



Village of



Menomonee Falls

More than a Village

2016 CAPITAL BUDGET

ENGINEERING DEPARTMENT

MARCH 21, 2016

2016 CAPITAL BUDGET AT A GLANCE

3/14/2016

VILLAGE PROJECTS

Project #	DESCRIPTION	Life	COST	EXPLANATION	Approved Must Do	Crucial to Operations	Recommend	Declaration of Intent by VB on file	
41191	2016 Sidewalk Replacement Program	10+	\$80,000	In order to reduce potential hazards to pedestrians and to minimize the exposure of the Village to liability for personal injury, the Village has initiated an on-going program for inspection of existing sidewalks and for repair or replacement of defective sidewalk sections.		X			
41192	2016 Curb & Gutter Replacement Program	20+	\$230,000	This proposed project is part of the Village's on-going program to replace defective curb and gutter in advance of the annual Village Road Repair Program. This year as part of the 2016 Curb & Gutter Program, the repair and replacement of defective concrete pavement on roadways that are maintained by the Village of Menomonee Falls has been added. The Village maintains several miles of concrete pavement and sections of the pavement have deteriorated to a point that replacement is necessary.		X			
41193	2016 Asphalt Paving Program	10+	\$746,000	As part of the 2016 Asphalt Paving Program the Engineering Department typically uses two funding sources. The first being a portion of the \$700,000 that the Village Board has appropriated to the Department of Public Works 2016 Operating Budget for replacement of deteriorated pavement and the 2nd being the \$700,000 that is being asked for as part of this Capital Budget. This year there is a third funding source which is the Storm Utility which will fund the storm sewer portion of the road program as stated below. This year as part of the 2016 Asphalt Paving project, The Village will be installing storm sewer that addresses areas of existing roadways that do not drain properly and are in need of storm sewer.		X			
41194	Appleton Ave, Pilgrim Rd & Menomonee Ave Intersection Reconstruction - Design	20+	\$83,000	This project consists of the removal of the three 150 foot tall high mast lights, replacement of the three traffic signal systems at Appleton Ave, Pilgrim Road and Menomonee Ave, new lighting system to replace the high mast lights and intersection modifications to improve traffic movements. The high mast lighting was installed in the 1960's and parts are no longer available for repair or maintenance. With the removal of the high mast lighting, the most efficient way to light the intersections would be to install the lights on the traffic signal poles. The traffic signals were installed in 1970 and refurbished as part of a project in 1999 and would need to be replaced as part of the new lighting installation. Lastly the intersections will be reconfigured to improve the traffic flow such as straightening the northbound movement on Pilgrim Road through Appleton Ave.			X		
41195	Train Quiet Zones Lannon Road & Marcy Road	20+	\$50,000	This project consists of the design and installation of the necessary infrastructure to allow for train quiet zones at the Lannon Road and Marcy Road crossings. The crossing gates at these intersections were replaced a few years ago and the technology and necessary equipment was installed to allow for these crossings to become quiet zones. To complete the process of turning these crossings into quiet zones a barrier needs to be installed along the centerline of the road to prohibit drivers from going around the gates when down. These barriers are anchored into the pavement and must be approved by the appropriate Federal and County agencies.			X		
41196	Arthur Ave - Appleton to Menomonee Design	20+	\$34,500	This project consists of designing a relay of the water main with appurtenances in Arthur Avenue from Appleton Ave to Menomonee Avenue along with the reconstructing of the sanitary sewer manholes, removal and replacement of Defective curb & gutter and driveway approaches, installation of storm sewer and removal and replacement of the base course and asphalt pavement. The existing 6" water main will be replaced with an 8" water main due to the age of the water main and material of the water main. The existing water main is sandcast with lead joints. The DNR requires that when possible the existing water main with lead joints and lead laterals be removed from service. Also as part of this project the Storm Sewer will be sized appropriately and eliminate the poor drainage and standing water to reduce future damage to the curb & gutter and asphalt pavement. With the installation of the water main and storm sewer the roadway will be mostly removed and the current roadway is in poor condition. Due to these factors the entire roadway will be removed to the subgrade and new base course, curb & gutter and asphalt pavement will be installed. Any defective sidewalk and driveway approaches will be replaced.				X	
41182	Donald Ave - Arthur to Fleet Construction	20+	\$357,000	This project consists of construction of a relay of the water main with appurtenances in Donald Avenue from Fleet Ave to Arthur Avenue along with the reconstructing of the sanitary sewer manholes, removal and replacement of Defective curb & gutter and driveway approaches, installation of storm sewer and removal and replacement of the base course and asphalt pavement. The existing 6" water main will be replaced with an 8" water main due to the age of the water main and material of the water main. The existing water main is sandcast with lead joints. The DNR requires that when possible the existing water main with lead joints and lead laterals be removed from service. Also as part of this project the Storm Sewer will be sized appropriately and eliminate the poor drainage and standing water to reduce future damage to the curb & gutter and asphalt pavement. With the installation of the water main and storm sewer the roadway will be mostly removed and the current roadway is in poor condition. Due to these factors the entire roadway will be removed to the subgrade and new base course, curb & gutter and asphalt pavement will be installed. Any defective sidewalk and driveway approaches will be replaced.				X	

Project #	DESCRIPTION	Life	COST	EXPLANATION	Approved Must Do	Crucial to Operations	Recommend	Declaration of Intent by VB on file
41189	May Avenue - Arthur Ave to Fleet Ave Construction	20+	\$360,000	<p>This project consists of a relay of the water main with appurtenances in May Avenue from Fleet Ave to Arthur Avenue along with the reconstructing of the sanitary sewer manholes, removal and replacement of Defective curb & gutter and driveway approaches, installation of storm sewer and removal and replacement of the base course and asphalt pavement.</p> <p>The existing 6" water main will be replaced with an 8" water main due to the age of the water main and material of the water main. The existing water main is sandcast with lead joints. The DNR requires that when possible the existing water main with lead joints and lead laterals be removed from service.</p> <p>Also as part of this project the Storm Sewer will be sized appropriately and eliminate the poor drainage and standing water to reduce future damage to the curb & gutter and asphalt pavement. With the installation of the water main and storm sewer the roadway will be mostly removed and the current roadway is in poor condition. Due to these factors the entire roadway will be removed to the subgrade and new base course, curb & gutter and asphalt pavement will be installed. Any defective sidewalk and driveway approaches will be replaced.</p>			X	
41190	Cherokee Drive - Water St to Chippewa Dr. Construction	20+	\$822,000	<p>This project consists of the reconstruction of Cherokee Drive from Water Street to Chippewa Drive. The reconstruction will include relaying of the water main with appurtenances in Cherokee Drive along with the adjusting of sanitary sewer manholes, removal and replacement of defective curb & gutter and driveway approaches, upsizing of existing storm sewer, installation of additional storm sewer and removal and replacement of the asphalt pavement.</p> <p>The existing 8" water main will be replaced due to the age, cast iron material of the water main and the water main breaks in this subdivision. This section of water main has had three (3) water main breaks over the last two (2) years. This street has become a maintenance problem for the Water Utility and Public Works Dept and the water main needs to be replaced.</p> <p>This Area also has experienced storm water problems and the upsize in storm sewer was recommended as part of the Storm Sewer System Study completed by Ruekert/Mielke in 2001. The Storm Sewer will also eliminate the poor drainage, standing water potential damage to the curb & gutter and asphalt pavement. With the installation of the water main and storm sewer the roadway will be mostly removed so the entire pavement will be removed and replaced along with defective curb & gutter.</p>			X	
62004-03	Falls Parkway - Phase III Water Street to County Line Road	20+	\$1,800,000	<p>This project consists of reconstruction of Falls Parkway - Phase III from Water St to County Line Road. The reconstruction will include the adjusting of sanitary sewer manholes, removal and replacement of defective curb & gutter and driveway approaches, upsizing of existing storm sewer, installation of additional storm sewer and removal and replacement of the asphalt pavement.</p> <p>This project is the last section of Falls Parkway that was planned to be reconstructed as part of TID No. 8. The curb & gutter and pavement has deteriorated to such a level that is warrants replacement and with the additional traffic volume added by the development if TID No. 8 a dedicated turn lane will be added to roadway. Lastly a pedestrian bridge will be installed across the Menomonee River north of the shopping center to connect Falls Parkway sidewalk to the existing asphalt path in Menomonee River Park near the intersection of Shady Lane & Erika Road.</p>	X			
72050	Fair Oak Water Tower Sand Blasting & Recoating - CONSTRUCTION	20+	\$270,000	<p>This project is to install a recoat system for the Fair Oak Tower that was put on line in 1989. A recoat system on a tank has an average life span of approximately 20 to 25 years and to insure a 20 to 25 year life of the coating system it is recommended that the entire tower be sand blasted to bare steel, apply a new primer and apply a coating system. Conditions that would affect the coating would be weather, variations in water chemistry, changing water levels in the tank. The adhesion of a coating system fails as time goes on. Flaking, delamination and rusting could also occur. You will find that when a coating system starts to break down mold and mildew spores start to grow causing the area of failure to become a black color.</p> <p>A five year inspection is done on all our towers at which time a coating adhesion test was performed. Having the five year inspection done helps the utility forecast maintenance expenditures. The inspection not only determines the condition of the interior and exterior coatings but insures the structural integrity of the tower as well. The inspections also makes sure the utility stays in compliance with sanitation guidelines along with safety and security regulations in accordance with AWWA, OSHA, DNR, EPA and US department of homeland security. If additional work or upgrades need to be made to come into compliance, this is the time while recoating the tower to make such upgrades.</p> <p>THIS PROJECT WAS APPROVED BY THE VILLAGE BOARD ON MARCH 7, 2016 WITH A DECLARATION OF INTENT TO REIMBURSE ON FILE.</p>				X

Project #	DESCRIPTION	Life	COST	EXPLANATION	Approved Must Do	Crucial to Operations	Recommend	Declaration of Intent by VB on file
72053	Appleton Avenue Water Tower Sand Blasting & Recoating - DESIGN	20+	\$30,000	<p>This project is to Design a recoat system for the Appleton Avenue that was put on line in 1993. A recoat system on a tank has an average life span of approximately 20 to 25 years and to insure a 20 to 25 year life of the coating system it is recommended that the entire tower be sand blasted to bare steel, apply a new primer and apply a coating system. Conditions that would affect the coating would be weather, variations in water chemistry, changing water levels in the tank. The adhesion of a coating system fails as time goes on. Flaking, delamination and rusting could also occur. You will find that when a coating system starts to break down mold and mildew spores start to grow causing the area of failure to become a black color.</p> <p>A five year inspection is done on all our towers at which time a coating adhesion test was performed. Having the five year inspection done helps the utility forecast maintenance expenditures. The inspection not only determines the condition of the interior and exterior coatings but insures the structural integrity of the tower as well. The inspections also makes sure the utility stays in compliance with sanitation guidelines along with safety and security regulations in accordance with AWWA, OSHA, DNR, EPA and US department of homeland security. If additional work or upgrades need to be made to come into compliance, this is the time while recoating the tower to make such upgrades.</p>		X		
72054	Town Line Road Water Tower Design	20+	\$150,000	<p>This project is to Design a new 400,000 gallon elevated water tower in the Southwest area of the Village. While existing water storage capacity is estimated to be just adequate to meet current storage needs, an additional 400,000 gallons of storage will be required as the Southwest area continues to develop. Additional elevated storage will provide required water storage to meet domestic demands as well as fire protection. A second elevated tank will also provide reliability and redundant storage for periods when the Fair Oaks tower is out of service for maintenance or painting. Lastly, water service west of Well 10 currently lacks redundancy, and would be without service in the event of a single water main failure.</p> <p>As part of the Silver Spring Estates Subdivision a 0.75 acre lot in the northeast corner along the railroad tracks has reserved for the construction of this water tower and 12 inch water main has been installed to provide adequate flow to this water tower.</p>			X	
72055	Cleveland Ave - Pilgrim to Charles Design & Construction	20+	\$220,000	This project consists of a relay of the water main with appurtenances in Cleveland Avenue from Pilgrim Road to Charles Drive. The existing 8" water main will be replaced due to the age of the water main, material of the water main and the number of breaks.			X	
72056	Caroline Dr - Cleveland to Falls Parkway Design & Construction	20+	\$170,000	This project consists of a relay of the water main with appurtenances in Caroline Drive from Cleveland Ave to Falls Parkway. The existing 8" water main will be replaced due to the age of the water main, material of the water main and the number of breaks.			X	
64065	Bug Line Trail Connection Acquisition, Design & Construction	20+	\$120,000	<p>This project would consist of the necessary acquisition, design and construction of the proposed trail section that would connect the Bug Line Trail at Apple Tree Court to Appleton Ave. Currently the Bug Line leaves the old railroad corridor and directs pedestrians to Apple Tree Court where there is no sidewalk. A pedestrian would walk on Apple Tree Court to Shady Lane where there is sidewalk and proceed north and cross Appleton Ave at the traffic signals and then rejoin the Bug Line Trail 350 feet north of Appleton Ave.</p> <p>This project would consist of acquiring the necessary easement or property to construct a 10 foot asphalt path for this connection. The connection was recommended in Menomonee Falls' 2011-2015 Comprehensive Outdoor Recreation (COR) Plan in order "to create an easier and more visible route to the Menomonee River trail system." The COR Plan identified this acquisition and construction as crucial direct trail link to connect the 13 mile Bug Line trail to the existing Village trail system. This trail system will be expanded with a new segment crossing the Menomonee River and connecting to the redevelopment area in TID 8. The completion of this project along with the TID 8 connection, will link the County Bug Line Trail to the Germantown trail network by utilizing the existing pedestrian bridge over US 41/45. This project will ultimately improve trail access from Menomonee Falls to Washington, Ozaukee, and Milwaukee County.</p> <p>This project was included in the Villages Public Facilities Needs Assessment and Impact Fee Study Update approved in December 2014.</p>			X	
64067	River Road Bridge Removal Construction	20+	\$50,000	<p>The Project consists of the Removal of the River Road Park Pedestrian Bridge. Traffic was removed from this bridge is part of the River Road park purchase several years ago and was left in place to provide a pedestrian connection from Lisbon Road to River Road.</p> <p>The Engineering has previously brought forward a capital project to rehabilitate the bridge which would include rebuilding the wingwalls, rebuilding areas of the bridge that have settled, repointing the mortar joints as necessary, strengthening arches with shotcrete and reinforcing steel and installing tie rods and injection grouting of foundation. The Village Board approved the project in 2010 with additional funding approved in 2014.</p> <p>Since the project was scoped and design begun, the bridge has deteriorated to a point that rehabilitation is no longer feasible at an acceptable level of cost. The removal of this bridge was presented to the Village Board last year and the Village Board directed staff to proceed with the removal project.</p>			X	

Project #	DESCRIPTION	Life	COST	EXPLANATION	Approved Must Do	Crucial to Operations	Recommend	Declaration of Intent by VB on file
74015	Bruceton Manor Sub Storm Study	20+	\$30,000	<p>Bruceton Manor Subdivision is located in the northwest corner of Silver Spring and Pilgrim Road behind Karl's County Market. Approximately 295 acres of industrial and residential land drain through this subdivision including a portion of the Silver Spring Corporate Park, business along Kohler Lane and a portion of the Claremore subdivision north of railroad tracks on the west side of Pilgrim Road. Both the SSCP and Claremore Sub drain through existing detention ponds.</p> <p>The Bruceton Manor Subdivision has experienced flooding over the years from the Phillips Tributary that begins in this subdivision and is considered a navigable waterway. As part of the April 9, 2015 storm the storm water flowing down Bette Drive was over the road and flowing full in the grass ditches on both side of Bette Drive. This flooding event was between a 10 yr and 25 yr storm when looked at over a 24 hour period but was closer to a 50 yr event when looking at a shorter rainfall duration.</p> <p>This project would study the storm flows through this subdivision and come up with several options to reduce the flows along Bette Drive with cost estimates for each option. A report will be prepared for the Village Board that could provide information for a possible future project in this subdivision.</p>			X	
74016	Grand Ave Storm Sewer Replacement Design & Construction	20+	\$302,000	<p>This project consists of Design and Construction of a new storm sewer system in Grand Avenue just south of the Neu Bridge to replace an existing undersized and poorly operating storm sewer. This area has experienced storm water problems due to poor drainage, sump pump discharges, undersized pipes and two storm outfalls that discharge into the Menomonee River at such an angle as to face upstream and limit the flow of water from the storm pipes.</p> <p>The new system will be installed in Grand Ave running south from the Neu Bridge to Forrest Drive and discharging into the Menomonee River in Menomonee River Park. At the end of the new storm system a bio retention area will be constructed to clean the outflow prior to emptying into the Menomonee River. The bio retention portion of this project is eligible for grant funding from the MMSD.</p>			X	
74017	Apple Blossom & Santa Barbara Ct Storm Sewer Design & Construction	20+	\$110,000	<p>This project consists of Design and Construction of a new storm sewer system in Apple Blossom Lane from Roosevelt drive to Santa Barbara Court and in Santa Barbara Court. This area has experienced storm water problems due to poor drainage and sump pump discharges that have caused the pavement to deteriorate to the point of needing replacement. The nearest storm sewer is at the intersection of Roosevelt and Apple Blossom and the new storm sewer will be extended from this existing system to Santa Barbara to provide the drainage and pick up the sump pumps that discharge onto the street. The Storm Sewer will also eliminate the poor drainage, standing water potential damage to the curb & gutter and asphalt pavement. With the installation of the storm sewer the roadway will be will be removed and replaced along with defective curb & gutter.</p>			X	
62007	Megal Court Landscaping	20+	\$119,000	<p>The Village entered into an Agreement with the Wisconsin Department of Transportation to Reconstruct Pilgrim Road from Megal Drive to 300 feet South of Main Street. This project was completed in December of 2015 with some final clean up and restoration to be completed this spring. As part of this project the Village worked with the WDOT to construct Megal Court which is where the Wacker-Neusen and Harley Davidson manufacturing facilities driveways now access the reconstructed Pilgrim Road. As part of the design, a roundabout was installed where the driveways intersect Megal Court to provide adequate traffic flow for Wacker-Neusen and Harley Davidson. Now that the construction of Megal Court is complete, this project will install landscaping in the Megal Court area, along parts of Pilgrim Road, in the roundabout and around the detention pond. This was not included in the WDOT project since it would have been 100% a Village cost and we can bid and construct this cheaper and have better quality control than going through the WDOT process.</p>			X	

**VILLAGE OF MENOMONEE FALLS
PROPOSED FIVE YEAR CAPITAL PLAN
2016-2020**

3/14/2016

Description	Proposed 2016	Proposed 2017	Proposed 2018	Proposed 2019	Proposed 2020	5 Year Total
VILLAGE PROJECTS						
Aero Park - Dog park Area, Entrance Road, Parking Lot & Shelter					420,000	\$420,000
Aero Park - Mass Grading, Det. Pond & Restoration					\$520,000	\$520,000
Ann Ave - Village Park to Sheridan Dr - Water main, Storm Swr & Street Reconst - RECONSTRUCTION		\$795,000				\$795,000
Apple Blossom & Santa Barbara Ct - Storm Sewer - DESIGN & CONSTRUCTION	\$110,000					\$110,000
Appleton Avenue Water Tower - Sand Blasting & Recoating	\$30,000	\$370,000				\$400,000
Appleton, Pilgrim & Men Intersection Reconstruction	\$83,000	\$750,000				\$833,000
Arthur Ave - Menom Ave to Appleton Ave - Water main Relay, Storm Sewer & Street Reconst	\$34,500	\$1,025,000				\$1,059,500
Asphalt Paving Program	\$746,000	\$700,000	\$700,000	\$700,000	\$700,000	\$3,546,000
Blackfoot Dr. - Cheyenne Dr to Cherokee Dr - Water main Relay, Storm Sewer & Street Reconst - DESIGN					\$60,000	\$60,000
Bruceton Manor Sub Storm Study - Cherlyn Dr, Bette Dr & Kendal Place	\$30,000					\$30,000
Bug Line Trail Connection	\$120,000					\$120,000
Caroline Drive - Roosevelt to Cleveland - Water main Relay - DESIGN & CONSTRUCTION	\$170,000					\$170,000
Charles Drive - Roosevelt to Cleveland - Water main Relay - DESIGN & CONSTRUCTION		\$166,000				\$166,000
Cherokee Dr. - Chippewa to Cheyenne Dr - Wm Relay, Storm Swr & Street Recont - CONSTRUCTION		\$840,000				\$840,000
Cherokee Dr. - Water St to Chippewa - Water main Relay, Storm Sewer & Street Recon. + CONSTRUCTION		\$822,000				\$822,000
Cheyenne Dr - Blackfoot Dr to Village Standpipe - Wm Relay, Storm Sewer & Street - CONSTRUCTION					\$575,000	\$575,000
Cheyenne Dr - Cherokee Dr to Blackfoot Dr - Wm Relay, Storm Sewer & Street - CONSTRUCTION				\$605,000		\$605,000
Cheyenne Dr - Village Stand Pipe to Cherokee Dr - Wm Relay, Storm Sewer & Street Reconst - DESIGN			\$40,000			\$40,000
Cleveland Ave - Pilgrim to Charles - Water main Relay - DESIGN & CONSTRUCTION	\$220,000					\$220,000
Curb & Gutter Replacement Program	\$230,000	\$210,000	\$210,000	\$210,000	\$210,000	\$1,070,000
Donald Ave - Arthur Ave to Fleet Ave - Water main Relay, Storm Sewer & Street Reconst - CONSTRUCTION	\$357,000					\$357,000
Fair Oak Water Tower - Sand Blasting & Recoating - CONSTRUCTION	\$270,000					\$270,000
Falls Parkway Phase III Reconstruction - Water St to County Line Road	\$1,800,000					\$1,800,000
Garfield Drive - Mill St - Sheridan - Wm Relay, Storm Swr & Street Reconst - DESIGN & CONSTRUCTION		\$892,000				\$892,000
Grand Avenue Storm Sewer Replacement - DESIGN & CONSTRUCTION	\$302,000					\$302,000
Graysland Storm Sewer Replacement			\$275,000			\$275,000
Jacobon Dr - Appleton to Hiawatha & Hiawatha Dr - Jacobson to Mary Ct & Dardis Pl - RECONSTRUCTION			\$927,000			\$927,000
Jacobon Dr - Hiawatha to Theodore & Dardis Ave - Jacobson to Dardis Pl - RECONSTRUCTION				\$835,000		\$835,000
Jacobon Dr - Theodore Dr to Ann Ave - RECONSTRUCTION				\$504,000		\$504,000
Joss Pl - Shady Ln to Sheridan Dr - RECONSTRUCTION				\$455,000		\$455,000
Kenwood Blvd. - Patton Dr to Park Blvd - Wm, Storm Sewer & Road Reconst - DESIGN & CONSTRUCTION				\$620,000		\$620,000
Lannon Road Water Main (Silver Spring to Lisbon) DESIGN & CONSTRUCTION		\$863,000				\$863,000
Madison Drive - Main St to Roosevelt - Water main Relay - CONSTRUCTION					\$302,000	\$302,000
May Ave - Arthur Ave to Fleet Ave - Water main Relay, Storm Swr & Street Reconst - CONSTRUCTION	\$360,000					\$360,000
Megal Court Landscaping	\$119,000					\$119,000
Men. River Parkway & Keith Cir. - Fond du Lac Ave to 1200 ft West - Wm Relay - DESIGN & CONSTRUCTION					\$285,000	\$285,000
Patton Drive - Cleveland to Roosevelt - Water main Relay - CONSTRUCTION				\$350,000		\$350,000
Patton Drive & Madison Dr - Cleveland to Roosevelt - Water main Relay - DESIGN			\$33,000			\$33,000
River Road Bridge Removal	\$50,000					\$50,000
Roosevelt Dr. - St. Francis Dr to North Limit - Water main Relay - DESIGN & CONSTRUCTION					\$270,000	\$270,000
Roosevelt Dr. - Wm Relay, Storm Sewer & Road Reconst - DESIGN & CONSTRUCTION		\$1,360,000				\$1,360,000
Russell Court - Water main Relay - DESIGN & CONSTRUCTION			\$185,000			\$185,000
Sheridan Dr - Ann Ave to Men Ave - RECONSTRUCTION				\$1,075,000		\$1,075,000

Sheridan Dr - Hillcrest to Ann Ave & Village Park - RECONSTRUCTION			\$1,141,000			\$1,141,000
Sidewalk Replacement Program	\$80,000	\$80,000	\$80,000	\$80,000	\$80,000	\$400,000
St. Francis Dr. - St. Mark to Roosevelt Drive - Water main & Storm Sewer Relay - DESIGN & CONSTRUCTION			\$376,000			\$376,000
St. Regis Dr. - St. Francis Dr to West Limit - Water main Relay - DESIGN & CONSTRUCTION				\$255,000		\$255,000
Stonefield Dr - Fox Ridge Ct to Maple Crest Lane - Water main Relay - DESIGN & CONSTRUCTION			\$370,000			\$370,000
Townline Road Water Tower	\$150,000	\$1,450,000				\$1,600,000
Train Quiet Zones - Lannon Road & Marcy Road	\$50,000					\$50,000
Village Park - Band Shelter, Parking Lot, Gazebo Demo & Amenities			\$556,000			\$556,000
Village Park - Grading, Tennis & Basketball Courts				\$670,000		\$670,000
Village Park - Play Structures					\$195,000	\$195,000
GRAND TOTAL PROJECT COSTS	\$6,133,500	\$9,501,000	\$4,893,000	\$6,359,000	\$3,617,000	\$30,503,500

Village of Menomonee Falls

Capital Improvement Plan 2016 - 2020

3/11/2016

PROJECT ENGINEER	YEAR	PROJECT NUMBER	PROJECT	GENERAL OBLIGATION							CASH ON HAND or OTHER FUNDING SOURCE										TOTAL COST	COMMENTS		
				CAPITAL PROJECTS	SPECIAL ASSESSMENT	TID's	WATER UTILITY	SANITARY SEWER UTILITY	STORM WATER UTILITY	TOTAL GENERAL OBLIGATION	CAPITAL FUND	MUNICIPAL FACILITIES & EQUIPMENT FUND	FIRE IMPACT FEE	PARK IMPACT FEE	STORM UTILITY OR MMSD	WATER UTILITY	WATER IMPACT FEE	SANITARY SEWER UTILITY	SANITARY SEWER IMPACT FEES	SANITARY SEWER INTERCEPTOR	TOTAL			
	2016																							
PUBLIC WORKS PROJECTS																								
		41191	2016 Sidewalk Replacement Program	80,000						80,000													\$80,000	
		41192	2016 Curb & Gutter Replacement Program	230,000						230,000													\$230,000	
		41193	2016 Asphalt Paving Program	700,000						700,000													46,000	\$746,000 Slag Seal and Crack Filling in 2016 Operating Budget
TRANSPORTATION PROJECTS																								
		41194	Appleton, Pilgrim & Men Intersection Reconstruction - Intersection Mod., Traffic Signal Replacement, Overhead Light Removal & Electrical Upgrade - DESIGN	83,000						83,000													\$83,000	
		41195	Train Quiet Zones - Lannon Road & Marcy Road	50,000						50,000														\$50,000
		41196	Arthur Ave - Menom Ave to Appleton Ave - Water main Relay, Storm Sewer & Street Recon - DESIGN	20,000						20,000													14,500	\$34,500
		41182	Donald Ave - Arthur Ave to Fleet Ave - Water main Relay, Storm Sewer & Street Recon - CONSTRUCTION	202,000					155,000	357,000														\$357,000
		41189	May Ave - Arthur Ave to Fleet Ave - Water main Relay, Storm Swr & Street Recon - CONSTRUCTION	185,000					175,000	360,000														\$360,000
		41190	Cherokee Dr. - Water St to Chippewa - Water main Relay, Storm Sewer & Street Recon - CONSTRUCTION	340,000					200,000	540,000	275,000												7,000	\$822,000
		62004-03	Falls Parkway Phase III Reconstruction - Water St to County Line Road				1,800,000			1,800,000														\$1,800,000
WATER PROJECTS																								
		72050	Fair Oak Water Tower - Sand Blasting & Recoating - CONSTRUCTION						270,000	270,000														\$270,000 Approved by Village Board on March 7, 2016 with Dec. of Intent to Reimburse on File
		72053	Appleton Avenue Water Tower - Sand Blasting & Recoating - DESIGN							0														30,000 \$30,000
		72054	Townline Road Water Tower - DESIGN							0														150,000 \$150,000
		72055	Cleveland Ave - Pilgrim to Charles - Water main Relay - DESIGN & CONSTRUCTION						220,000	220,000														\$220,000
		72056	Caroline Drive - Roosevelt to Cleveland - Water main Relay - DESIGN & CONSTRUCTION						170,000	170,000														\$170,000
PARKS PROJECTS																								
		64065	Bug Line Trail Connection	60,000						60,000													60,000 \$120,000	
		64067	River Road Bridge Removal	50,000						50,000														\$50,000
SANITARY PROJECTS																								
STORM WATER PROJECTS																								
		74015	Bruceton Manor Sub Storm Study - Cheryln Dr, Bette Dr & Kendal Place								30,000												30,000 \$30,000	
		74016	Grand Avenue Storm Sewer Replacement - DESIGN & CONSTRUCTION									302,000												302,000 \$302,000 \$138,000 in MMSD Grant Part of this Project
		74017	Apple Blossom & Santa Barbara Ct - Storm Sewer - DESIGN & CONSTRUCTION								110,000												110,000 \$110,000	
OTHER																								
		62007	Megal Court Landscaping				119,000			119,000														\$119,000
				TOTAL	2,000,000	0	1,919,000	1,190,000	0	0	5,109,000	305,000	0	0	60,000	458,000	80,000	121,500	0	0	0	1,024,500	6,133,500	

Village of Menomonee Falls
Capital Improvement Plan 2016 - 2020

PROJECT ENGINEER	YEAR	PROJECT NUMBER	PROJECT	GENERAL OBLIGATION							CASH ON HAND										TOTAL COST	COMMENTS
				CAPITAL PROJECTS	SPECIAL ASSESSMENT	TID's	WATER UTILITY	SANITARY SEWER UTILITY	STORM WATER UTILITY	TOTAL GENERAL OBLIGATION	CAPITAL FUND	MUNICIPAL FACILITIES & EQUIPMENT FUND	FIRE IMPACT FEE	PARK IMPACT FEE	STORM UTILITY	WATER UTILITY	WATER IMPACT FEE	SANITARY SEWER UTILITY	SANITARY SEWER IMPACT FEES	SANITARY SEWER INTERCEPTOR	CASH TOTAL	
	2017																					
PUBLIC WORKS PROJECTS																						
			2017 Sidewalk Replacement Program	80,000						80,000											\$80,000	
			2017 Curb & Gutter Replacement Program	210,000						210,000											\$210,000	
			2017 Asphalt Paving Program	700,000						700,000											\$700,000 <i>Slag Seal and Crack Filling in 2017 Operating Budget</i>	
TRANSPORTATION PROJECTS																						
			Roosevelt Dr. - Wm Relay, Storm Sewer & Road Reconst - DESIGN & CONSTRUCTION				1,360,000			1,360,000											\$1,360,000	
			Appleton, Pilgrim & Men Intersection Reconstruction - Intersection Mod., Traffic Signal Replacement, Overhead Light Removal & Electrical Upgrade - CONSTRUCTION	750,000						750,000											\$750,000	
			Ann Ave - Village Park to Sheridan Dr - Water main, Storm Swr & Street Reconst - RECONSTRUCTION							179,000						506,000	110,000				795,000 <i>\$506,000 FROM Village Park Stabilization Project #74007</i>	
			Garfield Drive - Mill St - Sheridan - Water Main Relay, Storm Swr & Street Reconst - DESIGN & CONSTRUCTION							692,000						200,000					892,000 <i>\$892,000</i>	
WATER PROJECTS																						
			Lannon Road Water Main (Silver Spring to Lisbon) DESIGN & CONSTRUCTION	452,000			42,500			494,500					102,000			266,500			368,500 <i>\$863,000 Impact Fee Portion Confirmed by Update in 2014 Study</i>	
			Appleton Avenue Water Tower - Sand Blasting & Recoating - CONSTRUCTION				370,000			370,000											\$370,000	
			Townline Road Water Tower - CONSTRUCTION				275,500			275,500							1,174,500				1,174,500 <i>\$1,450,000</i>	
			Cherokee Dr. - Chippewa to Cheyenne Dr - Water main Relay, Storm Swr & Street Recont - CONSTRUCTION	260,000			305,000			565,000	275,000										275,000 <i>\$840,000</i>	
			Charles Drive - Roosevelt to Cleveland - Water main Relay - DESIGN & CONSTRUCTION				166,000			166,000											\$166,000	
			Arthur Ave - Menom Ave to Appleton Ave - Water main Relay, Storm Swr & Street Reconst - CONSTRUCTION							620,000						405,000					1,025,000 <i>\$1,025,000</i>	
PARKS PROJECTS																						
SANITARY PROJECTS																						
STORM WATER PROJECTS																						
MUNICIPAL FACILITIES																						
			TOTAL	2,000,000	452,000	1,360,000	1,159,000	0	0	4,971,000	1,766,000	0	0	102,000	506,000	715,000	1,441,000	0	0	0	4,530,000 <i>9,501,000</i>	

Village of Menomonee Falls
Capital Improvement Plan 2016 - 2020

PROJECT ENGINEER	YEAR	PROJECT NUMBER	PROJECT	GENERAL OBLIGATION							CASH ON HAND										TOTAL COST	COMMENTS
				CAPITAL PROJECTS	SPECIAL ASSESSMENT	TID's	WATER UTILITY	SANITARY SEWER UTILITY	STORM WATER UTILITY	TOTAL GENERAL OBLIGATION	CAPITAL FUND	MUNICIPAL FACILITIES & EQUIPMENT FUND	FIRE IMPACT FEE	PARK IMPACT FEE	STORM UTILITY	WATER UTILITY	WATER IMPACT FEE	SANITARY SEWER UTILITY	SANITARY SEWER IMPACT FEES	SANITARY SEWER INTERCEPTOR	CASH TOTAL	
	2018																					
PUBLIC WORKS PROJECTS																						
			2018 Sidewalk Replacement Program	80,000						80,000											80,000	
			2018 Curb & Gutter Replacement Program	210,000						210,000											210,000	
			2018 Asphalt Paving Program	700,000						700,000											700,000	
TRANSPORTATION PROJECTS																						
			Sheridan Dr - Hillcrest to Ann Ave & Village Park - RECONSTRUCTION								776,000										1,141,000	
			Jacobson Dr - Appleton to Hiawatha & Hiawatha Dr - Jacobson to Mary Ct & Dardis Pl - RECONSTRUCTION				275,000			275,000	652,000										652,000	
			Cheyenne Dr - Village Stand Pipe to Cherokee Dr - Water main Relay, Storm Sewer & Street Reconst - DESIGN	25,000			15,000			40,000											\$40,000	
			-																			
WATER PROJECTS																						
			St. Francis Dr - St Mark to Roosevelt Drive - Water main & Storm Sewer Relay - DESIGN & CONSTRUCTION	154,000			222,000			376,000											\$376,000	
			Russell Court - Water main Relay - DESIGN & CONSTRUCTION				185,000			185,000											\$185,000	
			Stonefield Dr - Fox Ridge Ct to Maple Crest Lane - Water main Relay - DESIGN & CONSTRUCTION				370,000			370,000											\$370,000	
			Patton Drive & Madison Dr - Cleveland to Roosevelt - Water main Relay - DESIGN				33,000			33,000											\$33,000	
PARKS PROJECTS																						
			Village Park - Band Shelter, Parking Lot, Gazebo Demo & Ammenities	556,000						556,000											556,000	
SANITARY PROJECTS																						
STORM WATER PROJECTS																						
			Graysland Storm Sewer Replacement	275,000						275,000											\$275,000	
MUNICIPAL FACILITIES																						
			TOTAL	2,000,000	0	0	1,100,000	0	0	3,100,000	1,428,000	0	0	0	0	365,000	0	0	0	1,793,000	4,893,000	

**Village of Menomonee Falls
Capital Improvement Plan 2016 - 2020**

January 29, 2013

PROJECT ENGINEER	YEAR	PROJECT NUMBER	PROJECT	GENERAL OBLIGATION							CASH ON HAND										TOTAL COST	COMMENTS
				CAPITAL PROJECTS	SPECIAL ASSESSMENT	TID's	WATER UTILITY	SANITARY SEWER UTILITY	STORM WATER UTILITY	TOTAL GENERAL OBLIGATION	CAPITAL FUND	MUNICIPAL FACILITIES & EQUIPMENT FUND	FIRE IMPACT FEE	PARK IMPACT FEE	STORM UTILITY	WATER UTILITY	WATER IMPACT FEE	SANITARY SEWER UTILITY	SANITARY SEWER IMPACT FEES	SANITARY SEWER INTERCEPTOR		
	2019																					
PUBLIC WORKS PROJECTS																						
			2019 Sidewalk Replacement Program	80,000						80,000											80,000	
			2019 Curb & Gutter Replacement Program	210,000						210,000											210,000	
			2019 Asphalt Paving Program	700,000						700,000											700,000 Slag Seal and Crack Filling in 2019 Operating Budget	
TRANSPORTATION PROJECTS																						
			Sheridan Dr - Ann Ave to Men Ave - RECONSTRUCTION								860,000										1,075,000	
			Jacobon Dr - Hiawatha to Theodore & Dardis Ave - Jacobson to Dardis Pl - RECONSTRUCTION				120,000			120,000	580,000										715,000	
			Jacobon Dr - Theodore Dr to Ann Ave - RECONSTRUCTION								328,000										504,000	
			Joss Pl - Shady Ln to Sheridan Dr - RECONSTRUCTION								299,000										455,000	
			Kenwood Blvd. - Patton Dr to Park Blvd - Water main, Storm Sewer & Road Reconst - DESIGN & CONSTRUCTION		445,000	175,000				620,000											\$620,000	
			Cheyenne Dr - Cherokee Dr to Blackfoot Dr - Wm Relay, Storm Sewer & Street - CONSTRUCTION	340,000			265,000			605,000											\$605,000	
WATER PROJECTS																						
			St. Regis Dr. - St. Francis Dr to West Limit - Water main Relay - DESIGN & CONSTRUCTION				255,000			255,000											\$255,000	
			Patton Drive - Cleveland to Roosevelt - Water main Relay - CONSTRUCTION				350,000			350,000											\$350,000	
PARKS PROJECTS																						
			Village Park - Grading, Tennis & Basketball Courts	670,000						670,000											\$670,000	
SANITARY PROJECTS																						
STORM WATER PROJECTS																						
MUNICIPAL FACILITIES																						
				TOTAL	2,000,000	0	445,000	1,165,000	0	0	3,610,000	2,067,000	0	0	0	0	682,000	0	0	0	2,749,000	6,359,000

Village of Menomonee Falls
Capital Improvement Plan 2016 - 2020

January 29, 2013

PROJECT ENGINEER	YEAR	PROJECT NUMBER	PROJECT	GENERAL OBLIGATION						CASH ON HAND										TOTAL COST	COMMENTS	
				CAPITAL PROJECTS	SPECIAL ASSESSMENT	TID's	WATER UTILITY	SANITARY SEWER UTILITY	STORM WATER UTILITY	TOTAL GENERAL OBLIGATION	CAPITAL FUND	MUNICIPAL FACILITIES & EQUIPMENT FUND	FIRE IMPACT FEE	PARK IMPACT FEE	STORM UTILITY	WATER UTILITY	WATER IMPACT FEE	SANITARY SEWER UTILITY	SANITARY SEWER IMPACT FEES	SANITARY SEWER INTERCEPTOR	CASH TOTAL	
	2020																					
PUBLIC WORKS PROJECTS																						
			2020 Sidewalk Replacement Program	80,000						80,000											80,000	
			2020 Curb & Gutter Replacement Program	210,000						210,000											210,000	
			2020 Asphalt Paving Program	700,000						700,000											700,000 Slag Seal and Crack Filling in 2020 Operating Budget	
TRANSPORTATION PROJECTS																						
			Cheyenne Dr - Blackfoot Dr to Village Standpipe - Wm Relay, Storm Sewer & Street - CONSTRUCTION	310,000				265,000		575,000											\$575,000	
			Blackfoot Dr. - Cheyenne Dr to Cherokee Dr - Water main Relay, Storm Sewer & Street Reconst - DESIGN	35,000				25,000		60,000											\$60,000	
WATER PROJECTS																						
			Roosevelt Dr. - St. Francis Dr to North Limit - Water main Relay - DESIGN & CONSTRUCTION				270,000		270,000												\$270,000	
			Madison Drive - Main St to Roosevelt - Water main Relay - CONSTRUCTION				302,000		302,000												\$302,000	
			Men. River Parkway & Keith Cir. - Fond du Lac Ave to 1200 ft West - Water main Relay - DESIGN & CONSTRUCTION				285,000		285,000												\$285,000	
PARKS PROJECTS																						
			Village Park - Play Structures	195,000						195,000											\$195,000	
			Aero Park - Mass Grading, Det. Pond & Restoration	260,000						260,000			260,000								260,000	\$520,000
			Aero Park - Dog park Area, Entrance Road, Parking Lot & Shelter	210,000						210,000			210,000								210,000	\$420,000
SANITARY PROJECTS																						
STORM WATER PROJECTS																						
MUNICIPAL FACILITIES																						
			TOTAL	2,000,000	0	0	1,147,000	0	0	3,147,000	0	0	0	470,000	0	0	0	0	0	470,000	3,617,000	

CONSTRUCTION PROJECTS

Department: Engineering

03-10-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
41191	2016 Sidewalk Replacement Program	10+	\$80,000	06-06-2016	08-26-2016	12-30-2016		\$80,000 General Obligation

In order to reduce potential hazards to pedestrians and to minimize the exposure of the Village to liability for personal injury, the Village has initiated an on-going program for inspection of existing sidewalks and for repair or replacement of defective sidewalk sections.

The Village Board on March 2, 2015 approved a revised sidewalk program and the Village will continuous move through the Village and plan to repair all of the defective sidewalk section in the Village on a 5-year cycle commencing with a Village contract in 2015.

The Village inspects an area once in the spring for defective sidewalk and then the defective sidewalk will be added to the Village contract for repair or replacement.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-10-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date	Funding
41192	2016 Curb & Gutter Replacement Program	20+	\$230,000	05-02-2016	08-26-2016	12-30-2016	\$230,000 General Obligation

This proposed project is part of the Village's on-going program to replace defective curb and gutter in advance of the annual Village Road Repair Program.

The Village Board has determined that it will not undertake a "Crash Program" to correct deficiencies with the existing curb and gutter in the Village but rather will address these deficiencies in conjunction with the annual Village Asphalt Paving Program, unlike the programs undertaken with sidewalks and handicap ramps.

If defective, deteriorated and sunken curb and gutter is not replaced, surface water will not flow as it should, but will pond and percolate into the roadway subgrade and base materials resulting in premature and more extensive deterioration of the roadway pavement. This will result in increased future costs for roadway repair and maintenance as well as the necessity to replace the curb and gutter in the future.

The Village initiated the curb and gutter replacement program several years ago in conjunction with the Sidewalk Replacement Program and has continued this annual program focusing on the most defective and deteriorated curb and gutter sections each year on a rotating basis throughout the curb and gutter areas of the Village.

The repair and replacement of defective concrete pavement on roadways that are maintained by the Village of Menomonee Falls is part of the 2016 Curb & Gutter Program. The Village maintains several miles of concrete pavement and sections of the pavement have deteriorated to a point that replacement is necessary.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-10-2016

Project Number (if known)	Project Description	Economic/ Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date	Funding
41193	2016 Asphalt Paving Program	10+	\$746,000	06-06-2016	08-26-2016	12-30-2016	\$700,000 General Obligation \$46,000 Storm Utility

As part of the 2016 Asphalt Paving Program the Engineering Department typically uses two funding sources. The first being a portion of the \$700,000 that the Village Board has appropriated to the Department of Public Works 2016 Operating Budget for replacement of deteriorated pavement and the second being the \$700,000 that is being asked for as part of this Capital Budget. This year there is a third funding source which is the Storm Utility which will fund the storm sewer portion of the road program as stated below.

Even with the money budget to the DPW Operating Budget above there is a large amount of work necessary to be done to the existing Village streets and that is why we are asking for the \$700,000 as part of the Capital Budget. The Village Board in 2007 decided to move the costs for the Village's Asphalt Paving Program to the Capital Budget, which is the Village's on-going program to replace deteriorated asphalt pavement.

The purpose of the Asphalt Paving Program is to replace portions of existing asphalt pavement on Village streets that have deteriorated to such a level that routine maintenance is no longer effective. In doing this work it will extend the serviceable life of the roadway for a minimum of approximately 10 years. If this work is not done the asphalt pavement on Village streets will continue to deteriorate to a level where the entire roadway will need to be replaced and this reconstruction will cost significantly more in the future.

As part of the 2016 Asphalt Paving project, the Village will be installing storm sewer that addresses areas of existing roadways that do not drain properly, are in need of storm sewer and to alleviate sump pump icing issues.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-10-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
41194	Appleton, Pilgrim & Men Ave Intersection Reconstruction - Intersection Mod., Traffic Signal Replacement, Overhead Light Removal & Electrical Upgrade - DESIGN	20+	\$83,000	05-02-2016	11-18-2016	12-30-2016		\$83,000 General Obligation

This project consists of the removal of the three 150 foot tall high mast lights, replacement of the three traffic signal systems at Appleton Ave, Pilgrim Road and Menomonee Ave, new lighting system to replace the high mast lights and intersection modifications to improve traffic movements. The high mast lighting was installed in the 1960's and parts are no longer available for repair or maintenance. With the removal of the high mast lighting, the most efficient way to light the intersections would be to install the lights on the traffic signal poles. The traffic signals were installed in 1970 and refurbished as part of a project in 1999 and would need to be replaced as part of the new lighting installation. Lastly the intersections will be reconfigured to improve the traffic flow such as straightening the northbound movement on Pilgrim Road through Appleton Ave .

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
41195	Train Quiet Zones – Lannon Road & Marcy Road	20+	\$50,000	06-06-2016	11-19-2016	12-30-2016		\$50,000 General Obligation

This project consists of the design and installation of the necessary infrastructure to allow for train quiet zones at the Lannon Road and Marcy Road crossings. The crossing gates at these intersections were replaced a few years ago and the technology and necessary equipment was installed to allow for these crossings to become quiet zones. To complete the process of turning these crossings into quiet zones a barrier needs to be installed along the centerline of the road to prohibit drivers from going around the gates when down. These barriers are anchored into the pavement and must be approved by the appropriate Federal and County agencies.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
41196	Arthur Avenue – Appleton Ave to Menomonee Ave -Water Main Relay, Storm Sewer & Street Reconst - Design	20+	\$34,500	06-06-2016	11-19-2016	12-30-2016		\$20,000 General Obligation
								\$14,500 Water Utility

This project consists of designing a relay of the water main with appurtenances in Arthur Avenue from Appleton Ave to Menomonee Avenue along with the reconstructing of the sanitary sewer manholes, removal and replacement of Defective curb & gutter and driveway approaches, installation of storm sewer and removal and replacement of the base course and asphalt pavement.

The existing 6" water main will be replaced with an 8" water main due to the age of the water main and material of the water main. The existing water main is sandcast with lead joints. The DNR requires that when possible the existing water main with lead joints and lead laterals be removed from service.

Also as part of this project the Storm Sewer will be sized appropriately and eliminate the poor drainage and standing water to reduce future damage to the curb & gutter and asphalt pavement. With the installation of the water main and storm sewer the roadway will be mostly removed and the current roadway is in poor condition. Due to these factors the entire roadway will be removed to the subgrade and new base course, curb & gutter and asphalt pavement will be installed. Any defective sidewalk and driveway approaches will be replaced.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
41182	Donald Avenue – Fleet Ave to Arthur Ave -Water Main Relay, Storm Sewer & Street - Construction	20+	\$357,000	06-06-2016	11-18-2016	12-30-2016		\$202,000 General Obligation
								\$155,000 Water Revenue Bond

This project consists of construction of a relay of the water main with appurtenances in Donald Avenue from Fleet Ave to Arthur Avenue along with the reconstructing of the sanitary sewer manholes, removal and replacement of Defective curb & gutter and driveway approaches, installation of storm sewer and removal and replacement of the base course and asphalt pavement.

The existing 6" water main will be replaced with an 8" water main due to the age of the water main and material of the water main. The existing water main is sandcast with lead joints. The DNR requires that when possible the existing water main with lead joints and lead laterals be removed from service.

Also as part of this project the Storm Sewer will be sized appropriately and eliminate the poor drainage and standing water to reduce future damage to the curb & gutter and asphalt pavement. With the installation of the water main and storm sewer the roadway will be mostly removed and the current roadway is in poor condition. Due to these factors the entire roadway will be removed to the subgrade and new base course, curb & gutter and asphalt pavement will be installed. Any defective sidewalk and driveway approaches will be replaced.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
	May Avenue – Fleet Ave to Arthur Ave - Water Main Relay, Storm Sewer & Street - Construction	20+	\$360,000	06-06-2016	11-18-2016	12-30-2016		\$185,000 General Obligation
								\$175,000 Water Utility

This project consists of construction of a relay of the water main with appurtenances in May Avenue from Fleet Ave to Arthur Avenue along with the reconstructing of the sanitary sewer manholes, removal and replacement of Defective curb & gutter and driveway approaches, installation of storm sewer and removal and replacement of the base course and asphalt pavement.

The existing 6" water main will be replaced with an 8" water main due to the age of the water main and material of the water main. The existing water main is sandcast with lead joints. The DNR requires that when possible the existing water main with lead joints and lead laterals be removed from service.

Also as part of this project the Storm Sewer will be sized appropriately and eliminate the poor drainage and standing water to reduce future damage to the curb & gutter and asphalt pavement. With the installation of the water main and storm sewer the roadway will be mostly removed and the current roadway is in poor condition. Due to these factors the entire roadway will be removed to the subgrade and new base course, curb & gutter and asphalt pavement will be installed. Any defective sidewalk and driveway approaches will be replaced.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/ Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
41190	Cherokee Drive Reconstruction - Water St to Chippewa - Construction	20+	\$822,000	06-06-2016	11-18-2016	12-30-2016		\$340,000 General Obligation
								\$200,000 Water Revenue
								\$275,000 Capital Fund
								\$7,000 Water Utility

This project consists of the reconstruction of Cherokee Drive from Water Street to Chippewa Dr. The reconstruction will include relaying of the water main with appurtenances in Cherokee Drive along with the adjusting of sanitary sewer manholes, removal and replacement of defective curb & gutter and driveway approaches, upsizing of existing storm sewer, installation of additional storm sewer and removal and replacement of the asphalt pavement.

The existing 8" water main will be replaced due to the age, cast iron material of the water main and the water main breaks in this subdivision.

This Area also has experienced storm water problems and the upsize in storm sewer was recommended as part of the Storm Sewer System Study completed by Ruekert/Mielke in 2001. The Storm Sewer will also eliminate the poor drainage, standing water potential damage to the curb & gutter and asphalt pavement. With the installation of the water main and storm sewer the roadway will be mostly removed so the entire pavement will be removed and replaced along with defective curb & gutter.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/ Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
62004-03	Falls Parkway Phase III Reconstruction - Water St to County Line Road - Construction	20+	\$1,800,000	06-06-2016	11-18-2016	12-30-2016		\$1,800,000 TID #8 Funds

This project consists of reconstruction of Falls Parkway - Phase III from Water St to County Line Road. The reconstruction will include the adjusting of sanitary sewer manholes, removal and replacement of defective curb & gutter and driveway approaches, upsizing of existing storm sewer, installation of additional storm sewer and removal and replacement of the asphalt pavement.

This project is the last section of Falls Parkway that was planned to be reconstructed as part of TID No. 8. The curb & gutter and pavement has deteriorated to such a level that warrants replacement and with the additional traffic volume added by the development if TID No. 8 a dedicated turn lane will be added to roadway. Lastly a pedestrian bridge will be installed across the Menomonee River north of the shopping center to connect Falls Parkway sidewalk to the existing asphalt path in Menomonee River Park near the intersection of Shady Lane & Erika Road.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date	Funding
72050	Fair Oak Water Tower – Sand Blasting & Recoating - Construction	20+	\$270,000	04-04-2016	08-26-2016	12-30-2016	\$270,000 Water Revenue

This project is to replace a recoat system for the Fair Oak Tower that was put on line in 1989. A recoat system on a tank has an average life span of approximately 20 to 25 years and to insure a 20 to 25 year life of the coating system it is recommended that the entire tower be sand blasted to bare steel, apply a new primer and apply a coating system. Conditions that would affect the coating would be weather, variations in water chemistry, changing water levels in the tank. The adhesion of a coating system fails as time goes on. Flaking, delamination and rusting could also occur. You will find that when a coating system starts to break down mold and mildew spores start to grow causing the area of failure to become a black color.

A five year inspection is done on all our towers at which time a coating adhesion test was performed. Having the five year inspection done helps the utility forecast maintenance expenditures. The inspection not only determines the condition of the interior and exterior coatings but insures the structural integrity of the tower as well. The inspections also makes sure the utility stays in compliance with sanitation guidelines along with safety and security regulations in accordance with AWWA, OSHA, DNR, EPA and US department of homeland security. If additional work or upgrades need to be made to come into compliance, this is the time while recoating the tower to make such upgrades.

THIS PROJECT WAS APPROVED BY THE VILLAGE BOARD ON MARCH 7, 2016 WITH A DECLARATION OF INTENT TO REIMBURSE ON FILE.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date	Funding
72053	Appleton Avenue Water Tower – Sand Blasting & Recoating - DESIGN	20+	\$30,000	06-06-2016	11-18-2016	12-30-2016	\$30,000 Water Utility

This project is to Design a recoat system for the Appleton Avenue that was put on line in 1993. A recoat system on a tank has an average life span of approximately 20 to 25 years and to insure a 20 to 25 year life of the coating system it is recommended that the entire tower be sand blasted to bare steel, apply a new primer and apply a coating system. Conditions that would affect the coating would be weather, variations in water chemistry, changing water levels in the tank. The adhesion of a coating system fails as time goes on. Flaking, delamination and rusting could also occur. You will find that when a coating system starts to break down mold and mildew spores start to grow causing the area of failure to become a black color.

A five year inspection is done on all our towers at which time a coating adhesion test was performed. Having the five year inspection done helps the utility forecast maintenance expenditures. The inspection not only determines the condition of the interior and exterior coatings but insures the structural integrity of the tower as well. The inspections also makes sure the utility stays in compliance with sanitation guidelines along with safety and security regulations in accordance with AWWA, OSHA, DNR, EPA and US department of homeland security. If additional work or upgrades need to be made to come into compliance, this is the time while recoating the tower to make such upgrades.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/ Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
72054	Townline Road Water Tower – DESIGN	20+	\$150,000	06-06-2016	11-18-2016	12-30-2016		\$28,500 Water Utility
								\$121,500 Water Impact Fee

This project is to Design a new 400,000 gallon elevated water tower in the Southwest area of the Village. While existing water storage capacity is estimated to be just adequate to meet current storage needs, an additional 400,000 gallons of storage will be required as the Southwest area continues to develop. Additional elevated storage will provide required water storage to meet domestic demands as well as fire protection. A second elevated tank will also provide reliability and redundant storage for periods when the Fair Oaks tower is out of service for maintenance or painting. Lastly, water service west of Well 10 currently lacks redundancy, and would be without service in the event of a single water main failure.

As part of the Silver Spring Estates Subdivision a 0.75 acre lot in the northeast corner along the railroad tracks has reserved for the construction of this water tower and 12 inch water main has been installed to provide adequate flow to this water tower.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
72055	Cleveland Ave – Pilgrim Road to Charles Dr. – Design & Construction	20+	\$219,000	06-06-2016	11-18-2016	12-30-2016		\$220,000 Water Revenue

This project consists of a relay of the water main with appurtenances in Cleveland Avenue from Pilgrim Road to Charles Drive. The existing 8" water main will be replaced due to the age of the water main, material of the water main and the number of breaks.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
72056	Caroline Drive – Cleveland Ave to Falls Parkway – Design & Construction	20+	\$169,000	06-06-2016	11-18-2016	12-30-2016		\$170,000 Water Revenue

This project consists of a relay of the water main with appurtenances in Caroline Drive from Cleveland Ave to Falls Parkway. The existing 8" water main will be replaced due to the age of the water main, material of the water main and the number of breaks.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
64065	Bug Line Trail Connection	20+	\$120,000	06-06-2016	11-18-2016	12-30-2016		\$60,000 General Fund
								\$60,000 Park Impact Fees

This project would consist of the necessary acquisition, design and construction of the proposed trail section that would connect the Bug Line Trail at Apple Tree Court to Appleton Ave. Currently the Bug Line leaves the old railroad corridor and directs pedestrians to Apple Tree Court where there is no sidewalk. A pedestrian would walk on Apple Tree Court to Shady Lane where there is sidewalk and proceed north and cross Appleton Ave at the traffic signals and then rejoin the Bug Line Trail 350 feet north of Appleton Ave.

This project would consist of acquiring the necessary easement or property to construct a 10 foot asphalt path for this connection. The connection was recommended in Menomonee Falls' 2011-2015 Comprehensive Outdoor Recreation (COR) Plan in order "to create an easier and more visible route to the Menomonee River trail system." The COR Plan identified this acquisition and construction as crucial direct trail link to connect the 13 mile Bug Line trail to the existing Village trail system. This trail system will be expanded with a new segment crossing the Menomonee River and connecting to the redevelopment area in TID 8. The completion of this project along with the TID 8 connection, will link the County Bug Line Trail to the Germantown trail network by utilizing the existing pedestrian bridge over US 41/45. This project will ultimately improve trail access from Menomonee Falls to Washington, Ozaukee, and Milwaukee County.

This project was included in the Villages Public Facilities Needs Assessment and Impact Fee Study Update approved in December 2014.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
64067	River Road Bridge Removal	20+	\$50,000	06-06-2016	11-18-2016	12-30-2016		\$50,000 General Fund

The Project consists of the Removal of the River Road Park Pedestrian Bridge. Traffic was removed from this bridge is part of the River Road park purchase several years ago and was left in place to provide a pedestrian connection from Lisbon Road to River Road.

The Engineering has previously brought forward a capital project to rehabilitate the bridge which would include rebuilding the wingwalls, rebuilding areas of the bridge that have settled, repointing the mortar joints as necessary, strengthening arches with shotcrete and reinforcing steel and installing tie rods and injection grouting of foundation. The Village Board approved the project in 2010 with additional funding approved in 2014.

Since the project was scoped and design begun, the bridge has deteriorated to a point that rehabilitation is no longer feasible at an acceptable level of cost. The removal of this bridge was presented to the Village Board last year and the Village Board directed staff to proceed with the removal project.

Please Note: These projects are funded by borrowed funds. They must be spent within eighteen months.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
74015	Bruceton Manor Sub Storm Study - Cherlyn Dr, Bette Dr & Kendal Place	20+	\$30,000	04-04-2016	12-30-2016	12-30-2016		\$30,000 Capital Fund

Bruceton Manor Subdivision is located in the northwest corner of Silver Spring and Pilgrim Road behind Karl's Country Market. Approximately 295 acres of industrial and residential land drain through this subdivision including a portion of the Silver Spring Corporate Park, business along Kohler Lane and a portion of the Claremore subdivision north of railroad tracks on the west side of Pilgrim Road. Both the SSCP and Claremore Sub drain through existing detention ponds.

The Bruceton Manor Subdivision has experienced flooding over the years from the Phillips Tributary that begins in this subdivision and is considered a navigable waterway. As part of the April 9, 2015 storm the storm water flowing down Bette Drive was over the road and flowing full in the grass ditches on both side of Bette Drive. This flooding event was between a 10 yr and 25 yr storm when looked at over a 24 hour period but was closer to a 50 yr event when looking at a shorter rainfall duration.

This project would study the storm flows through this subdivision and come up with several options to reduce the flows along Bette Drive with cost estimates for each option. A report will be prepared for the Village Board that could provide information for a possible future project in this subdivision.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
74016	Grand Avenue Storm Sewer Replacement – Design & Construction	20+	\$302,000	06-06-2016	11-18-2016	12-30-2016		\$164,000 Storm Utility
								\$138,000 MMSD Grant Funds

This project consists of Design and Construction of a new storm sewer system in Grand Avenue just south of the Neu Bridge to replace an existing undersized and poorly operating storm sewer. This area has experienced storm water problems due to poor drainage, sump pump discharges, undersized pipes and two storm outfalls that discharge into the Menomonee River at such an angle as to face upstream and limit the flow of water from the storm pipes.

The new system will be installed in Grand Ave running south from the Neu Bridge to Forrest Drive and discharging into the Menomonee River in Menomonee River Park. At the end of the new storm system a bio retention area will be constructed to clean the outflow prior to emptying into the Menomonee River. The bio retention portion of this project is eligible for grant funding from the MMSD.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/ Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
74017	Apple Blossom & Santa Barbara Ct Storm Sewer – Design & Construction	20+	\$110,000	06-06-2016	11-18-2016	12-30-2016		\$110,000 Storm Utility

This project consists of Design and Construction of a new storm sewer system in Apple Blossom Lane from Roosevelt drive to Santa Barbara Court and in Santa Barbara Court. This area has experienced storm water problems due to poor drainage and sump pump discharges that have caused the pavement to deteriorate to the point of needing replacement. The nearest storm sewer is at the intersection of Roosevelt and Apple Blossom and the new storm sewer will be extended from this existing system to Santa Barbara to provide the drainage and pick up the sump pumps that discharge onto the street. The Storm Sewer will also eliminate the poor drainage, standing water potential damage to the curb & gutter and asphalt pavement. With the installation of the storm sewer the roadway will be removed and replaced along with defective curb & gutter.

CONSTRUCTION PROJECTS

Department: Engineering

03-11-2016

Project Number (if known)	Project Description	Economic/ Useful Life in years (if known)	Amount	Estimated Construction Start Date	Estimated Completion Date	Estimated Final Payment Date		Funding
62007	Megal Court Landscaping	20+	\$119,000	06-06-2016	11-19-2016	1230-2016		\$119,000 TID #8

The Village entered into an Agreement with the Wisconsin Department of Transportation to Reconstruct Pilgrim Road from Megal Drive to 300 feet South of Main Street. This project was completed in December of 2015 with some final clean up and restoration to be completed this spring. As part of this project the Village worked with the WDOT to construct Megal Court which is where the Wacker-Neusen and Harley Davidson manufacturing facilities driveways now access the reconstructed Pilgrim Road. As part of the design, a roundabout was installed where the driveways intersect Megal Court to provide adequate traffic flow for Wacker-Neusen and Harley Davidson. Now that the construction of Megal Court is complete, this project will install landscaping in the Megal Court area, along parts of Pilgrim Road, in the roundabout and around the detention pond. This was not included in the WDOT project since it would have been 100% a Village cost and we can bid and construct this cheaper and have better quality control than going through the WDOT process.