKHAWK)		SHENANDOAH (SEQUOIA TO NORTH CDS)		BAGPIPE CT (LOCHANORA TO EAST CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	2,059	$ 1,029.50	2,324	$ 1,162.00	2,496	$ 1,248.00	5,377	$ 2,688.50	2,146	$ 1,073.00	1,319	$ 659.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	97	$ 7,760.00	109	$ 8,720.00	117	$ 9,360.00	251	$ 20,080.00	101	$ 8,080.00	62	$ 4,960.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	193	$ 14,475.00	217	$ 16,275.00	233	$ 17,475.00	502	$ 37,650.00	201	$ 15,075.00	124	$ 9,300.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,287	$ 4,574.00	2,582	$ 5,164.00	2,773	$ 5,546.00	5,974	$ 11,948.00	2,384	$ 4,768.00	1,465	$ 2,930.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	46	$ 1,840.00	52	$ 2,080.00	56	$ 2,240.00	120	$ 4,800.00	48	$ 1,920.00	30	$ 1,200.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	1,060	$ 116,600.00	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	5	$ 600.00	0	$ -	3	$ 360.00	4	$ 480.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	32	$ 960.00	22	$ 660.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 965.11	1	$ 1,072.92	1	$ 1,148.77	1	$ 6,103.64	1	$ 985.19	1	$ 615.18
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 965.11	1	$ 1,072.92	1	$ 1,148.77	1	$ 6,103.64	1	$ 985.19	1	$ 615.18
				SUBTOTAL =	$ 30,638.50	SUBTOTAL =	$ 34,061.00	SUBTOTAL =	$ 36,469.00	SUBTOTAL =	$ 193,766.50	SUBTOTAL =	$ 31,276.00	SUBTOTAL =	$ 19,529.50
				CONTINGENCY (5%) =	$ 1,531.93	CONTINGENCY (5%) =	$ 1,703.05	CONTINGENCY (5%) =	$ 1,823.45	CONTINGENCY (5%) =	$ 9,688.33	CONTINGENCY (5%) =	$ 1,563.80	CONTINGENCY (5%) =	$ 976.48
				SUBTOTAL =	$ 32,170.43	SUBTOTAL =	$ 35,764.05	SUBTOTAL =	$ 38,292.45	SUBTOTAL =	$ 203,454.83	SUBTOTAL =	$ 32,839.80	SUBTOTAL =	$ 20,505.98
				CONSTRUCTION TOTAL =	**$ 34,100.65**	**CONSTRUCTION TOTAL =**	**$ 37,909.89**	**CONSTRUCTION TOTAL =**	**$ 40,590.00**	**CONSTRUCTION TOTAL =**	**$ 215,662.11**	**CONSTRUCTION TOTAL =**	**$ 34,810.19**	**CONSTRUCTION TOTAL =**	**$ 21,736.33**
				ENGINEERING =	$ 3,410.07	ENGINEERING =	$ 3,790.99	ENGINEERING =	$ 4,059.00	ENGINEERING =	$ 21,566.21	ENGINEERING =	$ 3,481.02	ENGINEERING =	$ 2,173.63
				ROADWAY TOTAL =	**$ 37,510.72**	**ROADWAY TOTAL =**	**$ 41,700.88**	**ROADWAY TOTAL =**	**$ 44,649.00**	**ROADWAY TOTAL =**	**$ 237,228.33**	**ROADWAY TOTAL =**	**$ 38,291.21**	**ROADWAY TOTAL =**	**$ 23,909.97**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$**	**1,404,096.41**
ROUTINE MAINTENANCE =	**$**	**230,000.00**
YEAR 4 TOTAL =	**$**	**1,634,096.41**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 5 STREETS

				GRIND & OVERLAY		FULL DEPTH		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY					
				PCI=	5	PCI=	6	PCI=	5	PCI=	5	PCI=	5	PCI=	6				
				EXISTING RIBBON=	YES	EXISTING RIBBON=	NO	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	NO	EXISTING RIBBON=	YES				
				LENGTH =	580	LENGTH =	1,830	LENGTH =	1,055	LENGTH =	2,746	LENGTH =	1,345	LENGTH =	983				
				WIDTH =	22	WIDTH =	21	WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22				
				TOTAL AREA (SQ YD) =	1,610	TOTAL AREA (SQ YD) =	4,356	TOTAL AREA (SQ YD) =	2,631	TOTAL AREA (SQ YD) =	6,847	TOTAL AREA (SQ YD) =	3,354	TOTAL AREA (SQ YD) =	2,451				
				ACORN (BRUCE CI S TO ROBIN CREST)		ACORN DR (12 ACORN DR TO BRUCE CI S)		BRUCE CI (WAYNE TO S CDS)		BRUCE CI N (WAYNE TO ACORN)		BRUCE CI S (BRUCE CI N TO ACORN)		CARLISLE (GLEN TO N. HIGHVIEW CI)					
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST				
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	73	$ 2,007.50	0	$ -	0	$ -	0	$ -	0	$ -				
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	218	$ 218.00	0	$ -	0	$ -	0	$ -	0	$ -				
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	73	$ 2,007.50	0	$ -	0	$ -	0	$ -	0	$ -				
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	4,356	$ 4,356.00	0	$ -	0	$ -	0	$ -	0	$ -				
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	115	$ 2,012.50	0	$ -	0	$ -	0	$ -	0	$ -				
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,449	$ 724.50	3,921	$ 1,960.50	2,368	$ 1,184.00	6,163	$ 3,081.50	3,019	$ 1,509.50	2,206	$ 1,103.00				
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	68	$ 5,440.00	0	$ -	111	$ 8,880.00	288	$ 23,040.00	141	$ 11,280.00	103	$ 8,240.00				
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	610	$ 45,750.00	0	$ -	0	$ -	0	$ -	0	$ -				
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	136	$ 10,200.00	488	$ 36,600.00	222	$ 16,650.00	576	$ 43,200.00	282	$ 21,150.00	206	$ 15,450.00				
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,610	$ 3,220.00	0	$ -	2,631	$ 5,262.00	6,847	$ 13,694.00	3,354	$ 6,708.00	2,451	$ 4,902.00				
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	4,356	$ 17,424.00	0	$ -	0	$ -	0	$ -	0	$ -				
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	33	$ 1,320.00	0	$ -	53	$ 2,120.00	137	$ 5,480.00	68	$ 2,720.00	50	$ 2,000.00				
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	814	$ 89,540.00	0	$ -	0	$ -	598	$ 65,780.00	0	$ -				
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	3	$ 360.00	0	$ -	5	$ 600.00	13	$ 1,560.00	0	$ -	5	$ 600.00				
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 669.83	1	$ 6,359.09	1	$ 1,092.92	1	$ 2,836.75	1	$ 3,438.15	1	$ 1,017.29				
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 669.83	1	$ 6,359.09	1	$ 1,092.92	1	$ 2,836.75	1	$ 3,438.15	1	$ 1,017.29				
				SUBTOTAL =	$ 21,264.50	SUBTOTAL =	$ 201,876.00	SUBTOTAL =	$ 34,696.00	SUBTOTAL =	$ 90,055.50	SUBTOTAL =	$ 109,147.50	SUBTOTAL =	$ 32,295.00				
				CONTINGENCY (5%) =	$ 1,063.23	CONTINGENCY (5%) =	$ 10,093.80	CONTINGENCY (5%) =	$ 1,734.80	CONTINGENCY (5%) =	$ 4,502.78	CONTINGENCY (5%) =	$ 5,457.38	CONTINGENCY (5%) =	$ 1,614.75				
				SUBTOTAL =	$ 22,327.73	SUBTOTAL =	$ 211,969.80	SUBTOTAL =	$ 36,430.80	SUBTOTAL =	$ 94,558.28	SUBTOTAL =	$ 114,604.88	SUBTOTAL =	$ 33,909.75				
				CONSTRUCTION TOTAL =	**$ 23,667.39**	**CONSTRUCTION TOTAL =**	**$ 224,687.99**	**CONSTRUCTION TOTAL =**	**$ 38,616.65**	**CONSTRUCTION TOTAL =**	**$ 100,231.77**	**CONSTRUCTION TOTAL =**	**$ 121,481.17**	**CONSTRUCTION TOTAL =**	**$ 35,944.34**				
				ENGINEERING =	$ 2,366.74	ENGINEERING =	$ 22,468.80	ENGINEERING =	$ 3,861.66	ENGINEERING =	$ 10,023.18	ENGINEERING =	$ 12,148.12	ENGINEERING =	$ 3,594.43				
				ROADWAY TOTAL =	**$ 26,034.13**	**ROADWAY TOTAL =**	**$ 247,156.79**	**ROADWAY TOTAL =**	**$ 42,478.31**	**ROADWAY TOTAL =**	**$ 110,254.95**	**ROADWAY TOTAL =**	**$ 133,629.28**	**ROADWAY TOTAL =**	**$ 39,538.77**				

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 5 STREETS

				FULL DEPTH		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 6		PCI= 5		PCI= 6		PCI= 5		PCI= 5	
				EXISTING RIBBON= NO		EXISTING RIBBON= YES		EXISTING RIBBON= NO		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 450		LENGTH = 1,777		LENGTH = 1,750		LENGTH = 3,270		LENGTH = 370		LENGTH = 1,340	
				WIDTH = 22		WIDTH = 22		WIDTH = 21		WIDTH = 21.5		WIDTH = 22		WIDTH = 21	
				TOTAL AREA (SQ YD) = 1,850		TOTAL AREA (SQ YD) = 5,901		TOTAL AREA (SQ YD) = 4,990		TOTAL AREA (SQ YD) = 7,968		TOTAL AREA (SQ YD) = 1,383		TOTAL AREA (SQ YD) = 3,190	
				EQUESTRIAN WAY (450' S/MOOREGATE TO S CDS)		HIGHVIEW CI (CARLISLE TO CARLISLE)		MOOREGATE TR (330' W/EQUESTRIAN TO W CDS)		PHEASANT RUN (THORNFIELD TO THORNFIELD)		ROBIN CREST (EAST CDS TO ACORN DR)		ROBIN CREST (ACORN TO BRUCE CI S)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	31	$ 852.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	93	$ 93.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	31	$ 852.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	1,850	$ 1,850.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	49	$ 857.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,665	$ 832.50	5,311	$ 2,655.50	4,491	$ 2,245.50	7,172	$ 3,586.00	1,245	$ 622.50	2,871	$ 1,435.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	0	$ -	248	$ 19,840.00	210	$ 16,800.00	335	$ 26,800.00	59	$ 4,720.00	134	$ 10,720.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	259	$ 19,425.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	208	$ 15,600.00	496	$ 37,200.00	420	$ 31,500.00	670	$ 50,250.00	117	$ 8,775.00	268	$ 20,100.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	0	$ -	5,901	$ 11,802.00	4,990	$ 9,980.00	7,968	$ 15,936.00	1,383	$ 2,766.00	3,190	$ 6,380.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	1,850	$ 7,400.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	0	$ -	119	$ 4,760.00	100	$ 4,000.00	160	$ 6,400.00	28	$ 1,120.00	64	$ 2,560.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	200	$ 22,000.00	0	$ -	778	$ 85,580.00	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	8	$ 960.00	0	$ -	15	$ 1,800.00	2	$ 240.00	6	$ 720.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 2,197.53	1	$ 2,432.35	1	$ 4,728.32	1	$ 3,300.32	1	$ 574.67	1	$ 1,320.34
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 2,197.53	1	$ 2,432.35	1	$ 4,728.32	1	$ 3,300.32	1	$ 574.67	1	$ 1,320.34
				SUBTOTAL =	$ 69,763.00	SUBTOTAL =	$ 77,217.50	SUBTOTAL =	$ 150,105.50	SUBTOTAL =	$ 104,772.00	SUBTOTAL =	$ 18,243.50	SUBTOTAL =	$ 41,915.50
				CONTINGENCY (5%) =	$ 3,488.15	CONTINGENCY (5%) =	$ 3,860.88	CONTINGENCY (5%) =	$ 7,505.28	CONTINGENCY (5%) =	$ 5,238.60	CONTINGENCY (5%) =	$ 912.18	CONTINGENCY (5%) =	$ 2,095.78
				SUBTOTAL =	$ 73,251.15	SUBTOTAL =	$ 81,078.38	SUBTOTAL =	$ 157,610.78	SUBTOTAL =	$ 110,010.60	SUBTOTAL =	$ 19,155.68	SUBTOTAL =	$ 44,011.28
				CONSTRUCTION TOTAL =	**$ 77,646.22**	**CONSTRUCTION TOTAL =**	**$ 85,943.08**	**CONSTRUCTION TOTAL =**	**$ 167,067.42**	**CONSTRUCTION TOTAL =**	**$ 116,611.24**	**CONSTRUCTION TOTAL =**	**$ 20,305.02**	**CONSTRUCTION TOTAL =**	**$ 46,651.95**
				ENGINEERING =	$ 7,764.62	ENGINEERING =	$ 8,594.31	ENGINEERING =	$ 16,706.74	ENGINEERING =	$ 11,661.12	ENGINEERING =	$ 2,030.50	ENGINEERING =	$ 4,665.20
				ROADWAY TOTAL =	**$ 85,410.84**	**ROADWAY TOTAL =**	**$ 94,537.39**	**ROADWAY TOTAL =**	**$ 183,774.16**	**ROADWAY TOTAL =**	**$ 128,272.36**	**ROADWAY TOTAL =**	**$ 22,335.52**	**ROADWAY TOTAL =**	**$ 51,317.15**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 5 STREETS

				FULL DEPTH		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5		PCI= 5		PCI= 5	
				EXISTING RIBBON= NO		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 424		LENGTH = 725		LENGTH = 1,093		LENGTH = 414	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 1,058		TOTAL AREA (SQ YD) = 2,754		TOTAL AREA (SQ YD) = 2,726		TOTAL AREA (SQ YD) = 1,678	
				THORNFIELD (MOOREGATE TO SOUTH CDS)		THORNFIELD (PHEASANT RUN TO NORTH CDS)		THORNFIELD (PHEASANT RUN TO MOOREGATE)		WAYNE LN (BRUCE CI TO N CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	18	$ 495.00	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	53	$ 53.00	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	18	$ 495.00	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	1,058	$ 1,058.00	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	28	$ 490.00	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	953	$ 476.50	2,479	$ 1,239.50	2,454	$ 1,227.00	1,511	$ 755.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	0	$ -	116	$ 9,280.00	115	$ 9,200.00	71	$ 5,680.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	149	$ 11,175.00	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	119	$ 8,925.00	232	$ 17,400.00	229	$ 17,175.00	141	$ 10,575.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	0	$ -	2,754	$ 5,508.00	2,726	$ 5,452.00	1,678	$ 3,356.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	1,058	$ 4,232.00	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	0	$ -	56	$ 2,240.00	55	$ 2,200.00	34	$ 1,360.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	189	$ 20,790.00	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	4	$ 480.00	5	$ 600.00	2	$ 240.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,517.97	1	$ 1,138.65	1	$ 1,129.40	1	$ 691.94
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,517.97	1	$ 1,138.65	1	$ 1,129.40	1	$ 691.94
				SUBTOTAL =	$ 48,189.50	SUBTOTAL =	$ 36,147.50	SUBTOTAL =	$ 35,854.00	SUBTOTAL =	$ 21,966.50
				CONTINGENCY (5%) =	$ 2,409.48	CONTINGENCY (5%) =	$ 1,807.38	CONTINGENCY (5%) =	$ 1,792.70	CONTINGENCY (5%) =	$ 1,098.33
				SUBTOTAL =	$ 50,598.98	SUBTOTAL =	$ 37,954.88	SUBTOTAL =	$ 37,646.70	SUBTOTAL =	$ 23,064.83
				CONSTRUCTION TOTAL =	**$ 53,634.91**	**CONSTRUCTION TOTAL =**	**$ 40,232.17**	**CONSTRUCTION TOTAL =**	**$ 39,905.50**	**CONSTRUCTION TOTAL =**	**$ 24,448.71**
				ENGINEERING =	$ 5,363.49	ENGINEERING =	$ 4,023.22	ENGINEERING =	$ 3,990.55	ENGINEERING =	$ 2,444.87
				ROADWAY TOTAL =	**$ 58,998.40**	**ROADWAY TOTAL =**	**$ 44,255.38**	**ROADWAY TOTAL =**	**$ 43,896.05**	**ROADWAY TOTAL =**	**$ 26,893.59**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$ 1,338,783.07**
ROUTINE MAINTENANCE =	**$ 230,000.00**
YEAR 5 TOTAL =	**$ 1,568,783.07**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 6 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 6		PCI= 6		PCI= 6		PCI= 6		PCI= 6	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 220		LENGTH = 1,275		LENGTH = 262		LENGTH = 760		LENGTH = 5,011		LENGTH = 1,358	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22 - 36		WIDTH = 22	
				TOTAL AREA (SQ YD) = 1,230		TOTAL AREA (SQ YD) = 3,179		TOTAL AREA (SQ YD) = 1,435		TOTAL AREA (SQ YD) = 2,661		TOTAL AREA (SQ YD) = 13,120		TOTAL AREA (SQ YD) = 3,386	
				BLUE BIRD (FALCON TO NORTH CDS)		CARDINAL (SCHWERMAN TO 250' S/FALCON)		CHANCELLOR (COPPERFIELD TO S. CDS)		CHANTILLY (SOUTH CDS TO WEDGEWOOD)		COPPERFIELD (OLD MCHENRY TO CHANTILLY)		CROYDEN (STONEHAVEN TO GLEN)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,107	$ 553.50	2,862	$ 1,431.00	1,292	$ 646.00	2,395	$ 1,197.50	11,808	$ 5,904.00	3,048	$ 1,524.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	52	$ 4,160.00	134	$ 10,720.00	61	$ 4,880.00	112	$ 8,960.00	552	$ 44,160.00	143	$ 11,440.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	104	$ 7,800.00	268	$ 20,100.00	121	$ 9,075.00	224	$ 16,800.00	1,103	$ 82,725.00	285	$ 21,375.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,230	$ 2,460.00	3,179	$ 6,358.00	1,435	$ 2,870.00	2,661	$ 5,322.00	13,120	$ 26,240.00	3,386	$ 6,772.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	25	$ 1,000.00	64	$ 2,560.00	29	$ 1,160.00	54	$ 2,160.00	263	$ 10,520.00	68	$ 2,720.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	1	$ 120.00	6	$ 720.00	2	$ 240.00	4	$ 480.00	23	$ 2,760.00	13	$ 1,560.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 506.95	1	$ 1,319.50	1	$ 594.44	1	$ 1,099.96	1	$ 5,427.73	1	$ 1,429.82
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 506.95	1	$ 1,319.50	1	$ 594.44	1	$ 1,099.96	1	$ 5,427.73	1	$ 1,429.82
				SUBTOTAL =	$ 16,093.50	SUBTOTAL =	$ 41,889.00	SUBTOTAL =	$ 18,871.00	SUBTOTAL =	$ 34,919.50	SUBTOTAL =	$ 172,309.00	SUBTOTAL =	$ 45,391.00
				CONTINGENCY (5%) =	$ 804.68	CONTINGENCY (5%) =	$ 2,094.45	CONTINGENCY (5%) =	$ 943.55	CONTINGENCY (5%) =	$ 1,745.98	CONTINGENCY (5%) =	$ 8,615.45	CONTINGENCY (5%) =	$ 2,269.55
				SUBTOTAL =	$ 16,898.18	SUBTOTAL =	$ 43,983.45	SUBTOTAL =	$ 19,814.55	SUBTOTAL =	$ 36,665.48	SUBTOTAL =	$ 180,924.45	SUBTOTAL =	$ 47,660.55
				CONSTRUCTION TOTAL =	**$ 17,912.07**	**CONSTRUCTION TOTAL =**	**$ 46,622.46**	**CONSTRUCTION TOTAL =**	**$ 21,003.42**	**CONSTRUCTION TOTAL =**	**$ 38,865.40**	**CONSTRUCTION TOTAL =**	**$ 191,779.92**	**CONSTRUCTION TOTAL =**	**$ 50,520.18**
				ENGINEERING =	$ 1,791.21	ENGINEERING =	$ 4,662.25	ENGINEERING =	$ 2,100.34	ENGINEERING =	$ 3,886.54	ENGINEERING =	$ 19,177.99	ENGINEERING =	$ 5,052.02
				ROADWAY TOTAL =	**$ 19,703.27**	**ROADWAY TOTAL =**	**$ 51,284.70**	**ROADWAY TOTAL =**	**$ 23,103.77**	**ROADWAY TOTAL =**	**$ 42,751.94**	**ROADWAY TOTAL =**	**$ 210,957.91**	**ROADWAY TOTAL =**	**$ 55,572.20**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 6 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		FULL DEPTH		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY							
				PCI=	3	PCI=	3	PCI=	5	PCI=	5	PCI=	6	PCI=	5						
				EXISTING RIBBON=	NO	EXISTING RIBBON=	C+G	EXISTING RIBBON=	NO	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES						
				LENGTH =	510	LENGTH =	1,055	LENGTH =	485	LENGTH =	2,490	LENGTH =	941	LENGTH =	400						
				WIDTH =	22	WIDTH =	25	WIDTH =	23	WIDTH =	22	WIDTH =	22	WIDTH =	22						
				TOTAL AREA (SQ YD) =	1,272	TOTAL AREA (SQ YD) =	2,990	TOTAL AREA (SQ YD) =	1,265	TOTAL AREA (SQ YD) =	6,209	TOTAL AREA (SQ YD) =	2,347	TOTAL AREA (SQ YD) =	2,045						
				ECHO LAKE RD (MILLER TO VILLAGE LIMIT)		ECHO LAKE RD (OLD MCHENRY TO STONE CREEK)		ECHO LAKE RD (STONE CREEK TO MILLER)		FALCON (PEREGRINE TO MEADOWLARK)		FALKIRK (DARLINGTON TO CARLISLE)		HARVEST GLEN (STONE CREEK TO S. CDS)							
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST						
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	22	$ 605.00	0	$ -	0	$ -	0	$ -						
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	64	$ 64.00	0	$ -	0	$ -	0	$ -						
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	22	$ 605.00	0	$ -	0	$ -	0	$ -						
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -						
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	1,265	$ 1,265.00	0	$ -	0	$ -	0	$ -						
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	34	$ 595.00	0	$ -	0	$ -	0	$ -						
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,145	$ 572.50	2,691	$ 1,345.50	1,139	$ 569.50	5,589	$ 2,794.50	2,113	$ 1,056.50	1,841	$ 920.50						
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	54	$ 4,320.00	126	$ 10,080.00	0	$ -	261	$ 20,880.00	99	$ 7,920.00	86	$ 6,880.00						
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	178	$ 13,350.00	0	$ -	0	$ -	0	$ -						
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	107	$ 8,025.00	252	$ 18,900.00	142	$ 10,650.00	522	$ 39,150.00	198	$ 14,850.00	172	$ 12,900.00						
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -						
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,272	$ 2,544.00	2,990	$ 5,980.00	0	$ -	6,209	$ 12,418.00	2,347	$ 4,694.00	2,045	$ 4,090.00						
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	1,265	$ 5,060.00	0	$ -	0	$ -	0	$ -						
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	26	$ 1,040.00	60	$ 2,400.00	0	$ -	125	$ 5,000.00	47	$ 1,880.00	41	$ 1,640.00						
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	227	$ 24,970.00	0	$ -	216	$ 23,760.00	0	$ -	0	$ -	0	$ -						
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -						
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	12	$ 1,440.00	9	$ 1,080.00	2	$ 240.00						
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	22	$ 660.00	0	$ -	0	$ -	0	$ -	0	$ -						
*NA	STRIPING	L. SUM	$ 2,500.00	1	$ 2,500.00	1	$ 2,500.00	1	$ 2,500.00	0	$ -	0	$ -	0	$ -						
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,385.10	1	$ 1,318.76	1	$ 1,859.24	1	$ 2,573.00	1	$ 991.64	1	$ 840.12						
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,385.10	1	$ 1,318.76	1	$ 1,859.24	1	$ 2,573.00	1	$ 991.64	1	$ 840.12						
				SUBTOTAL =	$ 43,971.50	SUBTOTAL =	$ 41,865.50	SUBTOTAL =	$ 59,023.50	SUBTOTAL =	$ 81,682.50	SUBTOTAL =	$ 31,480.50	SUBTOTAL =	$ 26,670.50						
				CONTINGENCY (5%) =	$ 2,198.58	CONTINGENCY (5%) =	$ 2,093.28	CONTINGENCY (5%) =	$ 2,951.18	CONTINGENCY (5%) =	$ 4,084.13	CONTINGENCY (5%) =	$ 1,574.03	CONTINGENCY (5%) =	$ 1,333.53						
				SUBTOTAL =	$ 46,170.08	SUBTOTAL =	$ 43,958.78	SUBTOTAL =	$ 61,974.68	SUBTOTAL =	$ 85,766.63	SUBTOTAL =	$ 33,054.53	SUBTOTAL =	$ 28,004.03						
				CONSTRUCTION TOTAL =	**$ 48,940.28**	**CONSTRUCTION TOTAL =**	**$ 46,596.30**	**CONSTRUCTION TOTAL =**	**$ 65,693.16**	**CONSTRUCTION TOTAL =**	**$ 90,912.62**	**CONSTRUCTION TOTAL =**	**$ 35,037.80**	**CONSTRUCTION TOTAL =**	**$ 29,684.27**						
				ENGINEERING =	$ 4,894.03	ENGINEERING =	$ 4,659.63	ENGINEERING =	$ 6,569.32	ENGINEERING =	$ 9,091.26	ENGINEERING =	$ 3,503.78	ENGINEERING =	$ 2,968.43						
				ROADWAY TOTAL =	**$ 53,834.31**	**ROADWAY TOTAL =**	**$ 51,255.93**	**ROADWAY TOTAL =**	**$ 72,262.47**	**ROADWAY TOTAL =**	**$ 100,003.88**	**ROADWAY TOTAL =**	**$ 38,541.58**	**ROADWAY TOTAL =**	**$ 32,652.69**						

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 6 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5		PCI= 6		PCI= 6		PCI= 4		PCI= 5	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 250		LENGTH = 576		LENGTH = 295		LENGTH = 1,950		LENGTH = 708		LENGTH = 1,395	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 2,135		TOTAL AREA (SQ YD) = 1,437		TOTAL AREA (SQ YD) = 736		TOTAL AREA (SQ YD) = 6,331		TOTAL AREA (SQ YD) = 2,359		TOTAL AREA (SQ YD) = 3,479	
				MEADOW LN N (N CDS TO STONE CREEK)		MEADOW LN S (S CDS TO STONE CREEK)		MULBERRY (COPPERFIELD TO 315' E/COPPERFIELD)		PEREGRINE (SOUTH CDS TO WEST CDS)		PRINCETON (CAMBRIDGE TO NORTH CDS)		STONE CREEK (ECHO LAKE TO E. 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
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,922	$ 961.00	1,294	$ 647.00	663	$ 331.50	5,698	$ 2,849.00	2,124	$ 1,062.00	3,132	$ 1,566.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	90	$ 7,200.00	61	$ 4,880.00	31	$ 2,480.00	266	$ 21,280.00	100	$ 8,000.00	147	$ 11,760.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	180	$ 13,500.00	121	$ 9,075.00	62	$ 4,650.00	532	$ 39,900.00	199	$ 14,925.00	293	$ 21,975.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,135	$ 4,270.00	1,437	$ 2,874.00	736	$ 1,472.00	6,331	$ 12,662.00	2,359	$ 4,718.00	3,479	$ 6,958.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	43	$ 1,720.00	29	$ 1,160.00	15	$ 600.00	127	$ 5,080.00	48	$ 1,920.00	70	$ 2,800.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	2	$ 240.00	3	$ 360.00	2	$ 240.00	9	$ 1,080.00	4	$ 480.00	7	$ 840.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 878.57	1	$ 598.37	1	$ 307.87	1	$ 2,609.81	1	$ 979.81	1	$ 1,445.82
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 878.57	1	$ 598.37	1	$ 307.87	1	$ 2,609.81	1	$ 979.81	1	$ 1,445.82
				SUBTOTAL =	$ 27,891.00	SUBTOTAL =	$ 18,996.00	SUBTOTAL =	$ 9,773.50	SUBTOTAL =	$ 82,851.00	SUBTOTAL =	$ 31,105.00	SUBTOTAL =	$ 45,899.00
				CONTINGENCY (5%) =	$ 1,394.55	CONTINGENCY (5%) =	$ 949.80	CONTINGENCY (5%) =	$ 488.68	CONTINGENCY (5%) =	$ 4,142.55	CONTINGENCY (5%) =	$ 1,555.25	CONTINGENCY (5%) =	$ 2,294.95
				SUBTOTAL =	$ 29,285.55	SUBTOTAL =	$ 19,945.80	SUBTOTAL =	$ 10,262.18	SUBTOTAL =	$ 86,993.55	SUBTOTAL =	$ 32,660.25	SUBTOTAL =	$ 48,193.95
				CONSTRUCTION TOTAL =	**$ 31,042.68**	**CONSTRUCTION TOTAL =**	**$ 21,142.55**	**CONSTRUCTION TOTAL =**	**$ 10,877.91**	**CONSTRUCTION TOTAL =**	**$ 92,213.16**	**CONSTRUCTION TOTAL =**	**$ 34,619.87**	**CONSTRUCTION TOTAL =**	**$ 51,085.59**
				ENGINEERING =	$ 3,104.27	ENGINEERING =	$ 2,114.25	ENGINEERING =	$ 1,087.79	ENGINEERING =	$ 9,221.32	ENGINEERING =	$ 3,461.99	ENGINEERING =	$ 5,108.56
				ROADWAY TOTAL =	**$ 34,146.95**	**ROADWAY TOTAL =**	**$ 23,256.80**	**ROADWAY TOTAL =**	**$ 11,965.70**	**ROADWAY TOTAL =**	**$ 101,434.48**	**ROADWAY TOTAL =**	**$ 38,081.85**	**ROADWAY TOTAL =**	**$ 56,194.15**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

				YEAR 6 STREETS							
				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 6		PCI= 4		PCI= 5		PCI= 6	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 948		LENGTH = 2,165		LENGTH = 1,500		LENGTH = 1,458	
				WIDTH = 22		WIDTH = 21		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 2,364		TOTAL AREA (SQ YD) = 5,153		TOTAL AREA (SQ YD) = 4,436		TOTAL AREA (SQ YD) = 3,636	
				STONE HAVEN (CARLISLE TO DARLINGTON)		TRENT (DARLINGTON TO DARLINGTON)		UNIVERSITY (CARLISLE TO CARLISLE)		WEDGEWOOD (COPPERFIELD TO COPPERFIELD)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	2,128	$ 1,064.00	4,638	$ 2,319.00	3,993	$ 1,996.50	3,273	$ 1,636.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	100	$ 8,000.00	217	$ 17,360.00	187	$ 14,960.00	153	$ 12,240.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	199	$ 14,925.00	433	$ 32,475.00	373	$ 27,975.00	306	$ 22,950.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,364	$ 4,728.00	5,153	$ 10,306.00	4,436	$ 8,872.00	3,636	$ 7,272.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	48	$ 1,920.00	104	$ 4,160.00	89	$ 3,560.00	73	$ 2,920.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	5	$ 600.00	10	$ 1,200.00	7	$ 840.00	7	$ 840.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 983.97	1	$ 2,136.33	1	$ 1,833.41	1	$ 1,507.54
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 983.97	1	$ 2,136.33	1	$ 1,833.41	1	$ 1,507.54
				SUBTOTAL =	$ 31,237.00	SUBTOTAL =	$ 67,820.00	SUBTOTAL =	$ 58,203.50	SUBTOTAL =	$ 47,858.50
				CONTINGENCY (5%) =	$ 1,561.85	CONTINGENCY (5%) =	$ 3,391.00	CONTINGENCY (5%) =	$ 2,910.18	CONTINGENCY (5%) =	$ 2,392.93
				SUBTOTAL =	$ 32,798.85	SUBTOTAL =	$ 71,211.00	SUBTOTAL =	$ 61,113.68	SUBTOTAL =	$ 50,251.43
				CONSTRUCTION TOTAL =	**$ 34,766.78**	**CONSTRUCTION TOTAL =**	**$ 75,483.66**	**CONSTRUCTION TOTAL =**	**$ 64,780.50**	**CONSTRUCTION TOTAL =**	**$ 53,266.51**
				ENGINEERING =	$ 3,476.68	ENGINEERING =	$ 7,548.37	ENGINEERING =	$ 6,478.05	ENGINEERING =	$ 5,326.65
				ROADWAY TOTAL =	**$ 38,243.46**	**ROADWAY TOTAL =**	**$ 83,032.03**	**ROADWAY TOTAL =**	**$ 71,258.55**	**ROADWAY TOTAL =**	**$ 58,593.16**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$ 1,268,131.78**
ROUTINE MAINTENANCE =	**$ 230,000.00**
YEAR 6 TOTAL =	**$ 1,498,131.78**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 7 STREETS

				FULL DEPTH		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY					
				PCI=	6	PCI=	6	PCI=	6	PCI=	6	PCI=	5	PCI=	5				
				EXISTING RIBBON=	LOT, C+G	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES				
				LENGTH =		LENGTH =	185	LENGTH =	199	LENGTH =	120	LENGTH =	1,335	LENGTH =	324				
				WIDTH =		WIDTH =	22	WIDTH =	22	WIDTH =	22 - 32	WIDTH =	22	WIDTH =	22				
				TOTAL AREA (SQ YD) =	8,906	TOTAL AREA (SQ YD) =	639	TOTAL AREA (SQ YD) =	1,217	TOTAL AREA (SQ YD) =	1,372	TOTAL AREA (SQ YD) =	3,637	TOTAL AREA (SQ YD) =	1,636				
				AQUATIC CENTER		BLUE JAY (MEADOWLARK TO WEST END)		BYRON CT (KATHY TO SOUTH CDS)		COOPER (KATHY TO SOUTH CDS)		DAVID (NORTH END TO SOUTH END)		GOLDFINCH (MEADOWLARK TO EAST CDS)					
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST				
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	149	$ 4,097.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	446	$ 446.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	149	$ 4,097.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	8,906	$ 8,906.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	234	$ 4,095.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	8,016	$ 4,008.00	576	$ 288.00	1,096	$ 548.00	1,235	$ 617.50	3,274	$ 1,637.00	1,473	$ 736.50				
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	0	$ -	27	$ 2,160.00	52	$ 4,160.00	58	$ 4,640.00	153	$ 12,240.00	69	$ 5,520.00				
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	1,247	$ 93,525.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	998	$ 74,850.00	54	$ 4,050.00	103	$ 7,725.00	116	$ 8,700.00	306	$ 22,950.00	138	$ 10,350.00				
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	0	$ -	639	$ 1,278.00	1,217	$ 2,434.00	1,372	$ 2,744.00	3,637	$ 7,274.00	1,636	$ 3,272.00				
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	8,906	$ 35,624.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	0	$ -	13	$ 520.00	25	$ 1,000.00	28	$ 1,120.00	73	$ 2,920.00	33	$ 1,320.00				
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	1	$ 120.00	1	$ 120.00	1	$ 120.00	6	$ 720.00	2	$ 240.00				
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	40	$ 1,200.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
*NA	STRIPING	L. SUM	$ 2,500.00	1	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -				
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 7,350.49	1	$ 265.10	1	$ 503.59	1	$ 565.16	1	$ 1,503.84	1	$ 675.31				
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 7,350.49	1	$ 265.10	1	$ 503.59	1	$ 565.16	1	$ 1,503.84	1	$ 675.31				
				SUBTOTAL =	$ 233,349.00	SUBTOTAL =	$ 8,416.00	SUBTOTAL =	$ 15,987.00	SUBTOTAL =	$ 17,941.50	SUBTOTAL =	$ 47,741.00	SUBTOTAL =	$ 21,438.50				
				CONTINGENCY (5%) =	$ 11,667.45	CONTINGENCY (5%) =	$ 420.80	CONTINGENCY (5%) =	$ 799.35	CONTINGENCY (5%) =	$ 897.08	CONTINGENCY (5%) =	$ 2,387.05	CONTINGENCY (5%) =	$ 1,071.93				
				SUBTOTAL =	$ 245,016.45	SUBTOTAL =	$ 8,836.80	SUBTOTAL =	$ 16,786.35	SUBTOTAL =	$ 18,838.58	SUBTOTAL =	$ 50,128.05	SUBTOTAL =	$ 22,510.43				
				CONSTRUCTION TOTAL =	**$ 259,717.44**	**CONSTRUCTION TOTAL =**	**$ 9,367.01**	**CONSTRUCTION TOTAL =**	**$ 17,793.53**	**CONSTRUCTION TOTAL =**	**$ 19,968.89**	**CONSTRUCTION TOTAL =**	**$ 53,135.73**	**CONSTRUCTION TOTAL =**	**$ 23,861.05**				
				ENGINEERING =	$ 25,971.74	ENGINEERING =	$ 936.70	ENGINEERING =	$ 1,779.35	ENGINEERING =	$ 1,996.89	ENGINEERING =	$ 5,313.57	ENGINEERING =	$ 2,386.11				
				ROADWAY TOTAL =	**$ 285,689.18**	**ROADWAY TOTAL =**	**$ 10,303.71**	**ROADWAY TOTAL =**	**$ 19,572.88**	**ROADWAY TOTAL =**	**$ 21,965.78**	**ROADWAY TOTAL =**	**$ 58,449.31**	**ROADWAY TOTAL =**	**$ 26,247.16**				

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 7 STREETS

				FULL DEPTH		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI=	5	PCI=	5	PCI=	6	PCI=	5	PCI=	5	PCI=	5	PCI=	5
				EXISTING RIBBON=	LOT, C+G	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES
				LENGTH =		LENGTH =	275	LENGTH =	2,470	LENGTH =	2,426	LENGTH =	274	LENGTH =	987	LENGTH =	987
				WIDTH =		WIDTH =	22.5	WIDTH =	22.5	WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22
				TOTAL AREA (SQ YD) =	13,816	TOTAL AREA (SQ YD) =	786	TOTAL AREA (SQ YD) =	7,339	TOTAL AREA (SQ YD) =	6,049	TOTAL AREA (SQ YD) =	1,411	TOTAL AREA (SQ YD) =	3,214	TOTAL AREA (SQ YD) =	3,214
				HERITAGE OAKS PARK		HOLMES (KATHY TO FAIRFIELD)		KATHY (EAST VILLAGE LIMIT TO WEST CDS)		MEADOWLARK (SOUTH END TO SCHWERMAN)		ORIOLE (MEADOWLARK TO WEST CDS)		SANDPIPER (WEST END TO EAST CDS)		SANDPIPER (WEST END TO EAST CDS)	
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
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	231	$ 6,352.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	691	$ 691.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	231	$ 6,352.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	13,816	$ 13,816.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	363	$ 6,352.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	12,435	$ 6,217.50	708	$ 354.00	6,606	$ 3,303.00	5,445	$ 2,722.50	1,270	$ 635.00	2,893	$ 1,446.50	2,893	$ 1,446.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	0	$ -	34	$ 2,720.00	309	$ 24,720.00	255	$ 20,400.00	60	$ 4,800.00	135	$ 10,800.00	135	$ 10,800.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	1,935	$ 145,125.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	1,548	$ 116,100.00	67	$ 5,025.00	617	$ 46,275.00	509	$ 38,175.00	119	$ 8,925.00	270	$ 20,250.00	270	$ 20,250.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	0	$ -	786	$ 1,572.00	7,339	$ 14,678.00	6,049	$ 12,098.00	1,411	$ 2,822.00	3,214	$ 6,428.00	3,214	$ 6,428.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	13,816	$ 55,264.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	0	$ -	16	$ 640.00	147	$ 5,880.00	121	$ 4,840.00	29	$ 1,160.00	65	$ 2,600.00	65	$ 2,600.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	2	$ 240.00	11	$ 1,320.00	11	$ 1,320.00	2	$ 240.00	5	$ 600.00	5	$ 600.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	156	$ 4,680.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	1	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 11,448.71	1	$ 332.36	1	$ 3,029.54	1	$ 2,506.00	1	$ 585.33	1	$ 1,326.92	1	$ 1,326.92
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 11,448.71	1	$ 332.36	1	$ 3,029.54	1	$ 2,506.00	1	$ 585.33	1	$ 1,326.92	1	$ 1,326.92
				SUBTOTAL =	$ 363,451.00	SUBTOTAL =	$ 10,551.00	SUBTOTAL =	$ 96,176.00	SUBTOTAL =	$ 79,555.50	SUBTOTAL =	$ 18,582.00	SUBTOTAL =	$ 42,124.50	SUBTOTAL =	$ 42,124.50
				CONTINGENCY (5%) =	$ 18,172.55	CONTINGENCY (5%) =	$ 527.55	CONTINGENCY (5%) =	$ 4,808.80	CONTINGENCY (5%) =	$ 3,977.78	CONTINGENCY (5%) =	$ 929.10	CONTINGENCY (5%) =	$ 2,106.23	CONTINGENCY (5%) =	$ 2,106.23
				SUBTOTAL =	$ 381,623.55	SUBTOTAL =	$ 11,078.55	SUBTOTAL =	$ 100,984.80	SUBTOTAL =	$ 83,533.28	SUBTOTAL =	$ 19,511.10	SUBTOTAL =	$ 44,230.73	SUBTOTAL =	$ 44,230.73
				CONSTRUCTION TOTAL =	**$ 404,520.96**	**CONSTRUCTION TOTAL =**	**$ 11,743.26**	**CONSTRUCTION TOTAL =**	**$ 107,043.89**	**CONSTRUCTION TOTAL =**	**$ 88,545.27**	**CONSTRUCTION TOTAL =**	**$ 20,681.77**	**CONSTRUCTION TOTAL =**	**$ 46,884.57**	**CONSTRUCTION TOTAL =**	**$ 46,884.57**
				ENGINEERING =	$ 40,452.10	ENGINEERING =	$ 1,174.33	ENGINEERING =	$ 10,704.39	ENGINEERING =	$ 8,854.53	ENGINEERING =	$ 2,068.18	ENGINEERING =	$ 4,688.46	ENGINEERING =	$ 4,688.46
				ROADWAY TOTAL =	**$ 444,973.06**	**ROADWAY TOTAL =**	**$ 12,917.59**	**ROADWAY TOTAL =**	**$ 117,748.28**	**ROADWAY TOTAL =**	**$ 97,399.80**	**ROADWAY TOTAL =**	**$ 22,749.94**	**ROADWAY TOTAL =**	**$ 51,573.03**	**ROADWAY TOTAL =**	**$ 51,573.03**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

				YEAR 7 STREETS			
				GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 6		PCI= 5	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 681		LENGTH = 1,725	
				WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 2,447		TOTAL AREA (SQ YD) = 4,301	
				SHEARWATER (MEADOWLARK TO WEST CDS)		WHITMAN (KATHY TO DAVID)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	2,203	$ 1,101.50	3,871	$ 1,935.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	103	$ 8,240.00	181	$ 14,480.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	206	$ 15,450.00	362	$ 27,150.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,447	$ 4,894.00	4,301	$ 8,602.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	49	$ 1,960.00	87	$ 3,480.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	4	$ 480.00	8	$ 960.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,011.95	1	$ 1,783.14
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,011.95	1	$ 1,783.14
				SUBTOTAL =	$ 32,125.50	SUBTOTAL =	$ 56,607.50
				CONTINGENCY (5%) =	$ 1,606.28	CONTINGENCY (5%) =	$ 2,830.38
				SUBTOTAL =	$ 33,731.78	SUBTOTAL =	$ 59,437.88
				CONSTRUCTION TOTAL =	**$ 35,755.68**	**CONSTRUCTION TOTAL =**	**$ 63,004.15**
				ENGINEERING =	$ 3,575.57	ENGINEERING =	$ 6,300.41
				ROADWAY TOTAL =	**$ 39,331.25**	**ROADWAY TOTAL =**	**$ 69,304.56**

ASSUMPTIONS:
1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$ 1,278,225.52**
ROUTINE MAINTENANCE =	**$ 230,000.00**
YEAR 7 TOTAL =	**$ 1,508,225.52**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

				YEAR 8 STREETS											
				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5		PCI= 6		PCI= 5		PCI= 5		PCI= 5	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 190		LENGTH = 680		LENGTH = 580		LENGTH = 275		LENGTH = 220		LENGTH = 142	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 474		TOTAL AREA (SQ YD) = 2,678		TOTAL AREA (SQ YD) = 2,075		TOTAL AREA (SQ YD) = 2,126		TOTAL AREA (SQ YD) = 1,269		TOTAL AREA (SQ YD) = 1,011	
				AHO (SENECA EAST TO EAST END)		BENT TREE (FOX HUNT TO WEST CDS)		BIXTONE (OLD MCHENRY TO NORTH CDS)		CAYUGA (SENECA EAST TO WEST CDS)		CONESUS (SENECA EAST TO WEST CDS)		DORSET (NORTH TRAIL TO SOUTH CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	427	$ 213.50	2,411	$ 1,205.50	1,868	$ 934.00	1,914	$ 957.00	1,143	$ 571.50	910	$ 455.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	20	$ 1,600.00	113	$ 9,040.00	88	$ 7,040.00	90	$ 7,200.00	54	$ 4,320.00	43	$ 3,440.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	40	$ 3,000.00	225	$ 16,875.00	175	$ 13,125.00	179	$ 13,425.00	107	$ 8,025.00	85	$ 6,375.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	474	$ 948.00	2,678	$ 5,356.00	2,075	$ 4,150.00	2,126	$ 4,252.00	1,269	$ 2,538.00	1,011	$ 2,022.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	10	$ 400.00	54	$ 2,160.00	42	$ 1,680.00	43	$ 1,720.00	26	$ 1,040.00	21	$ 840.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	50	$ 5,000.00	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	1	$ 120.00	4	$ 480.00	3	$ 360.00	2	$ 240.00	1	$ 120.00	1	$ 120.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 197.87	1	$ 1,106.17	1	$ 1,017.10	1	$ 875.51	1	$ 523.36	1	$ 417.44
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 197.87	1	$ 1,106.17	1	$ 1,017.10	1	$ 875.51	1	$ 523.36	1	$ 417.44
				SUBTOTAL =	$ 6,281.50	SUBTOTAL =	$ 35,116.50	SUBTOTAL =	$ 32,289.00	SUBTOTAL =	$ 27,794.00	SUBTOTAL =	$ 16,614.50	SUBTOTAL =	$ 13,252.00
				CONTINGENCY (5%) =	$ 314.08	CONTINGENCY (5%) =	$ 1,755.83	CONTINGENCY (5%) =	$ 1,614.45	CONTINGENCY (5%) =	$ 1,389.70	CONTINGENCY (5%) =	$ 830.73	CONTINGENCY (5%) =	$ 662.60
				SUBTOTAL =	$ 6,595.58	SUBTOTAL =	$ 36,872.33	SUBTOTAL =	$ 33,903.45	SUBTOTAL =	$ 29,183.70	SUBTOTAL =	$ 17,445.23	SUBTOTAL =	$ 13,914.60
				CONSTRUCTION TOTAL =	**$ 6,991.31**	**CONSTRUCTION TOTAL =**	**$ 39,084.66**	**CONSTRUCTION TOTAL =**	**$ 35,937.66**	**CONSTRUCTION TOTAL =**	**$ 30,934.72**	**CONSTRUCTION TOTAL =**	**$ 18,491.94**	**CONSTRUCTION TOTAL =**	**$ 14,749.48**
				ENGINEERING =	$ 699.13	ENGINEERING =	$ 3,908.47	ENGINEERING =	$ 3,593.77	ENGINEERING =	$ 3,093.47	ENGINEERING =	$ 1,849.19	ENGINEERING =	$ 1,474.95
				ROADWAY TOTAL =	**$ 7,690.44**	**ROADWAY TOTAL =**	**$ 42,993.13**	**ROADWAY TOTAL =**	**$ 39,531.42**	**ROADWAY TOTAL =**	**$ 34,028.19**	**ROADWAY TOTAL =**	**$ 20,341.13**	**ROADWAY TOTAL =**	**$ 16,224.42**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

				YEAR 8 STREETS											
				FULL DEPTH		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 6		PCI= 6		PCI= 5		PCI= 5		PCI= 4		PCI= 4	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= C+G	
				LENGTH = 653		LENGTH = 407		LENGTH = 250		LENGTH = 1,000		LENGTH = 878		LENGTH = 795	
				WIDTH = 22		WIDTH = 24		WIDTH = 22.5		WIDTH = 22		WIDTH = 22		WIDTH = 25	
				TOTAL AREA (SQ YD) = 1,629		TOTAL AREA (SQ YD) = 2,033		TOTAL AREA (SQ YD) = 1,546		TOTAL AREA (SQ YD) = 2,494		TOTAL AREA (SQ YD) = 2,190		TOTAL AREA (SQ YD) = 2,253	
				ELMWOOD (MILLER TO N CDS)		ENCLAVE WAY (JOHN TO S CDS)		FOX HUNT CT (FOX HUNT TR TO EAST CDS)		FOX HUNT TR. (PHEASANT RUN TO OLD MCHENRY)		GLEN (DARLINGTON TO CARLISLE)		GOLF CREST (S CDS TO N CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	28	$ 770.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	82	$ 82.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	28	$ 770.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	1,629	$ 1,629.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	43	$ 752.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,467	$ 733.50	1,830	$ 915.00	1,392	$ 696.00	2,245	$ 1,122.50	1,971	$ 985.50	2,028	$ 1,014.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	0	$ -	86	$ 6,880.00	65	$ 5,200.00	105	$ 8,400.00	92	$ 7,360.00	95	$ 7,600.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	229	$ 17,175.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	183	$ 13,725.00	171	$ 12,825.00	130	$ 9,750.00	210	$ 15,750.00	184	$ 13,800.00	190	$ 14,250.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	0	$ -	2,033	$ 4,066.00	1,546	$ 3,092.00	2,494	$ 4,988.00	2,190	$ 4,380.00	2,253	$ 4,506.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	1,629	$ 6,516.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	0	$ -	41	$ 1,640.00	31	$ 1,240.00	50	$ 2,000.00	44	$ 1,760.00	46	$ 1,840.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	14	$ 1,680.00	2	$ 240.00	2	$ 240.00	5	$ 600.00	4	$ 480.00	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	32	$ 960.00
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,380.74	1	$ 836.83	1	$ 636.87	1	$ 1,035.11	1	$ 906.11	1	$ 950.36
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,380.74	1	$ 836.83	1	$ 636.87	1	$ 1,035.11	1	$ 906.11	1	$ 950.36
				SUBTOTAL =	$ 43,833.00	SUBTOTAL =	$ 26,566.00	SUBTOTAL =	$ 20,218.00	SUBTOTAL =	$ 32,860.50	SUBTOTAL =	$ 28,765.50	SUBTOTAL =	$ 30,170.00
				CONTINGENCY (5%) =	$ 2,191.65	CONTINGENCY (5%) =	$ 1,328.30	CONTINGENCY (5%) =	$ 1,010.90	CONTINGENCY (5%) =	$ 1,643.03	CONTINGENCY (5%) =	$ 1,438.28	CONTINGENCY (5%) =	$ 1,508.50
				SUBTOTAL =	$ 46,024.65	SUBTOTAL =	$ 27,894.30	SUBTOTAL =	$ 21,228.90	SUBTOTAL =	$ 34,503.53	SUBTOTAL =	$ 30,203.78	SUBTOTAL =	$ 31,678.50
				CONSTRUCTION TOTAL =	**$ 48,786.13**	**CONSTRUCTION TOTAL =**	**$ 29,567.96**	**CONSTRUCTION TOTAL =**	**$ 22,502.63**	**CONSTRUCTION TOTAL =**	**$ 36,573.74**	**CONSTRUCTION TOTAL =**	**$ 32,016.00**	**CONSTRUCTION TOTAL =**	**$ 33,579.21**
				ENGINEERING =	$ 4,878.61	ENGINEERING =	$ 2,956.80	ENGINEERING =	$ 2,250.26	ENGINEERING =	$ 3,657.37	ENGINEERING =	$ 3,201.60	ENGINEERING =	$ 3,357.92
				ROADWAY TOTAL =	**$ 53,664.74**	**ROADWAY TOTAL =**	**$ 32,524.75**	**ROADWAY TOTAL =**	**$ 24,752.90**	**ROADWAY TOTAL =**	**$ 40,231.11**	**ROADWAY TOTAL =**	**$ 35,217.60**	**ROADWAY TOTAL =**	**$ 36,937.13**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 8 STREETS

ITEM NO.	ITEM	UNIT	UNIT PRICE	JOHN (DARLINGTON TO ENCLAVE WAY)		KEUKA (SENECA EAST TO WEST CDS)		LAGOON (FALKIRK TO N CDS)		MILLER (VILLAGE LIMITS TO CREEK CROSSING)		ONONDAGA (SENECA EAST TO SENECA WEST)		OWENS RD (SCHWERMAN TO VILLAGE LIMIT)	
				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		FULL DEPTH	
				PCI= 6		PCI= 5		PCI= 5		PCI= 6		PCI= 5		PCI= 6	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= NO		EXISTING RIBBON= YES		EXISTING RIBBON= NO	
				LENGTH = 1,894		LENGTH = 185		LENGTH = 1,467		LENGTH = 1,700		LENGTH = 1,556		LENGTH = 191	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 20	
				TOTAL AREA (SQ YD) = 4,723		TOTAL AREA (SQ YD) = 1,157		TOTAL AREA (SQ YD) = 3,658		TOTAL AREA (SQ YD) = 4,239		TOTAL AREA (SQ YD) = 3,880		TOTAL AREA (SQ YD) = 433	
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	8	$ 220.00
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	22	$ 22.00
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	8	$ 220.00
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	433	$ 433.00
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	12	$ 210.00
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	4,251	$ 2,125.50	1,042	$ 521.00	3,293	$ 1,646.50	3,816	$ 1,908.00	3,492	$ 1,746.00	390	$ 195.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	199	$ 15,920.00	49	$ 3,920.00	154	$ 12,320.00	179	$ 14,320.00	163	$ 13,040.00	0	$ -
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	61	$ 4,575.00
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	397	$ 29,775.00	98	$ 7,350.00	308	$ 23,100.00	357	$ 26,775.00	326	$ 24,450.00	49	$ 3,675.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	4,723	$ 9,446.00	1,157	$ 2,314.00	3,658	$ 7,316.00	4,239	$ 8,478.00	3,880	$ 7,760.00	0	$ -
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	433	$ 1,732.00
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	95	$ 3,800.00	24	$ 960.00	74	$ 2,960.00	85	$ 3,400.00	78	$ 3,120.00	0	$ -
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	756	$ 83,160.00	0	$ -	85	$ 9,350.00
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	9	$ 1,080.00	1	$ 120.00	14	$ 1,680.00	0	$ -	7	$ 840.00	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	1	$ 2,500.00	0	$ -	1	$ 2,500.00
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,957.61	1	$ 478.33	1	$ 1,544.21	1	$ 4,427.04	1	$ 1,605.11	1	$ 728.66
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,957.61	1	$ 478.33	1	$ 1,544.21	1	$ 4,427.04	1	$ 1,605.11	1	$ 728.66
				SUBTOTAL =	$ 62,146.50	SUBTOTAL =	$ 15,185.00	SUBTOTAL =	$ 49,022.50	SUBTOTAL =	$ 140,541.00	SUBTOTAL =	$ 50,956.00	SUBTOTAL =	$ 23,132.00
				CONTINGENCY (5%) =	$ 3,107.33	CONTINGENCY (5%) =	$ 759.25	CONTINGENCY (5%) =	$ 2,451.13	CONTINGENCY (5%) =	$ 7,027.05	CONTINGENCY (5%) =	$ 2,547.80	CONTINGENCY (5%) =	$ 1,156.60
				SUBTOTAL =	$ 65,253.83	SUBTOTAL =	$ 15,944.25	SUBTOTAL =	$ 51,473.63	SUBTOTAL =	$ 147,568.05	SUBTOTAL =	$ 53,503.80	SUBTOTAL =	$ 24,288.60
				CONSTRUCTION TOTAL =	**$ 69,169.05**	**CONSTRUCTION TOTAL =**	**$ 16,900.91**	**CONSTRUCTION TOTAL =**	**$ 54,562.04**	**CONSTRUCTION TOTAL =**	**$ 156,422.13**	**CONSTRUCTION TOTAL =**	**$ 56,714.03**	**CONSTRUCTION TOTAL =**	**$ 25,745.92**
				ENGINEERING =	$ 6,916.91	ENGINEERING =	$ 1,690.09	ENGINEERING =	$ 5,456.20	ENGINEERING =	$ 15,642.21	ENGINEERING =	$ 5,671.40	ENGINEERING =	$ 2,574.59
				ROADWAY TOTAL =	**$ 76,085.96**	**ROADWAY TOTAL =**	**$ 18,591.00**	**ROADWAY TOTAL =**	**$ 60,018.25**	**ROADWAY TOTAL =**	**$ 172,064.35**	**ROADWAY TOTAL =**	**$ 62,385.43**	**ROADWAY TOTAL =**	**$ 28,320.51**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 8 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 4		PCI= 6		PCI= 5		PCI= 5		PCI= 5	
				EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 1,050		LENGTH = 593		LENGTH = 2,095		LENGTH = 1,443		LENGTH = 1,425		LENGTH = 525	
				WIDTH = 22		WIDTH = 25		WIDTH = 22		WIDTH = 22		WIDTH = 21.5		WIDTH = 21.5	
				TOTAL AREA (SQ YD) = 3,520		TOTAL AREA (SQ YD) = 1,681		TOTAL AREA (SQ YD) = 5,224		TOTAL AREA (SQ YD) = 4,319		TOTAL AREA (SQ YD) = 3,473		TOTAL AREA (SQ YD) = 1,280	
				RUTGERS (INDIAN CREEK TO E CDS)		SCARLET OAK DR (OWENS TO GOLF CREST)		SENECA EAST (WASHITAY TO INDIAN CREEK)		SENECA WEST (S. CDS TO INDIAN CREEK)		WINDING BRANCH (MILTON TO PHEASANT RUN)		WOODED LN (WINDING BRANCH TO MILTON)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	3,168	$ 1,584.00	1,513	$ 756.50	4,702	$ 2,351.00	3,888	$ 1,944.00	3,126	$ 1,563.00	1,152	$ 576.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	148	$ 11,840.00	71	$ 5,680.00	220	$ 17,600.00	182	$ 14,560.00	146	$ 11,680.00	54	$ 4,320.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	296	$ 22,200.00	142	$ 10,650.00	439	$ 32,925.00	363	$ 27,225.00	292	$ 21,900.00	108	$ 8,100.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	3,520	$ 7,040.00	1,681	$ 3,362.00	5,224	$ 10,448.00	4,319	$ 8,638.00	3,473	$ 6,946.00	1,280	$ 2,560.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	71	$ 2,840.00	34	$ 1,360.00	105	$ 4,200.00	87	$ 3,480.00	70	$ 2,800.00	26	$ 1,040.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	5	$ 600.00	0	$ -	10	$ 1,200.00	7	$ 840.00	7	$ 840.00	3	$ 360.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	24	$ 720.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,452.28	1	$ 709.65	1	$ 2,164.81	1	$ 1,785.64	1	$ 1,440.46	1	$ 534.11
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,452.28	1	$ 709.65	1	$ 2,164.81	1	$ 1,785.64	1	$ 1,440.46	1	$ 534.11
				SUBTOTAL =	$ 46,104.00	SUBTOTAL =	$ 22,528.50	SUBTOTAL =	$ 68,724.00	SUBTOTAL =	$ 56,687.00	SUBTOTAL =	$ 45,729.00	SUBTOTAL =	$ 16,956.00
				CONTINGENCY (5%) =	$ 2,305.20	CONTINGENCY (5%) =	$ 1,126.43	CONTINGENCY (5%) =	$ 3,436.20	CONTINGENCY (5%) =	$ 2,834.35	CONTINGENCY (5%) =	$ 2,286.45	CONTINGENCY (5%) =	$ 847.80
				SUBTOTAL =	$ 48,409.20	SUBTOTAL =	$ 23,654.93	SUBTOTAL =	$ 72,160.20	SUBTOTAL =	$ 59,521.35	SUBTOTAL =	$ 48,015.45	SUBTOTAL =	$ 17,803.80
				CONSTRUCTION TOTAL =	**$ 51,313.75**	**CONSTRUCTION TOTAL =**	**$ 25,074.22**	**CONSTRUCTION TOTAL =**	**$ 76,489.81**	**CONSTRUCTION TOTAL =**	**$ 63,092.63**	**CONSTRUCTION TOTAL =**	**$ 50,896.38**	**CONSTRUCTION TOTAL =**	**$ 18,872.03**
				ENGINEERING =	$ 5,131.38	ENGINEERING =	$ 2,507.42	ENGINEERING =	$ 7,648.98	ENGINEERING =	$ 6,309.26	ENGINEERING =	$ 5,089.64	ENGINEERING =	$ 1,887.20
				ROADWAY TOTAL =	**$ 56,445.13**	**ROADWAY TOTAL =**	**$ 27,581.64**	**ROADWAY TOTAL =**	**$ 84,138.79**	**ROADWAY TOTAL =**	**$ 69,401.89**	**ROADWAY TOTAL =**	**$ 55,986.01**	**ROADWAY TOTAL =**	**$ 20,759.23**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

				YEAR 8 STREETS							
				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 6		PCI= 6		PCI= 5		PCI= 5	
				EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 597		LENGTH = 276		LENGTH = 1,158		LENGTH = 1,844	
				WIDTH = 24		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 1,624		TOTAL AREA (SQ YD) = 1,101		TOTAL AREA (SQ YD) = 2,888		TOTAL AREA (SQ YD) = 4,598	
				BITTERSWEET TR (SCHWERMAN TO SOUTH CDS)		HERON (EAST CDS TO DARLINGTON)		JAMES DR (DARLINGTON TO JOHN)		NORBERT (DARLINGTON TO JOHN)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,462	$ 731.00	991	$ 495.50	2,600	$ 1,300.00	4,139	$ 2,069.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	69	$ 5,520.00	47	$ 3,760.00	122	$ 9,760.00	194	$ 15,520.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	137	$ 10,275.00	93	$ 6,975.00	243	$ 18,225.00	387	$ 29,025.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,624	$ 3,248.00	1,101	$ 2,202.00	2,888	$ 5,776.00	4,598	$ 9,196.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	33	$ 1,320.00	23	$ 920.00	58	$ 2,320.00	92	$ 3,680.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	3	$ 360.00	2	$ 240.00	6	$ 720.00	9	$ 1,080.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 675.80	1	$ 459.66	1	$ 1,200.18	1	$ 1,907.97
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 675.80	1	$ 459.66	1	$ 1,200.18	1	$ 1,907.97
				SUBTOTAL =	$ 21,454.00	SUBTOTAL =	$ 14,592.50	SUBTOTAL =	$ 38,101.00	SUBTOTAL =	$ 60,570.50
				CONTINGENCY (5%) =	$ 1,072.70	CONTINGENCY (5%) =	$ 729.63	CONTINGENCY (5%) =	$ 1,905.05	CONTINGENCY (5%) =	$ 3,028.53
				SUBTOTAL =	$ 22,526.70	SUBTOTAL =	$ 15,322.13	SUBTOTAL =	$ 40,006.05	SUBTOTAL =	$ 63,599.03
				CONSTRUCTION TOTAL =	**$ 23,878.30**	**CONSTRUCTION TOTAL =**	**$ 16,241.45**	**CONSTRUCTION TOTAL =**	**$ 42,406.41**	**CONSTRUCTION TOTAL =**	**$ 67,414.97**
				ENGINEERING =	$ 2,387.83	ENGINEERING =	$ 1,624.15	ENGINEERING =	$ 4,240.64	ENGINEERING =	$ 6,741.50
				ROADWAY TOTAL =	**$ 26,266.13**	**ROADWAY TOTAL =**	**$ 17,865.60**	**ROADWAY TOTAL =**	**$ 46,647.05**	**ROADWAY TOTAL =**	**$ 74,156.46**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$ 1,280,850.42**
ROUTINE MAINTENANCE =	**$ 230,000.00**
YEAR 8 TOTAL =	**$ 1,510,850.42**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 9 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		FULL DEPTH	
				PCI= 5		PCI= 6		PCI= 5		PCI= 5		PCI= 5		PCI= 6	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= NO	
				LENGTH = 1,035		LENGTH = 300		LENGTH = 1,791		LENGTH = 2,200		LENGTH = 658		LENGTH = 2,411	
				WIDTH = 22		WIDTH = 27		WIDTH = 22		WIDTH = 22		WIDTH = 21		WIDTH = 22	
				TOTAL AREA (SQ YD) = 2,719		TOTAL AREA (SQ YD) = 918		TOTAL AREA (SQ YD) = 4,466		TOTAL AREA (SQ YD) = 5,486		TOTAL AREA (SQ YD) = 1,933		TOTAL AREA (SQ YD) = 6,012	
				ACORN (OLD MCHENRY TO 12 ACORN)		BRIERWOODS CT (BRIERWOODS LN TO N CDS)		BRIERWOODS LN (BRUCE TO VILLAGE LIMIT)		DARLINGTON (OLD MCHENRY TO JUEL)		ECHO CT (ACORN TO SOUTH CDS)		ELM (DARLINGTON TO LAGOON)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	101	$ 2,777.50
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	301	$ 301.00
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	101	$ 2,777.50
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	6,012	$ 6,012.00
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	158	$ 2,765.00
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	2,448	$ 1,224.00	827	$ 413.50	4,020	$ 2,010.00	4,938	$ 2,469.00	1,740	$ 870.00	5,411	$ 2,705.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	115	$ 9,200.00	39	$ 3,120.00	188	$ 15,040.00	231	$ 18,480.00	82	$ 6,560.00	0	$ -
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	842	$ 63,150.00
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	229	$ 17,175.00	78	$ 5,850.00	376	$ 28,200.00	461	$ 34,575.00	163	$ 12,225.00	674	$ 50,550.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,719	$ 5,438.00	918	$ 1,836.00	4,466	$ 8,932.00	5,486	$ 10,972.00	1,933	$ 3,866.00	0	$ -
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	6,012	$ 24,048.00
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	55	$ 2,200.00	19	$ 760.00	90	$ 3,600.00	110	$ 4,400.00	39	$ 1,560.00	0	$ -
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	1,072	$ 117,920.00
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	50	$ 5,000.00
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	5	$ 600.00	2	$ 240.00	8	$ 960.00	10	$ 1,200.00	3	$ 360.00	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,128.87	1	$ 384.91	1	$ 1,850.37	1	$ 2,271.02	1	$ 801.39	1	$ 8,757.20
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,128.87	1	$ 384.91	1	$ 1,850.37	1	$ 2,271.02	1	$ 801.39	1	$ 8,757.20
				SUBTOTAL =	$ 35,837.00	SUBTOTAL =	$ 12,219.50	SUBTOTAL =	$ 58,742.00	SUBTOTAL =	$ 72,096.00	SUBTOTAL =	$ 25,441.00	SUBTOTAL =	$ 278,006.50
				CONTINGENCY (5%) =	$ 1,791.85	CONTINGENCY (5%) =	$ 610.98	CONTINGENCY (5%) =	$ 2,937.10	CONTINGENCY (5%) =	$ 3,604.80	CONTINGENCY (5%) =	$ 1,272.05	CONTINGENCY (5%) =	$ 13,900.33
				SUBTOTAL =	$ 37,628.85	SUBTOTAL =	$ 12,830.48	SUBTOTAL =	$ 61,679.10	SUBTOTAL =	$ 75,700.80	SUBTOTAL =	$ 26,713.05	SUBTOTAL =	$ 291,906.83
				CONSTRUCTION TOTAL =	**$ 39,886.58**	**CONSTRUCTION TOTAL =**	**$ 13,600.30**	**CONSTRUCTION TOTAL =**	**$ 65,379.85**	**CONSTRUCTION TOTAL =**	**$ 80,242.85**	**CONSTRUCTION TOTAL =**	**$ 28,315.83**	**CONSTRUCTION TOTAL =**	**$ 309,421.23**
				ENGINEERING =	$ 3,988.66	ENGINEERING =	$ 1,360.03	ENGINEERING =	$ 6,537.98	ENGINEERING =	$ 8,024.28	ENGINEERING =	$ 2,831.58	ENGINEERING =	$ 30,942.12
				ROADWAY TOTAL =	**$ 43,875.24**	**ROADWAY TOTAL =**	**$ 14,960.33**	**ROADWAY TOTAL =**	**$ 71,917.83**	**ROADWAY TOTAL =**	**$ 88,267.13**	**ROADWAY TOTAL =**	**$ 31,147.42**	**ROADWAY TOTAL =**	**$ 340,363.36**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 9 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5		PCI= 5		PCI= 6		PCI= 4		PCI= 4	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 1,700		LENGTH = 1,920		LENGTH = 555		LENGTH = 4,265		LENGTH = 478		LENGTH = 1,606	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 4,239		TOTAL AREA (SQ YD) = 4,788		TOTAL AREA (SQ YD) = 1,423		TOTAL AREA (SQ YD) = 10,635		TOTAL AREA (SQ YD) = 1,192		TOTAL AREA (SQ YD) = 4,005	
				HEATHER (QUENTIN TO WEST CDS)		ABERDEEN (DARLINGTON TO DARLINGTON)		HIGHLAND TERRACE (HEATHER TO MCGREGOR)		DARLINGTON (JUEL TO GILMER)		JANE (JUEL TO SOUTH CDS)		JUEL (DARLINGTON TO ELM)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	3,816	$ 1,908.00	4,310	$ 2,155.00	1,281	$ 640.50	9,572	$ 4,786.00	1,073	$ 536.50	3,605	$ 1,802.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	179	$ 14,320.00	202	$ 16,160.00	60	$ 4,800.00	447	$ 35,760.00	51	$ 4,080.00	169	$ 13,520.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	357	$ 26,775.00	403	$ 30,225.00	120	$ 9,000.00	894	$ 67,050.00	101	$ 7,575.00	337	$ 25,275.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	4,239	$ 8,478.00	4,788	$ 9,576.00	1,423	$ 2,846.00	10,635	$ 21,270.00	1,192	$ 2,384.00	4,005	$ 8,010.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	85	$ 3,400.00	96	$ 3,840.00	29	$ 1,160.00	213	$ 8,520.00	24	$ 960.00	81	$ 3,240.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	8	$ 960.00	9	$ 1,080.00	3	$ 360.00	19	$ 2,280.00	3	$ 360.00	8	$ 960.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,758.99	1	$ 1,985.63	1	$ 592.40	1	$ 4,399.48	1	$ 500.71	1	$ 1,663.44
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,758.99	1	$ 1,985.63	1	$ 592.40	1	$ 4,399.48	1	$ 500.71	1	$ 1,663.44
				SUBTOTAL =	$ 55,841.00	SUBTOTAL =	$ 63,036.00	SUBTOTAL =	$ 18,806.50	SUBTOTAL =	$ 139,666.00	SUBTOTAL =	$ 15,895.50	SUBTOTAL =	$ 52,807.50
				CONTINGENCY (5%) =	$ 2,792.05	CONTINGENCY (5%) =	$ 3,151.80	CONTINGENCY (5%) =	$ 940.33	CONTINGENCY (5%) =	$ 6,983.30	CONTINGENCY (5%) =	$ 794.78	CONTINGENCY (5%) =	$ 2,640.38
				SUBTOTAL =	$ 58,633.05	SUBTOTAL =	$ 66,187.80	SUBTOTAL =	$ 19,746.83	SUBTOTAL =	$ 146,649.30	SUBTOTAL =	$ 16,690.28	SUBTOTAL =	$ 55,447.88
				CONSTRUCTION TOTAL =	**$ 62,151.03**	**CONSTRUCTION TOTAL =**	**$ 70,159.07**	**CONSTRUCTION TOTAL =**	**$ 20,931.63**	**CONSTRUCTION TOTAL =**	**$ 155,448.26**	**CONSTRUCTION TOTAL =**	**$ 17,691.69**	**CONSTRUCTION TOTAL =**	**$ 58,774.75**
				ENGINEERING =	$ 6,215.10	ENGINEERING =	$ 7,015.91	ENGINEERING =	$ 2,093.16	ENGINEERING =	$ 15,544.83	ENGINEERING =	$ 1,769.17	ENGINEERING =	$ 5,877.47
				ROADWAY TOTAL =	**$ 68,366.14**	**ROADWAY TOTAL =**	**$ 77,174.97**	**ROADWAY TOTAL =**	**$ 23,024.80**	**ROADWAY TOTAL =**	**$ 170,993.08**	**ROADWAY TOTAL =**	**$ 19,460.86**	**ROADWAY TOTAL =**	**$ 64,652.22**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 9 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5		PCI= 4		PCI= 5		PCI= 5		PCI= 4	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 582		LENGTH = 690		LENGTH = 300		LENGTH = 1,050		LENGTH = 426		LENGTH = 726	
				WIDTH = 20		WIDTH = 22		WIDTH = 22		WIDTH = 21.5		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 1,938		TOTAL AREA (SQ YD) = 2,561		TOTAL AREA (SQ YD) = 1,418		TOTAL AREA (SQ YD) = 3,412		TOTAL AREA (SQ YD) = 1,959		TOTAL AREA (SQ YD) = 1,811	
				LYDIA (ACORN TO EAST CDS)		McGREGOR (WEST CDS TO PIPER)		ESSEX (MARK TO EAST CDS)		PIPER (MCGREGOR TO HEATHER)		TANGLEWOOD CT (TANGLEWOOD LN TO N. CDS)		TANGLEWOOD LN (BRIERWOODS LN TO W. 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
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,745	$ 872.50	2,305	$ 1,152.50	1,277	$ 638.50	3,071	$ 1,535.50	1,764	$ 882.00	1,630	$ 815.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	82	$ 6,560.00	108	$ 8,640.00	60	$ 4,800.00	144	$ 11,520.00	83	$ 6,640.00	77	$ 6,160.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	163	$ 12,225.00	216	$ 16,200.00	120	$ 9,000.00	287	$ 21,525.00	165	$ 12,375.00	153	$ 11,475.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,938	$ 3,876.00	2,561	$ 5,122.00	1,418	$ 2,836.00	3,412	$ 6,824.00	1,959	$ 3,918.00	1,811	$ 3,622.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	39	$ 1,560.00	52	$ 2,080.00	29	$ 1,160.00	69	$ 2,760.00	40	$ 1,600.00	37	$ 1,480.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	3	$ 360.00	4	$ 480.00	2	$ 240.00	5	$ 600.00	2	$ 240.00	4	$ 480.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 801.79	1	$ 1,060.75	1	$ 588.25	1	$ 1,410.08	1	$ 808.13	1	$ 757.01
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 801.79	1	$ 1,060.75	1	$ 588.25	1	$ 1,410.08	1	$ 808.13	1	$ 757.01
				SUBTOTAL =	$ 25,453.50	SUBTOTAL =	$ 33,674.50	SUBTOTAL =	$ 18,674.50	SUBTOTAL =	$ 44,764.50	SUBTOTAL =	$ 25,655.00	SUBTOTAL =	$ 24,032.00
				CONTINGENCY (5%) =	$ 1,272.68	CONTINGENCY (5%) =	$ 1,683.73	CONTINGENCY (5%) =	$ 933.73	CONTINGENCY (5%) =	$ 2,238.23	CONTINGENCY (5%) =	$ 1,282.75	CONTINGENCY (5%) =	$ 1,201.60
				SUBTOTAL =	$ 26,726.18	SUBTOTAL =	$ 35,358.23	SUBTOTAL =	$ 19,608.23	SUBTOTAL =	$ 47,002.73	SUBTOTAL =	$ 26,937.75	SUBTOTAL =	$ 25,233.60
				CONSTRUCTION TOTAL =	**$ 28,329.75**	**CONSTRUCTION TOTAL =**	**$ 37,479.72**	**CONSTRUCTION TOTAL =**	**$ 20,784.72**	**CONSTRUCTION TOTAL =**	**$ 49,822.89**	**CONSTRUCTION TOTAL =**	**$ 28,554.02**	**CONSTRUCTION TOTAL =**	**$ 26,747.62**
				ENGINEERING =	$ 2,832.97	ENGINEERING =	$ 3,747.97	ENGINEERING =	$ 2,078.47	ENGINEERING =	$ 4,982.29	ENGINEERING =	$ 2,855.40	ENGINEERING =	$ 2,674.76
				ROADWAY TOTAL =	**$ 31,162.72**	**ROADWAY TOTAL =**	**$ 41,227.69**	**ROADWAY TOTAL =**	**$ 22,863.19**	**ROADWAY TOTAL =**	**$ 54,805.18**	**ROADWAY TOTAL =**	**$ 31,409.42**	**ROADWAY TOTAL =**	**$ 29,422.38**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

				YEAR 9 STREETS					
				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI=	4	PCI=	4	PCI=	4
				EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES
				LENGTH =	295	LENGTH =	480	LENGTH =	300
				WIDTH =	22	WIDTH =	22	WIDTH =	22
				TOTAL AREA (SQ YD) =	1,440	TOTAL AREA (SQ YD) =	1,197	TOTAL AREA (SQ YD) =	1,295
				HAMPTON (MARK TO EAST CDS)		JAMES DR (MARK TO JOHN)		NEWBURY (MARK TO EAST CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,296	$ 648.00	1,078	$ 539.00	1,166	$ 583.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	61	$ 4,880.00	51	$ 4,080.00	55	$ 4,400.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	121	$ 9,075.00	101	$ 7,575.00	109	$ 8,175.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,440	$ 2,880.00	1,197	$ 2,394.00	1,295	$ 2,590.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	29	$ 1,160.00	24	$ 960.00	26	$ 1,040.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	2	$ 240.00	3	$ 360.00	2	$ 240.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 594.81	1	$ 501.10	1	$ 536.38
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 594.81	1	$ 501.10	1	$ 536.38
				SUBTOTAL =	$ 18,883.00	SUBTOTAL =	$ 15,908.00	SUBTOTAL =	$ 17,028.00
				CONTINGENCY (5%) =	$ 944.15	CONTINGENCY (5%) =	$ 795.40	CONTINGENCY (5%) =	$ 851.40
				SUBTOTAL =	$ 19,827.15	SUBTOTAL =	$ 16,703.40	SUBTOTAL =	$ 17,879.40
				CONSTRUCTION TOTAL =	**$ 21,016.78**	**CONSTRUCTION TOTAL =**	**$ 17,705.60**	**CONSTRUCTION TOTAL =**	**$ 18,952.16**
				ENGINEERING =	$ 2,101.68	ENGINEERING =	$ 1,770.56	ENGINEERING =	$ 1,895.22
				ROADWAY TOTAL =	**$ 23,118.46**	**ROADWAY TOTAL =**	**$ 19,476.16**	**ROADWAY TOTAL =**	**$ 20,847.38**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$**	**1,288,535.96**
ROUTINE MAINTENANCE =	**$**	**230,000.00**
YEAR 9 TOTAL =	**$**	**1,518,535.96**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 10 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 4		PCI= 4		PCI= 5		PCI= 6		PCI= 4	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 950		LENGTH = 235		LENGTH = 245		LENGTH = 166		LENGTH = 6,635		LENGTH = 500	
				WIDTH = 21		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 21		WIDTH = 22	
				TOTAL AREA (SQ YD) = 2,261		TOTAL AREA (SQ YD) = 1,223		TOTAL AREA (SQ YD) = 1,277		TOTAL AREA (SQ YD) = 1,034		TOTAL AREA (SQ YD) = 17,871		TOTAL AREA (SQ YD) = 1,748	
				CIRCLE (OLD MCHENRY TO CIRCLE)		BRIGHTON (MARK TO EAST CDS)		CANTERBURY (MARK TO EAST CDS)		CONDOR (ROSEWOOD TO WEST CDS)		INDIAN CREEK (GILMER TO VILLAGE LIMIT)		EDWARD (MARK TO EAST CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	2,035	$ 1,017.50	1,101	$ 550.50	1,150	$ 575.00	931	$ 465.50	16,084	$ 8,042.00	1,574	$ 787.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	95	$ 7,600.00	52	$ 4,160.00	54	$ 4,320.00	44	$ 3,520.00	751	$ 60,080.00	74	$ 5,920.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	190	$ 14,250.00	103	$ 7,725.00	108	$ 8,100.00	87	$ 6,525.00	1,502	$ 112,650.00	147	$ 11,025.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,261	$ 4,522.00	1,223	$ 2,446.00	1,277	$ 2,554.00	1,034	$ 2,068.00	17,871	$ 35,742.00	1,748	$ 3,496.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	46	$ 1,840.00	25	$ 1,000.00	26	$ 1,040.00	21	$ 840.00	358	$ 14,320.00	35	$ 1,400.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	5	$ 600.00	2	$ 240.00	2	$ 240.00	1	$ 120.00	30	$ 3,600.00	3	$ 360.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	1	$ 2,500.00	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 939.63	1	$ 507.83	1	$ 530.11	1	$ 426.46	1	$ 7,463.42	1	$ 724.12
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 939.63	1	$ 507.83	1	$ 530.11	1	$ 426.46	1	$ 7,463.42	1	$ 724.12
				SUBTOTAL =	$ 29,829.50	SUBTOTAL =	$ 16,121.50	SUBTOTAL =	$ 16,829.00	SUBTOTAL =	$ 13,538.50	SUBTOTAL =	$ 236,934.00	SUBTOTAL =	$ 22,988.00
				CONTINGENCY (5%) =	$ 1,491.48	CONTINGENCY (5%) =	$ 806.08	CONTINGENCY (5%) =	$ 841.45	CONTINGENCY (5%) =	$ 676.93	CONTINGENCY (5%) =	$ 11,846.70	CONTINGENCY (5%) =	$ 1,149.40
				SUBTOTAL =	$ 31,320.98	SUBTOTAL =	$ 16,927.58	SUBTOTAL =	$ 17,670.45	SUBTOTAL =	$ 14,215.43	SUBTOTAL =	$ 248,780.70	SUBTOTAL =	$ 24,137.40
				CONSTRUCTION TOTAL =	**$ 33,200.23**	**CONSTRUCTION TOTAL =**	**$ 17,943.23**	**CONSTRUCTION TOTAL =**	**$ 18,730.68**	**CONSTRUCTION TOTAL =**	**$ 15,068.35**	**CONSTRUCTION TOTAL =**	**$ 263,707.54**	**CONSTRUCTION TOTAL =**	**$ 25,585.64**
				ENGINEERING =	$ 3,320.02	ENGINEERING =	$ 1,794.32	ENGINEERING =	$ 1,873.07	ENGINEERING =	$ 1,506.84	ENGINEERING =	$ 26,370.75	ENGINEERING =	$ 2,558.56
				ROADWAY TOTAL =	**$ 36,520.26**	**ROADWAY TOTAL =**	**$ 19,737.55**	**ROADWAY TOTAL =**	**$ 20,603.74**	**ROADWAY TOTAL =**	**$ 16,575.19**	**ROADWAY TOTAL =**	**$ 290,078.30**	**ROADWAY TOTAL =**	**$ 28,144.21**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 10 STREETS

ITEM NO.	ITEM	UNIT	UNIT PRICE	GRIND & OVERLAY PCI= 5 EXISTING RIBBON= YES LENGTH = 585 WIDTH = 21 TOTAL AREA (SQ YD) = 1,393 OAK (WEST END TO CIRCLE DR)		GRIND & OVERLAY PCI= 5 EXISTING RIBBON= YES LENGTH = 1,007 WIDTH = 22 TOTAL AREA (SQ YD) = 2,511 GLEN (ORCHARD TO LYNN)		GRIND & OVERLAY PCI= 6 EXISTING RIBBON= YES LENGTH = 855 WIDTH = 22 TOTAL AREA (SQ YD) = 2,512 GLEN RD (LYNN TO E CDS)		GRIND & OVERLAY PCI= 5 EXISTING RIBBON= YES LENGTH = 1,362 WIDTH = 22 TOTAL AREA (SQ YD) = 3,396 ONEIDA (WASHITAY TO SENECA WEST)		GRIND & OVERLAY PCI= 5 EXISTING RIBBON= YES LENGTH = 265 WIDTH = 22 TOTAL AREA (SQ YD) = 661 IVY LN (ROSEWOOD TO VILLAGE LIMIT)		GRIND & OVERLAY PCI= 6 EXISTING RIBBON= YES LENGTH = 1,763 WIDTH = 22 TOTAL AREA (SQ YD) = 4,396 SENECA WEST (INDIAN CREEK TO WASHITAY)	
				QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,254	$ 627.00	2,260	$ 1,130.00	2,261	$ 1,130.50	3,057	$ 1,528.50	595	$ 297.50	3,957	$ 1,978.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	59	$ 4,720.00	106	$ 8,480.00	106	$ 8,480.00	143	$ 11,440.00	28	$ 2,240.00	185	$ 14,800.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	118	$ 8,850.00	211	$ 15,825.00	212	$ 15,900.00	286	$ 21,450.00	56	$ 4,200.00	370	$ 27,750.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,393	$ 2,786.00	2,511	$ 5,022.00	2,512	$ 5,024.00	3,396	$ 6,792.00	661	$ 1,322.00	4,396	$ 8,792.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	28	$ 1,120.00	51	$ 2,040.00	51	$ 2,040.00	68	$ 2,720.00	14	$ 560.00	88	$ 3,520.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	118	$ 12,980.00	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	3	$ 360.00	5	$ 600.00	4	$ 480.00	7	$ 840.00	2	$ 240.00	8	$ 960.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 581.58	1	$ 1,042.56	1	$ 1,041.22	1	$ 1,410.27	1	$ 687.94	1	$ 1,820.72
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 581.58	1	$ 1,042.56	1	$ 1,041.22	1	$ 1,410.27	1	$ 687.94	1	$ 1,820.72
				SUBTOTAL =	$ 18,463.00	SUBTOTAL =	$ 33,097.00	SUBTOTAL =	$ 33,054.50	SUBTOTAL =	$ 44,770.50	SUBTOTAL =	$ 21,839.50	SUBTOTAL =	$ 57,800.50
				CONTINGENCY (5%) =	$ 923.15	CONTINGENCY (5%) =	$ 1,654.85	CONTINGENCY (5%) =	$ 1,652.73	CONTINGENCY (5%) =	$ 2,238.53	CONTINGENCY (5%) =	$ 1,091.98	CONTINGENCY (5%) =	$ 2,890.03
				SUBTOTAL =	$ 19,386.15	SUBTOTAL =	$ 34,751.85	SUBTOTAL =	$ 34,707.23	SUBTOTAL =	$ 47,009.03	SUBTOTAL =	$ 22,931.48	SUBTOTAL =	$ 60,690.53
				CONSTRUCTION TOTAL =	**$ 20,549.32**	**CONSTRUCTION TOTAL =**	**$ 36,836.96**	**CONSTRUCTION TOTAL =**	**$ 36,789.66**	**CONSTRUCTION TOTAL =**	**$ 49,829.57**	**CONSTRUCTION TOTAL =**	**$ 24,307.36**	**CONSTRUCTION TOTAL =**	**$ 64,331.96**
				ENGINEERING =	$ 2,054.93	ENGINEERING =	$ 3,683.70	ENGINEERING =	$ 3,678.97	ENGINEERING =	$ 4,982.96	ENGINEERING =	$ 2,430.74	ENGINEERING =	$ 6,433.20
				ROADWAY TOTAL =	**$ 22,604.25**	**ROADWAY TOTAL =**	**$ 40,520.66**	**ROADWAY TOTAL =**	**$ 40,468.62**	**ROADWAY TOTAL =**	**$ 54,812.52**	**ROADWAY TOTAL =**	**$ 26,738.10**	**ROADWAY TOTAL =**	**$ 70,765.15**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

				YEAR 10 STREETS											
				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 4		PCI= 5		PCI= 5		PCI= 6		PCI= 6		PCI= 5	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 592		LENGTH = 886		LENGTH = 1,017		LENGTH = 793		LENGTH = 3,696		LENGTH = 195	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 21		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 1,477		TOTAL AREA (SQ YD) = 2,523		TOTAL AREA (SQ YD) = 2,536		TOTAL AREA (SQ YD) = 1,888		TOTAL AREA (SQ YD) = 9,216		TOTAL AREA (SQ YD) = 1,180	
				JAMIE LANE (MARK TO TRENT)		LISA (MARK TO EAST CDS)		LYNN (GLEN TO ROSEWOOD DR NORTH)		LYNN (HICKORY TO LAGOON DR)		LYNN (LAGOON TO GLEN)		WAKIA (SENECA WEST TO EAST CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,330	$ 665.00	2,271	$ 1,135.50	2,283	$ 1,141.50	1,700	$ 850.00	8,295	$ 4,147.50	1,062	$ 531.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	63	$ 5,040.00	106	$ 8,480.00	107	$ 8,560.00	80	$ 6,400.00	388	$ 31,040.00	50	$ 4,000.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	125	$ 9,375.00	212	$ 15,900.00	214	$ 16,050.00	159	$ 11,925.00	775	$ 58,125.00	100	$ 7,500.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,477	$ 2,954.00	2,523	$ 5,046.00	2,536	$ 5,072.00	1,888	$ 3,776.00	9,216	$ 18,432.00	1,180	$ 2,360.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	30	$ 1,200.00	51	$ 2,040.00	51	$ 2,040.00	38	$ 1,520.00	185	$ 7,400.00	24	$ 960.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	3	$ 360.00	4	$ 480.00	5	$ 600.00	4	$ 480.00	17	$ 2,040.00	1	$ 120.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 617.21	1	$ 1,042.07	1	$ 1,054.10	1	$ 785.96	1	$ 3,817.31	1	$ 487.34
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 617.21	1	$ 1,042.07	1	$ 1,054.10	1	$ 785.96	1	$ 3,817.31	1	$ 487.34
				SUBTOTAL =	$ 19,594.00	SUBTOTAL =	$ 33,081.50	SUBTOTAL =	$ 33,463.50	SUBTOTAL =	$ 24,951.00	SUBTOTAL =	$ 121,184.50	SUBTOTAL =	$ 15,471.00
				CONTINGENCY (5%) =	$ 979.70	CONTINGENCY (5%) =	$ 1,654.08	CONTINGENCY (5%) =	$ 1,673.18	CONTINGENCY (5%) =	$ 1,247.55	CONTINGENCY (5%) =	$ 6,059.23	CONTINGENCY (5%) =	$ 773.55
				SUBTOTAL =	$ 20,573.70	SUBTOTAL =	$ 34,735.58	SUBTOTAL =	$ 35,136.68	SUBTOTAL =	$ 26,198.55	SUBTOTAL =	$ 127,243.73	SUBTOTAL =	$ 16,244.55
				CONSTRUCTION TOTAL =	**$ 21,808.12**	**CONSTRUCTION TOTAL =**	**$ 36,819.71**	**CONSTRUCTION TOTAL =**	**$ 37,244.88**	**CONSTRUCTION TOTAL =**	**$ 27,770.46**	**CONSTRUCTION TOTAL =**	**$ 134,878.35**	**CONSTRUCTION TOTAL =**	**$ 17,219.22**
				ENGINEERING =	$ 2,180.81	ENGINEERING =	$ 3,681.97	ENGINEERING =	$ 3,724.49	ENGINEERING =	$ 2,777.05	ENGINEERING =	$ 13,487.83	ENGINEERING =	$ 1,721.92
				ROADWAY TOTAL =	**$ 23,988.93**	**ROADWAY TOTAL =**	**$ 40,501.68**	**ROADWAY TOTAL =**	**$ 40,969.36**	**ROADWAY TOTAL =**	**$ 30,547.51**	**ROADWAY TOTAL =**	**$ 148,366.18**	**ROADWAY TOTAL =**	**$ 18,941.15**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 10 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI=	4	PCI=	5	PCI=	4	PCI=	5	PCI=	5
				EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	C+G
				LENGTH =	284	LENGTH =	2,360	LENGTH =	270	LENGTH =	1,852	LENGTH =	1,329
				WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	30
				TOTAL AREA (SQ YD) =	1,044	TOTAL AREA (SQ YD) =	6,286	TOTAL AREA (SQ YD) =	674	TOTAL AREA (SQ YD) =	4,618	TOTAL AREA (SQ YD) =	4,519
				ROBERT (MARK TO EAST CDS)		ROSEWOOD (LYNN TO 280' W/LYNN)		WILD WAY (MARK TO WEST END)		WASHITAY (SENECA W. TO SENECA E.)		BUSINESS PARK	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	940	$ 470.00	5,658	$ 2,829.00	607	$ 303.50	4,157	$ 2,078.50	4,068	$ 2,034.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	44	$ 3,520.00	265	$ 21,200.00	29	$ 2,320.00	194	$ 15,520.00	190	$ 15,200.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	88	$ 6,600.00	529	$ 39,675.00	57	$ 4,275.00	388	$ 29,100.00	380	$ 28,500.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,044	$ 2,088.00	6,286	$ 12,572.00	674	$ 1,348.00	4,618	$ 9,236.00	4,519	$ 9,038.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	21	$ 840.00	126	$ 5,040.00	14	$ 560.00	93	$ 3,720.00	91	$ 3,640.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	2	$ 240.00	11	$ 1,320.00	2	$ 240.00	9	$ 1,080.00	6	$ 720.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 433.38	1	$ 2,603.03	1	$ 284.96	1	$ 1,913.14	1	$ 1,862.66
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 433.38	1	$ 2,603.03	1	$ 284.96	1	$ 1,913.14	1	$ 1,862.66
				SUBTOTAL =	$ 13,758.00	SUBTOTAL =	$ 82,636.00	SUBTOTAL =	$ 9,046.50	SUBTOTAL =	$ 60,734.50	SUBTOTAL =	$ 59,132.00
				CONTINGENCY (5%) =	$ 687.90	CONTINGENCY (5%) =	$ 4,131.80	CONTINGENCY (5%) =	$ 452.33	CONTINGENCY (5%) =	$ 3,036.73	CONTINGENCY (5%) =	$ 2,956.60
				SUBTOTAL =	$ 14,445.90	SUBTOTAL =	$ 86,767.80	SUBTOTAL =	$ 9,498.83	SUBTOTAL =	$ 63,771.23	SUBTOTAL =	$ 62,088.60
				CONSTRUCTION TOTAL =	**$ 15,312.65**	**CONSTRUCTION TOTAL =**	**$ 91,973.87**	**CONSTRUCTION TOTAL =**	**$ 10,068.75**	**CONSTRUCTION TOTAL =**	**$ 67,597.50**	**CONSTRUCTION TOTAL =**	**$ 65,813.92**
				ENGINEERING =	$ 1,531.27	ENGINEERING =	$ 9,197.39	ENGINEERING =	$ 1,006.88	ENGINEERING =	$ 6,759.75	ENGINEERING =	$ 6,581.39
				ROADWAY TOTAL =	**$ 16,843.92**	**ROADWAY TOTAL =**	**$ 101,171.25**	**ROADWAY TOTAL =**	**$ 11,075.63**	**ROADWAY TOTAL =**	**$ 74,357.25**	**ROADWAY TOTAL =**	**$ 72,395.31**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL = $	**1,246,726.73**
ROUTINE MAINTENANCE = $	**230,000.00**
YEAR 10 TOTAL = $	**1,476,726.73**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 11 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5		PCI= 6		PCI= 4		PCI= 5		PCI= 6	
				EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= YES	
				LENGTH = 446		LENGTH = 615		LENGTH = 1,301		LENGTH = 2,337		LENGTH = 834		LENGTH = 3,281	
				WIDTH = 26		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 26		WIDTH = 22	
				TOTAL AREA (SQ YD) = 2,223		TOTAL AREA (SQ YD) = 1,534		TOTAL AREA (SQ YD) = 3,244		TOTAL AREA (SQ YD) = 5,827		TOTAL AREA (SQ YD) = 2,458		TOTAL AREA (SQ YD) = 8,181	
				ANNE CT (DEER POINT TO S CDS)		BARBERRY (OLD LAKE TO NORTH CDS)		BIRCH LAKES (DEER POINT TO FAIRFIELD)		CAMBRIDGE (CARLISLE TO GILMER)		DEER POINTE DR (GOVERNORS TO BRIDGE E/ANNE)		DEER POINT (BRIDGE E/ANNE TO OLD LAKE)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	2,001	$ 1,000.50	1,381	$ 690.50	2,920	$ 1,460.00	5,245	$ 2,622.50	2,213	$ 1,106.50	7,363	$ 3,681.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	94	$ 7,520.00	65	$ 5,200.00	137	$ 10,960.00	245	$ 19,600.00	104	$ 8,320.00	344	$ 27,520.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	187	$ 14,025.00	129	$ 9,675.00	273	$ 20,475.00	490	$ 36,750.00	207	$ 15,525.00	688	$ 51,600.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,223	$ 4,446.00	1,534	$ 3,068.00	3,244	$ 6,488.00	5,827	$ 11,654.00	2,458	$ 4,916.00	8,181	$ 16,362.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	45	$ 1,800.00	31	$ 1,240.00	65	$ 2,600.00	117	$ 4,680.00	50	$ 2,000.00	164	$ 6,560.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	3	$ 360.00	6	$ 720.00	11	$ 1,320.00	0	$ -	15	$ 1,800.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	18	$ 540.00	0	$ -	0	$ -	0	$ -	34	$ 1,020.00	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 923.94	1	$ 637.36	1	$ 1,345.14	1	$ 2,413.73	1	$ 1,035.96	1	$ 3,386.99
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 923.94	1	$ 637.36	1	$ 1,345.14	1	$ 2,413.73	1	$ 1,035.96	1	$ 3,386.99
				SUBTOTAL =	$ 29,331.50	SUBTOTAL =	$ 20,233.50	SUBTOTAL =	$ 42,703.00	SUBTOTAL =	$ 76,626.50	SUBTOTAL =	$ 32,887.50	SUBTOTAL =	$ 107,523.50
				CONTINGENCY (5%) =	$ 1,466.58	CONTINGENCY (5%) =	$ 1,011.68	CONTINGENCY (5%) =	$ 2,135.15	CONTINGENCY (5%) =	$ 3,831.33	CONTINGENCY (5%) =	$ 1,644.38	CONTINGENCY (5%) =	$ 5,376.18
				SUBTOTAL =	$ 30,798.08	SUBTOTAL =	$ 21,245.18	SUBTOTAL =	$ 44,838.15	SUBTOTAL =	$ 80,457.83	SUBTOTAL =	$ 34,531.88	SUBTOTAL =	$ 112,899.68
				CONSTRUCTION TOTAL =	**$ 32,645.96**	**CONSTRUCTION TOTAL =**	**$ 22,519.89**	**CONSTRUCTION TOTAL =**	**$ 47,528.44**	**CONSTRUCTION TOTAL =**	**$ 85,285.29**	**CONSTRUCTION TOTAL =**	**$ 36,603.79**	**CONSTRUCTION TOTAL =**	**$ 119,673.66**
				ENGINEERING =	$ 3,264.60	ENGINEERING =	$ 2,251.99	ENGINEERING =	$ 4,752.84	ENGINEERING =	$ 8,528.53	ENGINEERING =	$ 3,660.38	ENGINEERING =	$ 11,967.37
				ROADWAY TOTAL =	**$ 35,910.56**	**ROADWAY TOTAL =**	**$ 24,771.87**	**ROADWAY TOTAL =**	**$ 52,281.28**	**ROADWAY TOTAL =**	**$ 93,813.82**	**ROADWAY TOTAL =**	**$ 40,264.17**	**ROADWAY TOTAL =**	**$ 131,641.02**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 11 STREETS

				GRIND & OVERLAY				GRIND & OVERLAY				GRIND & OVERLAY				GRIND & OVERLAY				GRIND & OVERLAY			
				PCI=	5			PCI=	5			PCI=	5			PCI=	6			PCI=	5		
				EXISTING RIBBON=	YES			EXISTING RIBBON=	C+G			EXISTING RIBBON=	C+G			EXISTING RIBBON=	YES			EXISTING RIBBON=	YES		
				LENGTH =	275			LENGTH =	350			LENGTH =	2,090			LENGTH =	250			LENGTH =	1,267		
				WIDTH =	22			WIDTH =	25			WIDTH =	25			WIDTH =	22			WIDTH =	22		
				TOTAL AREA (SQ YD) =	686			TOTAL AREA (SQ YD) =	1,928			TOTAL AREA (SQ YD) =	5,922			TOTAL AREA (SQ YD) =	624			TOTAL AREA (SQ YD) =	3,160		
				DURANGO (DEER POINT TO NORTH CDS)				GOVERNORS CT (OLIVERS TO W CDS)				GOVERNORS WAY (230' E/GENTRY TO OLIVERS)				HIGH POINT CI (HIGH POINT DR TO EAST CDS)				HIGH POINT DR (BIRCH LAKES TO NORTH CDS)			
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST			QUANTITY	TOTAL COST			QUANTITY	TOTAL COST			QUANTITY	TOTAL COST			QUANTITY	TOTAL COST		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	618	$ 309.00			1,736	$ 868.00			5,330	$ 2,665.00			562	$ 281.00			2,844	$ 1,422.00		
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	29	$ 2,320.00			81	$ 6,480.00			249	$ 19,920.00			27	$ 2,160.00			133	$ 10,640.00		
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	58	$ 4,350.00			162	$ 12,150.00			498	$ 37,350.00			53	$ 3,975.00			266	$ 19,950.00		
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	686	$ 1,372.00			1,928	$ 3,856.00			5,922	$ 11,844.00			624	$ 1,248.00			3,160	$ 6,320.00		
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	14	$ 560.00			39	$ 1,560.00			119	$ 4,760.00			13	$ 520.00			64	$ 2,560.00		
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	2	$ 240.00			0	$ -			0	$ -			2	$ 240.00			6	$ 720.00		
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -			14	$ 420.00			84	$ 2,520.00			0	$ -			0	$ -		
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -			0	$ -			0	$ -			0	$ -			0	$ -		
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 288.26			1	$ 798.02			1	$ 2,490.36			1	$ 265.36			1	$ 1,310.78		
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 288.26			1	$ 798.02			1	$ 2,490.36			1	$ 265.36			1	$ 1,310.78		
				SUBTOTAL =	$ 9,151.00			SUBTOTAL =	$ 25,334.00			SUBTOTAL =	$ 79,059.00			SUBTOTAL =	$ 8,424.00			SUBTOTAL =	$ 41,612.00		
				CONTINGENCY (5%) =	$ 457.55			CONTINGENCY (5%) =	$ 1,266.70			CONTINGENCY (5%) =	$ 3,952.95			CONTINGENCY (5%) =	$ 421.20			CONTINGENCY (5%) =	$ 2,080.60		
				SUBTOTAL =	$ 9,608.55			SUBTOTAL =	$ 26,600.70			SUBTOTAL =	$ 83,011.95			SUBTOTAL =	$ 8,845.20			SUBTOTAL =	$ 43,692.60		
				CONSTRUCTION TOTAL =	**$ 10,185.06**			**CONSTRUCTION TOTAL =**	**$ 28,196.74**			**CONSTRUCTION TOTAL =**	**$ 87,992.67**			**CONSTRUCTION TOTAL =**	**$ 9,375.91**			**CONSTRUCTION TOTAL =**	**$ 46,314.16**		
				ENGINEERING =	$ 1,018.51			ENGINEERING =	$ 2,819.67			ENGINEERING =	$ 8,799.27			ENGINEERING =	$ 937.59			ENGINEERING =	$ 4,631.42		
				ROADWAY TOTAL =	**$ 11,203.57**			**ROADWAY TOTAL =**	**$ 31,016.42**			**ROADWAY TOTAL =**	**$ 96,791.93**			**ROADWAY TOTAL =**	**$ 10,313.50**			**ROADWAY TOTAL =**	**$ 50,945.57**		

				GRIND & OVERLAY			
				PCI=	6		
				EXISTING RIBBON=	YES		
				LENGTH =	2,325		
				WIDTH =	22		
				TOTAL AREA (SQ YD) =	5,797		
				CARLISLE (DARLINGTON TO HIGHVIEW)			
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST		
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -		
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -		
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -		
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -		
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -		
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -		
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	5,218	$ 2,609.00		
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	244	$ 19,520.00		
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -		
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	487	$ 36,525.00		
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -		
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	5,797	$ 11,594.00		
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -		
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	116	$ 4,640.00		
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -		
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -		
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	21	$ 2,520.00		
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -		
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -		
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 2,438.35		
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 2,438.35		
				SUBTOTAL =	$ 77,408.00		
				CONTINGENCY (5%) =	$ 3,870.40		
				SUBTOTAL =	$ 81,278.40		
				CONSTRUCTION TOTAL =	**$ 86,155.10**		
				ENGINEERING =	$ 8,615.51		
				ROADWAY TOTAL =	**$ 94,770.61**		

ASSUMPTIONS:
1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 11 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 4		PCI= 5		PCI= 5		PCI= 4		PCI= 5	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 1,206		LENGTH = 385		LENGTH = 775		LENGTH = 1,566		LENGTH = 1,278		LENGTH = 467	
				WIDTH = 22		WIDTH = 21.5		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 3,007		TOTAL AREA (SQ YD) = 969		TOTAL AREA (SQ YD) = 2,622		TOTAL AREA (SQ YD) = 3,905		TOTAL AREA (SQ YD) = 3,187		TOTAL AREA (SQ YD) = 1,165	
				MULBERRY (315' E/COPPERFIELD TO OLD MCHENRY)		DARTMOUTH (CAMBRIDGE TO VILLAGE LIMIT)		OLD LAKE (38 OLD LAKE TO EAST CDS)		OLD LAKE (MULBERRY TO 38 OLD LAKE)		HARVARD (CAMBRIDGE TO CAMBRIDGE)		OVERLOOK (DEER POINT TO NORTH CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	2,707	$ 1,353.50	873	$ 436.50	2,360	$ 1,180.00	3,515	$ 1,757.50	2,869	$ 1,434.50	1,049	$ 524.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	127	$ 10,160.00	41	$ 3,280.00	111	$ 8,880.00	165	$ 13,200.00	134	$ 10,720.00	49	$ 3,920.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	253	$ 18,975.00	82	$ 6,150.00	221	$ 16,575.00	329	$ 24,675.00	268	$ 20,100.00	98	$ 7,350.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	3,007	$ 6,014.00	969	$ 1,938.00	2,622	$ 5,244.00	3,905	$ 7,810.00	3,187	$ 6,374.00	1,165	$ 2,330.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	61	$ 2,440.00	20	$ 800.00	53	$ 2,120.00	79	$ 3,160.00	64	$ 2,560.00	24	$ 960.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	6	$ 720.00	2	$ 240.00	0	$ -	7	$ 840.00	6	$ 720.00	3	$ 360.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	31	$ 930.00	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,249.37	1	$ 404.60	1	$ 1,100.26	1	$ 1,620.44	1	$ 1,320.12	1	$ 486.50
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,249.37	1	$ 404.60	1	$ 1,100.26	1	$ 1,620.44	1	$ 1,320.12	1	$ 486.50
				SUBTOTAL =	$ 39,662.50	SUBTOTAL =	$ 12,844.50	SUBTOTAL =	$ 34,929.00	SUBTOTAL =	$ 51,442.50	SUBTOTAL =	$ 41,908.50	SUBTOTAL =	$ 15,444.50
				CONTINGENCY (5%) =	$ 1,983.13	CONTINGENCY (5%) =	$ 642.23	CONTINGENCY (5%) =	$ 1,746.45	CONTINGENCY (5%) =	$ 2,572.13	CONTINGENCY (5%) =	$ 2,095.43	CONTINGENCY (5%) =	$ 772.23
				SUBTOTAL =	$ 41,645.63	SUBTOTAL =	$ 13,486.73	SUBTOTAL =	$ 36,675.45	SUBTOTAL =	$ 54,014.63	SUBTOTAL =	$ 44,003.93	SUBTOTAL =	$ 16,216.73
				CONSTRUCTION TOTAL =	**$ 44,144.36**	**CONSTRUCTION TOTAL =**	**$ 14,295.93**	**CONSTRUCTION TOTAL =**	**$ 38,875.98**	**CONSTRUCTION TOTAL =**	**$ 57,255.50**	**CONSTRUCTION TOTAL =**	**$ 46,644.16**	**CONSTRUCTION TOTAL =**	**$ 17,189.73**
				ENGINEERING =	$ 4,414.44	ENGINEERING =	$ 1,429.59	ENGINEERING =	$ 3,887.60	ENGINEERING =	$ 5,725.55	ENGINEERING =	$ 4,664.42	ENGINEERING =	$ 1,718.97
				ROADWAY TOTAL =	**$ 48,558.80**	**ROADWAY TOTAL =**	**$ 15,725.52**	**ROADWAY TOTAL =**	**$ 42,763.57**	**ROADWAY TOTAL =**	**$ 62,981.05**	**ROADWAY TOTAL =**	**$ 51,308.58**	**ROADWAY TOTAL =**	**$ 18,908.70**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 11 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 4		PCI= 5		PCI= 5		PCI= 6	
				EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= YES	
				LENGTH = 5,200		LENGTH = 1,040		LENGTH = 2,000		LENGTH = 175	
				WIDTH = 22		WIDTH = 25		WIDTH = 21		WIDTH = 22	
				TOTAL AREA (SQ YD) = 12,966		TOTAL AREA (SQ YD) = 2,947		TOTAL AREA (SQ YD) = 5,337		TOTAL AREA (SQ YD) = 1,362	
				MARK (DARLINGTON TO SOUTH CDS)		PARK PLACE CI (PARK VIEW TO CDS)		PARK VIEW (OLD MCHENRY TO EAST END)		YALE (HARVARD TO EAST CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	11,670	$ 5,835.00	2,653	$ 1,326.50	4,804	$ 2,402.00	1,226	$ 613.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	545	$ 43,600.00	124	$ 9,920.00	225	$ 18,000.00	58	$ 4,640.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	1,090	$ 81,750.00	248	$ 18,600.00	449	$ 33,675.00	115	$ 8,625.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	12,966	$ 25,932.00	2,947	$ 5,894.00	5,337	$ 10,674.00	1,362	$ 2,724.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	260	$ 10,400.00	59	$ 2,360.00	107	$ 4,280.00	28	$ 1,120.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	24	$ 2,880.00	0	$ -	0	$ -	1	$ 120.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	42	$ 1,260.00	80	$ 2,400.00	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 5,367.51	1	$ 1,239.86	1	$ 2,250.08	1	$ 562.02
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 5,367.51	1	$ 1,239.86	1	$ 2,250.08	1	$ 562.02
				SUBTOTAL =	$ 170,397.00	SUBTOTAL =	$ 39,360.50	SUBTOTAL =	$ 71,431.00	SUBTOTAL =	$ 17,842.00
				CONTINGENCY (5%) =	$ 8,519.85	CONTINGENCY (5%) =	$ 1,968.03	CONTINGENCY (5%) =	$ 3,571.55	CONTINGENCY (5%) =	$ 892.10
				SUBTOTAL =	$ 178,916.85	SUBTOTAL =	$ 41,328.53	SUBTOTAL =	$ 75,002.55	SUBTOTAL =	$ 18,734.10
				CONSTRUCTION TOTAL =	**$ 189,651.86**	**CONSTRUCTION TOTAL =**	**$ 43,808.24**	**CONSTRUCTION TOTAL =**	**$ 79,502.70**	**CONSTRUCTION TOTAL =**	**$ 19,858.15**
				ENGINEERING =	$ 18,965.19	ENGINEERING =	$ 4,380.82	ENGINEERING =	$ 7,950.27	ENGINEERING =	$ 1,985.81
				ROADWAY TOTAL =	**$ 208,617.05**	**ROADWAY TOTAL =**	**$ 48,189.06**	**ROADWAY TOTAL =**	**$ 87,452.97**	**ROADWAY TOTAL =**	**$ 21,843.96**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$ 1,280,073.60**
ROUTINE MAINTENANCE =	**$ 230,000.00**
YEAR 11 TOTAL =	**$ 1,510,073.60**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 12 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 4		PCI= 5		PCI= 4		PCI= 4		PCI= 4		PCI= 4	
				EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= YES	
				LENGTH = 1,250		LENGTH = 3,300		LENGTH = 645		LENGTH = 1,825		LENGTH = 1,000		LENGTH = 1,260	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 3,927		TOTAL AREA (SQ YD) = 8,228		TOTAL AREA (SQ YD) = 2,136		TOTAL AREA (SQ YD) = 4,732		TOTAL AREA (SQ YD) = 2,494		TOTAL AREA (SQ YD) = 3,142	
				COBBLEWOOD (NORTH TRAIL TO SOUTH CDS)		DEERFIELD (FOREST VIEW TO NORTH END)		CHERRY HILL CI (GINO TO NORTH CDS)		EQUESTRIAN WAY (NORTH TRAIL TO 450' S/MOOREGATE)		GINO (HAWTHORN TO 360' E/HAWTHORN)		GINO (360' E/HAWTHORN TO ST JOHN)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	3,535	$ 1,767.50	7,406	$ 3,703.00	1,923	$ 961.50	4,259	$ 2,129.50	2,245	$ 1,122.50	2,828	$ 1,414.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	165	$ 13,200.00	346	$ 27,680.00	90	$ 7,200.00	199	$ 15,920.00	105	$ 8,400.00	132	$ 10,560.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	330	$ 24,750.00	692	$ 51,900.00	180	$ 13,500.00	398	$ 29,850.00	210	$ 15,750.00	264	$ 19,800.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	3,927	$ 7,854.00	8,228	$ 16,456.00	2,136	$ 4,272.00	4,732	$ 9,464.00	2,494	$ 4,988.00	3,142	$ 6,284.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	79	$ 3,160.00	165	$ 6,600.00	43	$ 1,720.00	95	$ 3,800.00	50	$ 2,000.00	63	$ 2,520.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	6	$ 720.00	0	$ -	3	$ 360.00	0	$ -	0	$ -	6	$ 720.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	132	$ 3,960.00	0	$ -	73	$ 2,190.00	40	$ 1,200.00	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,620.72	1	$ 3,474.42	1	$ 882.43	1	$ 1,995.64	1	$ 1,054.01	1	$ 1,300.89
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,620.72	1	$ 3,474.42	1	$ 882.43	1	$ 1,995.64	1	$ 1,054.01	1	$ 1,300.89
				SUBTOTAL =	$ 51,451.50	SUBTOTAL =	$ 110,299.00	SUBTOTAL =	$ 28,013.50	SUBTOTAL =	$ 63,353.50	SUBTOTAL =	$ 33,460.50	SUBTOTAL =	$ 41,298.00
				CONTINGENCY (5%) =	$ 2,572.58	CONTINGENCY (5%) =	$ 5,514.95	CONTINGENCY (5%) =	$ 1,400.68	CONTINGENCY (5%) =	$ 3,167.68	CONTINGENCY (5%) =	$ 1,673.03	CONTINGENCY (5%) =	$ 2,064.90
				SUBTOTAL =	$ 54,024.08	SUBTOTAL =	$ 115,813.95	SUBTOTAL =	$ 29,414.18	SUBTOTAL =	$ 66,521.18	SUBTOTAL =	$ 35,133.53	SUBTOTAL =	$ 43,362.90
				CONSTRUCTION TOTAL =	**$ 57,265.52**	**CONSTRUCTION TOTAL =**	**$ 122,762.79**	**CONSTRUCTION TOTAL =**	**$ 31,179.03**	**CONSTRUCTION TOTAL =**	**$ 70,512.45**	**CONSTRUCTION TOTAL =**	**$ 37,241.54**	**CONSTRUCTION TOTAL =**	**$ 45,964.67**
				ENGINEERING =	$ 5,726.55	ENGINEERING =	$ 12,276.28	ENGINEERING =	$ 3,117.90	ENGINEERING =	$ 7,051.24	ENGINEERING =	$ 3,724.15	ENGINEERING =	$ 4,596.47
				ROADWAY TOTAL =	**$ 62,992.07**	**ROADWAY TOTAL =**	**$ 135,039.07**	**ROADWAY TOTAL =**	**$ 34,296.93**	**ROADWAY TOTAL =**	**$ 77,563.69**	**ROADWAY TOTAL =**	**$ 40,965.69**	**ROADWAY TOTAL =**	**$ 50,561.14**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 12 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 4		PCI= 4		PCI= 4		PCI= 5		PCI= 4	
				EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 1,400		LENGTH = 426		LENGTH = 142		LENGTH = 215		LENGTH = 2,196		LENGTH = 797	
				WIDTH = 22		WIDTH = 22 TO 55		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 3,491		TOTAL AREA (SQ YD) = 2,289		TOTAL AREA (SQ YD) = 921		TOTAL AREA (SQ YD) = 1,258		TOTAL AREA (SQ YD) = 5,476		TOTAL AREA (SQ YD) = 2,561	
				FOREST VIEW (KRUCKENBURG TO DEERFIELD)		HILLCREST (VILLAGE LIMIT TO LAKEVIEW)		HILLTOP (OLD BARN TO NORTH CDS)		KAREN (GINO TO SOUTH CDS)		LAKEVIEW (HILLCREST TO OLD BARN)		MAGNOLIA PKWY (ST. JOHN TO WEST CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	3,142	$ 1,571.00	2,061	$ 1,030.50	829	$ 414.50	1,133	$ 566.50	4,929	$ 2,464.50	2,305	$ 1,152.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	147	$ 11,760.00	97	$ 7,760.00	39	$ 3,120.00	53	$ 4,240.00	230	$ 18,400.00	108	$ 8,640.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	294	$ 22,050.00	193	$ 14,475.00	78	$ 5,850.00	106	$ 7,950.00	460	$ 34,500.00	216	$ 16,200.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	3,491	$ 6,982.00	2,289	$ 4,578.00	921	$ 1,842.00	1,258	$ 2,516.00	5,476	$ 10,952.00	2,561	$ 5,122.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	70	$ 2,800.00	46	$ 1,840.00	19	$ 760.00	26	$ 1,040.00	110	$ 4,400.00	52	$ 2,080.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	1	$ 120.00	1	$ 120.00	10	$ 1,200.00	4	$ 480.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	56	$ 1,680.00	18	$ 540.00	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,475.55	1	$ 952.04	1	$ 381.35	1	$ 517.62	1	$ 2,265.37	1	$ 1,060.75
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,475.55	1	$ 952.04	1	$ 381.35	1	$ 517.62	1	$ 2,265.37	1	$ 1,060.75
				SUBTOTAL =	$ 46,843.00	SUBTOTAL =	$ 30,223.50	SUBTOTAL =	$ 12,106.50	SUBTOTAL =	$ 16,432.50	SUBTOTAL =	$ 71,916.50	SUBTOTAL =	$ 33,674.50
				CONTINGENCY (5%) =	$ 2,342.15	CONTINGENCY (5%) =	$ 1,511.18	CONTINGENCY (5%) =	$ 605.33	CONTINGENCY (5%) =	$ 821.63	CONTINGENCY (5%) =	$ 3,595.83	CONTINGENCY (5%) =	$ 1,683.73
				SUBTOTAL =	$ 49,185.15	SUBTOTAL =	$ 31,734.68	SUBTOTAL =	$ 12,711.83	SUBTOTAL =	$ 17,254.13	SUBTOTAL =	$ 75,512.33	SUBTOTAL =	$ 35,358.23
				CONSTRUCTION TOTAL =	**$ 52,136.26**	**CONSTRUCTION TOTAL =**	**$ 33,638.76**	**CONSTRUCTION TOTAL =**	**$ 13,474.53**	**CONSTRUCTION TOTAL =**	**$ 18,289.37**	**CONSTRUCTION TOTAL =**	**$ 80,043.06**	**CONSTRUCTION TOTAL =**	**$ 37,479.72**
				ENGINEERING =	$ 5,213.63	ENGINEERING =	$ 3,363.88	ENGINEERING =	$ 1,347.45	ENGINEERING =	$ 1,828.94	ENGINEERING =	$ 8,004.31	ENGINEERING =	$ 3,747.97
				ROADWAY TOTAL =	**$ 57,349.88**	**ROADWAY TOTAL =**	**$ 37,002.63**	**ROADWAY TOTAL =**	**$ 14,821.99**	**ROADWAY TOTAL =**	**$ 20,118.31**	**ROADWAY TOTAL =**	**$ 88,047.37**	**ROADWAY TOTAL =**	**$ 41,227.69**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 12 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 4		PCI= 4		PCI= 5		PCI= 5		PCI= 4	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= YES	
				LENGTH = 1,671		LENGTH = 458		LENGTH = 3,302		LENGTH = 350		LENGTH = 330		LENGTH = 500	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 25		WIDTH = 22	
				TOTAL AREA (SQ YD) = 5,159		TOTAL AREA (SQ YD) = 1,728		TOTAL AREA (SQ YD) = 8,233		TOTAL AREA (SQ YD) = 873		TOTAL AREA (SQ YD) = 935		TOTAL AREA (SQ YD) = 1,777	
				GREENBRIAR (EAST CDS TO WEST CDS)		MARY (ST. JOHN TO WEST CDS)		OLD BARN (HILLCREST TO VILLAGE LIMIT)		GREENFIELD CT (DEERFIELD TO N CDS)		MOOREGATE TR (330' W/EQUESTRIAN TO EQUESTRIAN)		QUAIL HOLLOW (SOUTH CDS TO NORTH CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	4,644	$ 2,322.00	1,556	$ 778.00	7,410	$ 3,705.00	786	$ 393.00	842	$ 421.00	1,600	$ 800.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	217	$ 17,360.00	73	$ 5,840.00	346	$ 27,680.00	37	$ 2,960.00	40	$ 3,200.00	75	$ 6,000.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	434	$ 32,550.00	146	$ 10,950.00	692	$ 51,900.00	74	$ 5,550.00	79	$ 5,925.00	150	$ 11,250.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	5,159	$ 10,318.00	1,728	$ 3,456.00	8,233	$ 16,466.00	873	$ 1,746.00	935	$ 1,870.00	1,777	$ 3,554.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	104	$ 4,160.00	35	$ 1,400.00	165	$ 6,600.00	18	$ 720.00	19	$ 760.00	36	$ 1,440.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	8	$ 960.00	3	$ 360.00	15	$ 1,800.00	0	$ -	0	$ -	3	$ 360.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	14	$ 420.00	14	$ 420.00	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 2,131.61	1	$ 717.70	1	$ 3,406.76	1	$ 371.35	1	$ 396.77	1	$ 737.23
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 2,131.61	1	$ 717.70	1	$ 3,406.76	1	$ 371.35	1	$ 396.77	1	$ 737.23
				SUBTOTAL =	$ 67,670.00	SUBTOTAL =	$ 22,784.00	SUBTOTAL =	$ 108,151.00	SUBTOTAL =	$ 11,789.00	SUBTOTAL =	$ 12,596.00	SUBTOTAL =	$ 23,404.00
				CONTINGENCY (5%) =	$ 3,383.50	CONTINGENCY (5%) =	$ 1,139.20	CONTINGENCY (5%) =	$ 5,407.55	CONTINGENCY (5%) =	$ 589.45	CONTINGENCY (5%) =	$ 629.80	CONTINGENCY (5%) =	$ 1,170.20
				SUBTOTAL =	$ 71,053.50	SUBTOTAL =	$ 23,923.20	SUBTOTAL =	$ 113,558.55	SUBTOTAL =	$ 12,378.45	SUBTOTAL =	$ 13,225.80	SUBTOTAL =	$ 24,574.20
				CONSTRUCTION TOTAL =	**$ 75,316.71**	**CONSTRUCTION TOTAL =**	**$ 25,358.59**	**CONSTRUCTION TOTAL =**	**$ 120,372.06**	**CONSTRUCTION TOTAL =**	**$ 13,121.16**	**CONSTRUCTION TOTAL =**	**$ 14,019.35**	**CONSTRUCTION TOTAL =**	**$ 26,048.65**
				ENGINEERING =	$ 7,531.67	ENGINEERING =	$ 2,535.86	ENGINEERING =	$ 12,037.21	ENGINEERING =	$ 1,312.12	ENGINEERING =	$ 1,401.93	ENGINEERING =	$ 2,604.87
				ROADWAY TOTAL =	**$ 82,848.38**	**ROADWAY TOTAL =**	**$ 27,894.45**	**ROADWAY TOTAL =**	**$ 132,409.27**	**ROADWAY TOTAL =**	**$ 14,433.27**	**ROADWAY TOTAL =**	**$ 15,421.28**	**ROADWAY TOTAL =**	**$ 28,653.52**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 12 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI=	4	PCI=	5	PCI=	4	PCI=	4	PCI=	5	PCI=	4
				EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	C+G
				LENGTH =	752	LENGTH =	2,452	LENGTH =	150	LENGTH =	443	LENGTH =	2,007	LENGTH =	650
				WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22
				TOTAL AREA (SQ YD) =	1,875	TOTAL AREA (SQ YD) =	6,114	TOTAL AREA (SQ YD) =	842	TOTAL AREA (SQ YD) =	1,105	TOTAL AREA (SQ YD) =	5,515	TOTAL AREA (SQ YD) =	1,621
				SAINT JOHN (GILMER TO GINO)		SAINT JOHN (GINO TO OLD BARN)		SUNSET (OLD BARN TO NORTH CDS)		NEWHAVEN (COBBLEWOOD TO VILLAGE LIMIT)		ROSEWOOD (280' W/LYNN TO NORTH END)		SADDLE RIDGE CT (EQUESTRIAN WAY TO E CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,688	$ 844.00	5,503	$ 2,751.50	758	$ 379.00	995	$ 497.50	4,964	$ 2,482.00	1,459	$ 729.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	79	$ 6,320.00	257	$ 20,560.00	36	$ 2,880.00	47	$ 3,760.00	232	$ 18,560.00	69	$ 5,520.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	158	$ 11,850.00	514	$ 38,550.00	71	$ 5,325.00	93	$ 6,975.00	464	$ 34,800.00	137	$ 10,275.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,875	$ 3,750.00	6,114	$ 12,228.00	842	$ 1,684.00	1,105	$ 2,210.00	5,515	$ 11,030.00	1,621	$ 3,242.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	38	$ 1,520.00	123	$ 4,920.00	17	$ 680.00	23	$ 920.00	111	$ 4,440.00	33	$ 1,320.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	4	$ 480.00	11	$ 1,320.00	1	$ 120.00	2	$ 240.00	9	$ 1,080.00	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	26	$ 780.00
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 780.07	1	$ 2,530.38	1	$ 348.64	1	$ 459.98	1	$ 2,280.35	1	$ 688.79
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 780.07	1	$ 2,530.38	1	$ 348.64	1	$ 459.98	1	$ 2,280.35	1	$ 688.79
				SUBTOTAL =	$ 24,764.00	SUBTOTAL =	$ 80,329.50	SUBTOTAL =	$ 11,068.00	SUBTOTAL =	$ 14,602.50	SUBTOTAL =	$ 72,392.00	SUBTOTAL =	$ 21,866.50
				CONTINGENCY (5%) =	$ 1,238.20	CONTINGENCY (5%) =	$ 4,016.48	CONTINGENCY (5%) =	$ 553.40	CONTINGENCY (5%) =	$ 730.13	CONTINGENCY (5%) =	$ 3,619.60	CONTINGENCY (5%) =	$ 1,093.33
				SUBTOTAL =	$ 26,002.20	SUBTOTAL =	$ 84,345.98	SUBTOTAL =	$ 11,621.40	SUBTOTAL =	$ 15,332.63	SUBTOTAL =	$ 76,011.60	SUBTOTAL =	$ 22,959.83
				CONSTRUCTION TOTAL =	**$ 27,562.33**	**CONSTRUCTION TOTAL =**	**$ 89,406.73**	**CONSTRUCTION TOTAL =**	**$ 12,318.68**	**CONSTRUCTION TOTAL =**	**$ 16,252.58**	**CONSTRUCTION TOTAL =**	**$ 80,572.30**	**CONSTRUCTION TOTAL =**	**$ 24,337.41**
				ENGINEERING =	$ 2,756.23	ENGINEERING =	$ 8,940.67	ENGINEERING =	$ 1,231.87	ENGINEERING =	$ 1,625.26	ENGINEERING =	$ 8,057.23	ENGINEERING =	$ 2,433.74
				ROADWAY TOTAL =	**$ 30,318.57**	**ROADWAY TOTAL =**	**$ 98,347.41**	**ROADWAY TOTAL =**	**$ 13,550.55**	**ROADWAY TOTAL =**	**$ 17,877.84**	**ROADWAY TOTAL =**	**$ 88,629.53**	**ROADWAY TOTAL =**	**$ 26,771.16**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

				YEAR 12 STREETS					
				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 4		PCI= 6	
				EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G	
				LENGTH = 740		LENGTH = 350		LENGTH = 150	
				WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 1,846		TOTAL AREA (SQ YD) = 873		TOTAL AREA (SQ YD) = 374	
				SAINT JOHN (GREENBRIAR TO GILMER))		STONEY RIDGE CT (EQUESTRIAN WAY TO END CDS)		LA VISTA DR (VILLAGE LIMIT TO VILLAGE LIMIT)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,662	$ 831.00	786	$ 393.00	337	$ 168.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	78	$ 6,240.00	37	$ 2,960.00	16	$ 1,280.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	156	$ 11,700.00	74	$ 5,550.00	32	$ 2,400.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,846	$ 3,692.00	873	$ 1,746.00	374	$ 748.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	37	$ 1,480.00	18	$ 720.00	8	$ 320.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	4	$ 480.00	0	$ -	1	$ 120.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	14	$ 420.00	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 769.32	1	$ 371.35	1	$ 158.65
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 769.32	1	$ 371.35	1	$ 158.65
				SUBTOTAL =	$ 24,423.00	SUBTOTAL =	$ 11,789.00	SUBTOTAL =	$ 5,036.50
				CONTINGENCY (5%) =	$ 1,221.15	CONTINGENCY (5%) =	$ 589.45	CONTINGENCY (5%) =	$ 251.83
				SUBTOTAL =	$ 25,644.15	SUBTOTAL =	$ 12,378.45	SUBTOTAL =	$ 5,288.33
				CONSTRUCTION TOTAL =	**$ 27,182.80**	**CONSTRUCTION TOTAL =**	**$ 13,121.16**	**CONSTRUCTION TOTAL =**	**$ 5,605.62**
				ENGINEERING =	$ 2,718.28	ENGINEERING =	$ 1,312.12	ENGINEERING =	$ 560.56
				ROADWAY TOTAL =	**$ 29,901.08**	**ROADWAY TOTAL =**	**$ 14,433.27**	**ROADWAY TOTAL =**	**$ 6,166.19**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$**	**1,287,642.22**
ROUTINE MAINTENANCE =	**$**	**230,000.00**
YEAR 12 TOTAL =	**$**	**1,517,642.22**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 13 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI=	5	PCI=	5	PCI=	5	PCI=	5	PCI=	5	PCI=	5
				EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES
				LENGTH =	853	LENGTH =	1,750	LENGTH =	731	LENGTH =	318	LENGTH =	722	LENGTH =	2,770
				WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22
				TOTAL AREA (SQ YD) =	2,127	TOTAL AREA (SQ YD) =	4,858	TOTAL AREA (SQ YD) =	1,823	TOTAL AREA (SQ YD) =	793	TOTAL AREA (SQ YD) =	1,801	TOTAL AREA (SQ YD) =	6,907
				BRIDLE PATH (MILTON TO NORTH TRAIL)		ARROWWOOD (SOUTH CDS TO SYCAMORE)		BOXWOOD (MIDDLETREE TO ARROWWOOD)		DERBY (STEEPLECHASE TO NORTH END)		ELDERBERRY (MIDDLETREE TO EAST END)		LAGOON (OLD MCHENRY TO WALNUT)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,915	$ 957.50	4,373	$ 2,186.50	1,641	$ 820.50	714	$ 357.00	1,621	$ 810.50	6,217	$ 3,108.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	90	$ 7,200.00	205	$ 16,400.00	77	$ 6,160.00	34	$ 2,720.00	76	$ 6,080.00	291	$ 23,280.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	179	$ 13,425.00	409	$ 30,675.00	154	$ 11,550.00	67	$ 5,025.00	152	$ 11,400.00	581	$ 43,575.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,127	$ 4,254.00	4,858	$ 9,716.00	1,823	$ 3,646.00	793	$ 1,586.00	1,801	$ 3,602.00	6,907	$ 13,814.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	43	$ 1,720.00	98	$ 3,920.00	37	$ 1,480.00	16	$ 640.00	37	$ 1,480.00	139	$ 5,560.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	1,232	$ 135,520.00
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	4	$ 480.00	8	$ 960.00	4	$ 480.00	2	$ 240.00	4	$ 480.00	13	$ 1,560.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 883.15	1	$ 2,011.51	1	$ 760.30	1	$ 332.89	1	$ 751.35	1	$ 7,132.15
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 883.15	1	$ 2,011.51	1	$ 760.30	1	$ 332.89	1	$ 751.35	1	$ 7,132.15
				SUBTOTAL =	$ 28,036.50	SUBTOTAL =	$ 63,857.50	SUBTOTAL =	$ 24,136.50	SUBTOTAL =	$ 10,568.00	SUBTOTAL =	$ 23,852.50	SUBTOTAL =	$ 226,417.50
				CONTINGENCY (5%) =	$ 1,401.83	CONTINGENCY (5%) =	$ 3,192.88	CONTINGENCY (5%) =	$ 1,206.83	CONTINGENCY (5%) =	$ 528.40	CONTINGENCY (5%) =	$ 1,192.63	CONTINGENCY (5%) =	$ 11,320.88
				SUBTOTAL =	$ 29,438.33	SUBTOTAL =	$ 67,050.38	SUBTOTAL =	$ 25,343.33	SUBTOTAL =	$ 11,096.40	SUBTOTAL =	$ 25,045.13	SUBTOTAL =	$ 237,738.38
				CONSTRUCTION TOTAL =	**$ 31,204.62**	**CONSTRUCTION TOTAL =**	**$ 71,073.40**	**CONSTRUCTION TOTAL =**	**$ 26,863.92**	**CONSTRUCTION TOTAL =**	**$ 11,762.18**	**CONSTRUCTION TOTAL =**	**$ 26,547.83**	**CONSTRUCTION TOTAL =**	**$ 252,002.68**
				ENGINEERING =	$ 3,120.46	ENGINEERING =	$ 7,107.34	ENGINEERING =	$ 2,686.39	ENGINEERING =	$ 1,176.22	ENGINEERING =	$ 2,654.78	ENGINEERING =	$ 25,200.27
				ROADWAY TOTAL =	**$ 34,325.09**	**ROADWAY TOTAL =**	**$ 78,180.74**	**ROADWAY TOTAL =**	**$ 29,550.32**	**ROADWAY TOTAL =**	**$ 12,938.40**	**ROADWAY TOTAL =**	**$ 29,202.62**	**ROADWAY TOTAL =**	**$ 277,202.95**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 13 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5		PCI= 5		PCI= 4		PCI= 5		PCI= 5	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 535		LENGTH = 2,056		LENGTH = 1,981		LENGTH = 330		LENGTH = 2,521		LENGTH = 1,283	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 38 to 25		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 1,334		TOTAL AREA (SQ YD) = 5,643		TOTAL AREA (SQ YD) = 4,940		TOTAL AREA (SQ YD) = 1,272		TOTAL AREA (SQ YD) = 6,518		TOTAL AREA (SQ YD) = 3,199	
				FURLONG (NORTH TRAIL TO EAST END)		MIDDLETREE (SYCAMORE TO SOUTH CDS)		ORCHARD (ROSEWOOD TO LAGOON)		REDWOOD (OLD MCHENRY TO SYCAMORE)		SYCAMORE (NORTH CDS TO SOUTH END)		NORTH TRAIL (WESTWIND TO FURLONG)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,201	$ 600.50	5,079	$ 2,539.50	4,446	$ 2,223.00	1,145	$ 572.50	5,867	$ 2,933.50	2,880	$ 1,440.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	57	$ 4,560.00	238	$ 19,040.00	208	$ 16,640.00	54	$ 4,320.00	274	$ 21,920.00	135	$ 10,800.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	113	$ 8,475.00	475	$ 35,625.00	415	$ 31,125.00	107	$ 8,025.00	548	$ 41,100.00	269	$ 20,175.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,334	$ 2,668.00	5,643	$ 11,286.00	4,940	$ 9,880.00	1,272	$ 2,544.00	6,518	$ 13,036.00	3,199	$ 6,398.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	27	$ 1,080.00	113	$ 4,520.00	99	$ 3,960.00	26	$ 1,040.00	131	$ 5,240.00	64	$ 2,560.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	3	$ 360.00	10	$ 1,200.00	9	$ 1,080.00	2	$ 240.00	12	$ 1,440.00	6	$ 720.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 558.92	1	$ 2,337.63	1	$ 2,044.60	1	$ 527.36	1	$ 2,698.59	1	$ 1,325.93
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 558.92	1	$ 2,337.63	1	$ 2,044.60	1	$ 527.36	1	$ 2,698.59	1	$ 1,325.93
				SUBTOTAL =	$ 17,743.50	SUBTOTAL =	$ 74,210.50	SUBTOTAL =	$ 64,908.00	SUBTOTAL =	$ 16,741.50	SUBTOTAL =	$ 85,669.50	SUBTOTAL =	$ 42,093.00
				CONTINGENCY (5%) =	$ 887.18	CONTINGENCY (5%) =	$ 3,710.53	CONTINGENCY (5%) =	$ 3,245.40	CONTINGENCY (5%) =	$ 837.08	CONTINGENCY (5%) =	$ 4,283.48	CONTINGENCY (5%) =	$ 2,104.65
				SUBTOTAL =	$ 18,630.68	SUBTOTAL =	$ 77,921.03	SUBTOTAL =	$ 68,153.40	SUBTOTAL =	$ 17,578.58	SUBTOTAL =	$ 89,952.98	SUBTOTAL =	$ 44,197.65
				CONSTRUCTION TOTAL =	**$ 19,748.52**	**CONSTRUCTION TOTAL =**	**$ 82,596.29**	**CONSTRUCTION TOTAL =**	**$ 72,242.60**	**CONSTRUCTION TOTAL =**	**$ 18,633.29**	**CONSTRUCTION TOTAL =**	**$ 95,350.15**	**CONSTRUCTION TOTAL =**	**$ 46,849.51**
				ENGINEERING =	$ 1,974.85	ENGINEERING =	$ 8,259.63	ENGINEERING =	$ 7,224.26	ENGINEERING =	$ 1,863.33	ENGINEERING =	$ 9,535.02	ENGINEERING =	$ 4,684.95
				ROADWAY TOTAL =	**$ 21,723.37**	**ROADWAY TOTAL =**	**$ 90,855.92**	**ROADWAY TOTAL =**	**$ 79,466.86**	**ROADWAY TOTAL =**	**$ 20,496.62**	**ROADWAY TOTAL =**	**$ 104,885.17**	**ROADWAY TOTAL =**	**$ 51,534.46**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 13 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5		PCI= 4		PCI= 5		PCI= 4		PCI= 4	
				EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 2,827		LENGTH = 3,560		LENGTH = 340		LENGTH = 231		LENGTH = 620		LENGTH = 595	
				WIDTH = 22		WIDTH = 22		WIDTH = 22		WIDTH = 35		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 7,049		TOTAL AREA (SQ YD) = 8,877		TOTAL AREA (SQ YD) = 848		TOTAL AREA (SQ YD) = 917		TOTAL AREA (SQ YD) = 1,546		TOTAL AREA (SQ YD) = 2,499	
				NORTH TRAIL (WESTWIND TO SOUTH CDS)		NORTH TRAIL (NORTH CDS TO FURLONG)		PADDOCK (NORTH TRAIL TO NORTH CDS)		REDWOOD (NORTH TRAIL TO OLD MCHENRY)		LAGOON (WALNUT TO FALKIRK)		WESTWIND (NORTH TRAIL TO WEST CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	6,345	$ 3,172.50	7,990	$ 3,995.00	764	$ 382.00	826	$ 413.00	1,392	$ 696.00	2,250	$ 1,125.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	297	$ 23,760.00	373	$ 29,840.00	36	$ 2,880.00	39	$ 3,120.00	65	$ 5,200.00	105	$ 8,400.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	593	$ 44,475.00	746	$ 55,950.00	72	$ 5,400.00	78	$ 5,850.00	130	$ 9,750.00	210	$ 15,750.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	7,049	$ 14,098.00	8,877	$ 17,754.00	848	$ 1,696.00	917	$ 1,834.00	1,546	$ 3,092.00	2,499	$ 4,998.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	141	$ 5,640.00	178	$ 7,120.00	17	$ 680.00	19	$ 760.00	31	$ 1,240.00	50	$ 2,000.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	13	$ 1,560.00	16	$ 1,920.00	2	$ 240.00	2	$ 240.00	3	$ 360.00	3	$ 360.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 2,920.22	1	$ 3,672.24	1	$ 355.26	1	$ 384.84	1	$ 640.65	1	$ 1,027.94
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 2,920.22	1	$ 3,672.24	1	$ 355.26	1	$ 384.84	1	$ 640.65	1	$ 1,027.94
				SUBTOTAL =	$ 92,705.50	SUBTOTAL =	$ 116,579.00	SUBTOTAL =	$ 11,278.00	SUBTOTAL =	$ 12,217.00	SUBTOTAL =	$ 20,338.00	SUBTOTAL =	$ 32,633.00
				CONTINGENCY (5%) =	$ 4,635.28	CONTINGENCY (5%) =	$ 5,828.95	CONTINGENCY (5%) =	$ 563.90	CONTINGENCY (5%) =	$ 610.85	CONTINGENCY (5%) =	$ 1,016.90	CONTINGENCY (5%) =	$ 1,631.65
				SUBTOTAL =	$ 97,340.78	SUBTOTAL =	$ 122,407.95	SUBTOTAL =	$ 11,841.90	SUBTOTAL =	$ 12,827.85	SUBTOTAL =	$ 21,354.90	SUBTOTAL =	$ 34,264.65
				CONSTRUCTION TOTAL =	**$ 103,181.22**	**CONSTRUCTION TOTAL =**	**$ 129,752.43**	**CONSTRUCTION TOTAL =**	**$ 12,552.41**	**CONSTRUCTION TOTAL =**	**$ 13,597.52**	**CONSTRUCTION TOTAL =**	**$ 22,636.19**	**CONSTRUCTION TOTAL =**	**$ 36,320.53**
				ENGINEERING =	$ 10,318.12	ENGINEERING =	$ 12,975.24	ENGINEERING =	$ 1,255.24	ENGINEERING =	$ 1,359.75	ENGINEERING =	$ 2,263.62	ENGINEERING =	$ 3,632.05
				ROADWAY TOTAL =	**$ 113,499.34**	**ROADWAY TOTAL =**	**$ 142,727.67**	**ROADWAY TOTAL =**	**$ 13,807.66**	**ROADWAY TOTAL =**	**$ 14,957.27**	**ROADWAY TOTAL =**	**$ 24,899.81**	**ROADWAY TOTAL =**	**$ 39,952.58**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

				YEAR 13 STREETS			
				GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 5		PCI= 5	
				EXISTING RIBBON= YES		EXISTING RIBBON= C+G	
				LENGTH = 1,790		LENGTH = 330	
				WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 4,464		TOTAL AREA (SQ YD) = 823	
				STEEPLECHASE (FURLONG TO SOUTH CDS)		SPRING CREEK (FOREST VIEW TO E CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	4,018	$ 2,009.00	741	$ 370.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	188	$ 15,040.00	35	$ 2,800.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	375	$ 28,125.00	70	$ 5,250.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	4,464	$ 8,928.00	823	$ 1,646.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	90	$ 3,600.00	17	$ 680.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	8	$ 960.00	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	0	$ -	14	$ 420.00
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,847.85	1	$ 351.74
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,847.85	1	$ 351.74
				SUBTOTAL =	$ 58,662.00	SUBTOTAL =	$ 11,166.50
				CONTINGENCY (5%) =	$ 2,933.10	CONTINGENCY (5%) =	$ 558.33
				SUBTOTAL =	$ 61,595.10	SUBTOTAL =	$ 11,724.83
				CONSTRUCTION TOTAL =	**$ 65,290.81**	**CONSTRUCTION TOTAL =**	**$ 12,428.31**
				ENGINEERING =	$ 6,529.08	ENGINEERING =	$ 1,242.83
				ROADWAY TOTAL =	**$ 71,819.89**	**ROADWAY TOTAL =**	**$ 13,671.15**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$ 1,265,697.87**
ROUTINE MAINTENANCE =	**$ 230,000.00**
YEAR 13 TOTAL =	**$ 1,495,697.87**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 14 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 1		PCI= 5		PCI= 1		PCI= 5		PCI= 5		PCI= 4	
				EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= YES	
				LENGTH = 2,400		LENGTH = 150		LENGTH = 320		LENGTH = 1,345		LENGTH = 656		LENGTH = 253	
				WIDTH = 24		WIDTH = 22		WIDTH = 40		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 6,528		TOTAL AREA (SQ YD) = 1,338		TOTAL AREA (SQ YD) = 1,451		TOTAL AREA (SQ YD) = 5,262		TOTAL AREA (SQ YD) = 2,599		TOTAL AREA (SQ YD) = 1,691	
ITEM NO.	ITEM	UNIT	UNIT PRICE	EMPRESS DR (ENSELL RD TO CATALPA DR)		BEDFORD (CHESTNUT TO EAST CDS)		ENSELL RD (QUENTIN RD TO ALDER CT)		CHESTNUT (NORTH CDS TO SOUTH CDS)		DORCHESTER (HIGHLAND TO NORTH CDS)		EAST PRAIRIE (REGAN TO EAST CDS)	
				QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	5,876	$ 2,938.00	1,205	$ 602.50	1,306	$ 653.00	4,736	$ 2,368.00	2,340	$ 1,170.00	1,522	$ 761.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	275	$ 22,000.00	57	$ 4,560.00	61	$ 4,880.00	222	$ 17,760.00	110	$ 8,800.00	72	$ 5,760.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	549	$ 41,175.00	113	$ 8,475.00	122	$ 9,150.00	443	$ 33,225.00	219	$ 16,425.00	143	$ 10,725.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	6,528	$ 13,056.00	1,338	$ 2,676.00	1,451	$ 2,902.00	5,262	$ 10,524.00	2,599	$ 5,198.00	1,691	$ 3,382.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	131	$ 5,240.00	27	$ 1,080.00	30	$ 1,200.00	106	$ 4,240.00	52	$ 2,080.00	34	$ 1,360.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	2	$ 240.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	48	$ 1,440.00	3	$ 90.00	7	$ 210.00	27	$ 810.00	14	$ 420.00	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 2,704.24	1	$ 550.73	1	$ 598.34	1	$ 2,171.20	1	$ 1,073.93	1	$ 700.18
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 2,704.24	1	$ 550.73	1	$ 598.34	1	$ 2,171.20	1	$ 1,073.93	1	$ 700.18
				SUBTOTAL =	$ 85,849.00	SUBTOTAL =	$ 17,483.50	SUBTOTAL =	$ 18,995.00	SUBTOTAL =	$ 68,927.00	SUBTOTAL =	$ 34,093.00	SUBTOTAL =	$ 22,228.00
				CONTINGENCY (5%) =	$ 4,292.45	CONTINGENCY (5%) =	$ 874.18	CONTINGENCY (5%) =	$ 949.75	CONTINGENCY (5%) =	$ 3,446.35	CONTINGENCY (5%) =	$ 1,704.65	CONTINGENCY (5%) =	$ 1,111.40
				SUBTOTAL =	$ 90,141.45	SUBTOTAL =	$ 18,357.68	SUBTOTAL =	$ 19,944.75	SUBTOTAL =	$ 72,373.35	SUBTOTAL =	$ 35,797.65	SUBTOTAL =	$ 23,339.40
				CONSTRUCTION TOTAL =	**$ 95,549.94**	**CONSTRUCTION TOTAL =**	**$ 19,459.14**	**CONSTRUCTION TOTAL =**	**$ 21,141.44**	**CONSTRUCTION TOTAL =**	**$ 76,715.75**	**CONSTRUCTION TOTAL =**	**$ 37,945.51**	**CONSTRUCTION TOTAL =**	**$ 24,739.76**
				ENGINEERING =	$ 9,554.99	ENGINEERING =	$ 1,945.91	ENGINEERING =	$ 2,114.14	ENGINEERING =	$ 7,671.58	ENGINEERING =	$ 3,794.55	ENGINEERING =	$ 2,473.98
				ROADWAY TOTAL =	**$ 105,104.93**	**ROADWAY TOTAL =**	**$ 21,405.05**	**ROADWAY TOTAL =**	**$ 23,255.58**	**ROADWAY TOTAL =**	**$ 84,387.33**	**ROADWAY TOTAL =**	**$ 41,740.06**	**ROADWAY TOTAL =**	**$ 27,213.74**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 14 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 1		PCI= 5		PCI= 6		PCI= 4		PCI= 5		PCI= 1	
				EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G	
				LENGTH = 150		LENGTH = 704		LENGTH = 642		LENGTH = 1,445		LENGTH = 645		LENGTH = 125	
				WIDTH = 24		WIDTH = 26		WIDTH = 25		WIDTH = 22		WIDTH = 22		WIDTH = 25	
				TOTAL AREA (SQ YD) = 408		TOTAL AREA (SQ YD) = 2,237		TOTAL AREA (SQ YD) = 2,956		TOTAL AREA (SQ YD) = 4,433		TOTAL AREA (SQ YD) = 1,609		TOTAL AREA (SQ YD) = 355	
				N ACACIA CT (ACACIA DR TO ACACIA DR)		HIGHLAND (QUENTIN TO CHESTNUT)		JESSICA CT (W CDS TO JOSHUA)		JOSHUA (REGAN TO RESERVE CT)		JOSHUA (RESERVE TO S END)		N EMPRESS CT (EMPRESS DR TO EMPRESS DR)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	368	$ 184.00	2,014	$ 1,007.00	2,661	$ 1,330.50	3,990	$ 1,995.00	1,449	$ 724.50	320	$ 160.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	18	$ 1,440.00	94	$ 7,520.00	125	$ 10,000.00	187	$ 14,960.00	68	$ 5,440.00	15	$ 1,200.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	35	$ 2,625.00	188	$ 14,100.00	249	$ 18,675.00	373	$ 27,975.00	136	$ 10,200.00	30	$ 2,250.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	408	$ 816.00	2,237	$ 4,474.00	2,956	$ 5,912.00	4,433	$ 8,866.00	1,609	$ 3,218.00	355	$ 710.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	9	$ 360.00	45	$ 1,800.00	60	$ 2,400.00	89	$ 3,560.00	33	$ 1,320.00	8	$ 320.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	3	$ 90.00	15	$ 450.00	13	$ 390.00	29	$ 870.00	13	$ 390.00	3	$ 90.00
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 173.72	1	$ 924.56	1	$ 1,219.29	1	$ 1,834.12	1	$ 670.71	1	$ 149.00
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 173.72	1	$ 924.56	1	$ 1,219.29	1	$ 1,834.12	1	$ 670.71	1	$ 149.00
				SUBTOTAL =	$ 5,515.00	SUBTOTAL =	$ 29,351.00	SUBTOTAL =	$ 38,707.50	SUBTOTAL =	$ 58,226.00	SUBTOTAL =	$ 21,292.50	SUBTOTAL =	$ 4,730.00
				CONTINGENCY (5%) =	$ 275.75	CONTINGENCY (5%) =	$ 1,467.55	CONTINGENCY (5%) =	$ 1,935.38	CONTINGENCY (5%) =	$ 2,911.30	CONTINGENCY (5%) =	$ 1,064.63	CONTINGENCY (5%) =	$ 236.50
				SUBTOTAL =	$ 5,790.75	SUBTOTAL =	$ 30,818.55	SUBTOTAL =	$ 40,642.88	SUBTOTAL =	$ 61,137.30	SUBTOTAL =	$ 22,357.13	SUBTOTAL =	$ 4,966.50
				CONSTRUCTION TOTAL =	**$ 6,138.20**	**CONSTRUCTION TOTAL =**	**$ 32,667.66**	**CONSTRUCTION TOTAL =**	**$ 43,081.45**	**CONSTRUCTION TOTAL =**	**$ 64,805.54**	**CONSTRUCTION TOTAL =**	**$ 23,698.55**	**CONSTRUCTION TOTAL =**	**$ 5,264.49**
				ENGINEERING =	$ 613.82	ENGINEERING =	$ 3,266.77	ENGINEERING =	$ 4,308.14	ENGINEERING =	$ 6,480.55	ENGINEERING =	$ 2,369.86	ENGINEERING =	$ 526.45
				ROADWAY TOTAL =	**$ 6,752.01**	**ROADWAY TOTAL =**	**$ 35,934.43**	**ROADWAY TOTAL =**	**$ 47,389.59**	**ROADWAY TOTAL =**	**$ 71,286.09**	**ROADWAY TOTAL =**	**$ 26,068.41**	**ROADWAY TOTAL =**	**$ 5,790.94**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 14 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI= 1		PCI= 1		PCI= 1		PCI= 4		PCI= 4		PCI= 4	
				EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= C+G		EXISTING RIBBON= YES		EXISTING RIBBON= YES		EXISTING RIBBON= YES	
				LENGTH = 1,600		LENGTH = 710		LENGTH = 90		LENGTH = 314		LENGTH = 1,336		LENGTH = 665	
				WIDTH = 24		WIDTH = 24		WIDTH = 24		WIDTH = 22		WIDTH = 22		WIDTH = 22	
				TOTAL AREA (SQ YD) = 4,352		TOTAL AREA (SQ YD) = 1,932		TOTAL AREA (SQ YD) = 245		TOTAL AREA (SQ YD) = 1,695		TOTAL AREA (SQ YD) = 3,332		TOTAL AREA (SQ YD) = 2,364	
				ACACIA DR (ALDER CT TO CATALPA DR)		ALDER CT (ENSELL RD TO SOUTH CDS)		S EMPRESS CT (EMPRESS DR TO EMPRESS DR)		REED CT (REGAN TO NORTH CDS)		REGAN (GILMER TO WEST PRAIRIE CT)		RESERVE CT (JOSHUA TO WEST CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	3,917	$ 1,958.50	1,739	$ 869.50	221	$ 110.50	1,526	$ 763.00	2,999	$ 1,499.50	2,128	$ 1,064.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	183	$ 14,640.00	82	$ 6,560.00	11	$ 880.00	72	$ 5,760.00	140	$ 11,200.00	100	$ 8,000.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	366	$ 27,450.00	163	$ 12,225.00	21	$ 1,575.00	143	$ 10,725.00	280	$ 21,000.00	199	$ 14,925.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	4,352	$ 8,704.00	1,932	$ 3,864.00	245	$ 490.00	1,695	$ 3,390.00	3,332	$ 6,664.00	2,364	$ 4,728.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	88	$ 3,520.00	39	$ 1,560.00	5	$ 200.00	34	$ 1,360.00	67	$ 2,680.00	48	$ 1,920.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	2	$ 240.00	6	$ 720.00	3	$ 360.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	32	$ 960.00	15	$ 450.00	2	$ 60.00	0	$ -	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 1,802.82	1	$ 804.15	1	$ 104.44	1	$ 700.50	1	$ 1,378.55	1	$ 976.41
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 1,802.82	1	$ 804.15	1	$ 104.44	1	$ 700.50	1	$ 1,378.55	1	$ 976.41
				SUBTOTAL =	$ 57,232.50	SUBTOTAL =	$ 25,528.50	SUBTOTAL =	$ 3,315.50	SUBTOTAL =	$ 22,238.00	SUBTOTAL =	$ 43,763.50	SUBTOTAL =	$ 30,997.00
				CONTINGENCY (5%) =	$ 2,861.63	CONTINGENCY (5%) =	$ 1,276.43	CONTINGENCY (5%) =	$ 165.78	CONTINGENCY (5%) =	$ 1,111.90	CONTINGENCY (5%) =	$ 2,188.18	CONTINGENCY (5%) =	$ 1,549.85
				SUBTOTAL =	$ 60,094.13	SUBTOTAL =	$ 26,804.93	SUBTOTAL =	$ 3,481.28	SUBTOTAL =	$ 23,349.90	SUBTOTAL =	$ 45,951.68	SUBTOTAL =	$ 32,546.85
				CONSTRUCTION TOTAL =	**$ 63,699.77**	**CONSTRUCTION TOTAL =**	**$ 28,413.22**	**CONSTRUCTION TOTAL =**	**$ 3,690.15**	**CONSTRUCTION TOTAL =**	**$ 24,750.89**	**CONSTRUCTION TOTAL =**	**$ 48,708.78**	**CONSTRUCTION TOTAL =**	**$ 34,499.66**
				ENGINEERING =	$ 6,369.98	ENGINEERING =	$ 2,841.32	ENGINEERING =	$ 369.02	ENGINEERING =	$ 2,475.09	ENGINEERING =	$ 4,870.88	ENGINEERING =	$ 3,449.97
				ROADWAY TOTAL =	**$ 70,069.75**	**ROADWAY TOTAL =**	**$ 31,254.54**	**ROADWAY TOTAL =**	**$ 4,059.17**	**ROADWAY TOTAL =**	**$ 27,225.98**	**ROADWAY TOTAL =**	**$ 53,579.65**	**ROADWAY TOTAL =**	**$ 37,949.63**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 14 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI=	N/A	PCI=	1	PCI=	2	PCI=	5	PCI=	4	PCI=	4
				EXISTING RIBBON=	C+G	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES	EXISTING RIBBON=	C+G	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES
				LENGTH =	820	LENGTH =	1,050	LENGTH =	1,790	LENGTH =	105	LENGTH =	705	LENGTH =	620
				WIDTH =	24	WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22	WIDTH =	22
				TOTAL AREA (SQ YD) =	2,231	TOTAL AREA (SQ YD) =	2,618	TOTAL AREA (SQ YD) =	4,464	TOTAL AREA (SQ YD) =	1,245	TOTAL AREA (SQ YD) =	2,489	TOTAL AREA (SQ YD) =	1,546
				COSTEKIN (176 TO NORTH CDS)		W KRUCKENBERG (BEND TO LIMIT)		W KRUCKENBERG (MIDLOTHIAN TO BEND)		WELLESEY (CHESTNUT TO WEST CDS)		WEST PRAIRE CT (REGAN TO WEST CDS)		LAGOON (WALNUT TO FALKIRK)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	2,008	$ 1,004.00	2,357	$ 1,178.50	4,018	$ 2,009.00	1,121	$ 560.50	2,241	$ 1,120.50	1,392	$ 696.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	94	$ 7,520.00	110	$ 8,800.00	188	$ 15,040.00	53	$ 4,240.00	105	$ 8,400.00	65	$ 5,200.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	188	$ 14,100.00	220	$ 16,500.00	375	$ 28,125.00	105	$ 7,875.00	210	$ 15,750.00	130	$ 9,750.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	2,231	$ 4,462.00	2,618	$ 5,236.00	4,464	$ 8,928.00	1,245	$ 2,490.00	2,489	$ 4,978.00	1,546	$ 3,092.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	45	$ 1,800.00	53	$ 2,120.00	90	$ 3,600.00	25	$ 1,000.00	50	$ 2,000.00	31	$ 1,240.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	5	$ 600.00	8	$ 960.00	0	$ -	4	$ 480.00	3	$ 360.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	17	$ 510.00	0	$ -	0	$ -	3	$ 90.00	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 925.97	1	$ 1,084.69	1	$ 1,847.85	1	$ 512.05	1	$ 1,030.95	1	$ 640.65
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 925.97	1	$ 1,084.69	1	$ 1,847.85	1	$ 512.05	1	$ 1,030.95	1	$ 640.65
				SUBTOTAL =	$ 29,396.00	SUBTOTAL =	$ 34,434.50	SUBTOTAL =	$ 58,662.00	SUBTOTAL =	$ 16,255.50	SUBTOTAL =	$ 32,728.50	SUBTOTAL =	$ 20,338.00
				CONTINGENCY (5%) =	$ 1,469.80	CONTINGENCY (5%) =	$ 1,721.73	CONTINGENCY (5%) =	$ 2,933.10	CONTINGENCY (5%) =	$ 812.78	CONTINGENCY (5%) =	$ 1,636.43	CONTINGENCY (5%) =	$ 1,016.90
				SUBTOTAL =	$ 30,865.80	SUBTOTAL =	$ 36,156.23	SUBTOTAL =	$ 61,595.10	SUBTOTAL =	$ 17,068.28	SUBTOTAL =	$ 34,364.93	SUBTOTAL =	$ 21,354.90
				CONSTRUCTION TOTAL =	**$ 32,717.75**	**CONSTRUCTION TOTAL =**	**$ 38,325.60**	**CONSTRUCTION TOTAL =**	**$ 65,290.81**	**CONSTRUCTION TOTAL =**	**$ 18,092.37**	**CONSTRUCTION TOTAL =**	**$ 36,426.82**	**CONSTRUCTION TOTAL =**	**$ 22,636.19**
				ENGINEERING =	$ 3,271.77	ENGINEERING =	$ 3,832.56	ENGINEERING =	$ 6,529.08	ENGINEERING =	$ 1,809.24	ENGINEERING =	$ 3,642.68	ENGINEERING =	$ 2,263.62
				ROADWAY TOTAL =	**$ 35,989.52**	**ROADWAY TOTAL =**	**$ 42,158.16**	**ROADWAY TOTAL =**	**$ 71,819.89**	**ROADWAY TOTAL =**	**$ 19,901.61**	**ROADWAY TOTAL =**	**$ 40,069.50**	**ROADWAY TOTAL =**	**$ 24,899.81**

ASSUMPTIONS:
1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 14 STREETS

GRIND & OVERLAY

PCI=	**N/A**
EXISTING RIBBON=	**C+G**
LENGTH =	**1,800**
WIDTH =	**27**
TOTAL AREA (SQ YD) =	**5,508**

HT3 (ROMAN LANE)

ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	4,958	$ 2,479.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	232	$ 18,560.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	463	$ 34,725.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	5,508	$ 11,016.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	111	$ 4,440.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	36	$ 1,080.00
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 2,277.45
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 2,277.45

SUBTOTAL =	$ 72,300.00
CONTINGENCY (5%) =	$ 3,615.00
SUBTOTAL =	$ 75,915.00
CONSTRUCTION TOTAL =	**$ 80,469.90**
ENGINEERING =	$ 8,046.99
ROADWAY TOTAL =	**$ 88,516.89**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$**	**1,043,822.26**
ROUTINE MAINTENANCE =	**$**	**230,000.00**
YEAR 14 TOTAL =	**$**	**1,273,822.26**

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 15 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI=	N/A	PCI=	N/A	PCI=	N/A	PCI=	N/A	PCI=	N/A	PCI=	N/A
				EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G
				LENGTH =	3,450	LENGTH =	2,000	LENGTH =	375	LENGTH =	425	LENGTH =	1,375	LENGTH =	900
				WIDTH =	29	WIDTH =	25	WIDTH =	22	WIDTH =	24	WIDTH =	24	WIDTH =	24
				TOTAL AREA (SQ YD) =	11,339	TOTAL AREA (SQ YD) =	5,667	TOTAL AREA (SQ YD) =	935	TOTAL AREA (SQ YD) =	1,156	TOTAL AREA (SQ YD) =	3,740	TOTAL AREA (SQ YD) =	2,448
				HAWTHORN HILLS (BEVERLY TO MIDLOTHIAN)		NORTH ABBEY GLEN (200' S OF HUBBARD TO EAST CDS)		ANDREW (CARDINAL TO 375' S OF CARDINAL)		ANDREW (375' S CARDINAL TO HAW. HILLS DR)		ANDREW (HAW. HILLS DR TO HAW. HILLS DR)		BRADBURY LN (HAW. HILLS DR TO EAST CDS)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	10,206	$ 5,103.00	5,101	$ 2,550.50	842	$ 421.00	1,041	$ 520.50	3,366	$ 1,683.00	2,204	$ 1,102.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	477	$ 38,160.00	239	$ 19,120.00	40	$ 3,200.00	49	$ 3,920.00	158	$ 12,640.00	103	$ 8,240.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	953	$ 71,475.00	477	$ 35,775.00	79	$ 5,925.00	98	$ 7,350.00	315	$ 23,625.00	206	$ 15,450.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	11,339	$ 22,678.00	5,667	$ 11,334.00	935	$ 1,870.00	1,156	$ 2,312.00	3,740	$ 7,480.00	2,448	$ 4,896.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	227	$ 9,080.00	114	$ 4,560.00	19	$ 760.00	24	$ 960.00	75	$ 3,000.00	49	$ 1,960.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	69	$ 2,070.00	40	$ 1,200.00	8	$ 240.00	9	$ 270.00	28	$ 840.00	18	$ 540.00
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 4,679.83	1	$ 2,347.99	1	$ 391.10	1	$ 482.97	1	$ 1,551.94	1	$ 1,013.92
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 4,679.83	1	$ 2,347.99	1	$ 391.10	1	$ 482.97	1	$ 1,551.94	1	$ 1,013.92
				SUBTOTAL =	$ 148,566.00	SUBTOTAL =	$ 74,539.50	SUBTOTAL =	$ 12,416.00	SUBTOTAL =	$ 15,332.50	SUBTOTAL =	$ 49,268.00	SUBTOTAL =	$ 32,188.00
				CONTINGENCY (5%) =	$ 7,428.30	CONTINGENCY (5%) =	$ 3,726.98	CONTINGENCY (5%) =	$ 620.80	CONTINGENCY (5%) =	$ 766.63	CONTINGENCY (5%) =	$ 2,463.40	CONTINGENCY (5%) =	$ 1,609.40
				SUBTOTAL =	$ 155,994.30	SUBTOTAL =	$ 78,266.48	SUBTOTAL =	$ 13,036.80	SUBTOTAL =	$ 16,099.13	SUBTOTAL =	$ 51,731.40	SUBTOTAL =	$ 33,797.40
				CONSTRUCTION TOTAL =	**$ 165,353.96**	**CONSTRUCTION TOTAL =**	**$ 82,962.46**	**CONSTRUCTION TOTAL =**	**$ 13,819.01**	**CONSTRUCTION TOTAL =**	**$ 17,065.07**	**CONSTRUCTION TOTAL =**	**$ 54,835.28**	**CONSTRUCTION TOTAL =**	**$ 35,825.24**
				ENGINEERING =	$ 16,535.40	ENGINEERING =	$ 8,296.25	ENGINEERING =	$ 1,381.90	ENGINEERING =	$ 1,706.51	ENGINEERING =	$ 5,483.53	ENGINEERING =	$ 3,582.52
				ROADWAY TOTAL =	**$ 181,889.35**	**ROADWAY TOTAL =**	**$ 91,258.71**	**ROADWAY TOTAL =**	**$ 15,200.91**	**ROADWAY TOTAL =**	**$ 18,771.58**	**ROADWAY TOTAL =**	**$ 60,318.81**	**ROADWAY TOTAL =**	**$ 39,407.77**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

EXHIBIT 4
MARCH 8, 2013
REVISED: OCTOBER 5, 2018

YEAR 15 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI=	N/A	PCI=	N/A	PCI=	N/A	PCI=	3	PCI=	N/A	PCI=	N/A
				EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G
				LENGTH =	600	LENGTH =	2,075	LENGTH =	730	LENGTH =	545	LENGTH =	5,922	LENGTH =	2,600
				WIDTH =	24	WIDTH =	22	WIDTH =	22	WIDTH =	33	WIDTH =	25	WIDTH =	25
				TOTAL AREA (SQ YD) =	1,632	TOTAL AREA (SQ YD) =	5,174	TOTAL AREA (SQ YD) =	1,821	TOTAL AREA (SQ YD) =	2,039	TOTAL AREA (SQ YD) =	16,779	TOTAL AREA (SQ YD) =	7,367
				BRENTWOOD (HAW. HILLS TO HAW. HILLS)		CARDINAL (620' S OF FALCON TO GILMER)		EAST PETER LN (CARDINAL TO EAST CDS)		HUBBARD LANE (OLD MCHENRY TO NORTH ABBEY GLEN)		WESTERN HALF OF HAWTHORN HILLS		STONEBRIDGE STREETS	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,469	$ 734.50	4,657	$ 2,328.50	1,639	$ 819.50	1,836	$ 918.00	15,102	$ 7,551.00	6,631	$ 3,315.50
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	69	$ 5,520.00	218	$ 17,440.00	77	$ 6,160.00	86	$ 6,880.00	705	$ 56,400.00	310	$ 24,800.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	138	$ 10,350.00	435	$ 32,625.00	153	$ 11,475.00	172	$ 12,900.00	1,410	$ 105,750.00	619	$ 46,425.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,632	$ 3,264.00	5,174	$ 10,348.00	1,821	$ 3,642.00	2,039	$ 4,078.00	16,779	$ 33,558.00	7,367	$ 14,734.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	33	$ 1,320.00	104	$ 4,160.00	37	$ 1,480.00	41	$ 1,640.00	336	$ 13,440.00	148	$ 5,920.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	12	$ 360.00	42	$ 1,260.00	15	$ 450.00	11	$ 330.00	119	$ 3,570.00	52	$ 1,560.00
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 678.78	1	$ 2,147.09	1	$ 756.83	1	$ 842.50	1	$ 6,938.47	1	$ 3,047.77
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 678.78	1	$ 2,147.09	1	$ 756.83	1	$ 842.50	1	$ 6,938.47	1	$ 3,047.77
				SUBTOTAL =	$ 21,548.50	SUBTOTAL =	$ 68,161.50	SUBTOTAL =	$ 24,026.50	SUBTOTAL =	$ 26,746.00	SUBTOTAL =	$ 220,269.00	SUBTOTAL =	$ 96,754.50
				CONTINGENCY (5%) =	$ 1,077.43	CONTINGENCY (5%) =	$ 3,408.08	CONTINGENCY (5%) =	$ 1,201.33	CONTINGENCY (5%) =	$ 1,337.30	CONTINGENCY (5%) =	$ 11,013.45	CONTINGENCY (5%) =	$ 4,837.73
				SUBTOTAL =	$ 22,625.93	SUBTOTAL =	$ 71,569.58	SUBTOTAL =	$ 25,227.83	SUBTOTAL =	$ 28,083.30	SUBTOTAL =	$ 231,282.45	SUBTOTAL =	$ 101,592.23
				CONSTRUCTION TOTAL =	**$ 23,983.48**	**CONSTRUCTION TOTAL =**	**$ 75,863.75**	**CONSTRUCTION TOTAL =**	**$ 26,741.49**	**CONSTRUCTION TOTAL =**	**$ 29,768.30**	**CONSTRUCTION TOTAL =**	**$ 245,159.40**	**CONSTRUCTION TOTAL =**	**$ 107,687.76**
				ENGINEERING =	$ 2,398.35	ENGINEERING =	$ 7,586.37	ENGINEERING =	$ 2,674.15	ENGINEERING =	$ 2,976.83	ENGINEERING =	$ 24,515.94	ENGINEERING =	$ 10,768.78
				ROADWAY TOTAL =	**$ 26,381.83**	**ROADWAY TOTAL =**	**$ 83,450.12**	**ROADWAY TOTAL =**	**$ 29,415.64**	**ROADWAY TOTAL =**	**$ 32,745.13**	**ROADWAY TOTAL =**	**$ 269,675.34**	**ROADWAY TOTAL =**	**$ 118,456.53**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
5. PIPE CULVERT REMOVAL AND REPLACEMENT UNIT PRICE INCLUDES TRENCH BACKFILL AND PATCHING.
6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

VILLAGE OF HAWTHORN WOODS
2018 15-YEAR MAINTENANCE PROGRAM
COST ESTIMATE AND SCHEDULE

YEAR 15 STREETS

				GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY		GRIND & OVERLAY	
				PCI=	N/A	PCI=	N/A	PCI=	N/A	PCI=	1	PCI=	1
				EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	C+G	EXISTING RIBBON=	YES	EXISTING RIBBON=	YES
				LENGTH =	460	LENGTH =	1,315	LENGTH =	575	LENGTH =	1,066	LENGTH =	4,842
				WIDTH =	24	WIDTH =	22	WIDTH =	24	WIDTH =	22	WIDTH =	22
				TOTAL AREA (SQ YD) =	1,855	TOTAL AREA (SQ YD) =	3,279	TOTAL AREA (SQ YD) =	1,564	TOTAL AREA (SQ YD) =	2,658	TOTAL AREA (SQ YD) =	17,800
				SIERRA PL (HAWTHORN HILLS DR TO S CDS)		WEST PETER LN (CARDINAL TO SOUTH CDS)		SHERMAN CT (HAWTHORN HILLS DR TO N CDS)		SCHWERMAN RD (OWENS TO 175' E/MILTON)		SCHWERMAN RD (175' E/MILTON TO GILMER RD)	
ITEM NO.	ITEM	UNIT	UNIT PRICE	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST	QUANTITY	TOTAL COST
20201200	REMOVAL AND DISPOSAL OF UNSUITABLE MATERIAL	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
21001000	GEOTECHNICAL FABRIC FOR GROUND STABILIZATION	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
30300001	AGGREGATE SUBGRADE IMPROVEMENT	CU YD	$ 27.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35102400	AGGREGATE BASE COURSE, TYPE B 12"	SQ YD	$ 12.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800100	PREPARATION OF BASE	SQ YD	$ 1.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
35800200	AGGREGATE BASE REPAIR	TON	$ 17.50	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40600275	BITUMINOUS MATERIALS (PRIME COAT)	POUND	$ 0.50	1,670	$ 835.00	2,952	$ 1,476.00	1,408	$ 704.00	2,393	$ 1,196.50	16,020	$ 8,010.00
40600625	LEVELING BINDER (MACHINE METHOD), N50	TON	$ 80.00	78	$ 6,240.00	138	$ 11,040.00	66	$ 5,280.00	112	$ 8,960.00	748	$ 59,840.00
40603080	HOT-MIX ASPHALT BINDER COURSE, IL-19.0, N50	TON	$ 75.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
40603335	HOT-MIX ASPHALT SURFACE COURSE, MIX "D", N50	TON	$ 75.00	156	$ 11,700.00	276	$ 20,700.00	132	$ 9,900.00	224	$ 16,800.00	1,496	$ 112,200.00
*44000100	PAVEMENT REMOVAL/EARTH EXCAVATION	SQ YD	$ 15.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
44000157	HOT-MIX ASPHALT SURFACE REMOVAL, 1/4" TO 2"	SQ YD	$ 2.00	1,855	$ 3,710.00	3,279	$ 6,558.00	1,564	$ 3,128.00	2,658	$ 5,316.00	17,800	$ 35,600.00
44000167	HOT-MIX ASPHALT SURFACE REMOVAL, 4.25"	SQ YD	$ 4.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
*44201723	CLASS D PATCHES, 6" (SPECIAL)	SQ YD	$ 40.00	38	$ 1,520.00	66	$ 2,640.00	32	$ 1,280.00	54	$ 2,160.00	356	$ 14,240.00
*48300400	PORTLAND CEMENT CONCRETE SHOULDERS, 9"	SQ YD	$ 110.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
54205047	PIPE CULVERT REMOVAL AND REPLACEMENT	FOOT	$ 100.00	0	$ -	0	$ -	0	$ -	0	$ -	0	$ -
60100070	PCC SHOULDER REMOVAL AND REPLACEMENT	SQ YD	$ 120.00	0	$ -	0	$ -	0	$ -	5	$ 600.00	22	$ 2,640.00
*NA	CURB AND GUTTER REMOVAL AND REPLACEMENT	FOOT	$ 30.00	10	$ 300.00	27	$ 810.00	12	$ 360.00	0	$ -	0	$ -
*NA	STRIPING	L. SUM	$ 2,500.00	0	$ -	0	$ -	0	$ -	1	$ 2,500.00	1	$ 2,500.00
*NA	CONSTRUCTION LAYOUT	L. SUM		1	$ 765.61	1	$ 1,361.56	1	$ 650.54	1	$ 1,182.27	1	$ 7,403.45
*NA	TRAFFIC CONTROL AND PROTECTION (SPECIAL)	L. SUM		1	$ 765.61	1	$ 1,361.56	1	$ 650.54	1	$ 1,182.27	1	$ 7,403.45
				SUBTOTAL =	$ 24,305.00	SUBTOTAL =	$ 43,224.00	SUBTOTAL =	$ 20,652.00	SUBTOTAL =	$ 37,532.50	SUBTOTAL =	$ 235,030.00
				CONTINGENCY (5%) =	$ 1,215.25	CONTINGENCY (5%) =	$ 2,161.20	CONTINGENCY (5%) =	$ 1,032.60	CONTINGENCY (5%) =	$ 1,876.63	CONTINGENCY (5%) =	$ 11,751.50
				SUBTOTAL =	$ 25,520.25	SUBTOTAL =	$ 45,385.20	SUBTOTAL =	$ 21,684.60	SUBTOTAL =	$ 39,409.13	SUBTOTAL =	$ 246,781.50
				CONSTRUCTION TOTAL =	**$ 27,051.47**	**CONSTRUCTION TOTAL =**	**$ 48,108.31**	**CONSTRUCTION TOTAL =**	**$ 22,985.68**	**CONSTRUCTION TOTAL =**	**$ 41,773.67**	**CONSTRUCTION TOTAL =**	**$ 261,588.39**
				ENGINEERING =	$ 2,705.15	ENGINEERING =	$ 4,810.83	ENGINEERING =	$ 2,298.57	ENGINEERING =	$ 4,177.37	ENGINEERING =	$ 26,158.84
				ROADWAY TOTAL =	**$ 29,756.61**	**ROADWAY TOTAL =**	**$ 52,919.14**	**ROADWAY TOTAL =**	**$ 25,284.24**	**ROADWAY TOTAL =**	**$ 45,951.04**	**ROADWAY TOTAL =**	**$ 287,747.23**

ASSUMPTIONS:

1. GRIND & OVERLAY = 1.5" SURFACE, 0.75" LEVELING BINDER, 5% PATCHING, 2% PCC SHOULDER/CURB REPAIR.
2. FULL DEPTH = 2" SURFACE, 2.5" BINDER, 5% UNDERCUTTING, 2% PCC SHOULDER/CURB REPAIR.
3. RECONSTRUCTION = 2" SURFACE, 3" BINDER, 12" AGGREGATE, 5% UNDERCUTTING, 100% PCC SHOULDER.
4. TRAFFIC CONTROL & PROTECTION AND CONSTRUCTION LAYOUT ARE EACH 3% (OF CONSTRUCTION TOTAL).
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6. DESIGN/CONSTRUCTION ENGINEERING FOR RECONS IS 15%, AND 10% FOR GRIND & OVERLAYS AND FULL DEPTHS.
7. DESIGN/CONSTRUCTION ENGINEERING FOR FULL DEPTH/RECON PARKING LOTS IS 15%.
8. PATCHING ASSUMPTION: 2%.
9. PCC SHOULDER REMOVAL AND REPLACEMENT ASSUMPTION: 1%.

ROADWAY TOTAL =	**$ 1,408,630.00**
ROUTINE MAINTENANCE =	**$ 230,000.00**
YEAR 15 TOTAL =	**$ 1,638,630.00**

ALL ROADWAY TOTAL =	**$ 19,492,526.88**
ALL MAINTENANCE TOTAL =	**$ 3,450,000.00**
ALL PROGRAM TOTAL =	**$ 22,942,526.88**

EXHIBIT #5
TYPICAL PAVEMENT LIFE CYCLE CURVE

TYPICAL LIFE CYCLE CURVE

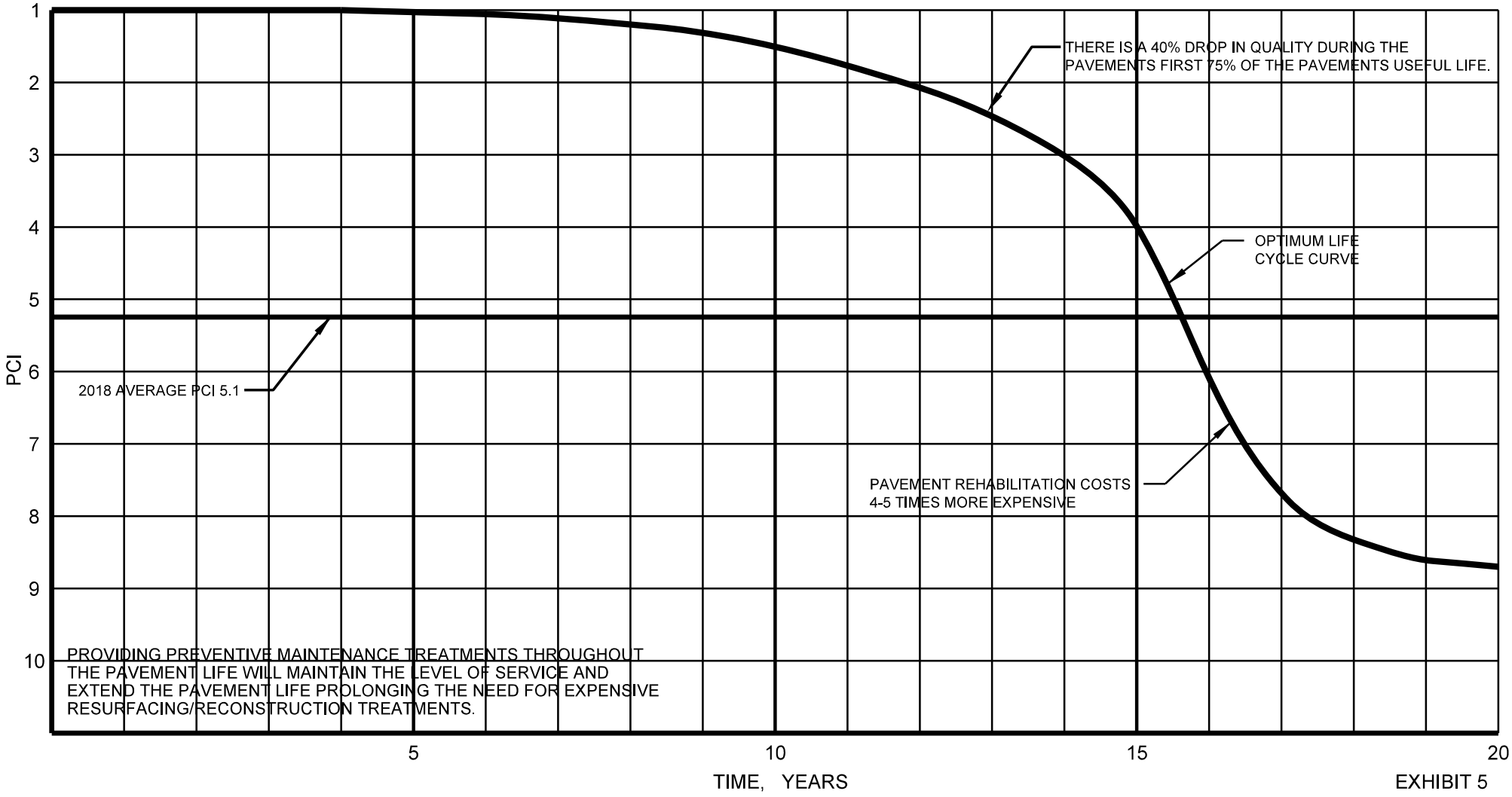


EXHIBIT 5

VILLAGE OF HATHORN WOODS

N:\HAWTHORNWOODS\0265 H's\H201-H300\0265H239\Civil\Exhibits\Typical Life Cycle Curve.dgn

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

EXHIBIT #6
TYPICAL VISUAL PAVEMENT DISTRESSES

PCI 1 – W. Kruckenberg Road north of Marvin Road



Exhibit 6 - Typical Visual Pavement Distresses

PCI 2 – W. Kruckenberg Road near Forest View Drive



Exhibit 6 - Typical Visual Pavement Distresses

PCI 3 – N. Echo Lake Road south of Old McHenry Road



Exhibit 6 - Typical Visual Pavement Distresses

PCI 4 – Tanglewood Lane near Tanglewood Court



Exhibit 6 - Typical Visual Pavement Distresses

PCI 5 – Whitman Terrace



Exhibit 6 - Typical Visual Pavement Distresses

PCI 6 – Kathy Lane just east of David Lane



Exhibit 6 - Typical Visual Pavement Distresses

PCI 8 – N. Owens Road south of Gilmer Road



Exhibit 6 - Typical Visual Pavement Distresses

PCI 9 – N. Owens Road north of first bend



Exhibit 6 - Typical Visual Pavement Distresses

PCI 10 – N. Owens Road between first two bends



Exhibit 6 - Typical Visual Pavement Distresses

EXHIBIT #7
AREA PERCENTAGE OF PCI VALUES GRAPH

Village of Hawthorn Woods

Exhibit 7

Pavement Evaluation Report

2018 PCI Values Based on Roadway Area Percentages

