

The Capital Improvements Plan FY 2019 - FY 2024 was developed by the Planning Commission for the Village of Brooklyn. The Plan is a result of the Planning Commission's work and recommendations made at the meeting held on November 23, 2017. The Commission's FY 2019 - FY 2024 is attached and is approved by the Village Council.

Planning Commission members:

- David Gandy, Chairperson
- Brookland, V-B-Correspondent/Officer
- Oliver Anderson, Assistant
- Carolyn Baker, Member
- Crystal Ehlert, Member
- Stacy Hill, Member
- Stacy Hill, Member
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VILLAGE OF BROOKLYN, MICHIGAN
CAPITAL IMPROVEMENTS PLAN
FY 2019 – FY 2024

Village Council members:

- David Gandy, Chairperson
- Brookland, V-B-Correspondent/Officer
- Oliver Anderson, Assistant
- Carolyn Baker, Member
- Crystal Ehlert, Member
- Stacy Hill, Member
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Document created with the assistance of the Village of Brooklyn, Michigan.

Approved by Village Council January 8, 2018

This Capital Improvements Plan FY 2019 – FY 2024 was developed by the Planning Commission for the Village of Brooklyn. On a motion by Commissioner Jenson, seconded by Commissioner Lutz, and unanimously approved by the Planning Commission at a regular meeting held on November 29, 2017, the Capital Improvements Plan FY 2019 – FY 2024 is recommended for approval to the Village Council.

Planning Commission members:

- Greg Goings, Chairperson
- Bob Jenson, Vice-Chairperson/Ex-officio member
- Olivia Arkabauer, Member
- Cathryn Beever, Member
- Crystal Buter, Member
- Shawn Lutz, Ex-officio Member
- Shayne Mickels, Member
- Debbie Powell, Member
- Robert Stockton, Member

On a motion by Trustee Jenson, seconded by Trustee Lutz, the Capital Improvements Plan FY 2019 – FY 2024 is approved by Village Council at a regular meeting held on January 8, 2018.

- Yeas: Bliven, Lorenz, Lutz, Krauss, Jenson, DeJeu
- Nays: None
- Absent: Roberts

Village Council members:

- J.B. DeJeu, Village President
- Estella Roberts, Village President Pro Tempore
- Phil Bliven, Trustee
- Bob Jenson, Trustee
- Phil Krauss, Trustee
- Kara Lorenz, Trustee
- Shawn Lutz, Trustee

Document created with the assistance of:
Michigan Economic Development Corporation (format)
Jae Guetschow, Village Manager

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Introduction

The Village of Brooklyn Capital Improvements Plan (CIP) is a multi-year planning instrument used to identify needs and financial resources for public infrastructure improvements to facilitate the orderly planning of infrastructure improvements; to maintain, preserve, and protect Brooklyn's existing infrastructure system; and to provide for the acquisition or scheduled replacement of assets 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 Planning Commission, the Village Council and the residents and business owners of the community.

A comprehensive CIP is an essential tool for the planning a development of the social, physical, and economic wellbeing of the community. This process is a necessary step in an organized effort to strengthen the quality of public facilities and services; provide a framework for the realization of community goals and objectives; and provide a sound basis from which to build and maintain a healthy and vibrant community.

The CIP informs the Village of Brooklyn residents, business owners and stakeholders on the municipality's plans to address significant capital needs over the next six years. Thereafter, the CIP is reviewed annually and another year's projects are added to the CIP. The CIP provides visual representations of the community's needs and may include maps that detail the timing, sequence, and location of capital projects. The CIP may also influence growth as infrastructure projects often impact development patterns.

The benefits the CIP provides for residents, business owners and stakeholders may include, but are not limited to:

- Optimizing the use of revenue
- Focusing attention on community goals, needs and capabilities
- Guiding future growth and development
- Encouraging efficient government
- Improving intergovernmental and regional cooperation
- Maintaining a sound and stable financial program
- Enhancing opportunities for participation in federal and/or state grant programs

Projects identified in the CIP represent the community's plan to serve both residents and businesses and anticipate the needs of a dynamic community. Projects are guided by various development plans and policies established by the Planning Commission, Village Council and Village administration.

Plans and policies may include, but are not limited to:

- Master land use plan
- Redevelopment plan
- Downtown development plan
- Corridor improvement plan
- Recreation plan

- Transportation plan
- Non-motorized transportation plan
- Goals and objectives of Village Council
- Administrative policies

Mission Statement

Preparation of the CIP is done under the authority of the Michigan Planning Enabling Act (PA 33 of 2008), as amended. The goal of the CIP is to implement the Master Plan (formerly the Comprehensive Plan) and to assist in the community's financial planning.

The CIP is dynamic. Each year all projects included within the CIP are reviewed, a call for new projects is made, and adjustments are made to existing projects arising from changes in the amount of funding required, conditions, or time line. A new year of programming is also added each year to replace the year funded in the annual operating budget.

The CIP program should continue to develop over time by adding features to gradually improve quality and sophistication. Greater attention shall be devoted to providing more detailed information about individual project requests, program planning, fiscal analysis, fiscal policies, and developing debt strategy.

CIP and the Budget Process

The CIP plays a significant role in the implementation of the 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 annual budget. Approval of the CIP by the Planning Commission does not mean that they grant final approval of all projects contained within the plan. Rather by approving the CIP, the Planning Commission acknowledges that these projects represent a reasonable interpretation of the upcoming needs for the community and that projects contained in the first year of the plan are suitable for inclusion in the upcoming budget.

Priority ranking do not necessarily correspond to funding sequence. For example, a street project that is ranked lower than a park project may be funded prior to the park project because the street project has 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 many factors – not only its merit, but also its location, cost, funding source, and logistics.

Brooklyn strives to maximize resources by maintaining a balance between operating and capital budgets. A continuous relationship exists between the CIP and the annual budget as should be expected in a properly managed strategic planning environment. Budget appropriations lapse at the end of each fiscal year as the operating budget is funded with recurring annual revenues, such as taxes, licenses, fines, user fees, and interest income.

The Village has adopted a “pay-as-you-go” philosophy in developing the initial budget for the CIP. However, this does not preclude Village Council from authorizing execution of other sources of funding to address emergency situations or to take advantage of economies of scale by accelerating completion of multiyear projects. There may be instances in which federal or state requirements may necessitate the Village to obtain debt funding to remain in compliance with regulations. In addition, the availability of grants or gifts by the Village may enable projects to be implemented earlier than planned or the scope of such projects to be expanded.

CIP Process

CIP Policy Group. Responsibility for development of the CIP rests with the Planning Commission. In the absence of a separate CIP Policy Group, the Planning Commission in collaboration with the Village Manager provides those functions which include review of the policies, development of project rating and weighting criteria, review of funding options and presentation of recommendations to Village Council. Current Planning Commission members include two ex-officio members who are Village Trustees which will strengthen the connection between the two entities and the CIP.

Administrative Group. The Administrative Group consists of the Village Manager who is responsible to clarify issues, finalize the rating and weighting process, develop the draft CIP for discussion with the Planning Commission and presentation at a Public Hearing with either the Planning Commission or Village Council.

Planning Commission. The Planning Commission acts as the Policy Group with the Village Manager during plan development, conducts workshops (if necessary), reviews recommendations, receives public input, conducts Public Hearings, adopts the plan and requests Village Council to consider incorporating funding for each year’s projects into the budget document.

Governing Body. The Village Council is encouraged to use the CIP as a tool in the adoption of the annual budget in accordance with Village goals and objectives. Whenever funding for significant capital improvement projects is considered, Village Council should verify that the project has been included in the CIP and, if not, the reasons for circumventing the CIP process are appropriately documented.

Residents. Though not included in the development of the initial CIP due to logistics and time constraints, residents are encouraged to review the CIP (available online) and offer comments to or participate in discussion with the Planning Commission or Village Council in the process of making annual amendments to the CIP prior to adoption of the annual budget by Village Council. Village Council encourages open communication with residents and business owners by staff, Planning Commissioners and Village Council members.

CIP Policy

The Village of Brooklyn CIP defines a capital improvement project as a major, nonrecurring expenditure that includes one or more of the following:

1. Construction of any new facility (i.e.: public building, water or sanitary sewer mains, storm sewers, major and local roadways, recreational facilities), an addition to or extension of such a facility, provided that the cost is at least \$15,000 and that the improvement will have a useful of life of at least three years.
2. Nonrecurring rehabilitation of all or a part of a Village-owned building, its grounds, a facility, or equipment, provided that the cost is at least \$15,000 and the improvement will have a useful of life of at least three years.
3. Purchase or replacement of major equipment to support community programs provided that the cost is at least \$15,000 and will be coded to a capital asset account.
4. A planning, feasibility, engineering or design study related to an individual capital improvements project or to a program that is implemented through individual capital improvements projects provided the cost is at least \$15,000 and will have a useful of life of at least three years.
5. A planning, feasibility, engineering or design study that is not related to an individual capital improvements project or program that is implemented through individual capital improvement projects for which the cost is at least \$25,000.
6. 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 improvements projects provided that the cos is at least \$25,000.

Program Funding

Capital improvement projects often involve the outlay of substantial funds necessitating access to numerous sources to provide financing for greater than one fiscal year and frequently for the life of the project. Capital funding sources are often earmarked for specific purposes and cannot be transferred from one capital program to another. For example, millage funds raised by the Village for streets must be used for the purposes that were stated when the voters approved the millage. The CIP must be prepared with some projections as to the amount of funding available. The following is a summary of the funding sources for projects included in the CIP.

Enterprise Funds. In enterprise financing, funds are accumulated in advance for capital requirements. Enterprise funds not only pay for capital improvement, but also for the day-to-day operations of community services and the debt payment on revenue bonds. The community can set levels for capital projects; however, increases in capital expenditures for water mains, for example, could result in increased rates. Enterprise fund dollars can only be used on projects related to that enterprise fund (i.e.: water system funds can only be used on the water system).

Bonds. When the Village of Brooklyn sells bonds, purchasers are, in effect, lending the community money. The money is repaid, with interest, from taxes or fees over several years. The logic behind issuing bonds (or “floating a bond issue”) for capital projects is that the citizens who benefit from the capital improvement should help the community pay for them. Brooklyn issues bonds in two forms:

- **General Obligation Bonds:** Perhaps the most flexible of all capital funding sources, General Obligation Bonds can be used for the design or construction of any capital project. These bonds are financed through property taxes. In financing through this method, the taxing power of the community is pledged to pay interest and principal to retire the debt. Voter approval is required if the community wants to increase the taxes that it levies and the amount is included in Brooklyn’s state-imposed debt limit. To minimize the need for property tax increases, the community makes every effort to coordinate new bond issues with the retirement of previous bonds. General Obligation bonds are authorized by a variety of state statutes.
- **Revenue Bonds:** Revenue bonds are sold for projects that produce revenues, such as water and sewer system projects. Revenue bonds depend on user charges and other project-related income to cover their costs. Unlike General Obligation bonds, revenue bonds are not included in the state-imposed debt limits because the full faith and credit of the community back them. Revenue bonds are authorized Public Act 94 of 1933.

Act 51 Funds: Based on a formula set by the State of Michigan, the Village receives a portion of the tax placed on motor fuel, vehicle registration fees and highway usage in the state. The restrictions placed on the expenditure of these funds insure that they will be spent on transportation-related projects or operations and services, specifically through the Major and Local Street Funds.

Tax Increment Financing (TIF): Tax Increment Financing is a municipal financing tool that may be used to renovate or redevelop declining areas while improving their tax base. TIF applies the increase in various state and local taxes that result from a redevelopment project to pay for project-related public improvements. For purposes of financing activities with the Village’s downtown district, the Corridor Improvement Authority (CIA) will adopt a 20-year TIF plan in 2018. Public Act 281 of 1986, the Local Development Finance Authority Act, and Public Act 450 of 1980, the Tax Increment Financing Act, authorizes TIF.

Millages: The property tax is a millage that is one of the most important sources of community revenue. The property tax rate is stated in mills (one dollar per \$1,000 of valuation). This rate is applied to a property’s net value, following the application of all exemptions and a 50 percent equalization ratio. Millages are either authorized by state statute or are voter-approved and are specifically earmarked for a particular purpose. For example, the street millage provides funding dedication to the maintenance of the Village’s streets beyond the revenue received from the state (Act 51 funds). The community is authorized to utilize millages under Public Act 279 of 1909, the Home Rule Cities Act.

State and Federal Funds: The state and federal governments make funds available to communities through numerous grants and aid programs. Funds are often tied directly to a specific program while the community may have discretion in the expenditure of other funds, within certain parameters. For the most part, the community has no direct control over the amount of money received under these programs.

Special Assessments: Capital improvements that benefit particular properties, rather than the entire community, may be financed more equitably by special assessment (i.e.: by those who directly benefit). Local improvements often financed by this method include new street improvements (pavement, curb and gutter, sidewalks), sanitary and storm sewers and water mains.

Developer Contributions: Occasionally, capital improvements are required to serve new development. Should funding not be forthcoming from the community to construct such improvements, developers may agree to voluntarily contribute their share or to install the facilities themselves so the development can proceed.

CIP BUDGET

The budget for the initial Capital Improvement Plan FY 2018 – FY 2023 is included on the following page. It is the intent of the Village that the CIP budget spread sheet will be updated annually to reflect changes in the projects as some projects are completed, others are amended, and new projects are added.

VILLAGE OF BROOKLYN, MICHIGAN
Capital Improvements Plan Budget (Approved 01/08/2018)

A	B	C	D	E	F	G	H	I
Projects	Priority	Years to Start	Target FY Year	Total Estimated Cost	Fund Source(s)	Grant Type	Grant Amount	Annual Reserve Required
M-50 Lift Station Replacement	High	1	2019	\$ 250,000	Sewer			\$ 250,000
Mill Street Bridge Replacement	High	2	2020	\$ 300,000	Major Street			\$ 150,000
Marshal Street Milling and Resurfacing	Medium	1	2019	\$ 270,000	Major Street	State/Fed	\$ 216,000	\$ 54,000
Lansing Street Lift Station Replacement	Medium	3	2021	\$ 150,000	Sewer			\$ 50,000
Water Main Replacement	Medium	5	2023	\$ 250,000	Water			\$ 50,000
Sanitary Sewer Main Replacement	Medium	5	2023	\$ 150,000	Sewer			\$ 30,000
Water Main Extension to unserved areas	Medium	6	2024	\$ 240,000	Water			\$ 40,000
Sanitary Sewer Main Extension to unserved areas	Medium	6	2024	\$ 150,000	Sewer			\$ 25,000
Connection to Trails	Low	5	2023	\$ 75,000	General			\$ 15,000
Sidewalk Extension to unserved areas	Low	5	2023	\$ 50,000	Major/Local St.			\$ 10,000
DPW Garage Fencing	Low	1	2019	\$ 15,000	General			\$ 15,000
DPW Garage Covered Storage	Low	2	2020	\$ 25,000	General			\$ 12,500
Total Capital Improvement reserve required in the current year:								
\$ 701,500								

Notes

1. Appearance of any project on the CIP does not necessarily mean that a project will be funded in the year indicated.
2. See individual project summaries for priority rationale.
3. Projects included in the CIP must have a total estimated cost of at least \$15,000. The annual reserve amount may be less.

PROJECT SUMMARIES

The intent of the Capital Improvements Plan is to include priority projects for the Village during the immediate six-year period following approval of the initial CIP. Since the CIP is dynamic by design, each subsequent year will see completed projects from the previous year removed from the CIP and inclusion of new projects for each subsequent year. In addition, upon completion of a comprehensive street maintenance program the CIP will likely reflect street projects being included as a perpetual project in the CIP although project activities may occur less frequently than annually should the scope of such a project require accumulation of revenue for more than one year.

The following project summaries are intended to provide stand-alone information for each project. Since the CIP may contain projects funded by allocations from the same fund source, information may often appear to be repetitive. However, this repetition is necessary since completed projects will be removed from the CIP each year. For this reason, project summaries are attached to the CIP as appendices so that the entire CIP only requires annual updates rather than a complete rewrite. However, the budget spread sheet will be updated each year to reflect annual changes as projects are completed, funding sources and costs are updated and new projects are added.

The format for the following appendices reflects the year in which a given project summary was included in the CIP. Should a project continue for subsequent years of the CIP, the appendix number will reflect its initial year in the CIP. New project submissions will reflect the year in which they were included in the amended CIP even though the letter assigned to the year may duplicate a previous year. Such duplication does not necessarily imply any connection with a previous project summary with an identical letter.

Appendix 2017A: M-50 Lift Station Replacement

Project Status: Tentatively scheduled for FY 2019.

Project Description: Prior to 1996, when the Village connected to the regional sanitary sewer system, the Village operated its own waste water treatment plant, a lagoon system, from property at Turk Road, approximately two miles outside of the Village. The Michigan Department of Environmental Quality had cited the Village for deficiencies that would have required a considerable investment in capital to bring the Village up to MDEQ standards. In consideration of financial and time constraints, combined with possible repercussions in the event of surface water pollution, the decision was made by Village Council to connect through Columbia Township to the regional treatment facility operated by Leoni Township.

At a cost of approximately \$1,550,000, the Village connected to the regional system in 1996. This included up-front connection fees paid to Columbia Township. Since the original sanitary sewer system functioned as a gravity system, lift stations were required to transmit waste water to the pressurized force main through Columbia Township. The primary lift station is the M-50 lift station located on North Main Street between Wesco and Guthrie Ford's used car lot (adjacent to Swain Memorial Park).

Priority Status: The M-50 lift station's operational life is twenty (20) years, at which time the Village would typically expect to either extensively rehabilitate or replace the facility. The lift station consists of two, high capacity pumps through which most of the Village's waste water is transmitted. Failure of the lift station's two pumps would require connection of bypass pumps for an indefinite period and would present a risk of surface water pollution, a critical concern considering the proximity of the River Raisin and Goose Creek.

Ideally, the M-50 lift station should have been replaced in 2016. However, with some equipment repairs and a history of receiving quality maintenance during its useful life by the Department of Public Works staff, the lift station's life has been extended at least two years. The plan is to replace the entire lift station, including the concrete container, both pumps and the electrical control components. Building the new lift station adjacent to the current lift station will require only minimal use of bypass pumps while the final connections to the sewer mains are made. Once the new lift station is brought online, the original lift station will be demolished.

For the reasons cited above, replacement of the lift station is considered the top priority in the Village's initial CIP.

Timeline: For financial reasons, replacement of the M-50 lift station was delayed until fiscal year 2019 (July 1, 2018). Preliminary engineering was done previously to determine the estimated cost of the project and the feasibility of locating a new lift station adjacent to the current one. Though some additional preliminary work and staging may begin prior to July 1, 2018, the intent is to allocate funds for the project

from FY 2019 in anticipation of the receipt of the majority of tax revenue between July 1 and September 14, 2018. Therefore, construction will likely take place beginning in September 2018 with completion by December 31, 2018.

Funding Source and Cost: The total estimated cost for replacement of the M-50 lift station is \$250,000 which will be paid from reserves and budget allocation from the Sewer Funds from the FY 2019 budget. No bond funds or loans are anticipated to complete this project. The two-year delay in scheduling the project relates to the cumulative impact of the Village's failure to collect sufficient revenue to cover the final two years of a Sewer Bond obligation associated with connection to the regional sewer system in 1996. Collection of the bond millage will continue through 2020 to replace reserve funds that would otherwise have been available to complete this project in 2016.

Typically, reserve funds are accumulated over several years from monthly Readiness-to-Serve charges paid by the Village's customers. These funds would then be allocated for long-term projects, such as replacement of the M-50 lift station, or for expansion of the system to areas of the Village that are not currently served by the sewer system. As an enterprise fund, Sewer Fund revenues may only be allocated to operation of or capital projects for the sanitary sewer system.

Community Goal: It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the sanitary sewer system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the wastewater disposal needs of the community indefinitely.

Appendix 2017B: Mill Street Bridge Replacement

Project Status: Tentatively planned to commence during FY 2020.

Project Description: On or about 1920, the Ford Motor Company purchased property in the Village at the headwaters of the River Raisin, formerly occupied by early grist and saw mills which utilized the river as a mechanical power source. Henry Ford's plan was to decentralize much of his manufacturing operations to reduce risks that may disrupt automobile manufacturing if all operations had been consolidated in one location. Doing so enabled access to a labor force that was often lacking motorized transportation. The two water sluices were consolidated into one behind a new dam and mill pond with a sluice that fed a hydroelectric generator which powered the plant. Reportedly, the bridge over the River Raisin on Mill Street was built at the same time, considering that the exit point for water from the generating sluice is adjacent to the bridge.

Though manufacturing by Ford at this location ceased in 1988, the facility has since had numerous tenants, but has been vacant for several years. The property was purchased by Daniel and Samantha Ross in 2014 with plans to convert the facility to commercial use under the Old Irish Mill concept with a bar and restaurant being the anchor businesses. Ross' plans estimated the potential of 500,000 visitors to the Mill per year. This customer load will place an extreme traffic load on the aging bridge and it is likely that construction traffic will need to be routed to the location from the east due to load restrictions.

With its age approaching 100 years, the Mill Street bridge was designated as a historic structure in 2002. It consists of three separate culverts covered with fill and topped by asphalt. The roadway surface is just 22 feet in width and does not include shoulders or pedestrian walkways. Due to age, the weight capacity has been gradually reduced to the present 17 tons. It is reevaluated every two years with the most recent being November 2017. Should replacement of the bridge occur, the bridge would (minimally) be widened to 36 feet to accommodate two, 12 foot lanes, shoulders and a pedestrian walkway.

Priority Status and Timeline: Though the bridge remains functional, due to a progressively declining load capacity for the bridge coupled with an anticipated significant increase in traffic associated with the redevelopment of the Ford facility as the Old Irish Mill, replacement of the Mill Street bridge is rated as a high priority. A secondary concern, after safety, is impact on the Old Irish Mill. It would be desirable to schedule the replacement project prior to the Old Irish Mill completing its renovation and opening for business. Currently, it is uncertain when the funding package for the Old Irish Mill will be secured by the Ross' to allow the renovation project to begin.

Contingent upon identifying potential funding from federal or state grants, this project appears on the CIP as occurring within two years. Certain state funding sources are

allocated three years in advance of a project. If dependent upon a state grant, the project might not be scheduled prior to 2021.

Funding Source and Cost: In October 2017, Village Council approved development of a Request for Qualifications & Quote package to solicit concept designs and costs from qualified bridge engineering firms. That process will be initiated by January 2018 and should address funding for and timing of the project. While the CIP uses a \$300,000 cost estimate for replacement, initiating the RFQ process should provide an accurate cost estimate for this project.

As a street project, funding would come from the Major Street fund. Project funds are available for bridge replacement through the Michigan Department of Transportation, however, the application requires three years lead time prior to construction. While the RFQ package will require engineering firms to delineate any experience they have in securing relevant grants, it is uncertain whether grant funds will be available when needed for this project.

Community Goal: Replacement of the Mill Street bridge is consistent with the community goal of maintaining a viable transportation system in the Village. However, with the possibility of the Old Irish Mill becoming a landmark destination for the Village, replacement of the bridge becomes more of an economic development priority. The success of the Old Irish Mill will be a catalyst for other commercial development, as well as residential development, that will impact the entire community.

Appendix 2017C: Marshall Street Milling and Resurfacing

Project Status: Tentatively scheduled for FY 2019.

Project Description: Marshall Street is a primary arterial street connecting the Village with Jefferson Road in Columbia Township. It is one-half (1/2) mile in length terminating at North Main Street (M-50) within the Village. During its life, sections of Marshall Street have been resurfaced corresponding to several infrastructure improvements creating an uneven surface and altering the flow of storm water into the storm sewer system that serves only part of Marshall Street. The project would consist of milling the existing surface to expose the full height of existing curbs to improve storm water drainage followed by resurfacing of the driving surface with three inches of asphalt.

Marshall Street contains narrow shoulders from North Main Street to approximately Ernest Street on both sides of the street. Widening the street to accommodate two full-width parking lanes is not an option, for budgetary reasons, as this would require replacement of curbs and shifting of water and sewer mains. Consideration should be given to allowing parking on one side of Marshall Street. Ideally, Marshall Street should have a dedicated left-turn lane at North Main Street which would require 36 feet of width.

Priority Status and Timeline: The Marshall Street project was initially scheduled for 2015, but was delayed due to a reduction in the funding allocation by the State of Michigan. Though Marshall St. remains functional, due to its status as a primary arterial street, it is considered a medium level priority with an anticipated timeline of implementation after July 1, 2018 (FY 2019).

Funding Source and Cost: The estimated total cost of the project is \$270,000 with federal and state funds amounting to \$216,000 of that cost. This does not include water and sanitary sewer improvements completed in 2015 when this project was originally scheduled. The local match of \$54,000 would come from reserves and budget funds from the Major Street Fund in the FY 2019 allocation. However, receipt of federal and state funds for this project may require expenditures for nonmotorized walkways which must be completely funded with local funds. Specifically, the steps at Delamater and Marshall Street would need to be removed, the grade changed and a retaining wall installed. If there are insufficient local funds available to complete this and other mandatory improvements, the project may need to be delayed indefinitely.

Community Goal: Though the Village has not yet completed a comprehensive street maintenance plan, resurfacing of Marshall Street is consistent with the community goal of maintaining a viable transportation system in the Village. Ideally, the Village would receive sufficient revenue annually to plan for long-term maintenance of the streets on a twenty (20) year cycle. Since the state's Act 51 funds and the Village's dedicated street millage (reduced from 5.0 mills to 3.6551 mills by the Headlee Amendment of 1978) do not generate sufficient funds to achieve a continual street maintenance program, significant street projects will be limited in scope and mostly to major streets.

Appendix 2017D: Lansing Street Lift Station Replacement

Project Status: Tentatively scheduled for FY 2021.

Project Description: Prior to 1996, when the Village connected to the regional sanitary sewer system, the Village operated its own waste water treatment plant, a lagoon system, from property at Turk Road, approximately two miles outside of the Village. The Michigan Department of Environmental Quality had cited the Village for deficiencies that would have required a considerable investment in capital to bring the Village up to MDEQ standards. In consideration of financial and time constraints, combined with possible repercussions in the event of surface water pollution, the decision was made by Village Council to connect through Columbia Township to the regional treatment facility operated by Leoni Township.

At a cost of approximately \$1,550,000, the Village connected to the regional system in 1996. This included up-front connection fees paid to Columbia Township. Since the original sanitary sewer system functioned as a gravity system, lift stations were required to transmit waste water to the pressurized force main through Columbia Township. The primary lift station is the M-50 lift station located on North Main Street between Wesco and Guthrie Ford's used car lot (adjacent to Swain Memorial Park). The Lansing Street lift station was installed to transmit a portion of the Village's waste water into the primary interceptor that connects the Village to Columbia Township.

The Lansing Street lift station is currently located at the east end of Lansing Street, which dead-ends at that point. Future development in the Village should include vacant land between the east end of Lansing Street and Monroe Street. Ideally, when the lift station is replaced, it would be moved from within the right-of-way of a possible extension of Lansing Street. Building the new lift station adjacent to the current lift station will require only minimal use of bypass pumps while the final connections to the sewer mains are made. Once the new lift station is brought online, the original lift station will be demolished.

Priority Status and Timeline: Though the lift station would normally be considered as approaching its planned useful life of 20 years, that timeframe has been extended due to the limited service area of the Village the lift station provides and the quality of maintenance it has received during its useful life by the Department of Public Works staff. Replacement of the lift station is considered a medium priority in the Village's initial CIP with an anticipated timeline of 2021 for completion.

Funding Source and Cost: The total estimated cost for replacement of the Lansing Street lift station is \$150,000 which will be paid from reserves and budget allocation from the Sewer Funds from the FY 2021 budget. No bond funds or loans are anticipated to complete this project. The two-year delay in scheduling the project relates to the cumulative impact of the Village's failure to collect sufficient revenue to cover the final two years of a Sewer Bond obligation associated with connection to the regional sewer system in 1996. Collection of the bond millage will continue through

2020 to replace reserve funds that would otherwise have been available to complete this project sooner.

Typically, reserve funds are accumulated over several years from monthly Readiness-to-Serve charges paid by the Village's customers. These funds would then be allocated for long-term projects, such as replacement of the Lansing Street lift station, or for expansion of the system to areas of the Village that are not currently served by the sewer system. As an enterprise fund, Sewer Fund revenues may only be allocated to operation of or capital projects for the sanitary sewer system.

Community Goal: It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the sanitary sewer system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the needs of the community indefinitely.

Appendix 2017E: Water Main Replacement

Project Status: Tentatively planned to commence during FY 2020.

Project Description: The public water distribution system for the Village of Brooklyn dates to 1955 and consists of a variety of sizes of water mains and materials. Current standards are to replace all ductile iron and cast iron pipe with plastic. 36 sections (56%) of water main are constructed with ductile iron or cast iron pipe. At least 13 sections (20%) are of 4" diameter pipe which, by current standards, is obsolete. 17 sections (27%) are of 1955 vintage and, due to size or materials, should be replaced. 17 sections (27%) are rated "unserviceable" which would require replacement should there be a water main break. Five other sections (8%) are rated as showing "significant deterioration," eight (8 or 13%) with "moderate deterioration," and six (6 or 9%) with "minor deterioration." Only 31 (48%) are rated as "new or excellent condition."

It is the Village's intent to eventually replace all ductile iron, cast iron or undersized water mains with properly sized plastic water mains. Though not considered a perpetual replacement project, since plastic water mains are rated to 100 years of service, the CIP may include water main replacements as ongoing projects for several years until all inadequate mains have been replaced. The water main projects may vary from year to year based on annual allocation and the cost of replacing each section (considering size or length of each section). The CIP may require adjustment for water main replacement since breaks in any of the deteriorated sections may shift a given section to a higher priority level.

Priority Status and Timeline: For the initial CIP, water main replacement is considered a medium level of priority simply because the water system continues to be functioning. However, consideration should be given to those higher priority sections due to age and those with a rating of unserviceable or with significant deterioration. Though the initial CIP suggests a water main replacement program begins in year five, it is likely risk of or actual breaks in the system may elevate implementation of a replacement program earlier. The annual allocation of funds for this project would allow the Village to budget for replacement sooner and more frequently through the subsequent years of the CIP.

Funding Source and Cost: Water main replacement is generally more expensive than sewer main replacement since it requires excavation of existing lines rather than directional boring with sewer mains. The initial CIP budget for the first five years is \$250,000 from the Water Fund. However, with the annual allocation at \$50,000, water main replacement may occur sooner than in year five as funds accumulate. To realize total replacement of 52% of the water mains in the Village will require that the CIP extend the program for several years beyond the initial six years. Future updates to the CIP will include a detailed replacement cost associated with each section.

Community Goal: It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the water supply system, including planning

for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the drinking water needs of the community indefinitely.

The Village Council is currently reviewing the Village Water System Master Plan and is currently in the process of updating the Village Water System Master Plan. The Village Council is currently reviewing the Village Water System Master Plan and is currently in the process of updating the Village Water System Master Plan. The Village Council is currently reviewing the Village Water System Master Plan and is currently in the process of updating the Village Water System Master Plan.

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Appendix 2017F: Sanitary Sewer Main Replacement

Project Status: Tentatively planned to commence during FY 2020.

Project Description: Prior to 1996, when the Village connected to the regional sanitary sewer system, the Village operated its own waste water treatment plant, a lagoon system, from property at Turk Road, approximately two miles outside of the Village. The Michigan Department of Environmental Quality had cited the Village for deficiencies that would have required a considerable investment in capital to bring the Village up to MDEQ standards. In consideration of financial and time constraints, combined with possible repercussions in the event of surface water pollution, the decision was made by Village Council to connect through Columbia Township to the regional treatment facility operated by Leoni Township.

At a cost of approximately \$1,550,000, including up-front connection fees paid to Columbia Township, the Village connected to the regional system in 1996. The original sanitary sewer system functioned as a gravity system, much of it original from the inception of the public sanitary sewer system in the Village. Connection to the regional sewer treatment plant required installation of three lift stations to transmit waste water to the pressurized force main through Columbia Township.

Though not considered a perpetual replacement project, since plastic sewer mains are rated at 100 years of service, the CIP may include sanitary sewer main replacements as ongoing projects for several years until all inadequate mains have been replaced. The sewer main projects may vary from year to year based on annual allocation and the cost of replacing each section (considering condition and length of each section). The CIP may require adjustment for sewer main replacement since breaks in any of the deteriorated sections may shift a given section to a higher priority level.

Priority Status and Timeline: For the initial CIP, sanitary sewer main replacement is considered a medium level of priority simply because the sewer system continues to be functioning. However, consideration should be given to those higher priority sections due to age and those with a rating of unserviceable or with significant deterioration. Though the initial CIP suggests a sewer main replacement program begins in year five, it is likely risk of or actual breaks in the system may elevate implementation of a replacement program earlier. The annual allocation of funds for this project would allow the Village to budget for replacement sooner and more frequently through the subsequent years of the CIP.

Funding Source and Cost: Sewer main replacement is generally less expensive than water main replacement since it is often accomplished through directional boring rather than through excavation as with water mains. The initial CIP budget for the first five years is \$150,000 from the Sewer Fund. However, with the annual allocation at \$30,000, sewer main replacement may occur sooner than in year five as funds accumulate. To realize total replacement of deficient sewer mains in the Village will require that the CIP extend the program for several years beyond the initial six years.

Future updates to the CIP will include a detailed replacement cost associated with each section.

Community Goal: It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the sanitary sewer system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the sanitation needs of the community indefinitely.

Appendix 2017G: Water Main Extension

Project Status: Tentatively planned to commence during FY 2024.

Project Description: Though most parcels within the Village currently have access to the public water supply system, there are a small number of parcels that remain on private wells. Upon failure of those wells, the Village requires that they connect to the water system. There are also several areas of undeveloped property that would be more marketable with access to the public water supply. If the Village is expected to grow within the current footprint, the Village must be prepared to extend water service. Parcels include the undeveloped area south of the Department of Public Works garage, the former lumber yard, an undeveloped area west of Detroit street to Constitution Avenue and parcels within Lighthouse Village. There also is a possibility of extending water service to commercial areas outside of the Village should it be requested and annexation occurs.

Priority Status and Timeline: For the initial CIP, water main extension is considered a medium level of priority below that of maintaining the existing the water system. However, development of areas of the Village not presently served would require elevation to a higher priority. The initial CIP suggests a water main extension program begins in year six. It is likely commercial/industrial and/or residential growth in the Village may elevate implementation of an extension program sooner. The annual allocation of funds for this project would allow the Village to budget for extension sooner and continue, as needed, through subsequent years of the CIP.

Funding Source and Cost: Extension of water mains to unserved areas of the Village is relatively expensive since it requires excavation. It may also require expansion in the size of existing feeder water mains that may not have been included among the water main replacement projects. Funding for extension of water mains is initially estimated at \$240,000 from the Water Fund. However, it is anticipated that a significant portion of funding may come from developers for certain properties, especially in undeveloped areas of Lighthouse Village. If so, funding should be allowed to accumulate in the Water Fund reserves in anticipation of future expansion to the water supply system.

Community Goal: It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the water supply system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the drinking water needs of the community indefinitely.

Appendix 2017H: Sanitary Sewer Main Extension

Project Status: Tentatively planned to commence during FY 2024.

Project Description: Though most parcels within the Village currently have access to the public sanitary sewer system, there are a small number of parcels that remain on private septic systems. Upon failure of those systems, the Village requires that they connect to the Village system. There are also several areas of undeveloped property that would be more marketable with access to the public sewer system. If the Village is expected to grow within the current footprint, the Village must be prepared to extend sewer service. Parcels include the undeveloped area south of the Department of Public Works garage, the former lumber yard, an undeveloped area west of Detroit street to Constitution Avenue and parcels within Lighthouse Village. There also is a possibility of extending sewer service to commercial areas outside of the Village should it be requested and annexation occurs.

Priority Status and Timeline: For the initial CIP, sewer main extension is considered a medium level of priority below that of maintaining the existing the sewer system. However, development of areas of the Village not presently served would require elevation to a higher priority. The initial CIP suggests a sewer main extension program begins in year six. It is likely commercial/industrial and/or residential growth in the Village may elevate implementation of an extension program sooner. The annual allocation of funds for this project would allow the Village to budget for extension sooner and continue, as needed, through subsequent years of the CIP.

Funding Source and Cost: Extension of sewer mains to unserved areas of the Village is estimated to be less expensive than extending water mains since it may often be accomplished through directional boring rather than excavation. Funding for extension of sewer mains is initially estimated at \$150,000 from the Sewer Fund. However, it is anticipated that a significant portion of funding may come from developers for certain properties, especially in undeveloped areas of Lighthouse Village. If so, funding should be allowed to accumulate in the Sewer Fund reserves in anticipation of future expansion to the sanitary sewer system.

Community Goal: It is the goal of the Village of Brooklyn to provide quality, uninterrupted utility services to the residents and businesses served by the Village. Within this goal is to operate and maintain the sanitary sewer system, including planning for long-term capital improvements consisting of upgrading or replacing components of the system as well as expansion of services, when requested, to continue to meet the sanitation water needs of the community indefinitely.

Appendix 2017I: Connection to Trails

Project Status: Tentatively planned to commence during FY 2023.

Project Description: The Heart of the Lakes Area Recreational Plan 2007 – 2012 was adopted by the Village of Brooklyn on February 22, 2007. Though the plan may need to be updated, the included goals may still be relevant to the Village. Included in that plan is connection of the Village to existing trails. The Clark Lake Spirit Trail terminates approximately four miles west of the Village along Jefferson Road in Columbia Township. Currently, there is discussion of creating a trail system around Lake Columbia and extension of a trail along Goose Creek to the Village of Brooklyn. There is also discussion of creating a trail system from the recently created Watkins Lake State Park (in collaboration with the Michigan Department of Natural Resources and Washtenaw County) to the Village of Manchester.

The Michigan Department of Transportation has recently delayed resurfacing M-124 (Wamplers Lake Road in the Village) from M-50 (South Main Street) to U.S.-12 until 2019 in hopes of expanding existing bike paths on the shoulders of M-124 from four feet to eight feet. This \$1.3 million expansion would essentially provide a nonmotorized connection along M-124 with Vineyard Lake, Wamplers Lake and Hayes State Park. Though this project would be an MDOT project, as a stakeholder, the Village is encouraged to contribute nominal local funding to this project to strengthen the likelihood of receiving a federal grant.

Trail projects within the Village would consist of providing access along Marshall Street or Goose Creek to connect the Village to the Spirit Trail, terminating at Swain Memorial Park. A separate trail from Swain Memorial Park would connect to Watkins State Park along a route that is yet to be determined. The Village's role in connecting to the nonmotorized pathway along M-124/Wamplers Lake Road would be minimal, though a likely trail connection from Swain Memorial Park would follow Tecumseh Street to Water Street to Monroe Street to M-124/Wamplers Lake Road.

Priority Status and Timeline: Since a trail system is not considered a critical service, it has been rated a low priority in the initial CIP. Emphasis on healthier lifestyles and reshaping the Village as a destination could elevate the priority in future years. Rural areas have not rebounded as quickly from the Great Recession of 2008-2015 as have cities, largely due to the attraction the cities offer to the millennial generation. As such, rural areas are compelled to promote their attributes as a destination, including trails and the associated recreational activities. The timeline, dependent on completion of other segments of the trail system outside of the parameters of the Village, is slated for FY 2023. Once the described connections are completed, the Village would be able to maintain its connections to the larger trail system within the annual budget.

Funding Source and Cost: The Village may apply for grant funds for expansion of nonmotorized pathways and trails from several sources including the Michigan Department of Natural Resources and the Michigan Department of Transportation.

Contingent on the timeline for trails to reach the Village, the Village should consider setting aside funds in anticipation of connecting to those trails. The initial CIP budget would allow for accumulation of \$15,000 per year for five years from the General Fund, though, if combined with sidewalk expansions along the Village's streets, Major or Local Street Funds may be considered.

Community Goal: Adoption of the Heart of the Lakes Area Recreational Plan 2007 – 2012 is an indication of the Village's commitment to connect to trail systems outside of the Village. It is a continuing goal of the Village to promote healthy lifestyles for its residents and visitors, to promote and connect to recreational activities adjacent to the Village and to promote the natural attributes of the Irish Hills area and the Village as a recreational destination for visitors.

Appendix J: Sidewalk Extension

Project Status: Tentatively planned to commence during FY 2023.

Project Description: Replacement and expansion of the Village's sidewalks (aka: nonmotorized pathways) is a required activity to receive Act 51 funds through the Michigan Department of Transportation. Currently, the Village's system of sidewalks is incomplete resulting in entire areas of the Village not being connected by sidewalks or there being gaps between sections of sidewalks. Future amendments to the CIP will include specific locations and dimensions for expansion of the system of sidewalks to unserved areas of the Village.

Priority Status and Timeline: Since sidewalks are not considered a critical component of the Village's infrastructure, extension of the system of sidewalks is considered a low priority. Annual allocations should be accumulated to allow for extension of sidewalks, especially to areas in which street construction may occur. As a low priority activity, the initial CIP identifies FY 2023 when a sidewalk extension program would commence.

Funding Source and Cost: The CIP budget suggests a budget of \$50,000 for a sidewalk extension program, accumulating at the rate of \$10,000 per year. This would be in addition to the current sidewalk replacement program which address condition issues with an emphasis on replacing tripping hazards. Both Major and Local Street Funds could include funding for sidewalk extensions along sections identified by priority based on accessibility and safety. The General Fund may also contribute funds, especially in areas not covered by street funds. In addition, the Village may apply for funding through the Safe Routes to School program through MDOT for areas not presently served by sidewalks from residential areas to the local elementary schools.

Community Goal: In compliance with state guidelines to increase accessibility within the Village, the Village is committed to extending sidewalks to unserved areas of the community to increase accessibility by persons with all levels of mobility. In addition, it is the Village's goal to provide safe routes for pedestrians and others using nonmotorized forms of transportation and, wherever possible, to be separated from the streets and motor vehicles.

Appendix 2017K: DPW Garage Fencing

Project Status: Tentatively scheduled for FY 2019.

Project Description: The Department of Public Works garage project completed in 2015 did not include installation of fencing of the grounds. Though considered as a one-year project scheduled for 2018, it is within the parameters of the CIP with a total cost estimated at \$15,000. This would provide security for materials and equipment outside of the DPW garage and define the perimeter of the property to reduce to potential for trespassing, vandalism and theft. The project consists of attaching an eight-foot chain-link fence from the west corners of the building to the property line with a gate to allow entry of DPW vehicles.

Priority Status and Timeline: The CIP classifies installation of fencing at the DPW garage as a low priority project since it does not impact on critical services of the Village. It is anticipated this will be a one-year project to be included in the FY 2019 budget.

Funding Source and Cost: Based on initial estimates, fencing of the DPW grounds will cost \$15,000 and will be included in the General Fund appropriations for FY 2019.

Community Goal: Consistent with the goal of protecting the Village's assets by enclosing equipment and most materials within the DPW garage, the Village would protect other materials stored outside and the grounds from trespassing, vandalism and theft by enclosing the area adjacent to the structure. In addition, this project reduces possible risk to nonemployees from inadvertently venturing onto the grounds while employees are using Village equipment.

Appendix 2017L: DPW Garage Covered Storage

Project Status: Tentatively scheduled for FY 2020.

Project Description: The Department of Public Works garage project completed in 2015 did not include installation of covered storage for materials on the grounds of the DPW. Though considered as a one-year project scheduled for 2019, it is within the parameters of the CIP with a total cost estimated at \$25,000. This would provide security for materials stored outside of the DPW garage (including road salt, sand, mulch and patch material) to protect materials from the weather, comply with the Michigan Department of Environmental Quality requirements and provide improved aesthetics for the DPW grounds. The project consists of installing a covering over the existing salt storage structure and construction of a series of covered bins for the other loose materials.

Priority Status and Timeline: The CIP classifies installation of covered storage at the DPW garage as a low priority project since it does not impact on critical services of the Village. It is anticipated this will be a one-year project to be included in the FY 2020 budget.

Funding Source and Cost: Based on initial estimates, covered storage on the DPW grounds will cost \$25,000 and will be included in the General Fund appropriations for FY 2020.

Community Goal: Consistent with the goal of protecting the Village's assets by enclosing equipment and most materials within the DPW garage, the Village would protect other materials stored outside and the grounds from the weather by installing covered storage bins or covering existing bins. In addition, this project improves the aesthetics of the DPW grounds by containing loose materials within a durable structure.