



**VILLAGE OF BROOKLYN, MICHIGAN**  
**CAPITAL IMPROVEMENTS PLAN**  
**FY 2024 – FY 2029**

Approved by Village Council \_\_\_\_\_, **2023**

This Capital Improvements Plan update covering fiscal years 2024 – 2029 was developed by the Planning Commission for the Village of Brooklyn. On a motion by Commissioner \_\_\_\_\_, seconded by Commissioner \_\_\_\_\_, and unanimously approved by the Planning Commission at a Meeting held on May 15, 2023, the Capital Improvements Plan FY 2024 – FY 2029 is recommended for approval to the Village Council.

**Planning Commission members:**

- Robert Stockton, Chairperson
- Greg Goings, Vice-Chairperson
- Misty Bliven, Member
- Crystal Buter, Member
- Stacy Hicks, Ex-officio member
- Bob Jenson, Ex-officio member
- Debbie Powell, Member

On a motion by Trustee \_\_\_\_\_, seconded by Trustee \_\_\_\_\_, the Capital Improvements Plan FY 2024 – FY 2029 is approved by Village Council at a regular meeting held on \_\_\_\_\_, 2023.

Yeas: \_\_\_\_\_  
Nays: \_\_\_\_\_  
Absent: \_\_\_\_\_

**Village Council members:**

- Terry Mahr, Village President
- Patricia Robinson, Village President Pro Tempore
- Phil Bliven, Trustee
- Stacy Hicks, Trustee
- Bob Jenson, Trustee
- Phil Krauss, Trustee
- Gabriella Bach, Trustee

**Original document created with the assistance of:**  
Michigan Economic Development Corporation (format)  
Update created by Matt Swartzlander, 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 significant public infrastructure improvements to facilitate the orderly planning of said 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 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 to be 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 timeline. A new year of programming is also added each year to replace the prior 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. Though the CIP may be recommended to Village Council for approval by the Planning Commission, the Planning Commission does not have the authority to 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 does 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, when necessary, 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. Annually, Village Council conducts a Public Hearing prior to adoption of each fiscal year budget. 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 cost 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 (termed the full faith and credit) 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 beyond 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 they do not require a pledge of the full faith and credit of the community to 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 ensure 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) approved a 20-year TIF plan which was adopted by Village Council on April 8, 2019. 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 dedicated 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 updated Capital Improvement Plan FY 2024 – FY 2029 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 FY2024**

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
Mill Street Bridge Replacement (See note 5.)	High	2	2025	\$ 1,600,000	Major Street	MDOT	\$ 1,600,000	\$ -
Lansing Street Lift Station Upgrade	Medium	1	2024	\$ 150,000	Sewer			\$ 150,000
Sanitary Sewer Main Replacement	Low	3	2026	\$ 150,000	Sewer			\$ 50,000
Water Main Extension to unserved areas	Low	4	2028	\$ 240,000	Developer			\$ 50,000
Sanitary Sewer Main Extension to unserved areas	Low	1	2023	\$ 35,000	General Fund			\$ 35,000
Connection to Trails	Medium	2	2025	\$ 25,000	GF/MS/LS	SRTS	\$ 880,000	\$ 25,000
Sidewalk Repair and Extension (See note 7.)	Medium	1	2023	\$ 50,000	Major/Local St.			\$ 50,000
Street rehabilitation (All streets) (See note 6.)	High	0	2023	\$ 1,500,000	GF/MS/LS/SAD	Bond	\$ 1,250,000	\$ 50,000
Electric Generator at Water Plant	High	2	2024	\$ 457,000	GF/WF		TBD	\$ 100,000
Monroe St. reconstruction	High	2	2025	\$ 1,600,000	Major St.	STP	TBD	\$ 100,000
Colbrook Lift Station Upgrade	Medium	2	2024	\$ 100,000	Sewer			\$ 50,000
Equipment Purchase and Replacement	Medium	1	2023	\$ 60,000	Internal Service			\$ 60,000
Water Plant Upgrades	High	2	2024	\$ 105,000	Water Fund	MDHHS	\$ 24,000	\$ 93,000
Municipal Parking Improvements	Medium	1	2024	\$ 100,000	General Fund	MEDC		\$ 100,000
<b>Total Capital Improvement reserve required in the current year:</b>								<b>\$ 913,000</b>

**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.
5. MDOT local bridge program funding has been secured for FY25 with remaining cost coming from grants through EGLE.
6. Capital Improvement Bonds were received in 2021 to fund street rehabilitation projects, except for N. King, S. King, Tiffany, Marshall, Constitution, and Mill Streets which will be/have been funded by rural transportation funds. Monroe St. is addressed in another plan.
7. The Safe Routes to School has been included in Connection to Trails. It is anticipate sidewalk improvements within the Village will require an increase during the FY2024-25 budget process.
8. The original project was completed during 2021; however, the 655' extension of Marshall St. will be included in the Mill St. project during 2022.

## **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 2017B: Mill Street Bridge Replacement**

*Project Status:* Planned to commence during FY2025

*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 sawmills 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 June 2021. Should replacement of the bridge occur, the three culverts would be replaced with a single span and the bridge would (minimally) be widened to 36 feet to accommodate two, 12-foot lanes, shoulders, and a pedestrian walkway on the south side of the bridge.

*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 2025.

*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 was initiated in January 2018 and addressed 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, which will impact the entire community.

*Update:* The engineering firm of Fleis & Vandenbrink was selected by the Village through a competitive bid process in April 2018 as the project engineer for both design and construction of the Mill Street bridge. As a condition of approval, F & V completed and submitted an application on behalf of the Village to the Michigan Department of Transportation for its local bridge program by the May 1, 2018 deadline. Unfortunately, the grant was not awarded to the Village. F & V renewed the application by May 1, 2019 and a determination will be made prior to December 31, 2019. Given the limited funding available and the large number of applicant municipalities, chances for approval are not improved over that in 2018.

The Village Manager has engaged with the Economic Development Administration of the U.S. government through the Region 2 Planning Commission to determine if the Village may be eligible for a federal grant of up to 50% of the projected cost of construction. It may be feasible to combine this application for grant funds with the M-50 lift station replacement to improve the Village's chances of approval on the basis of the economic impact and potential growth of commercial development from the impact of the Old Irish Mill project.

*Update 2021:* Fleis & Vandenbrink submitted applications on behalf of the Village to the Michigan Department of Transportation for its local bridge program during 2020 and 2021. This marks four consecutive years that F & V have submitted applications. Each year, the Village has increased the number of points assigned during the award process. During July 2021, the Michigan Legislature approved \$1.5 billion toward bridge and roads that will hopefully increase the Village's chances of this project being funded.

*Update 2022:* Fleis & Vandenbrink submitted their fifth consecutive application on behalf of the Village to the Michigan Department of Transportation for the local bridge program in April 2022. All four previous applications were not approved for funding by MDOT. The 2023 fiscal year budget approved by the Michigan Legislature includes additional funding for streets and bridge projects which may improve the Village's chances of receiving funding for bridge replacement.

During 2021, a feasibility study for removal of the dam and restoration of the River Raisin channel was initiated in collaboration with the property owners, Daniel and Samantha Ross. Since the dam is privately owned, there would be considerable liability in the event of failure of the dam. Following the failure of two earthen dams near Midland during 2020, the State of Michigan has compiled a list of some 85 high risk dams which includes the Brooklyn dam. The feasibility study has been funded, thus far, by grants from the Michigan Department of Natural Resources and the U.S. Fish and Wildlife Service.

Though the dam removal project would not normally be expected to involve resources from the Village, restoration of the channel would require replacement of the Mill Street bridge. As stated above, the bridge was constructed concurrently with the dam which directs water through a sluice as a means to generate electric power for the former Ford plant. To increase the velocity of the water, the sluice empties into the channel on the north side of the bridge. The north foundation for the bridge created a two-to-three-foot drop. This would require removal to restore the channel. As such, applications for grant funding for removal of the dam and restoration of the channel now includes funding for replacement of the Mill Street bridge.

Update 2023: Funding was secured for FY25 for the project through the Michigan Local Agency Program in the amount of \$862,000. Additional funds required will come from EGLE Grant funding being secured through the dam removal project. Planning is ongoing for the project to coincide with the needed timeframe of the dam removal project.

## **Appendix 2017D: Lansing Street Lift Station Upgrade**

*Project Status:* Tentatively scheduled for FY 2021 (now FY 2024).

*Project Description:* Prior to 1996, when the Village connected to the regional sanitary sewer system, the Village operated its own wastewater 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 wastewater 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 wastewater 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.

*Update 2021:* Delaying replacement of the Lansing St. lift station was necessitated by the unexpected cost increase of replacing the M-50 lift station to allow for the Sewer Fund to accumulate sufficient funds to allow the Village to “pay as we go” for this project. The project has been modified from “replacement” to “upgrade.” The lift station has been properly maintained to enable relining of the collection well, replacement of rails for the pumps, and replacement of other components that have outlived their design lives. Though the Village has not yet obtained quotes for the upgrade, the cost would not likely exceed \$75,000.

*Update 2022:* As discussed previously, the Lansing Street lift station project was amended to provide extensive rehabilitation rather than replacement. Included in the FY2022 budget was funding for addition of a natural gas backup generator for the lift station. It is now anticipated that the generator will not be installed before 2023, although it may be delayed until rehabilitation of the lift station occurs, possibly during 2024. The total cost estimate has been adjusted to \$125,000 to include lift station rehabilitation (\$65,000) and the backup generator (\$60,000).

## **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.

*Update:* With the scheduling of the N. King St., S. King St., and Tiffany St. rehabilitation project advanced to occur during 2019, approximately 400 feet of water main replacement has occurred during 2019 at a cost of approximately \$80,000 paid from Water Funds. This project included new service taps for each residential unit along the new section of water main. This project consists of replacement of an original 4" water main with an 8" water main that will improve water pressure in the area and increase capacity to new fire hydrants installed during the project. The remaining water main projects will be coordinated with the scheduling of street rehabilitation projects during the next two years concluding in 2021.

*Update 2021:* The Village is waiting on Jack Ripstra to complete the engineering and project cost estimates for water main upgrades on Jackson and Lane Streets before these projects can be let out for bid. Both sections of water mains consisting of ductile iron have incurred several breaks in recent years. The water main projects must be completed prior to street rehabilitation on those two streets. It is still anticipated that the water main replacement projects will be completed during 2021.

*Update 2022:* Water main upgrades to Irwin Street and Lane Street were completed during 2021, prior to resurfacing of those streets. Upgrades to the water mains on Jackson Street and Water Street/Tecumseh Street will be completed during 2022. These two projects substantially complete the upgrade to the Villages water distribution system. During 2021, the Village received the first of two installments through the American Rescue Plan Act in the amount of \$61,545. An additional \$247.87 was received from the redistribution of funds allocated to municipalities that declined the ARPA funds. The second installment of \$61,791.47 was received in June 2022. The required report to the U.S. Treasury from the Village stated that the funds would be utilized for utility upgrades, specifically water main upgrades. Therefore, the funds will be transferred to the Water Fund.

## **Appendix 2017F: Sanitary Sewer Main Replacement**

*Project Status:* Tentatively planned to commence during FY 2020 (now 2025).

*Project Description:* Prior to 1996, when the Village connected to the regional sanitary sewer system, the Village operated its own wastewater 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 wastewater 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.

*Update 2021:* Though the increased cost associated with replacement of the M-50 lift station will delay other upgrades to the sanitary sewer system, there currently are no critical sections that would demand urgent repair or replacement. However, timing for future upgrades coincides with completing the payments on the equipment costs associated with replacement of the M-50 lift station.

*Update 2022:* Though no sanitary sewer replacements are planned for FY2023, this appendix should be considered a placeholder category for unforeseen maintenance. Funds should continue to accumulate in the Sewer Fund, but may be allocated for other sewer maintenance projects that would be identified in future years.

## **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.

*Update 2021:* During 2020, Village Council has considered the feasibility of extending water mains through the undeveloped sections of Lighthouse Village since the development is experiencing a building boom. This would likely entail implementing a Special Assessment District to finance the extension, though this is unlikely unless or until the 24 parcels that under the control of the Jackson County Treasurer's Office are either purchased by the Village or a developer since Jackson County does not pay special assessments. Extension of the water main along M-50 south of the Village would be considered if Country Market requested

annexation to access the public water supply. Beyond an initial inquiry, Country Market has not yet made a formal request for annexation.

*Update 2022:* The Jackson County Treasurer's Office is unable to transfer the 24 vacant parcels in Lighthouse Village under County control to the Village at no cost. The quote to reimburse Jackson County for expenses related to the tax foreclosure process is approximately \$49,000. The estimated cost to complete the infrastructure consisting of water and sewer main extensions, storm drains, curb and gutter, and street paving would add approximately \$12,000-\$15,000 per parcel. Unless a developer obtains the parcels and decides to complete the development, it is unlikely the subdivision will be completely developed in the near future.

## **Appendix 2017H: Sanitary Sewer Main Extension**

*Project Status:* Tentatively planned to commence during FY 2024 (now 2025).

*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.

*Update 2021:* During 2020, Village Council has considered the feasibility of extending sanitary sewer mains through the undeveloped sections of Lighthouse Village since the development is experiencing a building boom. This would likely entail implementing a Special Assessment District to finance the extension, though this is unlikely unless or until the 24 parcels that under the control of the Jackson County Treasurer's Office are either purchased by the Village or a developer since Jackson County does not pay special assessments.



*Update 2022:* An inquiry about extending sanitary sewer service to a vacant property at the intersection of Sheridan and Irwin Streets was made by the Brooklyn Food Pantry which is considering purchase of the property for a permanent location. Unfortunately, the sewer main on Sheridan St. ends approximately 150 feet to the north. The sewer main on Irwin St. ends further to the west. Without extending one of the sewer mains, which, depending on the depth of the current mains, may not be feasible. The only other option would be installation of a grinder can with a pump with a pressure line leading to the nearest sanitary sewer manhole on Sheridan St. at a cost estimated at \$15,000.

## **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, which expired in 2018, was adopted by the Village of Brooklyn on February 22, 2007. Though the plan is in the process of being replaced by the Greater Irish Hills Regional Recreation Plan, the included goals may still be relevant to the Village. Included in the original 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 to 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:* The previous 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.

*Update 2021:* The Intermunicipality Committee, created in 2018 and consisting of representatives from the Villages of Addison, Brooklyn, Cement City, and Onsted, and the townships of Cambridge, Columbia, Franklin, Liberty, Manchester, Napoleon, Norvell, Rollin, Somerset, and Woodstock, contracted with Region 2 Planning Commission to develop the Greater Irish Hills Regional Recreation Plan in 2020. It is anticipated the plan will be completed by spring 2022. Existing, proposed and wish list trails will be included in the plan.

The Legacy Committee for the Irish Hills Regional Chamber of Commerce has coordinated commitments by the Village of Brooklyn, Jackson County Parks Department, and Columbia and Norvell Townships, along with a community donation, to secure the matching funds with the Michigan Department of Natural Resources to obtain a feasibility study for the Brooklyn to Watkins Lake State Park trail. Carlisle Wortman & Associates along with Stantec were the selected contractors to complete the feasibility study.

The Village is also participating with the Safe Routes to School (SRTS) committee to secure a grant of up to \$660,000 for a non-motorized pathway between Columbia Middle School and the two elementary schools. The likely route is along Turk Road to Cement City Road to Tiffany/South King Streets to Chicago Street to Monroe Street to Broad Street. The Village will be working with Jackson County Department of Transportation to submit a joint application since the route would include both county roads and Village streets. The volunteer organization that plans to connect Lake Columbia with the Village via a trail would also benefit from the proposed SRTS trail.

*Update 2020 (moved from 2017I):* On June 27, 2019, the Village Manager participated in a preliminary discussion with the Columbia School District, members of a trail committee associated with Lake Columbia and a representative of the Safe Routes to School Program, a federal government initiative to improve safety for children walking and biking to school. While the trail association would like to connect Lake Columbia with the Spirit Trail and the Village of Brooklyn, the Safe Routes to School Program would only be applicable to sections of a route between the Junior High School (housed with the High School) and the elementary schools in the Village. Safe Routes to School Program funding could conceivably provide up to \$220,000 per school (Upper and Lower Elementary and Junior High) for a total of \$660,000 toward construction costs with no local match requirement. Funds could be allocated in the Village to upgrade existing sidewalks or install new sidewalks along the proposed Safe Routes to School Program route.

*Update 2022:* Though a final report has not yet been issued, Carlisle Wortman & Associates has completed the feasibility study pertaining to connecting the Village with Watkins Lake State Park via a nonmotorized pathway. Lacking the possibility of private

easements along a proposed route, the remaining options are to install a trail within the road rights-of-way or utilize the existing shoulders of the roads. Due to topographic and environmental (wetlands) concerns, installation of a pathway removed from the various roads would be prohibitively expensive option. Safety concerns may also preclude using the shoulder of the roads for a pathway. It is likely the only recommendation is to install signage along the likeliest route as the future route for a trail with hopes that adjacent property owners may negotiate an easement.

Jackson County Department of Transportation has agreed to be the applicant for the Safe Routes to School trail. The application would be submitted during October 2022 with an award decision anticipated during the first quarter of 2023. If awarded, grant funds would not be received until 2025. Federal guidelines for the SRTS program may be modified by 2023 to allow consideration of high schools which would increase the possible grant to \$880,000. Engineering costs are estimated at \$80,000-\$100,000 which would not be covered by the SRTS grant. Jackson County DOT would provide the engineering for the project, but would require reimbursement of costs. Engineering costs within the Village should be minimal since the pathway will generally follow existing sidewalks which may need replacement to make them wider.

Update 2023: Planning for the Safe Routes to School trail is ongoing with preliminary engineering being conducted currently. The application is planned to be completed and submitted in October of 2023.

## **Appendix 2017J: Sidewalk Repair and 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.

*Update 2022:* During 2022, Village Council expressed support for increasing the budget to include greater funding for sidewalk replacement and extension starting with the FY2023 budget. Historically, the Village has only allocated \$10,000 per year for improvements. Until significant progress is made to improve and extend sidewalks, the amount to be considered should be \$50,000 to be funded from Major and Local Streets and/or the General Fund. It should be noted that the Village anticipates receiving additional state revenue from a share of excise taxes on marijuana sales, possibly during 2023, assuming a provisioning center located at the former Ford facility on Mill Street is operational during 2022. Those proceeds are not earmarked for a specific purpose.

*Update 2023:* Work has commenced on the improvement of high priority sections of sidewalks throughout the Village. Work on high priority sections will continue the remainder of the 2023 season with additional funding being budgeted to continue the work in the coming years.

## **Appendix 2019B: Street Rehabilitation (All Streets)**

*Project Status:* Initially scheduled to occur during FY 2019, the tentative schedule has been moved to FY 2020 with a two-year completion due to the Village's interest in coordinating with the Jackson County Department of Transportation to share construction services as a means of cost saving. Contractors have been scheduling nearly a year in advance.

*Project Description:* Frequently a topic of discussion throughout the budget development process from April through June 2018, prior to the start of FY 2019, Village Council approved a 2.0 mill increase in the General Fund effective with the July 1, 2018 tax bills in anticipation of funding a comprehensive street rehabilitation plan that would touch nearly every street in the Village over a two-year period. A resolution to approve the Notice of Intent for Capital Improvement Bonds was approved on July 9, 2019, after the initial CIP had been implemented.

Assessment of all Village streets has occurred to determine the extent of rehabilitation that may be required ranging from crack filling to complete reconstruction. Excluding N. King St., S. King St., Tiffany St., and Marshall St. which are eligible for funding through the Surface Transportation Program (STP), estimates range from \$875,000 to \$2.3 million for rehabilitation of the remaining Village streets. The larger number reflects complete reconstruction of all Village streets. A more realistic estimate of \$1.5 million reflects the full range of rehabilitation including crack sealing, chip/seal, wedge and fog seal, mill and fill, and reconstruction.

*Priority Status and Timeline:* As Village Council considered options for rehabilitating the Village's streets, several factors were considered, including:

1. The increasingly deteriorating condition of the Village's streets primarily from the effects of water infiltration (exacerbated by Michigan's freeze/thaw cycles each winter) due to the age of the streets and lack of prior maintenance.
2. The increasing costs of materials apparently related to petroleum products being refined for fuel consumption rather than asphalt emulsions.
3. The increasing cost of mobilization and labor (due to a nationwide labor shortage) from the demand on contractors to rehabilitate roads and streets across Michigan.
4. The cumulative effect of decades of reductions in the allocation of funds from the State of Michigan, including revenue sharing and Act 51 funds, and the lack of any apparent legislative solution that would direct greater funding to rural areas.
5. The cumulative impact of reductions in revenue since passage of the Headlee Amendment in 1978 that has reduced the Village's street millage from 5.0 mills to the current 3.6408 mills, a factor representing approximately \$50,000 per year (in 2019 dollars).

*Funding Source and Cost:* With likely costs ranging from \$875,000 to \$1.5 million for rehabilitating the Village's streets, General Obligation Bonds of \$1 million to \$1.2 million are being pursued with repayment over a 10-year period at up to \$120,000 per year. Village Council's approval of the FY 2019 budget included a 2.0 mill increase in the General Fund that will generate approximately \$75,000 per year to be transferred to the two street funds. Those funds will accumulate for up to two years prior to completion of the street rehabilitation

plan. If estimates for rehabilitation exceed \$1.2 million, it will be necessary to obtain other sources of funding (grants) or reduce the scale of the rehabilitation to some streets.

An application for a Transportation Economic Development Fund program grant for 2020 in the amount of \$250,000, applicable to five of the Village's major streets with an equivalent local match, was denied. The TEDF program specifically targets communities of less than 10,000 population. An application for 2021 will be submitted when the application period is announced by the Michigan Department of Transportation. Other than N. King St., S. King St., Tiffany St. and Marshall St., the Village's streets are not eligible for additional Surface Transportation Program (STP) funding.

*Community Goal:* Though rehabilitation of all of the Village's streets within a two-year period is an ambitious goal and would require securing the maximum amount of General Obligation Bonds available to the Village, this would prevent the further deterioration in the streets and, once the bonds are redeemed at the end of ten years, enable the Village to utilize existing revenue from all sources to maintain the streets indefinitely. In addition, though the General Fund millage was increased by 2.0 mills effective with FY 2019, the total millage rate for the Village will decrease by 3.55 mills effective with the FY 2021 tax bill (July 1, 2020), when the Sewer Bond millage will expire, resulting in an overall decrease in the tax millage rate for all property owners.

*Update 2021:* Though the Village had tentatively secured bond funds during 2020, the closing on the bonds was delayed until April 1, 2021, due to the street projects not commencing until 2021. \$1.25 million in bond funds has been secured at an interest rate of 1.5% for 12 years. Tri-State Paving will be doing the crack sealing, milling, and paving. Jackson County Department of Transportation will be doing wedge patching, chip, and fog seal. It is not anticipated that all of the streets will be completed until 2022 due to delays in obtaining engineering and quotes for the water main replacements on Jackson and Lane Streets.

*Update 2022:* Planned street rehabilitation projects continue through 2022 with milling and paving provided by Tri-State Paving who will also coordinate needed chip and seal since Jackson County DOT was not able to include the Village in their schedule. During 2021, a Special Assessment District was created by Village Council for Lighthouse Village streets to complete the paving from when the subdivision was first developed. The project consists of installing the top coat of asphalt which will make the pavement flush with the gutter pans and reduce damage from snow plowing. The SAD amount is approximately \$80,000. The paving is scheduled to occur during 2022.

*Update 2023:* Planned street rehabilitation projects continue through 2023 with milling and paving provided by Tri-State Paving that will bring all streets in the Village to a top Paser Rating, excluding Monroe St that we are working with F&V on plans that include state and federal funding for 2025.

## **Appendix 2022B: Monroe Street Reconstruction**

*Project Status:* Tentatively scheduled for FY 2025.

*Project Description:* Though Monroe St. is not currently designated as a federal aid eligible street, it is a primary arterial street that connects Main St. (M-50) with M-124 through a short section of Monroe Pike Rd. The Village has submitted documents to the Michigan Department of Transportation to request such designation that would potentially allow street reconstruction to be funded up to 80% with Surface Transportation Program funds through the State of Michigan. Such designation would require the approval by the Jackson County Department of Transportation to agree to also designate .2 mile of Monroe Pike Rd. that is between the Village boundary and M-124. According to Angela Kline, the JCDOT engineer, her agency appears to be agreeable for such designation.

The project would consist of complete milling of the existing asphalt surface, reshaping of the base to facilitate improved stormwater control and resurfacing with 3"-4" of asphalt. With the exception of the first block east of Main St., there is no curb and gutter along the length of Monroe St. which makes the project less expensive.

*Priority Status and Timeline:* Monroe St. is in poor condition with a very rough surface and crumbling edges that are exacerbated by unauthorized parking in the right-of-way adjacent to both sides of the street. Due to the current condition and the nature of it being a primary artery, this project would be considered a high priority. Should MDOT approve its designation as federal aid eligible, Monroe St. would not likely be funded from STP funds until 2023.

*Funding Source and Cost:* Once Monroe St. has received designation as a federal aid eligible street, the Village will be able to obtain an engineering estimate of the cost. Based on the cost for other streets, it is likely this project could cost upwards of \$500,000. It would be funded 80% from STP funds through the Rural Task Force Program and 20% from the Village's street funds.

*Community Goal:* The community goal for Monroe St. is consistent with that for the other street rehabilitation projects; that is to rehabilitate all of the streets and be in a position to properly maintain all streets to provide a viable transportation system, all from existing fiscal resources. Those resources include the Village's street millage (currently 3.6408 mills), Act 51 funds from gasoline sale tax revenue, and two mills of General Funds.

*Update 2022:* The effort to have MDOT reclassify Monroe Street has been ongoing since mid-2021 from a local street to a minor collector, based on MDOT's definitions. During July 2022, MDOT indicated that the street should be reclassified as a major collector, presumably due to connecting two state trunklines, M-50 and M-124. This required Village Council to approve a new resolution (2022.07.01) which was adopted on July 11, 2022, and will require the Jackson County Board of Commissioners to follow suit with the short section of Monroe Pike Road. Once that occurs, MDOT will be able to complete the reclassification of Monroe Street/Monroe Pike Road.

Once reclassification occurs, Monroe Street will become federal aid eligible through the Rural Task Force; however, funding for the reconstruction will not occur until 2024. Increased



material and labor costs will likely increase the project cost to \$750,000 with up to 80% being grant funded and 20% funded by the Village's Major Street Fund. Currently, no other street projects are being considered other than Jackson County roads, so negotiation with JCDOT will determine the level of funding for 2024.

*Update 2023:* Currently working with F&V to continue the process toward state and federal funding, initial cost estimates are in at \$1,600,000. Project will include a complete rebuild from Main St to Sheridan, with mill and cap continuing to the Village limits.

## **Appendix 2023B: Equipment Purchase and Replacement**

*Project Status:* Initiated during FY2022; continuing through FY2023.

*Project Description:* This appendix probably should have been initiated with the original Capital Improvement Plan in FY2017 since most of the Village's equipment would exceed the \$15,000 threshold for inclusion in the CIP. However, there may be occasional fiscal years in which there is no need to replace equipment. Equipment in this appendix may include specialty equipment, vehicle or park maintenance equipment.

*Priority Status and Timeline:* To the extent possible, equipment purchase or replacement should be anticipated and would be reflected in a CIP update prior to the expenditure occurring. This may not always be realistic if there is an equipment failure or in instances in which it is determined that repair of equipment may not be economically prudent. As such, a determination of priority may change from year to year or within a given year.

*Funding Source and Cost:* Generally, equipment purchases are charged to the Internal Service Fund. Revenue for the fund is transferred by formula from each of the significant Village funds, including General Fund, Major Street Fund, Local Street Fund, Water Fund and Sewer Fund. Occasionally, the Village may secure a loan for major equipment, such as when the Caterpillar Backhoe was purchased.

During FY2022, Village Council approved the unscheduled purchase of Ditch Witch equipment, at a cost of \$79,475, that will enable the DPW to hydro-excavate, jet storm and sewer mains, and vacuum out catch basins, grinder cans, and manholes rather than contract for this work. Due to limited availability of such equipment due to supply chain issues, the decision was made to purchase this equipment rather than delaying until FY2023. Prior to its purchase, the Village had limited jetting ability with the old fire truck, but otherwise contracted for this service. Though after-the-fact, this purchase should be reported in the CIP update.

During FY2023, the Village plans to replace the DPW work truck that is frequently used in the field to service grinder cans and pumps. In consideration of the Village terminating the contract for operation and maintenance services with Columbia Township, effective no later than August 16, 2022, it is anticipated that replacement of the vehicle may be with a lighter duty truck that is less expensive than the current vehicle and more readily available as a stock vehicle. The anticipated cost of the replacement vehicle is \$60,000.

## **Appendix 2023C: Water Plant Upgrades**

*Project Status:* Initiated during FY2022 and continuing during FY2023

*Project Description:* During December 2021, the Village was cited by the Michigan Department of Environment, Great Lakes and Energy for an anomalous spike in fluoride in a water sample that was taken during September 2021. As a result, the Village negotiated a compromise with EGLE to upgrade the fluoride injection process in exchange for rescinding the violation notice. The upgrades include extending the sample service line from outside of the Scout Cabin to the inside of the water plant, replacing the single injector system with a dual injector system to provide a separate injector pump for each of the two high service pumps, and an enhanced monitoring process. It is anticipated that this project will be completed during FY2022.

The Village plans to replace the antiquated, portable diesel backup generator that is in excess of 30 years old that is located adjacent to the water plant on the banks of the River Raisin. The generator would need a complete rebuild at an estimated cost of \$30,000; however, there remains a high risk of leakage of oil or diesel fuel into the river. In addition, the existing diesel generator requires manual starting for monthly exercising of the unit as well as in the event of a power failure. It is expected that this project will be completed during FY2023.

*Priority Status and Timeline:* Both projects are considered a high priority. The fluoride injection upgrade is essentially a mandate from EGLE. This upgrade will be completed during FY2022. Replacement of the diesel backup generator with a natural gas backup generator is anticipated to occur during FY2023.

*Funding Source and Cost:* Both projects will be funded from the Water Fund, though the cost of the fluoride injector upgrade will likely be reimbursed up to \$24,000 from a grant through the Michigan Department of Health and Human Services, according to EGLE. Since the initial expenditure will come from the Water Fund, even though less than \$15,000 will remain, it is included in the CIP update. The replacement backup generator is estimated to cost \$80,000 based on the cost of an identical generator installed previously at the M-50 lift station. Due to the limited amount of reserve funds in the Water Fund, it is likely the cost of the new backup generator will require a transfer from the General Fund to be reflected in the FY2023 budget.

*Community Goal:* Upgrades to the fluoride injection system is consistent with the Village's goal of providing safe drinking water for residents, businesses and visitors. Though the fluoride sample reading is considered an anomaly, the upgrades will provide greater assurance of water quality. Replacement of the backup generator will assure that the Village is able to provide quality drinking water, even during a significant power disruption, but also assure that the aquifer and River Raisin are no protected from contamination by oil or diesel fuel leakage.

## **Appendix 2023D: Municipal Parking Improvements**

*Project Status:* Tentatively planned to commence during FY2024.

*Project Description:* This project would address issues pertaining to the municipal parking on West Street consisting of approximately 28 parking spaces and to parking at Weatherwax Park at the corner of Monroe and Water Streets. The West Street parking lot is in need of resurfacing and minimal landscaping. Weatherwax Park was never completed following removal of the old water tower and requires reconfiguration that would accommodate 45-50 parking spaces. The public restrooms and actual park do not require any significant changes. This project would consist of removal of the existing asphalt surface, regrading the surface, installation of curbs and islands for storm water drainage, paving, and configuration of the parking spaces.

*Priority Status and Timeline:* The West Street parking lot surface has deteriorated, but is not to the point of becoming a hazard for vehicles or occupants. Weatherwax Park is minimally useful, but is more of a hazard due to the fact that it was not properly graded following removal of the water tower. Currently, less than 24 parking spaces are useable. Due to safety issues, this is more of a priority. Based on anticipate funding, it is not anticipated that either project will be feasible until FY2024. Engineering was completed during FY2022 for Weatherwax Park.

*Funding Source and Cost:* Both projects are contingent upon receipt of revenue through the excise tax on marijuana sales which pertains to the opening of the provisioning center under construction at the former Ford facility on Mill Street. Based on the 2021 allocation to municipalities that previously had marijuana related businesses, each license resulted in excess of \$56,000 in revenue being received by the municipality. With two licenses, it is anticipated that the Village would receive in excess of \$100,000 per year. The estimated cost of the projects is \$50,000 for the West Street lot and \$100,000 for Weatherwax Park. A potential additional revenue for Weatherwax Park is from monthly leases with the Village for parking for adjacent buildings.

*Community Goal:* The Village's goal is to provide safe, attractive and convenient public parking near the downtown. The Village budget has not previously been able to sustain improvements to the existing parking. As the commercial businesses grow and change, it is anticipated there will be a need for additional municipal parking. The current municipal parking lots are adequate, but are in a deteriorating condition. Weatherwax Park has the potential to double the number of parking spaces if reconfigured.

## **Appendix 2024A: Electric Generator at Water Plant**

*Project Status:* Initiated during FY2024; continuing through FY2025.

*Project Description:* This project will address the need for a new backup generator at the Village Water Plant. The generator in use was previously used at the M50 lift station as backup power for that space and the water plant for many years. This generator keeps the Village water supply running in case of a power outage once the water tower is depleted its supply. The condition of the generator has diminished over the past several years.

*Priority Status and Timeline:* This is a high priority project due to the importance of maintaining quality equipment that creates a safe water supply for our community.

*Funding Source and Cost:* General Fund and Water Fund. Village Manager will be exploring grant funding opportunities to expedite replacement timeframe.