2016-2021 Capital Improvement Plan
Introduction

A Capital Improvement Plan (CIP) is a multi-year planning instrument used to identify needs and financing sources for public infrastructure improvements. The purpose of a CIP is to facilitate the orderly planning of infrastructure improvements; to maintain, preserve, and protect the City's existing infrastructure system; and to provide for the acquisition or scheduled replacement of equipment in order to ensure the efficient delivery of services to the community. The CIP is also utilized to ensure that capital improvements are fiscally sound and consistent with the goals and policies of the City Council and residents of Rochester Hills.

CIP & the Community

A comprehensive Capital Improvement Plan is an essential tool used in the planning and development of the social, physical, and economic well being of the City of Rochester Hills. This process is a necessary step in an organized effort to strengthen the quality of public facilities and services; to provide a framework for the realization of community goals and objectives; and to provide a sound basis on which to build a healthy and vibrant community.

The CIP informs residents and stakeholders on how the City plans to address significant capital needs over the next six-years. The CIP provides visual representations of the City's needs including maps which detail the timing, sequence, and location of capital projects. The CIP can also influence community growth as infrastructure improvements can impact development patterns.

Some of the many benefits that the CIP provides for the residents and stakeholders of Rochester Hills include:

- Optimize the uses of revenue
- Focus attention on community goals, needs, and capabilities
- Guide future growth and development
- Encourage efficient government
- Improve intergovernmental and regional cooperation
- Help maintain a sound and stable financial program
- Enhance opportunities for the participation in federal and/or state grant programs

Overview

Projects identified in the CIP represent the City of Rochester Hills' plan to serve residents and anticipate the needs of a dynamic community. Projects are guided by various development plans and policies established by the Planning Commission, City Council, and City Administration. Plans and policies include:

Components of the City's Strategic Plan
City of Rochester Hills' Mission Statement
City Council Goals & Objectives
Administrative Policies
Storm Water Management System Plan
Master Land Use Plan
Master Transportation Plan
Master Pathway Plan
Master Recreation Plan
LDFA Master Plan

2016-2021 Capital Improvement Plan
CIP Process

CIP Process

Preparation of the CIP is done under the authority of the Municipal Planning Commission Act (PA 285 of 1931). It is the City of Rochester Hills Planning Commission's goal that the CIP be used as a tool to implement the City Master Plan and to assist in the City's financial planning process.

The CIP is dynamic. Each year all projects included within the CIP are reviewed, a call for new projects is made, requests for new projects are considered, and adjustments are made to existing projects arising from changes in the amount of funding required, conditions, or timeline. A new year of programming is also added each year to replace the year funded in the annual operating budget. A status report on the prior 2015-2020 CIP can be found in the Appendix section located at the end of this book.

The CIP program will continue to develop over time by adding processes to improve quality and efficiencies. Greater attention shall be devoted to provide more detailed information regarding individual project requests, program planning, fiscal analysis, fiscal policies, and debt strategy (if applicable).

CIP & the Budget Process

The CIP plays an increasingly significant role in the implementation of a master plan by providing the link between planning and budgeting for capital projects. The CIP process precedes the budget process and is used to develop the capital project portion of the upcoming annual budget. Approval of the CIP by the Planning Commission does not mean final approval of all projects contained within the plan is granted. Rather by approving the CIP, the Planning Commission acknowledges that these projects represent a reasonable interpretation of the upcoming needs for the City and that projects contained in the plan are suitable for inclusion in future budgets.

Project priority rankings do not necessarily correspond to funding sequence. For example, a road-widening project which is ranked lower than a park project may be funded before the park project because the road project may have access to a restricted revenue source, whereas a park project may have to compete for funding from other revenue sources. A project's funding depends upon a number of factors – not only its merit, but also its location, cost, funding source, and logistics.

The City of Rochester Hills strives to maximize resources by maintaining a balance between operating and capital budgets. A continuous relationship exists between the CIP and the annual budget. A direct link can be seen between the two documents, as there should be in a strategic planning environment.

2016-2021 Capital Improvement Plan
CIP Policy

As used in the City of Rochester Hills' Capital Improvement Program, a capital improvement project is defined as a major, nonrecurring expenditure that includes one or more of the following:

1. Any construction of a new facility (i.e., major/local roadways, water/sanitary sewer mains, storm water management, pathways*, recreational facilities, or public buildings), an addition to, or extension of such a facility, provided that the cost is $25,000 or more and that the improvement will have a useful life of three years or more.

2. Any non-recurring rehabilitation of all or a part of a building, its grounds, a facility, or equipment, provided that the cost is $25,000 or more and the improvement will have a useful life of three years or more.

3. Any purchase or replacement of major equipment to support City programs provided that the cost is $25,000 or more and will be coded to a capital asset account.

4. Any planning, feasibility, engineering, or design study related to an individual capital improvement project or to a program that is implemented through individual capital improvement projects provided that the cost is $25,000 or more and will have a useful life of three years or more.

5. Any planning, feasibility, engineering, or design study costing $50,000 or more that is <u>not</u> part of an individual capital improvement project or a program that is implemented through individual capital improvement projects.

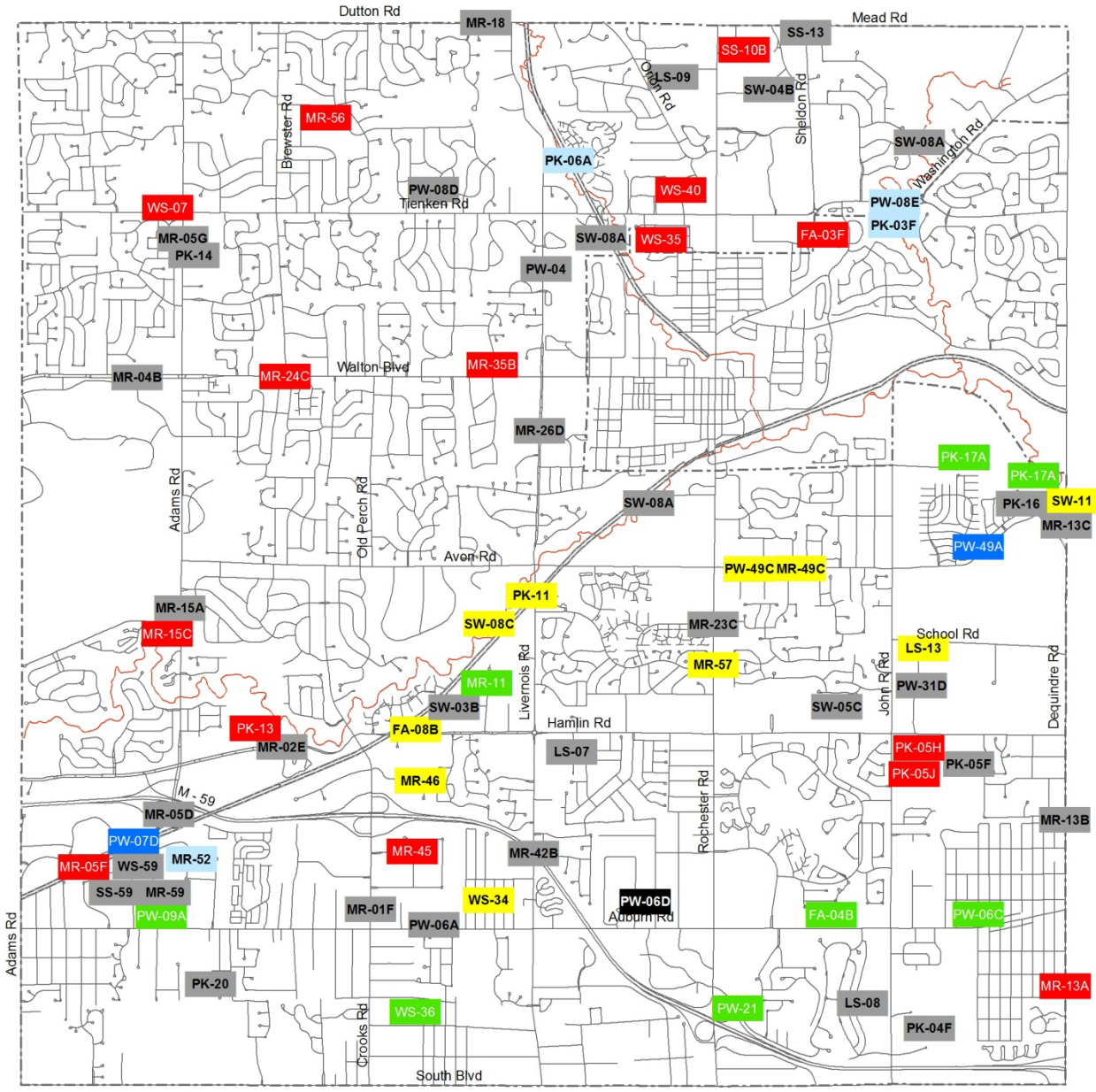
6. Any acquisition of land for a public purpose that is not part of an individual capital improvement project or a program that is implemented through individual capital improvement projects provided that the cost is $25,000 or more. **

* = Note: Beginning in FY 2008, pathway projects are reviewed and rated by the Pathway Ad-hoc Committee as opposed to the CIP raters.

** = Note: Land acquisition funded by the Green Space Preservation millage has <u>not</u> been included in the CIP process

Adopted March 10, 1997 by the CIP Policy Group
Revised February 25, 2011 by the CIP Policy Group

2016-2021 Capital Improvement Plan
Aggregate Citywide Project Locations



LEGEND

Projects that may begin construction in:

- 2016
- 2017
- 2018
- 2019
- 2020
- 2021
- Pending Project

FA-00 = City-Owned Facility Improvements
LS-00 = Local Road Improvements
MR-00 = Major Road Improvements
PK-00 = Parks & Recreation System Improvements
PW-00 = Pathway System Improvements
SS-00 = Sanitary Sewer Improvements
SW-00 = Storm Water Management Improvements
WS-00 = Water System Improvements

4/14/2015
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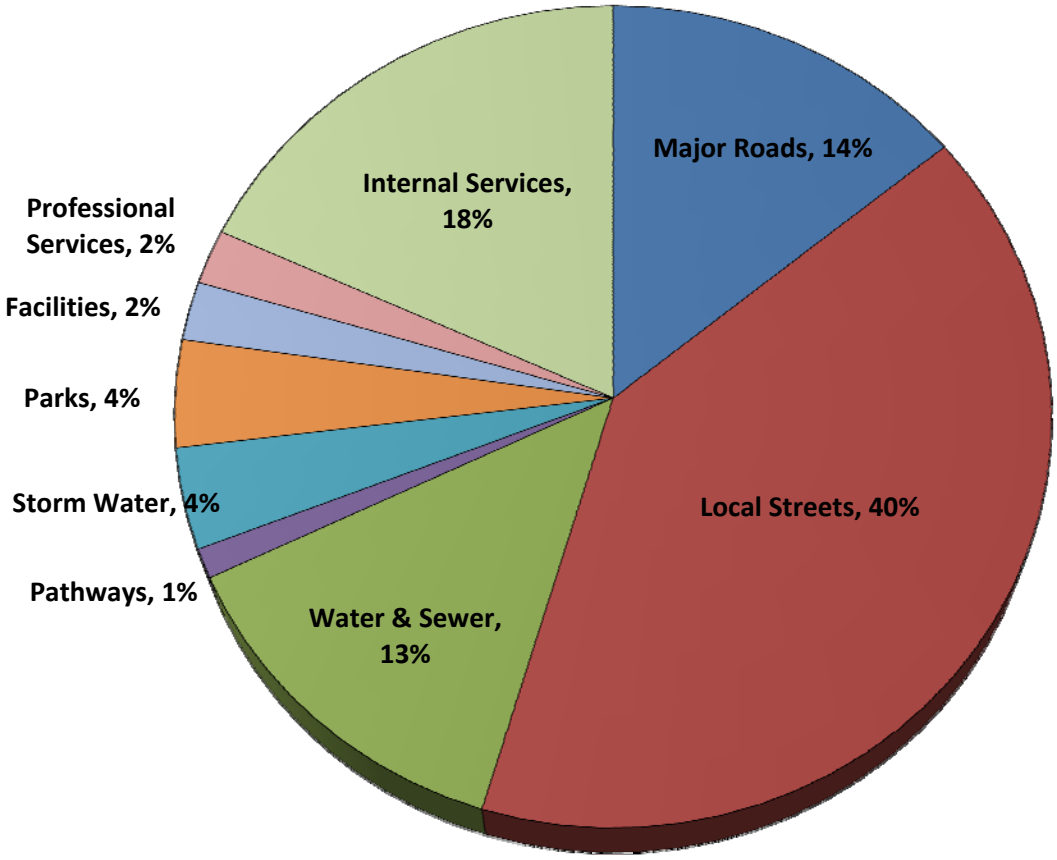
2016-2021 Capital Improvement Plan
Aggregate City Share Summary



2016-2021 CIP City Share Breakdown			
Major Roads	$	10,653,790	**14%**
Local Streets	$	30,437,600	**40%**
Water & Sewer	$	10,012,610	**13%**
Pathways	$	875,000	**1%**
Storm Water Management	$	2,992,630	**4%**
Parks	$	3,175,000	**4%**
Facilities	$	1,741,000	**2%**
Professional Services	$	1,625,000	**2%**
Internal Services	$	13,714,780	**18%**
	$	**75,227,410**	

ROCHESTER HILLS
MICHIGAN

innovative *by* nature

2016-2021 Capital Improvement Plan
Street Improvements

The purpose of the Street Improvement Program is to preserve and maintain safe neighborhoods in an effort to sustain the quality of life that Rochester Hills residents expect. The Street Improvement Program is part of a long-term solution aimed at the systematic maintenance, repair, and rehabilitation of City streets. This program provides a consistent standard and maintenance level over a period of years for both the major road and local street systems.

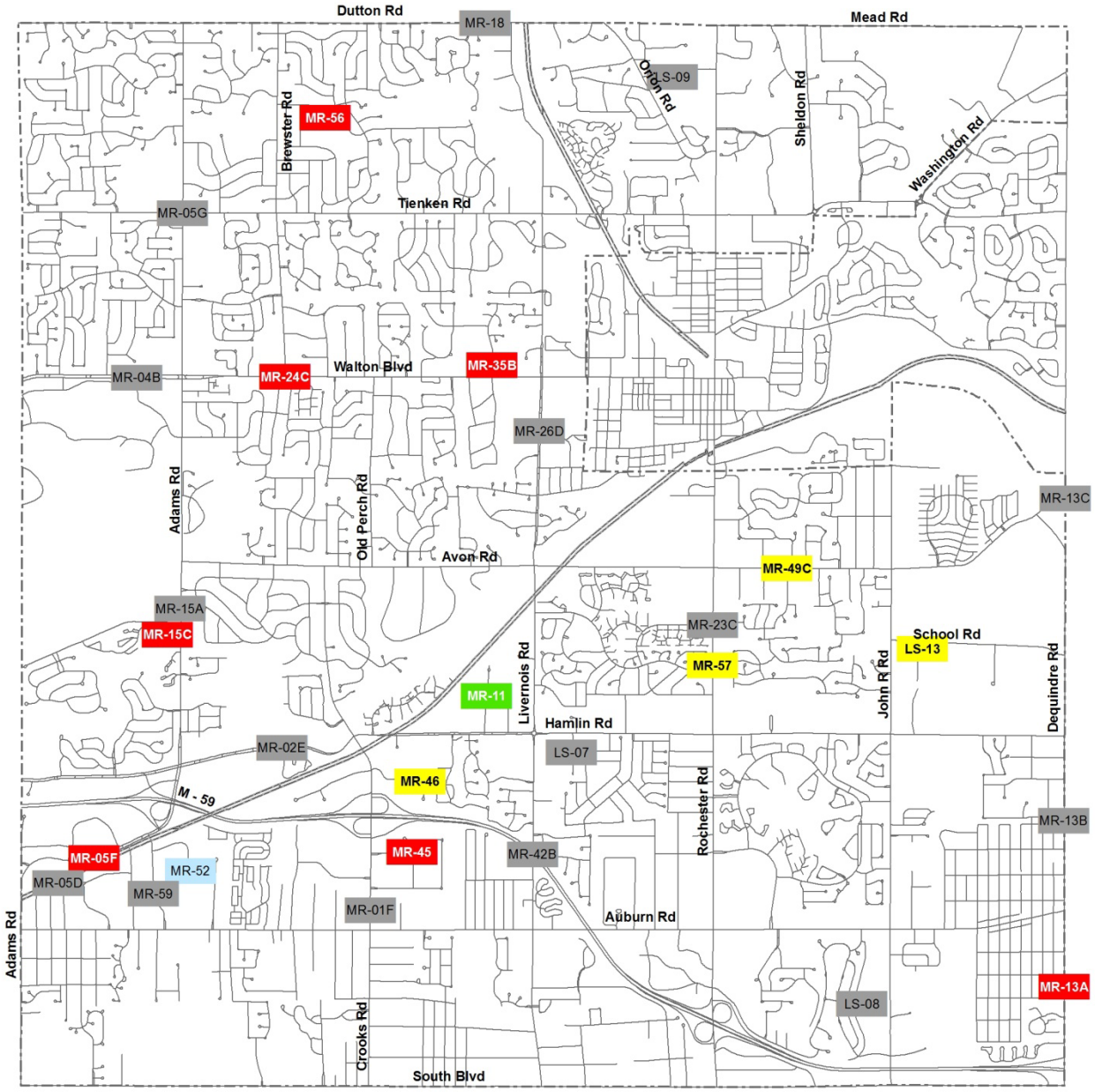
Local streets in Rochester Hills came under the City's jurisdiction in 1985. Prior to then the City was known as Avon Township and the responsibility for designing, maintaining, repairing, and replacing our streets fell upon the Road Commission of Oakland County (RCOC). Design standards were much different 30 years ago, and streets in neighborhoods which were built during the 1960's, 1970's, and early 1980's were constructed based upon design standards that have since become outdated.

In 1998, the Planning Commission adopted the Master Thoroughfare Plan to provide a better understanding of current and projected traffic trends in the community, using traffic forecasts through the year 2015. This plan presented a comprehensive program of solutions to address the problems identified by the traffic forecasts. Components of the plan have been incorporated into the Capital Improvement Plan. An update to the plan began in 2007 consisting of monthly Technical Review Committee meetings along with several public information meetings, which allowed the citizens of Rochester Hills to provide invaluable input. The Planning Commission adopted the current Master Thoroughfare Plan Update on October 21, 2008.

The City of Rochester Hills contains both public and private roadways. Public roads are owned and operated by the Michigan Department of Transportation (MDOT), the Road Commission of Oakland County (RCOC), and the City of Rochester Hills. Private roads are owned and operated by private developments and homeowner groups.

The City currently maintains approximately 39-miles of paved major roads, 214-miles of paved local streets, and 23-miles of gravel local streets. In order to define priorities and establish a course of action for the local street and major road rehabilitation programs, a Pavement Management System using Pavement Surface Evaluation and Rating (PASER) is used. PASER is a visual survey method for evaluating the condition of roads with the corresponding data serving as the foundation on which to build cost-effective pavement maintenance strategies. This information is a valuable tool when combined with an engineer's knowledge and experience to plan for and to prioritize reconstruction, rehabilitation, and traffic enhancement projects.

2016-2021 Capital Improvement Plan
Street Improvements



LEGEND

Projects that may begin construction in:

2016	MR-00
2017	MR-00
2018	MR-00
2019	MR-00
2020	MR-00
2021	MR-00
Pending Project	MR-00

4/7/2015
Published by MIS Dept.

2016-2021 Capital Improvement Plan
Street Improvements

MR-01A	Major Road System: Rehabilitation Program

2016-2021

Estimated City Cost: **$3,000,000** **Estimated City Share:** **100%**

Rehabilitation or reconstruction of failed concrete and asphalt sections within the Major Road network, as identified through the City's Pavement Management System and based upon field inspections. Work also to include rehabilitating storm water structures and installing edge drains as needed. The annual Major Road Rehabilitation Program allows for greater flexibility in coordinating activities with those of DPS crews and also allows for spreading work over a wider area rather than focusing on street specific repairs. Operating costs are anticipated to decrease by $15,000 per year for each 0.5 miles proposed to be replaced annually. This program is proposed to be funded at $500,000 per year and is on-going.

MR-01B	LDFA Road System: Rehabilitation Program

2016-2021

Estimated City Cost: **$1,200,000** **Estimated LDFA Share:** **100%**

Rehabilitation or reconstruction of failed concrete and asphalt sections within the LDFA District Road network, as identified through the City's Pavement Management System and based upon field inspections. The annual LDFA Concrete & Asphalt Rehabilitation Program allows for greater flexibility in coordinating activities with those of DPS crews. This program assists in maintaining road infrastructure and the viability of industrial and technology parks within the LDFA District. Operating costs are anticipated to decrease by $6,000 per year for each 0.3 miles proposed to be replaced annually. This program is proposed to be funded at $200,000 per year and is on-going.

MR-05F	Adams Boulevard: Irrigation System Installation

2016-2016

Estimated City Cost: **$190,000** **Estimated City Share:** **100%**

Installation of an automatic lawn irrigation system along Adams Boulevard between approximately 1,200' southwest of Marketplace Circle and approximately 1,000' north of Hamlin Boulevard. The total project length is approximately 5,600'. Rochester Hills has previously decided that installation of irrigation systems for boulevard roadways is justified to maintain an appealing median. Increased operating costs are estimated at $6,500 per year include routine seasonal start-up and shut-down of the irrigation system, water usage, electrical usage, applications of weed killer and fertilizer, and future sprinkler head and line repairs. METRO Act funding is proposed to be utilized for construction and operational costs. Construction is planned to begin in 2016.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Street Improvements

MR-11	Rochester Industrial Park Reconstruction		
		2017-2017	
Estimated City Cost:	**$993,130**	**Estimated City Share:**	**100%**

Reconstruction of approximately 2,800' of Rochester Industrial Drive concrete roadway. Operating costs of approximately $15,000 per year are anticipated to decrease to $12,000 per year due to reconstruction. Construction is planned to begin in 2017.

MR-12	Major Road System: Traffic Calming Program		
Estimated Total Project:	**$120,000**	**2016-2021**	
Estimated City Cost:	**$60,000**	**Estimated City Share:**	**50%**

The City receives many traffic related concerns from subdivision homeowner's associations (HOA) regarding speeding along residential streets. After performing in-depth traffic studies, City staff bring forth recommendations to the Advisory Traffic and Safety Board (ATSB). Often speed humps or other traffic calming devices are recommended as a solution. This program allows for 'seed' money to offer a 50/50 match between the HOA and the City to provide assistance for the implementation of traffic-calming devices along residential collector type roads which are classified as major roads. This program is proposed to be funded at a City share of $10,000 per year and is on-going.

MR-13A	Dequindre Road Reconstruction [Auburn Road – South Boulevard]		
Estimated Total Project:	**$24,108,000**	**2015-2016**	
Estimated City Cost:	**$602,700**	**Estimated City Share:**	**2.5%**

Reconstruction of Dequindre Road as a 5-lane road section between Auburn Road and South Boulevard. This improvement is part of a larger Road Commission of Oakland County (RCOC) project to widen Dequindre Road as a 5-lane road southbound to Long Lake Road in the City of Troy. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC. Construction is planned to begin in 2016.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Street Improvements

MR-15C	Butler Road: Right Turn-Lane @ Adams Road

2014-2016

Estimated City Cost: **$159,760** **Estimated City Share:** **100%**

Construction of a dedicated right turn-lane on Butler Road to enable traffic to turn southbound on Adams Road. The stacking length for Butler Road is inadequate when left-turn vehicles are present, which causes long vehicular congestion and back-up delays for Butler Road traffic. By extending the existing right turn-lane, traffic flow for Butler Road vehicles to head southbound on Adams Road will improve. Intersection capacity improvements will help to reduce delays for Butler Road traffic and residents within the Butler Ridge Subdivision & River Oaks Apartments. Operating costs are anticipated to increase by approximately $300 per year due to the lane extension. Construction is planned to begin in 2016.

MR-24C	Brewster Road: Right-Turn Lane @ Walton Boulevard

2015-2016

Estimated City Cost: **$471,250** **Estimated City Share:** **100%**

Extension of the existing southbound Brewster Road right turn-lane onto westbound Walton Boulevard. The stacking length for the existing right turn-lane is inadequate causing vehicular congestion and back-ups along southbound Brewster Road. Operating costs are anticipated to increase by approximately $750 per year due to the lane extension. Construction is planned to begin in 2016.

MR-27	Major Road System: Bridge Rehabilitation Program

2016-2021

Estimated City Cost: **$228,000** **Estimated City Share:** **100%**

Performance of maintenance and rehabilitation type work to the four (4) existing City-owned bridges: 1) Shagbark Road over Sargent Creek; 2) Butler Road over Galloway Creek; 3) Rochdale Road over Sargent Creek; 4) King's Cove Drive over Paint Creek. Repairs are based upon the City's latest Biennial Bridge Structure Inventory Report, as required by the Federal Highway Administration (FHWA) and the Michigan Department of Transportation (MDOT). Bridge Rehabilitation Study is to occur every "even-year" with Bridge Rehabilitation to occur every "odd-year". This program is on-going.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Street Improvements

MR-35B	** Rochdale Drive Rehabilitation **		
	2016-2016		
Estimated City Cost:	$99,380	Estimated City Share:	100%

Rehabilitate approximately 500’ of asphalt section of Rochdale Drive north of Walton Boulevard. The existing road is a boulevard with 2 x 24’ wide from back curb to back curb halves. The 2014 Paser Rating was 2 out a scale of 10. The pavement rehabilitation strategy is a 4 inch asphalt mill & fill (final determination upon geotechnical testing & recommendation) with selective base repairs and concrete curb and gutter repairs as deemed necessary. Construction is planned to begin in 2016.

MR-45	Northfield & Tan Industrial Park Reconstruction		
	2016-2016		
Estimated City Cost:	$2,125,000	Estimated City Share:	100%

Reconstruction of Northfield Drive, Enterprise Drive, Commerce Drive, and Product Drive; approximately 8,000' of asphalt roads (final road repair strategy is contingent upon the results of the geotechnical pavement core data). Operating costs of approximately $44,000 per year are anticipated to decrease to $36,000 per year due to reconstruction. Construction is planned to begin in 2016.

MR-46	Industro Plex Industrial Park Reconstruction		
	2019-2019		
Estimated City Cost:	$770,000	Estimated City Share:	100%

Reconstruction of Star Batt Drive; approximately 2,300' asphalt road (final road repair strategy is contingent on results of geotechnical pavement cores). Operating costs of approximately $15,000 per year are anticipated to decrease to $12,000 per year due to reconstruction. Construction is planned to begin in 2019.

MR-49C	Avon Road Widening [Princeton Avenue – Grovecrest Avenue]		
Estimated Total Project:	$577,500	2018-2019	
Estimated City Cost:	$192,500	Estimated City Share:	33%

Widen approximately 1,300 feet of Avon Road between Princeton Avenue and Grovecrest Avenue to accommodate an 11' wide center left-turn lane. The proposed project will provide safety benefits by allowing vehicles to exit the through lanes and enter a dedicated center left-turn lane. No operating costs are anticipated, due to this section of roadway being owned and operated by the RCOC. Construction is planned to begin in 2019.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Street Improvements

MR-52	Research Drive Reconstruction		
		2018-2018	
Estimated City Cost:	$767,580	Estimated LDFA Share:	100%

Reconstruction of Research Drive between Bond Street and Technology Drive. The project will include removal of the existing roadway, geotechnical investigation, construction engineering, replacement of sub-base, repairs and replacement of storm water structures as needed, and re-pavement with concrete. Construction is planned to begin in 2018.

MR-56	North Fairview Lane Rehabilitation		
		2016-2016	
Estimated City Cost:	$210,380	Estimated City Share:	100%

Rehabilitate approximately 3,000’ of asphalt section of North Fairview Lane between 900’ east of Brewster and 700’ east of Grandview. The existing road is 36’ wide from back curb to back curb. The proposed rehabilitation strategy is 1.5” asphalt resurfacing with selective base repairs and concrete curb and gutter repairs as necessary. Operating costs are anticipated to decrease approximately $5,800 per year due to less routine maintenance requirements, i.e, crack sealing after the rehabilitation is completed. Construction is planned to begin in 2016.

MR-57	Drexelgate/Eddington @ Rochester Road: Traffic Signal		
Estimated Total Project:	$256,500	2018-2019	
Estimated City Cost:	$0	Estimated City Share:	0%

Installation of a traffic signal at the intersection of Rochester Road, Drexelgate Parkway, and the potentially realigned Eddington Boulevard. A traffic signal has been requested for a number of years at this location and will serve the public's interest in safety. Many subdivision residents within the area use Drexelgate Parkway and Eddington Boulevard. The proposed traffic signal will improve the ingress and egress for vehicles entering Rochester Road. Due to the large traffic volumes along Rochester Road, acceptable gaps to make left turns are infrequent during the day. A traffic signal would also provide a signalized crossing for pedestrians and bicyclists to utilize. The traffic signal design would incorporate a "box-span" design. The schedule is dependent upon meeting traffic signal warrants as outlined in the MMUTCD and approval from MDOT and is contingent upon Eddington Boulevard being realigned with Drexelgate Parkway to create a four-way intersection. Operations and maintenance costs of approximately $3,000 per year for the City's cost share of the traffic signal are anticipated as the City's share will be 50% since two legs of the intersection are under City jurisdiction. Construction is planned to begin in 2019.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Street Improvements

LS-01	Local Street System: Rehabilitation Program		
	2016-2021		
Estimated City Cost:	$30,000,000	Estimated City Share:	100%

Rehabilitation or reconstruction of failed concrete and asphalt sections within the Local Street network, as identified through the City's Pavement Management System and based upon field inspections. Operating costs of approximately $57,000 per year are anticipated to decrease to $42,000 per year for each 9.0 miles of the local street network that is proposed to be rehabilitated or reconstructed annually. This program is proposed to be funded at $5,000,000 per year and is on-going.

LS-12	Local Street System: Traffic Calming Program		
Estimated Total Project:	$300,000	2016-2021	
Estimated City Cost:	$150,000	Estimated City Share:	50%

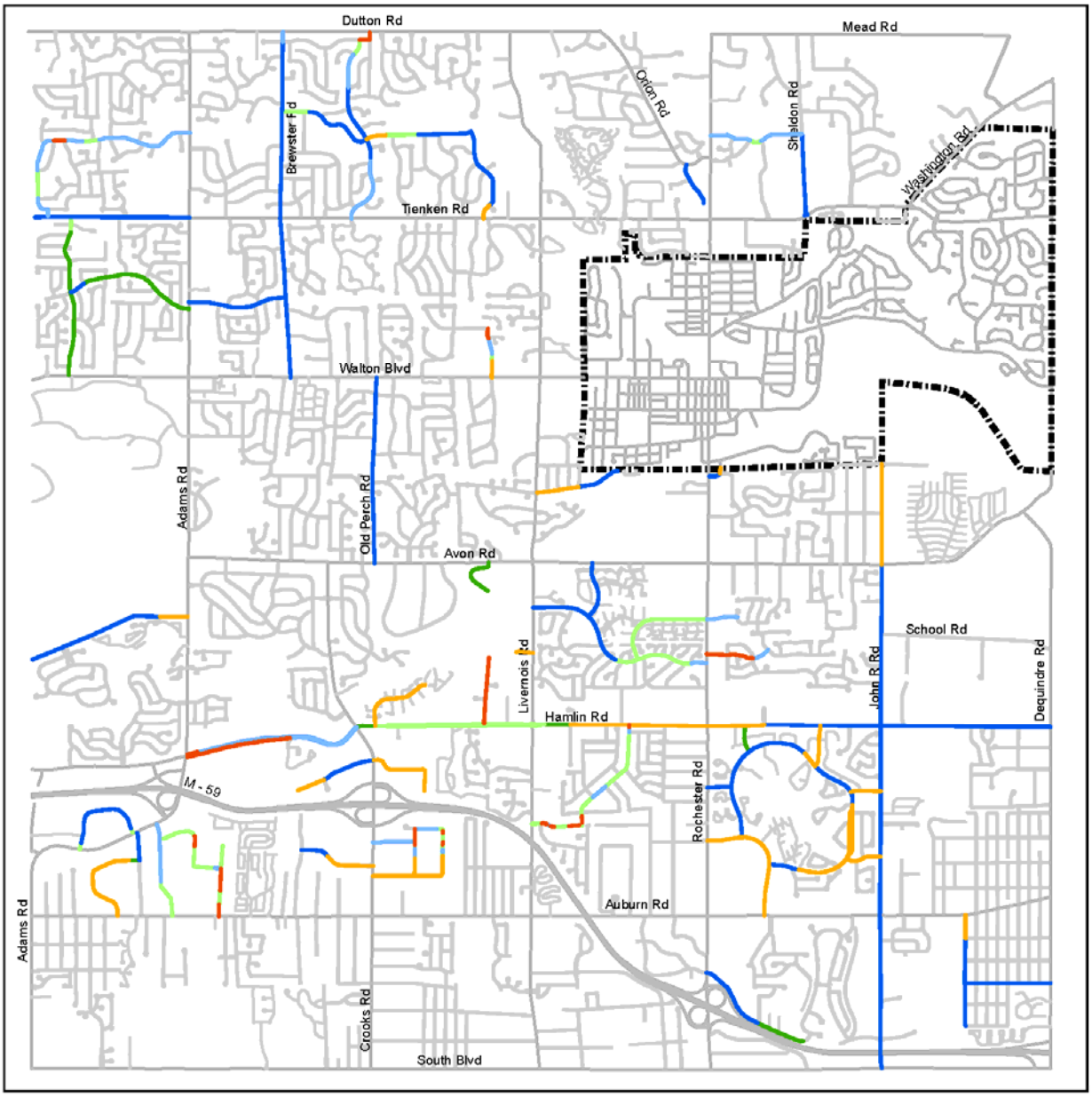
The City receives many traffic related concerns from subdivision homeowner's associations (HOA) regarding speeding through residential streets. After performing in-depth traffic studies, City staff bring forth recommendations to the Advisory Traffic and Safety Board (ATSB). Often speed humps or other traffic calming devices are recommended as a solution. This program would allow for 'seed' money to offer a 50/50 match between the HOA and the City to provide assistance for the implementation of approximately twenty (20) traffic-calming devices per year along residential streets. This program is proposed to be funded at a City share of $25,000 per year and is on-going.

LS-13	School Road Paving (John R Road – 1,700’ Eastbound)		
Estimated Total Project:	$360,500	2018-2019	
Estimated City Cost:	$287,600	Estimated City Share:	100 / 73%

Pave approximately 1,700’ of School Road from John R Road easterly to the existing pavement at the culvert crossing. The road is currently gravel. As part of the Harvard Place PUD agreement, the developer will contribute 1/2 of the road cost for the portion across the development's 900’ of frontage. This equates to an approximate 27 percent contribution of the project cost. The proposed road cross section is 22’ of travel width with shoulders. A future proposed project would also construct a passing lane for southbound John R Road to turn left onto School Road. Operating costs are anticipated to decrease for a period of time by approximately $1,000 per year due to gravel road grading/chloriding operations being eliminated. Construction is planned to begin in 2019.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
City Map – Major Road Conditions



2014 MAJOR ROAD CONDITIONS
(PUBLIC PAVED ROADS)

1-4 (POOR)

Asphalt	7.72 mi	> 26%
Concrete	2.12 mi	

5-7 (FAIR)

Asphalt	18.05 mi	> 55%
Concrete	5.09 mi	

8-10 (GOOD)

Asphalt	2.65 mi	> 19%
Concrete	5.88 mi	
	41.50 mi	

Others

City of Rochester

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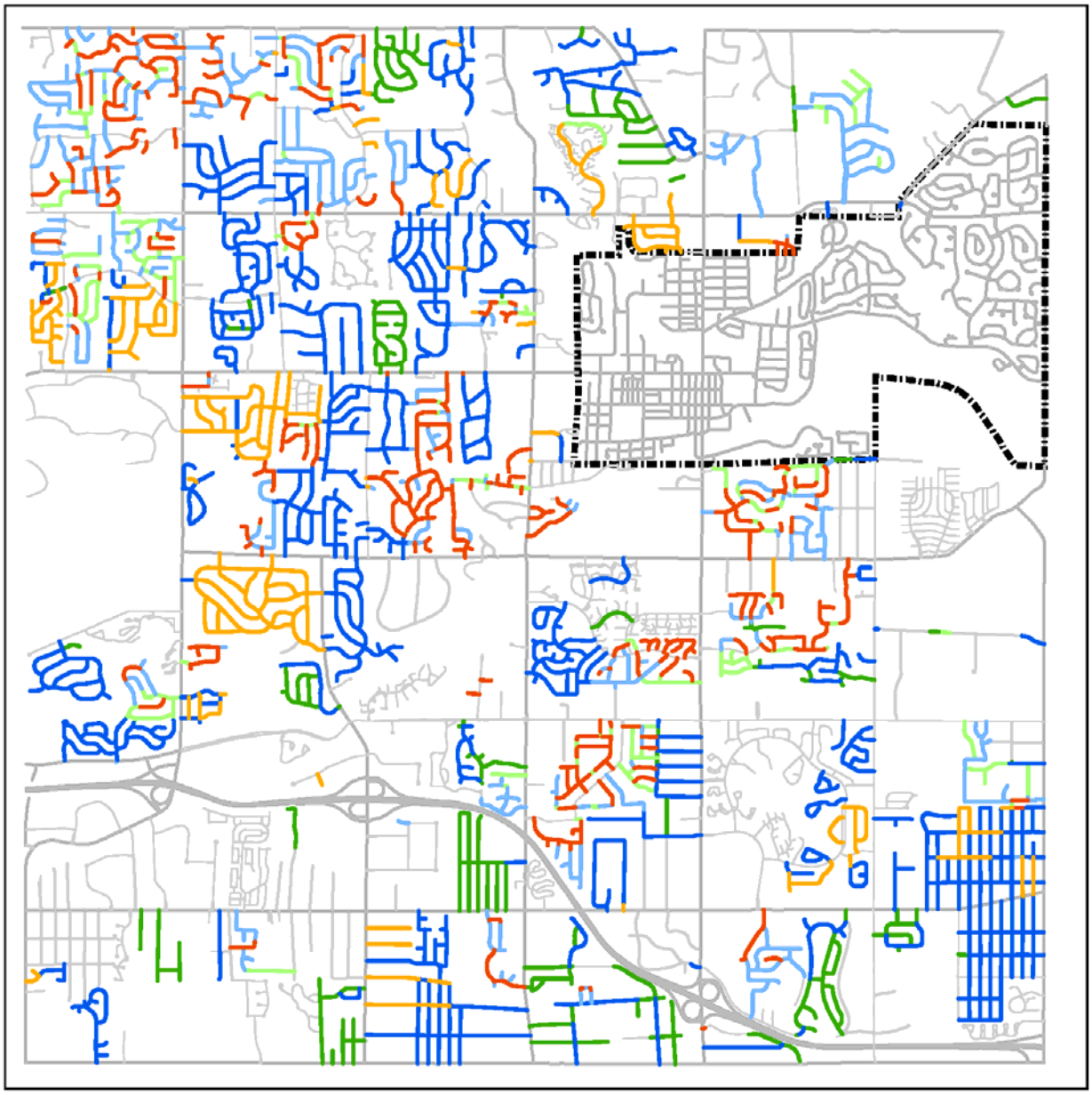
Note: ACT 51 mileage is 38.61 centerline miles.
Roadsoft ACT 51 mileage includes both sides of Hamlin Rd boulevard and cross overs in total mileage.

2016-2021 Capital Improvement Plan
City Map – Local Street Conditions



2014 LOCAL ROAD CONDITIONS
(PUBLIC PAVED ROADS)

1-4 (POOR)

Asphalt	21.97 mi	> 25%
Concrete	26.17 mi	

5-7 (FAIR)

Asphalt	79.28 mi	> 57%
Concrete	29.84 mi	

8-10 (GOOD)

Asphalt	21.71 mi	> 18%
Concrete	13.26 mi	
	192.22 mi	

Others

City of Rochester

N

Notes:
1) Actual travel length (214.22 miles)
2) ACT 51 certified length (195.26 miles)
3) Roadsoft length (192.22 miles)

2016-2021 Capital Improvement Plan
City Map – Local Street Conditions

2014 = Local Streets in Poor Condition (PASER Rating between 1 - 4)

Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Abington Ct	Tower Hill Ln	Dead End or Start	4: Poor	264	Concrete
Alsdorf	Crooks Rd	Alida	4: Poor	1,616	Asphalt
Alsdorf	Samuel	Mildred	4: Poor	338	Asphalt
Alsdorf	Mildred	Cone	4: Poor	306	Asphalt
Antler Ct	Stag Rdg	Dead End or Start	3: Poor	322	Concrete
Antoinette Dr	Rose Brier Dr	Pepper Tree Ln	4: Poor	855	Asphalt
Antoinette Dr	Pepper Tree Ln	Old Tree Ct	3: Poor	312	Asphalt
Antoinette Dr	Old Tree Ct	Raintree Dr	3: Poor	628	Asphalt
Aquinas	Bellarmine	Donegal	4: Poor	385	Asphalt
Aquinas	Donegal	Gunder	2: Very Poor	422	Asphalt
Aquinas	Gunder		2: Very Poor	227	Asphalt
Aquinas		Raintree Dr	4: Poor	444	Asphalt
Arlington Dr	Dalton Dr	Bolinger	4: Poor	327	Concrete
Arlington Dr	Bolinger	Whitney Dr	4: Poor	312	Concrete
Arlington Dr	Whitney Dr		4: Poor	137	Concrete
Arlington Dr	Whitney Dr		4: Poor	491	Concrete
Arlington Dr		Dalton Dr	4: Poor	317	Concrete
Arlington Dr			4: Poor	327	Concrete
Arms Ct	Thames Dr	Dead End or Start	4: Poor	618	Concrete
Avoncrest Dr	Old Perch Rd		3: Poor	63	Asphalt
Avonstoke Rd		W Hamlin Rd	3: Poor	391	Concrete
Axford Pl		Winry	3: Poor	26	Asphalt
Aynsley Dr	Kingspath Dr	Wedgewood Dr	3: Poor	401	Concrete
Barneswood Ct	Barneswood Ln	Dead End or Start	4: Poor	359	Asphalt
Barneswood Ln	Barneswood Ct	W Fairview Ln	4: Poor	871	Asphalt
Baylor	Croydon Rd	Campus	3: Poor	1,410	Concrete
Beacon Hill Dr	Beacon Hill Ct	Langley Rd	4: Poor	449	Concrete
Beacon Hill Dr		Beacon Hill Ct	4: Poor	227	Concrete
Beacon Hill Dr			4: Poor	269	Concrete
Beechcrest	Adams Rd	Paddington Ct	4: Poor	275	Asphalt
Bellarmine	Walton Blvd		3: Poor	475	Asphalt
Bembridge Dr	Pembroke Dr		4: Poor	32	Concrete
Bembridge Dr	Preswick	E Avon Rd	3: Poor	42	Concrete
Bembridge Dr		Preswick	3: Poor	528	Concrete
Bevington	Portsmouth	Kingsford	3: Poor	1,637	Asphalt
Bevington	Kingsford	Christian Hills	3: Poor	1,014	Asphalt
Bevington	Christian Hills	N Bretton Dr & Crooks Rd	3: Poor	333	Asphalt
Biggers	Bridgestone Dr	Allston	4: Poor	470	Asphalt
Bolinger	Dalton Dr		4: Poor	517	Concrete
Bolinger	Arlington Dr		3: Poor	169	Concrete
Bolinger		Arlington Dr	4: Poor	634	Concrete
Bourbon Ct	Coldiron Dr	Dead End or Start	3: Poor	808	Concrete
Bowdoin Hill	Hillendale Dr	Bowdoin Hill Ct	4: Poor	713	Asphalt
Bowdoin Hill	Bowdoin Hill Ct	Rhineberry	4: Poor	591	Asphalt
Bowdoin Hill Ct	Bowdoin Hill	Dead End or Start	3: Poor	713	Asphalt
Box Canyon		Dead End or Start	3: Poor	180	Concrete
Braeburn	Randolph	W Maryknoll	4: Poor	132	Asphalt
Brandon Ct	Englewood Dr		4: Poor	702	Concrete
Brandon Ct		Dead End or Start	2: Very Poor	232	Concrete
Brilliance	Rockhaven	Empire Dr	4: Poor	206	Concrete
Brilliance	Empire Dr	Honor Dr	4: Poor	417	Concrete
Brittany Ct	Springwood Ln	Dead End or Start	3: Poor	486	Concrete
Bromley Ln	N Kilburn Rd	Chelsea Ct	4: Poor	269	Concrete
Bromley Ln	Chelsea Ct	Dead End or Start	3: Poor	259	Concrete
Brookfield Ct	Grandview	Dead End or Start	4: Poor	69	Asphalt
Burgoyne	S Livernois Rd	S Livernois Rd	2: Very Poor	322	Asphalt
Burlington Dr	Salem Dr		3: Poor	401	Concrete
Burlington Dr		Dead End or Start	3: Poor	333	Concrete
Cal Ave	Gerald	Melvin	4: Poor	285	Concrete
Cal Ave	Culbertson	Emmons	4: Poor	312	Asphalt
Cal Ave	Eastern	Gerald	4: Poor	79	Asphalt
Campus	Old Perch Rd		3: Poor	840	Asphalt
Campus	Campus Ct	Baylor	3: Poor	364	Concrete
Campus	Baylor	Lake Forest	3: Poor	407	Concrete
Campus		Campus Ct	3: Poor	591	Concrete
Campus Ct	Campus	Dead End or Start	3: Poor	296	Concrete
Canterbury Trl	Chalet Dr		4: Poor	169	Concrete
Canterbury Trl	Hillendale Dr	Hillendale Dr	4: Poor	1,130	Asphalt
Canterbury Trl	Hillendale Dr	Walton Blvd	4: Poor	42	Asphalt
Canterbury Trl		Hillendale Dr	4: Poor	42	Asphalt
Canterbury Trl			4: Poor	79	Asphalt
Cascade Cir			3: Poor	90	Concrete
Cascade Cir			4: Poor	312	Concrete
Catalpa	City/Twp Line	Red Oak & Catalpa Ct	4: Poor	132	Concrete
Catalpa	Red Oak & Catalpa		4: Poor	216	Concrete
Cedaredge	Ridgecrest		4: Poor	470	Asphalt
Chaffer Dr	Royal Doulton Blvd & Cobridge Dr		3: Poor	718	Concrete
Chaffer Dr	Aynsley Dr	Wedgewood Dr	3: Poor	280	Concrete
Chalet Dr	Dead End or Start	Kimberly Fair	3: Poor	523	Concrete
Chalet Dr	Kimberly Fair	Canterbury Trl	4: Poor	317	Concrete
Chalet Dr	Canterbury Trl		3: Poor	618	Concrete
Chancery Ct	N Kilburn Rd	Dead End or Start	3: Poor	222	Concrete
Chelsea Ct	Bromley Ln	Dead End or Start	3: Poor	665	Concrete
Cherrywood Ln	Crestwood		4: Poor	164	Concrete
Cherrywood Ln		Falcon Dr & Cherrywood Ct	3: Poor	982	Concrete
Christian Hills	S Christian Hills Dr & New England	Glouchester	3: Poor	1,167	Asphalt
Christian Hills	Glouchester	Concord	4: Poor	454	Asphalt
Christian Hills	Concord	Portsmouth	3: Poor	1,579	Asphalt
Christian Hills	Portsmouth		3: Poor	396	Asphalt
Christian Hills	Bevington	Green Ridge Rd	4: Poor	1,156	Asphalt
Christian Hills	Green Ridge Rd	Green Ridge Rd	4: Poor	121	Asphalt
Christian Hills		Bevington	2: Very Poor	581	Asphalt
Christian Hills	Christian Hills	Crooks Rd & S Bretton Dr	4: Poor	1,204	Asphalt
Clear Point Ct	Grandview	Dead End or Start	4: Poor	502	Asphalt
Clopton Brg	W Tienken Rd	Chippenham Chase	4: Poor	343	Concrete
Clovelly	Weaverton	Bridget	3: Poor	322	Asphalt
Clovelly	Bridget	Culbertson	4: Poor	338	Asphalt
Clovelly	Culbertson	Emmons	4: Poor	327	Asphalt
Clovelly	Emmons	Longview	4: Poor	333	Asphalt
Clovelly	Longview	Harrison	4: Poor	327	Asphalt
Cobridge Ct	Cobridge Dr	Dead End or Start	3: Poor	222	Concrete
Cobridge Dr	Royal Doulton Blvd & Chaffer Dr	Cobridge Ct	4: Poor	523	Concrete
Cobridge Dr	Baroque Ct	Wedgewood Dr	4: Poor	449	Concrete
Colony Ct E	Colony Dr	Dead End or Start	2: Very Poor	158	Concrete
Colony Ct W	Colony Dr	Dead End or Start	3: Poor	148	Concrete
Colony Dr	Glen Meadow Ct	Colony Ct E	2: Very Poor	618	Concrete
Colony Dr	Colony Ct E	Drexelgate Pkwy	2: Very Poor	391	Concrete
Colony Dr	Drexelgate Pkwy	Colony Ct W	3: Poor	333	Concrete
Colony Dr	Colony Ct W	Glen Meadow Ct	3: Poor	428	Concrete
Concord	Green Ridge Rd	S Christian Hills Dr	3: Poor	729	Asphalt
Concord	S Christian Hills Dr	New England	4: Poor	417	Asphalt
Concord	New England	Portsmouth	2: Very Poor	137	Asphalt
Concord	Portsmouth	Glouchester	2: Very Poor	755	Asphalt
Concord	Glouchester	Christian Hills	3: Poor	866	Asphalt
Courtfield	Lexham Ln		4: Poor	391	Concrete
Crestline Ct	Crestline	Crestline Ct @ Crestline	2: Very Poor	37	Concrete
Crestline Ct	Cul-de-sac	Dead End or Start	3: Poor	58	Concrete
Croydon Rd	Lake Forest	Spartan Dr	3: Poor	206	Concrete
Croydon Rd	Spartan Dr	Dead End or Start	4: Poor	454	Concrete
Croydon Rd		Lake Forest	3: Poor	37	Concrete
Croydon Rd		Baylor	3: Poor	781	Concrete
Culbertson	Clovelly	Morley	4: Poor	512	Asphalt
Culbertson	Morley	Frankson	4: Poor	253	Asphalt
Culbertson	Frankson	Cal Ave	4: Poor	53	Asphalt
Cypress		Sumac Dr	2: Very Poor	1,241	Concrete
Dalton Dr	Arlington Dr	Hadley Rd	4: Poor	285	Concrete
Dalton Dr	Hadley Rd		4: Poor	1,742	Concrete
Dartmouth Dr	Sandhurst	Baker St & Hampton Cir	4: Poor	348	Asphalt
Dawson Dr	Cumberland Dr	Highsplint Dr	4: Poor	180	Concrete
Deerfield Ct	Springwood Ln	Dead End or Start	3: Poor	333	Concrete
Devonwood		Foresthill Dr	4: Poor	1,589	Concrete
Donegal	Bellarmine	Aquinas	4: Poor	375	Asphalt
Dorfield	Briston Dr	Wortham	4: Poor	1,035	Asphalt
Dorfield	Wortham	Wortham	4: Poor	1,056	Asphalt
E Horseshoe Bnd	Barneswood Ln	Whispering Knoll & E Horseshoe Bnd	4: Poor	1,288	Asphalt
E Maryknoll	Maryknoll Ct & W Maryknoll	Randolph	3: Poor	375	Asphalt
E Maryknoll	Randolph	Hillendale Dr	4: Poor	1,267	Asphalt
E Maryknoll	Hillendale Dr	Walton Blvd	4: Poor	1,109	Asphalt
E Maryknoll		Maryknoll Ct & E Maryknoll	3: Poor	95	Asphalt
Eagle Ct	Eagle Dr	Dead End or Start	3: Poor	681	Concrete
Eagle Dr	Dead End or Start	Eagle Ct	3: Poor	285	Concrete
Eagle Dr	Eagle Ct	Pheasant Ring Dr	3: Poor	248	Concrete
Edinborough Dr		Salem Dr	4: Poor	660	Concrete
Edmunton Dr	Hartford Ct	Salem Dr	3: Poor	1,014	Concrete

2016-2021 Capital Improvement Plan
City Map – Local Street Conditions

2014 = Local Streets in Poor Condition (PASER Rating between 1 - 4)

Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Edmunton Dr	Salem Dr	McCormick Dr	3: Poor	264	Concrete
Edmunton Dr		Salem Dr	2: Very Poor	871	Concrete
Emmons	Morley	Cal Ave	4: Poor	280	Asphalt
Englewood Dr	Brandon Ct		4: Poor	760	Concrete
Englewood Dr			3: Poor	607	Concrete
Essex Dr	Grosvenor Dr	Saxon Ct	4: Poor	48	Concrete
Essex Dr	Eddington		3: Poor	755	Concrete
Essex Dr	Lexington Dr	Pembroke Dr	3: Poor	327	Concrete
Essex Dr	Pembroke Dr		3: Poor	280	Concrete
Essex Dr		Lexington Dr	3: Poor	354	Concrete
Essex Dr			3: Poor	190	Concrete
Fair Oak Dr	Yale Ct	Dead End or Start	3: Poor	100	Concrete
Fawn Ct	Stag Rdg	Dead End or Start	4: Poor	190	Concrete
Fielding Dr	Drexelgate Pkwy	Glenbrooke Ct	2: Very Poor	201	Concrete
Fielding Dr	Glenbrooke Ct	Meadowfield Dr	2: Very Poor	433	Concrete
Flanders Dr	Highsplint Dr		3: Poor	190	Concrete
Ford Croft Dr	Stonetree Cir	Raintree Dr	3: Poor	671	Concrete
Forest View Ct	Woodfield Way		3: Poor	966	Concrete
Foresthill Dr	Devonwood	Pleasant View Dr	3: Poor	116	Concrete
Fox Woods Ln		Woodfield Way	3: Poor	1,294	Concrete
Fulham Dr	Tottenham Ct & Fulham Dr	Brompton Ct	4: Poor	275	Concrete
Fulham Dr	Brompton Ct	S Livernois Rd & Sierra Blvd	3: Poor	792	Concrete
Fulham Dr	Lexham Ln	Fulham Ct	4: Poor	211	Concrete
Fulham Dr	Fulham Ct	Brompton Rd & Tottenham Ct	4: Poor	216	Concrete
Gallaland	Pioneer Dr	Dead End or Start	4: Poor	539	Concrete
Glen Meadow Ct	Colony Dr	Glen Meadow Ct to CulDeSac	3: Poor	1,125	Concrete
Glen Meadow Ct	Glen Meadow Ct to CulDeSac	Dead End or Start	2: Very Poor	227	Concrete
Glouchester	Concord	Christian Hills	3: Poor	285	Asphalt
Glouchester	Christian Hills	W Avon Rd	4: Poor	422	Asphalt
Grace		Dead End or Start	0: Not Rated	74	Asphalt
Green Ridge Rd	Christian Hills	Bunker Hill	4: Poor	454	Asphalt
Green Ridge Rd	Bunker Hill	Concord	4: Poor	803	Asphalt
Green Ridge Rd	Concord	S Christian Hills Dr	4: Poor	285	Asphalt
Green Ridge Rd	S Christian Hills Dr	Christian Hills	4: Poor	517	Asphalt
Greenleaf Dr		Rochdale	3: Poor	312	Concrete
Greenleaf Dr			3: Poor	502	Concrete
Greenspring Ln			4: Poor	174	Concrete
Greenspring Ln			4: Poor	227	Concrete
Grosvenor Dr	Harvard Dr	intersection Grosvenor&Harvard	3: Poor	760	Concrete
Grosvenor Dr	intersection bad	Harvard Dr	3: Poor	95	Concrete
Grovecrest	Slumber	Misty Brook Ln	4: Poor	5	Concrete
Gunder	Bellarmine	Gunder Ct	4: Poor	5	Asphalt
Gunder	Gunder Ct	Tammaron Dr	4: Poor	470	Asphalt
Gunder	Tammaron Dr	Aquinas	4: Poor	581	Asphalt
Gunder Ct	Gunder	Dead End or Start	3: Poor	876	Asphalt
Hadley Rd	E Avon Rd	Dalton Dr	3: Poor	818	Concrete
Harlan Ct	Warrington Rd	Flanders Dr	3: Poor	370	Concrete
Harlan Ct	Flanders Dr	Dead End or Start	4: Poor	882	Concrete
Harvard Dr	Grosvenor Dr	intersection Harvard& Grosvenor	3: Poor	296	Concrete
Harvard Dr	intersection Harvard& Grosvenor	intersection Harvard& Grosvenor	3: Poor	216	Concrete
Harvard Dr	intersection Harvard& Grosvenor	Saxon Ct	4: Poor	26	Concrete
Hayfield	W Tienken Rd		3: Poor	5	Concrete
Heatherwood Ct	Pepper Tree Ln	Dead End or Start	2: Very Poor	734	Asphalt
Heritage Hill Ct	Dutton Rd		2: Very Poor	74	Asphalt
Heritage Hill Ct		Dead End or Start	2: Very Poor	290	Concrete
Hessel	E Auburn Rd	Dawes	3: Poor	21	Asphalt
Hessel	Dawes	Clovelly	4: Poor	153	Asphalt
Hidden Ln	Springwood Ln	Dead End or Start	4: Poor	375	Concrete
Highsplint Dr	Kentucky Dr	Flanders Dr	3: Poor	776	Concrete
Highsplint Dr	Flanders Dr		4: Poor	697	Concrete
Highsplint Dr	Warrington Rd		3: Poor	496	Concrete
Highsplint Dr	Dawson Dr		3: Poor	290	Concrete
Highsplint Dr		Dead End or Start	3: Poor	412	Concrete
Highsplint Dr		Warrington Rd	3: Poor	422	Concrete
Highsplint Dr		Dawson Dr	3: Poor	148	Concrete
Hillcrest Dr	Pleasant View Dr	Devonwood	3: Poor	253	Concrete
Hillcrest Dr	Devonwood		4: Poor	428	Concrete
Hillendale Dr	Adams Rd & Meadowbrook Rd	Vreeland	4: Poor	253	Asphalt
Hillendale Dr	Vreeland	Bowdoin Hill	4: Poor	343	Asphalt
Hillendale Dr	Bowdoin Hill	W Maryknoll	4: Poor	913	Asphalt
Hillendale Dr	W Maryknoll	Randolph	4: Poor	385	Asphalt
Hillendale Dr	Randolph	E Maryknoll	3: Poor	396	Asphalt
Hillendale Dr	E Maryknoll	Canterbury Trl	4: Poor	1,299	Asphalt
Hillendale Dr	Canterbury Trl	Longford	4: Poor	412	Asphalt
Hillside Ln	Hillside to Sandalwood	Drexelgate Pkwy	3: Poor	375	Concrete
Hillside Ln	Hillside to Sandalwood	Hillside to Sandalwood	3: Poor	1,003	Concrete
Holiday Ct	Summit Rdg	Dead End or Start	3: Poor	544	Concrete
Hollenshade	Olympia Dr	Muirwood Ct	4: Poor	190	Concrete
Huntington Ct	Stonecrest Dr	Dead End or Start	3: Poor	359	Concrete
Innsbrook Dr	Innsbrook Ct	Raintree Dr	4: Poor	950	Asphalt
Ivy Wood Ct	Arlington Dr	Dead End or Start	3: Poor	306	Concrete
Jason Cir	Snowden Cir	Quincy Dr	4: Poor	797	Concrete
Jason Cir	Quincy Dr	Annchester Ct	3: Poor	459	Concrete
June	Crooks Rd	Dead End or Start	4: Poor	253	Asphalt
Kentucky Dr		Cumberland Dr	4: Poor	285	Concrete
Kentucky Dr		Cumberland Dr	4: Poor	1,315	Concrete
Kilburn Ct	N Kilburn Rd	Dead End or Start	4: Poor	887	Concrete
Kimberly Fair	Chalet Dr		4: Poor	491	Concrete
Kimberly Fair			3: Poor	570	Concrete
Kings Cove Dr	W Tienken Rd	Paint Creek Ln	4: Poor	507	Asphalt
Kings Cove Dr	Paint Creek Ln	Brook Side Ct	4: Poor	53	Asphalt
Kings Cove Dr	Brook Side Ct	Cove Ln	4: Poor	169	Asphalt
Kings Cove Dr	Cove Ln	Pine Ridge Ct	4: Poor	634	Asphalt
Kings Cove Dr	Pine Ridge Ct	Candlestick Ln	4: Poor	602	Asphalt
Kings Cove Dr	Candlestick Ln	Kings Cove Ct	4: Poor	211	Asphalt
Kings Cove Dr	Kings Cove Ct		4: Poor	169	Asphalt
Kings Cove Dr		Knights Ridge Ct	3: Poor	58	Asphalt
Kings Cove Dr	Knights Ridge Ct	Windmill Ct	3: Poor	169	Asphalt
Kings Cove Dr	Windmill Ct	Crescent Ln	3: Poor	206	Asphalt
Kings Cove Dr	Crescent Ln	Crescent Ln	3: Poor	111	Asphalt
Kings Cove Dr	Crescent Ln		3: Poor	42	Asphalt
Kings Cove Dr		Lamplighter Ln	4: Poor	232	Asphalt
Kings Cove Dr	Lamplighter Ln	Wagon Wheel Ln	4: Poor	37	Asphalt
Kings Cove Dr	Wagon Wheel Ln	Saddle Ln & Autumn Ln	4: Poor	158	Asphalt
Kings Cove Dr	Saddle Ln & Autumn Ln	Hidden Valley Ln	4: Poor	143	Asphalt
Kings Cove Dr	Hidden Valley Ln	Paddle Wheel Ln	4: Poor	201	Asphalt
Kings Cove Dr	Paddle Wheel Ln	Gas Light Ln	4: Poor	269	Asphalt
Kings Cove Dr	Gas Light Ln	Lantern Ln	4: Poor	42	Asphalt
Kings Cove Dr	Lantern Ln	Carriage Ln	4: Poor	232	Asphalt
Kings Cove Dr	Carriage Ln	Ravine & Surrey Ln	3: Poor	90	Asphalt
Kings Cove Dr			3: Poor	121	Asphalt
Kings Cove Dr	Kings Cove Dr & Ravine		3: Poor	407	Asphalt
Kings Cove Dr			3: Poor	296	Asphalt
Kingsford	Portsmouth	Bevington	2: Very Poor	222	Asphalt
Kingspath Dr	Hollenshade	Sherborn Dr	4: Poor	238	Concrete
Kingsview	Springwood Ln		3: Poor	16	Concrete
Kirkton Ct		Dead End or Start	3: Poor	100	Concrete
Knollcrest	Longford		3: Poor	1,140	Concrete
Lake Forest	Croydon Rd	Rutgers	3: Poor	607	Concrete
Lake Forest	Rutgers	Campus	3: Poor	238	Concrete
Lake Forest	Campus	Lake Forest Ct	4: Poor	211	Concrete
Lake Forest	Lake Forest Ct	Bucknell Ct	3: Poor	32	Concrete
Lake Forest	Bucknell Ct	Spartan Dr	4: Poor	285	Concrete
Lake Forest	Sumac Dr	Ansal	4: Poor	280	Concrete
Lake Forest	Ansal	Spartan Dr	3: Poor	692	Concrete
Lake Forest		Sumac Dr	4: Poor	306	Concrete
Lake Forest			3: Poor	185	Concrete
Lambeth Park	Brewster Rd		4: Poor	781	Concrete
Lambeth Park		Dead End or Start	4: Poor	570	Concrete
Langley Ct	Langley Rd	Dead End or Start	4: Poor	211	Concrete
Langley Rd	Beacon Hill Dr	Langley Ct	4: Poor	327	Concrete
Langley Rd	Langley Ct	Lassiter Dr	3: Poor	544	Concrete
Lassiter Dr			4: Poor	296	Concrete
Lexington Dr	Ternbury Dr	Essex Dr	4: Poor	882	Concrete
Lion St	Hampton Cir	Hampton Cir	4: Poor	539	Asphalt
Live Oak Dr	Ulster	Munster	4: Poor	1,410	Concrete
Live Oak Dr	Munster	Dead End or Start	4: Poor	1,214	Concrete
Lockport Rd			3: Poor	333	Concrete
Long Meadow Ln		Long Meadow Ln & Twin Oaks Ct	4: Poor	781	Concrete
Long Meadow Ln	Twin Oaks Ct	Woodfield Way	4: Poor	296	Concrete
Longford	Chalet Dr	Hillendale Dr	4: Poor	908	Asphalt
Longford	Hillendale Dr	Dead End or Start	4: Poor	269	Asphalt
Longford	Knollcrest	Chalet Dr	3: Poor	401	Concrete
Longford		Knollcrest	3: Poor	259	Concrete

2016-2021 Capital Improvement Plan
City Map – Local Street Conditions

2014 = Local Streets in Poor Condition (PASER Rating between 1 - 4)

Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Maple	City/Twp Line	Red Oak	3: Poor	866	Concrete
Maryknoll Ct	Ulster	Dead End or Start	3: Poor	238	Concrete
Mayapple Ct	Daylily Dr	Dead End or Start	4: Poor	190	Concrete
Meadowbrook Dr	Adams Rd	Country Club Dr	3: Poor	354	Concrete
Meadowbrook Dr	Country Club Dr	Trailwood Dr	3: Poor	496	Concrete
Meadowbrook Dr		Walton Blvd	3: Poor	502	Concrete
Melvin	Clovelly	Dawes	4: Poor	290	Asphalt
Melvin	Dawes	E Auburn Rd	4: Poor	63	Asphalt
Michele Ct	Charlwood	Dead End or Start	3: Poor	781	Concrete
Michelson	S Rochester Rd		4: Poor	444	Concrete
Middlebury	Plum Ridge Dr	Plum Ridge Dr	4: Poor	333	Asphalt
Millbrook Ct	Grandview		3: Poor	90	Concrete
Millbrook Ct			3: Poor	845	Concrete
Millbrook Ct		Dead End or Start	4: Poor	79	Concrete
Monica Ct	Charlwood	Dead End or Start	4: Poor	106	Concrete
Morley	Culbertson	Emmons	4: Poor	90	Asphalt
Morley	Emmons	Longview	3: Poor	544	Asphalt
Morley	Longview	Harrison	3: Poor	327	Asphalt
Morley	Harrison	Eastern	2: Very Poor	327	Asphalt
Muirwood Ct	Hollenshade	Dead End or Start	4: Poor	333	Concrete
N Kilburn Rd	N Adams Rd	Woodford Cir	4: Poor	327	Concrete
N Oak	City/Twp Line	Winry	3: Poor	348	Asphalt
N Rolling Green Cir	Raintree Dr	S Rolling Green Cir	3: Poor	312	Asphalt
New England	Christian Hills & S Christian Hills Dr	Concord	3: Poor	164	Asphalt
New Kent Rd	N Kilburn Rd	Lambeth Park	4: Poor	972	Concrete
New Love Ln	N Livernois Rd	Dead End or Start	2: Very Poor	2,508	Asphalt
Notre Dame Rd	Spartan Dr	Ten Point Dr	3: Poor	586	Concrete
Oak View Ct	Woodfield Way	Dead End or Start	3: Poor	512	Concrete
Oakrock	Rochdale		3: Poor	322	Concrete
Oakrock		Dead End or Start	3: Poor	206	Asphalt
Old Homestead	Merriweather	Salem Dr	2: Very Poor	185	Concrete
Old Homestead		Merriweather	4: Poor	100	Concrete
Old Ridge Ct	Rose Brier Dr	Dead End or Start	3: Poor	148	Asphalt
Old Tree Ct	Antoinette Dr	Dead End or Start	3: Poor	845	Asphalt
Orchardale		Walton Blvd	4: Poor	407	Concrete
Paddington Ct	Beechcrest	Dead End or Start	4: Poor	243	Asphalt
Parkland Dr	Parkland to Sandalwood	Drexelgate Pkwy	3: Poor	48	Concrete
Parsons Ln			3: Poor	253	Concrete
Parsons Ln		Whitney Dr	4: Poor	296	Concrete
Pembroke Dr	Essex Dr	Bembridge Dr	4: Poor	771	Concrete
Pembroke Dr	Bembridge Dr	Tewksbury Ct	2: Very Poor	111	Concrete
Pembroke Dr	Tewksbury Ct	Dead End or Start	2: Very Poor	1,030	Concrete
Pepper Tree Ln	Rose Brier Dr	Worthington Ct	3: Poor	649	Asphalt
Pepper Tree Ln	Worthington Ct	Heatherwood Ct	3: Poor	164	Asphalt
Pepper Tree Ln	Heatherwood Ct	Antoinette Dr	4: Poor	195	Asphalt
Pheasant Ring Ct	Pheasant Ring Dr	Dead End or Start	3: Poor	312	Concrete
Pheasant Ring Dr	Pheasant Ring Ct	Eagle Dr	3: Poor	380	Concrete
Pine	Winry	Reitman	3: Poor	153	Asphalt
Pine	Reitman	Thalia	3: Poor	1,251	Asphalt
Pine	Thalia	Tienken Ct & W Tienken Rd	3: Poor	343	Asphalt
Pinehurst Dr	Tammaron Dr	Tammaron Dr	3: Poor	327	Asphalt
Pinehurst Dr	Tammaron Dr	Raintree Dr	3: Poor	708	Asphalt
Pinehurst Dr	Raintree Dr	Doral Dr	3: Poor	222	Concrete
Pleasant View Dr	Foresthill Dr	Grandview	3: Poor	602	Concrete
Plum Ridge Dr	Hidden Creek Ct	Middlebury	4: Poor	1,140	Asphalt
Plum Ridge Dr	Middlebury	Firewood Dr	4: Poor	290	Asphalt
Poco Ct	Winchester	Dead End or Start	3: Poor	253	Concrete
Portage Trl	Rapids Way	Current	4: Poor	449	Asphalt
Portsmouth	Concord	Bevington	2: Very Poor	977	Asphalt
Portsmouth	Bevington	Kingsford	3: Poor	375	Asphalt
Portsmouth	Kingsford	Christian Hills	3: Poor	496	Asphalt
Portsmouth	Christian Hills	W Avon Rd	3: Poor	549	Asphalt
Preswick	Bembridge Dr		3: Poor	449	Concrete
Primrose Ct	Primrose Dr	Dead End or Start	4: Poor	285	Concrete
Primrose Dr	Primrose Ct	Goldenrod Dr	4: Poor	127	Concrete
Primrose Dr	Goldenrod Dr	E Auburn Rd	4: Poor	1,146	Concrete
Priscilla Ln	Stoodleigh	S Christian Hills Dr	4: Poor	533	Asphalt
Prospect Dr	Cumberland Dr	Elkhorn Dr	3: Poor	792	Concrete
Prospect Dr	Elkhorn Dr		4: Poor	312	Concrete
Quail Ridge Cir	Glengrove Dr	Park Creek Ct	4: Poor	195	Concrete
Quincy Dr	Jason Cir	Salem Dr	4: Poor	808	Concrete
Randolph	E Maryknoll	Braeburn	4: Poor	972	Asphalt
Randolph	Braeburn	Hillendale Dr	4: Poor	517	Asphalt
Randolph	Hillendale Dr	Rhineberry	4: Poor	1,045	Asphalt
Rapids Way	Portage Trl	Current	4: Poor	892	Asphalt
Rapids Way	Current	River Trl	4: Poor	465	Asphalt
Ravine Terrace Ct	Ravine Terrace Dr	Dead End or Start	3: Poor	312	Concrete
Ravine Terrace Dr	S Livernois Rd	Ravine Terrace Ct	4: Poor	449	Concrete
Ravine Terrace Dr	Ravine Terrace Ct	Dead End or Start	4: Poor	496	Concrete
Red Oak	Courtland		4: Poor	285	Asphalt
Red Oak	Sycamore	Catalpa Ct & Catalpa	4: Poor	1,093	Concrete
Red Oak	Catalpa Ct & Catalpa	Maple	3: Poor	269	Concrete
Red Oak		Sycamore	4: Poor	232	Concrete
Reitman	Thalia	Pine	3: Poor	100	Asphalt
Rhineberry	Adams Rd	Vreeland	4: Poor	1,315	Asphalt
Rhineberry	Vreeland	Bowdoin Hill	4: Poor	438	Asphalt
Rhineberry	Bowdoin Hill	W Maryknoll	4: Poor	354	Asphalt
Rhineberry	W Maryknoll	Randolph	4: Poor	903	Asphalt
Ridgecrest	Pleasant View Dr	Fairfield	4: Poor	660	Concrete
Ridgecrest		Cedaredge	4: Poor	602	Asphalt
Ridgefield Ct	Grandview	Dead End or Start	4: Poor	855	Concrete
River Bend Dr	S Livernois Rd	Woodridge Dr	4: Poor	766	Concrete
River Trl	Portage Trl	Dead End or Start	4: Poor	1,600	Asphalt
Rochdale	Oakrock	Streamview Ct	4: Poor	180	Concrete
Rochdale	Streamview Ct	Greenleaf Dr	3: Poor	100	Concrete
Rochester Industrial Ct	Rochester Industrial Dr	Dead End or Start	2: Very Poor	333	Concrete
Rochester Industrial Ln	Rochester Industrial Dr	Dead End or Start	2: Very Poor	338	Concrete
Rocky Crest Dr	Tacoma Dr & Rocky Crest Dr	Dead End or Start	4: Poor	359	Concrete
Rocky Crest Dr	Charlwood	Tacoma Dr	3: Poor	222	Concrete
Rose Brier Dr	Firewood Dr	Pepper Tree Ln	3: Poor	919	Asphalt
Rose Brier Dr	Pepper Tree Ln	Antoinette Dr	3: Poor	1,008	Asphalt
Rose Brier Dr	Antoinette Dr	Old Ridge Ct	4: Poor	824	Asphalt
Rose Brier Dr	Old Ridge Ct	Williamsburg Ct	4: Poor	581	Asphalt
Ruby	Crooks Rd	Alida	4: Poor	454	Asphalt
Ruby	Alida	Samuel	3: Poor	1,621	Asphalt
Ruby	Samuel	Mildred	3: Poor	322	Asphalt
Ruby	Mildred	Cone	3: Poor	327	Asphalt
Rutgers	Lake Forest	Spartan Dr	4: Poor	322	Concrete
S Christian Hills Dr	New England	Stoodleigh	3: Poor	1,373	Asphalt
S Christian Hills Dr	Stoodleigh	Priscilla Ln	2: Very Poor	639	Asphalt
S Christian Hills Dr	Priscilla Ln	Stoodleigh	3: Poor	539	Asphalt
S Christian Hills Dr	Stoodleigh	Concord	3: Poor	987	Asphalt
S Christian Hills Dr	Concord	Green Ridge Rd	3: Poor	966	Asphalt
S Rolling Green Cir	Tammaron Dr	N Rolling Green Cir	3: Poor	993	Asphalt
S Shore Dr	Gerald	East Shore Dr	4: Poor	1,003	Concrete
Salem Ct	Salem Dr	Dead End or Start	4: Poor	496	Concrete
Salem Dr	Burlington Dr	Saratoga Dr	3: Poor	195	Concrete
Salem Dr	Edmunton Dr	Saratoga Dr	3: Poor	597	Concrete
Sandalwood Ct	Sandalwood Ct to CuldeSac	Dead End or Start	2: Very Poor	961	Concrete
Sandalwood Ct		Sandalwood Ct to CuldeSac	4: Poor	121	Concrete
Sandalwood Dr	Drexelgate Pkwy	Parkland Ct	4: Poor	285	Concrete
Sandalwood Dr	Parkland Ct	Sandalwood to Parkland	4: Poor	306	Concrete
Sandhurst	Dead End or Start	Dartmouth Dr	4: Poor	407	Asphalt
Sandhurst	Dartmouth Dr	Abbey Ct	4: Poor	216	Asphalt
Saxon Ct	Dead End or Start	Essex Dr	4: Poor	322	Concrete
Saxon Ct	Essex Dr	Harvard Dr	4: Poor	248	Concrete
Saxon Ct	Harvard Dr	Dead End or Start	4: Poor	296	Concrete
Shellbourne Dr			4: Poor	523	Concrete
Shellbourne Dr		Raintree Dr	3: Poor	201	Concrete
Sherborn Ct	Sherborn Dr	Dead End or Start	4: Poor	185	Concrete
Slade Ct	Winchester	Dead End or Start	3: Poor	517	Concrete
Snowden Cir	Jason Cir	Tacoma Dr	4: Poor	444	Concrete
Snowden Cir	Tacoma Dr	Albany Dr	4: Poor	523	Concrete
Snowden Ct	Salem Dr	Dead End or Start	3: Poor	887	Concrete
Sorbonne	McGill Dr	Dead End or Start	4: Poor	227	Asphalt
Spartan Ct	Spartan Dr & Fair Oak Dr	Dead End or Start	4: Poor	275	Concrete
Spartan Dr	Croydon Rd	Notre Dame Rd	4: Poor	275	Concrete
Spartan Dr	Notre Dame Rd	Rutgers	3: Poor	1,104	Concrete
Spartan Dr	Rutgers	Lake Forest	3: Poor	354	Concrete
Springwood Ln	Springwood Ct		4: Poor	723	Concrete
Springwood Ln	Brittany Ct	Hidden Ln	4: Poor	121	Concrete
Springwood Ln	Hidden Ln		3: Poor	364	Concrete
Stag Rdg	W Avon Rd	Antler Ct	3: Poor	111	Concrete
Stag Rdg	Antler Ct	Fawn Ct	3: Poor	222	Concrete

2016-2021 Capital Improvement Plan
City Map – Local Street Conditions

2014 = Local Streets in Poor Condition (PASER Rating between 1 - 4)

Street	From	To	PASER Rating	Length (Feet)	Pavement Surface
Stag Rdg	Fawn Ct	Ten Point Dr	3: Poor	121	Concrete
Stanford Cir	W Avon Rd		3: Poor	148	Concrete
Stanford Cir	Dead End or Start	Box Canyon	3: Poor	243	Concrete
Stanford Ct	Stanford Cir	Dead End or Start	3: Poor	549	Concrete
Starr Ct	Avon Industrial Dr	Dead End or Start	4: Poor	201	Asphalt
Stonebury Dr	Briston Dr		4: Poor	370	Asphalt
Stonecrest Dr	Drexelgate Pkwy	Huntington Ct	2: Very Poor	327	Concrete
Stonecrest Dr	Huntington Ct	Dead End or Start	3: Poor	232	Concrete
Stonetree Cir			3: Poor	512	Concrete
Stonington Ln	Stonington Ln & Grandview		3: Poor	238	Concrete
Stonington Ln	Devonwood	Grandview & Stonington Ct	4: Poor	544	Asphalt
Stoodleigh	S Christian Hills Dr	Priscilla Ln	3: Poor	338	Asphalt
Stoodleigh	Priscilla Ln		3: Poor	755	Asphalt
Stoodleigh		S Christian Hills Dr	3: Poor	216	Asphalt
Sugar Pine	Tanglewood Dr	Black Maple Dr	3: Poor	1,225	Concrete
Sugar Pine	Black Maple Dr	Walton Blvd	3: Poor	502	Concrete
Sumac Dr	Lake Forest	Cypress	4: Poor	539	Concrete
Sumac Dr	Cypress	Tanglewood Dr	3: Poor	348	Concrete
Summit Ct	Summit Rdg	Dead End or Start	3: Poor	649	Concrete
Summit Rdg	East Pointe Ct	W Kilburn Rd	4: Poor	253	Concrete
Summit Rdg	McCormick Dr	Wales Dr	3: Poor	898	Concrete
Summit Rdg	Wales Dr	Holiday Ct	3: Poor	850	Concrete
Summit Rdg	Holiday Ct	Old Homestead	3: Poor	259	Concrete
Sunbury Ct		Dead End or Start	3: Poor	1,135	Concrete
Sussex Fair	Chalet Dr	Kimberly Fair	3: Poor	739	Concrete
Sussex Fair	Kimberly Fair	Dead End or Start	4: Poor	375	Concrete
Sycamore	City/Twp Line	Red Oak	4: Poor	1,357	Concrete
Tamm	Crooks Rd	Dead End or Start	4: Poor	364	Asphalt
Tammaron Dr	Gunder	S Rolling Green Cir	3: Poor	227	Asphalt
Tammaron Dr	S Rolling Green Cir	Pinehurst Dr	3: Poor	1,051	Asphalt
Tammaron Dr	Pinehurst Dr	Pinehurst Dr	3: Poor	539	Asphalt
Tanglewood Ct	Tanglewood Dr	Dead End or Start	4: Poor	528	Concrete
Tanglewood Dr	Black Maple Dr		3: Poor	227	Concrete
Tanglewood Dr	Sugar Pine	Lake Forest	3: Poor	660	Concrete
Tanglewood Dr	Sumac Dr	Tanglewood Ct	4: Poor	359	Concrete
Tanglewood Dr	Tanglewood Ct	Cypress	4: Poor	69	Concrete
Tanglewood Dr		Sugar Pine	4: Poor	206	Concrete
Tanglewood Dr		Dead End or Start	3: Poor	232	Concrete
Teakwood	Cherrywood Ln	Coachwood Ln	3: Poor	348	Concrete
Ten Point Dr	Stag Rdg	Stag Rdg	3: Poor	766	Concrete
Ten Point Dr	Stag Rdg	Notre Dame Rd	3: Poor	1,278	Concrete
Ten Point Dr	Notre Dame Rd		3: Poor	95	Concrete
Ternbury Dr	Lexington Dr	Dead End or Start	4: Poor	158	Concrete
Ternbury Dr		Lexington Dr	4: Poor	301	Concrete
Tewksbury Ct	Pembroke Dr		2: Very Poor	322	Concrete
Tewksbury Ct		Dead End or Start	4: Poor	106	Concrete
Thalia	Dead End or Start	Winry	3: Poor	301	Asphalt
Thalia	Winry	Reitman	3: Poor	322	Asphalt
Thalia	Reitman	Pine	3: Poor	876	Asphalt
Thames Ct	Thames Dr	Dead End or Start	4: Poor	275	Concrete
Thames Dr	Thames to Arms Ct	E Avon Rd	2: Very Poor	876	Asphalt
Thames Dr	Thames to Arms Ct	Thames to Arms Ct	2: Very Poor	58	Asphalt
Thornridge Ct	Thornridge Dr	Dead End or Start	4: Poor	301	Concrete
Thornridge Dr			4: Poor	560	Concrete
Tienken Ct	W Tienken Rd & Pine	Dead End or Start	3: Poor	676	Asphalt
Timberlea Dr	S Livernois Rd	Dead End or Start	4: Poor	1,151	Concrete
Tiverton Trl	W Tienken Rd	Royal Crescent	4: Poor	1,056	Concrete
Torrent Ct	Elkhorn Dr	Dead End or Start	3: Poor	649	Concrete
Tower Hill Ln		Brewster Rd	4: Poor	74	Asphalt
Twin Oaks Ct	Long Meadow Ln	Dead End or Start	4: Poor	359	Concrete
Ulster	W Maryknoll & E Maryknoll	Ulster	3: Poor	1,056	Concrete
Ulster	Maryknoll Ct	Live Oak Dr	4: Poor	348	Concrete
Valley Stream Ct	Valley Stream Dr	Dead End or Start	4: Poor	312	Concrete
Valley Stream Dr	Dead End or Start	Valley Stream Ct	4: Poor	201	Concrete
Valley Stream Dr	Valley Stream Ct	Greenleaf Dr	4: Poor	190	Concrete
Vreeland	Hillendale Dr	Rhineberry	4: Poor	280	Asphalt
W Kilburn Rd	Summit Rdg		3: Poor	333	Concrete
W Kilburn Rd	Summit Rdg	N Adams Rd & N Kilburn Rd	4: Poor	243	Concrete
W Kilburn Rd		Summit Rdg	4: Poor	787	Concrete
W Maryknoll	Hillendale Dr	Braeburn	4: Poor	449	Asphalt
W Maryknoll	Braeburn	Maryknoll Ct	3: Poor	290	Asphalt
W Maryknoll	Maryknoll Ct		3: Poor	132	Asphalt
Wagner Dr	Woodridge Dr	Dead End or Start	3: Poor	169	Concrete
Walbridge	W Auburn Rd		4: Poor	343	Asphalt
Warrington Rd	Cumberland Dr	Highsplint Dr	4: Poor	528	Concrete
Warrington Rd	Highsplint Dr	Harlan Ct	3: Poor	628	Concrete
Warrington Rd			3: Poor	148	Concrete
Warrington Rd			4: Poor	259	Concrete
Warrington Rd			3: Poor	84	Concrete
Warrington Rd			3: Poor	375	Concrete
West Ridge		Tall Oaks Blvd & Archers Pointe	4: Poor	1,051	Asphalt
Westwood Dr	Devonwood	Hillcrest Dr	4: Poor	1,294	Concrete
Whispering Knoll	W Horseshoe Bnd & E Horseshoe Bnd	E Fairview Ln	4: Poor	660	Asphalt
White Water Dr	Portage Trl	River Trl	4: Poor	586	Asphalt
Whitehouse Ct	Charlwood	Dead End or Start	4: Poor	1,135	Concrete
Whitney Dr	Berry Nook Ln & Arlington Dr	Pioneer Dr	4: Poor	232	Concrete
Whitney Dr	Arlington Dr		3: Poor	312	Concrete
Williamsburg Ct	Rose Brier Dr	Dead End or Start	3: Poor	792	Concrete
Willow Grove Ln	S Livernois Rd	Willow Grove Ct	4: Poor	58	Asphalt
Wimpole		Walton Blvd	3: Poor	560	Concrete
Windrift Ln		Eddington	3: Poor	211	Concrete
Winry	Winry		3: Poor	449	Asphalt
Winry	W Tienken Rd	Thalia	3: Poor	327	Asphalt
Winry	Thalia	Axford Pl	3: Poor	818	Asphalt
Winry	Axford Pl	N Oak	3: Poor	840	Asphalt
Winry	N Oak	Pine	3: Poor	354	Asphalt
Woodfield Way	Lake Ridge Rd	Oak View Ct	3: Poor	882	Concrete
Woodfield Way	Oak View Ct	Forest View Ct	3: Poor	333	Concrete
Woodfield Way	Forest View Ct	Fox Woods Ln	4: Poor	380	Concrete
Woodfield Way	Fox Woods Ln	Long Meadow Ln	3: Poor	317	Concrete
Woodford Cir	N Kilburn Rd	N Kilburn Rd	3: Poor	1,468	Concrete
Woodridge Dr	Wagner Dr	Woodridge Ct	4: Poor	290	Concrete
Wortham	Dorfield	Dorfield	4: Poor	1,531	Asphalt
Wortham	Dorfield	Hampton Cir	4: Poor	306	Asphalt
Wortham	Dorfield	Hampton Cir	4: Poor	84	Asphalt
Worthington Ct	Pepper Tree Ln	Dead End or Start	3: Poor	290	Asphalt
Yale Ct	Fair Oak Dr	Dead End or Start	3: Poor	370	Concrete

Notes to Local Street Conditions:

- *Pavement Surface Evaluation and Rating System (PASER) is a visual survey method for evaluating the condition of roads. This data serves as the foundation of which to build cost-effective pavement maintenance strategies.*
- *Local Street conditions are depicted on the map. The PASER condition ratings are grouped by the following categories: POOR (1-4); FAIR (5-7); and GOOD (8-10). Only streets in POOR condition are listed in the table.*
- *Local Streets are presented by segment (not by total average PASER rating). The same street may be listed as both Fair and Poor because different segments are at different quality levels.*
- *Streets degrade at different rates due to a variety of factors such as traffic volume, road cross-section, drainage, etc… The PASER rating listed in the tables only represent today's current street condition and **does not** guarantee that the ranking of roads will remain the same after subsequent street evaluation surveys are conducted. The entire Local Street system is re-evaluated and PASER figures updated each year.*

2016-2021 Capital Improvement Plan
Water & Sanitary Sewer System Improvements

The mission of the Water Supply and Sanitary Sewage Disposal System Plan is to preserve the integrity of the water and sanitary sewer systems; to implement a capital maintenance program that sustains reliability; and (if justified) to extend the distribution and collection systems throughout the remainder of the City.

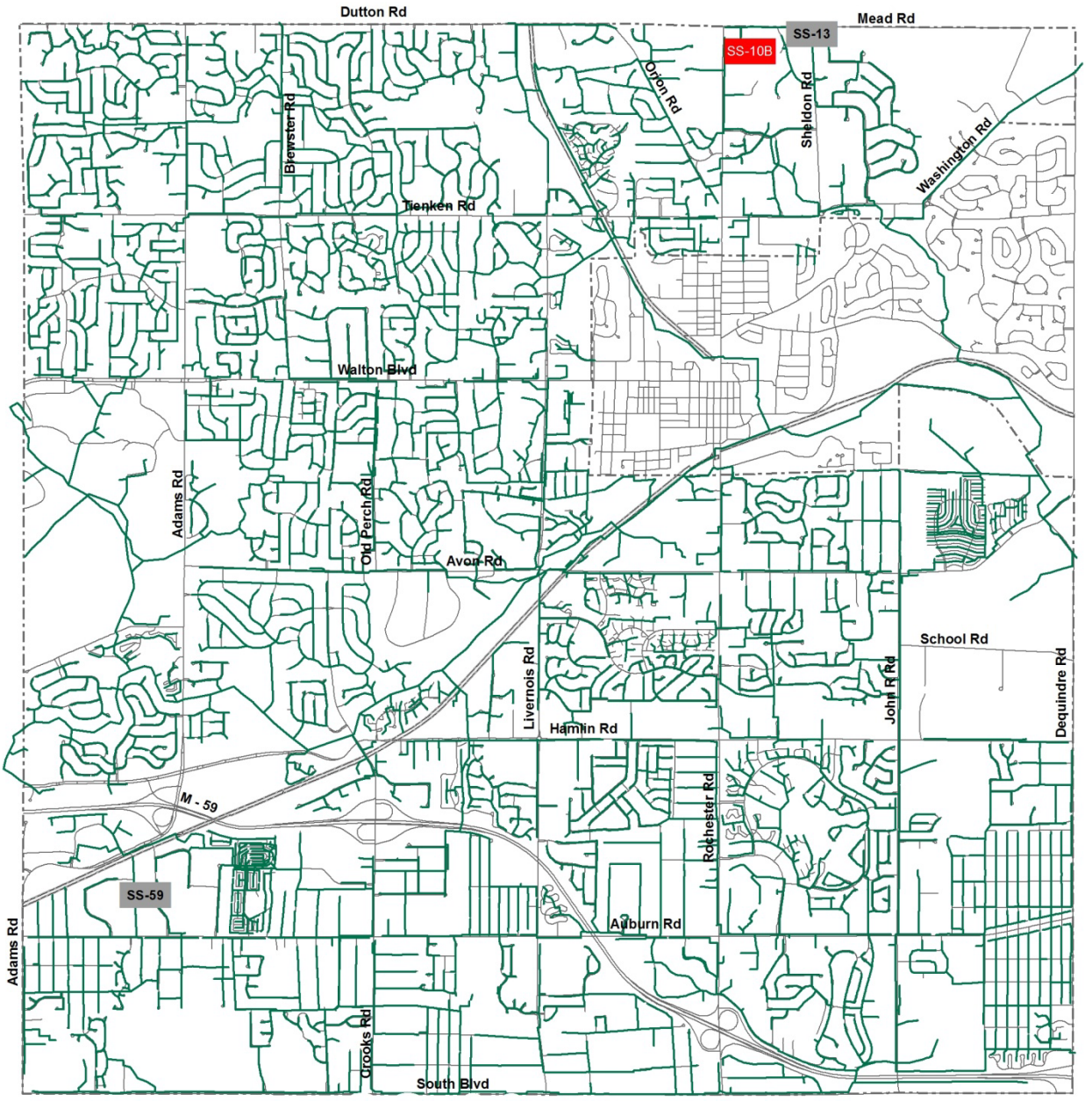
The extension of the sanitary sewage disposal system throughout the City will eventually eliminate private septic systems, thereby preserving the environment as well as the water source for private well systems, which some residents are dependent upon as their source of potable water.

The development of the proposed water and sanitary sewer projects were based upon system deficiencies and needs obtained from area residents, business owners, and City staff. These projects are coordinated with storm water management, roadway, and pathway improvements whenever possible to maximize cost savings through economies of scale, resulting in a more effective and efficient process to implement the construction projects.

The proposed water and sanitary sewer projects are flexible, allowing for the addition of new improvements to address specific needs without deferring other projects along the way. Studies and analysis of the existing system is an on-going program that, when coupled with new technologies, provides for improved system capabilities and reliability.

Water and sanitary sewer projects identified as urgent are not subject to the rating/weighting scale required of capital improvement projects as these projects are deemed necessary for the health, safety, and welfare of our customers.

2016-2021 Capital Improvement Plan
Sanitary Sewer System Improvements



LEGEND

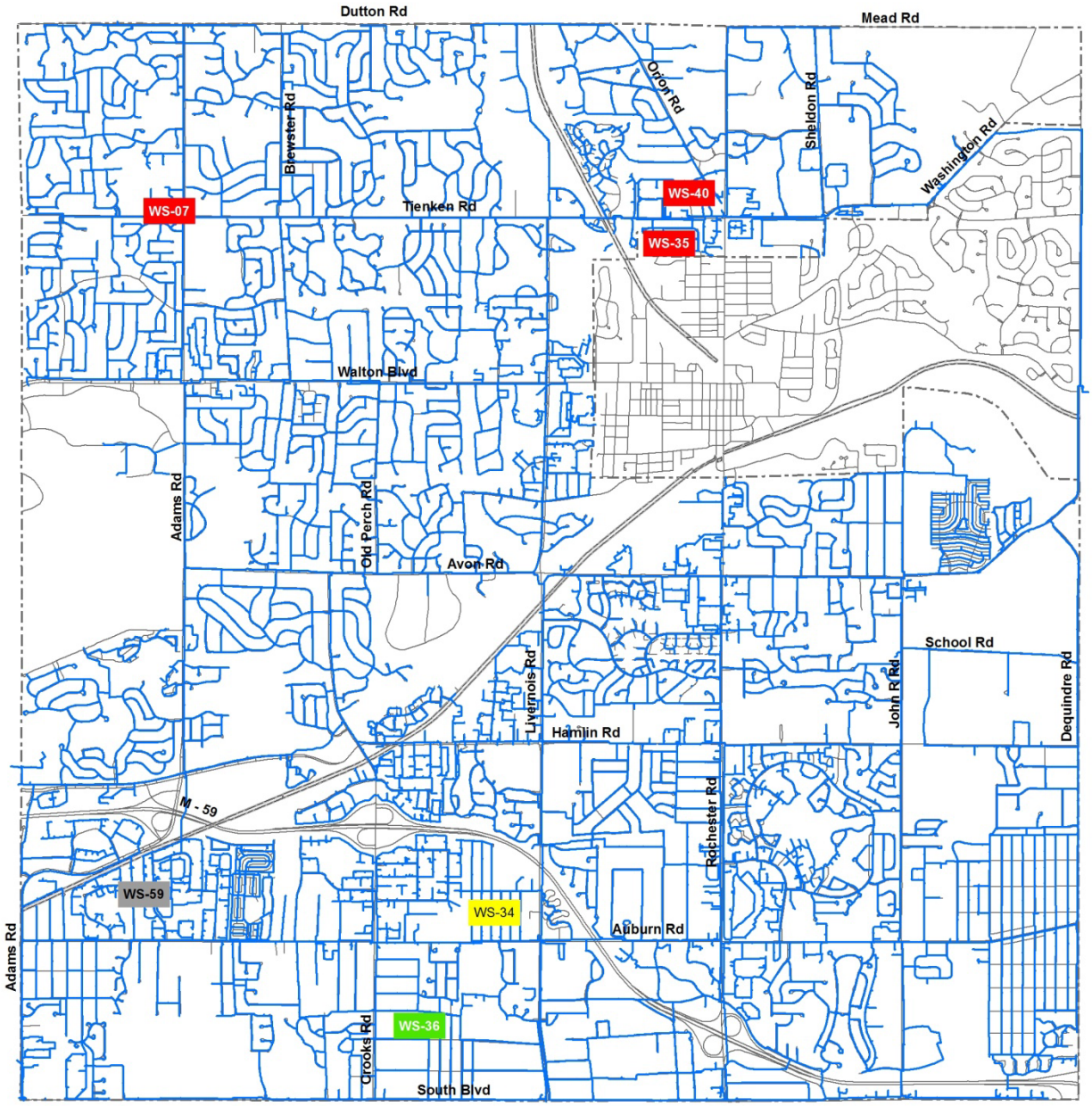
Projects that may begin construction in:

2016	SS-00
2017	SS-00
2018	SS-00
2019	SS-00
2020	SS-00
2021	SS-00
Pending Project	SS-00

Existing Sanitary Sewer

4/7/2015
Published by MIS Dept.

2016-2021 Capital Improvement Plan
Water System Improvements



LEGEND

Projects that may begin construction in:

2016	WS-00
2017	WS-00
2018	WS-00
2019	WS-00
2020	WS-00
2021	WS-00
Pending Project	WS-00

Existing Water Main

4/8/2015
Published by MIS Dept.

2016-2021 Capital Improvement Plan
Water & Sanitary Sewer System Improvements

SS-01B	SCADA System Upgrade Schedule
2016-2021	
Estimated City Cost: **$830,260**	**Estimated City Share:** **100%**
Regular replacement of servers and other SCADA hardware components (including radio system) scheduled to occur approximately every 5 years. Servers and other SCADA hardware/software components are scheduled for replacement in 2016. The communications (radio) system is scheduled to be replaced in 2019. Annual operating costs of $60,000 are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. This project is on-going.	

SS-02B	Sanitary Sewer Rehabilitation Program
2016-2021	
Estimated City Cost: **$1,500,000**	**Estimated City Share:** **100%**
Rehabilitation of the existing sanitary sewer system in various areas of the City as determined through an in-house sanitary sewer system evaluation study that occurs every other year. Selective rehabilitation is planned to occur in the years following the sanitary sewer system evaluation study. This program is proposed to be funded at $500,000 every other year and is on-going.	

SS-10B	** Wimberly Drive: Sanitary Sewer Replacement **
2016-2016	
Estimated City Cost: **$56,000**	**Estimated City Share:** **100%**
Replace approximately 700’ of 2" HDPE sanitary sewer main along Wimberly Drive in Section 2. This sanitary sewer main is a low pressure line that is served by individual grinder pumps. The sanitary sewer was installed in FY 2006. Only a portion of the main which appears to be damaged (and creates the need for continual maintenance) will be replaced. Construction is planned to begin in 2016.	

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Water & Sanitary Sewer System Improvements

WS-07	** Booster Station #2: Replacement **

2016-2016

Estimated City Cost: **$1,250,000** **Estimated City Share:** **100%**

Booster Station #2 is an important component within the City's water system, as this booster station is responsible for providing customers located in sections 5, 6, & 7 adequate water pressure. The existing station is approximately 25 years old and has been deteriorating over the last few years. This station consists of four pumps located in an underground vault. The pumps have been in need of repair continually over the last few years, and it is recommended to replace/update the entire station. The station will require less maintenance due to updated technology and the operating costs will be lower due to improved efficiency. Our fire fighting capabilities will be more dependable as well. The City is currently performing a feasibility study to determine the best design for the replacement of the water booster station. Construction is planned to begin in 2016.

WS-34	Glidewell Subdivision: Water Main Replacement

2018-2019

Estimated City Cost: **$2,139,690** **Estimated City Share:** **100%**

Replace approximately 16,700’ of 6" and 8" cast iron water main located in the Glidewell Subdivision in Section 28 of the City. The water main will be replaced with 8" ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2019.

WS-35	North Hill Subdivision: Water Main Replacement

2015-2016

Estimated City Cost: **$900,000** **Estimated City Share:** **100%**

Replace approximately 6,350’ of 6" and 8" cast iron water main located in the North Hill Subdivision in section 10 of the City. The water main will be replaced with 8" ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2016.

WS-36	Section #33: Water Main Replacement

2016-2017

Estimated City Cost: **$3,296,660** **Estimated City Share:** **100%**

Replace approximately 25,730’of 6" and 8" cast iron water main located in the Belle Cone Gardens, Sunnydale Gardens, and Homestead Acres Subdivisions in section 33 of the City. The water main will be replaced with 8" ductile iron pipe or high density polyethylene (HDPE) pipe (depends on installation method). Construction is planned to begin in 2017.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Water & Sanitary Sewer System Improvements

WS-40	** Tienken Court: Water Main Replacement **		
	2016-2016		
Estimated City Cost:	$40,000	Estimated City Share:	100%

Replace approximately 400’ of 6" cast iron water main located behind the Tienken Court Shopping Center in Section 3 of the City. The existing water main will be replaced with 8" ductile iron pipe or high density polyethylene (HDPE) pipe and lowered to have at least 6’ of ground cover. The existing main freezes every winter due to location and depth of the main. Construction is planned to begin in 2016.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Storm Water Management

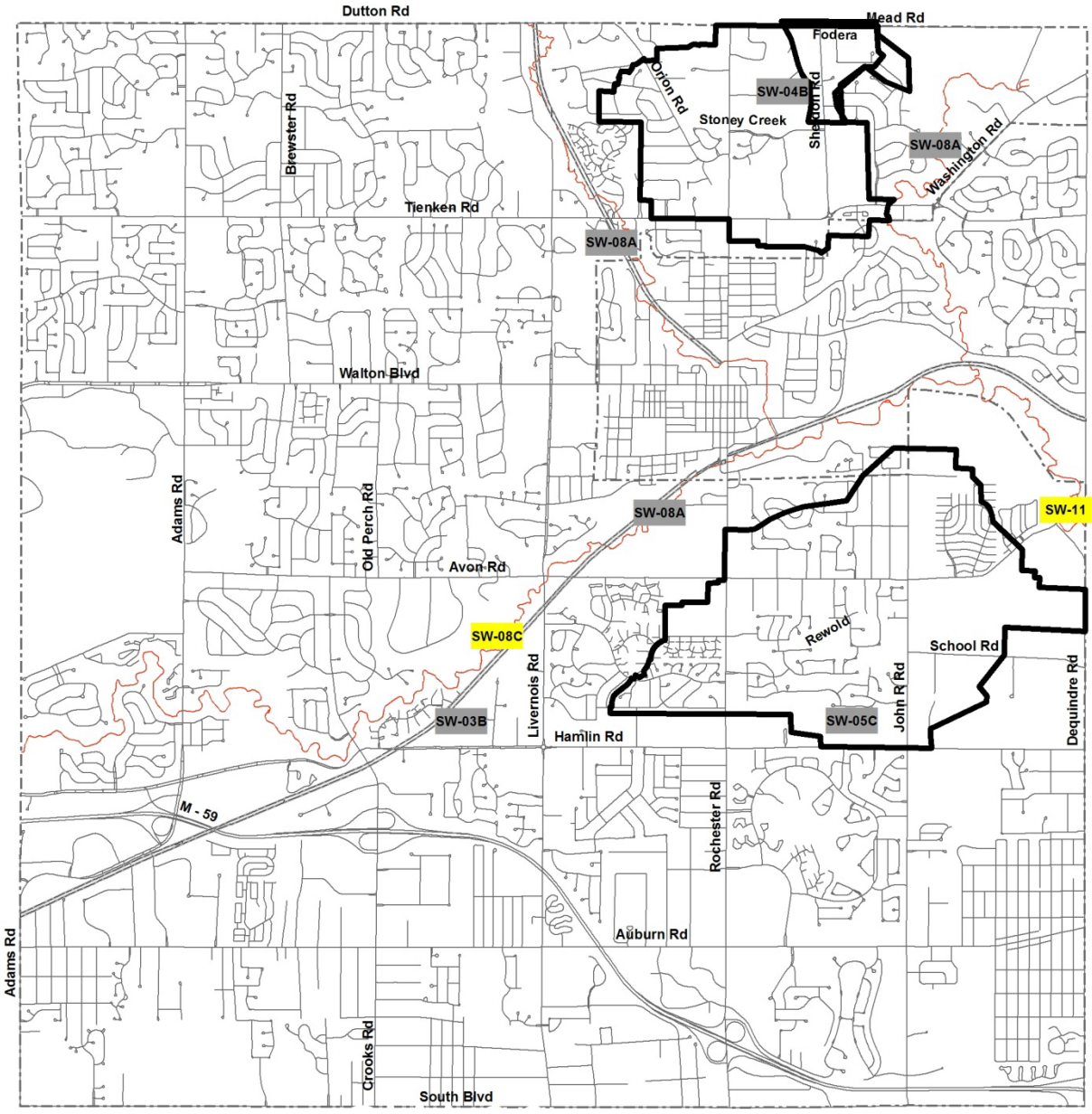
Prior to FY 2000, the primary focus of Storm Water Management in Rochester Hills was to develop a storm water system adequate to provide for storm water runoff in existing flood-prone areas. Much of the storm water management improvements made were financed and constructed through the use of Chapter 20 of the Drain Code. The improvements were made in parts of the City that were developed prior to the 1970s without drainage improvements. More recently it has become apparent that rain water from smaller, more common storms pass water through detention basins un-detained and are an untreated source of surface water pollution.

The mission of the Storm Water Management Plan is to provide the City with a method of managing storm water runoff in order to provide for adequate drainage in existing flood-prone areas. In addition, the plan addresses water quality standards, minimizes impacts associated with land improvements, and complies with the NPDES Phase II rule and the City's MDEQ Municipal Separate Storm Systems Permit (MS4). The main goal is to protect the health, safety, and welfare of the public and to better protect the surface waters and natural environment of the City of Rochester Hills and downstream communities.

To accomplish this mission it is necessary to:

- Develop a comprehensive storm water management policy that clearly defines the role of the City in storm water management issues, along with a mechanism for funding capital improvements and operations/maintenance of all drainage systems within the City
- Plan and implement the actions identified in the City's Storm Water Pollution Prevention Initiative (SWPPI) and when necessary, update the SWPPI with more cost effective and efficient actions to meet the goals and objectives of the storm water management plans
- Continue to participate and support the activities of the Storm Water Advisory Groups (SWAG) for the Red Run, Clinton Main, Stoney/Paint Creeks, Rouge Main 1-2 Sub-Watersheds, the Alliance of Rouge Communities (ARC), and the Clinton River Public Advisory Council (PAC)
- Cooperate with the Oakland County Water Resources Commission to reach compliance requirements of the Soil Erosion and Sedimentation Act
- Continue the planning, design, construction, and if necessary, right-of-way acquisition for improvements based on the projects listed in the CIP
- Continue to search for and pursue alternative funding sources to help accomplish our mission
- Work cooperatively with other cities, townships, and villages to efficiently and cost effectively comply with the mandates of the NPDES Phase II rule

2016-2021 Capital Improvement Plan
Storm Water Management



LEGEND

Projects that may begin construction in:

2016	SW-00
2017	SW-00
2018	SW-00
2019	SW-00
2020	SW-00
2021	SW-00
Pending Project	SW-00

4/7/2015
Published by MIS Dept.

2016-2021 Capital Improvement Plan
Storm Water Management

SW-08C	Clinton River: Natural Channel Restoration		
Estimated Total Project:	**$840,000**	**2019-2021**	
Estimated City Cost:	**$420,000**	**Estimated City Share:**	**50%**

Significant bank erosion and channel widening exists along the Clinton River within the City property between Livernois Road and Crooks Road. In 2010, as part of Phase I (SW-08B), the City restored approximately 500' of the channel and stabilized the bank to protect the Clinton River Trail from collapse due to the bank's failure. The whole project area consists of approximately one mile of river through City property. It is proposed that the balance of the project (Phase II) be improved in phases as grants (up to a 50% match) become available. The City has applied for several grants and will continue to apply for additional grants to allow the City's match dollars to go further toward the goal of restoring the natural riverbank and flow characteristics of the river, and provide in-stream habitat, as well as adjacent riparian habitat within the City property. In addition to the reduction in erosion, the project will improve fish and insect habitat with the intent to create a self-sustaining fishery. Angling and paddling access to the river is also proposed to be added to protect the banks from access and use disturbance. Construction for Phase II is planned to begin in 2019.

SW-11	Clinton River / Yates Park: Riverbank Stabilization		
Estimated Total Project:	**$400,000**	**2019-2021**	
Estimated City Cost:	**$230,000**	**Estimated City Share:**	**50% / 100%**

Angler traffic at Yates Park, the adjacent dam, and the Cider Mill area has caused bank erosion resulting in pool filling, over-widening, and lack of holding water for steelhead trout. This project seeks to utilize the latest science to design and then restore habitat and provide suitable access along the river at this trout fishery. Partnership with Clinton River Watershed Council for monitoring and public involvement will convey results. The design phase will create a master plan for future construction phases. The construction phases will be broken into smaller projects as those that can be performed with volunteers and those that would require heavy equipment/contractors. Once the planning phase is completed, construction projects will be more attractive for receiving grant support. The Great Lakes Restoration Initiative (GLRI) has been a source of grants for similar projects. Construction is planned to begin in 2019.

SW-13	Storm Water Best Management Practices (BMP) Retrofitting		
Estimated Total Project:	**$450,000**	**2019-2020**	
Estimated City Cost:	**$225,000**	**Estimated City Share:**	**50%**

Retrofit up to 10 city-owned properties with storm water Best Management Practices (BMP) which include methods, measures, or practices to prevent or reduce surface runoff and/or water pollution, including but not limited to, structural and non-structural storm water management practices and operational / maintenance procedures. Construction is planned to begin in 2019.

** = New project to the 2016-2021 CIP

ROCHESTER HILLS
MICHIGAN

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2016-2021 Capital Improvement Plan
Pathway System

In the mid 1970's the City of Rochester Hills (formerly Avon Township) initiated a pathway program that planned for approximately 125-miles of pathways along major roads. To date, approximately 94 miles of pathways have been constructed by private development and/or through public funding. Approximately 31 miles of pathways are needed to complete the pathway system. Additionally, approximately 4.5 miles of the Clinton River Trailway was surfaced utilizing recycled asphalt materials in 2007.

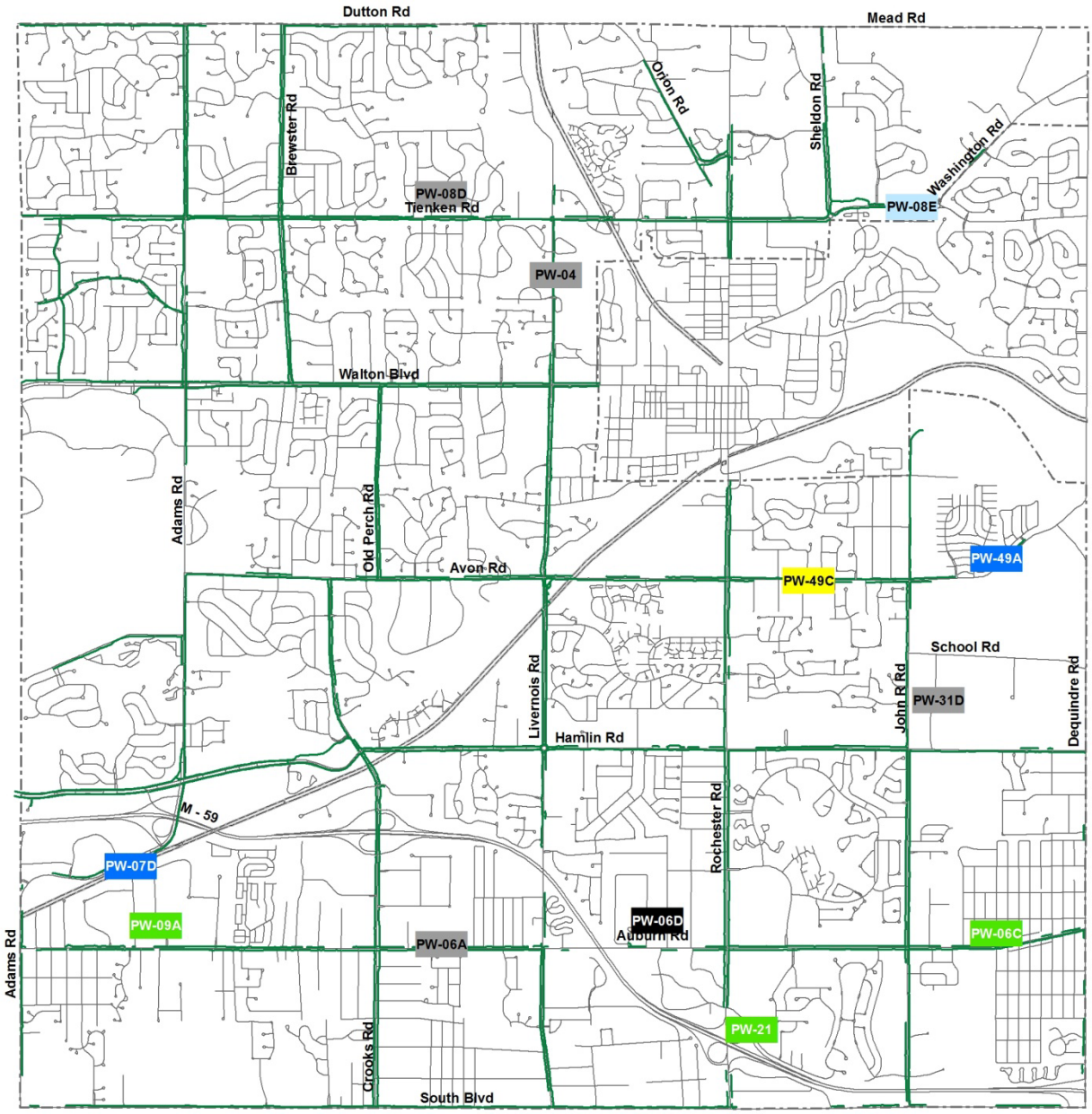
The scope of the pathway program has gone beyond the initial goal of just extending the system to both sides of all arterial roads in the City. In November of 2006, a twenty-year 0.1858 mill ballot proposal was approved by the residents of Rochester Hills to fund the continuation of new pathways, rehabilitation and maintenance of existing pathways, and to preserve the system for the public's use and enjoyment. The current pathway program has evolved through the continuation of the development of the City along with a heightened awareness of the value of a non-motorized transportation facility.

The pathway program is comprised of the following elements:

- Construction of new pathways to fulfill the goal of pathways along both sides of all arterial streets.
    - The pathway millage language allows for construction along school routes, connectivity for high volume pedestrian generator sites, and along the Clinton River Trailway.
- Rehabilitation of existing pathways to maintain an adequate level of service for pathway users.
    - Each year, more segments of the pathway system exceed their service life and require some form of rehabilitation. Additionally, any pathway upgrades or rehabilitations must now comply with current Americans with Disabilities Act (ADA) requirements.
- Maintenance of the existing pathway system to protect and extend the condition of the pathway segments to the end of their service life.
    - Beyond routine winter maintenance, other maintenance activities such as pothole patching, crack sealing, and vegetation control need to be done system-wide on a routine basis to preserve the integrity of the system.

Starting in FY 2008, the Pathway Ad-hoc Committee began reviewing and rating the pathway projects.

2016-2021 Capital Improvement Plan
Pathway System



LEGEND

Projects that may begin construction in:

2016	PW-00
2017	PW-00
2018	PW-00
2019	PW-00
2020	PW-00
2021	PW-00
Pending Project	PW-00

Existing Pathways

4/14/2015
Published by MIS Dept.

2016-2021 Capital Improvement Plan
Pathway System

PW-01	Pathway System Rehabilitation Program

2016-2021

Estimated City Cost: **$1,500,000** **Estimated City Share:** **100%**

Rehabilitation of the existing City asphalt pathway system by performing bituminous overlays or large section repairs in order to maintain the integrity of the overall pathway system. In 2008, the City initiated a pedestrian bridge inspection program to be performed on a four (4) year cycle. Every fourth year following the inspection, the City may perform pedestrian bridge rehabilitation work as identified in the consultants' bridge inspection inventory and report. Operating costs of approximately $3,400 per year for each 2.0-mile section are anticipated to decrease to $2,950 per year due to this rehabilitation program. This program is proposed to be funded at $250,000 per year and is on-going.

PW-06C	Auburn Road Pathway Gaps [John R Road – Dequindre Road]

2015-2017

Estimated City Cost: **$99,500** **Estimated City Share:** **100%**

Construction of approximately 1,150' of 8' wide asphalt pathway along the north and south sides of Auburn Road to fill in the pathway gaps between John R Road and Dequindre Road. Operating costs of approximately $320 per year are anticipated due to the additional pathway sections added. Construction is planned to begin in 2017.

PW-06D	Auburn Road Pathway Gaps [Walbridge Road – Hickory Lawn Road]

2020-2021

Estimated City Cost: **$231,000** **Estimated City Share:** **100%**

Construction of approximately 2,100' of 8' wide asphalt pathway along the north side of Auburn Road between Walbridge Road and 500' east of Hickory Lawn Road to fill in the pathway gaps. Operating costs of approximately $590 per year are anticipated due to the additional pathway sections added. Construction is planned to begin in 2021.

** = New project to 2016-2021 CIP

2016-2021 Capital Improvement Plan
Pathway System

PW-07D	Adams Road @ Clinton River Trailway: Road Crossing

2019-2020

Estimated City Cost: **$180,330** **Estimated City Share:** **100%**

Construction of a mid-block pedestrian crossing at Adams Road near Leach Drive and Marketplace Circle to connect the Clinton River Trailway to the nearby shopping center. The proposed crossing would incorporate the use of eight (8) solar powered push-button rapid flasher beacons (RFBs), four (4) in each direction. The project would also include the installation of two (2) steel poles and mast arms with overhead signage at the crossing. Approximately 500' of asphalt and concrete pathway would be required to be extended in order to provide connection. Note: The project is located within the Road Commission for Oakland (RCOC) county's right-of-way and will require prior approval by the RCOC demonstrating that pedestrian/bicycle volume warrants are met. Operating costs of approximately $1,000 per year are anticipated due to routine and winter maintenance requirements. Construction is planned to begin in 2020.

PW-08E	Tienken Road Pathway [Van Hoosen Road – Washington Road]

2017-2018

Estimated City Cost: **$258,750** **Estimated City Share:** **100%**

Construction of approximately 1,100' of 8' wide pathway along the south side of Tienken Road between Van Hoosen Road and Washington Road, including ramps at the SE and NW corners of the roundabout. Operating costs of approximately $600 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2018.

PW-09A	Technology Drive Pathway [Auburn Road – 2,250' North]

2016-2017

Estimated City Cost: **$196,250** **Estimated City Share:** **100%**

Construction of approximately 2,250' of 8' wide asphalt pathway along the west side of Technology Drive between Auburn Road and the pathway connection to Adams Road. Operating costs of approximately $540 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2017.

PW-21	** East Nawakwa Pathway [Rochester Road – Joshua Drive] **

2017-2018

Estimated City Cost: **$140,000** **Estimated City Share:** **100%**

Construction of approximately 2,100' of 8' wide asphalt pathway along the north side of East Nawakwa Road between Rochester Road and Joshua Drive. Operating costs of approximately $590 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2018.

** = New project to 2016-2021 CIP

2016-2021 Capital Improvement Plan
Pathway System

PW-49A	Avon Road Pathway [LeGrande Boulevard – Cider Mill Boulevard]		
2019-2020			
Estimated City Cost:	**$120,750**	**Estimated City Share:**	**100%**
Construction of approximately 1,500' of 8' wide asphalt pathway along the north side of Avon Road between Le Grande Boulevard and Cider Mill Boulevard. Operating costs of approximately $420 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2020.			

PW-49C	Avon Road Pathway [Rainier Avenue – Bembridge Drive]		
2018-2019			
Estimated City Cost:	**$295,800**	**Estimated City Share:**	**100%**
Construction of approximately 3,200' of 8' wide asphalt pathway along the south side of Avon Road between Rainier Avenue and Bembridge Drive. Operating costs of approximately $890 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2019.			

** = New project to 2016-2021 CIP

2016-2021 Capital Improvement Plan

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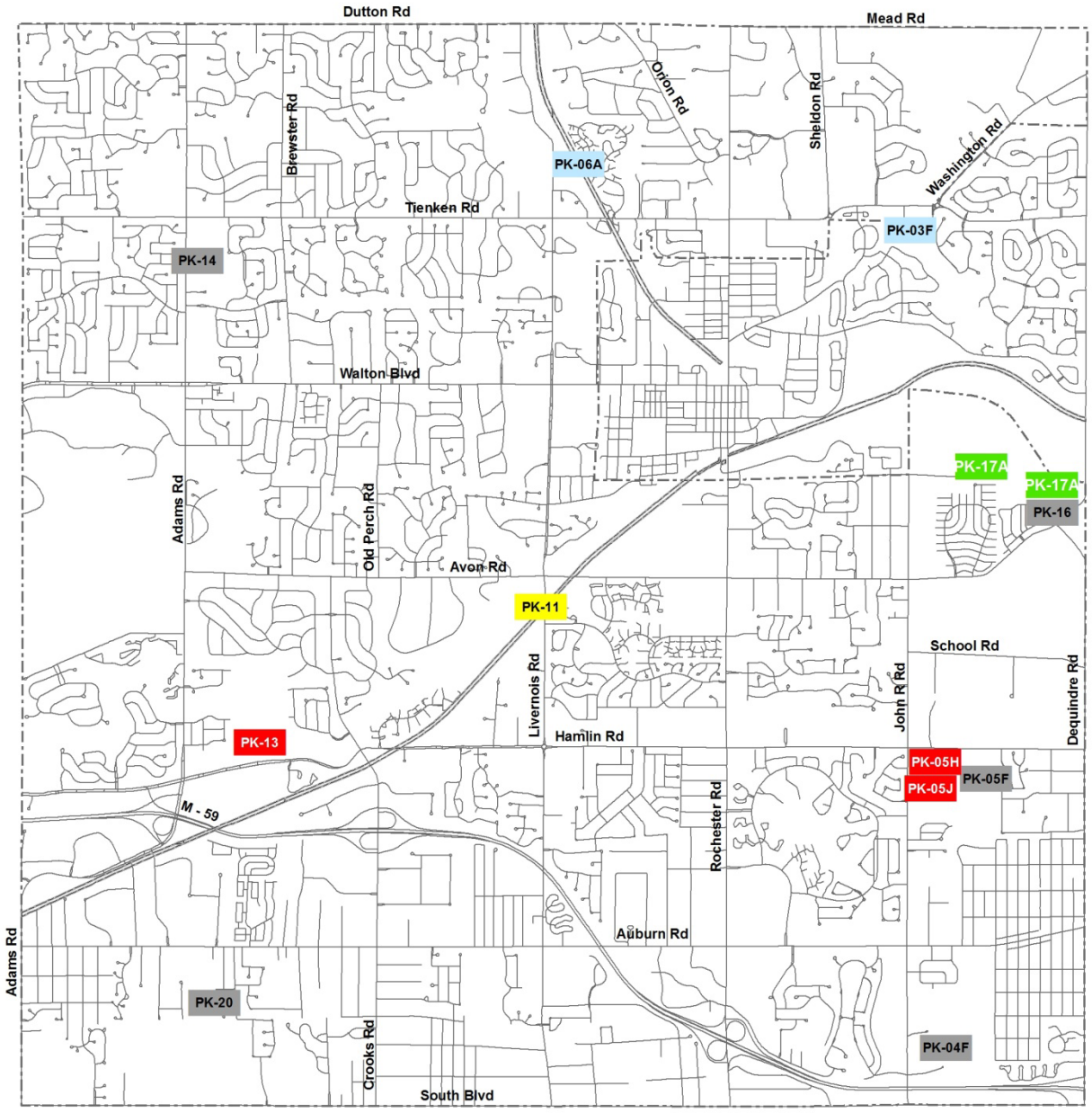
2016-2021 Capital Improvement Plan
Parks and Recreation

The City of Rochester Hills' Parks provide active and passive recreational opportunities for its residents. The City operates 2 regional trails and 14 parks that cover over 1,100 acres and vary in purpose, size, and development.

Every five years the Parks and Recreation Master Plan is updated. Once the Plan is adopted by the Planning Commission it is incorporated into the City's Master Land Use Plan. The Parks and Recreation Master Plan, which was last updated in 2011, provides an overview of regional recreational opportunities, identifies long and short-term objectives for park development, and meets criteria for Michigan Department of Natural Resources (MDNR) grant eligibility. The Plan is scheduled to be updated again in 2016.

Park development and operational costs are supported primarily by the City's General Fund and Capital Improvement Fund and are supplemented by user fees, charges, grants, and donations.

2016-2021 Capital Improvement Plan
Parks and Recreation



LEGEND
Projects that may begin construction in:

2016	PK-00
2017	PK-00
2018	PK-00
2019	PK-00
2020	PK-00
2021	PK-00
Pending Project	PK-00

4/7/2015
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2016-2021 Capital Improvement Plan
Parks and Recreation

PK-03F	Van Hoosen Museum: Equipment Barn Replacement		
Estimated Total Project:	**$450,000**	**2018-2018**	
Estimated City Cost:	**$0**	**Estimated City Share:**	**0%**

The Equipment Barn was once an integral part of the Van Hoosen Farm operation. Built in 1912, it was torn down in 1999 due to its deteriorated condition. The Museum has a full set of photographs and drawings of this facility and would like to rebuild it to continue restoring the Van Hoosen Farm facility, while creating space for storage and maintenance activities. The Equipment Barn will help the Museum more accurately recreate the historic farm setting at the Van Hoosen Farm. The building will be located on the exact footprint of the original building and would replicate the original building in nearly all details. At one time, the Van Hoosen Farm was a world class dairy operation and the equipment barn will allow us to create a broader interpretive story, create an on-site maintenance space, and bring valuable items indoors during the winter to avoid deterioration from weather and vandalism. Construction is planned to begin in 2018 or as funding becomes available.

PK-05H	** Borden Park: Office Relocation **		
	2016-2016		
Estimated City Cost:	**$295,000**	**Estimated City Share:**	**100%**

Relocation of the Borden Office and its operations to a more central location in the park; in order to provide better safety, security, and customer service. While doing administrative/reservation work at the current location it is not possible to observe and/or quickly react to the needs of activities in the park. The existing building used as an office is an old residential house at the eastern boundary of Borden Park, initially purchased along with the Borden Park property and converted to office use. The existing building is inefficient for office use, is poorly insulated, lacks adequate electrical power, and requires significant improvements to the heating system, windows, doors and floors. The building also has ADA compliance issues. Construction is planned to begin in 2016.

PK-05J	Borden Park: Maintenance Yard		
	2016-2016		
Estimated City Cost:	**$480,000**	**Estimated City Share:**	**100%**

Construction of a secure fenced storage yard for the park maintenance operations housed at Borden Park. Development is to include a covered storage area for materials such as fuel, infield mix, topsoil, aggregates, and mowing equipment. Operating costs of approximately $1,000 per year are anticipated for this facility. Construction is planned to begin in 2016.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Parks and Recreation

PK-06A	Paint Creek Trailway: Resurfacing		
	2018-2018		
Estimated City Cost:	$50,000	Estimated City Share:	100%

The Paint Creek Trail is surfaced with limestone fines which require major maintenance approximately every fifteen (15) years. As a member of the Paint Creek Trailway Commission, the City is responsible for the maintenance of its portion of the trail located in the City. The project will be coordinated by the Paint Creek Trailway Commission staff. No changes to operating costs are anticipated. Construction is planned to begin in 2018.

PK-11	Clinton River Access		
Estimated Total Project:	$100,000	2019-2019	
Estimated City Cost:	$50,000	Estimated City Share:	50%

Construction of a small parking area (approximately 15 spaces), an accessible pathway, and an accessible canoe/kayak launch into the Clinton River. Cooperation with the City of Rochester and/or the City of Auburn Hills could provide for additional river access points in their cities. Operating costs of approximately $1,000 per year are anticipated for this facility. Construction is planned to begin in 2019.

PK-13	Riverbend Park: Development		
	2013-2016		
Estimated City Cost:	$2,250,000	Estimated City Share:	TBD

Development of Riverbend Park including parking lot, entrance road, nature and fitness trails, improvements to the wetlands and invasive vegetation control. Future development may include fitness stations, restrooms, playgrounds and educational facilities. Private donations and grant funding will be pursued to offset overall project costs. Construction began in 2014 and is anticipated to be complete in 2016.

PK-17A	Playground Replacement Schedule		
	2001-2021		
Estimated City Cost:	$50,000	Estimated City Share:	100%

Scheduled replacement and/or upgrades of existing playground equipment at City Parks to comply with Federal and State Laws by adding surfacing and equipment, or replacing existing equipment. Design and/or surfacing needs to meet ADA/CPSC/ASTM standards and guidelines. Playground Equipment is scheduled to be replaced after 20-years. It is planned to upgrade the playground equipment at Bloomer and Yates Parks in 2017. Operating costs of approximately $8,000 per year are anticipated to remain consistent with the new equipment. This program is on-going.

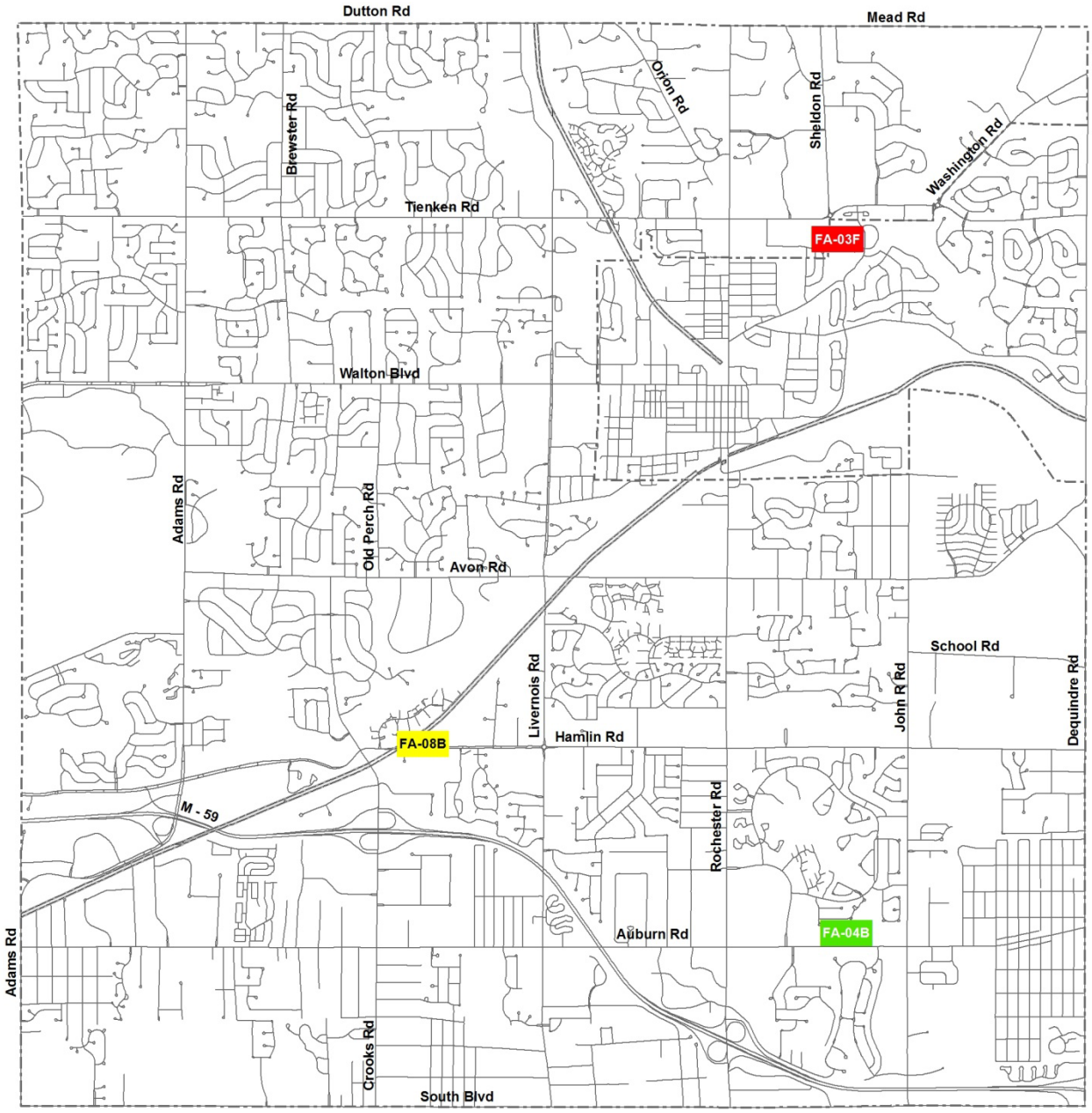
** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
City-Owned Facilities

The City of Rochester Hills owns 34 buildings totaling over 288,000 square feet of space with a replacement cost of over $52.8 million. These buildings support the ability of departments to provide services to the public. The rehabilitation, renovation, and/or replacement of the City's facilities is inevitable. Changes in services required by residents, changes in local government regulations, Federal and State mandated programs for health, safety or building access, changes in technology, as well as securing the investment of our taxpayers, requires systematic improvements and varying degrees of maintenance. Improvements are planned to address these issues as well as indoor air quality, ergonomics, energy conservation, and customer service.

The Capital Improvement Plan addresses the on-going deterioration of City-owned facilities caused by age and use. The Capital Reinvestment Program, as a component of the Capital Improvement Plan, involves a number of rehabilitation projects, which contain strategies to increase the useful life-span of individual facilities while reducing their maintenance and operational costs. A Facility Condition Index, a measure of repair costs as a percentage of replacement cost, determines the course of action to rehabilitate a facility; redevelop the site; or evaluate the loss of the facility to the community.

2016-2021 Capital Improvement Plan
City-Owned Facilities



LEGEND
Projects that may begin construction in:

2016	FA-00
2017	FA-00
2018	FA-00
2019	FA-00
2020	FA-00
2021	FA-00
Pending Project	FA-00

4/7/2015
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2016-2021 Capital Improvement Plan
City-Owned Facilities

FA-03F	** Van Hoosen / Jones Cemetery: Chapel Glass Enclosed Niches **

2016-2016

Estimated City Cost: **$50,000** **Estimated City Share:** **100%**

Installation of glass enclosed niches inside the Van Hoosen / Jones Cemetery Chapel for those who have chosen cremation. This would offer an interior place for cremains in a beautiful and secure environment. The units proposed consist of industry-leading materials to assure material durability and long-term value. Anodized architectural aluminum is proposed to be used for the structure of the Glass Front Niches and Stone-front Niche systems. Anodizing is an environmentally friendly, electrochemical process that creates a controlled protective oxide coating on an aluminum substrate – resulting in a finish that's long-lasting and weather resistant. Anodized architectural aluminum is incredibly durable with an extremely long lifespan, offers excellent resistance to corrosion and color stability, is easily maintained and cleaned, is naturally beautiful, offers lower initial cost, and lower maintenance costs for a greater long-term value. Approximately 100 - 140 glass enclosed niches (depending on design and fit) are initially proposed - with the ability for future expansion. Construction is planned to begin in 2016.

FA-04B	** DPS Facility: Alternative Energy **

2016-2017

Estimated City Cost: **$600,000** **Estimated City Share:** **100% / TBD**

Provide an alternative electrical energy source for the Department of Public Services Facility. Alternative sources could include but are not limited to solar and wind. Annual operating costs for electricity at the DPS Facility are anticipated to be reduced by a minimum of 75% and/or possibly eliminated. Preliminary Engineering is planned to begin in 2016 with construction planned in 2017.

FA-08B	Interchange Technology Park: Site Preparation

2019-2020

Estimated City Cost: **$751,000** **Estimated LDFA Share:** **100%**

Potentially provide for a public road/boulevard to service the business park; water, sewer, and fiber optics extensions along the road; construction of a landscaped entrance and monument sign; as well as a provision for site fill to promote building development; soil testing; and the design and construction of a storm water detention pond. Operating costs of $1,000 per year are anticipated due to the infrastructure development. Construction is planned to begin in 2019.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
City-Owned Facilities

FA-09	IT Infrastructure Capacity Funding

2019-2021

Estimated City Cost: **$100,000** **Estimated LDFA Share:** **100%**

One of the goals of the State of Michigan's SmartZone program is to provide local communities, through an LDFA, with the capability to improve Information Technology (IT) Infrastructure within Certified Technology Parks. Capacity improvements would be on a case-by-case basis, often associated with the needs of specific companies. Funding for these projects must occur in public right-of-ways or in a deeded easement only. It is not known when these individual requests will arise, and the improvement must be constructed within a short period of time. A pool of funding set aside from the LDFA's TIF capture would allow for a quick response, and improve the competitiveness of the City's technology parks for the attraction and/or retention of companies. There are no operating cost impacts associated with these improvements since the LDFA will not own the infrastructure, but rather would only pay the installation costs.

FA-11	ADA Compliance Implementation Program

2016-2021

Estimated City Cost: **$240,000** **Estimated City Share:** **100%**

In 2010, the City contracted an outside Compliance Specialist to perform ADA (Americans with Disabilities Act) inspections of all City Facilities. A transition plan was completed identifying a full description of work areas needing ADA adjustments in order to comply with the State and Federal guidelines. This project will involve coordination with the Facilities Division, Department of Public Services, and Parks Department to coordinate similar projects for efficiency and cost savings. Examples of ADA compliance improvements include: concrete replacement, inside and outside signage upgrades, handrail installation/upgrades, wrapping of plumbing fixtures, handicap push pads on doors, accessible pathways, trailways, shelters, picnic tables, grills, boat launches, beaches, shower areas, restrooms, etc… This program is proposed to be funded at $40,000 per year and is on-going.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Professional Services

Professional services are solicited when technical expertise or knowledge of a specialized field is critical to the performance of a service that cannot be performed in-house by City staff. Professional services involve extended analysis, discretion, and independent judgment and an advanced or specialized type of knowledge, expertise, or training which is customarily acquired either by a prolonged course of study or equivalent level of experience in the field. These services include, but are not limited to: attorneys, engineers, planning consultants, architects, and other similar professionals.

PS-07	Master Land Use Plan Update Schedule

2016-2021

Estimated City Cost: **$75,000** **Estimated City Share:** **100%**

Contract with a planning consultant to prepare scheduled updates to the City's Master Land Use Plan (MLUP). The MLUP is the policy tool used as a guide in the physical development of the community. By State Law (PA 33 of 2008) the Master Land Use Plan must be reviewed and if necessary updated every 5-years. The current MLUP was adopted in 2007 and the required 5-year review was completed in 2012. That review resulted in minor updates which were completed in-house by City Staff. The next update is planned to begin in 2017.

PS-08	Master Thoroughfare Plan Update Schedule

2016-2021

Estimated City Cost: **$100,000** **Estimated City Share:** **100%**

The current Master Thoroughfare Plan was adopted in 2008 and it is anticipated that priority projects recommended therein will be completed in the next few years. At that point, it will be time to prepare a new or updated Master Thoroughfare Plan to guide City transportation improvements. It is anticipated that the new plan will incorporate Complete Streets concepts as required by State Law, in addition to other motorized and non-motorized transportation planning for infrastructure and right of way needs. The Master Thoroughfare Plan is also an important coordinating document that helps guide regional transportation planning by providing adjacent and regional communities with an understanding of our transportation vision, and vice versa. The next update is planned to begin in 2018.

PS-10	Energy Efficiency Analysis

2016-2016

Estimated City Cost: **$50,000** **Estimated City Share:** **100%**

Contract with professional energy evaluation consultant to determine if there is potential for significant energy cost reductions at up to 10 municipally owned buildings. The study would detail all items and allow decisions on which areas could give the greatest potential return on investment. If savings are identified, the costs of implementing related improvements are intended to be fully covered by the realized efficiency savings. Grant funding may potentially offset a portion of the project implementation costs. Study is planned to begin in 2016.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Professional Services

PS-15A	Green Space Stewardship: Master Plan

2014-2017

Estimated City Cost: **$100,000** **Estimated City Share:** **100%**

After the successful November 2013 vote to expand permissible uses of the Green Space Millage to include stewardship of "green spaces and natural features owned, acquired, or controlled by the City", the next step is to engage an experienced and qualified Professional Environmental Consultant firm to develop detailed management plans, strategies, and budget estimates for each such property and natural feature. Elements of the work will include: Assessment of the current site conditions and review of city data and reports; assist Green Space Advisory Board (GSAB) in setting priorities and timelines; develop detailed management plans for each green space property, city open space, and significant natural resources such as the Clinton River and other named watercourses; as well as assist the City in the implementation of the adopted action plans. Study began in 2014.

PS-15B	** Green Space Stewardship: Implementation **

2016-2021

Estimated City Cost: **$1,350,000** **Estimated City Share:** **100%**

After the successful November 2013 vote to expand permissible uses of the Green Space Millage to include stewardship of "green spaces and natural features owned, acquired, or controlled by the City", and after the City engages an experienced and qualified Professional Environmental Consultant firm to develop detailed management plans, strategies, and budget estimates for each such property and natural feature - the next step is to implement the detailed management plans. Elements of the work will include: Invasive species removal, natural features restoration, and educational programs to promote stewardship. We will continue to work with a consultant and the Green Space Advisory Board (GSAB) in setting priorities and time lines based on management plans for each green space property, city open space, and significant natural resource such as the Clinton River and other named watercourses; as well as the implementation of the adopted action plans. This stewardship program is proposed to be funded at $225,000 per year and is on-going.

** = New project to the 2016-2021 CIP

2016-2021 Capital Improvement Plan
Internal Service Support Programs

Internal Service Support Programs play a pivotal role in the City's ability to deliver services to its residents. These programs involve a wide range of support services for functions that interact directly with residents. Individual components of support programs are not normally considered to be capital expenditures; however, the Capital Improvement Plan Policy includes purchases of major equipment (i.e., items with a cost individually or in total of $25,000 or more and will be coded to a capital asset account).

Internal Service Support Program projects are funded internally by user charges to City departments or directly by millage levy. Projects in this category directly and/or indirectly affect a broad range of services including Management Information Systems (MIS); Geographic Information Systems (GIS); Fleet Equipment and Vehicles; Fire Equipment, Vehicles and Apparatus; as well as Communication Systems.

IS-02B	City Website Update Schedule
2016-2021	
Estimated City Cost: **$35,000**	**Estimated City Share:** **100%**
Scheduled improvements in functionality and design to the City's current website configuration. Improvements would likely require changes to the current content management system as well as Internet hosting provider. Upgrades to the City's website are anticipated to occur every 5 years. Operating costs are anticipated to remain consistent as current website processes are already in place. The next website upgrade is planned to begin in 2017. This update schedule is on-going.	

IS-04D	SCBA Replacement Schedule
2016-2021	
Estimated City Cost: **$899,410**	**Estimated City Share:** **100%**
Scheduled replacement of Self Contained Breathing Apparatus (SCBA) gear for fire suppression personnel. SCBA is an essential part of a firefighter's protective equipment as it allows a firefighter to enter smoke filled, toxic areas while providing clean air to breathe. SCBA gear is scheduled to be replaced every 8-10 years and air compression equipment every 16-20 years. The Fire Department looks to grants from the Department of Homeland Security as well as other possible grants to cover all or a percentage of the costs associated with replacement. The next replacement is planned to begin in 2021. This replacement program is on-going.	

2016-2021 Capital Improvement Plan
Internal Service Support Programs

IS-04G	Heart Monitor Replacement Schedule

2016-2021

Estimated City Cost: **$195,710** **Estimated City Share:** **100%**

Scheduled replacement of Heart Monitors. A Heart ECG Monitor allows paramedics to monitor possible life threatening heart rhythms, provide defibrillation capabilities, along with vital sign monitoring. This piece of equipment is used on approximately 60-70% of all patients treated. Heart monitors are anticipated to be replaced every 5-7 years. Operating costs are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. The next replacement is planned to begin in 2021. This replacement program is on-going.

IS-05	Citywide Fleet Replacement Schedule

2016-2021

Estimated City Cost: **$7,013,910** **Estimated City Share:** **100%**

Scheduled replacement of various Fleet Department vehicles and equipment. Operating costs (fuel, maintenance, supplies) of approximately $600,000 per year for the entire City Fleet are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. A detailed schedule is provided on pages 65-69 in the Appendix Section. This replacement program is on-going.

IS-08	Fire Vehicle & Apparatus Replacement Schedule

2016-2021

Estimated City Cost: **$4,155,750** **Estimated City Share:** **100%**

Scheduled replacement of various Fire Department vehicles and apparatus. Operating costs (fuel, maintenance, supplies) of approximately $100,000 per year are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. A detailed schedule is provided on page 70 in the Appendix Section. This replacement program is on-going.

IS-10B	Computer Network Upgrade Schedule

2016-2021

Estimated City Cost: **$900,000** **Estimated City Share:** **100%**

Regularly scheduled network computer system upgrade(s). Items to be evaluated for replacement include servers, storage, firewalls, switches, and software such as operating systems, back-up, anti-virus, and network management. Operating costs of approximately $9,000 per year are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep the network operational. This update schedule is on-going.

2016-2021 Capital Improvement Plan
Internal Service Support Programs

IS-10C	AS/400 Upgrade/Replacement Schedule

2016-2021

Estimated City Cost: **$25,000** **Estimated City Share:** **100%**

Upgrade or replacement of the City's AS/400 server. This computer system is used as the main server for the City's utility billing system. This project falls in line with other computer replacement schedules. As technology and software changes occur, changes in hardware are also required. Operating costs of approximately $5,000 per year are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. The next upgrade/replacement is planned to begin in 2016. This update schedule is on-going.

IS-10D	Office Software Suite Upgrade Schedule

2016-2021

Estimated City Cost: **$100,000** **Estimated City Share:** **100%**

Scheduled upgrade of existing office productivity software suite to current version. Our existing version is MS Office 2007. Extended support for this version will end on 10/10/2017. After that date no further security updates will be issued. Using the product after support ends would pose a significant security risk. At the time of scheduled upgrade, we will have been using the 2007 version for 9 years. The next replacement is planned to begin in 2016. This replacement program is on-going.

IS-18	Election Equipment Replacement Schedule

2016-2021

Estimated City Cost: **$390,000** **Estimated City Share:** **100%**

Scheduled replacement of voting equipment for City administered elections. In 2005, the City received election equipment from the State of MI through the federal Help America Vote Act (HAVA) grant program at a discounted rate. The City currently has 38 voting tabulators, 27 Auto mark Handicap Accessible tabulators, as well as related software for programming the equipment. Operating costs of approximately $18,000 per year are anticipated to remain consistent with timely replacement, before more extensive service and maintenance levels are required to keep older equipment operational. The next replacement and/or upgrade of the current election equipment is planned for 2016. This replacement program is on-going.

2016-2021 Capital Improvement Plan

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2016-2021 Capital Improvement Plan
Projects Pending

Projects pending are projects that may be deemed as potentially worthy and viable; however they are not included as part of the active 2016-2021 Capital Improvement Plan. Projects pending may require additional information, studies, research, review, or City Council policies to be in place before more accurate timelines and/or funding levels can be identified. It is possible that these projects may not fall under the City's jurisdiction and will require other agencies to move the project forward, while some projects may not fall within the 2016-2021 timeframe.

MR-01F	***Crooks Boulevard: Street Lighting***
Installation of street lighting along Crooks Boulevard between South Boulevard and the M-59 Interchange to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately $15,000 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.	

MR-02E	***Hamlin Boulevard: Street Lighting***
Installation of street lighting along Hamlin Boulevard between the West City Limit and Livernois Road to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately $28,000 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.	

MR-04B	***Walton Boulevard: Street Lighting***
Installation of street lighting along Walton Boulevard between the West City Limit and just east of Adams Road to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately $10,800 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.	

MR-05D	***Adams Boulevard: Street Lighting***
Installation of street lighting along Adams Boulevard between Marketplace Circle and just north of Hamlin Boulevard to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately $10,400 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.	

2016-2021 Capital Improvement Plan
Projects Pending

MR-05G	Adams Road @ Tienken Road: Intersection Improvements
Extension of the northbound Adams Road right-turn lane and the southbound Adams Road right-turn lane to increase storage capacity. Work also involves upgrading the existing traffic signal from a "span-wire" to a "box-span" configuration. This improvement is recommended based upon the City's Master Thoroughfare Plan Update and a previous joint traffic study between the cities of Rochester Hills and Auburn Hills. This project may assist with minimizing southbound Adams Road cut-through traffic through the Judson Park Subdivision, which has been brought forth to the Advisory Traffic and Safety Board on several occasions. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.	

MR-13B	Dequindre Road Reconstruction (Hamlin Road - Auburn Road)
Reconstruction of Dequindre Road as a 5-lane road between Auburn Road and Hamlin Road. This improvement is part of a larger Road Commission of Oakland County (RCOC) project to widen Dequindre Road as a 5-lane road southbound to Long Lake Road in the City of Troy. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.	

MR-13C	Dequindre Road Realignment (South of Avon – 23 Mile Road)
Construction of Dequindre Road on a new alignment behind the Yates Cider Mill to eliminate the Dequindre Road offset at Avon Road. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.	

MR-15A	Adams Road @ Butler Road: Traffic Signal & Road Improvement
Installation of a new traffic signal at the Adams Road @ Butler Road intersection. Corresponding center left-turn lane improvements are required to facilitate the proposed traffic signal. Pathway ramps meeting ADA compliance will also be installed, including push button and countdown signals. The City has received confirmation from RCOC that the intersection meets signal warrants #2 for installation with the condition that the University Presbyterian Church's (UPC) existing drive be removed and relocated to align with Butler Road and that UPC perform on-site parking lot improvements at their cost. The traffic signal installation is also conditioned upon restricting the turning movements in and out of the UPC's southerly drive and the existing drive for the Brookfield Academy to the north. The City and RCOC would share the costs for the installation of the traffic signal and construction of road improvements. The future operations and maintenance costs of the traffic signal would be shared by the City (25%), RCOC (50%), and the University Presbyterian Church (25%). Operating costs of approximately $6,000 per year are anticipated due to the widened roadway section and the operation of an additional traffic signal.	

2016-2021 Capital Improvement Plan
Projects Pending

MR-18	Dutton Road Paving (Rainbow Drive – Arthurs Way)
Pave and improve approximately 4,200' of Dutton Road between approximately 3,000' west of Livernois Road (just east of Rainbow Drive) and the existing Dutton Road pavement just east of Livernois Road (approximately 1,200'). Proposed road improvements include placing concrete curb & gutter along both sides of Dutton Road to thereby eliminate extensive erosion of existing open ditching and abrupt side embankments adjacent to tree areas. Paving this segment of Dutton Road as a 2-lane roadway would improve road safety by providing a uniform paved road surface for steep road grade and improve safety for Dutton Road at its intersections: Tall Oaks Boulevard, Acorn Glen, Livernois Road, and the Paint Creek Trailway. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.	

MR-23C	Meadowfield Drive @ Yorktowne Drive: Traffic Signal Installation
Installation of a traffic signal along Rochester Road at its intersection with Meadowfield Drive and Yorktowne Drive in order to provide for easier turning movements both in and out of Meadowfield Drive and Yorktowne Drive. The City of Rochester Hills is currently awaiting final warrant study results from MDOT to move forward with this project. Operating costs of approximately $6,000 per year are anticipated due to the operation of an additional traffic signal.	

MR-26D	Livernois Boulevard: Street Lighting
Installation of street lighting along Livernois Boulevard between Avon Road and just north of Walton Boulevard to provide for increased nighttime travel safety and visibility. This project is proposed to be entirely funded through METRO Act funding sources. Operating costs of approximately $12,500 per year are anticipated due to the lighting addition. A Comprehensive City Street Lighting Policy approved by City Council is recommended to be in place prior to including as an active CIP project.	

MR-42B	Livernois Road @ M-59 Highway: Bridge Expansion
Participate in a cost share agreement for expanding the Livernois Road @ M-59 Highway Bridge. The City and RCOC may have the option to construct a complete expansion to the 5-lane bridge, or construct and have abutments placed. No operating costs are anticipated due to this section of roadway being owned and operated by the RCOC.	

MR-59	LDFA Major Road Upgrades
One of the primary purposes for completing the M-59 Corridor Plan was to identify what infrastructure would be needed to support an increase in the intensity of development in the study area. It is unknowable at this time where such intensification will occur, so no specific timeframe or dollar value is being assigned. The M-59 Corridor Plan's infrastructure projects are not being prioritized at this point in time as implementation will occur opportunistically as part of a private/public partnership or to support a specific commitment by the private sector.	

2016-2021 Capital Improvement Plan
Projects Pending

LS-07	Hamlin Court Drainage Improvements
Hamlin Court has had poor drainage and has been difficult to maintain for years. This project would extend storm water piping southbound down Hamlin Court to a point that an open ditch could be installed in order to provide drainage for the balance of the road. Any increased operating costs for maintenance would be offset by road and ditch maintenance cost savings.	

LS-08	Bendelow Road Ditching (East Side)
Provide drainage for the east side of Bendelow Road including the front yards and road base. The spring thaws and heavy rains can cause water to pond in the yards and adjacent to the Bendelow roadway. In 1996, drainage for Bendelow Road was planned to be improved as part of the west branch of the East Ferry Drain. In 2004, the developer of the Country Club Village Subdivision agreed to install storm sewers that would provide drainage for the west side of Bendelow Road. In 2006, the East Ferry Drain project (SW-06A) was designed and constructed without the Bendelow Road improvements. The change in the project saved the City approximately $420,000. This project would utilize the improvements previously installed by the developer to provide for catch basins and ditching to the east side of Bendelow Road. No additional operating costs are anticipated for site maintenance.	

LS-09	Hillview Street Drainage Improvements
Install ditches along Hillview Street. Hillview Street is a gravel local street, 595' in length which runs east to west and slopes steeply at the eastern end. The roadway was constructed without a design and has experienced drainage problems throughout its life. The problem has gotten worse in the last few years as a result of the ditch's loss of definition. Most storm water travels down the roadway causing erosion and depositing the gravel material in a residential front yard. After heavy rains, residents routinely use a wheelbarrow and shovel to manually return the sand and gravel.	

PK-04F	Splash Pad / Spray Park
Add new water play feature (Splash Pad) to Spencer Park and/or Bloomer Park. This project can also address some ADA features for lake access and increase the offerings at Spencer Park. It would add a water feature to Bloomer Park. The project would generate additional attendance and revenue in either park.	

PK-05F	Borden Park: Soccer Field Renovations
Renovation of three (3) existing soccer fields at Borden Park. Correct drainage, grading, and re-sod to improve performance and safety under high traffic and use. Operating costs of approximately $10,000 per year per field are anticipated to remain consistent with timely renovations, before more extensive service levels are required to keep the fields in a suitable condition for play.	

PK-14	Nowicki Park: Development
Development of the 35-acre park located on Adams Road to include both active and passive recreational opportunities.	

2016-2021 Capital Improvement Plan
Projects Pending

PK-16	Yates Park: Parking Lot Rehabilitation
Reconstruction and resurfacing of the Yates Park parking lot in order to make it safer for patrons exiting the park. The existing gravel parking surface and lot angle makes it difficult for patrons to safely merge into traffic on the main roadway.	

PK-20	Avondale Park: Field Rehabilitation
Growing demand for field rental is greater than available resources. Improved turf and irrigation will aid in the recovery of a field after use, allowing additional games to be played at the park to help meet demand and to generate additional revenue. Private Local League support will be sought to offset some of the costs to rehabilitate the field. Operating costs of approximately $10,000 per year per field are anticipated to remain consistent with timely renovation, before more extensive service levels are required to keep the field in a suitable condition for play.	

PW-04	Livernois Road Pathway (New Life Lane – Tienken Road)
Construction of approximately 4,000' of 8' wide pathway along the west side of Livernois Road between New Life Lane and Tienken Road. Project is also to include a bridge crossing over Sargent Creek. Operating costs of approximately $1,120 per year are anticipated due to the additional pathway section added.	

PW-06A	Auburn Road Pathway Gaps [Alexander Avenue – Livernois Road]
Construction of approximately 1,000' of 8' wide asphalt pathway along the north side of Auburn Road between Alexander Avenue and Livernois Road to fill in the pathway gaps. Operating costs of approximately $280 per year are anticipated due to the additional pathway sections added. Construction is planned to begin in 2022.	

PW-08D	Tienken Road Pathway Gaps [Tiverton Trail Drive – E of Whispering Knoll Lane]
Construction of approximately 810' of 8' wide asphalt pathway along the north side of Tienken Road between Tiverton Trail Drive and 400’ east of Whispering Knoll Lane to fill in the pathway gaps. Operating costs of approximately $250 per year are anticipated due to the additional pathway sections added.	

PW-31D	John R Road Pathway [Hamlin Road – School Road]
Construction of approximately 4,350' of 8' wide asphalt pathway along the east side of John R Road between Hamlin Road and School Road. Operating costs of approximately $1,220 per year are anticipated due to the additional pathway section added. Construction is planned to begin in 2023.	

2016-2021 Capital Improvement Plan
Projects Pending

SS-13	Sheldon Road: Sanitary Sewer Metering Equipment
Installation of new sanitary sewer metering equipment in existing manhole location on Sheldon Road to monitor the amount of Oakland Township sanitary sewer flows entering the City of Rochester Hills Sanitary Sewer System. The installation of this equipment will allow the City to monitor Oakland Township's sanitary sewer flow in order to insure that they are not exceeding their allotted capacity. The sanitary sewer installation on Sheldon Road was constructed with the District 21 Sanitary Sewer Interlocal Agreement approved by City Council. The City is currently visually monitoring Oakland Township flow and proposes to install the equipment when additional homes are connected to the system. Annual operating costs are anticipated to be covered by the Oakland County Water Resources Commissioner.	

SS-59	LDFA Sanitary Sewer Main Upgrades
One of the primary purposes for completing the M-59 Corridor Plan was to identify what infrastructure would be needed to support an increase in the intensity of development in the study area. It is unknowable at this time where such intensification will occur, so no specific timeframe or dollar value is being assigned at this time. The M-59 Corridor Plan's infrastructure projects are not being prioritized at this point in time as implementation will occur opportunistically as part of a private/public partnership or to support a specific commitment by the private sector.	

SW-03B	Karas Creek Bank Stabilization
Perform bank stabilization along the Karas Creek (Section 21) from Hamlin Road north to the Clinton River. The existing open ditch is badly eroded and is very sinuous. Soil from the bank is eroding away and is being transported to the Clinton River. If allowed to continue, adjacent lands are at risk of falling into the creek and continued sediment deposits into the river could cause negative impacts to this channel and the Clinton River bank improvements. No additional operating costs are anticipated for site maintenance.	

SW-04B	Stoney Creek Drain Extension
In the northeast section of Rochester Hills there are three (3) main tributary branches of Stoney Creek referred to as the Fodera Drain (the Sheldon Road Branch, the Mead Road Branch, and the Tienken Road Branch). These branches service a drainage area of approximately 1,230 acres that extend into Oakland Township. The Mead Road Branch is intended to address the drainage of Mead Road and areas between Blue Beech Road and Wimberly Road. The Tienken Road Branch is intended to address drainage along Rochester Road north of Tienken Road including Perrydale Street and along Orion Road between Ann Maria Drive and Cherry Tree Lane. The Tienken Road branch is also intended to include local drainage for the adjacent streets along Orion Road.	

2016-2021 Capital Improvement Plan
Projects Pending

SW-05C	Rewold Drain (Phase C)
Construction of a regional detention basin north of Hamlin Road and west of John R Road on the Christian Memorial Cultural Center site. According to the Rewold Drain Study, floodwaters can flood over John R Road during a significant rain event, while water currently floods over Hamlin Road near John R Road. This project will correct both of these conditions except during an extreme rain event. Operating costs of approximately $5,000 per year are anticipated for site maintenance. The City will pursue cost-sharing options for this project and also for the on-going operations.	

SW-08A	Major Waterway Preservation
Project to identify areas along the Clinton River, Paint Creek, and Stony Creek that could benefit from a variety of actions such as stream bank stabilization and/or land acquisition to protect the natural features of the waterways and adjacent tributary areas such as floodplains and wetlands. This project is intended to be funded entirely through grant sources. The City is continuing to seek grant support for preservation.	

SW-10	Sump Line Collection System
Provide a permanent connection point for sump pump discharge for subdivisions that do not have sump collection systems. Many of the subdivisions developed in the 1970's and early 1980's do not have sump pump collection systems designed to capture footing drain discharge from residential homes. Many complaints are received of icing in roadways and yards from being saturated by excess sump water. This project proposes to install approximately 83,000 lineal feet of sump collection lines along roadways and will require that homeowners connect. In addition to icing and wet ground complaints, there is a concern that some homeowners may have violated city code by connecting footing drains to the sanitary sewer system, which reduces capacity in the sanitary sewer system and increases the amount of discharge to the county interceptor which increases overall sanitary sewer disposal costs.	

WS-59	LDFA Water Main Upgrades
One of the primary purposes for completing the M-59 Corridor Plan was to identify what infrastructure would be needed to support an increase in the intensity of development in the study area. It is unknowable at this time where such intensification will occur, so no specific timeframe or dollar value is being assigned at this time. The M-59 Corridor Plan's infrastructure projects are not being prioritized at this point in time as implementation will occur opportunistically as part of a private/public partnership or to support a specific commitment by the private sector.	

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2016-2021 Capital Improvement Plan
CIP Role Identification

The Capital Improvement Plan **Policy Group** reviews the policy, develops the project rating and weighting criteria, rates project applications, reviews funding options, and presents the six-year recommendation to the Administrative Group.

Planning Commission Representative (2)
City Council Representative
City Treasurer / Assessor
Director of Finance
Director of Planning & Development
Director of Public Services

The Capital Improvement Plan **Project Group** prepares new project applications, reviews existing CIP projects, and serves as support staff to departments and the Policy Group as needed.

City Clerk
Crew Leader – Facilities
Deputy Director DPS / City Engineer
Deputy Director MIS / Network Administrator
Director of Building
Fire Chief
Fleet Supervisor
Manager of Economic Development
Manager of Planning
Media Specialist
Park Operations Manager
Public Utilities Engineer
Senior Financial Analyst
Supervisor of Communications
Transportation Engineer

The **Administrative Group** brings the CIP Draft forward at the Planning Commission Workshop and presents the CIP at the Planning Commission Public Hearing.

Director of Finance
Director of Planning & Development

The **Planning Commission** works with the Policy Group during the plan development, conducts workshops, reviews the Policy Group's recommendation, receives public input, conducts public hearings, adopts the plan, and requests City Council to consider incorporating funding for projects into the upcoming three-year Budget Plan.

The **City Council** is encouraged to use the CIP as a tool in the adoption of the three-year Budget Plan in accordance with City Council goals and objectives.

Residents are encouraged to participate in plan development by working with various Boards and Commissions at the Planning Commission workshops, the Planning Commission public hearings, and at City Council budget workshops and public hearings. As always, communication is open between residents, Council representatives, Planning Commission representatives, and staff.

2016-2021 Capital Improvement Plan
Project Application Forms

2016-2021 Capital Improvement Plan – Project Application

Project Title: _____ Program Area: _____

Prepared By: _____ Date Prepared: _____

CIP ID #: _____

Project Description: Provide a brief (1-2 paragraph) description of project:

Planning Context: Is the project part of an Adopted Program, Policy or Plan?

☐ Yes (Must Identify): _____

☐ No

Must List the adopted program or policy, and how this project directly or indirectly meets these objectives:

Legal Context: Is the City Legally Obligated to perform this service?

☐ Yes ☐ No

Please describe City's Obligation:

Schedule: Estimated project beginning and ending dates. If project will take several years to complete, please fill out Form 2. If applicable, be sure to include any work done in prior years, including studies or other planning:

Coordination: Please identify if this project is dependant upon one or more other CIP projects, and please describe what the relationship is:

Project Priority: Low, Medium, High

_____ Priority within Program Area

_____ Priority Citywide

2016-2021 Capital Improvement Plan – Project Application

Prior Approval: Is this project included the 2015 Adopted or prior year's budget? Has this project been approved by any Board, Commission or City Council?

☐ Yes (Please check appropriate box(es) below) ☐ No

☐ City Council ☐ Planning Commission

☐ 2015 Budget ☐ Prior Year Budget:_____

Total Estimated Cost: In 2015 dollars (Amount shown here should agree with total on Form 2)

$_____

List all funding options available for this project?

Recommended funding option(s) to be used? (i.e: Operating Revenues, Fund Balance, Bond Issue etc…)

Basis of Cost Estimate: Please check one of the following

☐ Cost of comparable facility / equipment ☐ Rule of thumb indicator / unit costs

☐ Cost estimate from engineer / architect ☐ Preliminary estimate

☐ Ballpark "guesstimate"

Budget Impact (Costs): Any and all future operating costs this project/item will create: Payroll/Staffing; Maintenance; Supplies etc… (** Details Required)*

Budget Impact (Savings): Any and all future operating savings this project/item will create: Payroll/Staffing; Maintenance; Supplies etc… (** Details Required)*

If Cost Impact Exceeds Saving Impact: Please explain in detail the increased level of services that will be provided with the implementation of this project (** Details Required)*

** Projects submitted without thorough future cost/savings projections may not be accepted*

2016-2021 Capital Improvement Plan
Project Application Forms

2016-2021 Capital Improvement Plan – Equipment Application

Equipment: _____ Date Prepared: _____

Department: _____

Form of Acquisition: Please check one of the following

☐ Purchase ☐ Rental / Lease

Number of Units Requested: _____

Estimated Service Life (Years): _____

Total Net Impact Over Service Life	**Per Unit ($):**	**Total Cost ($):**
Plus: Purchase Price:	*$0.00*	***$0.00***
Plus: Installation or Related Charges:	*$0.00*	***$0.00***
Less: Trade-in, Salvage Value, Discount:	*$0.00*	***$0.00***
Net Purchase Cost / Annual Rent:	**$0.00**	**$0.00**
Plus: Annual Operational – After:	*$0.00*	***$0.00***
Less: Annual Operational – Savings:	*$0.00*	***$0.00***
Net Annual Operational Impact:	**$0.00**	**$0.00**
Net Operational Impact Over Service Life:	**$0.00**	**$0.00**
Total Net Impact Over Service Life:	**$0.00**	**$0.00**

Purpose of Expenditure: Please check appropriate box(es):

☐ Scheduled Replacement ☐ Present Equipment Obsolete

☐ Replace Worn-Out Equipment ☐ Reduce Personnel Time

☐ Expanded Service Life ☐ New Operation

☐ Increased Safety ☐ Improved Service to Community, Procedures etc…

☐ Other: _____

Replaced Item(s): Attach Separate Sheet if Necessary

Item	*Make*	*Age*	*Prior Year's Maintenance*	*Prior Year's Rental Cost*
			$	$
			$	$
			$	$

Project Title: _____ CIP ID#: _____

Project Construction	Cost Before 2015	ADOPTED BUDGET 2015	PROJECTED BUDGET 2016	PROJECTED BUDGET 2017	2018	2019	2020	2021	Total	City Share	TOTAL CITY
Preliminary Engineering									$0	100%	$0
Right-of-Way Services									$0	100%	$0
Land Acquisition (ROW)									$0	100%	$0
Geotechnical Engineering									$0	100%	$0
Construction									$0	100%	$0
Construction Engineering									$0	100%	$0
Other Construction Costs									$0	100%	$0
Equipment / Vehicle Purchase									$0	100%	$0
Total Project Construction	$0	$0	$0	$0	$0	$0	$0	$0	$0		$0

Future Net Operating Costs / Savings	Cost Before								Total	City Share	TOTAL CITY
Est. Staffing Impact									$0	100%	$0
Est. Operational Impact									$0	100%	$0
Est. Maintenance Impact									$0	100%	$0
Est. Other Impact									$0	100%	$0
Total Operating Impact	$0	$0	$0	$0	$0	$0	$0	$0	$0		$0

Grand Total Project	$0	$0	$0	$0	$0	$0	$0	$0	$0		$0

** Coordinate with:*

** Note:*

2016-2021 Capital Improvement Plan
Needs Assessment Form

2016-2021 CAPITAL IMPROVEMENT PROJECT RATING FORM

Project Name: _____ Project #: _____

Department: _____ Total Score: 0

Rater Name:	Score Range	Rater Score	Weight	Total Points
1 Contributes to Health, Safety and Welfare			5	0
Eliminates a known hazard (accident history)	5			
Eliminates a potential hazard	4			
Materially contributes	3			
Minimally contributes	1			
No Impact	0			
2 Project Needed to Comply with Local, State or Federal Law			5	0
Yes	5			
No	0			
3 Project Conforms to Adopted Program, Policy or Plan			4	0
Project is consistent with adopted City Council policy or plan	5			
Project is consistent with Administrative policy	3			
No policy / plan in place	0			
4 Project Remediates an Existing or Projected Deficiency			3	0
Completely Remedy Problem	5			
Partially Remedy Problem	3			
No	0			
5 Will Project Upgrade Facilities			3	0
Rehabilitates / upgrades existing facility	5			
Replaces existing facility	3			
New facility	1			
6 Contributes to Long-term Needs of Community			2	0
More than 30 years	5			
21 - 30 years	4			
11 - 20 years	3			
4 - 10 years	2			
3 years or less	1			
7 Annual Impact on Operating Costs Compared to Operating Costs Absent the Project			2	0
Net Cost Savings	5			
No Change	4			
Minimal increase (<$25,000)	3			
Moderate Increase ($25,000 - $100,000)	2			
Major Increase (> $100,000)	1			
8 Impact Measures - Net Present Value & Internal Rate of Return / # of Years to Recoup Costs			2	0
High / 0-3 Years	5			
Medium-High / 4-7 Years	4			
Medium / 8-11 Years	3			
Medium-Low / 12-15 Years	2			
Low / 16 - 20 Years	1			
Never	0			
9 Service Area of Project			2	0
Regional	5			
City-Wide	4			
Several neighborhoods	3			
One neighborhood or less	1			
10 Department Priority			2	0
High	5			
Medium	3			
Low	1			
11 Project Delivers Level of Service Desired by Community			2	0
High	5			
Medium	3			
Low	1			

2016-2021 Capital Improvement Plan
Fleet Replacement Schedule

2016 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	*DEPARTMENT*	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Wheel Load Weigher	*OCSO*	#1122	8	$ 4,920
Wheel Load Weigher	*OCSO*	#1123	8	$ 4,920
Dump Body Vehicle Insert	*Parks - Borden*	#6134	5	$ 6,400
Sign Shop Cutter	*DPS - Roads*	#6163	5	$ 6,250
Field Rake	*Parks - Borden*	#6168	5	$ 11,680
Zero Turn Mower	*Parks - Borden*	#6263	4	$ 11,960
Zero Turn Mower	*Parks - Borden*	#6264	4	$ 11,960
Welder Arc	*DPS - Fleet*	#90481	8	$ 5,300
Front End Loader	*DPS*	39-095	12	$ 175,890
Wheeled Excavator	*DPS*	39-102	12	$ 230,630
Equipment Trailer	*Parks - Borden*	39-229	12	$ 4,980
Stump Grinder	*Forestry*	39-317	10	$ 36,590
Traffic Arrowboard	*DPS - Roads*	39-325	7	$ 6,760
Traffic Arrowboard	*DPS - Roads*	39-326	7	$ 6,760
Mini-Track Excavator Trailer	*DPS - W&S*	TBD	12	$ 7,500
Mini-Track Excavator	*DPS - W&S*	TBD	12	$ 60,000
Street Sweeper	*DPS - Roads*	39-029	7	$ 204,890
Sign/Guardrail Truck	*DPS - Roads*	39-087	12	$ 195,930
Cargo Van	*Building*	39-174	7	$ 19,010
Passenger Car	*Assessing*	39-178	7	$ 16,270
Pickup 2wd	*Building*	39-184	7	$ 17,760
Pickup 2wd	*DPS*	39-185	7	$ 17,240
Cargo Van	*Building- Facilities*	39-275	7	$ 21,790
Cargo Van	*DPS - W&S*	39-278	7	$ 20,960
Cargo Van	*Building - Facilities*	39-279	7	$ 20,960
Pickup 4wd	*DPS*	39-280	7	$ 24,380
Pickup 4wd w\ Plow	*Parks - Borden*	39-281	6	$ 27,570
Pickup 2wd	*Building*	39-283	7	$ 17,510
Pickup 2wd	*Building*	39-284	7	$ 17,510
Pickup 4wd	*Parks*	39-285	7	$ 23,540
Pickup 4wd w\ Plow	*Parks - Borden*	39-290	7	$ 29,050
Pickup 4wd w\ Plow	*Parks - Borden*	39-291	7	$ 29,050
Pickup 4wd w\ Plow	*DPS - W&S*	TBD	7	$ 45,000
			TOTAL 2016 FLEET VEHICLE / EQUIPMENT COSTS:	$ 1,340,920

2016-2021 Capital Improvement Plan
Fleet Replacement Schedule

2017 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	*DEPARTMENT*	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Transmission Fluid Exchanger	*DPS - Fleet*	#1115	6	$ 4,850
Service Hoist	*Parks - Borden*	#2431	10	$ 12,840
Top Dresser	*Parks - Borden*	#2432	8	$ 27,890
Deep Tine Aerator	*Parks - Borden*	#4526	10	$ 36,080
Wheel Balancer	*DPS - Fleet*	#5282	8	$ 4,020
Pressure Washer	*DPS - Fleet*	#5907	5	$ 9,820
De-Icing Vehicle Insert	*Parks - Borden*	#6133	5	$ 5,350
Dump Body Vehicle Insert	*Parks - Borden*	#6135	5	$ 8,860
Rotary Broom	*Parks - Spencer*	#6155	4	$ 8,160
Mower	*Cemetery*	#6265	5	$ 12,310
Finish Machine	*DPS - Fleet*	#902547	5	$ 6,550
Tractor/Loader/Backhoe	*DPS - Roads*	39-084	12	$ 109,500
Excavator	*DPS*	39-169	12	$ 201,520
Forklift	*DPS*	39-188	10	$ 27,180
Hydroseeder	*DPS*	39-208	10	$ 23,900
Trash Pump	*DPS - Fleet*	39-212	10	$ 44,440
Equipment Trailer	*DPS - W&S*	39-224	10	$ 19,010
Steam Generating Unit/Trailer	*DPS*	39-225	12	$ 21,580
Equipment Trailer	*DPS - W&S*	39-226	12	$ 20,560
Air Compressor	*DPS - Fleet*	39-228	10	$ 17,470
Equipment Trailer	*OCSO*	39-230	5	$ 7,350
Asphalt Roller	*DPS - Roads*	39-303	8	$ 21,300
Service Truck	*Fleet*	39-015	12	$ 35,660
Water System Truck	*DPS - W&S*	39-042	12	$ 191,690
Tandem-Axle Dump Truck	*DPS*	39-058	12	$ 202,630
Tandem-Axle Dump Truck	*DPS*	39-067	12	$ 202,630
Road Grader	*DPS - Roads*	39-082	12	$ 234,090
Pickup 4wd w\ Plow	*Cemetery*	39-154	6	$ 24,890
Sewer Camera Truck	*DPS - W&S*	39-158	12	$ 46,750
Pickup 4wd	*Forestry*	39-160	7	$ 25,840
Crew Truck	*DPS - W&S*	39-179	12	$ 173,590
Pickup 4wd	*DPS - Drains*	39-282	7	$ 23,700
Pickup 4wd	*Ordinance*	39-288	7	$ 21,710
Pickup 4wd w\ Plow	*DPS*	39-289	7	$ 43,030
Pickup 4wd w\ Plow	*DPS*	39-292	7	$ 29,050
Pickup 4wd w\ Plow	*DPS*	39-293	7	$ 29,050
	TOTAL 2017 FLEET VEHICLE / EQUIPMENT COSTS:			**$ 1,934,850**

2016-2021 Capital Improvement Plan
Fleet Replacement Schedule

2018 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	*DEPARTMENT*	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Concrete Power Screed	*DPS - Roads*	#5877	10	$ 6,540
Dump Truck Body Insert	*Parks*	#6185	7	$ 12,920
Wheeled Excavator	*DPS - Roads*	39-148	12	$ 236,530
Floor Scrubber	*DPS - Fleet*	39-276	12	$ 53,080
Tractor/Loader	*Cemetery*	39-277	12	$ 61,440
Concrete Saw	*DPS - Roads*	39-323	10	$ 13,630
Smart Cart	*OCSO*	39-324	5	$ 10,450
Utility Vehicle	*Parks - Borden*	39-328	4	$ 8,260
Pickup 4wd w\ Plow	*Facilities*	39-298	7	$ 33,590
Pickup 4wd w\ Plow	*DPS*	39-299	7	$ 33,590
Passenger Car	*City Pool*	39-525	7	$ 21,470
Passenger Car	*DPS - Roads*	39-526	7	$ 21,470
Pickup 4wd w\ Plow	*DPS - W&S*	39-527	7	$ 33,590
Pickup 4wd w\ Plow	*Parks - Bloomer*	39-528	7	$ 33,590
Pickup 4wd	*DPS - W&S*	39-529	7	$ 29,800
Pickup 4wd w\ Plow	*DPS - Roads*	39-530	7	$ 35,590
		TOTAL 2018 FLEET VEHICLE / EQUIPMENT COSTS:		$ 645,540

2019 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	*DEPARTMENT*	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Utility Tractor	*Parks*	#5999	10	$ 59,680
Zero-Turn Mower	*Parks - Borden*	#6174	4	$ 12,530
Zero-Turn Mower	*Parks - Borden*	#6175	4	$ 12,530
Equipment Trailer	*DPS - Roads*	39-231	10	$ 7,290
Tractor / Loader	*DPS*	39-286	10	$ 130,710
Utility Vehicle	*Parks - Borden*	39-333	4	$ 15,790
Utility Vehicle	*Parks - Spencer*	39-334	4	$ 14,630
Wood Chipper	*Forestry*	39-335	8	$ 39,600
Pickup 4wd	*DPS - W&S*	39-533	7	$ 26,320
Pickup 4wd w\ Plow	*DPS*	39-534	7	$ 31,080
Pickup 4wd w\ Plow & Platform	*DPS*	39-535	7	$ 34,960
Pickup 4wd w\ Plow	*DPS*	39-536	7	$ 31,080
Pickup 4wd w\ Plow	*DPS*	39-537	7	$ 31,080
Pickup 4wd w\ Plow & Platform	*DPS*	39-538	7	$ 34,960
Sport Utility 4wd	*Media*	39-555	7	$ 22,500
		TOTAL 2019 FLEET VEHICLE / EQUIPMENT COSTS:		$ 504,740

2016-2021 Capital Improvement Plan
Fleet Replacement Schedule

2020 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	*DEPARTMENT*	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
Dump Body Vehicle Insert	*Parks - Borden*	#6134	5	**$ 7,420**
Fuel Management System	*Fleet*	#6143	10	**$ 26,880**
Rotary Broom	*Parks - Spencer*	#6155	4	**$ 9,190**
Zero Turn Mower	*Parks - Borden*	#6263	4	**$ 13,460**
Zero Turn Mower	*Parks - Borden*	#6264	4	**$ 13,460**
Trailer Mounted Hot Pathcer	*DPS - Roads*	29-235	8	**$ 30,840**
Wheel Loader	*DPS - Roads*	39-296	10	**$ 183,130**
Radar Smart Cart	*OCSO*	39-324	5	**$ 16,120**
Crash Attenuator	*Fleet*	39-327	10	**$ 21,170**
Utility Vehicle	*Parks - Borden*	39-329	4	**$ 11,320**
Utility Vehicle	*Parks - Borden*	39-330	4	**$ 11,230**
Utility Vehicle	*Parks - Museum*	39-332	4	**$ 10,320**
Single-Axle Dump Truck	*DPS*	39-189	12	**$ 190,850**
Single-Axle Dump Truck	*DPS*	39-190	12	**$ 190,850**
Tandem-Axle Dump Truck	*DPS*	39-270	12	**$ 228,060**
Tandem-Axle Dump Truck	*DPS*	39-271	12	**$ 228,060**
Tandem-Axle Dump Truck	*DPS*	39-272	12	**$ 228,060**
Pickup 4wd w\ Plow	*Parks*	39-273	7	**$ 33,190**
Pickup 4wd w\ Plow	*Parks*	39-274	7	**$ 33,190**
Pickup 4wd	*Parks*	39-543	7	**$ 28,740**
Pickup 2wd	*Building*	39-544	7	**$ 25,780**
Pickup 4wd w\ Dump	*Parks*	TBD	6	**$ 47,740**
	TOTAL 2020 FLEET VEHICLE / EQUIPMENT COSTS:			**$ 1,589,060**

2016-2021 Capital Improvement Plan
Fleet Replacement Schedule

2021 FLEET EQUIPMENT PURCHASES BREAKDOWN				
VEHICLE TYPE	*DEPARTMENT*	VEHICLE #	REPLACEMENT CYCLE	ESTIMATED COST
De-Icing Vehicle Insert	*Parks - Borden*	#6133	5	**$ 6,200**
Dump Body Vehicle Insert	*Parks - Borden*	#6135	5	**$ 10,270**
Sign Shop Cutter	*DPS - Roads*	#6163	5	**$ 7,250**
Field Rake	*Parks - Borden*	#6168	5	**$ 13,540**
Finish Machine	*DPS - Fleet*	#902547	5	**$ 7,590**
Equipment Trailer	*OCSO*	39-230	5	**$ 8,520**
Municipal Tractor	*DPS*	39-287	12	**$ 147,000**
Concrete Saw	*DPS - Roads*	39-336	10	**$ 23,100**
Passenger Car	*Assessing*	39-130	7	**$ 23,570**
Pickup 4wd w\ Plow	*DPS*	39-149	6	**$ 34,040**
Sport Utility 4wd	*DPS - W&S*	39-175	7	**$ 24,040**
Pickup 4wd w\ Plow	*DPS*	39-180	6	**$ 39,220**
Pickup 4wd w\ Plow	*DPS*	39-183	6	**$ 39,220**
Pickup 4wd w\ Plow	*Parks - Borden*	39-281	6	**$ 32,920**
Pickup 4wd	*DPS*	39-297	10	**$ 38,890**
2-Yard Dump Truck	*DPS*	39-531	10	**$ 49,350**
Sanitary Sewer Truck	*DPS - W&S*	39-532	10	**$ 494,080**
	TOTAL 2021 FLEET VEHICLE / EQUIPMENT COSTS:			**$ 998,800**

2016-2021 Capital Improvement Plan
Fire Replacement Schedule

2016 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	*VEHICLE #*	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Rescue Pumper	Fire Suppression	*Engine 3*	10	$ 480,000
E-One Technical Rescue	Fire Suppression	*Rescue 1*	10	$ 568,000
Sport Utility 4wd	Administration	*Captain 4*	10	$ 39,000
Pickup 4wd	Fire Prevention	*104*	10	$ 34,000
Ambulance	EMS	*Alpha 24*	7	$ 203,600
Ambulance	EMS	*Bravo 25*	7	$ 203,600
	2016 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:			**$ 1,528,200**

2017 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	*VEHICLE #*	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Sport Utility 4wd	Administration	*Chief 1*	10	$ 42,000
Sport Utility 4wd	Administration	*127*	10	$ 42,000
Sport Utility 4wd	Fire Prevention	*101*	10	$ 42,000
Sport Utility 4wd	Training	*107*	10	$ 42,000
Pickup 4wd	Fire Suppression	*Utility 1*	10	$ 36,000
	2017 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:			**$ 204,000**

2018 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	*VEHICLE #*	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Ambulance	EMS	*Alpha 21*	7	$ 215,000
Rescue Pumper	Fire Suppression	*Engine 1*	7	$ 525,000
Rescue Pumper	Fire Suppression	*Engine 4*	7	$ 525,000
	2018 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:			**$ 1,265,000**

2019 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	*VEHICLE #*	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Sport Utility 4wd	Fire Suppression	*Utility 3*	10	$ 39,690
Sport Utility 4wd	Fire Suppression	*Utility 4*	10	$ 38,940
Sport Utility 4wd	Fire Prevention	*106*	10	$ 34,500
	2019 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:			**$ 113,130**

2020 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	*VEHICLE #*	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Rescue Pumper	Fire Suppression	*Engine 2*	10	$ 550,000
	2020 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:			**$ 550,000**

2021 FIRE DEPARTMENT VEHICLE & APPARATUS BREAKDOWN				
VEHICLE TYPE	DIVISION	*VEHICLE #*	REPLACEMENT CYCLE (Years)	ESTIMATED COST
Ambulance	EMS	*Bravo 23*	7	$ 247,710
Ambulance	EMS	*Alpha 22*	7	$ 247,710
	2021 TOTAL FIRE DEPARTMENT VEHICLE & APPARATUS COSTS:			**$ 495,420**

NEW PROJECTS ADDED TO 2016-2021 CIP AGGREGATE

2016-2021 CAPITAL IMPROVEMENT PLAN AGGREGATE SPREADSHEET

PROJECT NUMBER AND NAME		PROJECT COORDINATION	AVERAGE RATING	POTENTIAL FUNDING SOURCE(S)	TOTAL PROJECT COST	CITY SHARE	TOTAL CITY COST	FUTURE CITY COST (2016-2021)	2016 PROJECT COST	2016 CITY COST	2017 PROJECT COST	2017 CITY COST	2018 PROJECT COST	2018 CITY COST	2019 PROJECT COST	2019 CITY COST	2020 PROJECT COST	2020 CITY COST	2021 PROJECT COST	2021 CITY COST
	Major Road Construction:																			
MR-27	Major Road System: Bridge Rehabilitation Program	None	127	Major Road Fund	228,000	100%	228,000	228,000	10,000	10,000	66,000	66,000	10,000	10,000	66,000	66,000	10,000	10,000	66,000	66,000
MR-01B	LDFA Road System: Rehabilitition Program	MR-01A; LS-01	101	LDFA Fund	1,200,000	100%	1,200,000	1,200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000	200,000
MR-13A	Dequindre Road Reconstruction [Auburn-South Blvd]	None	101	STP (80/10/10); RCOC; RCMC; MR	24,108,000	2.5%	602,700	279,070	11,162,800	279,070	-	-	-	-	-	-	-	-	-	-
MR-01A	Major Road System: Rehabilitition Program	MR-01B; LS-01	97	Major Road Fund	3,000,000	100%	3,000,000	3,000,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000	500,000
MR-52	Research Drive Reconstruction	MR-01A; MR-01B; LS-01	92	LDFA Fund	767,580	100%	767,580	767,580	-	-	-	-	767,580	767,580	-	-	-	-	-	-
MR-57	Drexelgate/Eddington @ Rochester Rd: Traffic Signal	None	89	MDOT	256,500	0%	-	-	-	-	-	-	25,000	-	231,500	-	-	-	-	-
MR-24C	Brewster Road: Right-Turn Lane @ Walton Boulevard	None	88	Major Road Fund	471,250	100%	471,250	416,250	416,250	416,250	-	-	-	-	-	-	-	-	-	-
MR-35B	Rochdale Drive Rehabilitation	LS-01	86	Major Road Fund	99,380	100%	99,380	99,380	99,380	99,380	-	-	-	-	-	-	-	-	-	-
MR-49C	Avon Road Widening [Princeton - Grovecrest]	PW-49C	85	Major Road Fund; Tri-Party	577,500	33%	192,500	192,500	-	-	-	-	45,000	15,000	532,500	177,500	-	-	-	-
MR-56	North Fairview Lane Rehabilitation	MR-01A; MR-01B; LS-01	83	Major Road Fund	210,380	100%	210,380	210,380	210,380	210,380	-	-	-	-	-	-	-	-	-	-
MR-15C	Butler Road: Right-Turn Lane @ Adams Road	None	78	Major Road Fund	159,760	100%	159,760	122,500	122,500	122,500	-	-	-	-	-	-	-	-	-	-
MR-11	Rochester Industrial Park Reconstruction	MR-01A; MR-01B	77	Major Road Fund	993,130	100%	993,130	993,130	-	-	993,130	993,130	-	-	-	-	-	-	-	-
MR-45	Northfield & Tan Industrial Park Reconstruction	MR-01A; MR-01B; LS-01	77	Major Road Fund	2,125,000	100%	2,125,000	2,125,000	2,125,000	2,125,000	-	-	-	-	-	-	-	-	-	-
MR-46	Industro Plex Industrial Park Reconstruction	MR-01A; MR-01B; LS-01	77	Major Road Fund	770,000	100%	770,000	770,000	-	-	-	-	-	-	770,000	770,000	-	-	-	-
MR-12	Major Road System: Traffic Calming Program	MR-01A; LS-12	72	Major Road Fund / HOA	120,000	50%	60,000	60,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000	20,000	10,000
MR-05F	Adams Boulevard: Irrigation	None	63	METRO Act	190,000	100%	190,000	190,000	190,000	190,000	-	-	-	-	-	-	-	-	-	-
				Subtotal	**$ 35,276,480**		**11,069,680**	**$ 10,653,790**	**$ 15,056,310**	**$ 4,162,580**	**$ 1,779,130**	**$ 1,769,130**	**$ 1,567,580**	**$ 1,502,580**	**$ 2,320,000**	**$ 1,723,500**	**$ 730,000**	**$ 720,000**	**$ 786,000**	**$ 776,000**
	Local Street Improvement Plan:																			
LS-01	Local Street: Rehabilitation Program	MR-01A; MR-01B	100	Local Street Fund	30,000,000	100%	30,000,000	30,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000
LS-13	School Road Paving [John R - 1,700' East]	None	93	Local Street Fund	360,500	100 / 73%	287,600	287,600	-	-	-	-	45,000	45,000	315,500	242,600	-	-	-	-
LS-12	Local Street: Traffic Calming Program	MR-12	75	Local Street Fund / HOA	300,000	50%	150,000	150,000	50,000	25,000	50,000	25,000	50,000	25,000	50,000	25,000	50,000	25,000	50,000	25,000
				Subtotal	**$ 30,660,500**		**30,437,600**	**$ 30,437,600**	**$ 5,050,000**	**$ 5,025,000**	**$ 5,050,000**	**$ 5,025,000**	**$ 5,095,000**	**$ 5,070,000**	**$ 5,365,500**	**$ 5,267,600**	**$ 5,050,000**	**$ 5,025,000**	**$ 5,050,000**	**$ 5,025,000**
	Water and Sewer Extensions Program:																			
WS-36	Section #33 Water Main Replacement	LS-01	106	Water & Sewer Fund	3,296,660	100%	3,296,660	3,296,660	-	-	3,296,660	3,296,660	-	-	-	-	-	-	-	-
SS-02B	Sanitary Sewer Rehabilitation Program	None	105	Water & Sewer Fund	1,500,000	100%	1,500,000	1,500,000	-	-	500,000	500,000	-	-	500,000	500,000	-	-	500,000	500,000
WS-34	Glidewell Subdivision Water Main Replacement	LS-01	101	Water & Sewer Fund	2,139,690	100%	2,139,690	2,139,690	-	-	-	-	-	-	2,139,690	2,139,690	-	-	-	-
WS-35	North Hill Subdivision Water Main Replacement	LS-01	100	Water & Sewer Fund	900,000	100%	900,000	900,000	900,000	900,000	-	-	-	-	-	-	-	-	-	-
WS-07	Booster Station #2: Replacement	None	100	Water & Sewer Fund	1,250,000	100%	1,250,000	1,250,000	1,250,000	1,250,000	-	-	-	-	-	-	-	-	-	-
WS-40	Tienken Court: Water Main Replacement	None	96	Water & Sewer Fund	40,000	100%	40,000	40,000	40,000	40,000	-	-	-	-	-	-	-	-	-	-
SS-01B	SCADA System Upgrade Schedule	None	91	Water & Sewer Fund	830,260	100%	830,260	830,260	575,000	575,000	-	-	-	-	159,540	159,540	95,720	95,720	-	-
SS-10B	Wimberly Drive: Sanitary Sewer Replacement	None	88	Water & Sewer Fund	56,000	100%	56,000	56,000	56,000	56,000	-	-	-	-	-	-	-	-	-	-
				Subtotal	**$ 10,012,610**		**10,012,610**	**$ 10,012,610**	**$ 2,821,000**	**$ 2,821,000**	**$ 3,796,660**	**$ 3,796,660**	**$ -**	**$ -**	**$ 2,799,230**	**$ 2,799,230**	**$ 95,720**	**$ 95,720**	**$ 500,000**	**$ 500,000**
	Storm Water / Drain Management:																			
SW-08C	Clinton River: Natural Channel Restoration	PK-11; PS-15B	107	Water Resource Fund / Grants	840,000	50%	420,000	420,000	-	-	-	-	-	-	280,000	140,000	280,000	140,000	280,000	140,000
SW-13	Storm Water BMP Retrofit	None	104	Water Resource Fund / CWSRF	450,000	50%	225,000	225,000	-	-	-	-	-	-	50,000	25,000	400,000	200,000	-	-
SW-11	Clinton River: Yates Riverbank Stabilization	PS-15B	100	Water Resource Fund / Grants	400,000	50%/100%	230,000	230,000	-	-	-	-	-	-	115,000	87,500	175,000	87,500	110,000	55,000
				Subtotal	**$ 1,690,000**		**875,000**	**$ 875,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 445,000**	**$ 252,500**	**$ 855,000**	**$ 427,500**	**$ 390,000**	**$ 195,000**
	Pathways:																			
PW-01	Pathway System Rehabilitation Program	None	131	Pathway Construction Fund	1,500,000	100%	1,500,000	1,500,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000	250,000
PW-08E	Tienken Pathway [Van Hoosen-Washington]	None	85	Pathway Construction Fund	258,750	100%	258,750	258,750	-	-	47,500	47,500	211,250	211,250	-	-	-	-	-	-
PW-06C	Auburn Pathway Gaps [John R-Dequindre]	None	81	Pathway Construction Fund	99,500	100%	99,500	69,750	-	-	69,750	69,750	-	-	-	-	-	-	-	-
PW-09A	Technology Drive Pathway [Auburn-2,250' North]	None	81	Pathway Construction Fund	196,250	100%	196,250	196,250	15,000	15,000	181,250	181,250	-	-	-	-	-	-	-	-
PW-49A	Avon Pathway [LeGrande-Cider Mill Blvd.]	None	81	Pathway Construction Fund	120,750	100%	120,750	120,750	-	-	-	-	-	-	18,750	18,750	102,000	102,000	-	-
PW-07D	Adams Road @ Clinton River Trail: Pathway Crossing	None	79	Pathway Construction Fund	180,330	100%	180,330	180,330	-	-	-	-	-	-	13,750	13,750	166,580	166,580	-	-
PW-06D	Auburn Pathway Gaps [Walbridge-Hickory Lawn]	None	76	Pathway Construction Fund	231,000	100%	231,000	231,000	-	-	-	-	-	-	-	-	90,750	90,750	140,250	140,250
PW-21	East Nawakwa Pathway [Rochester-Joshua]	None	75	Pathway Construction Fund	140,000	100%	140,000	140,000	-	-	17,500	17,500	122,500	122,500	-	-	-	-	-	-
PW-49C	Avon Pathway [Rainier-Bembridge]	MR-49C	66	Major Road Fund	295,800	100%	295,800	295,800	-	-	-	-	84,000	84,000	211,800	211,800	-	-	-	-
				Subtotal	**$ 3,022,380**		**3,022,380**	**$ 2,992,630**	**$ 265,000**	**$ 265,000**	**$ 566,000**	**$ 566,000**	**$ 667,750**	**$ 667,750**	**$ 494,300**	**$ 494,300**	**$ 609,330**	**$ 609,330**	**$ 390,250**	**$ 390,250**
	Parks and Recreation:																			
PK-17A	Playground Upgrades	None	103	City Funds	50,000	100%	50,000	50,000	-	-	50,000	50,000	-	-	-	-	-	-	-	-
PK-13	Riverbend Park Development	None	94	City Funds	2,250,000	100%	2,250,000	2,250,000	2,250,000	2,250,000	-	-	-	-	-	-	-	-	-	-
PK-03F	Van Hoosen Museum: Equipment Barn Replacement	None	87	Private Funds / Grants	450,000	0%	-	-	-	-	-	-	450,000	-	-	-	-	-	-	-
PK-06A	Paint Creek Trailway: Resurfacing	None	86	City Funds	50,000	100%	50,000	50,000	-	-	-	-	50,000	50,000	-	-	-	-	-	-
PK-05H	Borden Park: Office Relocation	PK-05J	79	City Funds	295,000	100%	295,000	295,000	295,000	295,000	-	-	-	-	-	-	-	-	-	-
PK-05J	Borden Park: Maintenance Yard	PK-05H	49	City Funds	480,000	100%	480,000	480,000	480,000	480,000	-	-	-	-	-	-	-	-	-	-
PK-11	Clinton River Access	SW-08C	47	City Funds	100,000	50%	50,000	50,000	-	-	-	-	-	-	100,000	50,000	-	-	-	-
				Subtotal	**$ 3,675,000**		**3,175,000**	**$ 3,175,000**	**$ 3,025,000**	**$ 3,025,000**	**$ 50,000**	**$ 50,000**	**$ 500,000**	**$ 50,000**	**$ 100,000**	**$ 50,000**	**$ -**	**$ -**	**$ -**	**$ -**
	City-Owned Facilities:																			
FA-11	ADA Compliance Implementation	None	125	Facilities Fund	240,000	100%	240,000	240,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000	40,000
FA-08B	Interchange Technology Park: Site Preparation	None	79	LDFA Fund	751,000	100%	751,000	751,000	-	-	-	-	-	-	250,000	250,000	501,000	501,000	-	-
FA-03F	Cemetery: Chapel Glass Enclosed Niches	None	79	City Funds	50,000	100%	50,000	50,000	50,000	50,000	-	-	-	-	-	-	-	-	-	-
FA-09	IT Infrastructure Capacity Funding	None	73	LDFA Fund	100,000	100%	100,000	100,000	-	-	-	-	-	-	50,000	50,000	25,000	25,000	25,000	25,000
FA-04B	DPS Facility: Alternative Energy	None	65	City Funds / Grants	600,000	100%	600,000	600,000	50,000	50,000	550,000	550,000	-	-	-	-	-	-	-	-
				Subtotal	**$ 1,741,000**		**$ 1,741,000**	**$ 1,741,000**	**$ 140,000**	**$ 140,000**	**$ 590,000**	**$ 590,000**	**$ 40,000**	**$ 40,000**	**$ 340,000**	**$ 340,000**	**$ 566,000**	**$ 566,000**	**$ 65,000**	**$ 65,000**
	Professional Services:																			
PS-08	Master Thoroughfare Plan Update	None	118	Major Road Fund	100,000	100%	100,000	100,000	-	-	-	-	100,000	100,000	-	-	-	-	-	-
PS-07	Master Land Use Plan Update Schedule	None	100	City Funds	75,000	100%	75,000	75,000	-	-	75,000	75,000	-	-	-	-	-	-	-	-
PS-15B	Green Space Stewardship: Implementation	PS-15A	100	Green Space Fund	1,350,000	100%	1,350,000	1,350,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000	225,000
PS-15A	Green Space Stewardship: Plan	SW-08C; SW-11	86	Green Space Fund	100,000	100%	100,000	50,000	25,000	25,000	25,000	25,000	-	-	-	-	-	-	-	-
PS-10	Energy Efficiency Analysis	None	86	Facilities Fund	50,000	100%	50,000	50,000	50,000	50,000	-	-	-	-	-	-	-	-	-	-
				Subtotal	**$ 1,675,000**		**$ 1,675,000**	**$ 1,625,000**	**$ 300,000**	**$ 300,000**	**$ 325,000**	**$ 325,000**	**$ 325,000**	**$ 325,000**	**$ 225,000**	**$ 225,000**	**$ 225,000**	**$ 225,000**	**$ 225,000**	**$ 225,000**

NEW PROJECTS ADDED TO 2016-2021 CIP AGGREGATE

2016-2021 CAPITAL IMPROVEMENT PLAN AGGREGATE SPREADSHEET

PROJECT NUMBER AND NAME		PROJECT COORDINATION	AVERAGE RATING	POTENTIAL FUNDING SOURCE(S)	TOTAL PROJECT COST	CITY SHARE	TOTAL CITY COST	FUTURE CITY COST (2016-2021)	2016 PROJECT COST	2016 CITY COST	2017 PROJECT COST	2017 CITY COST	2018 PROJECT COST	2018 CITY COST	2019 PROJECT COST	2019 CITY COST	2020 PROJECT COST	2020 CITY COST	2021 PROJECT COST	2021 CITY COST
	Internal Services:																			
IS-04D	SCBA Replacement Program	None	**128**	Fire Capital Fund / Grants	899,410	100%	899,410	899,410	-	-	-	-	-	-	-	-	-	-	899,410	899,410
IS-04G	Heart Monitor Replacement Schedule	None	**115**	Fire Capital Fund	195,710	100%	195,710	195,710	-	-	-	-	-	-	-	-	-	-	195,710	195,710
IS-10D	Office Software Suite Update Schedule	None	**113**	MIS Fund	100,000	100%	100,000	100,000	100,000	100,000	-	-	-	-	-	-	-	-	-	-
IS-08	Fire Vehicle & Apparatus Replacement Schedule	None	**109**	Fire Capital Fund	4,155,750	100%	4,155,750	4,155,750	1,528,200	1,528,200	204,000	204,000	1,265,000	1,265,000	113,130	113,130	550,000	550,000	495,420	495,420
IS-10B	Computer Network Upgrade Schedule	IS-10C	**103**	MIS Fund	900,000	100%	900,000	900,000	330,000	330,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	60,000	330,000	330,000
IS-10C	AS/400: Upgrade/Replacement Schedule	IS-10B	**97**	MIS Fund	25,000	100%	25,000	25,000	25,000	25,000	-	-	-	-	-	-	-	-	-	-
IS-18	Election Equipment Replacement Schedule	None	**95**	City Funds / Grants	390,000	100%	390,000	390,000	390,000	390,000	-	-	-	-	-	-	-	-	-	-
IS-05	Citywide Fleet Replacement Schedule	None	**86**	Fleet Equipment Fund	7,013,910	100%	7,013,910	7,013,910	1,340,920	1,340,920	1,934,850	1,934,850	645,540	645,540	504,740	504,740	1,589,060	1,589,060	998,800	998,800
IS-02B	City Website Upgrade Schedule	None	**52**	MIS Fund	35,000	100%	35,000	35,000	-	-	35,000	35,000	-	-	-	-	-	-	-	-
				Subtotal	**$ 13,714,780**		**13,714,780**	**$ 13,714,780**	**$ 3,714,120**	**$ 3,714,120**	**$ 2,233,850**	**$ 2,233,850**	**$ 1,970,540**	**$ 1,970,540**	**$ 677,870**	**$ 677,870**	**$ 2,199,060**	**$ 2,199,060**	**$ 2,919,340**	**$ 2,919,340**
				GRAND TOTAL ALL CITY PROJECTS	**$ 101,467,750**		**75,723,050**	**$ 75,227,410**	**$ 30,371,430**	**$ 19,452,700**	**$ 14,390,640**	**$ 14,355,640**	**$ 10,165,870**	**$ 9,625,870**	**$ 12,766,900**	**$ 11,830,000**	**$ 10,330,110**	**$ 9,867,610**	**$ 10,325,590**	**$ 10,095,590**

15-Apr-14

2016-2021 Capital Improvement Plan
CIP Schedule

January 20	CIP Project Group receives CIP schedule and instructions. Planning Commission representative (at Planning Commission meeting) announces request for public submission of any eligible project. Project Application form will be available on City website for public.
January 26	Mayor or City Council representative (at City Council meeting) announces request for public submission of any eligible project.
February 20	Deadline to submit new CIP project applications/re-evaluations.
March 17	CIP Project group & CIP Policy group meeting (Q & A opportunity for CIP Policy group).
March 27	CIP Project ratings due from Policy Group.
April 21	Planning Commission Workshop and public hearing to review Draft 2016-2021 CIP and to provide an opportunity for public input.

NOTICE OF PUBLIC HEARING
ON THE PROPOSED
2016-2021 CAPITAL IMPROVEMENT PLAN

ROCHESTER HILLS PLANNING COMMISSION

Notice is hereby given that the City of Rochester Hills Planning Commission will hold a Public Hearing at 1000 Rochester Hills Drive, Rochester Hills, Oakland County, Michigan 48309, on Tuesday, April 21, 2015 at 7:00 p.m. to receive public comments regarding the City of Rochester Hills 2016-2021 Capital Improvement Plan as a component of the City's Comprehensive Plan.

Information regarding the Capital Improvement Plan may be obtained from the Fiscal Department during regular business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday, or by calling (248) 656-4660. Written comments concerning this matter will be received by the Planning and Economic Development Department prior to the Public Hearing or by the Planning Commission at the Public Hearing.

William F. Boswell, Chairperson
Rochester Hills Planning Commission

Note: Anyone planning to attend the meeting who has need of special assistance under the Americans Disabilities Act (ADA) is asked to contact the Facilities Division (248) 656-2560 forty-eight (48) hours prior to the meeting. Staff will be pleased to make the necessary arrangements.

Dated this 1st day of April 2015
at Rochester Hills, Michigan.
Publish Monday, April 6, 2015

2016-2021 Capital Improvement Plan
Capital Improvement Plan Review

2016-2021 Capital Improvement Plan / Projects Added				
		Page #	*Year*	
FA-03F	Cemetery: Chapel Glass Enclosed Niches	**43**	2016-2016	New Project Submittal
FA-04B	DPS Facility: Alternative Energy	**43**	2016-2017	New Project Submittal
MR-35B	Rochdale Drive Rehabilitation	**12**	2016-2016	New Project Submittal
PK-05H	Borden Park: Office Relocation	**39**	2016-2016	New Project Submittal
PS-15B	Green Space Stewardship: Implementation	**46**	2016-2021	New Project Submittal
PW-21	East Nawakwa Pathway [Rochester - Joshua]	**34**	2017-2018	New Project Submittal
SS-10B	Wimberly Drive: Sanitary Sewer Replacement	**24**	2016-2016	New Project Submittal
WS-07	Booster Station #2: Replacement	**25**	2016-2016	New Project Submittal
WS-40	Tienken Court: Water Main Replacement	**26**	2016-2016	New Project Submittal

2016-2021 Capital Improvement Plan
Capital Improvement Plan Review

2016-2021 Capital Improvement Plan / Projects Removed from 2015-2020 CIP		
		Reason Not Included
FA-01F	City Hall: Parking Lot Rehabilitation	Project Complete
FA-02F	Fire Station #1: Training Tower	Project Deleted
FA-06	Cemetery: Columbarium	Project Complete
IS-13	Utility Billing Software System	Project Complete
LS-10	Crestline Street Paving	Project Complete
MR-02B	Hamlin Road Reconstruction [Hamlin Court - Dequindre]	Project Complete
MR-02H	Hamlin Boulevard Irrigation [Adams Road - Crooks Road]	Project Complete
MR-20A	Grandview Drive @ Tienken Road: Traffic Signal & Improvement	Project Complete
MR-31D	John R Road @ South Boulevard: Intersection Improvements	Project Complete
MR-40C	Tienken Road Rehabilitation [Adams Road - Livernois Road]	Project Complete
MR-40D	Tienken Road @ Sheldon Road: Intersection Enhancements	Project Complete
MR-40E	Tienken Road @ Washington Road: Intersection Enhancements	Project Complete
MR-40F	Tienken Road @ Livernois Road: Intersection Enhancements	Project Complete
MR-42E	M-59 Sound Barrier Installation (11 Additional)	Project Deleted
MR-55	Regency Drive Rehabilitation	Project Complete
MR-58	Streamwood Drive Rehabilitation	Project Complete
PK-05B	Borden Park: Roller Hockey Rink Board & Tile Replacement	Project Complete
PS-09A	Olde Town District: Redevelopment Schedule	Project Complete
PW-02B	Hamlin Pathway [Hamlin Court - Dequindre]	Project Complete
PW-07C	Adams Pathway [Powderhorn Ridge - Tienken]	Project Complete
PW-08B	Tienken Pathway [Livernois - Rochester]	Project Complete
PW-08D	Tienken Pathway Gaps [Tiverton Trail - Whispering Knoll]	To Pending
WS-02B	Hamlin Water Main Replacement [Livernois - Rochester]	Project Complete

2016-2021 Capital Improvement Plan
Capital Improvement Plan Review

2016-2021 Capital Improvement Plan / Project Timeline Changes			
		Project Timelines:	
		Prior	***Revised***
FA-08B	Interchange Technology Park: Site Preparation	2018-2019	2019-2020
FA-09	IT Infrastructure Capacity Funding	2018-2020	2019-2021
MR-49C	Avon Road Widening [Princeton Avenue - Grovecrest Avenue]	2017-2018	2018-2019
MR-57	Drexelgate/Eddington @ Rochester Road: Traffic Signal	2016-2017	2018-2019
PK-03F	Van Hoosen Museum: Equipment Barn Replacement	2017-2017	2018-2018
PK-05J	Borden Park: Maintenance Yard	2015-2015	2016-2016
PK-11	Clinton River Access	2018-2018	2019-2019
PK-13	Riverbend Park: Development	2013-2014	2013-2016
PS-10	Energy Efficiency Analysis	2015-2015	2016-2016
PW-06C	Auburn Pathway Gaps [John R - Dequindre]	2018-2019	2015-2017
PW-06D	Auburn Pathway Gaps [Walbridge Road - Hickory Lawn Road]	Pending	2020-2021
PW-07D	Adams Road @ Clinton River Trailway: Road Crossing	Pending	2019-2020
PW-08E	Tienken Pathway [Van Hoosen Road - Washington Road]	Pending	2017-2018
PW-49C	Avon Road Widening [Ranier Avenue - Bembridge Drive]	2017-2018	2018-2019
SW-08C	Clinton River: Natural Channel Restoration	2018-2020	2019-2021
SW-11	Clinton River / Yates Park: Riverbank Stabilization	2018-2020	2019-2021
SW-13	Storm Water Best Management Practices (BMP) Retrofitting	2018-2019	2019-2020

2016-2021 Capital Improvement Plan
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PROJECT LOCATION MAPS: