Adopted Plan:
November 2019

TOWN OF TWIN BRIDGES

2019 Capital Improvements Plan Update

GreatWest engineering®

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Adopted by the Town Council on

November 12, 2019

GreatWest engineering®

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EXECUTIVE SUMMARY

The essential components of this Capital Improvements Plan (CIP or Plan) include the identification of projects; evaluation and prioritization of projects; and the development of cost estimates and funding approaches. Ultimately, the updated plan is meant to ensure that the Town is positioned to:

- improve its basic infrastructure through construction, rehabilitation and maintenance;
- maximize the useful life of capital investments by scheduling major renovation, rehabilitation, or replacement at the appropriate time in the life-cycle of the facility or equipment;
- identify and examine current and future infrastructure needs and establish priorities among projects; and
- improve financial planning by balancing needs and resources and identifying funding options.

While much of the Town's budget and financial planning efforts are by necessity focused on one or at most two year intervals, capital planning can help focus attention on the Town's long-term objectives and financial capacity. This will help balance the Town's operating and capital needs. Like many communities in Montana, the Town is often faced with the option of reducing its capital expenditures in order to balance the operating budget. An adopted capital improvements plan will help to maintain a consistent level of spending for capital needs, barring any unforeseen events.

Table 1 - Highest Priorities for the Town in 2019

Priority	Facility	Project	Estimated Cost	Notes
1	Stormwater	Stormdrains on 6th Ave	$200,000	
2	Stormwater	Miscellaneous Drainage Improvements	$400,000	
3	Maintenance	New Shop Building	$270,000	
4	Water	Well 1 – Pump & Motor Evaluation & Possible Replacement	$10,000 to $40,000	Originally installed in 1960's
5	Water	Well 2 – Pump & Motor Evaluation	$10,000 to $40,000	Originally installed in 1970's. Started running in 1990's
6	Water	Paint Water Tank	$85,000	
7	Water	New Water Main from 1st Ave to 9th Avenue on Main St	$750,000 to $1,000,000	Installed 1967 – Cast Iron
8	Water	New Water Main from West 4th to 6th Ave on Bridge Street	$250,000 to $300,000	
9	Highway & Streets	¾" Road material for all roads	$10,000	
10	General	Housing Study	$25,000	

EXECUTIVE SUMMARY

The Town retained Great West Engineering to assist with the preparation of this CIP, which was funded through TSEP Funding.

The individual projects identified in this plan were evaluated by the Town Council with a view to the community's long-term objectives and how they related to each other. The evaluation resulted in a list of the highest capital improvement priorities for the Town as determined by the Town Council in consultation with Town staff and residents. The Town reported that the top priorities would continue to be improvements related to stormwater drainage around Town and updating the water system on Main Street.

INTRODUCTION

The Town of Twin Bridges is located in Madison County, Montana, approximately 30 miles northeast of Dillon and 58 miles southeast of Butte. According to the United States Census Bureau, the estimated population of the Town in 2017 was 307. The economy of the Town is dependent upon agriculture, fishing, and tourism. Recreational hunting during the fall hunting season also helps to support the Town's economy. The Town is home to a small elementary and high school which is a major employer and is a center of local activity.

Twin Bridges was settled and developed by the Lott Brothers in the early 1860's and, was one of the first towns in Southwestern Montana. Traditionally it has been a ranching and farming community. The Town's population of approximately 307 in 2017 has remained fairly constant for the past 25 years.

The Lewis and Clark Expedition traveled through present day Twin Bridges in 1805. In the 1860's gold mining and miners moved into the area and mining was a major part of the economy up into the 1920's.

The climate is semiarid and cool. Summer weather is typically warm days and cool nights. Frost-free periods are about 100 days in Twin Bridges which is one of the reasons that it was originally settled.

Geographically, Twin Bridges is located in one of the most spectacular landscapes in Montana. The Tobacco Root Mountains are immediately to the east of town; the Butte Highlands, a part of the Rocky Mountain Continental Divide, are viewed to the north and west, the Ruby Mountains to the south southeast, and the McCarty Mountains are to the southwest. The Ruby, Beaverhead, and Big Hole Rivers converge to form the Jefferson River near the Town's limits. With the world-class trout fishing of the Beaverhead, Big Hole, and Jefferson Rivers, Twin Bridges has emerged as a manufacturing center of premium fly rods and fishing accessories and R.L. Winston Rod Company operates manufacturing facilities in Twin Bridges.

Utilities available in the Town are electricity, telephone, fiber optic cable, and natural gas as well as a central water system and a community sewer system.

Businesses in the town include a grocery & liquor store, three restaurants, two deli's, a bank, auto parts store, two real estate offices, two bars, two motels, one RV park, an insurance company, four fishing guides, two gas stations, one convenience store, one auto repair shop, one hardware/lumber yard, a hat maker, medical clinic, dental office, three fly rod shops, ice house, post office, two hair salons, mortuary, two (motorcycle, four-wheeler-small engine repairs) shops, one laundry mat, and a day care.

Services include a library that is open daily during the week and an excellent school system that serves the surrounding area. There is an active volunteer fire department that assists the area as well as a Quick Response Unit. The nearest hospital is nine miles to the east at Sheridan. There is a doctor available in the Town.

Highway 287, which is the direct route to nearby Virginia City and Yellowstone Park, connects with Highway 41 in the center of Twin Bridges. Highway 41 connects the Town to the City of Dillon to the southwest and also Butte to the northwest.

INTRODUCTION

The Madison County Fairgrounds is located in the Town as is the Riverside Park. The Park contains a baseball and soccer field. Jessen Park has been developed, in cooperation with the Montana Department of Transportation, as a rest area. Jessen Park also features a boat launch area on the Beaverhead River, a camp for bicyclists, as well as a well-used ice skating rink that is open in the winter as temperatures allow. The Town park is adjacent to the Town Hall on Main Street.

Over the past 30 years the local economy has transitioned from dependence on agriculture and mining to more service-oriented recreation based businesses with an emphasis on fly-fishing. Recreational activities are abundant throughout the valley. There are numerous areas available for backpacking, fishing, picnicing, snowmobiling, ATV riding, winter skiing and related activities.

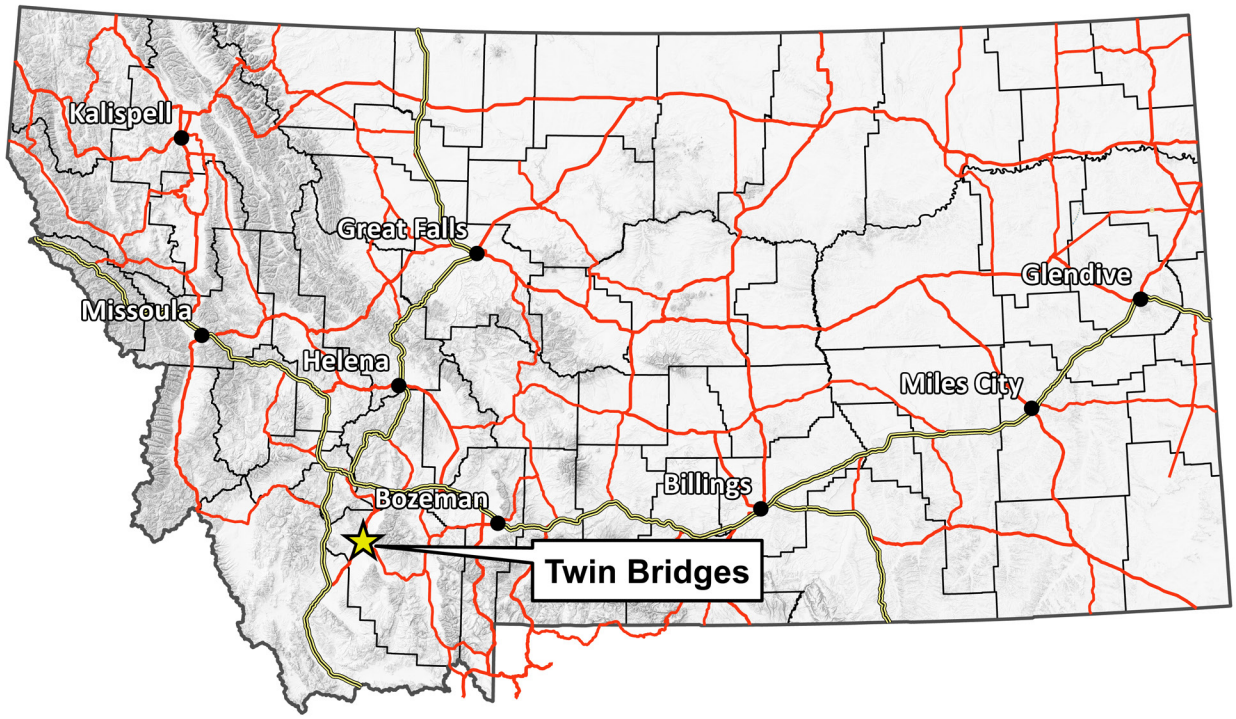

Figure 1 - Location of Twin Bridges

PREVIOUS PLANNING GUIDANCE

The Town developed its original capital improvements plan in 2007 and it was later updated in 2013. The plan provided a list of priority projects that ranged from updating the Growth Policy, preparing subdivision regulations and locating key existing survey monuments. The following table provides the status of projects identified in the 2013 plan.

Table 2 - 2013 Town Priorities
Town of Twin Bridges - Capital Improvement Plan FY-2013-2017

Project Name	Status of Project
Update Growth Policy	Complete
New Senior Citizen Center	Complete
Water Tank Inspection	Complete
Locate Key Existing Survey Monuments	Complete
Replace Gate Valve Bolts w/Stainless Steal	Continuous Project
Sewer Main TV Inspection/Cleaning	Complete
Identify and Repair Sewer System Infiltration	Complete
Street Signing	Complete
Replace/Repair Fire Hydrants	In Progress
Prepare GIS Maps for Water & Sewer System	Complete
Housing Study	Not Complete
Prepare Subdivision Regulations	Complete
Paint Water Tank Exterior	Not Complete
Storm Drain System Improvements	In Progress
Street Improvements	On Going
Office Safety Renovation	Not Complete
Seal Coat Pedestrian/Bike Path/Jessen Park to Riverside Park	On Going
Library Expansion	Not Complete
New Structure Fire Truck	Not Complete
Water System Chlorination	Not Complete
New Fire Station	Not Complete
Town Hall Office Renovation	Not Complete

In summary, as shown on the above table, the actions on the projects listed indicate that the Town has been proactive in completing many of the planned projects.

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PUBLIC OUTREACH AND ENGAGEMENT

The Town Council actively worked to get the advice and guidance of residents during the process of updating the Capital Improvements Plan. Their primary means of gathering resident input was using a survey and during the monthly Council meetings.

An electronic/hardcopy survey was marketed to the residents of Twin Bridges to gather their input. Through the survey, residents identified drinking water, wastewater treatment and emergency services as their highest priorities. In addition, residents identified maintaining and fixing the Town's streets as the most challenging future project.

The Town Council also reviewed the priorities from the 2013 Capital Improvements Plan, and with the guidance of Town staff and residents, created an updated list of projects. The Town engineer and operator provided detailed costs for a number of improvements. The estimated costs for projects are rounded to the nearest $100 for budgeting purposes.

A draft plan update was presented to the Council on September 10 and October 8, 2019. The Council reviewed and edited the document with the guidance of the Town Public Works Director and Town Clerk. The plan draft was also made available to Town residents for their review. Ultimately the input of residents and the guidance of the Council resulted in a final draft of the document. The draft CIP was also posted to the website https://twinbridgesmt.com for available access to download the document and provide public comment. The Council shared the final draft of the plan and formally adopted by resolution at the regularly scheduled council meeting on November 12, 2019.

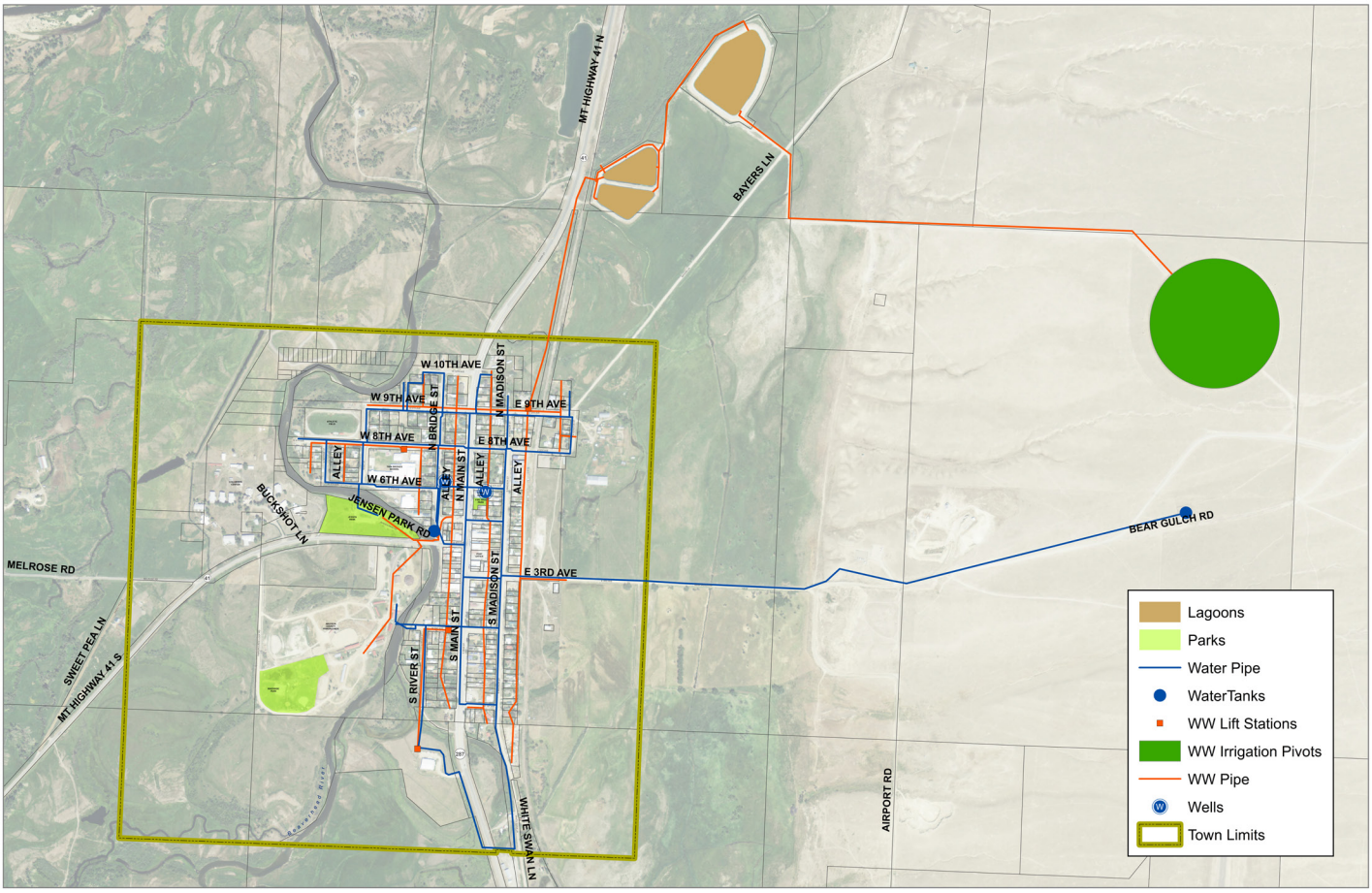

Figure 2 - Town of Twin Bridges

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WASTEWATER TREATMENT PRIORITIES

WASTEWATER SYSTEM CONDITION

Collection System

The wastewater collection system for the Town of Twin Bridges consists of approximately 40,700 lineal feet of 2-inch to 8-inch sewer main lines of which are located in streets and alley rights-of-way. The collection system contains approximately 58 concrete manholes. The table below has a summary of lineal footage and size of pipe within the collection system. In addition, it is estimated that there is an additional 5,000 lineal feet of four-inch service connections that extend from residences to the mains. The core of the central wastewater collection system was installed in 1963 and is composed of asbestos pipe. In the years since the original installation, numerous additions and extensions have been performed by private contractors utilizing PVC pipe.

Table 3 - Collection System Pipe Sizes

Pipe Size	Length (ft)
4” Gravity	18,747
6” Gravity	255
8” Gravity	17,890
2” Pressure	1,400
6” Pressure	2,400
Total	**40,692**

As part of a wastewater systems improvements project in 2011, approximately 930 lineal feet of 8-inch SDR 35 PVC gravity sewer main on 9th Avenue was replaced.

Force Main and Lift Station

The Town’s system includes four lift stations in total. Twin Bridges’ topography is relatively flat and has periods of high ground water. During initial construction, two satellite submerged lift stations were required to allow for conveyance of sewage in the system. The lift stations were replaced in a wastewater improvements project in 1990. The locations of these lift stations as well as the collection system layout are shown in Figure 6. The third lift station, which serves as the main lift station, is a wet well dry well facility and was refurbished in 2001. The fourth packaged lift station was constructed as part of the wastewater treatment improvements project in 2011 and pumps effluent from the two primary lagoon cells into the storage cell.

With the exception of the old children’s home, which has its own facilities, all of the wastewater generated in the community of Twin Bridges is delivered to a central lagoon treatment facility located ½ mile north of the Town.

Wastewater Treatment Facility

The original treatment facility was constructed in 1963 and designed as a two-cell discharging facultative treatment lagoon on property owned by the Town of Twin Bridges. The adjacent Bayers Irrigation ditched served as a point of discharge for the effluent from the facility. In 2011 the treatment system was upgraded to

WASTEWATER TREATMENT PRIORITIES

a storage and irrigation lagoon treatment system. The existing treatment lagoons were retrofitted to allow for series operation, using either lagoon as the primary treatment cell. Additionally, in 2011, a storage lagoon was constructed to store treated effluent during non-irrigation months. During the irrigated months the effluent is pumped via a floating irrigation pump through an 8-inch force main to a 34.3-acre irrigation pivot. See Figure 6 for the treatment facility site plan.

The collection system and treatment system are connected to a SCADA monitoring and control system. Due to age and potential different office locations, it is recommended that the Town update the existing SCADA system, radio antenna and computer with newer more efficient equipment.

Priority Summary

The following is a list of the proposed wastewater project priorities.

Table 4 - Wastewater Priorities

Priority	Facility	Project	Estimated Cost
1	Wastewater	Update Discharge Permit	$3,500
2	Wastewater	Update Scada System & provide service at new office location and new computer	$11,500
		Total Estimated Cost	**$15,000**

Figure 3 - Sewer System

Figure 4 – Lagoon Field

WASTEWATER TREATMENT PRIORITIES

Figure 5 - Sewer System Extension on 9th Ave

WASTEWATER TREATMENT PRIORITIES

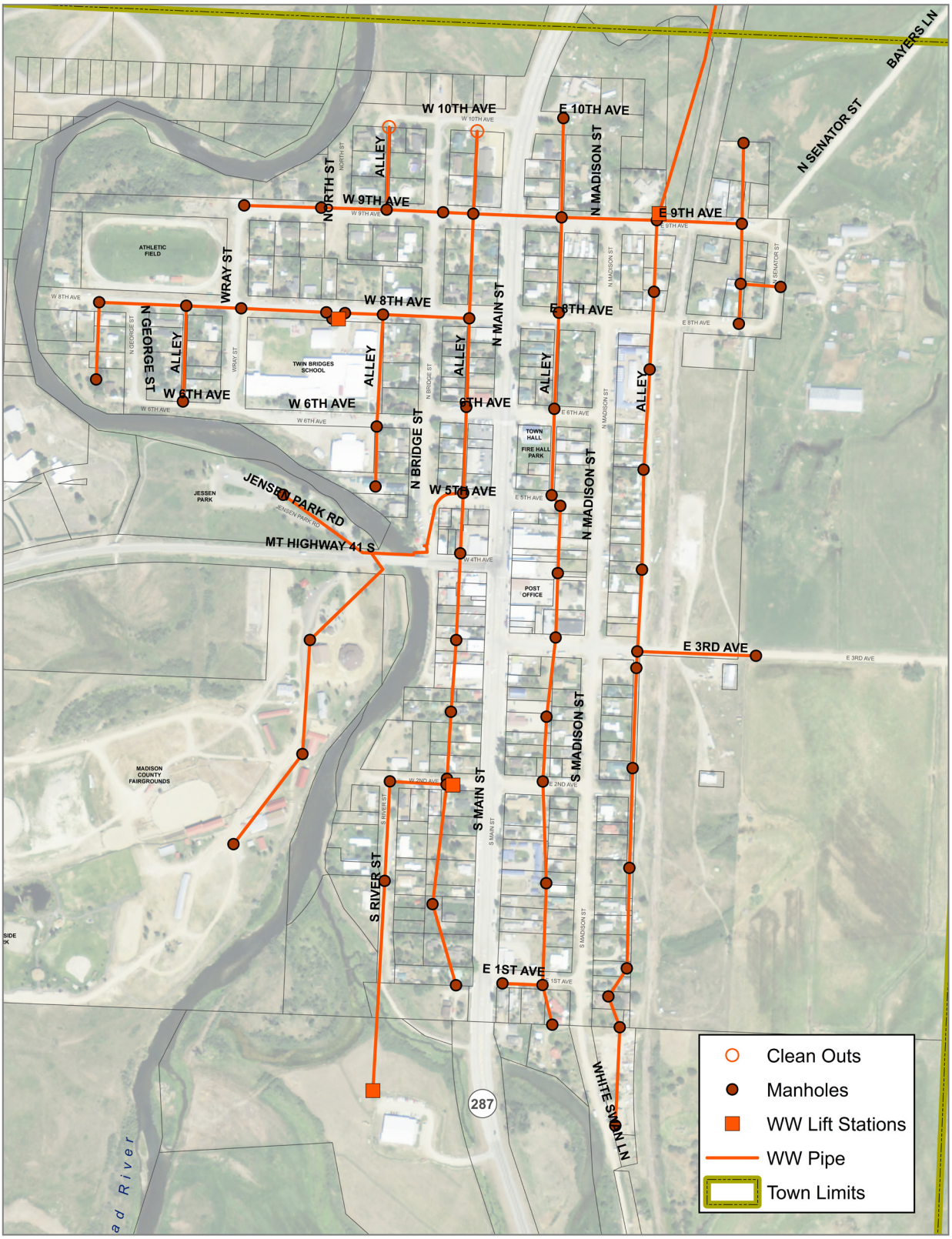

Figure 6 - Town of Twin Bridges Sewer System

DRINKING WATER PRIORITIES

SOURCE, SUPPLY & STORAGE

The Town's domestic water system consists of several components. The major facilities are depicted in Figure 8. The existing sources of water for the system consist of two wells. These wells are located in the central area of Town and pump directly into the distribution piping which in turn feeds user demands and fills the reservoirs. A 300,000-gallon storage tank was constructed in 1999 east of Town. Telemetry systems enable control of the reservoir levels and pumping cycles. The existing steel elevated 50,000-gallon storage tank located next to the City shop is no longer in use.

The pump and motor for Well 1 were originally installed in the 1960's, while the pump and motor for Well 2 were installed in the 1970's. The pump for Well 2 was not used until the 1990's. The pumps are currently operational with no major issues. Due to their age periodic maintenance should continue and performance evaluations should be completed.

Treatment

Water from the Town's supply wells is pumped directly into the distribution and storage system without any treatment including chlorination.

Distribution

The Town's distribution system consists of 4-inch, 6-inch, 8-inch and 12-inch mains with associated fittings, gate vales and fire hydrants. Portions of the original system date back to 1917. Since 1917, substantial improvements, upgrades, and additions to the system have been constructed. The oldest part of the existing system that is still in use today is the water main on Main Street from 1st Avenue to 9th Avenue which was installed in 1967.

A water system analysis was prepared for the Town in 1995 and an addendum was added in 1996 to address the Town of Twin Bridges' water system needs. The recommended improvements, most of which were completed in 1999, included a 300,000-gallon tank as well as some distribution system improvements to replace undersized, antiquated or failing mains, hydrants and fittings.

The water system hydraulic model was updated in 2018 to address the system's capacity for the addition of a water main extension to the Madison County Fairgrounds. In 2018 a 12-inch HDPE water main was installed via horizontal directional drilling from Twin Bridges under the Beaverhead River to the Madison County Fairgrounds to replace a failed 2-inch service line. In addition to the new main, a new 2" meter was installed as well as fire hydrant for the Fairgrounds.

Fire hydrants are provided throughout town and are flushed annually. The Town maintains water meters which are mainly in meter pits. Some pits are subject to flooding periodically due to the high ground water in the area.

Priority Summary

The following is a list of the proposed drinking water project priorities. It should be noted that the Water PER is severely out of date and the Town should consider preparation of a new PER in the very near future. Estimates for the below priorities are very high level at this point but would be much more refined through the PER process.

DRINKING WATER PRIORITIES

Table 5 - Drinking Water Priorities

Priority	Facility	Project	Estimated Cost
1	Source/Supply	Well 1 – Pump & Motor Evaluation & possible replacement (originally installed in the 1960's)	$10,000 - 40,000
2	Source/Supply	Well 2 – Pump & Motor Evaluation & possible replacement (originally installed in the 1970's, began operating in 1990's)	$10,000 -$40,000
3	Source/Supply	Paint water tank	$85,000
4	Water Distribution System	Water main replacement on Main Street from 1st Ave. to 9th Ave (Cast Iron from 1967)	$750,000 -$1,000,000
5	Water Distribution System	New water main from West 4th Avenue to 6th Avenue on Bridge Street	$250,000- $300,000
6	Source/Supply	Pump house improvements – Paint, insulate, & new siding	$15,000
7	Water Distribution System	Chlorination Equipment	$15,000
		****Total Estimated Cost**	**$1,495,000**

****Total estimated cost is based on the highest estimated cost listed for each project listed on Table 5.**

Figure 7 - Water Tank

DRINKING WATER PRIORITIES

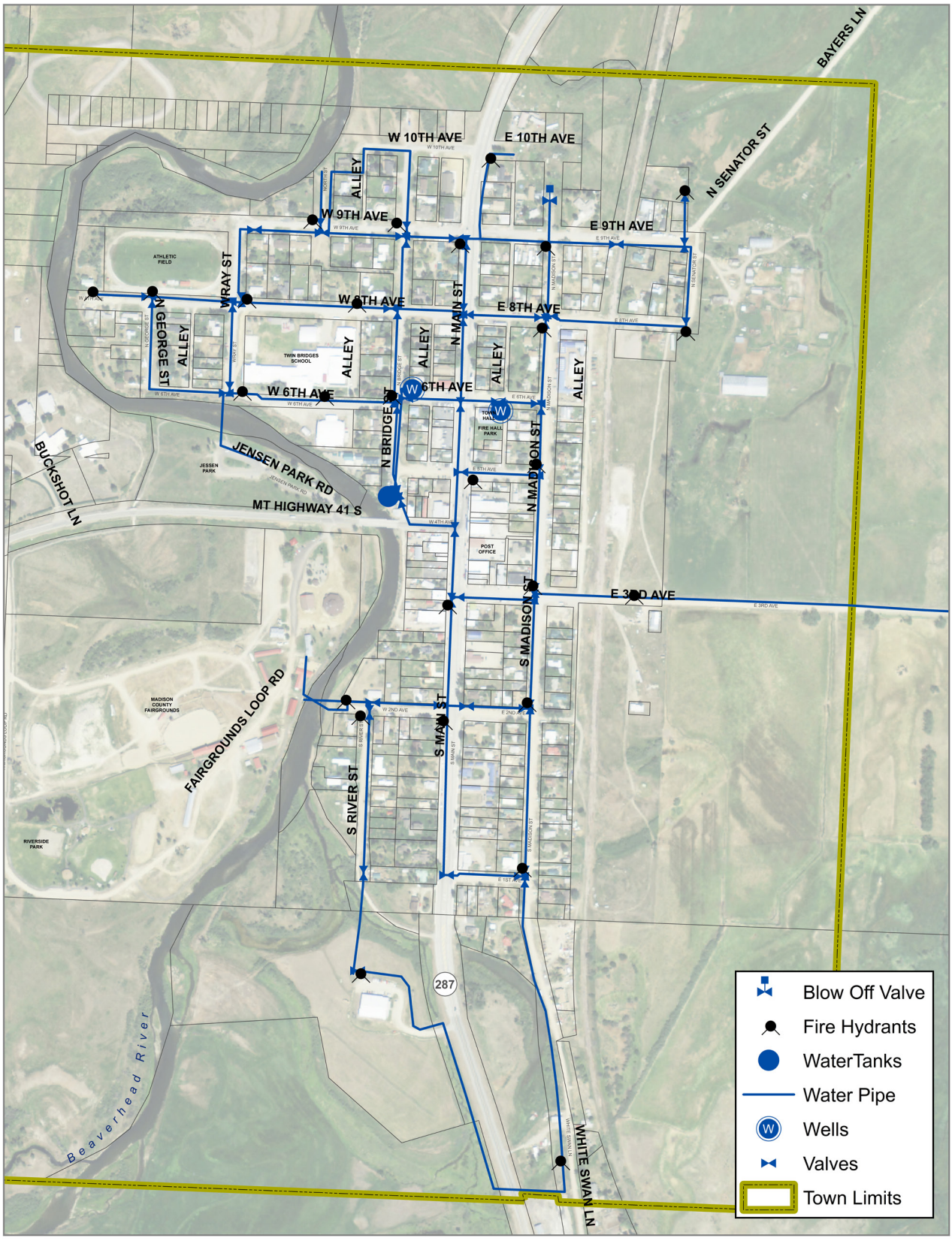

Figure 8 - Town of Twin Bridges Water System

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BUILDING PRIORITIES

A field inventory of public buildings was conducted in April 2007 as part of the 2007 Town of Twin Bridges CIP. The purpose of the inventory was to determine the general condition of the facilities owned and maintained by the Town of Twin Bridges, and to record information relating to the need for improvements to each of the buildings. Please refer to the 2007 Town of Twin Bridges CIP for more detailed information. The following is a listing and brief description of the facilities currently owned by the Town.

Town Hall / Fire Department

The Town Hall is the primary office space for conducting daily business and for regular meetings of Twin Bridges elected officials. The building is centrally located on the corner of Sixth Ave. and Main Street. It is a concrete block structure with a wood framed gable roof and concrete slab at the main floor level. The Town Office and Meeting Room are on the main floor directly behind the garage area that is occupied by the Twin Bridges Volunteer Fire Department. A large meeting/multi-purpose room is located in the second story of the building. The steel building addition on the south side of Town Hall is part of the Fire Department and has overhead doors for access from both the east and west ends.

The office space consists of a single room shared by the Town Clerk and the Maintenance Supervisor. The Town records are also kept in this room and in limited storage areas adjacent to it. The meeting room is in front of the office and provides ample space for the monthly meetings but is not adequate for large public meetings and hearings. The concrete block structure appears to be sound and is maintained as required to keep everything in working order.

Library

The Twin Bridges Public Library is located in a municipal building on South Main Street. The Library occupies the front part of the building and provides space for over 8,000 books, periodicals and documents. The Library is a concrete, wood frame and masonry structure built over 100 years ago and has an addition on the back that was built in 1986.

The Town of Twin Bridges Public Works Department has some shop space at the back of the original building. Space for equipment storage under a wood frame open end canopy addition was lost during a severe windstorm in 2013. The portion of the building between the shop and library is a storage area with restricted access to an attic floor above. There is a second story area above the library that has 3 rooms facing

BUILDING PRIORITIES

over Main Street and an old abandoned bathroom. This floor sees limited use for storage and a clothing thrift store.

Water Tower Shop

The Water Tower Shop is a simple masonry and wood frame structure. The building is located below the old water tank next to the Beaverhead River. It is one of the oldest public buildings in Town and is currently used as an office by public works personnel and as an equipment storage facility. The front part of the garage area was an addition to the old building at some point in the past. The exterior walls consist of stucco over masonry.

Pump House Building No. 1

Well #1 is located in the north central part of town on 6th Avenue next to the Town Hall. The building for this well was constructed in 1963 and has been in continuous service since that time. The building has a monolithic thickened edge slab foundation and the perimeter walls are concrete masonry units (CMU).

Pump House Building No. 2

Well #2 is located in the north central part of town on 6th Avenue one block west of Town Hall. The building for this well was originally constructed in 1972 but was re-constructed in 1988 due to settlement problems. The existing building has a 4' concrete frost wall foundation and has a wood frame wall and roof system. The building has a concrete slab and the perimeter walls are finished with painted OSB panels on the inside and T-111 plywood siding on the exterior.

Jessen Park Rest Area Building

The rest area building includes separate men and women restrooms which are open for local use and highway travelers from May to October. The structure, which consists of decorative block, a wood framed gable roof and concrete slab, was constructed in 2002.

Jessen Park Bike Shelter

The bike camp is a place for bicyclists to stop and rest or camp over for the night. The bike camp is open from

BUILDING PRIORITIES

May to October. The building consists of a small room for relaxing or repairing bicycles, a shower, a bathroom, and an outdoor sink. The building is wood frame on a concrete slab and was built by William White.

In addition to these existing buildings, the Town is in the process of constructing a new shop on property it owns in the northwest corner of town. To date plans have been drafted, the site has been graded, and concrete foundation walls installed. The Town is acting as the general contractor for the project with completion of the building scheduled for early 2020.

Priority Summary

The following is a list of the proposed building project priorities. As previously stated, Priority #1 is currently in the initial construction phase with completion scheduled for late 2019.

Table 6 - Building Priorities

Priority	Project	Estimated Cost
1	New Shop Building	$270,000
2	New Town Hall (1698 sq. ft)	$300,000
3	ADA compliancy for Town	TBD
4	New roof and paint (exterior) for Town Hall	TBD
5	New Paint for Interior – Town Hall	TBD
	****Total Estimated Cost**	**$570,000**

****Total estimated cost is based on the highest estimated cost listed for each project listed on Table 6.**

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EQUIPMENT PRIORITIES

Equipment needs in the Town include those related to maintenance and emergency services. The following is the Town's current list of equipment needs.

Table 7 - Equipment Priorities

Equipment	Improvement/Repair	Estimated Cost
Highway and Streets	Replace old 8 N with new Tractor with Cab	$30,000
Fire Department	New Structure Fire Truck	$300,000
Highway and Streets	New Water Truck for Highway & Streets	$50,000
	Total Estimated Cost	**$380,000**

Figure 9 - 8 N Tractor

Figure 10 - Other Equipment

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PARKS AND RECREATION PRIORITIES

The Town operates and maintains the Twin Bridges Firehall Park, and Jessen Park. The parks include a pavilion, a rest area, and a bike camp. Riveside Park is maintained by the Twin Bridges Park and Recreation District.

Table 8 - Parks and Recreation Priorities

Park	Improvement/Repair	Estimated Cost
Jessen Park Bike Camp	New Shower	$10,000
	Total Estimated Cost	**$10,000**

Figure 11 – Bike Camp

Figure 13 – Rest Area

Figure 12 – Bike Camp Shower

PARKS AND RECREATION PRIORITIES

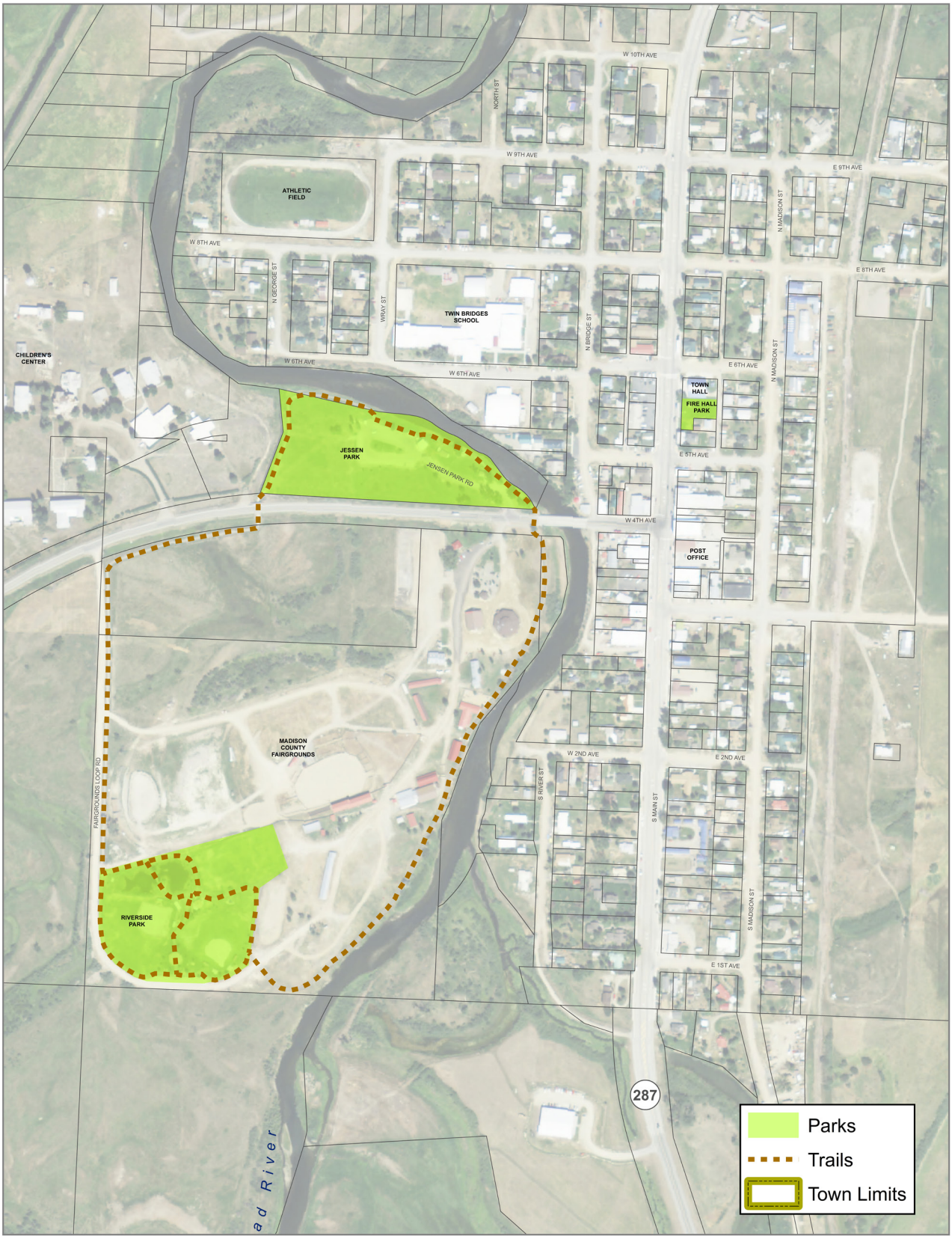

Figure 14 - Park and Recreational

STREET PRIORITIES

A Street Inventory and Improvement Plan for the Town was completed in 2007. The inventory addressed approximately 1.66 miles of hard surfaced streets and the 1.16 miles of gravel streets in the Town. The inspections and evaluation of the streets were based on PASER methods, which ranked the condition of each gravel and hard surfaced street.

The streets were found to be in varying physical condition ranging from minor deterioration to complete structural failure. According to field investigations, of the 2.82 miles of roadway evaluated, 97.5 percent (2.75 miles) of the streets require some form of maintenance and or upgrades. Each street was evaluated and improvements with costs were recommended based on the current road conditions.

Given that the 2007 Plan, has not been updated information from that plan, although dated, will be used for this CIP. Three alternatives for improvements to the existing streets were evaluated as part of this plan.

Alternative 1: This option involved maintenance upgrades to gravel and hard surfaced sections necessary to bring the existing streets to an acceptable condition. The majority of this work included crack and pothole repair, chip sealing, and minor overlays on hard surfaced roads as well as graveling and regrading gravel roads. The 2007 estimated costs for the recommended improvements under this alternative were $385,000.

Alternative 2: This option included maintenance upgrades to hard surfaced roads as well as upgrading and paving all gravel roads within the study area. The pavement maintenance included crack and pothole repair, chip sealing, and minor overlays. Gravel road paving included all necessary subbase improvements as well placement of a 3-inch asphalt mat. The 2007 estimated costs for the recommended improvements under this alternative were $970,000.

Alternative 3: This option included rebuilding, paving and adding curb and gutter to all roads within the study area. This work involved excavating all roads, rebuilding subbase as needed, adding curb and gutter, and placing a 3-inch asphalt mat on all roads within the study area. The 2007 estimated costs for the recommended improvements under this alternative were $2,653,000.

Priority Summary

The following is a list of the proposed street project priorities. It should be noted that the Street Inventory and Improvement Plan is severely out of date and the Town should consider preparation of an update to the Plan in the very near future. Estimates for the street priorities listed below are very high level at this point and would need to refined much more through an updated Street Inventory and Improvement Plan.

Table 9 - Street Priorities

Priority	Facility	Project	Estimated Cost
1	Highway & Streets	Additional ¾“ Gravel Surfacing throughout Town	$10,000
2	Highway & Streets	Update Street Inventory and Improvement Plan	$15,000 - $20,000
3	Highway & Streets	Paving, curb and gutter entire Town	$3,000,000 - $4,000,000
		****Total Estimated Cost**	**$4,030,000**

****Total estimated cost is based on the highest estimated cost listed for each project listed in Table 9.**

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STORMWATER PRIORITIES

The Town of Twin Bridges has a stormwater system that was originally installed circa 1970 as part of improvements on Main Street (Highway 41) facilitated by the Montana Department of Transportation. The existing infrastructure is localized to the Main Street corridor and includes inlet structures at seven street intersections which feed into a primary trunk main. This trunk main eventually outlets at the northern terminus of the Town into a slough. No storage or detention facilities are incorporated into the existing infrastructure.

The existing storm sewer trunk main consists of varying sizes of reinforced concrete pipe arch (RCPA) ranging from a 28.5-inch span by 18-inch rise to a 36.5-inch span by 22.5-inch rise. The system also incorporates manholes, grated inlets, 12-inch diameter manhole connections, curb and gutter, valley gutter and an outfall to an existing slough, which connects through farmland to a vast array of irrigation ditches. The existing collection infrastructure system begins just south of 1st Avenue and continues 500 feet north of 10th Avenue to the outfall location, for a total length of approximately 3150 feet. The collection facilities appear to be in good condition and functioning as designed. No replacement or repairs of the existing infrastructure is necessary. It should be noted however, that this stormwater system does not remedy existing ponding and flooding issues throughout the rest of the Twin Bridges community outside of the Main Street corridor.

Two storm drainage reports have been prepared since the initial construction of the MDT system with recommendations to improve storm drainage problems in the Town.

- Town of Twin Bridges, Storm Drainage Analysis, May 2007, by Great West Engineering
- Town of Twin Bridges, Preliminary Engineering Report – Stormwater Facility Improvements, January 2017, by Great West Engineering

The 2017 PER provided several recommendations for improving the Town's stormwater system totaling $1,422,616. However, due to the high cost of full infrastructure buildout of the system, the Town's immediate priority is the section of West 6th Avenue, located near the Twin Bridges School, from Wray Street to Main Street. Constructing the recommended immediate improvements on West 6th Avenue is estimated at a total cost of $310,281.

The Town has moved forward with an SID with a commitment to spend a total of $600,000, including the West 6th Avenue project, towards stormwater improvements around town. Since Town staff will be performing the 6th Avenue work, it is estimated that around $200,000 will come from the SID funding for this project. The remaining $400,000 will go towards various improvements throughout town such as grading. infiltration structures, piping and grates. The remainder of the $850,000 in identified improvements will be addressed in the future.

Priority Summary

The following is a list of the proposed stormwater project priorities. Priority #1 is currently in the design phase with construction scheduled for late 2019. Priority #2 is in process and will probably stretch into 2020. A plan for completing the rest of the improvements identified in the 2017 PER has yet to be addressed.

Table 10 - Stormwater Priorities

Priority	Facility	Project	Estimated Cost
1	Stormwater	West 6th Ave. Improvements	$200,000
2	Stormwater	Misc. Drainage Improvements around Town	$400,000
3	Stormwater	Remainder of Identified Improvements	$850,000
		Total Estimated Cost	**$1,450,000**

STORMWATER PRIORITIES

Figure 15 - Stormwater, 8th Avenue

Figure 16 - Madison Street

Figure 17 - Parking Lot Behind School Gym

STORMWATER PRIORITIES

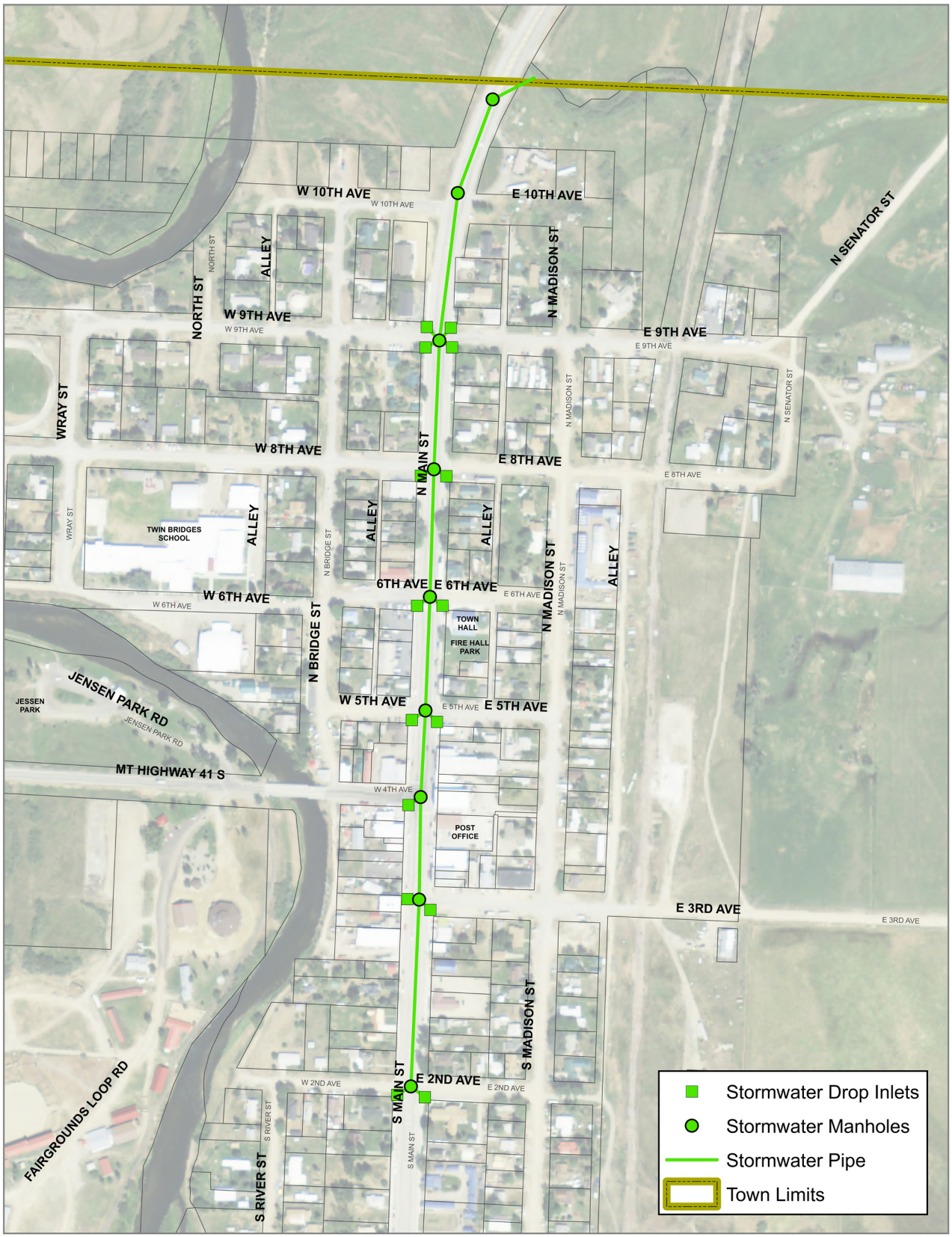

Figure 18 - Stormwater

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IMPLEMENTATION

Priority Recommendations

Twin Bridges has updated its Capital Improvements Plan (CIP) in order to ensure that its capital priorities accurately reflect the Town's needs. While all of projects listed in the plan are needed, the Council ultimately had to identify what the final list of priorities based upon criteria ranging from public health and safety to fiscal capabilities. The Council will use this document as one of the primary basis for setting the Town's annual overall budget. The documents priorities will be updated on an annual basis with remainder of the document be updated on a 5-year schedule.

Timeline

In general, Twin Bridges will initiate its highest priority projects within two years of the adoption of the CIP. The Council might commence with the development of lower priority projects sooner if funding becomes available.

Financing Improvements

Determining how to finance a project is one of the most difficult and important parts of completing a capital improvement project. The Town's analysis to fund projects is meant to keep user/tax rates stable and maximize state/federal loan and grant aid for capital expenditures. Incurring some debt is expected with large capital projects and annual evaluation will be needed to balance debt service and operating expenditures. The Town also needs to determine its debt capacity and acceptable debt service levels. The goal of this CIP is to plan for improvements that will reduce the overall financial burden of capital improvements upon Town residents.

The following is a brief description of the most common funding sources used by Montana communities to fund capital improvement projects. Funding options include bonding, special improvement districts, capital improvement funds, service charges, as well as federal, state, and private grant and loan funding. This is not an all-inclusive list of funding opportunities. The financing the Town uses will depend on the scope and budget of the selected project(s). Each option should be carefully evaluated based on the project, needs and financial capacity of the community.

Bonding

The different types of bonds authorized under state law have particular applications and requirements.

A. General Obligation Bonds

General obligation (G.O) bonds are guaranteed by the full faith and credit of the local government issuing the bonds. By pledging the jurisdiction's full faith and credit, the government undertakes a legally binding pledge to repay the principal and interest by relying upon its taxing authority (7-7-4204, MCA). This obligation must therefore be ratified by an affirmative vote of the citizens before the bonds may be issued (7-7-4221, MCA). Due to the relative security of the repayment of G.O. bond principal and interest, and because the interest paid to the bondholders (lenders) may be exempt from state and federal taxes, lenders are usually willing to accept a lower rate of interest. As a result, the cost of the capital project will be somewhat less for the local government and for their taxpayers.

B. Revenue Bonds

Revenue bonds are not guaranteed by the taxing authority of the local government entity issuing the bonds. Therefore, they are somewhat less secure than G.O. bonds. Even though the bondholder's interest earnings on revenue bonds may also be tax exempt, the bond market will usually demand somewhat higher interest rates to attract lenders. Revenue bonds are backed only by the revenues from fees paid by the users of the capital facility, such as a municipal water system, wastewater system or a Special Improvement District (SID) for Town improvements such as streets and bridges. Because revenue bonds do not involve a pledge of the full faith and credit (taxing authority) of the municipal government, revenue bonds do not require voter approval (7-7-4104 and 7-7-4426, MCA)

Capital Improvement Fund

Montana budget law provides that municipal governments may appropriate money to a capital improvement fund from any of the several government funds in the amount up to 10% of the money derived from that fund's property mill tax levy (7-6-616, MCA). The CIP must be formally adopted by resolution of the governing body and should include a prioritized schedule for replacement of capital equipment or facilities with a minimum $5,000 value and a five-year life span, as well as the estimated cost of each item.

Service Charges

The most common source of revenue to meet the operating and debt service costs of utility systems are by monthly service charges to all users. The service rates should be established to reflect charges to various customer classes or users according to the benefits received.

Annual Needs Assessment

Local governments are encouraged to annually assess their needs. A needs assessment can focus only on public infrastructure or it can include every service provided by the government. This assessment should occur before elected officials and department heads begin to prepare their budgets for the next fiscal year. The needs assessment is the foundation of every CIP and because every community changes so does its needs.

There are several methods for assessing a community's needs. Public hearings, online surveys, questionnaires in local newspapers, advisory committees and preliminary engineering or architectural reports are just a few of the ways Montana communities have assessed their needs. However, as needs are measured, it is very important that the information be thoroughly documented and the information presented to the public. See the section Public Outreach and Engagement for a description of how Town of Twin Bridges attempted to measure Town of Twin Bridges's needs for this CIP.

Grant and Loan Funding

Planning Grants: An important part, and the initial step to addressing capital improvement projects is adequate planning. Like this CIP, the Town must plan for specific projects to be successful at making improvements.

Department of Commerce Treasure State Endowment Program (TSEP) Grants can provide up to $15,000 for preparing Preliminary Engineering Reports (PER) and Capital Improvement Plans (CIP). These grants require a dollar-for-dollar match. The Town is eligible for this funding.

Department of Natural Resources and Conservation (DNRC) Renewable Resource Grant and Loan Program (RRGL) offers planning grants that can be used for preparing new PER's or Technical Narratives ($15,000), updates to PER's, as well as CIP's ($8,000) and Resource Services Plans or Studies ($8,000). The planning documents must address natural resources concerns. The Town is eligible for this funding.

Department of Commerce Community Development Block Grant (CDBG) Planning Grants are available on an annual cycle ($50,000) for planning activities and documents (Growth Policy, CIP, Housing Plans, CEDS, etc.) and preparation of Preliminary Engineering Reports/Preliminary Architectural Reports (PAR). CDBG may consider applications for PERs and CIPs secondary to other planning priorities for funding due to other available State and Federal Program funds. CDBG planning grants require at 1:3 local match contribution. The Town is eligible for this funding.

Montana Office of Tourism and Business Development Tourism Grants are available to Certified Regional Development Corporations (CRDC's) tribal governments, or other economic development organizations, not part of a CRDC region, to support economic development planning activities. This program is administered by the Montana Department of Commerce and projects include central business district redevelopment, industrial development, feasibility studies, creation and maintenance of baseline community profiles, preproduction costs for film or media, and administrative expenses. In general, the Department will award up to one dollar of Big Sky Trust Fund Program dollars for every dollar in documented matching funds up to a total of $25,000. If the Town would like to pursue this funding, they will likely work with Headwaters RC&D which is the CRDC for the area.

Montana Main Street Program (MMS), administered by the Montana Department of Commerce, offers technical assistance and expertise to member communities and awards grant funds to communities actively working on downtown revitalization, economic development and historic preservation projects. The Town of Twin Bridges is an Affiliate Member of the Main Street Project and eligible for this funding.

USDA Rural Development (RD) Special Evaluation Assistance for Rural Communities and Households (SEARCH) grants are available for rural areas with populations of 2,500 or less that have a median household income below the poverty line or less than 80 percent of the statewide non-metropolitan median household income. Funds can be used to pay for predevelopment planning costs, including feasibility studies to support applications for funding water or waste disposal projects, preliminary design and engineering analysis, and technical assistance for the development of an application for financial assistance. The Town is eligible for this funding.

Construction Grants and Loans: Once a project is determined and appropriate planning has been completed, there is a variety of grant and loan sources to fund construction of the capital project.

Treasure State Endowment Program (TSEP) is a State-funded grant program administered by the Montana Department of Commerce (MDOC). TSEP provides financial assistance to local governments for water, wastewater, storm water, solid waste and bridge infrastructure improvements. Grants can be obtained from TSEP for up to $500,000 if the projected user rates are between 100% and 125% of the target rate, $625,000 if projected user rates are between 125% and 150% of the target rate, and up to $750,000 if the projected user rates are over 150% of the target rate. TSEP grant recipients are required to match the grant dollar for dollar, however,

the match may come from a variety of sources including other grants, loans, or cash contributions. The Town is eligible for this funding.

Renewable Resource Grant and Loan Program (RRGL) is funded through interest accrued on the Resource Indemnity Trust Fund through the sale of Coal Severance Tax Bonds, RRGL is a State Program administered by the Montana Department of Natural Resources and Conservation (DNRC). The RRGL Program's primary purpose is to conserve, manage, develop, or protect Montana's renewable resources. Grants of up $125,000 are available for projects that meet one of more of these objectives and does not require matching funds. The Town is eligible for this funding.

Community Development Block Grant (CDBG) is a Federally funded Program (HUD) administered through the Montana Department of Commerce. The primary purpose of the CDBG Program is to benefit low to moderate-income (LMI) families. To be eligible for CDBG funding an applicant must have an LMI of 51% or greater. Applicants can apply for CDBG grant funds up to $450,000 with a limit of $15,000 per LMI household, therefore, a community needs 30 LMI households to apply for the maximum grant funds. The use of CDBG funds requires a 25% local match that can be provided through cash funds, loans, or a combination thereof. The Town has an LMI of 53.19% and is therefore eligible for this funding.

USDA Rural Development Water and Environmental Program (RD) provides grant and loan funding to districts, municipalities and counties for infrastructure projects that improve the quality of life and promote economic development in Rural America. Communities with populations less than 10,000 are eligible to apply; however, RD gives the highest priority to projects that serve rural areas with populations equal to or less than 1,000. RD bases grant eligibility and loan interest rates on a community's median household income and user rates. If the area to be served has an MHI of $38,205 or lower and the project is necessary to alleviate a health and/or sanitation concern, up to 75% of the RD funded project costs are grant eligible. RD generally advises communities not to expect grant awards greater than 25% of the RD funded project costs. The 2015 American Community Survey Data shows the Town's MHI a $30,326; and is, therefore eligible for both grant and loan funding.

USDA Rural Development (RD) Community Facilities provides grant and loan funding to develop essential community facilities in rural areas. Funds can be used to purchase, construct, and / or improve essential community facilities, purchase equipment and pay for related project expenses. Examples of essential community facilities include health care facilities, public facilities (town halls, courthouses, airport hangars, streets), community support and educational services (child care centers, community centers, fairgrounds), public safety, and local food banks. Grant funding is based on population and median household income. The Town is eligible for this funding.

Drinking Water and Water Pollution Control State Revolving Fund (SRF) provides low-interest loan funds for water, wastewater, stormwater and solid waste projects. The SRF Program is administered by the Montana Department of Environmental Quality. The Town is eligible for this funding.

Economic Development Administration (EDA) provides grant funding for infrastructure projects that demonstrate a need for placement of a new business. The amount of the grant award depends on the number of jobs created. If the Town has the potential for a project funded through EDA, it will explore the details with Headwaters RC&D and the EDA.

Montana Department of Transportation, Transportation Alternatives (TAP) Program is a Federally funded Program that provides funding for projects and programs defined as transportation alternatives. Transporta-

tion alternatives include on and off road pedestrian and bicycle facilities, infrastructure projects for improving non-driver access to public transportation and enhanced mobility. They also include community improvement activities, environmental mitigation, recreational trail program projects, safe routes to schools projects, and projects for planning, design or construction of boulevards and other roadways largely in the right-of-way of former Interstate System routes or other divided highways. A 13.42% match is required for all off-system projects. The Town is eligible for this funding.

National Park Service Rivers, Trails and Conservation Assistance provide Technical Assistance to community groups, nonprofits, tribes, and state and local governments to design trails and parks, conserve and improve access to rivers, protect special places, and create recreation opportunities.

National Endowment for the Arts (NEA) has several assistance programs to fund Creative place-making including art into revitalization work, including parks, downtown pathways, plazas, green spaces, wayfinding, and cultural tourism. All programs require a dollar for dollar match.

Department of Health and Human Services - Community Economic Development (CED) Program works to address the economic needs of individuals and families with low income through the creation of sustainable business development and employment opportunities. CED's projects must create employment opportunities.

Montana Gas Tax Revenue on July 1, 2017, Montana's gas tax increased from 27 cents per gallon to 31.5 cents. In fiscal year 2020, the tax will go to 32.5 cents per gallon until fiscal year 2023 when it will climb to 33 cents per gallon. The increase will generate an additional $6.3 million for Montana's 56 counties in fiscal year 2018. The increase to Twin Bridges's annual gas tax share of this income is not yet known; however, it is expected to give the Town's road and bridge fund a needed boost. Gas tax revenue can only be used for construction, reconstruction, maintenance, and repair of town streets and alleys.

FEMA Assistance to Firefighters (AFG) the goal of the Assistance to Firefighters Grants (AFG) is to enhance the safety of the public and firefighters with respect to fire-related hazards by providing direct financial assistance to eligible fire departments. This funding is for critically needed resources to equip and train emergency personnel to recognized standards, enhance operation efficiencies, foster interoperability, and support community resilience. Grant awards range from a few thousand dollars to hundreds of thousands of dollars. Eligible uses of funds include fire trucks, EMS equipment, personal protective equipment, equipment, and modifying facilities. FEMA also has funds available for fire prevention and safety programs, fire station construction, and staffing for adequate fire and emergency response. The match for jurisdictions that serve 20,000 residents or fewer is 5 percent of the grant awarded. The Town may explore this funding with Headwaters RC&D for its fire department.

FEMA Hazard Mitigation Program funding is available to help communities prepare for and recover from natural disasters, including drought, flooding and wildfires. FEMA administers three programs that provide funding for eligible mitigation planning and projects that reduces disaster losses and protect life and property from future disaster damages. The three programs are the Hazard Mitigation Grant Program (HMGP), the Flood Mitigation Assistance (FMA) Program, and the Pre-Disaster Mitigation (PDM) Program. If the Town experiences flooding issues and wants to pursue funding it will work with Great West Engineering and Headwaters RC&D to secure this funding.

- HMGP assists in implementing long-term hazard mitigation planning and projects following a Presidential major disaster declaration
- PDM provides funds for hazard mitigation planning and projects on an annual basis

- FMA provides funds for planning and projects to reduce or eliminate risk of flood damage to buildings that are insured under the National Flood Insurance Program (NFIP) on an annual basis

USDA Emergency Community Water Assistance Grants assists eligible communities to prepare or recover from an emergency that threatens the availability of safe, reliable drinking water. Emergencies include drought, flood, earthquake, tornado, hurricane, disease outbreak, chemical spill, or other disaster. A Federal Disaster Declaration is not required. Grants range from $150,000 for construction of transmission lines to $500,000 for construction of a water source or treatment facility. The Town is eligible for this funding if it experiences a significant infrastructure loss related to a disaster or emergency.

Private Foundations can provide funding for various capital improvement projects. Local and national foundations can support community development initiatives and offer unique opportunities to fund capital projects.

SUMMARY

Summary of Recommendations

Although this CIP is a valuable tool for the Town of Twin Bridges, it must be continually updated in order to represent current and changing conditions. Growth of the community through infill and annexation will affect the need for public services. The schedule of improvements must be reviewed and adjusted on an annual basis to account for changing public service demand and maintenance needs.

Overall Project Priorities

Priorities for the needed improvements have been established as shown in the following table based on input from the Town Council, Mayor, Public Works Director and residents.

SUMMARY

Table 11 - Overall Improvement Priorities

Priority	Facility	Project	Estimated Cost	Notes
1	Stormwater	Stormdrains on 6th Ave	$200,000	
2	Stormwater	Miscellaneous Drainage Improvements	$400,000	
3	Maintenance	New Shop Building	$270,000	
4	Water	Well 1 – Pump & Motor Evaluation & Possible Replacement	$10,000 to $40,000	Originally installed in 1960's
5	Water	Well 2 – Pump & Motor Evaluation	$10,000 to $40,000	Originally installed in 1970's. Started running in 1990's
6	Water	Paint Water Tank	$85,000	
7	Water	New Water Main from 1st Ave to 9th Avenue on Main St	$750,000 to $1,000,000	Installed 1967 – Cast Iron
8	Water	New Water Main from West 4th to 6th Ave on Bridge Street	$250,000 to $300,000	
9	Highway & Streets	¾" Road material for all roads	$10,000	
10	General	Housing Study	$25,000	
11	Sewer	Mag Meter Installed at Sewer Lift Station	TBD	
12	General	New Town Hall	$300,000	
13	Water	Pump House – Paint/New Siding	$15,000	
13	Water/Sewer	New Scada System	$11,500	
14	Maintenance	Tractor to Replace 8N	$30,000	
15	Maintenance	Tools for Shop	TBD	
16	Maintenance	Car Hoist for New Shop	TBD	
17	Highway & Streets	Update Street Inventory & Update Plan	$15,000 to $20,000	
18	General	Sidewalks through Town	TBD	
19	Highway & Streets	Paving of Streets	$3,000,000 to $4,000,000	
20	Stormwater	Remainder of Identified Improvements	$850,000	
21	Bike Camp	Update Shower	TBD	
22	General	ADA Compliance for Town Hall/Fire Hall	TBD	
23	General	New Roof & Paint for Town Hall – Exterior	TBD	
24	General	Town Hall Paint – Interior	TBD	
25	Highway & Streets	Water Truck	TBD	
26	Fire Department	New Structure Fire Truck	$300,000	
27	Water	Water System Chlorination Equipment	$15,000	

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