

**CITY OF BIRMINGHAM
AD HOC UNIMPROVED STREETS
COMMITTEE**

CITY COMMISSION ROOM
151 MARTIN ST., BIRMINGHAM, MI
(248) 530-1850

REGULAR MEETING AGENDA
THURSDAY, SEPTEMBER 27, 2018, 8:00 A.M.

1. ROLL CALL
2. APPROVAL OF SEPTEMBER 13, 2018
MEETING SUMMARY
3. SEPTEMBER 13 MEETING FOLLOW UP:
- MMTB MASTER PLAN, CITY CODE
AND CHARTER, HISTORY OF PAVING
PETITIONS, SPECIAL ASSESSMENT
ROLLS, AND LIFE CYCLE COST
ANALYSIS (INFORMATION ONLY)
4. SEPTEMBER 13 MEETING MATERIALS
UPDATED:
-POLICY CONSIDERATIONS AND
SUMMARY TABLE UPDATES WITH
ADDED DEFINITIONS AND STAFF
RECOMMENDATION
5. STAFF PRESENTATION:
INFRASTRUCTURE RANKING
PRIORITY LIST (INFORMATION ONLY)
6. PUBLIC COMMENT
7. NEXT MEETING: TBD
8. ADJOURN

Persons with disabilities that may require assistance for effective participation in this public meeting should contact the City Clerk's Office at the number (248) 530-1880, or (248) 644-5115 (for the hearing impaired) at least one day before the meeting to request help in mobility, visual, hearing, or other assistance.

Las personas con incapacidad que requieren algún tipo de ayuda para la participación en esta sesión pública deben ponerse en contacto con la oficina del escribano de la ciudad en el número (248) 530-1800 o al (248) 644-5115 (para las personas con incapacidad auditiva) por lo menos un día antes de la reunión para solicitar ayuda a la movilidad, visual, auditiva, o de otras asistencias. (Title VI of the Civil Rights Act of 1964).

City of Birmingham
AD HOC UNIMPROVED STREETS COMMITTEE

Birmingham City Hall Commission Room
151 Martin, Birmingham, Michigan
Wednesday, September 13, 2018

MINUTES

These are the minutes for the first meeting of the Ad Hoc Unimproved Streets Committee held on Wednesday, September 13, 2018. The meeting was called to order at 8 a.m. by Chairman Scott Moore.

1. **ROLLCALL**

Present: Chairman Scott Moore
Pierre Boutros
Jason Emerine
Michael Fenberg
Katie Schafer
Stuart Sherman
Janelle Whipple-Boyce

Absent: None

Administration: Aaron Filipski, Public Services Manager for DPS
Austin Fletcher, Asst. City Engineer
Mark Gerber, Finance Director
Tiffany Gunter, Asst. City Manager
Paul O'Meara, City Engineer
Carole Salutes, Recording Secretary
Joe Valentine, City Manager
Lauren Wood, Public Services Director

2. **APPROVAL OF AD HOC UNIMPROVED STREETS COMMITTEE
MINUTES OF AUGUST 2, 2018**

Motion by Mr. Boutros to approve the Minutes of the Ad Hoc Unimproved Streets Committee of August 2, 2018 as presented.

Motion carried, 7-0.

VOICE VOTE

Yeas: Boutros, Emerine, Fenberg, Moore, Schafer, Sherman, Whipple-Boyce

Nays: None

Absent: None

Mr. Valentine gave a brief overview of what the Committee will be talking about this morning. First they will go over future demands for the unimproved streets based on the needs. Next the policy considerations available to the Committee will be highlighted. The characteristics of each type of street will be covered. Lastly they will focus on some of the areas based on prior conversations to see how deeply the Committee wants to go into each; for example the petition process or the cost allocation, along with other variables that may warrant further conversation.

3. STAFF PRESENTATION: UNIMPROVED STREETS - SURFACE AGE

Mr. Filipski presented a Surface Age Map of unimproved streets that shows where the future demand for road improvements is most likely to be in the short and long term. Street maintenance is to some degree cyclical and surface age is a significant factor in maintenance planning and resource allocation. Although surface age is important to consider, some aged streets may be in relatively good condition compared to others of similar age.

Mr. Valentine clarified that the map illustrates the maintenance cycle that the City currently operates under. As the Committee considers how they want to affect policy going forward, this is the baseline. For Ms. Whipple-Boyce, he explained the streets would not necessarily be improved; they may just be maintained.

Mr. Boutros said the Committee must consider whether they should continue to maintain the streets as they have in the past, or should they implement different policies. His thought was that it all depends on cost, and to him it is almost patching. The more patching that is done the more the cost will accrue.

Ms. Schafer noted that right now it seems the initiative to improve a street lies with the residents and the initiation to maintain a street lies with the City. The question is how to make this better.

Chairman Moore explained that petitions from residents are advisory only. Only the City Commission can initiate an improvement.

Mr. Valentine pointed out that the map is informational and offers a snapshot assessment of the maintenance cycle program that exists today.

Mr. Boutros recalled at the last meeting the Committee had discussion about whether to eliminate the petition process and leave it to the City Commissioners to decide whether to improve a street.

Ms. Whipple-Boyce thought it would be nice to see an overlay of the complete streets map and how it relates to this map. When streets are redone, there is an opportunity to be all inclusive and embrace the complete streets that have been adopted,

Mr. Valentine said complete streets is a philosophy and a guideline that is driving the improvements that helped to facilitate the Multi-Modal Plan, taking into account more specific details for mobility. Any time the streets are redone they are being evaluated in the context of the other plans to make sure the City is doing the best they can with the changes.

4. STAFF PRESENTATION: COMPARISON CHART - IMPROVED VS. UNIMPROVED STREETS

Mr. O'Meara noted the first section compares how a project to build a new unimproved street compares with continuing to maintain an unimproved street. The second section speaks to various factors on these streets.

The special assessment process for both improved and unimproved is explained. The City puts in 15% of the cost for both. The payback period is 10 years currently for an improved street. On a cape seal treatment residents are expected to pay back in the year that is done.

The maintenance frequency for improved streets is 20 years for asphalt and 40+ years for concrete. For unimproved streets it is 7 - 10 years for cape seal.

Mr. Fenberg noted that maintenance on improved streets is not charged back to the residents.

Chairman Moore asked to have a copy of the ordinances regarding Special Assessments for the next meeting. That is because the Committee will be looking at costs.

Ms. Schafer said it would be helpful to know the surface quality of streets, such as recently redone but not improved.

➤ Policy Considerations

Mr. Valentine explained this table was created to provide a summary of topics outlining general advantages and disadvantages to consider as the Committee begins to develop a strategy for decision making. Information and cost factors are provided relative to advantages and disadvantages of the pavement types.

He hoped to find out from this Committee what areas they want to focus on first and what additional information is needed to participate in those discussions.

Ms. Schafer asked for the definition of an improved road.

- *Road Paving Options*

Mr. O'Meara advised the three options for paving are cape seal, no curbs; asphalt with curbs; and concrete with curbs. He went on to describe the advantages and disadvantages of each, along with their cost per foot.

Mr. Filipski clarified that cape seal is chip seal with a final slurry coat that adds a protective surface. Pulverization sometimes creates drainage problems.

Ms. Whipple-Boyce took issue with some of the advantages listed for cape seal, such as a rural appearance. She thought that is more of an opinion. Secondly she disagreed that "owners can add parking areas if desired" is an advantage. That option is subjective.

Mr. Sherman requested additional information on maintenance cost on a per foot basis in the first 50 years before a rebuild.

Ms. Whipple-Boyce asked that the amount of years that the different materials will last be added to the chart.

It was noted that the cost for concrete is getting higher and higher and more asphalt is being used such as on freeways and interstates.

- *Project initiation process considerations*

Mr. O'Meara described advantages and disadvantages of the petition process.

Ms. Schafer commented the City rarely initiates projects and there are very few newly improved streets because residents wishing to improve the street risk alienating themselves from other residents. It is a disadvantage that the City is not making a lot of forward progress under the petition process.

Ms. Whipple-Boyce added a disadvantage of the petition process is that there is no guarantee that a street will be redone even if a majority of property owners are in favor. She believes that it should not be up to the residents to make these tough decisions. It is the responsibility of the elected officials to initiate these decisions with the help of Engineering.

Ms. Schafer said the perspective of a resident is often very egocentric as to how they will be affected, but the City's job is to take a broader point of view and consider safety, drainage, safety, and cost.

Consensus was to begin the first sentence under Petition Process Disadvantages with "Potential long-term effects."

Mr. O'Meara went on to describe the advantages and disadvantages of Cost Allocation, Secondary Assessments, Corner Lot Assessments, and Payback Period.

Mr. Boutros noted the 10 year payment plan is a big advantage of Cost Allocation.

Ms. Whipple-Boyce said it is important historically to understand where policy came from in the first place.

5. STAFF PRESENTATION; COMPARISON CHART - POLICY, INITIATION PROCESS, AND FUNDING CONSIDERATIONS

Mr. Gerber described City Millages. Road Millage is when the cost of road improvement is spread over many individuals resulting in lower cost to property owners who receive the benefit of the improvement. This needs a vote of the citizens. The question will be how to structure this so that it would have the best opportunity for passage.

Mr. Fenberg said an important consideration when contemplating a millage is that it assesses the cost based on the valuation of the property as opposed to the front footage.

Mr. Gerber said the other consideration is to fund projects in the current Operating Millage. That does not need vote passage and can be approved by the City Commission. Unfortunately the City is kind of near the millage cap which is shrinking every year due to Headlee. So it does not give the City room for other projects that may arise. Also, bond rating agencies look at millage capacity as a factor of a city's financial health. There probably is some opportunity there, but it depends on where the Committee wants to go in terms of cost allocation.

Road projects are projected five years in advance in the Budget. There are usually no extra funds available for new projects which are not in the five-year projection.

A bond issue can be done to raise money for those kinds of projects. There is the flexibility to either do it as a Special Assessment to repay the bond millage or as a part of debt levy. Mr. Fenberg said this way it could still be assessed to the owners on a per foot basis as opposed to going on the property value basis.

Grants unfortunately are not likely to be available for local road improvements. They are competitive and difficult to obtain.

Regrettably no Tax Increment Financing ("TIF") legislation exists that the City may employ to pay for local road improvements. TIF is more to encourage large scale growth in certain areas.

Chairman Moore said the Committee needs to have an open discussion as to placing priorities, and certainly taking the suggestions of staff. Then after the next meeting the group will have a clear path forward where everybody is on board. Then after that, start tightening up these meetings to every other week.

Ms. Whipple-Boyce asked to have more information on road millage and what it might mean for the average resident should it be approved. Mr. Gerber replied that recently there have been road millage initiatives all across the State.

6. PUBLIC COMMENT

Ms. Christina McKenna Walton, who lives on Lakeview, said she has been very interested in the improvement process. She noted the 50% requirement for petition signatures doesn't indicate 50% of what and that is an important point. On her block they have already achieved 67%. That didn't satisfy the City Commission. They wanted 50% of the entire street. She believes it is too much burden to put on the volunteer homeowners to collect that much of the entire street. Without a doubt it discourages the street improvement process. It is something the citizens should expect City staff to take on instead of shifting it to the neighborhood.

The Chairman recalled they touched on that at a previous meeting. Historically it has been an issue and it will be part of their discussion on priorities.

Additionally, Ms. McKenna said there are people on her street that would support street improvement if the asphalt option was available to them. They feel it would be more appropriate because of its softer appearance and also it would lower their investment.

Mr. Stuart noted there was a study done on water and sewer in 2007-2008 and it would be nice to have that information. For a while they were using that to target areas that needed new water and sewer lines. They were going to deal with that and replace the streets also. Mr. O'Meara said updating the list is a big job and they are doing that right now. But one drawback for this Committee is the sewer

list was only done on improved streets. So he doesn't have a similar list for all of the unimproved streets.

7. NEXT MEETING

Thursday, September 27, 2018 at 8 a.m.

ADJOURNMENT

No further business being evident, the chairman adjourned the meeting at 9:25 a.m.

City Engineer Paul O'Meara

Asst. City Manager Tiffany Gunter



MEMORANDUM

Engineering Dept.

DATE: September 15, 2018

TO: Ad Hoc Unimproved Streets Study Committee

FROM: Paul T. O'Meara, City Engineer

SUBJECT: MMTB Master Plan, City Code and Charter, History of Paving Petitions, Special Assessment Rolls, and Life Cycle Costs

The following information has been assembled for your reference, as was discussed at the meeting of September 13, 2018:

Multi-Modal Master Transportation Plan

In 2013, the City Commission approved the final draft of the above plan. The plan was created by a consulting firm known as the Greenway Collaborative. The plan is posted on our website under the Planning Department's section known as "Master Planning Documents." The URL is: http://www.bhamgov.org/government/departments/planning/master_plan_and_guidelines/index.php.

With respect to the charge of this committee, please be aware that the City has a Multi-Modal Transportation Board (MMTB) that meets regularly. One of the Board's ongoing tasks is to review all upcoming street projects as they relate to the Master Plan. While the plan gives general guidance, the Board reviews each street plan in detail to ensure that all relevant multi-modal improvements that should be included are implemented if possible.

The master plan broke recommended projects down into four suggested phases. For your reference, the attached map summarizes all the suggested projects from all four phases. You will note that most of the projects focus on major streets. Where an unimproved street is noted for a project location, they are typically part of a neighborhood connector bicycle route. These routes consist of signs and pavement markings denoting a suggested bike route through the City. The routes do not typically require any changes to a pavement as a part of their implementation. Parts of a neighborhood connector route have already been implemented on parts of unimproved streets as needed in order to make the route complete.

City Code & Charter

Attached is Chapter 94 of the Birmingham City Code. The code spells out the procedure for the creation of a Special Assessment District.

Also attached is Chapter X of the original Birmingham City Charter, written at the time the City was formed. It gives the City Commission the right to create special assessment districts.

History of Paving Petitioning Efforts, 2000-2018

Per the request of the committee, attached is the history of the various petitioning efforts submitted to the Engineering Dept. for action. Note that several more petitions have been handed out to residents over the years which are never returned.

Petition Information Book

In the late 1990's, the special assessment procedure was modified to help put more facts in the hands of the property owners before a final decision is made. Now, whenever a valid petition is received with over 50% of the owners showing favor toward the project, an informational booklet is prepared and mailed to all owners within the suggested district. The owners are also invited to a neighborhood meeting where staff offers the chance to discuss the issue more. Once the meeting has been held, a few weeks is intentionally provided to give owners the opportunity to change their mind about the project, either for or against. If the petition remains above 50%, the City Commission is advised about the potential project. All owners are then invited to a public hearing to consider if the project should move forward. If the petition has dropped below 50%, then the project is not moved forward to the Commission.

Attached for your reference is the most recent package we distributed to the residents on an unimproved block of N. Glenhurst Dr. The neighborhood meeting was held this past week. The petition started at 56% of the owners in favor. Since then, four residents have asked to have their name removed, and one new one has asked to have their name added. The petition currently stands at 43%. Unless two or three new owners are added as being in favor, the project will not move forward at this time.

Special Assessment Roll

The last official roll that was prepared was for paving two blocks of Villa Ave., between Adams Rd. and Columbia Ave. The project was completed in 2016. Attached for your reference are the two final assessment rolls for the project.

The petition for this project was received in August, 2015. An informational booklet was distributed, and a neighborhood meeting was held in September, 2015. The unit rate for the new pavement was set adjusted up to \$174.00 per foot based on the bids received in April, 2016. Construction started in June, and was completed in October, 2016.

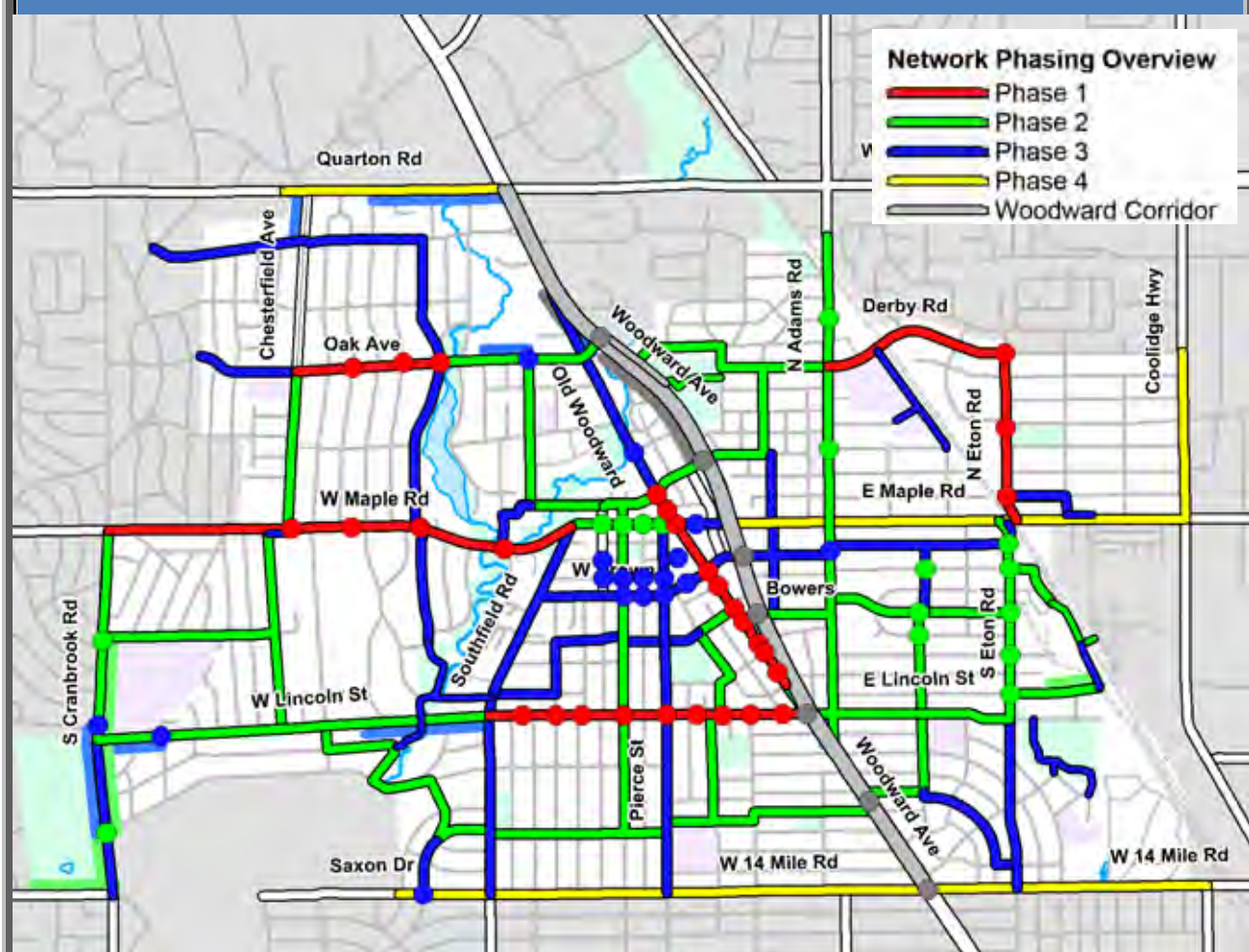
The project went smoothly and efficiently, and the final cost of the paving assessment district was calculated at \$165.86, which allowed almost all homeowners to receive a bill reduced from what had been expected. A separate assessment roll was created for the replacement of sewer laterals in the right-of-way. The originally estimated price of \$55 was adjusted upward to \$77.07 per foot, based on the contractor's actual charge. Most homeowners received a bill higher than what was expected.

There was no water lateral replacement cost on this contract, as the City did not have the policy in place at that time that required the replacement of all undersized water services.

Life Cycle Cost Analysis

A comparison of costs being expended to maintain our concrete vs. asphalt permanent pavements is attached. The costs and the suggested maintenance steps are meant to be averages. Some streets age faster than others, but as a general rule, more frequent and substantial projects need to be initiated on the asphalt streets in order to keep them in adequate condition. The overall cost difference, as shown, over the life of the pavement, is estimated at \$584,000 per mile over the 80 service life of an asphalt pavement.

FIGURE 4.5B. NETWORK PHASING SUMMARY MAP



APPROXIMATELY 15 MILES OF NEW MULTI-MODAL FACILITIES ARE PROPOSED:

- 3.8 MILES OF BIKE LANES
- 0.5 MILES OF BUFFERED BIKE LANES
- 12 MILES OF SHARED LANE MARKINGS
- 0.2 MILES OF COLORED SHARED LANE MARKINGS
- 16 MILES OF NEIGHBORHOOD CONNECTOR ROUTES
- 3.5 MILES OF PATHWAYS & SIDEWALKS
- 64 ROAD CROSSING IMPROVEMENTS
- 2 TREE EXTENSIONS
- 4 ACTIVE TRANSPORTATION HUBS (NOT SHOWN ON MAP)
- 5 BUS SHELTERS (NOT SHOWN ON MAP)
- 64 BICYCLE HOOPS (NOT SHOWN ON MAP)
- 3 ENCLOSED & SECURED BIKE ROOMS (NOT SHOWN ON MAP)

Chapter 94 - SPECIAL ASSESSMENTS^[1]

Sec. 94-1. - Purpose.

This chapter is adopted to comply with Chapter X of the Charter for the city to provide by ordinance for a complete special assessment procedure concerning the initiation of projects, plans and specifications, estimates of cost, notice and conduct of hearings, making and confirming of assessment rolls, correction of errors, contested assessments, financing of improvements made by special assessment, collection of special assessments and interest thereon, deferral of payments due to hardship, and all other matters concerning special assessments.

(Ord. No. 1637, 3-24-97)

Sec. 94-2. - Definitions.

The following words, terms and phrases, when used in this article, shall have the meanings ascribed to them in this section, except where the context clearly indicates a different meaning:

Applicant means an owner and the owner's spouse, if any, who files an application for deferral under this chapter.

Cost, when referring to the cost of any public improvement, shall mean the cost of surveys, plans, rights-of-way, spreading of rolls, notices, advertising, financing, construction, legal fees, administrative expense, condemnation and all other costs incidental to the making of such improvement, the special assessments therefor and the financing thereof.

Engineer means the director of the department of engineering and public services.

Homestead means a dwelling owned and occupied as a home by the owner thereof, including all contiguous unoccupied real property owned by the person.

Household means a housing unit consisting of related persons residing in a homestead who are age 18 or older and are not claimed as dependents on the owner's state or federal income tax returns.

Household income means all income received by all members of a household in a tax year, while members of the household. If any household member has become unemployed or has resigned from employment within the six-month period prior to the application date, the household income shall be computed at the rate of pay immediately prior to the termination or resignation from employment with the following exceptions:

- (1) The household member has permanently retired.
- (2) The household member has received a permanent medical leave due to total disability.

Improvement means a public improvement of such a nature as to specially benefit any real property, any part of the cost of which is to be assessed against one or more lots or parcels of land, in proportion to the benefit derived therefrom.

Income means the sum of federal adjusted gross income, as defined in 26 U.S.C. 1, et seq., of the Internal Revenue Code, as amended, plus all income specifically excluded or exempt from the computations of the federal adjusted gross income.

- (1) The term does not include the first \$300.00 of gifts in cash or kind from nongovernmental sources or the first \$300.00 received from awards, prizes, lottery, bingo, or other gambling winnings.
- (2) Income does not include surplus foods, relief in kind supplied by a governmental agency, payments or credits under this chapter, any governmental grant which has to be used by the claimant for

rehabilitation of the homestead, amounts deducted from monthly Social Security or Railroad Retirement Benefits for Medicare premiums, or contributions by an employer to life, accident, or health insurance plans.

- (3) Income does not include energy assistance grants and energy assistance tax credits.

Manager means the city manager or his designee.

Net worth means the total value of assets owned less total liabilities. For purposes of this chapter, net worth shall not include the value of the homestead and file value of any one automobile registered in the name of the owner of the homestead.

Owner means a person who holds solely or concurrently with others a fee interest in a parcel of real property, or who is purchasing a parcel of real property under a mortgage or land contract.

Street means a public street, avenue, highway, road, path, boulevard, right-of-way, or alley or other access used for travel by the public.

(Ord. No. 1637, 3-24-97; Ord. No. 1962, 4-21-08)

Sec. 94-3. - Commission authority.

The city commission shall have the power and authority to determine that the whole or any part of the cost of any public improvement shall be defrayed by special assessments upon the property especially benefitted, consistent with the procedures set forth in this chapter.

(Ord. No. 1637, 3-24-97)

Sec. 94-4. - Initiation of improvement.

Proceedings for the making of public improvements within the city may be commenced by resolution of the city commission, on its own initiative.

- (1) The commission, in order to ascertain whether or not a satisfactory number of property owners to be assessed desire any particular improvement to be made, may request and receive a petition therefor, or may receive a petition voluntarily presented.
- (2) The commission shall carefully consider any petition received, but petitions shall be advisory only and shall not be jurisdictional. Petitions shall in no event be mandatory upon the commission.

(Ord. No. 1637, 3-24-97)

Sec. 94-5. - Petitions.

- (a) All petitions shall be circulated and signed on blank forms furnished by the city engineer. Such petitions shall contain, in addition to the signature of the owner(s), a brief description of the property owned by the respective signers thereof.
- (b) Petitions shall be verified by the affidavit(s) of the petition circulator(s) attesting that signatures on the petition are genuine and that the persons signing are owners of the described properties.
- (c) Petitions shall be filed with the city engineer.
- (d) All petitions shall be referred by the city engineer to the manager. The manager shall check the petitions to

determine whether they conform to the foregoing requirements and shall report his or her findings to the city engineer.

(Ord. No. 1637, 3-24-97; Ord. No. 1962, 4-21-08)

Sec. 94-6. - City engineer's report.

- (a) Before the commission shall decide on making any public improvements, the city engineer shall prepare and submit a preliminary report to the city commission which shall include a general description of the nature and scope of the project, a recommended approach to the project including coordination of other city projects and finding sources, preliminary estimates of cost, an estimate of the life of the improvement, a description of the proposed assessment district(s), and such other pertinent information as may enable the commission to determine the cost, scope, extent and necessity of the proposed improvement and whether any portion of the cost should be paid by the city at large. A copy of the city engineer's report shall also be filed with the city clerk for public examination.
- (b) Whenever any property interest is acquired by condemnation or otherwise for the purpose of any public improvement, the cost thereof and of the proceedings required to acquire such property interest may be added to the cost of such public improvement.

(Ord. No. 1637, 3-24-97)

Sec. 94-7. - Notice of public hearing.

- (a) After the filing of the city engineer's report under section 94-6, above, a public hearing before the city commission on the advisability of proceeding to establish a special assessment district for the making of the public improvement shall be set, which hearing shall be held not less than ten days after notice thereof has been both published in a newspaper published or generally circulated in the city, and sent by first-class mail to all property owners in the proposed special assessment district as shown by the current property tax roll of the city. The notice shall include a statement that appearance and protest at the public hearing is required in order to appeal the special assessment to the Michigan Tax Tribunal, and that an owner or interested party, or his or her agent, may appear and protest in person or by letter, if received by the commission prior to the public hearing. The hearing required by this section may be held at any regular or special meeting of the commission.
- (b) At the public hearing on the proposed improvement, all persons interested shall be given an opportunity to be heard.

(Ord. No. 1637, 3-24-97)

Sec. 94-8. - Determination of necessity by commission.

- (a) Following the hearing, the commission may determine whether to continue to proceed, or to modify the scope of the public improvement, if necessary, in such a manner as it deems to be in the best interest of the city, provided that if the amount of work is increased or properties are added to the district, then another public hearing shall be held pursuant to notice as prescribed in section 94-7.
- (b) If the commission determines to continue to proceed with the improvement, the commission shall adopt a resolution:
 - (1) Determining the necessity of the improvement;
 - (2) Approving the detailed plans and estimates of cost prepared by the city engineer;

- (3) Prescribing what portion of the cost of such improvement shall be paid by special assessment upon the pro benefited, determining what benefits will be received by affected properties and what portion, if any, of the paid by the city;
 - (4) Delineating the boundaries of the special assessment district;
 - (5) Determining the method or formula to be used in making the assessment; and
 - (6) Directing the manager to prepare a special assessment roll and present the same to the commission for confirmation (unless the special assessment roll was previously prepared).
- (c) The commission may modify the resolution to proceed that was adopted pursuant to subsection (b) at any time, but if any modification will increase the cost or scope of the improvement or add properties to the assessment district, a further public hearing shall be held and notice given as prescribed in section 94-7.

(Ord. No. 1637, 3-24-97; Ord. No. 1962, 4-21-08)

Sec. 94-9. - Special assessment roll.

- (a) No construction contract or expenditure, except for the cost of preparing necessary plans, specifications and estimates of costs, for any public improvement to be financed in whole or part by special assessment shall be made before the confirmation of the special assessment roll for such improvement.
- (b) The manager shall make a special assessment roll of all lots and parcels of land within the designated district to be benefited by the proposed improvement and assess to each lot or parcel of land the amount benefited thereby. The amount spread in each case shall be based upon the cost estimate of the city engineer.
- (c) After the manager completes the assessment roll, it shall be filed with the clerk for public examination and presentation to the commission for review and confirmation by it.
- (d) The commission shall fix the time and place at which the commission will meet to review the special assessment roll and to give interested persons an opportunity to be heard; which meeting shall not be less than ten days after notice thereof has been both published in a newspaper published or generally circulated in the city and sent by first-class mail to all property owners in the proposed special assessment district as shown by the current property tax roll of the city. The meeting required by this section may be held at any regular or special meeting of the commission.
- (e) The commission shall meet at the time and place scheduled for review of the special assessment roll.
 - (1) At such, meeting, the commission shall consider all objections to the special assessment roll submitted in writing or orally at the meeting;
 - (2) The commission may correct the roll as to any special assessment or description of any lot or parcel of land or other errors appearing therein; or
 - (3) The commission may, by resolution, annul the assessment roll and direct that a new roll be prepared, following the same procedures applicable to the making of the original roll.
- (f) If, after hearing all objections and making a record of such changes as the commission deems justified, the commission determines that it is satisfied with said special assessment roll, and that assessments are in proportion to benefits received, it shall thereupon pass a resolution making such determination and confirming the roll. The resolution shall also:
 - (1) Direct the manager to spread the various sums and amounts appearing thereon on a special assessment roll;
 - (2) Order placement of the roll on file in the city clerk's office and direct the clerk to attach his or her warrant to a certified copy within ten days;

- (3) Command the city treasurer to bill and collect the special assessments or installments as provided in this chapter within 60 days of billing, unless a later date for billing and collecting is established by the commission in accordance with the following paragraph;
 - (4) If the commission determines construction of part or all of the improvement will not occur immediately after the confirmation of the roll, and if the commission also deems it unnecessary to collect the assessment forthwith, the resolution shall provide for the billing and collection of the assessment at the time of the construction of the improvement; and
 - (5) Direct the treasurer to give notice by first-class mail to each property owner on the special assessment roll that the roll has been confirmed, and further containing the information set forth in subsections (h) and 94-10(b).
- (g) Whenever a special assessment roll shall be confirmed by the commission, it shall be final and conclusive. Such roll shall have the date of confirmation endorsed thereon and shall from that date be final and conclusive for the purpose of the improvement to which it applies, subject only to adjustment to conform to the actual cost of the improvement, or as otherwise provided in section 94-13.
- (h) Such special assessments and all proceedings upon which such special assessments are based shall be incontestable, unless an appeal to the Michigan Tax Tribunal is instituted within 30 days after the date of confirmation of such special assessment roll.
- (i) Failure on the part of the city or any official or employee thereof to give or mail any notice required to be given or mailed by this chapter, or failure by any property owner to receive any such notice shall not invalidate any special assessment or special assessment roll.
- (j) Where deemed appropriate, the commission may authorize the public hearing on necessity of proceeding with the public improvement and on confirmation of the special assessment roll to be combined provided that all public notice requirements of this chapter are fulfilled.

(Ord. No. 1637, 3-24-97; Ord. No. 1833, 4-19-04; Ord. No. 1962, 4-21-08)

Sec. 94-10. - Payments.

- (a) All special assessments shall be payable in such number of approximately equal installments, not to exceed ten, as the commission may determine. The first installment of a special assessment shall be due and payable within 60 days of billing, or such later date as the commission may establish closer to the time of construction, and one installment shall be due and payable each year thereafter on the anniversary of such due date, with annual interest upon all unpaid installments to be fixed by the commission at a rate not to exceed 12 percent per annum, provided that no interest shall be charged upon any amount paid within 60 days of billing of the first installment. The whole assessment, both primary and deferred, against any lot or parcel of land may be paid to the city treasurer at any time in full with accrued interest and penalties thereon. If any special assessment or any installment of a special assessment is not paid when due, then such assessment or installment shall be deemed to be delinquent and there shall be, in addition to interest, a penalty added at the rate of one percent for each month or fraction thereof that the same remains unpaid before being reported to the commission for the purpose of being reassessed upon the city tax roll.
- (b) After the commission has directed the billing and collection of the assessment, the treasurer shall notify by first-class mail each property owner on the special assessment roll of the obligation to pay the amount assessed and:
- (1) When the special assessment is not payable in installments, the time within which it may be paid without interest, or penalty.

- (2) When the special assessment is payable in installments, the notice shall state the due date of the first installment date from which interest will be charged on future installments.
- (c) If any lots or lands are divided in compliance with city ordinance after a special assessment thereon has been confirmed and before the collection of all installments, the manager shall apportion the uncollected amounts upon the several parts of lots and lands so divided, and all assessments thereafter made upon such lots or lands shall be according to such apportionment.

(Ord. No. 1637, 3-24-97; Ord. No. 1962, 4-21-08)

Sec. 94-11. - Accounts.

Funds raised by special assessment to pay the cost of any public improvement shall be held in a special fund to pay such cost or to repay money borrowed therefor. Each special assessment account must be used only for the improvement project for which the assessment was levied. If there is a surplus, the surplus shall be refunded pro rata, without interest, as follows: Where the assessment has been paid in full, by a refund in cash to the owner of the premises at the time the refund was ordered, and where the assessment has not been paid in full, by credit on the assessment roll. No refund of \$20.00 or less shall be required.

(Ord. No. 1637, 3-24-97)

Sec. 94-12. - Lien until paid.

- (a) All special assessments, including installment payments, shall, from the date of the confirmation thereof, constitute a lien on the respective lots or parcels assessed, and until paid shall be charged against the respective owners of the lots or parcels assessed.
- (b) The city treasurer shall annually, on May 1, certify any delinquent special assessment, or any part thereof, together with all accrued interest and penalty, to the commission; and, it shall be transferred and reassessed, with an additional 15 percent penalty, on the next annual city tax roll. Such charges so assessed shall be collected in the same manner as general city taxes.

(Ord. No. 1637, 3-24-97; Ord. No. 1834, 4-19-04)

Sec. 94-13. - Adjustments and corrections.

- (a) Excessive assessments.
 - (1) The excess by which any special assessment proves larger than the actual cost of the improvement and expenses incidental thereto may be placed in the general fund of the city if such excess is five percent or less of the assessment.
 - (2) Should the assessment prove larger than necessary by more than five percent, the entire excess shall be refunded on a pro rata basis according to assessments to the owners of the property assessed as shown by the current assessment roll of the city, provided, however, no refunds shall be made of less than \$20.00.
 - a. Such refund shall be made by credit against future unpaid installments to the extent any installments are remaining, and the balance, if any, of such refund shall be in cash.
 - b. No refunds may be made which contravene the provisions of any outstanding evidence of indebtedness secured in whole or in part by such special assessment.
- (b) Additional pro rata assessments may be made when any special assessment roll proves insufficient to pay for the actual cost of the improvement for which it was levied and the expenses incident thereto, provided that

the additional pro rata assessment shall not exceed 25 percent of the total assessment originally confirmed unless a public hearing before the commission is first held to review and confirm such additional assessment, for which hearing notices shall be published and mailed as provided in the case of review of the original special assessment roll.

(c) Invalid assessments.

- (1) whenever any special assessment shall, in the opinion of the commission, be incorrect or invalid by reason of any irregularity or informality in the proceedings, or if any court or tribunal of competent jurisdiction shall adjudge the assessment to be illegal, the commission may, regardless of whether the improvement has been made or not, or whether any part of the assessment has been paid or not, cause a new assessment to be made for the same purpose for which the former assessment was made.
- (2) All proceedings on such reassessment and for the collection thereof shall be conducted in the same manner as provided for the original assessment.
- (3) Whenever any sum or part thereof levied upon any property under the assessment so set aside has been paid and not refunded, the payment so made shall be applied upon the reassessment or if the payments exceed the amount of the reassessment, refunds shall be made.
- (4) No judgment or decree nor any act of the commission vacating a special assessment shall destroy or impair the lien of the city upon the premises assessed for such amount of the assessment as may be equitably charged against the same or as by regular mode of proceeding might have been lawfully assessed thereupon.

(Ord. No. 1637, 3-24-97)

Sec. 94-14. - Assessment against single lot.

When any expense shall be incurred by the city upon or in respect to any separate or single lot or parcel of land which, by the provisions of this chapter, the city commission is authorized to charge and collect as a special assessment, and not being of that class of special assessments required to be made pro rata upon several lots or parcels of land in a special assessment district, an account of the labor, materials, or services for which such expense was incurred and the name and address of the owner or person chargeable therewith, if known, shall be reported to the commission in such manner as it may prescribe. The provisions of this chapter with reference to special assessments generally, and the proceedings necessary before making the improvements, shall not apply to assessments to cover the expense incurred in respect to that class of improvements contemplated in this section.

- (1) No improvement or expense shall be subject to special assessment under this section unless the owner of or party in interest in the property to be so assessed shall receive ten days' notice by mail of any meeting at which commission action on such an improvement, expense, or special assessment is to be considered, with such notice to be provided in accordance with the requirements and procedures set forth in this chapter.
- (2) The commission shall determine what amount or part of every expense is to be assessed and the person, if known, against whom such expense shall be charged, and the lot upon which the same shall be levied as a special assessment; and as often as the commission shall deem it expedient, it shall require all of the several amounts so reported and determined, and the several lots or parcels of land and person chargeable therewith, respectively, to be reported by the treasurer to the manager for assessment.
- (3) Upon receiving the commission's report, the manager shall make a special assessment roll, and levy as a special assessment upon each lot so reported to him and against the persons chargeable therewith, if known, the whole amount of all the charges so directed to be levied upon each lot or parcel of land

respectively, together with a penalty of ten percent, and when completed, the manager shall report the assessment to the commission and thereupon the same proceeding shall be had as provided in this chapter for special assessments in other cases, except the commission may require that the same be paid in one or any other number of installments not to exceed five; provided that the notice of the filing of the special assessment roll in such cases, and of the reviewing of the same, may be given by sending such notice by registered mail to the persons named in such roll at their last known address, instead of giving notice by publication. If such notice is given by publication, the commission may order the cost thereof to be added to the roll and distributed pro rata according to the amount of the special assessments therein. It shall not be necessary to make a separate roll for each lot or parcel of land against which such an assessment may be made, but assessments against several lots or parcels of land may be included in one roll.

(Ord. No. 1637, 3-24-97; Ord. No. 1962, 4-21-08)

Sec. 94-15. - Assessments for off-street parking.

When the proposed public improvement is a facility to provide public off-street parking, the commission may determine that any lot within the proposed assessment district which is developed to a floor area ratio of less than 1.0 will be additionally benefited if at some time in the future additional floor area is constructed on such property. In such instances, a resolution adopted pursuant to section 94-8 shall direct the manager to prepare the assessment roll by including therein a deferred assessment benefit, to be calculated as follows:

- (1) The manager shall compute the estimated benefit to the lot to be assessed using the actual square footage of land and building at the time of such assessment, to achieve the primary assessment figure.
- (2) The manager shall compute for each lot in the district the maximum additional square footage of building which could be added to the property under the current zoning ordinance without providing additional square footage of building which could be added to the property under the current zoning ordinance without providing additional on-site parking. If such property has, at the time of assessment, a floor area ratio of 1.0 or greater, no deferred off-street parking assessment shall be entered against such property. whether the lot or parcel is not being utilized at the time of assessment at the maximum floor area ratio of 1.0, the manager shall compute a deferred off-street parking assessment based on the additional allowable potential building area computed above and shall enter such amount on the roll as the deferred off-street parking assessment on such property.
- (3) Such deferred off-street parking assessments shall be canceled at the time of development if the building constructed or enlarged is residential in character. Primarily residential buildings shall be defined as any building with two or more stories in which the first floor or any portion thereof is occupied by a commercial or business use and all additional stories are utilized for residential purposes.

(Ord. No. 1637, 3-24-97; Ord. No. 1962, 4-21-08)

Sec. 94-16. - Deferred off-street parking assessments.

- (a) The manager shall enter the amount of any deferred off-street parking assessment upon the roll at the time of its preparation. Such assessment shall not be due as to any lot against which a deferred off-street parking assessment has been made until it shall be developed so as to increase the floor area existing at the time of the assessment by five percent or more or increase the floor area ratio to 1.0. Upon the issuance of a building permit authorizing such an increase in floor area, the city commission shall, by resolution, confirm the making

of the deferred off-street parking assessment and it shall be due and payable in full within 30 days. Failure to pay a deferred off-street parking assessment within the above-stated time period shall be grounds for issuance of a stop-work order on the subject property by the building official.

- (b) Deferred off-street parking assessments may be paid in full at the owner's option, at any time after the roll of primary assessments has been confirmed. A building owner may elect to finance a deferred off-street parking assessment with the primary assessment if such an election is made in writing and filed with the city treasurer within 14 months after confirmation of the primary assessment roll. Interest on a deferred off-street parking assessment shall not start to accrue until 60 days after such deferred off-street parking assessment was confirmed by the commission.

(Ord. No. 1637, 3-24-97; Ord. No. 1962, 4-21-08)

Sec. 94-17. - Time limitation.

No deferred off-street parking assessment shall be confirmed by the city commission unless such confirmation takes place within 20 years from the date on which the original roll was confirmed. As to any deferred off-street parking assessment not confirmed within such 20-year period, it shall no longer be considered a potential assessment against a lot. Any deferred off-street parking assessment which has been paid in advance shall not be refunded even though not confirmed within the 20-year period.

(Ord. No. 1637, 3-24-97)

Sec. 94-18. - Deferred payments of special assessments based on hardship.

- (a) The city may grant deferrals of special assessment payments of persons who, in the opinion of the city commission, by reason of hardship are unable to contribute toward the cost thereof, in accordance with the provisions of this section.
- (b) An owner may apply for deferment of any or all installment payments of special assessments due in a particular year on the owner's homestead. The application shall be made upon an affidavit form available from the city treasurer.
 - (1) The affidavit form shall contain the following:
 - a. The name, or names if owned jointly, and social security number of the applicant.
 - b. The homestead address and sidewall number.
 - c. The home and business telephone number of the applicant.
 - d. The length of ownership of the homestead by the applicant.
 - e. Total household income for the past calendar year. The applicant shall attach copies of the most recently filed federal and state income tax forms of all members of the household, including all schedules, to the application.
 - f. Current place of employment. If the applicant is unemployed, the date of termination or resignation from employment shall be stated.
 - g. A statement of the net worth of all household members as of the date of the application.
 - h. The number of dependents, as defined in 26 U.S.C. 1, et seq., of the Internal Revenue Code, as amended, residing with the applicant at the homestead.
 - i. If the applicant is over 65 years of age or totally and permanently disabled, the applicant shall attach a copy of the notice from the treasurer denying deferment of special assessment under MCL 211.765, as amended, to the application.

- j. The amount of the special assessment installment payment for which deferment is requested and the date such installment comes or was due.
 - k. A statement located immediately above the applicant's signature: "It is understood that if this deferment is authorized, the City will place a lien on your property."
 - l. The form shall be signed by the applicant and notarized. If the homestead is owned jointly by husband and wife, both shall sign and file the affidavit.
- (2) In addition to the above, copies of the following documents shall be attached to the application:
 - a. Recorded deed and land contract or mortgage for the homestead property.
 - b. The cover page of the current homeowners or hazard insurance policy covering the homestead.
 - c. A death certificate or divorce decree, if such document affects the title to the homestead property.
 - d. Any other document that the city may require to process the application for deferment.
- (c) Application for deferment of an installment payment of a special assessment must be made no later than 30 days after the due date of a special assessment or installment for which deferment is requested.
- (d) To qualify for a deferment of an installment payment, the applicant must meet all of the following requirements:
 - (1) Total household income attributed to the applicant in the past calendar year cannot exceed the level adopted by the state for its special assessment deferral program, plus an additional amount equal to the deduction allowed by state income tax law for each dependent residing with the applicant at the homestead;
 - (2) Total net worth of all members of the household cannot exceed \$10,000.00;
 - (3) The homestead must be the primary residence of the applicant;
 - (4) The homestead must have been owned and occupied by the applicant for at least three years;
 - (5) The applicant cannot be eligible for deferment of special assessment under MCL 211.761, et seq., as amended;
 - (6) The amount of the installment payments to be deferred on special assessments exceeds \$300.00 per year;
 - (7) Property taxes on the homestead property should not be more than two years delinquent.
- (e) Immediately upon receipt of the affidavit form, the treasurer shall stamp the application with the time and date of receipt. The treasurer shall promptly examine the application to determine if the applicant meets the requirements of this chapter.
 - (1) The treasurer shall request the Manager to make an inspection of the property and property records and conduct an investigation and survey as the treasurer deems necessary. An applicant shall not be compelled to supply information not reasonably necessary to a proper determination of the eligibility of the owner and the homestead for the relief provided under this section.
 - (2) The treasurer shall promptly make a decision and shall notify the applicant of this decision not later than 30 days after the receipt of the application by the treasurer. The decision of the treasurer shall be final.
- (f) The payment of any installment payment on a special assessment due and payable on a homestead in a year in which the owner meets all the eligibility requirements of this section shall be deferred until the occurrence of the first of the following events:
 - (1) The homestead or any part of the homestead is conveyed or transferred to another, provided however, that:
 - a. The original applicant for the deferral may convey or transfer an interest in the homestead to

another person jointly with the applicant provided that the original applicant continues to reside at the homestead, or

- b. An owner who owns the property jointly with another may convey or transfer that interest to the original applicant for the deferral provided that the original applicant to whom the property is conveyed continues to reside at the homestead;
 - (2) A land contract selling the homestead is entered into;
 - (3) The owner fails to maintain adequate homeowners and hazard insurance as required herein; or
 - (4) One year after the original applicant's death, subject to further order of the probate court; however, the death of a spouse shall not terminate the deferments of special assessments for a household owned by husband and wife as long as the spouse does not remarry.
- (g) Payment of deferred amounts.
- (1) Any special assessment deferred under this section may be paid at anytime.
 - (2) Upon the occurrence of any one of the events terminating a deferment of an installment payment under subsection 94-18(f), above, the deferred amount plus interest shall be paid in full.
 - (3) If the owner fails to make such payment when the deferment is terminated, the provisions of this chapter regarding the collection of special assessments shall again apply to the deferred payment as if no deferment had been granted and the city may enforce the lien upon the property in any manner permitted by law.
- (h) Interest shall accrue on deferred installment payments at the monthly rate provided for nondeferred installment payments within the special assessment district.
- (i) The treasurer shall send to the owner, by first-class mail, a yearly statement showing the amounts of deferred assessments on the homestead and the interest outstanding thereon.
- (j) Notice of lien.
- (1) Upon grant of a deferment or grant of the initial deferment if deferments are granted in subsequent years, the city shall record a notice of lien in its favor at the Oakland County Register of Deeds stating that there exists a lien upon such property for deferred special assessments. The lien created shall include the amount of interest provided hereunder.
 - (2) The owner shall sign all documents necessary for the filing of such lien as a condition to receiving a deferral.
 - (3) If subsequent deferments are granted, the treasurer shall ascertain whether the notice of the previously filed with the register of deeds is still in effect. If it is not, a new notice of lien shall be filed against the property with the register of deeds.
- (k) For the duration of the deferment, the owner shall maintain homeowners and hazard insurance on the homestead in an amount not less than the amount of the deferred assessment(s) and accrued interest plus the balance of any mortgage or other lien or encumbrance superior to the city's lien. On or before June 1st of each year for the duration of the deferment, the owner shall provide the treasurer with proof of such homeowners and hazard insurance in the form of a certificate of insurance, and such certificate of insurance shall show the city as an additional insured and shall further contain a clause requiring the insurance company to give the city 30 days advance notice of cancellation, termination or material change in the insurance coverage.
- (l) All deferments made under this section apply only to the installment payment for the year granted and for the specific special assessment district for which the deferment has been granted. An owner can apply for further deferments in any given year that installments are due if the eligibility requirements are met and this chapter

remains in effect.

- (m) Nothing in this chapter shall give any person a vested right to receive a deferment or in the standards to be applied in granting such a deferment.
 - (1) The city commission may change, modify, or delete any of the terms and conditions of this section or repeal it in its entirety at any time without notice to any applicant or recipient of a deferment.
 - (2) However, once a deferment is granted, it cannot be revoked and payment be required prior to the time set forth in this section.
- (n) Penalties.
 - (1) In addition to all other penalties imposed by this chapter, if any person shall make a false or misleading statement on an application for deferment under this section, such person shall be guilty of a misdemeanor and all amounts deferred shall be immediately due and payable.
 - (2) Failure to pay such deferrals within 30 days of receiving notice from the treasurer shall result in the foreclosure of the liens placed upon the subject property pursuant to this section.

(Ord. No. 1637, 3-24-97; Ord. No. 1962, 4-21-08)

CHAPTER X. - SPECIAL ASSESSMENTS

Section 1. - [Authority to impose; resolution.]

The commission shall have the power to determine that the whole or any part of the expense of any public improvement shall be defrayed by special assessments upon the property specially benefited or which may be specially benefited in the future and shall so declare by resolution. Such resolution shall state the estimated cost of the improvement, what proportion of the cost thereof shall be paid by special assessments, and what proportion, if any, shall be a general obligation of the city, the number of installments in which assessments may be paid, and shall designate the districts or land and premises upon which special assessments shall or may be levied. Such resolution may provide that specified development or improvement of property will benefit from a public improvement and establish assessments against such property to be collected if and after such improvement or development of property is undertaken.

(Amend. of 4-4-83)

State Law reference— Permissible that Charter provide for assessing costs of public improvements, MCL 117.4d, MSA 5.2077.

Section 2. - [Establishment of procedure.]

The commission shall prescribe by general ordinance complete special assessment procedure concerning plans and specifications, estimate of costs, the making of the assessment roll and correction of errors, the notice and conduct of hearings on the necessity of a public improvement and the confirmation of the special assessment roll, the collection of and interest to be borne by special assessments and any other matters concerning the making of improvements by the special assessment method.

(Amend. of 4-4-83)

Section 3. - [Imposition of lien.]

From the date of confirmation of any roll levying any special assessment, the full amount of the assessment and all interest thereon shall constitute a lien on the property subject thereto and that amount shall also be a debt of the person to whom assessed until paid and, in case of delinquency, may be collected as delinquent city property taxes.

(Amend. of 4-4-83)

Section 4. - [Collection.]

No action of any kind may be instituted for the purpose of contesting or enjoining the collection of any special assessment (a) unless, within 30 days after the confirmation of the special assessment roll, written notice is given to the commission indicating an intention to file such an action and stating the grounds on which it is claimed that the assessment is illegal and (b) unless that action shall be commenced within 60 days after the confirmation of the roll.

(Amend. of 4-4-83)

Section 5. - [Reassessment.]

Whenever the commission deems any special assessment invalid or defective, or whenever a court adjudges an assessment to be illegal in whole or in part, the commission may cause a new assessment to be levied for the same purpose, whether or not the improvement or any part thereof has been completed, or any part of the special assessment collected. In reassessment proceedings hereunder, it shall not be necessary for the commission to redetermine the necessity of the improvement or to hold a hearing thereon. If any portion of the original assessment is collected and not refunded, it shall be applied upon the reassessment, and the reassessment shall to that extent, be deemed satisfied. If more than the amount reassessed is collected, the balance shall be refunded to the person making such payment.

(Amend. of 4-4-83)



MEMORANDUM

Engineering Dept.

DATE: July 18, 2018

TO: Ad Hoc Unimproved Streets Study Committee

FROM: Paul T. O'Meara, City Engineer

SUBJECT: Ad Hoc Unimproved Streets Study Committee
Summary of Paving Past Paving Petitions

As requested, the following summarizes the petitions that have been submitted to the Engineering Dept., and what their results were:

STREET	FROM	TO	VOTES IN FAVOR	BASE COST PER FOOT	RESULTS
N. Glenhurst	Oak	Pine	56%	NA	Signatures verified; booklet to be prepared within 30 days.
Lakeview	Oak	Harmon	54%	NA	Information booklet mailed July, 2016. A small number of residents changed their mind, majority no longer present. ¹
Saxon	Norfolk	Southfield	53%	NA	Petition submitted May, 2016. Discussions with residents after booklet was distributed caused people to change their minds, majority no longer present. ²

¹ Lakeview Ave. proponents asked the City to explore paving one block instead of two, which would have changed typical procedure for this. City Commission discussed issue at meeting of May 8, 2017. Agenda package & minutes from May 8 is attached.

² Saxon Dr. had the complication that half of the owners in the district were in Beverly Hills owners, and were subject to their policy of splitting the cost, which seemed to result in over charges to certain parties and under charges to others.

Villa	Adams	Columbia	58%	\$174	Approved by Commission Nov., 2015. Constructed 2016. ³
Floyd	George	Lincoln	53%	NA	Information booklet mailed May, 2015. Percentage in favor dropped below 50%; hearing never scheduled. ⁴
Cummings	Chapin	14 Mile	61%	\$129	Approved by Commission Nov., 2014. Constructed 2015.
Clark	George	Lincoln	100%	\$112	Approved by Commission Nov., 2013. Constructed with Lincoln Ave. in 2014.
Ann	North End	Frank	55%	\$62 ⁵	Approved by Commission Sept., 2009. Constructed with George St. contract in 2010.
Vinewood	Lakeview	Woodland	60%	\$140	Commission hearing Dec., 2008; motion failed.
Baldwin	Harmon	Maple	58%	\$132	Approved by Commission April, 2008. Constructed in 2008.
Euclid	N. Old Woodward	Ferndale	NA ⁶	\$135	Approved by Commission in Sept., 2007. Constructed with other adjacent streets in 2008.
Dewey	Greenwood	Tooting	70%	\$110 ⁷	Approved by Commission April, 2007. Constructed with Greenwood St. in 2007.
N. Worth	Madison	Ridgedale	NA ⁸	\$149	Approved by Commission in 2006. Constructed with Birmingham Estates Ph. 2 in 2007.

³ In 2014, the City installed new water main on Yosemite Blvd. & Villa Ave. Our office contacted the homeowners association president in 2013 to notify the association of our plans, and to ask if they would like to poll the resident if they would want to combine this project with a paving project. A neighborhood meeting was held that year to discuss further, which had good attendance. No petition materialized. Residents on Villa did prepare a petition after water main project and subsequently got that street paved.

⁴ Floyd St. has a 45 ft. right-of-way with several mature trees. Lack of curbs allows residents to park up close to or adjacent to trees as needed. In order to build curbed street and save trees, pavement would be 20 ft. wide, requiring the removal of parking on one side of the street. Once residents understood this, they were no longer in favor.

⁵ Historically, this street was cape sealed with curbs. The residents petitioned to replace the curbs and install cape seal again, which reduced the cost.

⁶ The entire Residence Park neighborhood was being reconstructed in 2008. This was the only block in the area that was not paved, so the Commission held a hearing and authorized an assessment without a petition to finish the area.

⁷ Dewey St. residents did not want curbs, but did want improved drainage. An engineered road with underground drained shoulders was installed, and it was understood that this would not qualify for long term pavement maintenance at the City's expense.

⁸ N. Worth St. was initiated by City as part of Roeper School negotiations during purchase of Adams Park property.

Stanley	Lincoln	14 Mile	66%	\$89 ⁹	Approved by Commission April, 2006. Constructed in 2007.
Greenwood	Oak	Harmon	55%	\$105	Approved by Commission April, 2006. Constructed in 2007.
Wimbleton	Woodward	Oxford	71%	\$100	Commission hearing April, 2005. Motion failed.
Greenwood	Harmon	Willits	70%	\$95	Approved by Commission Jan., 2005. Constructed in 2006.
S. Worth	Haynes	Alley North of Webster	0%	\$149	City Manager initiated project to remove small section impacting two commercial properties. 2005
Northlawn	Stanley	Washington	NA ¹⁰	\$128	Constructed with Acacia Park Sewer Project, 2005.
Washington	Lincoln	14 Mile	51%	\$95	Approved by Commission July, 2004. Constructed in 2005.
Fairway	330 Ft. West of Pleasant	Pleasant	63%	\$95	Approved by Commission March, 2004.
Lakepark	Pine	Maple	52%	\$95	Commission hearing March, 2004. Motion failed.
Puritan	Raynale	Oak	55%	\$95	Information booklet mailed Dec., 2003. Percentage in favor dropped below 50%; hearing never scheduled. ¹¹
Harmon	Lakeside	N. Old Woodward	67%	\$85	Approved by Commission October, 2003. Constructed in 2005.
Humphrey	Grant	Woodward	60%	\$90	Approved by Commission April, 2003. Constructed in 2005.
Larchlea	Maple	Midvale	55%	\$90	Information booklet mailed Jan., 2003. Percentage in favor dropped below 50%; hearing never scheduled.
Norfolk	Saxon	Southfield	?	\$90	Information booklet mailed Jan., 2003. Percentage in favor dropped below 50%; hearing never scheduled.

⁹ Stanley Blvd. was previously a cape seal street with curbs. Since the curbs had been assessed in the past, the cost of the curbs was deducted from the special assessment.

¹⁰ Northlawn Blvd. was being removed due to an initiative by the City to improve the sewer system in the entire neighborhood, so it was going to be damaged and replaced anyway. The City Commission authorized the special assessment so that this one block would not be restored differently than the rest of this half mile section.

¹¹ Puritan Ave. discussion was complicated by backyard sewer issue, which was unresolved at the time.

Oak	Lakeview	Greenwood	75%	\$90	Approved by Commission May, 2002. Constructed with Hazelwood in 2003.
Hazelwood	Oak	Vinewood	75%	\$90	Approved by Commission May, 2002. Constructed with Oak in 2003.
Wimbledon	Woodward	Adams	49%	\$90	Information booklet mailed Nov., 2001. Percentage in favor dropped below 50%; hearing never scheduled.
Henrietta	Frank	Lincoln	60%	\$90	Approved by Commission January, 2001. Constructed in 2001.
Watkins	Brown	Lincoln	50%	\$75	Approved by Commission April, 2000. Constructed in 2001.



N. GLENHURST DRIVE PAVING

August 24, 2018

Dear Property Owner,

The City of Birmingham has received a petition signed by a significant number of the property owners on the above street requesting that the road be improved with a permanent pavement and curbs. Having the road paved under a special assessment is a significant decision, which can raise questions.

The attached report has been prepared to help answer questions about the project, and assist you in confirming your final position. In order to address any issues this report does not explain, or if you have any individual issues, we have scheduled an informational meeting for all property owners to attend. It is intended to be a forum to encourage all involved to learn details of the project, and to allow for City staff to answer any questions you may have before the petition process moves to the City Commission for consideration. Attendance is not mandatory, regardless of your position on this issue. However, we encourage you to attend. At your discretion, it may be constructive to share this information with tenants if appropriate.

The final decision to proceed with the project rests with the City Commission. It has typically been the Commission's preference to listen to what the wishes of the neighborhood are. Should your name remain on the petition, it will be considered as supporting the project. Should your name not be on the petition, it will be considered not in support of the project. If you have signed the petition, but you no longer support the project, you may remove your name by submitting a letter or email to the Engineering Department. If you wish to add your name in support, a letter or email may also be sent. Those that wish to make their position known and present their reasons, would best respond by letter, however, you are also invited to present your thoughts at the time of the public hearing. Should an official "public hearing of necessity" be scheduled, you will be sent notification at a later date.

The informational meeting will be held on **Tuesday, September 11, at 7:00 P.M.**, in the second floor conference room #202 & 203 located above the Police Department at the Municipal Building, 151 Martin St. It is best to enter the side door off of Pierce St., and proceed upstairs.

If you have any questions relative to the meeting, or the project in general, please contact Austin Fletcher at 248-530-1839, anytime between 8 A.M. and 5 P.M. weekdays.

Sincerely,

Paul T. O'Meara, P.E.
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PROPOSED PROJECT REPORT

N. GLENHURST DRIVE PAVING

Pine St. to Oak St.



**City of Birmingham
Engineering Department**

August 24, 2018

PROPOSED PROJECT REPORT: N. GLENHURST DRIVE PAVING

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I. INTRODUCTION

Recently, the residents on N. Glenhurst Drive between Pine Street and Oak Street signed and submitted a petition requesting that the City install a new paved surface on their street. The following report has been prepared to allow property owners in the affected area to understand the full impact of the idea.

With the submission of this petition, verified signatures representing **fifty-two percent (52%)** of the properties on this street indicated that they would be in favor of a paving project. Anyone who signed the petition, who, for whatever reason, is no longer in favor of the project, will need to indicate so in writing to our office to have his or her name removed. Likewise, anyone that wishes to add his or her name in favor of the project will need to submit a note in writing to our office indicating this. Mailed letters or emails are accepted for this correspondence and will need to be received by **September 28, 2018**.

II. EXISTING CONDITIONS

ROADWAY HISTORY

N. Glenhurst Drive (between Pine Street and Oak Street) was originally platted in 1925 with a fifty (50) foot road right-of-way. The road was constructed as a gravel road and has never been engineered to drain water or serve as a durable road surface. Over the years, as with other gravel streets in Birmingham, the road surface began to be oiled to reduce dust and improve stability. Starting in the 1940's, the road began to be chip sealed. As technology improved, a cape seal process has been used which creates a surface resembling asphalt, without the durability properties of asphalt. Resealing is often necessary every seven (7) to ten (10) years depending on particular conditions of the road.

As with all cape seal streets, the surface of N. Glenhurst Drive is rough in spots and the edges tend to break off. Water and mud can remain in the roadway at some locations long after rainstorms are over. Drainage has been a problem, particularly along the edge of the street. Grass near the street is difficult to maintain, since vehicles often park off the edge of the street. The existing road surface is approximately eighteen (18) feet wide, but there are areas where it is wider to allow for on-street parking in front of some homes. The roadway is generally centered in the fifty (50) foot wide City Right of Way.

The existing sidewalks on N. Glenhurst Drive are generally five (5) feet wide.

PUBLIC UTILITIES

The existing combined sewer is an eighteen (18) inch starting at Oak Street flowing south (650 feet) and increases to a twenty-one inch for the remaining (350 feet) south to Pine Street. Both of these sewers were constructed in 1926.

There is an existing six (6) inch cast iron water main that runs from Oak Street to Pine Street that was installed in 1927.

Given the age and nature of this infrastructure, future study of these systems may require their replacement. While there is no additional cost for the replacement of City water mains or sewer lines, there may be additional costs for sewer lateral replacements and water service replacements as outlined below.

III. PROPOSED IMPROVEMENTS

ROAD IMPROVEMENTS

N. Glenhurst Drive is proposed to be paved with the City's standard road width in a residential area, which is **twenty-six (26) feet**, measured between the face of the curbs. An example of how this width appears can be found on Greenwood Street. Unlike Greenwood Street, however, the entire road will be constructed of concrete, which is now the City's standard pavement for new roads (similar to Oak Street).

N. Glenhurst Drive has a fifty (50) foot wide right-of-way. After the installation of the road as described above, there will be approximately six (6) feet of grass between the sidewalk and the curb. Typically, tree roots grow in the direction of available water. In the case of street trees, the roots tend to grow towards the adjacent front yards, and away from the street. The impervious nature of the hard gravel road, and later the sealed paved surface, discourages the growth of roots in the area of the road. Nevertheless, we cannot guarantee what impact this project will have on each tree until the project is underway, as each tree is different.

The proposed limits for this project would start at the north side of the Pine Street intersection and go to the south side of the Oak Street intersection.

The sidewalks will generally remain as they are today, with repairs where damage occurred due to installation of the sewer leads, water services, or where needed for existing trip hazards. All sidewalk ramps within the project limits will also need to have ADA compliant ramps and detectable warnings installed.

Since all existing trees were installed relatively close to the City sidewalks, no trees are slated for removal as a result of this project. It should be noted that the City has constructed several new streets with similar situations, and typically very few trees are lost due to construction. However, since the risk of damage is present, homeowners need to be aware that some tree loss may occur, either during construction, or subsequent to it.

PUBLIC UTILITY IMPROVEMENTS

SEWER LINES

A cursory review of the existing sewers indicates the possible need for improvements. However, additional research and/or a study will be required in order to determine the extent and type of improvements, if any. This will be conducted by the City once the project is authorized and before the design begins to ensure all necessary pipe replacement and/or repairs are done to ensure that the pipe is stable for many years to come.

WATER LINES

The existing water main will be replaced with a new eight (8) inch water main as part of this project. An alignment for this water main will have to be determined during the detailed design phase. We will work to avoid damage to the existing trees, but it is possible that a small number of trees may be in conflict with this work.

*****It should be noted that the improvements to the City water main and any improvements deemed necessary to the City sewer, will not affect (increase) the cost of the special assessment.*****

SEWER LATERAL REPLACEMENT (THE LINE FROM YOUR HOME TO THE CITY SEWER)

Whenever the City is constructing a new pavement such as envisioned in this project, each home's sewer lateral must be considered relative to its remaining service life. Each homeowner is responsible for the maintenance of their sewer lateral from the home to the City sewer connection. The portion from the right-of-way line to the City sewer can be quite costly to repair if done on an emergency basis because it has collapsed. Experience has shown when older sewer laterals are replaced in conjunction with a street renewal project, the cost of the work is generally substantially reduced. Replacing older sewer laterals also significantly reduces the possibility of the new pavement having to be cut and patched afterward due to the continuing decline of sewer laterals. With that in mind, should the City Commission authorize the installation of a new pavement, **all homes with sewer laterals older than fifty (50) years (the expected service life of an underground pipe from that era), will be included in a special assessment district requiring removal and replacement of the sewer lateral in the right-of-way at homeowner expense as part of this project.**

WATER SERVICE REPLACEMENT (THE LINE FROM YOUR HOME TO THE CITY WATER)

Whenever the City is constructing a new pavement such as envisioned in this project, each home's water service must be considered relative to its size (diameter) and material. Each homeowner is responsible for the maintenance of their water service from the home to the City water connection. Experience has shown when water services are replaced in conjunction with a street renewal project, the cost of the work is generally substantially reduced. Upgrading the water service to one (1) inch diameter also significantly reduces the possibility of the new pavement having to be cut and patched afterwards due to either the desire by the homeowner to upgrade the size, needed replacement or from new construction. The current Building Code requires all new construction to have a minimum of a one (1) inch diameter water service. Any homes using lead or iron pipes will also have their services replaced. With that in mind, should the City Commission authorize the installation of a new pavement, **all homes with water services that are ¾" in diameter or if they are made of lead or iron will be included in a special assessment district requiring removal and replacement of the water service in the right-of-way at homeowner expense as part of this project.**

IV. PROJECT APPROVAL PROCESS

PUBLIC HEARING TO AUTHORIZE PROJECT

Installing a new permanent improved pavement on N. Glenhurst Drive will require that the City Commission authorize the creation of a special assessment district (SAD). Prior to this occurring, the Engineering Department will hold an informational meeting with residents on the street to review this program and answer any questions you may have to ensure that you fully understand what is being proposed prior to scheduling the Public Hearing. This informational meeting is scheduled for **Tuesday, September 11, 2018 at 7:00 p.m. at City Hall**. After the open informational meeting described on the cover letter is held, if it can be demonstrated that **a majority (over 50%)** are still in favor of the road paving plans, City staff will forward the petition to the City Commission, and recommend that a Public Hearing of Necessity of this project be scheduled to consider whether to authorize the project. The Public Hearing date will likely be set approximately four (4) weeks later. City staff will invite all property owners by individual notice (and advertise in the local press) to a Public Hearing for the purpose of taking comments in regard to the proposed project.

The Public Hearing will provide a forum for those impacted by the project to discuss the matter with the City Commission prior to any decision on the project being made. Any interested party may provide comment either by appearing and speaking at the meeting, or filing a letter with the City Clerk, preferably one (1) week prior to the scheduled hearing date.

After the Public Hearing is closed, the City Commission will determine if the proposed project is necessary and advisable. If they vote in favor of the project, the City Assessor will be directed to prepare a special assessment roll identifying all properties to be assessed, and the estimated amounts to be assessed against each property (described below). A second Public Hearing will be scheduled to confirm the roll of assessments.

PUBLIC HEARING TO CONFIRM ASSESSMENTS

The City Commission will then schedule another Public Hearing for the confirmation of the roll assigning the amounts for the special assessments. The City will again invite all property owners to this hearing. Property owners will be able to determine their particular assessment at the City Clerk's office for a period of ten (10) days prior to the hearing. The City Commission may confirm, correct, revise, or annul the special assessment roll.

A property owner or party-in-interest may file a written appeal of the special assessment with the Michigan Tax Tribunal within thirty (30) days of the confirmation if the property owner or party-in-interest, or their agent, appears and protests the assessment at the Public Hearing held for the purpose of confirming the roll. Appearance and protest may be made in person at the hearing, or may be made by filing a letter with the City Clerk prior to the hearing. If a protest is not made at the Public Hearing, an appeal may not be filed with the Michigan Tax Tribunal.

If the Commission confirms the roll, the Engineering Department will begin design of the project. After construction takes place, and final costs are available, the roll is subject to adjustment after the actual cost of construction is determined.

V. CONSTRUCTION

ANTICIPATED CONSTRUCTION SEQUENCE

Construction will likely take the following course:

1. The existing road surface will be removed or pulverized.
2. City sewer will be replaced and/or repaired (if determined necessary).
3. City water main will be replaced.
4. Sewer and water services will be replaced on an as-needed basis.
5. The existing storm drains will be abandoned, and new catch basins will be installed to accommodate the new road design. Short sections of storm sewer will be installed to drain these new basins.
6. The new grade of the road will be roughed out; generally about twelve (12) inches lower than the existing road, to ensure that all front yards drain properly to the street.
7. A gravel road base will be prepared.
8. New concrete pavement with integral curb will be installed. The new pavement will take **at least seven (7) days** to cure to gain strength before it can be re-opened to traffic.
9. New concrete driveway approaches will be installed. The drive approaches will match the width as needed for each existing driveway, and will be replaced complete from the sidewalk to the new curb.
10. The existing sidewalks will be repaired (where needed) to provide a consistent walking surface and new sidewalk ramps will be installed that meet current ADA regulations.
11. All yard areas within the right-of-way will be graded off, and topsoil will be placed. Front yards will generally be sodded. Seed and mulch will be used in small areas where sod is impractical, in areas where sod would not be watered, and adjacent to large trees. Seed will also be installed upon written request.
12. The Contractor will return for a short period of time (normally two weeks) to ensure that the grass is growing sufficiently in all disturbed areas. Homeowners are encouraged to water and maintain new lawn areas after the Contractor's work has been completed.

The above phases may be interchanged somewhat based upon Contractor's preference, and weather conditions.

Access to each property's driveway will be maintained during the majority of the work. Access may be limited during the following operations:

1. City sewer or sewer service installation directly in front of the driveway approach.
2. City water main or water service installation directly in front of the driveway approach.
3. Installation of new catch basins and connections to City sewers.
4. Installation of the concrete pavement.
5. Installation of the concrete drive approach (or sidewalk).

Of the above, only items 4 and 5 should involve overnight periods. Once the new concrete is placed, it is important that all traffic stay off a minimum of seven (7) days. Note that the time between the beginning of road base construction until the drive approach is ready to be driven on can be as much as **three (3) to four (4) weeks**. Sewer and water main work will impede access during the day, but traffic will be permitted to return at night.

All residents will be notified ahead of time if access is to be restricted, so that vehicles may be pulled out if needed.

It is anticipated that if this project is approved by the City Commission in the fall of 2018 that the construction on this project should be included in a larger contract, already planned in the area during the 2019 construction season.

INSPECTION

During construction, a City Inspector will be assigned to the project. The City Inspector and the Contractor's Foreman will be on site every day that work is occurring, and will be available to discuss any concerns or problems that you have as a result of the project. The Engineering Department will also be available between 8:00 A.M. and 5:00 P.M. weekdays to respond to any concerns that cannot be resolved at the work site **(248) 530-1840**.

SPECIAL TREATMENTS (IMPROVEMENTS BETWEEN THE SIDEWALK AND THE STREET)

Note that any special landscaping treatments in the right-of-way, such as underground sprinklers, brick pavers, wood ties, shrubbery, etc., will be impacted by the project. These special items will be removed if they will be inappropriate relative to the new street. Items such as underground sprinklers will likely be damaged or destroyed. Any repairs or replacement to sprinkler systems or other special landscaping treatments (within the right-of-way) will need to be accomplished by the property owner, prior to project completion, at their own expense. Replacement of such items will be subject to the provisions of a Special Treatment License.

VI. COSTS & FINANCING

This project will include various cost components, some of which will be mandatory and some that will be optional based on your voluntary participation. Those components that are mandatory (i.e. Paving Assessment, Drive Approach, Water Service Replacement, if necessary and Sewer Lateral Replacement, if necessary) are considered assessable costs and will be assessed by the City.

ASSESSABLE COSTS

Assessable costs include grading, street surfaces, driveway approaches, sidewalks, curb and gutter, drainage structures, and final restoration. The City of Birmingham pays for 15% of the cost of the project. The adjacent property owners share the remaining 85%. The **estimated assessment for this project is approximately \$190.00 per front foot**. The estimated cost includes engineering design, inspection, and project administration. Should bids come in significantly different than anticipated, City staff will review the costs and make an appropriate recommendation to the City Commission.

FINANCING INFORMATION

Once the assessment has been confirmed (at the estimated rate), and funding has been authorized, billings for the first installment shall be due and payable within sixty (60) days after billing. Normally this occurs near the starting date of the project. **You will have the option of paying the assessment in full or participating in a payment plan for up to ten (10) years.** Bills not paid when due will be subject to additional interest and penalties. If you desire to pay the cost of the

assessment over a ten-year period, you will pay interest at the rate fixed by the Commission at the time of the confirmation hearing. The interest rate selected reflects current market conditions, but will not exceed 12%. You may pay off the assessment, including interest accrued to date; or you may pay the total amount at the first payment date and not accrue any interest. If you elect to pay in ten (10) installments, interest will then be charged to the second and subsequent bills, based upon the unpaid balance. Subsequent bills will arrive approximately every twelve (12) months thereafter, until the assessment is paid.

For this example, a 70-foot lot width was used, and a 130 square foot driveway approach (single width driveway). In addition, the sewer lateral replacement is estimated at \$70.00 per linear foot for 25 feet in the road right of way and the water service replacement is estimated at \$50.00 per linear foot for 25 feet in the road.

The assessment for this parcel would be calculated as follows:

Paving Assessment:	70 LF @ \$ 190.00 / LF =	\$13,300.00
Drive Approach:	130 SF @ \$ 6.00 / SF =	\$ 900.00
Sewer Lateral Replacement:	25 LF @ \$ 70.00 / LF =	\$ 1,750.00
Water Service Replacement:	25 LF @ \$ 50.00 / LF =	\$ 1,250.00
TOTAL:		\$17,200.00

Total Cost = \$ 17,200.00	No interest on first payment.
Assumed Interest Rate = 5.0%	Interest due on unpaid balance.
Loan payable over 10-year period.	

Principal payments = \$ 17,200.00 divided by 10 = \$ 1,720.00

The following chart provides an example of the assessment period over ten (10) years using the rates specified above. An interest rate of 5% has been selected for this example, only.

YEARS	PRINCIPAL	UNPAID BALANCE	INTEREST CHARGE	YEARLY PAYMENT
1st Year	\$ 1,720.00	\$ 15,480.00	\$ -	\$ 1,720.00
2nd Year	\$ 1,720.00	\$ 13,760.00	\$ 774.00	\$ 2,494.00
3rd Year	\$ 1,720.00	\$ 12,040.00	\$ 688.00	\$ 2,408.00
4th Year	\$ 1,720.00	\$ 10,320.00	\$ 602.00	\$ 2,322.00
5th Year	\$ 1,720.00	\$ 8,600.00	\$ 516.00	\$ 2,236.00
6th Year	\$ 1,720.00	\$ 6,880.00	\$ 430.00	\$ 2,150.00
7th Year	\$ 1,720.00	\$ 5,160.00	\$ 344.00	\$ 2,064.00
8th Year	\$ 1,720.00	\$ 3,440.00	\$ 258.00	\$ 1,978.00
9th Year	\$ 1,720.00	\$ 1,720.00	\$ 172.00	\$ 1,892.00
10th Year	\$ 1,720.00	\$ -	\$ 86.00	\$ 1,806.00
TOTALS	\$17,200.00		\$ 3,870.00	\$ 21,070.00

Average payment per year = \$ 2,107.00

Note that the billing cycle may begin before the project is completed. There will be no refunds on interest paid by any property owner if this occurs.

VII. POST-CONSTRUCTION

BENEFITS

If the project is constructed, once completed, there are several benefits to be derived. As with other curbed streets, street-side leaf pickup during the months of October and November will be provided. Leaves need to be deposited at the curb, and the Department of Public Services will make two (2) pick-ups on each street, per year, at no additional cost. Once the road is paved, **the City will be fully responsible for its continued maintenance.** This will include patching, crack sealing, and eventually, resurfacing or complete reconstruction.

VIII. DISCLAIMER

The information provided in this report was based upon facts at the time written to the best of the Engineering Department's knowledge. The City of Birmingham reserves the right to change the policies and procedures noted herein without notice based upon changing conditions that may be appropriate in the future. If you have knowledge that any of the information contained in this report is incorrect, please contact the City of Birmingham Engineering Department as soon as possible to notify them of any inaccuracies.

VILLA AVE. - ADAMS RD. TO COLUMBIA AVE.

Pavement Special Assessment District

1/30/2017

SIDWELL NO.	PARCEL ADDRESS	FRONTAGE	ESTIMATED (Revised Costs - 4/29/16)				ACTUAL				Difference
			QTY'S	COSTS			QTY'S	COSTS			
			DRIVEWAY	FRONTAGE	DRIVEWAY	TOTALS	DRIVEWAY	FRONTAGE	DRIVEWAY*	TOTALS	
VILLA AVE.		LFT	SFT	\$ 174.00	\$ 7.55		SFT	\$ 165.86	\$ 8.44		
NORTH SIDE											
20-31-102-014	359 S. Adams	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	0	\$ 8,293.15	\$ -	\$ 8,293.15	\$ (1,388.35)
20-31-102-043	1133 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	104	\$ 8,293.15	\$ 877.76	\$ 9,170.91	\$ (510.59)
20-31-102-044	1155 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	149	\$ 8,293.15	\$ 1,257.56	\$ 9,550.71	\$ (130.79)
20-31-102-017	1179 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	142	\$ 8,293.15	\$ 1,198.48	\$ 9,491.63	\$ (189.87)
20-31-102-018	1207 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	124	\$ 8,293.15	\$ 1,046.56	\$ 9,339.71	\$ (341.79)
20-31-102-019	1219 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	129	\$ 8,293.15	\$ 1,088.76	\$ 9,381.91	\$ (299.59)
20-31-102-020	1235 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	130	\$ 8,293.15	\$ 1,097.20	\$ 9,390.35	\$ (291.15)
20-31-102-021	1255 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	103	\$ 8,293.15	\$ 869.32	\$ 9,162.47	\$ (519.03)
20-31-102-022	1265 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	103	\$ 8,293.15	\$ 869.32	\$ 9,162.47	\$ (519.03)
20-31-102-023	1279 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	117	\$ 8,293.15	\$ 987.48	\$ 9,280.63	\$ (400.87)
20-31-102-024	1295 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	124	\$ 8,293.15	\$ 1,046.56	\$ 9,339.71	\$ (341.79)
20-31-102-025	1331 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	109	\$ 8,293.15	\$ 919.96	\$ 9,213.11	\$ (468.39)
20-31-102-026	1347 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	125	\$ 8,293.15	\$ 1,055.00	\$ 9,348.15	\$ (333.35)
20-31-102-027	1367 Villa	75	130	\$ 13,050.00	\$ 981.50	\$ 14,031.50	173	\$ 12,439.72	\$ 1,460.12	\$ 13,899.84	\$ (131.66)
20-31-102-028	1405 Villa	75	130	\$ 13,050.00	\$ 981.50	\$ 14,031.50	143	\$ 12,439.72	\$ 1,206.92	\$ 13,646.64	\$ (384.86)
20-31-102-040	1427 Villa	100	130	\$ 17,400.00	\$ 981.50	\$ 18,381.50	133	\$ 16,586.30	\$ 1,122.52	\$ 17,708.82	\$ (672.68)
20-31-102-031	1439 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	133	\$ 8,293.15	\$ 1,122.52	\$ 9,415.67	\$ (265.83)
20-31-102-032	1467 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	146	\$ 8,293.15	\$ 1,232.24	\$ 9,525.39	\$ (156.11)
20-31-102-033	1491 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	115	\$ 8,293.15	\$ 970.60	\$ 9,263.75	\$ (417.75)
20-31-102-034	1509 Villa	70	130	\$ 12,180.00	\$ 981.50	\$ 13,161.50	144	\$ 11,610.41	\$ 1,215.36	\$ 12,825.77	\$ (335.73)
20-31-102-035	1523 Villa	60	130	\$ 10,440.00	\$ 981.50	\$ 11,421.50	155	\$ 9,951.78	\$ 1,308.20	\$ 11,259.98	\$ (161.52)
20-31-102-041	1555 Villa	85	130	\$ 14,790.00	\$ 981.50	\$ 15,771.50	152	\$ 14,098.35	\$ 1,282.88	\$ 15,381.23	\$ (390.27)
20-31-102-039	1583 Villa	85	130	\$ 14,790.00	\$ 981.50	\$ 15,771.50	127	\$ 14,098.35	\$ 1,071.88	\$ 15,170.23	\$ (601.27)
20-31-127-012	1611 Villa	60	130	\$ 10,440.00	\$ 981.50	\$ 11,421.50	0	\$ 9,951.78	\$ -	\$ 9,951.78	\$ (1,469.72)
20-31-127-013	1633 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	136	\$ 8,293.15	\$ 1,147.84	\$ 9,440.99	\$ (240.51)
20-31-127-014	1649 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	119	\$ 8,293.15	\$ 1,004.36	\$ 9,297.51	\$ (383.99)
20-31-127-015	1665 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	139	\$ 8,293.15	\$ 1,173.16	\$ 9,466.31	\$ (215.19)
20-31-127-016	1679 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	115	\$ 8,293.15	\$ 970.60	\$ 9,263.75	\$ (417.75)
20-31-127-017	1695 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	124	\$ 8,293.15	\$ 1,046.56	\$ 9,339.71	\$ (341.79)
20-31-127-018	1711 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	124	\$ 8,293.15	\$ 1,046.56	\$ 9,339.71	\$ (341.79)
20-31-127-019	1735 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	127	\$ 8,293.15	\$ 1,071.88	\$ 9,365.03	\$ (316.47)
20-31-127-020	1751 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	136	\$ 8,293.15	\$ 1,147.84	\$ 9,440.99	\$ (240.51)
20-31-127-021	1773 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	124	\$ 8,293.15	\$ 1,046.56	\$ 9,339.71	\$ (341.79)
20-31-127-022	1791 Villa	61.5	130	\$ 10,701.00	\$ 981.50	\$ 11,682.50	0	\$ 10,200.57	\$ -	\$ 10,200.57	\$ (1,481.93)

VILLA AVE. - ADAMS RD. TO COLUMBIA AVE.

Pavement Special Assessment District

1/30/2017

SIDWELL NO.	PARCEL ADDRESS	FRONTAGE	ESTIMATED (Revised Costs - 4/29/16)				ACTUAL				Difference
			QTY'S	COSTS			QTY'S	COSTS			
			DRIVEWAY	FRONTAGE	DRIVEWAY	TOTALS	DRIVEWAY	FRONTAGE	DRIVEWAY*	TOTALS	
VILLA AVE.		LFT	SFT	\$ 174.00	\$ 7.55		SFT	\$ 165.86	\$ 8.44		
SOUTH SIDE											
20-31-103-001	411 S. Adams	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	0	\$ 8,293.15	\$ -	\$ 8,293.15	\$ (1,388.35)
20-31-103-002	1136 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	115	\$ 8,293.15	\$ 970.60	\$ 9,263.75	\$ (417.75)
20-31-103-003	1158 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	155	\$ 8,293.15	\$ 1,308.20	\$ 9,601.35	\$ (80.15)
20-31-103-004	1180 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	122	\$ 8,293.15	\$ 1,029.68	\$ 9,322.83	\$ (358.67)
20-31-103-005	1208 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	157	\$ 8,293.15	\$ 1,325.08	\$ 9,618.23	\$ (63.27)
20-31-103-066	1228 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	122	\$ 8,293.15	\$ 1,029.68	\$ 9,322.83	\$ (358.67)
20-31-103-067	1238 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	131	\$ 8,293.15	\$ 1,105.64	\$ 9,398.79	\$ (282.71)
20-31-103-008	1250 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	140	\$ 8,293.15	\$ 1,181.60	\$ 9,474.75	\$ (206.75)
20-31-103-009	1272 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	140	\$ 8,293.15	\$ 1,181.60	\$ 9,474.75	\$ (206.75)
20-31-103-010	1288 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	124	\$ 8,293.15	\$ 1,046.56	\$ 9,339.71	\$ (341.79)
20-31-103-011	1316 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	105	\$ 8,293.15	\$ 886.20	\$ 9,179.35	\$ (502.15)
20-31-103-012	1326 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	105	\$ 8,293.15	\$ 886.20	\$ 9,179.35	\$ (502.15)
20-31-103-013	1350 Villa	55	130	\$ 9,570.00	\$ 981.50	\$ 10,551.50	125	\$ 9,122.46	\$ 1,055.00	\$ 10,177.46	\$ (374.04)
20-31-103-014	1384 Villa	70	130	\$ 12,180.00	\$ 981.50	\$ 13,161.50	150	\$ 11,610.41	\$ 1,266.00	\$ 12,876.41	\$ (285.09)
20-31-103-015	1408 Villa	75	130	\$ 13,050.00	\$ 981.50	\$ 14,031.50	126	\$ 12,439.72	\$ 1,063.44	\$ 13,503.16	\$ (528.34)
20-31-103-016	1420 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	122	\$ 8,293.15	\$ 1,029.68	\$ 9,322.83	\$ (358.67)
20-31-103-017	1438 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	125	\$ 8,293.15	\$ 1,055.00	\$ 9,348.15	\$ (333.35)
20-31-103-018	1456 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	110	\$ 8,293.15	\$ 928.40	\$ 9,221.55	\$ (459.95)
20-31-103-019	1474 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	128	\$ 8,293.15	\$ 1,080.32	\$ 9,373.47	\$ (308.03)
20-31-103-020	1492 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	141	\$ 8,293.15	\$ 1,190.04	\$ 9,483.19	\$ (198.31)
20-31-103-021	1500 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	127	\$ 8,293.15	\$ 1,071.88	\$ 9,365.03	\$ (316.47)
20-31-103-022	1524 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	142	\$ 8,293.15	\$ 1,198.48	\$ 9,491.63	\$ (189.87)
20-31-103-023	1540 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	130	\$ 8,293.15	\$ 1,097.20	\$ 9,390.35	\$ (291.15)
20-31-103-024	1560 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	132	\$ 8,293.15	\$ 1,114.08	\$ 9,407.23	\$ (274.27)
20-31-103-025	1576 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	116	\$ 8,293.15	\$ 979.04	\$ 9,272.19	\$ (409.31)
20-31-103-026	1594 Villa	70	130	\$ 12,180.00	\$ 981.50	\$ 13,161.50	116	\$ 11,610.41	\$ 979.04	\$ 12,589.45	\$ (572.05)
20-31-103-028	1600 Villa	80	130	\$ 13,920.00	\$ 981.50	\$ 14,901.50	205	\$ 13,269.04	\$ 1,730.20	\$ 14,999.24	\$ 97.74
20-31-103-029	1630 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	130	\$ 8,293.15	\$ 1,097.20	\$ 9,390.35	\$ (291.15)
20-31-103-030	1646 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	118	\$ 8,293.15	\$ 995.92	\$ 9,289.07	\$ (392.43)
20-31-103-031	1650 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	120	\$ 8,293.15	\$ 1,012.80	\$ 9,305.95	\$ (375.55)
20-31-103-032	1668 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	133	\$ 8,293.15	\$ 1,122.52	\$ 9,415.67	\$ (265.83)
20-31-103-033	1692 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	130	\$ 8,293.15	\$ 1,097.20	\$ 9,390.35	\$ (291.15)
20-31-103-034	1700 Villa	75	130	\$ 13,050.00	\$ 981.50	\$ 14,031.50	207	\$ 12,439.72	\$ 1,747.08	\$ 14,186.80	\$ 155.30
20-31-103-035	1750 Villa	75	130	\$ 13,050.00	\$ 981.50	\$ 14,031.50	158	\$ 12,439.72	\$ 1,333.52	\$ 13,773.24	\$ (258.26)
20-31-103-036	1772 Villa	50	130	\$ 8,700.00	\$ 981.50	\$ 9,681.50	124	\$ 8,293.15	\$ 1,046.56	\$ 9,339.71	\$ (341.79)
20-31-103-037	1786 Villa	61.5	130	\$ 10,701.00	\$ 981.50	\$ 11,682.50	0	\$ 10,200.57	\$ -	\$ 10,200.57	\$ (1,481.93)
								\$ 72,204.20	\$ 716,250.20		

***Driveway - \$8.00 SYD (Avg. Removal Cost) * \$68.00 SYD (New Conc.) = \$76.00 SYD / 9 = \$8.44 SqFt**

VILLA AVE. (#6-16P) - ADAMS RD. TO COLUMBIA AVE.

Sewer Special Assessment District

1/12/2017

SIDWELL NO.	PARCEL ADDRESS	FRONTAGE	ESTIMATED**		ACTUAL		Difference
			QTY'S	COSTS	QTY'S	COSTS	
			SEWER LATERAL		SEWER LATERAL		
VILLA AVE.		LFT	LFT	\$ 55.00	LFT	\$ 77.07	
NORTH SIDE							
20-31-102-014	359 S. Adams	50	36	\$ 1,980.00	35	\$ 2,697.45	\$ 717.45
20-31-102-043	1133 Villa	50	37	\$ 2,035.00	39	\$ 3,005.73	\$ 970.73
20-31-102-044	1155 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-102-017	1179 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-102-018	1207 Villa	50	40	\$ 2,200.00	40	\$ 3,082.80	\$ 882.80
20-31-102-019	1219 Villa	50	40	\$ 2,200.00	39	\$ 3,005.73	\$ 805.73
20-31-102-020	1235 Villa	50	40	\$ 2,200.00	51	\$ 3,930.57	\$ 1,730.57
20-31-102-021	1255 Villa	50	40	\$ 2,200.00	41	\$ 3,159.87	\$ 959.87
20-31-102-022	1265 Villa	50	40	\$ 2,200.00	39	\$ 3,005.73	\$ 805.73
20-31-102-023	1279 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-102-024	1295 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-102-025	1331 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-102-026	1347 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-102-027	1367 Villa	75	0	\$ -	0	\$ -	\$ -
20-31-102-028	1405 Villa	75	40	\$ 2,200.00	50	\$ 3,853.50	\$ 1,653.50
20-31-102-040	1427 Villa	100	40	\$ 2,200.00	35.5	\$ 2,735.99	\$ 535.99
	Empty Lot			40	\$ 3,082.80		
20-31-102-031	1439 Villa	50	40	\$ 2,200.00	45	\$ 3,468.15	\$ 1,268.15
20-31-102-032	1467 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-102-033	1491 Villa	50	40	\$ 2,200.00	44	\$ 3,391.08	\$ 1,191.08
20-31-102-034	1509 Villa	70	40	\$ 2,200.00	60	\$ 4,624.20	\$ 2,424.20
20-31-102-035	1523 Villa	60	0	\$ -	0	\$ -	\$ -
20-31-102-041	1555 Villa	85	40	\$ 2,200.00	43	\$ 3,314.01	\$ 1,114.01
20-31-102-039	1583 Villa	85	40	\$ 2,200.00	44	\$ 3,391.08	\$ 1,191.08
20-31-127-012	1611 Villa	60	0	\$ -	0	\$ -	\$ -
20-31-127-013	1633 Villa	50	40	\$ 2,200.00	40	\$ 3,082.80	\$ 882.80
20-31-127-014	1649 Villa	50	40	\$ 2,200.00	44	\$ 3,391.08	\$ 1,191.08
20-31-127-015	1665 Villa	50	40	\$ 2,200.00	13	\$ 1,001.91	\$ (1,198.09)
20-31-127-016	1679 Villa	50	40	\$ 2,200.00	40	\$ 3,082.80	\$ 882.80
20-31-127-017	1695 Villa	50	40	\$ 2,200.00	44	\$ 3,391.08	\$ 1,191.08
20-31-127-018	1711 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-127-019	1735 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-127-020	1751 Villa	50	40	\$ 2,200.00	52	\$ 4,007.64	\$ 1,807.64
20-31-127-021	1773 Villa	50	40	\$ 2,200.00	43	\$ 3,314.01	\$ 1,114.01
20-31-127-022	1791 Villa	61.5	40	\$ 2,200.00	43	\$ 3,314.01	\$ 1,114.01

VILLA AVE. (#6-16P) - ADAMS RD. TO COLUMBIA AVE.

Sewer Special Assessment District

1/12/2017

SIDWELL NO.	PARCEL ADDRESS	FRONTAGE	ESTIMATED**		ACTUAL		Difference
			QTY'S	COSTS	QTY'S	COSTS	
			SEWER LATERAL		SEWER LATERAL		
VILLA AVE.		LFT	LFT	\$ 55.00	LFT	\$ 77.07	
SOUTH SIDE							
20-31-103-001	411 S. Adams	50	20	\$ 1,100.00	21	\$ 1,618.47	\$ 518.47
20-31-103-002	1136 Villa	50	20	\$ 1,100.00	18.5	\$ 1,425.80	\$ 325.80
20-31-103-003	1158 Villa	50	20	\$ 1,100.00	19	\$ 1,464.33	\$ 364.33
20-31-103-004	1180 Villa	50	20	\$ 1,100.00	18.5	\$ 1,425.80	\$ 325.80
20-31-103-005	1208 Villa	50	20	\$ 1,100.00	11	\$ 847.77	\$ (252.23)
20-31-103-066	1228 Villa	50	20	\$ 1,100.00	20	\$ 1,541.40	\$ 441.40
20-31-103-067	1238 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-103-008	1250 Villa	50	20	\$ 1,100.00	21	\$ 1,618.47	\$ 518.47
20-31-103-009	1272 Villa	50	20	\$ 1,100.00	16.5	\$ 1,271.66	\$ 171.66
20-31-103-010	1288 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-103-011	1316 Villa	50	20	\$ 1,100.00	21	\$ 1,618.47	\$ 518.47
20-31-103-012	1326 Villa	50	20	\$ 1,100.00	17	\$ 1,310.19	\$ 210.19
20-31-103-013	1350 Villa	55	0	\$ -	0	\$ -	\$ -
20-31-103-014	1384 Villa	70	20	\$ 1,100.00	6	\$ 462.42	\$ (637.58)
20-31-103-015	1408 Villa	75	20	\$ 1,100.00	21	\$ 1,618.47	\$ 518.47
20-31-103-016	1420 Villa	50	20	\$ 1,100.00	20	\$ 1,541.40	\$ 441.40
20-31-103-017	1438 Villa	50	20	\$ 1,100.00	20	\$ 1,541.40	\$ 441.40
20-31-103-018	1456 Villa	50	20	\$ 1,100.00	19	\$ 1,464.33	\$ 364.33
20-31-103-019	1474 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-103-020	1492 Villa	50	20	\$ 1,100.00	17	\$ 1,310.19	\$ 210.19
20-31-103-021	1500 Villa	50	20	\$ 1,100.00	19	\$ 1,464.33	\$ 364.33
20-31-103-022	1524 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-103-023	1540 Villa	50	20	\$ 1,100.00	16.5	\$ 1,271.66	\$ 171.66
20-31-103-024	1560 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-103-025	1576 Villa	50	20	\$ 1,100.00	17	\$ 1,310.19	\$ 210.19
20-31-103-026	1594 Villa	70	20	\$ 1,100.00	20	\$ 1,541.40	\$ 441.40
20-31-103-028	1600 Villa	80	0	\$ -	0	\$ -	\$ -
20-31-103-029	1630 Villa	50	0	\$ -	0	\$ -	\$ -
20-31-103-030	1646 Villa	50	20	\$ 1,100.00	18	\$ 1,387.26	\$ 287.26
20-31-103-031	1650 Villa	50	20	\$ 1,100.00	20	\$ 1,541.40	\$ 441.40
20-31-103-032	1668 Villa	50	20	\$ 1,100.00	19	\$ 1,464.33	\$ 364.33
20-31-103-033	1692 Villa	50	20	\$ 1,100.00	19	\$ 1,464.33	\$ 364.33
20-31-103-034	1700 Villa	75	20	\$ 1,100.00	18	\$ 1,387.26	\$ 287.26
20-31-103-035	1750 Villa	75	20	\$ 1,100.00	14	\$ 1,078.98	\$ (21.02)
20-31-103-036	1772 Villa	50	20	\$ 1,100.00	18	\$ 1,387.26	\$ 287.26
20-31-103-037	1786 Villa	61.5	20	\$ 1,100.00	20	\$ 1,541.40	\$ 441.40
TOTALS			1433	\$ 78,815.00	1469.5	\$ 113,254.37	\$ 31,356.57

LIFE CYCLE COST ANALYSIS (2018 DOLLARS)

YEARS AFTER CONSTRUCTION	ASPHALT	COST PER MILE
0	Original Construction	\$2,000,000
7	Crack Sealing & Rejuvenation	\$17,000
20	Thin Overlay or Resurfacing	\$320,000
40	Resurfacing	\$430,000
60	Resurfacing	\$430,000
80	End of Service Life	
TOTAL		\$3,197,000
COST PER YEAR PER MILE		\$40,000

YEARS AFTER CONSTRUCTION	CONCRETE	COST PER MILE
0	Original Construction	\$2,400,000
30	Joint Sealing	\$6,000
60	Major Patching or Resurfacing	\$430,000
80	Resurfacing	\$430,000
100	End of Service Life	
TOTAL		\$3,266,000
COST PER YEAR PER MILE		\$32,700

COST SAVINGS OF CONCRETE OVER 80 YEAR LIFE SPAN = \$584,000 PER MILE

DATE: September 21, 2018

TO: Ad Hoc Unimproved Streets Study Committee

FROM: Tiffany J. Gunter, Assistant City Manager

SUBJECT: Staff Recommendation: Committee Priorities

Per the committee discussion on September 13, 2018, staff has updated the Policy Considerations and Comparison Table attached to this memo.

The purpose of the Policy Consideration table is to provide key information to be used as a guide for future recommendations.

The following outline was developed by staff to suggest the order to approach topics for future meetings and the key factors to evaluate in order for the committee to provide substantive recommendations to the City Commission for consideration.

The most critical concern that staff has noted by the committee is the Petition Process. Staff agrees and suggest that we explore options regarding the petition process before discussing funding and pavement options in greater detail. The manner in which the community is engaged will likely drive the other two considerations. Therefore, staff recommends that the next meeting involves an in depth conversation regarding the petition process and will focus on the pros and cons of the following items.

Petition Process

- Cost Allocation Model
- Assessments
- Payback Period
- Ranking (City Prioritizing Projects)
- Other?

After the committee has had an opportunity to isolate the petition process and develop possible recommendations for change, it is important to evaluate the funding mechanisms in place to support potential changes. Following the petition process discussion, staff will work with the committee to support an in depth conversation on how to fund future projects and the relative effects of the changes being considered as part of the petition process.

Funding Mechanisms

- Changes in Cost Allocation/Payback Periods
- Special Assessments
- City Millage
- Budget Amendments
- Bonding (Water and Sewer?)
- Other?

Lastly, staff recommends that the committee then begin making determinations on Pavement Options with the understanding of the potential funding options that may be employed. The costs of and benefits of different pavement options will be easier to ascertain once the committee has better idea of how the petition process might change and total dollars available to fund projects giving certain funding scenarios.

Pavement Options

Cape Seal
Asphalt
Concrete
Other?

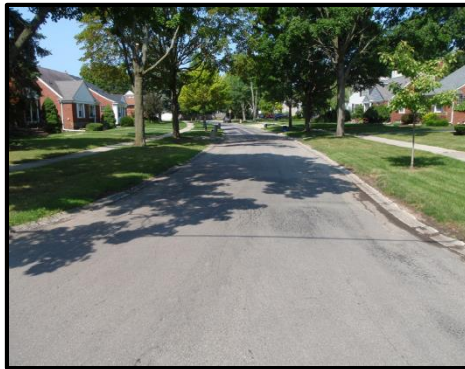
POLICY COMPARISON CHART IMPROVED VS. UNIMPROVED STREETS

The following table compares improved streets to unimproved streets. The first section compares how a project to either build a new unimproved street compares with continuing to maintain an unimproved street. The second section speaks to various factors on these streets and how those factors are addressed.

	Becoming an Improved Street	Maintaining Unimproved Streets
Project Factors	Paving from Unimproved to Improved Street	New Cape Seal Treatment on Unimproved Street
Initiation of Project	Requires 50%+ Petition by Owners	Nominated by City Staff
Cost Allocation	85% Paid by Owners/ 15% Paid by City	85% Paid by Owners/ 15% Paid by City
Charge to Corner Lots (Long Side)	33% Paid by Owners/ 67% Paid by City	25% Paid by Owners/ 75% by City
Payback Period for Special Assessment Charge	10 Years (10% Due Annually + Interest on Remaining Balance)	30 Days Upon Receipt of Invoice. Assessment repeats every 7 – 10 years.
Other Factors		
Maintenance Frequency	20 Years (Asphalt) 40+ Years (Concrete)	7 – 10 Years (Cape Seal)
Water/Sewer Improvements	Upgraded with Project	No Upgrades
Drainage	Problems are Addressed	Problems are not Addressed
Leaf Pickup	Leaves picked up loose at curb	Leaves must be bagged



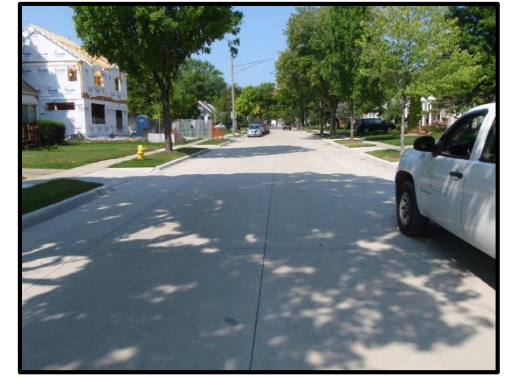
Unimproved Road



Unimproved Road with Gutter



Unimproved Road with Curbs



Improved Road

AD HOC UNIMPROVED STREETS STUDY COMMITTEE
POLICY CONSIDERATIONS

ROAD PAVING OPTIONS

The existing local street system is currently comprised of the following pavement options. Information is provided relative to perceived advantages and disadvantages based on community feedback that has been gathered on previous project as well as the policy and cost factors if such a street is built today:

PAVEMENT TYPE	PROJECT INITIATION	ADVANTAGES	DISADVANTAGES	Cost per foot for Special Assessment
Cape Seal (No Curbs)	Cape Seal streets are no longer accepted by City. New cape seal application is initiated by City staff.	Low construction cost. Rural appearance. Owners can add parking areas if desired.	Poor durability. Poor drainage. Rough riding surface. Regular maintenance cycles and assessments. Leaves must be bagged. Owners must be charged again for each assessment when cape sealed again.	\$11 - \$15 per foot Life Span: 7-10 years
Asphalt with Curbs	Not allowed by current City policy.	Lower construction cost. Drainage can be guaranteed. Leaf pickup provided. Owner not responsible for ongoing assessments.	Durability less than concrete. City general funds responsible for costs.	\$160 per foot Life Span: 20+ years
Concrete with Curbs	Submittal of petition by <u>+50%</u> of owners.	Long term durability, low maintenance. Drainage can be guaranteed. Leaf pickup provided. Owner not responsible for ongoing assessments.	Higher initial construction cost.	\$195 per foot Life Span: 40+ Years

PROJECT INITIATION PROCESS CONSIDERATIONS

	ADVANTAGES	DISADVANTAGES
PETITION PROCESS: Owners representing over <u>50%</u> submit request for paving assessment district. Commission has discretion to move projects with or without petition.	City Commission can declare district with knowledge that over half of owners are in favor of project. City does not appear as though it is forcing costs on owners that are not supportive of action.	Residents wishing to improve street risk alienating themselves from other residents that do not support project that continue beyond the project timeline. City rarely initiates projects, even when long term benefits of project outweigh overall costs.
COST ALLOCATION: All street paving costs, including design and inspection, are added together and charged to assessment district. City subsidizes by paying <u>15%</u> of base cost.	Local street paving benefits immediate owners. General fund dollars from entire City are not directed to benefit a small number of owners.	Cost of assessment is greater than perceived benefit to many owners, reducing owner support.
SECONDARY ASSESSMENTS: Driveway approach(es) measured and charged separately.	Size and cost of driveway approaches can vary greatly. Cost is kept directly proportional to actual benefit.	None.
SECONDARY ASSESSMENTS: Water and sewer lateral replacements are charged by the foot to adjacent owners.	Needed pipe replacements can vary greatly. Cost is kept directly proportional to actual benefit.	Older homes are often owned by long time residents less inclined to support project. Water and sewer costs are more likely added to old homes, while newer homes are not billed.
CORNER LOT ASSESSMENTS: Long side of corner lot is billed at <u>33%</u> of actual length; City pays for remaining balance.	Owners having side street paved are charged about the same amount as neighbors that are being billed on frontage.	Owners on corners have potential of having to pay two assessments concurrently.
PAYBACK PERIOD: City pays cost of project up front, and allows up to ten years to pay back, with interest at <u>1%</u> above prime.	Assessment district cost appears more manageable if paid over <u>10</u> years.	City must advance pay cost of project, requiring Local Street Fund to carry costs long before revenues are received.

FUNDING CONSIDERATIONS

	ADVANTAGES	DISADVANTAGES
SPECIAL ASSESSMENTS	Cost is allocated to those who benefit specifically from the improvement. Does not need vote of the citizens.	Results in a high cost per property owner thereby making it difficult to getting road improved.
CITY MILLAGE	<p>Road Millage: Cost of road improvement is spread over many individuals resulting in lower cost to property owners who receive the benefit of the improvement.</p> <p>Operating Millage: Does not need vote of the citizens (unless Headlee override). Can be approved by the city commission.</p>	<p>Road Millage: May be difficult to get road millage passed when some may not get benefit of improvements and/or others have previously been special assessed for their road.</p> <p>Operating Millage: City is already near its millage cap which is shrinking every year due to Headlee. Does not give city room to fund other projects or needs that may arise. May effect bond rating as the rating agencies look at millage capacity as a factor of a city's financial health.</p>
BUDGET AMENDMENTS	Road projects are projected five years in advance. This provides clarity in the city's long-term financial planning process and enables the city to manage its millage rates.	There are usually no extra funds available for new projects which are not in the five-year projection. In order to move forward, other road projects would need to be rescheduled or the new project would need to wait five years.
GRANTS	Usually only require a small local share (20-25%) resulting in significant savings to the city.	Grants are not likely to be available for local road improvements. Grants are competitive and are difficult to obtain.
TAX INCREMENT FINANCING	Leverages property value growth to fund improvements.	No TIF legislation exists that the city may employ to pay for local road improvements.
BONDS	Flexibility in how bonds are paid back: special assessment or debt millage. Water and sewer costs can be rolled into the bond. Does not use city's current resources to fund the projects. Currently, the city's outstanding debt is low.	Paying additional costs (interest and bond issuance). City has other bonding projects that it is reviewing which would drive the city's outstanding debt higher and may affect our bond rating. Bond would have to be approved by voters if it is being funded by a debt millage. Traditionally, all bond debt the city has issued has been voter approved regardless if it will be paid by taxes or other revenue.

TAXABLE VALUE INFORMATION

MILLAGE RATE	AVERAGE RESIDENTIAL PROPERTY TAXES AVERAGE RESIDENTIAL TV (\$210,900)	CITY-WIDE PROPERTY TAXES CITY TOTAL TV (\$2,359,367,180)
.2500	\$52.73	\$589,842
.5000	\$105.45	\$1,179,684
.7500	\$158.18	\$1,769,525
1.0000	\$210.90	\$2,359,367
1.2500	\$263.63	\$2,949,209
1.5000	\$316.35	\$3,539,051
1.7500	\$369.08	\$4,128,893
2.0000	\$421.80	\$4,718,734

For fiscal year 2018-2019, the City is currently contributing 2.1372 out of its 11.2099 operating millage for road maintenance and improvements. This is expected to increase to approximately 2.5667 mills in fiscal year 2019-2020.

DEFINITIONS

Unimproved Street (def.) , as used in the City of Birmingham:

“An unimproved street is a street originally built with a gravel surface that has since been treated with a cape seal layer or layers in order to provide stability to the driving surface.”

Cape Seal (def.), as defined by the Federal Highway Administration:

“A cape seal is a thin surface treatment constructed by applying a slurry seal or microsurfacing to a newly constructed chip seal. It is designed to be an integrated system where the primary purpose of the slurry is to fill voids in the chip seal.”

Chip Seal (def.), as defined by the Michigan Dept. of Transportation:

“A chip seal is a surface treatment in which the pavement is sprayed with asphalt (generally emulsified) and then immediately covered with aggregate and rolled.”

Improved Street (def.), as used in the City of Birmingham:

“An improved street is a street with a permanent pavement, engineered to address drainage within the corridor.”



MEMORANDUM

Engineering Dept.

DATE: September 17, 2018

TO: Ad Hoc Unimproved Streets Study Committee

FROM: Paul T. O'Meara, City Engineer

SUBJECT: Infrastructure Ranking Priority List

Water System

In 2008, the Engineering Dept. hired the consultant Hubbell, Roth, & Clark (HRC) to conduct a system-wide analysis of the City's water system. The analysis helped identify critical links in the system that should be focused on for future improvements. A very helpful tool within the study included a ranking for deciding which water mains should be replaced in the future, based on four criteria:

Age – Water mains were given a higher point value as they age, with anything 75 years old or more being given the highest score of 20 points.

Size – Current standards dictate that all public water mains shall be 8 inch diameter or more. Birmingham, like most cities its age, has many miles of 4 and 6 inch mains still in service. Water main segments at 4 inch or less were given the highest score of 20 points, and 6 inch mains were given a score of 10 points.

Reinforcement Factor – The entire water main system has been modeled on a computer. The model helps pinpoint the particular corridors where additional water capacity would help the entire area have satisfactory flow for fire flow conditions. On those streets where an extra large water main is recommended (either 12 inch or 16 inch), then additional points are added. Those streets getting the highest points have the biggest suggested difference in size than what would normally be installed on any particular street.

Water Main Break Factor – The City keeps data going back many decades relative to where water main breaks have occurred. Mains that are breaking frequently are scored higher. Unlike the other categories, the break factor is given a weight of up to 40 points. Those water mains that have broken up to 10 times or more on one block are given a point value of 40, with a scale that declines from there.

The water main ranking list has been an integral part of our decision-making for nominating future projects since it was prepared.

Sewer System

Since the condition of the sewer system, as well as the condition of the existing pavement must be factored into any project decision-making process, it was decided that an improved table

that would be of the most use would be one that would also have similar data for the sewer system and the street pavements.

HRC already had completed a City-wide study of the sewer system that was finished in the late 1990's. A similar table to rank sewers was created wherein the following factors were developed:

Structural Condition – Based on previous internal camera inspections, the City can score each sewer segment on a scale up to 30 points to identify the ones that are in most need of repair.

Operations & Maintenance – Based on input from the Dept. of Public Services, sewers were ranked on a scale up to 20 points based on the ones that require frequent cleaning, root removal, etc.

Capacity Deficiency – Each sewer is ranked relative to its drainage area, and how much volume the sewer is calculated to carry. Sewers that are considered deficient are given a score up to 40 points where appropriate.

Relief Sewer – Once it is determined that a sewer should be larger than it is currently, additional points are added if the proposed sewer is significant in size. For example, if a 36 inch sewer is needed that will help not only the street being constructed, but other streets upstream, it would be given a higher score than if a 15 inch pipe is needed. A scale of up to 10 points is provided.

Using data from the 1990's, preparing a ranking for each sewer segment was a time consuming task. Since the Engineering Dept. was looking for a tool to prioritize improved street maintenance decisions, only sewers on streets with improved pavements were completed at that time. No similar data has been prepared for unimproved streets. That said, the City is currently inspecting all sewers older than 20 years old, and making updated rankings for sewer conditions. The new data will be categorized more efficiently, making an updated listing for all sewers (including unimproved streets) a simpler task. Once all of the sewers have been inspected by October of 2019, HRC will then be in a position to prepare a more accurate list for future decision-making. That list can be expected to be completed at the end of 2019.

Street System

For many years, the civil engineering industry has used a ranking system of 1 to 10 for ranking the current condition of a pavement. Rankings are based on a team of 2 to 3 engineers driving each street segment, looking for cracking, pavement wear, age, safety issues, and a score is listed. This scoring mechanism is easily converted to the system already in place for our water and sewer system, so that a score of 100 means a street in need of immediate repair, while a score of 0 is given to a street that was just paved.

The Engineering Dept. attempts to conduct an updated ranking no less than once every 2 years, so that budgeting decisions for the upcoming five years can be based on updated, relevant pavement condition data.

Infrastructure Ranking List

The attached infrastructure ranking list was put together using the data from HRC lists created for the water and sewer systems, and then with an added column ranking pavement conditions. The higher the cumulative number, the higher priority work on that street becomes. Since the list was first created in 2010, it has been updated, but not on a regular basis. To help understand the level to which we use the list in our decision-making, those street segments that have had meaningful improvements conducted have a "strikethrough" on their name, meaning that on an updated list, they would no longer be on the first critical pages. The strikethroughs have been added for the first two pages of the list.

For the purposes of future decision-making, we hope to gather updated information on the water and sewer system, as well as keep updating the pavement condition rankings. Improved street projects will continue to be identified from this list. If unimproved streets are also added to the list, and if the City's policy is revised such that the City will nominate future projects based on merit, a ranking such as this can be used to score unimproved street segments based on a variety of factors.

NAME	FROM	TO	PAVEMENT POINTS	SEWER POINTS	WATER POINTS	TOTAL PROJECT POINTS
Bennaville	Grant	Edgewood	60	69	38	167
Fairway Dr	Pleasant	Northlawn	30	63	70	163
Fairway Dr	Pleasant	Northlawn	30	63	70	163
Coolidge Rd	Buckingham	Windemere	70	54	38	162
Oak	N Glenhurst Dr	Chesterfield	60	71	30	161
Hamilton Row	Ferndale	Park	60	55	45	160
Hamilton Row	Park	Woodward Ave	60	55	45	160
Old Woodward Ave	Maple	E Merrill	70	51	34	155
Old Woodward Ave	E Merrill	Brown	70	51	34	155
W Maple Rd	Aspen	Hawthorne	70	49	35	154
W Maple Rd	Hawthorne	Baldwin	70	49	35	154
Coolidge Rd	Yorkshire	Dorchester	70	53	30	153
Coolidge Rd	Dorchester	Buckingham	70	53	30	153
W Maple Rd	Yarmouth	Waddington	60	73	20	153
W Maple Rd	Columbia	S Eton Rd	50	78	24	152
Windemere	N Eton Rd	Edenborough	50	70	30	150
Bowers	Hazel	Columbia	60	25	64	149
Mansfield	Bradford	Sheffield	50	56	42	148
Bowers	Elm	Adams Rd	80	13	54	147
Coolidge Rd	E Maple Rd	Yorkshire	70	35	42	147
Pembroke	Graefield Rd	N Eton Rd	70	44	33	147
Webster	Adams Rd	Torry	60	47	40	147
Holland	S Eton Rd		30	46	38	144
Oxford	Rivenoak	Kennesaw	70	26	48	144
W Maple Rd	Lake Park Dr	Linden	60	49	35	144
W Maple Rd	Linden	Waterfall Ln	60	49	35	144
W Maple Rd	Waterfall Ln	Aspen	60	49	35	144
Henrietta	W Southlawn	Northlawn	60	25	58	143
W Maple Rd	S Cranbrook Rd	Radnor Dr	50	73	20	143
W Maple Rd	Radnor Dr	Yarmouth	50	73	20	143
W Maple Rd	Waddington	Westwood Dr	50	73	20	143
W Maple Rd	Westwood Dr	S Glenhurst Dr	50	73	20	143
W Maple Rd	S Glenhurst Dr	N Glenhurst Dr	50	73	20	143
Redding Rd	Lake Park Dr	Old Salem Ct	70	48	24	142
Redding Rd	Old Salem Ct	Willow Ln	70	48	24	142
N Glenhurst Dr	Oak	Kenwood Ct	50	59	32	141
Oak	Fairfax	Suffield	60	61	20	141
Oak	Suffield	Pilgrim	60	61	20	141
Oak	Pilgrim	Puritan	60	61	20	141
Kenwood Ct	N Glenhurst Dr		50	48	42	140
Oak	Puritan	Lake Park Dr	60	60	20	140
Kennesaw	Oxford	Poppleton	70	38	30	138
Brookwood	N Glenhurst Dr	Raynale	60	35	42	137
Mohegan	Oxford	Poppleton	70	37	30	137
Chapin	Woodward Ave	Torry	60	31	44	135
Kennesaw	Poppleton	N Worth	70	35	30	135
Kennesaw	N Worth	N Adams Rd	70	35	30	135
W Brown	Watkins	Cherry Ct	60	66	9	135
Bird	Pierce	Edgewood	70	16	48	134
Redding Rd	Willow Ln	Lakeside	70	28	36	134
W Lincoln	Arden Ln	Woodlea	70	55	9	134
W Maple Rd	Rugby	Cambridge	40	70	24	134
W Maple Rd	Cambridge	Columbia	40	70	24	134

S Worth	Webster	Haynes	60	45	28	133
Bird	Grant	Cummings Ave	70	18	44	132
Henrietta	W 14 Mile Rd	W Southlawn	60	38	34	132
E Lincoln	Taunton	S Eton Rd	30	70	32	132
Chapin	Grant	Cummings Ave	60	30	40	130
W Lincoln	Golfview	Arden Ln	70	55	5	130
W Lincoln	Arden Ln	Arden Ln	70	55	5	130
E Lincoln	Grant	Ann	50	58	22	130
E Lincoln	Ann	S Old Woodward Ave	50	58	22	130
Elm	Woodward Ave	Bowers	80	1	48	129
W Lincoln	Cranbrook	Hillside	70	54	5	129
W Lincoln	Hillside Dr	Golfview	70	54	5	129
W Maple Rd	Baldwin	Valley View Ln	70	32	27	129
W Maple Rd	Valley View Ln	Maple Hill Ln	70	32	27	129
W Maple Rd	Maple Hill Ln	Woodland Villa Ct	70	32	27	129
Emmons	Cummings Ave	Woodward Ave	70	18	40	128
Maryland Blvd	Lincoln	Northlawn	40	38	50	128
N Old Woodward Ave	Woodward	Bloomfield Ct	40	56	32	128
W Lincoln	Westchester Way	Larchlea Dr	70	53	5	128
W Lincoln	Larchlea Dr	Donmar Ct	70	53	5	128
W Lincoln	Donmar Ct	Pleasant	70	53	5	128
W Lincoln	Shipman	Birmingham Blvd	60	46	22	128
W Maple Rd	Shirley Dr	Lake Park Dr	60	53	15	128
E Maple Rd	Elm	N Worth	60	30	38	128
E Maple Rd	N Worth	N Adams Rd	60	30	38	128
Graefield Ct	Graefield Rd		60	30	37	127
Oakland	Woodward Ave	Lawndale St	40	57	30	127
Oakland	Lawndale St	Oakdale St	40	57	30	127
Oakland	Oakdale St	Oakdale St	40	57	30	127
Buckingham	Saint Andrews St	Coolidge Rd	60	36	30	126
Maryland Blvd	W 14 Mile Rd	W Southlawn	50	22	54	126
W Maple Rd	Suffield	Pilgrim	50	52	24	126
N Old Woodward Ave	Forest	E Brown	40	51	34	125
W Brown	Southfield	Watkins	50	66	9	125
W Brown	Cherry Ct	Stanley	50	66	9	125
W Brown	Stanley	Chester	50	66	9	125
W Lincoln	Shirley Dr	Latham	70	35	20	125
E Maple Rd	Woodward Ave	Poppleton	60	35	30	125
E Maple Rd	Poppleton	Elm	60	35	30	125
Windemere	Edenborough	Saint Andrews St	50	44	30	124
Woodlea	W Lincoln		50	34	40	124
Bird	Cummings Ave	Woodward Ave	70	9	44	123
N Adams Rd	Abbey Rd	Railroad Bridge	60	43	20	123
N Adams Rd	Wimbledon Dr	Abbey Rd	60	43	20	123
N Adams Rd	Wimbledon Dr	Abbey Rd	60	43	20	123
N Old Woodward Ave	Oakland	Hamilton Row	60	35	28	123
N Old Woodward Ave	Hamilton Row	S Old Woodward Ave	60	35	28	123
Oakland	Oakdale St	Poppleton	40	53	30	123
Redding Rd		Woodward Ave	70	25	28	123
Redding Rd	Lakeside		70	25	28	123
Redding Rd		Woodward Ave	70	25	28	123
Coolidge Rd	Pembroke	Derby Rd	70	18	34	122
N Old Woodward Ave	Bloomfield Ct	Oak	30	56	36	122
Peabody	Park	Forest	70	41	11	122
Edgewood	Bennaville	E Lincoln	60	59	2	121
Oak	Lake Park Dr	Lakeside	40	53	28	121
Pembroke	N Eton Rd	Edenborough	20	67	34	121
W Maple Rd	Fairfax	Suffield	50	47	24	121

Kenwood Ct	N Glenhurst Dr		30	48	42	120
N Eton Rd	Yorkshire	Dorchester	60	30	30	120
W Merrill	E Merrill	S Old Woodward Ave	70	31	19	120
Torry	Cole	Webster	70	29	20	119
W Lincoln	S Cranbrook Rd	Hillside Dr	60	54	5	119
W Maple Rd	Pilgrim	Puritan	50	54	15	119
Henrietta	W Frank	W Brown	40	44	34	118
N Eton Rd	Dorchester	Buckingham	60	38	20	118
Oxford	Kennesaw	Mohegan	70	0	48	118
Pierce	Northlawn	W Lincoln	60	20	38	118
W Lincoln	Birmingham Blvd	Maryland Blvd	50	46	22	118
W Maple Rd	Puritan	Shirley Dr	50	53	15	118
W Maple Rd	N Adams Rd	Rugby	40	40	38	118
Webster	Torry	S Eton Rd	60	6	52	118
N Adams Rd	Derby Rd	Wimbledon Dr	60	37	20	117
Pierce	Bird	W Southlawn	50	52	15	117
Pierce	W Southlawn	E Southlawn	50	52	15	117
Windemere	Saint Andrews St	Coolidge Rd	70	17	30	117
Maryland Blvd	W 14 Mile Rd	W Southlawn	40	22	54	116
Mohegan	Poppleton	N Adams Rd	70	12	34	116
Chapin	Cummings Ave	Woodward Ave	70	5	40	115
Dunstable	Melton	Cheltenham	50	35	30	115
Woodlea	W Lincoln		40	34	40	114
N Eton Rd	Buckingham	Windemere	60	33	20	113
N Eton Rd	Windemere	Graefield Rd	60	33	20	113
N Eton Rd	Graefield Rd	Manchester	60	33	20	113
S Bates	W Southlawn	Northlawn	10	41	62	113
W Maple Rd	S Bates	Henrietta	60	37	16	113
W Maple Rd	Henrietta	Pierce	60	37	16	113
Manchester	Edenborough	Saint Andrews St	60	18	34	112
Maryland Blvd	W Southlawn	Northlawn	40	38	34	112
Ruffner	Grant	Woodward Ave	60	12	40	112
W Lincoln	N Chester	S Bates	60	30	22	112
Saint Andrews St	Windemere	Manchester	70	22	19	111
W Brown	N Chester	S Bates	50	52	9	111
Arden Ln	W Lincoln		50	32	28	110
Grant	Ruffner	E Lincoln	60	22	28	110
Smith	Edgewood	Grant	50	20	40	110
Villa	Columbia	Eton	40	32	38	110
Bradford	Mansfield	Melton	40	23	46	109
Purdy	E Brown	Daines	70	35	4	109
Purdy	Daines	E Frank	70	35	4	109
W Maple Rd	Woodland Villa Ct	Southfield Rd	50	32	27	109
Catalpa	Pierce	Cedar Dr	50	20	38	108
Catalpa	Cedar Dr	Edgewood	50	20	38	108
Derby Rd	N Eton Rd	Edenborough	10	52	46	108
W Maple Rd	Pierce	N Old Woodward Ave	60	29	19	108
Bird	Edgewood	Grant	50	13	44	107
Derby Rd	Edenborough	Saint Andrews St	10	59	38	107
Derby Rd	Saint Andrews St	Coolidge Rd	10	59	38	107
Shipman	Northlawn	W Lincoln	40	40	27	107
W Lincoln	Southfield Rd	Shipman	60	46	1	107
W Merrill	Southfield Rd	N Chester	50	27	30	107
Catalpa	Edgewood	Grant	50	10	46	106
Donmar Ct	W Lincoln		60	6	40	106
Floyd	E Lincoln		50	10	46	106
Pembroke	Edenborough	Saint Andrews St	20	56	30	106
Purdy	George	Landon	70	32	4	106

Manchester	N Eton Rd	Edenborough	10	71	34	105
Haynes	Torry	Columbia	40	1	64	105
Hazel	Columbia	S Eton Rd	50	25	30	105
Oakland	Park	Woodward Ave	50	25	30	105
Rivenoak	Oxford	Oakdale St	30	72	3	105
Rivenoak	Oakdale St	Poppleton	30	72	3	105
Colonial Ct	Woodward Ave		10	53	41	104
Coolidge Rd	Windemere	Manchester	70	4	30	104
Coolidge Rd	Manchester	Pembroke	70	4	30	104
Oxford	Rivenoak	Kennesaw	30	26	48	104
Pierce	Catalpa	Northlawn	60	14	30	104
Sheffield	Melton	Cheltenham	50	30	24	104
W Lincoln	Adams Rd	Torry	30	27	47	104
Hamilton Row	N Old Woodward Ave	Ferndale	30	40	33	103
N Chester	W Lincoln	Hanna	20	45	38	103
Bowers	Columbia	S Eton Rd	50	18	34	102
E Frank	Pierce	Purdy	50	29	23	102
W Lincoln	S Bates	Henrietta	50	30	22	102
Bradford	S Eton Rd	Mansfield	40	27	34	101
Purdy	E Frank	George	70	27	4	101
Saint Andrews St	Manchester	Pembroke	70	0	31	101
W Brown	S Bates	Henrietta	40	52	9	101
W Brown	Henrietta	E Brown	40	52	9	101
Oakland	Poppleton	Rosedale St	40	26	34	100
Oakland	Rosedale St	N Worth	40	26	34	100
Townsend	Southfield Rd	N Chester	50	42	8	100
W Lincoln	Maryland Blvd	Stanley	60	18	22	100
W Lincoln	Stanley	Stanley	60	18	22	100
W Lincoln	Stanley	Washington	60	18	22	100
Aten Ct	Harmon		80	5	14	99
Bennaville	Cummings Ave	Woodward Ave	80	1	18	99
Derby Rd	Graefield Rd	N Eton Rd	50	34	15	99
Smith	Grant	Cummings	40	53	6	99
W Lincoln	Pleasant	Arlington Rd	70	9	20	99
Merritt Ln	Midvale		40	33	24	97
Midvale	Larchlea Dr	Merritt Ln	40	33	24	97
W Maple Rd	N Chester	S Bates	60	17	20	97
W Merrill	Chester	Bates	30	33	34	97
Manchester	Saint Andrews St	Coolidge Rd	30	36	30	96
Grant	Humphrey	Ruffner	60	0	36	96
Oakland	Poppleton	Poppleton	40	26	30	96
W Lincoln	Henrietta	Pierce	50	24	22	96
N Glenhurst Dr	Kenwood Ct	Brookwood	50	25	20	95
Mansfield	14 Mile	Bradford	50	44	0	94
Park	Peabody	Hamilton Row	70	24	0	94
Pierce	E Southlawn	Catalpa	50	14	30	94
S Bates	W 14 Mile Rd	W Southlawn	10	38	46	94
W Frank	Watkins	Stanley	30	34	30	94
W Maple Rd	Southfield Rd	N Chester	50	17	27	94
N Chester	W Brown	Townsend	60	18	15	93
N Chester	Townsend	W Merrill	60	18	15	93
N Chester	W Merrill	Martin	60	18	15	93
N Chester	Martin	W Maple Rd	70	0	23	93
Pembroke	Graefield Rd		60	8	25	93
W Maple Rd	Chesterfield	Pleasant	60	5	28	93
Oak	Chesterfield	Fairfax	60	12	20	92
N Eton Rd	Manchester	Pembroke	60	11	20	91
N Eton Rd	Pembroke	Derby Rd	60	11	20	91

N Glenhurst Dr	Brookwood	Raynale	50	17	24	91
Saint Andrews St	Dorchester	Buckingham	70	2	19	91
W Lincoln	Latham	Southfield Rd	70	1	20	91
Haynes	Bowers	Haynes Ct	40	32	18	90
W Lincoln	Arlington Rd	Shirley Dr	70	0	20	90
W Lincoln	Washington	N Chester	50	18	22	90
Sheffield	S Eton Rd	Mansfield	50	11	28	89
Sheffield	Mansfield	Melton	50	11	28	89
Torry	Webster	Holland	60	9	20	89
Cheltenham	Sheffield	Dunstable	50	0	38	88
Haynes	Columbia	S Eton Rd	10	39	38	87
Henrietta	W Lincoln	W Frank	20	33	34	87
Saint Andrews St	Buckingham	Windemere	70	2	15	87
Fairway Dr	Arden Ln	Pleasant	50	7	29	86
Haynes Ct	Haynes		50	0	36	86
N Adams Rd	Kennesaw	Derby Rd	50	16	20	86
S Worth	Woodward Ave	Webster	60	0	26	86
Torry	Holland	Haynes	60	0	26	86
W Lincoln	Pierce	Clark	50	18	18	86
W Lincoln	Clark	Lincoln Ct	50	18	18	86
W Lincoln	Lincoln Ct	Edgewood	50	18	18	86
W Lincoln	Edgewood	Floyd	50	18	18	86
W Lincoln	Floyd	Floyd	50	18	18	86
W Lincoln	Floyd	Grant	50	18	18	86
W Maple Rd	N Old Woodward Ave	Park	20	42	24	86
Mill Race	Randall Ct		60	0	25	85
N Adams Rd	Madison	Westboro	50	15	20	85
N Adams Rd	Westboro	Rivenoak	50	15	20	85
Ridgedale		Oakdale St	10	72	3	85
Ridgedale	Oakdale St	Poppleton	10	72	3	85
Ashford Ln	Quarton Rd		40	37	7	84
Hazel	Woodward Ave	Elm	40	0	44	84
N Old Woodward Ave	Daines	Hazel	60	13	11	84
Cole	S Eton Rd	Commerce	10	55	18	83
Derby Rd	N Adams Rd	Wimbleton Dr	60	8	15	83
Derby Rd	Wimbleton Dr	Canadian National Railw	60	8	15	83
Pierce	E Merrill	Martin	70	5	8	83
Pierce	Martin	W Maple Rd	70	5	8	83
W Maple Rd	Pleasant	Fairfax	50	5	28	83
E Frank	Henrietta	Pierce	20	28	34	82
Forest	Woodward Ave	Elm	50	0	30	80
Ridgedale	Poppleton	N Worth	10	67	3	80
Ridgedale	N Worth	N Adams Rd	10	67	3	80
Torry	E Lincoln	Cole	60	0	20	80
W Maple Rd	Westchester Way	Larchlea Dr	60	0	20	80
W Maple Rd	Larchlea Dr	Chesterfield	60	0	20	80
W Southlawn	S Bates	Henrietta	60	0	20	80
W Southlawn	Henrietta	Pierce	60	0	20	80
Landon	Purdy	Ann	70	5	4	79
N Chester	Hanna	W Frank	20	29	30	79
Smith	Cummings	Woodward	30	47	2	79
Woodlea	Midvale		40	34	5	79
N Old Woodward Ave	George		50	21	7	78
Oakland	Ferndale	Park	40	8	30	78
S Bates	Northlawn	W Lincoln	10	26	42	78
W Merrill	Henrietta	E Merrill	20	20	38	78
Wallace	Southfield Rd	Watkins	40	33	5	78
Cole	Commerce	Attribute Change	40	7	30	77

Grant	Bird	Smith	50	3	24	77
N Old Woodward Ave	Hazel	E Frank	60	10	7	77
N Old Woodward Ave	E Frank	Bowers	60	10	7	77
Poppleton	Kennesaw	Mohegan	70	0	7	77
Poppleton	Rivenoak	Kennesaw	70	0	7	77
Grant	E 14 Mile Rd	Bird	50	2	24	76
Graefield Rd	Pembroke	Derby Rd	50	0	25	75
Grant	Smith	Davis	50	0	24	74
Hanna	Watkins	Stanley	10	30	34	74
N Adams Rd	Rivenoak	Manchester St	50	0	24	74
N Adams Rd	Manchester St	Kennesaw	50	0	24	74
Park	Hamilton Row	Oakland	50	24	0	74
Westboro	N Adams Rd		50	17	7	74
Derby Rd	Canadian National Railw	Norwich	50	8	15	73
Derby Rd	Norwich	Graefield Rd	50	8	15	73
Pierce	W Frank	E Brown	50	19	4	73
Martin	Southfield Rd		40	5	27	72
Edenborough	Windemere	Manchester	70	0	0	70
Edenborough	Manchester	Pembroke	70	0	0	70
Edenborough	Pembroke	Derby Rd	70	0	0	70
Hanna	Southfield Rd	Watkins	10	30	30	70
Pierce	W Lincoln	George	50	16	4	70
W Maple Rd	N Glenhurst Dr	Westchester Way	50	0	20	70
Webster	Woodward Ave	S Worth	70	0	0	70
Yosemite	Columbia	S Eton Rd	10	30	30	70
Grant	Chapin	Bennaville	10	31	28	69
Grant	Bennaville	Bennaville	10	31	28	69
W Lincoln	Torry	Taunton	30	12	27	69
Edgewood	Catalpa	Bennaville	60	6	2	68
Haynes	Woodward Ave	S Worth	10	57	1	68
Haynes	S Worth	Adams Rd	10	57	1	68
Lawndale St	Woodward Ave	Oakland	50	0	18	68
N Eton Rd	E Maple Rd	Yorkshire	30	0	38	68
Pierce	E 14 Mile Rd	Bird	10	43	15	68
Pierce	Northlawn	W Lincoln	10	20	38	68
S Chester	Frank	Brown	20	18	30	68
W Frank	N Chester	S Bates	30	0	38	68
N Old Woodward Ave	Bowers	Haynes	50	10	7	67
N Old Woodward Ave	Haynes	George	50	10	7	67
Oakland	Willits	Ferndale	30	7	30	67
Poppleton	Knox	Ridgedale	60	0	7	67
Poppleton	Ridgedale	Oakland	60	0	7	67
Bowers	S Old Woodward Ave	Woodward Ave	40	0	26	66
Pembroke	Saint Andrews St	Coolidge Rd	20	16	30	66
S Worth	Webster	Haynes	10	55	1	66
Landon	Ann	S Old Woodward Ave	50	11	4	65
W Frank	Southfield Rd	Watkins	30	5	30	65
W Frank	Stanley	N Chester	30	5	30	65
Bowers	Woodward Ave	Elm	40	2	22	64
N Old Woodward Ave	Brown	Daines	40	13	11	64
Poppleton	E Maple Rd	Knox	60	0	4	64
Ruffner	Grant	Woodward Ave	10	12	42	64
Dewey	Greenwood	Attribute Change	0	59	4	63
E Frank	S Bates	Henrietta	20	12	30	62
W Lincoln	S Old Woodward Ave	Woodward Ave	40	0	22	62
Ferndale	Hamilton Row	Oakland	20	8	33	61
Pierce	George	W Frank	50	7	4	61
Edenborough	Buckingham	Windemere	60	0	0	60

Edgewood	E Southlawn	Catalpa	60	0	0	60
W Southlawn	Shipman	Birmingham Blvd	40	0	20	60
Webster	S Worth	Adams Rd	60	0	0	60
Grant	Bennaville	Humphrey	10	28	20	58
Wallace	Watkins	Stanley	40	13	5	58
Hanna	Stanley	N Chester	10	13	34	57
Hazel	S Old Woodward Ave	Woodward Ave	50	0	7	57
Hidden Ravine Ct	Hidden Ravine Dr		50	0	6	56
Hidden Ravine Dr		Hidden Ravine Trl	50	0	6	56
Hidden Ravine Dr	Hidden Ravine Trl	Hidden Ravine Ct	50	0	6	56
Hidden Ravine Dr	Hidden Ravine Ct	Hilltop Dr	50	0	6	56
Haynes	Haynes Ct	Torry	40	1	14	55
Hanna	N Chester	S Bates	10	10	34	54
Knox		Poppleton	10	18	24	52
W Lincoln	Woodward	Adams	30	0	22	52
Commerce	Cole	E Lincoln	50	0	0	50
E Frank	Purdy	Ann	10	13	27	50
Graefield Rd	Derby Rd	City/Twp Line	50	0	0	50
Grant	Emmons	Catalpa	10	0	40	50
Grant	Catalpa	Chapin	10	0	40	50
Norwich	Derby Rd	City/Twp Line	50	0	0	50
W Maple Rd	Woodward Ave	Woodward Ave	20	0	30	50
Bennaville	Cummings Ave	Woodward Ave	30	1	18	49
W Maple Rd	Park	Woodward Ave	20	5	24	49
N Old Woodward Ave		Landon	20	21	7	48
Bennaville	Grant	Cummings Ave	30	12	4	46
Fairway Dr	Arden Ln	Pleasant	10	7	29	46
Hidden Ravine Trl	Hidden Ravine Dr		40	0	6	46
Chestnut	Woodward Ave	Elm	40	0	4	44
Cummings Ave	Chapin	Bennaville	30	0	14	44
Elm	Bowers	Hazel	40	0	4	44
Elm	Hazel	Chestnut	40	0	4	44
Elm	Chestnut	Forest	40	0	4	44
Elm	Forest	E Maple Rd	40	0	4	44
Grant	Davis	E Southlawn	10	0	32	42
Grant	E Southlawn	Emmons	10	0	32	42
Hanley Ct	Cheltenham		30	0	12	42
Rivenoak	N Worth	N Adams Rd	30	5	7	42
Ann	Landon	George	10	29	2	41
Forest	Elm	Adams Rd	10	25	3	38
Madison	Poppleton	Rosedale St	30	5	3	38
Madison	Rosedale St	N Worth	30	5	3	38
Madison	N Worth	N Adams Rd	30	5	3	38
Haynes	S Old Woodward Ave	Woodward Ave	10	27	0	37
N Old Woodward Ave	Landon	Woodward	30	0	7	37
Poppleton	Oakland	Madison	30	0	7	37
Poppleton	Madison	Rivenoak	30	0	7	37
Poppleton	Rivenoak	Kennesaw	30	0	7	37
S Bates	Hanna	W Frank	20	15	2	37
S Bates	W Frank	W Frank	20	15	2	37
Golfview	W Lincoln		30	0	6	36
Madison	Woodward Ave	Lawndale St	30	0	3	33
Madison	Lawndale St	Oxford	30	0	3	33
Madison	Oxford	Oakdale St	30	0	3	33
Madison	Oakdale St	Poppleton	30	0	3	33
Rivenoak	Poppleton	Rosedale St	30	0	3	33
Rivenoak	Rosedale St	N Worth	30	0	3	33
Ann	George	E Frank	10	19	2	31

E Brown	Pierce	Purdy	20	2	9	31
E Brown	Purdy	S Old Woodward	20	2	9	31
Oakdale St	Oakland	Madison	30	0	0	30
Oakdale St	Madison	Rivenoak	30	0	0	30
S Bates	W Frank	W Brown	20	4	2	26
E Frank	Ann	S Old Woodward Ave	10	0	15	25
Oak	City/Twp Line	Woodward	20	0	5	25
S Bates	W Lincoln	Hanna	20	0	2	22
S Old Woodward Ave	Woodward	Old Woodward	20	0	0	20
Henrietta	Martin	W Maple Rd	10	0	7	17
N Adams Rd	Abbey Rd	Railroad Bridge	10	0	0	10
Graefield Rd	Graefield Ct	Pembroke	0	0	0	0
Cole	Torry	S Eton Rd	0	0	0	0
Graefield Rd	N Eton Rd	Graefield Ct	0	0	0	0
Cole	Adams Rd	Torry	0	0	0	0
Saint Andrews St	Yorkshire	Dorchester	0	0	0	0
Saint Andrews St	E Maple Rd	Yorkshire	0	0	0	0
W Lincoln	Woodlea	S Glenhurst Dr	0	0	0	0
W Lincoln	S Glenhurst Dr	Westchester Way	0	0	0	0
Riverside Dr	Southfield Rd	Riverstone Dr	0	0	0	0
Riverside Dr	Riverstone Dr		0	0	0	0
Riverstone Dr	Riverside Dr		0	0	0	0