

**VILLAGE OF BALDWIN
LAKE COUNTY, MICHIGAN**

**FY 2024-2029 SIX-YEAR
CAPITAL IMPROVEMENT PLAN (CIP)**

INTRODUCTION

The CIP is intended to identify public improvements to support the Village's projected needs during the next six years. It consists of:

- Standards for public facilities expressed as levels of service.
- A schedule of required projects.
- A schedule of revenues to fund required projects.

RANKING CRITERIA - Capital improvements are prioritized in the following order:

1. Repair, remodeling, renovation, or replacement of obsolete or worn-out facilities that contribute to achieving or maintaining the current level of service.
2. New or expanded facilities that reduce or eliminate deficiencies in the current level of service for existing demand.
3. New public facilities and improvements to existing public facilities that eliminate public hazards not eliminated above.
4. New or expanded facilities that provide the adopted levels of service for new development and redevelopment during the next six fiscal years.
5. New or expanded public facilities that are contained in the Village Master Plan and scheduled within the next six years.
6. Improvements to existing facilities, and new facilities that significantly reduce the operating cost of providing a service or facility.
7. New facilities that exceed the adopted levels of service for growth during the next six fiscal years by either:
 - a) Providing excess public facility capacity that is needed by future growth beyond the next six fiscal years: or
 - b) Providing higher quality public facilities than are contemplated in the Village's normal design criteria for such facilities.
8. Facilities not described in (1) through (6) above, but which the Village is obligated to complete.

ADDITIONAL INFORMATION

Village of Baldwin Administration

OVERVIEW

Village of Baldwin's Capital Improvements Plan (CIP) is a 6-year program that outlines projected capital expenditures for infrastructure and major capital projects such as road construction and improvements, park system improvements, public utility enhancements such as improvements to water, sanitary sewer, and storm drainage systems, and construction and improvement of Village facilities. In addition to identifying the specific capital projects, the CIP also outlines how these projects are to be financed.

The Village's CIP is designed to set forth the estimated schedule, timing, and details of each specific capital improvement by year, together with the estimated cost, the need for the improvement, and sources of revenue to pay for the improvement. With the adoption of the attached plan, and the projects contained herein, Village Council and staff have carefully considered for each project and the plan:

- The condition of the Village's existing infrastructure, including the projected need for repair or replacement.
- The demand for the improvement.
- The estimated cost of the improvement.
- The available resources.
- The level of overlapping debt.
- The relative benefits and costs of alternative uses of the funds.
- Operating costs of the proposed improvements; and
- Alternatives for providing services most efficiently, through shared facilities with other governmental units.

Each project in the Village's CIP is identified as to the project's type, or category. Also included for each project are the funding source and the year (or years in some cases) in which the project will be constructed or put into service. Project types currently in use in the CIP are:

- ❖ Buildings and Facilities
- ❖ Roads, Streets, and Bridges
- ❖ Park Improvements
- ❖ Water System
- ❖ Sanitary System
- ❖ Storm Drainage

The following pages include detail on each project included in the CIP. For each project, an improvement worksheet is completed. This worksheet provides all estimated costs and anticipated funding sources as well as the timing and location for each improvement. When a project is first proposed for inclusion in the CIP, a sheet such as this is entered into the data in the CIP database for further discussion and review.

CIP DEFINED

In Village of Baldwin, Capital Improvements will be any physical improvement to public facilities or road infrastructure as well as land acquisition, buildings, bike paths, trails, sidewalks, vehicles, and equipment over \$5,000.00.

MAPPED PROJECTS

Projects having a physical location are shown on the accompanying map.

FUNDING SOURCES

The Village employs several tools to finance capital projects. These various sources are listed below. Though the attached CIP does not reflect the use of all the funding sources available to the Village, the sources are identified below as potential sources for funding certain projects.

INTERNAL METHODS:

Property Taxes – Property taxes are used to fund projects of a general benefit to the entire Village. Property taxes can be used to concurrently fund projects – i.e., taxes levied in a particular year are spent that year for the specific project – or taxes can be levied to retire bonded debt if the Village borrowed money by issuing bonds to fund the project.

Special Assessments - Special assessments are based on the concept that when land is benefited from a particular improvement, all, or part of the costs of the improvement should be levied against those properties to finance such improvements. Special assessment bonds are retired through special assessment collections and, if necessary, property taxes if backed by the full faith and credit of the Village.

Utility Funds - Capital improvements to the water and sewer utilities are financed through utility fund revenues derived from user charges for the respective services. Revenue bonds are used to finance large projects.

Lease/Revenue Bonds - These bonds are backed by the full faith and credit of the Village and supported through an ad valorem special levy (millage).

Sinking (Reserve) Funds – Sinking funds for capital expenditures is recommended for future repair and replacement of infrastructure such as water mains.

Act 51 – Provides funding for local streets.

Other - Other internal funding options available include capital project and capital improvement funds whose source of funding includes property tax levies, interest income on Village investments, and transfer from reserves.

EXTERNAL METHODS:

Michigan Department of Transportation – The Michigan Department of Transportation provides financing assistance for maintenance and improvements on those highways included in the MDOT trunk highway system and federal interstate system. These improvements could include intersecting local or county streets. Improvements on these highways must meet State trunk highway standards before MDOT releases funds.

Community Development Block Grant (CDBG) – Enables local governments to help provide decent, affordable housing and create economic opportunities primarily for low and moderate-income families to address long-term economic distress in urban industrial cores and rural areas;

distributed based on need and ability to create jobs and attract private investment. Priority consideration will be given to those areas that have experienced sudden and severe economic dislocation and job loss due to corporate restructuring.

Drinking Water State Revolving Fund (DWSRF) - Michigan's Drinking Water State Revolving Fund (DWSRF) program is designed to assist water suppliers in satisfying the requirements of the Safe Drinking Water Act by offering low-interest loans (for 20, 30, or 40-year loans) to eligible water suppliers.

Other - Other sources of financing available externally include grants and donations.

PROJECT SUMMARIES

- 1. **PROJECT NAME:** 902 Michigan Redevelopment
YEAR: 2024
ESTIMATED COST: \$50,000
PROJECT TYPE: Downtown Improvements

Description - The project eliminates an eyesore in the downtown district.

Justification - This project consists of creating a new public gathering space feature.

Operational Impacts - Increased maintenance costs and removes a property from the tax roll. It would allow greater participation and interest in the center of the Village.

FUNDING SOURCES

DDA	\$ 25,000
CDBG Grant	\$ 25,000
TOTAL	\$ 50,000

- 2. **PROJECT NAME:** Signage / Banner Poles
YEAR: 2024
ESTIMATED COST: \$25,000
PROJECT TYPE: Downtown Improvements

Description - The project replaces the existing banner poles that have become obsolete.

Justification - This project consists of creating a new public advertising feature.

Operational Impacts - Decreased maintenance costs and increases interest in the downtown.

FUNDING SOURCES

DDA	\$ 25,000
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- 3. **PROJECT NAME:** Improve Carrs Road
YEAR: 2024

ESTIMATED COST: \$250,000
PROJECT TYPE: Street System Improvements

Description - This project consists of improvements to Carrs Road from Cherry to Astor Road. Work to be completed in 2024.

Justification – This street segment needs repair and upgrading.

Operational Impacts – Decreases long-term maintenance costs.

FUNDING SOURCES

<u>Street Fund</u>	<u>\$250,000</u>
TOTAL	\$250,000

4. **PROJECT NAME: Water Supply Improvements – Well 3 Improvements**
YEAR: 2024
ESTIMATED COST: \$556,000
PROJECT TYPE: Drinking Water supply

Description - The selected alternative for the water supply improvements is the optimization of the existing facilities. This alternative includes the replacement of aging equipment and infrastructure components at the Village's well #3. Replacing these items will improve the reliability of the water system and will limit the risk of critical supply equipment breaking down while in operation.

Justification - Improvements to the well house will see the aging components replaced in kind to maintain the existing functionality of the supply system.

Operational Impacts – Reduces long-term maintenance costs.

FUNDING SOURCES

DWSRF Grant	\$556,000
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5. **PROJECT NAME: Water Supply Improvements – Well 4 Improvements**
YEAR: 2024
ESTIMATED COST: \$180,000
PROJECT TYPE: Drinking Water supply

Description - The selected alternative for the water supply improvements is the optimization of the existing facilities. This alternative includes the replacement of aging equipment and infrastructure components at each of the Village's well houses. Replacing these items will improve the reliability of the water system and will limit the risk of critical supply equipment breaking down while in operation.

Justification - Improvements to the well houses will see the aging components replaced in kind to maintain the existing functionality of the supply system.

Operational Impacts - Reduces long-term maintenance costs.

FUNDING SOURCES

DWSRF Grant \$180,000

- 6. PROJECT NAME: Lead Service Line Replacement**
- YEAR: 2024**
- ESTIMATED COST: \$906,000**
- PROJECT TYPE: Drinking Water supply**

Description - The selected alternative will include the replacement of 250 lead service lines with new copper services and distribution system improvements.

Justification - As previously indicated, the Preliminary DSMI identified a total of 250 lead services that may need replacing. The Village is pursuing a DWAM grant to further study the number and location of lead service lines and to produce a final DSMI. GIS location of curb stops, and hydro-excavations will provide exact service locations and a better understanding of the service material types. With this data in hand, a better summation of the services needing replacement can be made.

Operational Impacts - Addresses compliance with the Safe Drinking Water Act.

FUNDING SOURCES

DWSRF Grant \$ 906,000

- 7. PROJECT NAME: Elevated Storage Tank Improvements - School Tank Mixers**
- YEAR: 2024**
- ESTIMATED COST: \$86,000**
- PROJECT TYPE: Drinking Water supply**

Description - The selected alternative for the elevated storage tank improvements is the optimization of the existing facility. This alternative includes a mixer to be installed in the School Tower to address concerns with ice formation and thermal stratification. Improvements to the Norway tower include replacement of existing electrical and control equipment, as well as corrosion control system equipment.

Justification - Improvements at the School Tower will see a mixer installed that can mix the entire contents of the tank. The mixer will be water lubricated. System operators will be able to control and monitor the mixer operation through the Village's SCADA system.

Operational Impacts – Improves functionality.

FUNDING SOURCES

DWSRF Grant \$86,000

- 8. PROJECT NAME: Water Main Replacement - Norway Street, First Street**

YEAR: 2024
ESTIMATED COST: \$1,830,000
PROJECT TYPE: Drinking Water supply

Description - The water main replacement projects will involve replacing existing 6-inch or 8-inch water main with new 8-inch main, including replacing associated lead service lines.

Justification - The length of water main to be replaced ranges from 300 feet to 2,100 feet. The water system modeling performed under the WSRS showed that currently, dead ends and older mains produce pressures between 48-52 psi, under peak hour demand conditions. After completion of the proposed projects, water system modeling showed that system pressure should increase to greater than 55 psi in all parts of the system.

Operational Impacts - Addresses issues associated with undersized and aging water mains such as risk of main breaks, lost water, excessive head loss, decreased system pressure, and water quality problems.

FUNDING SOURCES

DWSRF Grant	Norway Street	\$ 1,307,000
	First Street	\$ 523,000
	Total	\$ 1,830,000

9. **PROJECT NAME:** Improve 8th Street west of M-37 to Oak Street
YEAR: 2024
ESTIMATED COST: \$350,000
PROJECT TYPE: Street Improvements

Description - This project consists of reconstructing the street.

Justification - These improvements are long overdue for this major street.

Operational Impacts – Lower cost of maintenance.

FUNDING SOURCES

DDA	\$350,000
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10. **PROJECT NAME:** Improve 8th Street east of M-37 to the Bridge
YEAR: 2025
ESTIMATED COST: \$350,000
PROJECT TYPE: Street Improvements

Description - This project consists of reconstructing the street.

Justification - These improvements are long overdue for this major street.

Operational Impacts – Lower cost of maintenance.

Justification - As previously indicated, the Preliminary DSMI identified a total of 250 lead services that may need replacing. The Village is pursuing a DWAM grant to further study the number and location of lead service lines and to produce a final DSMI. GIS location of curb stops, and hydro-excavations will provide exact service locations and a better understanding of the service material types. With this data in hand, a better summation of the services needing replacement can be made.

Operational Impacts – Improves reliability and reduces water loss.

FUNDING SOURCES

DWSRF Grant \$ 755,000

14. **PROJECT NAME:** Water Main Replacement - Lake Street, Oak Street, Fifth Street
YEAR: 2026
ESTIMATED COST: \$2,747,000
PROJECT TYPE: Drinking Water supply

Description - The water main replacement projects will involve replacing existing 6-inch or 8-inch water main with new 8-inch main, including replacing associated lead service lines. This alternative addresses issues associated with undersized and aging water mains such as risk of main breaks, lost water, excessive head loss, decreased system pressure, and water quality problems.

Justification - The length of water main to be replaced ranges from 300 feet to 2,100 feet. The water system modeling performed under the WSRS showed that currently, dead ends and older mains produce pressures between 48-52 psi, under peak hour demand conditions. After completion of the proposed projects, water system modeling showed that system pressure should increase to greater than 55 psi in all parts of the system.

Operational Impacts – Reduces maintenance costs and improves reliability.

FUNDING SOURCES

DWSRF Grant	Lake Street	\$1,656,000
	Oak Street	\$ 829,000
	Fifth Street	\$ 262,000
	Total	\$ 2,747,000

15. **PROJECT NAME:** Elevated Storage Tank Improvements - School Tank Altitude
Valve Improvements
YEAR: 2026
ESTIMATED COST: \$142,000
PROJECT TYPE: Drinking Water supply

Description - The selected alternative for the elevated storage tank improvements is the optimization of the existing facility. This alternative includes replacing aging infrastructure

components at the Village's existing School Tower. Improvements to the School Tower include altitude valve piping and equipment.

Justification - Improvements at both the School Tower will see the aging equipment and infrastructure components replaced to maintain the existing functionality of the system.

Operational Impacts - Improves system reliability.

FUNDING SOURCES

DWSRF Grant \$142,000

16. PROJECT NAME: **Water Supply Improvements – Well 2 Improvements**
YEAR: **2026**
ESTIMATED COST: **\$358,000**
PROJECT TYPE: **Drinking Water supply**

Description - The selected alternative for the water supply improvements is the optimization of the existing facilities. This alternative includes the replacement of aging equipment and infrastructure components at the Village's well #2. Replacing these items will improve the reliability of the water system and will limit the risk of critical supply equipment breaking down while in operation.

Justification - Improvements to the well house will see the aging components replaced to maintain the existing functionality of the supply system.

Operational Impacts - Improves system reliability.

FUNDING SOURCES

DWSRF Grant \$358,000

17. PROJECT NAME: **New Sidewalks on Beech Street**
YEAR: **2027**
ESTIMATED COST: **\$150,000**
PROJECT TYPE: **Street Improvements**

Description - This project consists of constructing 3 blocks of new sidewalk on the east side of Beech Street between 4th Street and Lake Street.

Justification - These improvements will increase the safety of schoolchildren in this area.

Operational Impacts - None

FUNDING SOURCES

Street fund \$ 25,000
Grant (Safe Routes to School) \$ 25,000
DDA \$100,000

TOTAL \$150,000

18. PROJECT NAME: Improve 8th Street between Oak Street and Astor Road
YEAR: 2028
ESTIMATED COST: \$450,000
PROJECT TYPE: Street Improvements

Description - This project consists of acquiring right-of-way and constructing a new street across the railroad tracks.

Justification - These improvements provide an additional route for access to Astor Road.

Operational Impacts - Increased maintenance costs.

FUNDING SOURCES

Street fund	\$400,000
DDA	\$ 50,000
TOTAL	\$450,000

19. PROJECT NAME: Water System Pressure Reducing Valves Improvements - Norway Street and Maple Street
YEAR: 2028
ESTIMATED COST: \$90,000
PROJECT TYPE: Drinking Water supply

Description - The selected alternative for the water system pressure reducing valves improvements is the optimization of the existing facilities. This alternative will see the PRVs and associated piping and equipment at the Maple Street and Norway Street PRV vaults replaced in kind. Maintaining the functionality of these infrastructure components is necessary to ensure reliable operation of the two pressure zones in the distribution system, and to prevent scenarios where elevated tank overflows could occur.

Justification - Improvements to the PRV vaults will see the aging components replaced in kind to maintain the existing functionality of the distribution system.

Operational Impacts – Extends life of system.

FUNDING SOURCES

DWSRF Grant	\$90,000
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20. PROJECT NAME: Elevated Storage Tank Improvements - Norway Tank
YEAR: 2028
ESTIMATED COST: \$207,000
PROJECT TYPE: Drinking Water supply

Description - The project for the elevated storage tank improvement is the optimization of the existing facility. This includes replacing aging infrastructure components at the Norway Tower. Improvements to the Norway tower include replacement of existing electrical and control equipment, as well as corrosion control system equipment.

Justification - Improvements at the Norway Tower will see the aging equipment and infrastructure components replaced to maintain the existing functionality of the system.

Operational Impacts – Extends life of system.

FUNDING SOURCES

DWSRF Grant \$207,000

21. PROJECT NAME: Elevated Storage Tank Improvements - School Tank Improvements
YEAR: 2028
ESTIMATED COST: \$146,000
PROJECT TYPE: Drinking Water supply

Description - The selected alternative for the elevated storage tank improvement is the optimization of the existing facility. This project replaces aging infrastructure components at the School Tower. Improvements include replacing overflow piping, drain piping, and altitude valve piping and equipment.

Justification - Improvements at the School Tower will see the aging equipment and infrastructure components replaced to maintain the existing functionality of the system.

Operational Impacts – Extends life of system and improves water quality.

FUNDING SOURCES

DWSRF Grant \$146,000

22. PROJECT NAME: Water Main Replacement - Eighth Street Abandonment, Eighth Street, Carrs Street
YEAR: 2028
ESTIMATED COST: \$1,714,000
PROJECT TYPE: Drinking Water supply

Description - The water main replacement projects will involve replacing existing 6-inch or 8-inch water main with new 8-inch main, including replacing associated lead service lines. This alternative addresses issues associated with undersized and aging water mains such as risk of main breaks, lost water, excessive head loss, decreased system pressure, and water quality problems.

Justification - The length of water main to be replaced ranges from 300 feet to 2,100 feet. The water system modeling performed under the WSRS showed that currently, dead ends

and older mains produce pressures between 48-52 psi, under peak hour demand conditions. After completion of the proposed projects, water system modeling showed that system pressure should increase to greater than 55 psi in all parts of the system.

Operational Impacts – Reduces maintenance costs, improves functionality and water quality, and reduces water loss.

FUNDING SOURCES

DWSRF Grant	Eighth Street \$	10,000
	Eighth Street \$	994,000
	Carrs Road \$	710,000
	Total	\$ 1,714,000

23. **PROJECT NAME:** Hollister Park Spray Pad
YEAR: 2029
ESTIMATED COST: \$175,000
PROJECT TYPE: Recreation Improvements

Description - The project includes 50-foot diameter pad with water features and restoration of disturbed areas.

Justification - This project consists of creating a new feature at the park that is kid friendly.

Operational Impacts - Increased utility maintenance costs and. It would provide greater participation and interest in the center of the Village.

FUNDING SOURCES

DDA	\$100,000
L&WCF Grant	\$ 75,000
TOTAL	\$175,000

24. **PROJECT NAME:** 7th Street Streetscape and Sidewalk
YEAR: 2030
ESTIMATED COST: \$250,000
PROJECT TYPE: Street Improvements

Description - This project consists of extending the streetscape treatment including curb & gutter, landscaping, lighting, and street furniture.

Justification - These improvements continue the established standard in the downtown area.

Operational Impacts - Increased maintenance costs.

FUNDING SOURCES

DDA	\$250,000
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25. PROJECT NAME: 8th Street Streetscape and Sidewalk
YEAR: 2030
ESTIMATED COST: \$500,000
PROJECT TYPE: Street Improvements

Description - This project consists of street upgrades including resurfacing and extending the streetscape treatment including curb & gutter, landscaping, lighting, and street furniture east of M-37 to the 8th Street bridge.

Justification - These improvements continue the established standard in the downtown area and coordinate with the bridge replacement.

Operational Impacts - Decreased maintenance costs.

FUNDING SOURCES

DDA \$500,000

26. PROJECT NAME: Widen the Right-of-Way of Center Street
YEAR: 2030
ESTIMATED COST: \$50,000
PROJECT TYPE: Street Improvement

Description - This project consists of widening the 50-foot right-of-way on Center Street to 66-feet.

Justification – A full width right-of-way would meet the Village standard of 66 feet and allow enough room for in the future to improve utilities.

Operational Impacts - Increased utility maintenance costs.

FUNDING SOURCES

Street Fund \$ 50,000

27. PROJECT NAME: Widen Prospect Street Right-of-Way
YEAR: 2030
ESTIMATED COST: \$50,000
PROJECT TYPE: Street Improvements

Description - This project consists of widening the right-of-way of Prospect Street to 66 feet.

Justification - These improvements continue the established standard in the village.

Operational Impacts – Better management of utilities and maintenance.

FUNDING SOURCES

DDA \$50,000

TABLE 1 – CAPITAL IMPROVEMENTS

PROJECT	DEPARTMENT	YEAR									
		2024	2025	2026	2027	2028	2029	2030			
1. 902 Michigan Redevelopment	Downtown	50,000									
2. Signage/Banner Poles	Downtown	25,000									
3. Carrs Road Improvement	Streets	250,000									
4. Water Supply Improvements – Well 3	Water Supply	556,000									
5. Water Supply Improvements – Well 4	Water Supply	180,000									
6. Lead Service Line Replacement	Water Supply	906,000									
7. Elevated Storage Tank Improvements – School Tank Mixers	Water Supply	86,000									
8. Water Main Replacement – Norway Street, First Street	Water Supply	1,830,000									
9. Improve Maple Street west of M-37 to Oak Street	Streets	350,000									
10. Improve Maple Street east of M-37 to the Bridge	Streets		350,000								
11. Repurpose old DPW at Hollister Park	Recreation		50,000								
12. Emergency US-10 Bypass	Streets			1,250,000							
13. Lead Service Line Replacement	Water Supply			755,000							
14. Water Main Replacement – Lake Street, Oak Street, Fifth Street	Water Supply			2,747,000							
15. Elevated Storage Tank Improvements – School Tank Altitude Valve Improvements	Water Supply			142,000							
16. Water Supply Improvements – Well 2	Water Supply			358,000							
17. New Sidewalks on Beech Street	Streets				150,000						
18. Improve 8 th Street between Oak Street and Astor Road	Streets					450,000					
19. Water System Pressure Reducing Valves Improvements – Norway Street and Maple Street	Water Supply						90,000				

20. Elevated Storage Tank Improvements – Norway Tank Improvements	Water Supply							207,000		
21. Elevated Storage Tank Improvements – School Tank Improvements	Water Supply							146,000		
22. Water Main Replacement – Eighth Street Abandonment, Eighth Street, Carrs Street	Water Supply							1,714,000		
23. Hollister Park Spray Pad	Recreation								175,000	
24. 7 th Street Streetscape and Sidewalk	Streets									250,000
25. 8 th Street Streetscape and Sidewalk	Streets									500,000
26. Widen the Right-of-Way of Center Street	Streets									50,000
27. Widen Prospect Street Right-of-Way	Streets									50,000